

Data-Driven Instruction

Three FCPS principals put eCART and Professional Learning Communities to the test

BY HOPE KATZ GIBBS WITH PETER NOONAN

Thoreau Middle School principal Mark Greenfelder has a special relationship with eCART. Thoreau was one of the schools asked to pilot the program in 2005, when Northrop Grumman was first brought in to assist FCPS to develop a cutting-edge tool to help teachers improve their approach to instruction and formative assessment.

"Our teachers worked closely with the administration and gave feedback on what we liked and what needed improvement—such as having more input on

the questions asked and having the process be more intuitive for staff and students—and after putting our suggestions into the program, eCART has evolved into a very useful tool," Greenfelder explains.

By using it in tandem with other effective assessment tools—such as exit cards, interactive notebooks, wiki activities through blackboard.com, and peer evaluation—teachers are able to assess how students are doing in relation to state standards.

"Having data come back to teachers in a timely manner is key," Greenfelder says.

What makes this tool truly powerful, he adds, is the fact that teachers work together in Professional Learning Communities (PLC) to discuss,

debate, and analyze what the data means about what kids are comprehending. "When necessary, teachers can now use the data to see what is working and what isn't, and then respond appropriately. Prior to eCART, this was a missing link," he adds.

Connecting the Links

Greenfelder realizes challenges remain.

"I know that it takes a long time for teachers to come up with the best questions, then get agreement from the entire group," he says. "Fortunately, teachers have figured out how to create questions more quickly, and they are doing a terrific job digging deep into the analysis aspect of the process by working closely with their PLC. Everything worthwhile is difficult, but I'm incredibly proud of the progress my teachers continue to make."

Greenfelder points to 7th grade math teacher Michelle Welin as an example of an educator who has



Photo by Steve Barrett



Mark Greenfelder is the principal of Henry David Thoreau Middle School in Vienna. *For the last 17 years he has been a classroom teacher and administrator at the elementary, middle, and high school levels — experiences that have provided him with the opportunity to work with many groups of children and teachers.*

He has facilitated the development of Thoreau's professional learning communities from what he calls, "knowing to doing," and has also developed a formative assessment framework with his staff at Thoreau through the professional learning community's model that was the foundation for the ASPIRE assessment system developed by FCPS and Northrop Grumman.

Additionally, Greenfelder has fostered the development of a strong professional learning community model at Thoreau, and the formative assessment model has been an integral part of its success.

"I am proud to say that the teachers at Thoreau have embraced the PLC model, and they are the foundation for the success the school has achieved," he adds.

Greenfelder and his wife Kelly are proud graduates of West Springfield High School. All three of their children attend Fairfax County Public Schools. ■

used the power of eCART to take student achievement to the next level.

"I've been teaching for 30 years, and when I was first introduced to eCART and PLCs, I knew in my head that it was great because it was a culmination of all the research into effective teaching that I've been doing for decades," Welin shares.

In her heart, however, she admits the idea of sitting down with the other teachers in her PLC was a little intimidating.

"After all, I was supposed to be the seasoned one — the one with all the answers. I wasn't keen on finding out if that was just a myth."

Fortunately, it didn't take long for her to relax and embrace the potential of the opportunity before her.

"I've been through lots of different waves in education, but looking back I see they've all moved toward this standards-based classroom," Welin explains.

"Tools like eCART, organizing into professional learning communities, and more support from principals, are what give teachers the opportunity to refine the curriculum, improve assessments, and provide better instruction to our students. Good teachers instinctively know how to best serve students. But now there are processes and procedures to help us all do an even better job."

Welin and Greenfelder agree that eCART isn't a magic bullet. But, Welin says, the secret to student achievement is having teachers working together—by grade, school, and division—as a team.

This year, her approach is being tested.

In fact, Welin and her fellow math teachers are facing a new challenge: They are on a mission to get nearly 100% of 8th graders to take—and pass—Algebra I.

To that end, last summer teachers at Thoreau hosted an Algebra Boot Camp for students they thought weren't quite ready to tackle this high-level class.

"For two hours a day for two weeks, we really hunkered down," Welin says, noting the math teachers team-taught the kids, "which was great because we all learned new tips and approaches to teaching from the other."

By the start of school, Welin and her professional learning community felt comfortable enrolling about 90% of the 8th graders into the Algebra 1 class—and while she and the other teachers are keeping a watchful eye on students' grades, Welin reports that so far all of the kids are doing well.

"We assess students on an ongoing basis to determine who needs support, and then we provide that support," Welin shares. "The important thing is that all students are trying, all students are stretching—and everyone is learning."

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A Note from Peter Noonan



When it comes to maximizing student performance, concepts like data-driven instruction are often bandied about in education circles as the “new thing.” This suggests that perhaps the idea isn’t sound, or it will likely go out of favor when another educational fad becomes more popular.

Nonetheless, I have long been a proponent of this concept, and know that with technological tools such as eCART principals and educators can successfully use data to help all students master the curriculum. eCART helps educators thoroughly and concretely understand where students stand in the core subjects so they can intervene in the areas where kids are struggling, and enhance learning opportunities in the areas that they have already mastered.

I realize that there are different perspectives about this approach. In an Education Week article published in 2006, Boston College professors Dennis Shirley and Andy Hargreaves wrote:

“Data-driven instruction obliterates the crucial fact that to be effective, educators have to use many different kinds of information to think about what they are doing in classrooms. While statistics can be immensely useful, they do not automatically point to which instructional approaches will work best with the diverse learners that make up classes, or a nation’s schools.”

I agree with their comments that “one child may struggle with underperformance because she has difficulties with reading, a second because he

has a turbulent home life, and a third because she is a recent immigrant learning English as a second language.”

But I firmly believe that when faced with such diversity, teachers and educational leaders have to be intelligently informed by evidence, not blindly driven by it to teach in a certain way.

That is exactly why I am convinced that the only way to effectively execute data-driven instructional programs is for our principals to set aside time for teachers to work in Professional Learning Communities (PLC)—time when they can put their educated heads together to determine what is the best practice and approach to help each and every student succeed.

*In this issue of **inside** you’ll hear from three Fairfax County Public School principals about how their teachers used time to plan, prepare, and coordinate action plans that focus on student learning.*

As someone who has worked in the classroom for years, I know how challenging it can be to ensure that each student reaches their highest potential. I also know that as educators, it is our responsibility to ensure that they do. By working together and using interventions such as data-driven instruction, I know we’ll achieve that goal.

*As always, I hope you enjoy reading **inside**, and I encourage you to contact me directly with thoughts and ideas.*

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Mount Vernon rules

Before moving to the Professional Learning Communities model at Mount Vernon in 2005, teachers tended to teach the curriculum in isolation—with the sole goal of preparing students to pass the SOLs at the end of the year, explains Principal Nardos King.

Then the award-winning principal, who was an AP at the time, traveled with seven teachers to a training seminar with education guru Rick DuFour and learned how to properly form an effective PLC.

“On our return, we probably rushed it because we were so motivated,” King admits. “Eventually, our enthusiasm caught on and today the PLC model has become a well-oiled machine at Mount Vernon. Each week, our teachers make time to plan and look at instructional data to decide where we need to go with our students—whether it’s remediation for our struggling kids or giving advanced work to students ready to move ahead. This is a marked improvement over our approach before we established a PLC and teachers worked in isolation. Now they don’t miss a beat.”

King firmly believes that professional learning communities and formative assessment tools such as *Aspire* in eCART are the reason SOL scores at Mount Vernon have been improving steadily. Last year, student scores in math and English hit the 80th percentile (up from the 30th percentile in 2003). Plus, 28 stu-

dents received International Baccalaureate degrees—a new record for Mount Vernon.

King attributes such dramatic academic improvements to the fact that students and staff have grown more accustomed to the higher standards.

“But I don’t discount the power of our increasing use of data-driven instruction,” she adds. “All teachers are using eCART, which has enabled them to look at last year’s SOL scores by strand and really mine down to see how each student is performing objective by objective.”

King points to her science department chairman Joy McManus, who with her PLC regularly administers common assessments to make sure the science teachers are aligned with the POS and SOL benchmarks.

“When we give common assessments we don’t just look at the overall scores but also parse the scores by objectives thanks to eCART,” McManus explains. “This helps us look at both how the students are doing overall, but it also lets us dig deep into how each individual student is performing by objective. The data clearly shows us which kids are missing certain concepts.”

When students are struggling, McManus and her team puts those kids into smaller groups where they are re-taught the concept until they fully understand the material.

Data provided by eCART has also helped

Mount Vernon High School Principal Nardos King is the recipient of the FPCS 2008 Outstanding First-Year Principal Award.

Praised for her ability to motivate students, she set several goals when she became principal: to have Mount Vernon become a positive focal point in the community; to reach out to Hispanic parents who were underrepresented at the school; to improve instruction; and to find a way to forge relationships among students and staff members.

She met with community members and parents and challenged them to become ambassadors for the school; reached out to Hispanic parents, with the help of a neighborhood church, and ultimately established a Hispanic Parent Council. She also adjusted the bell schedule to facilitate student enrichment, mediation, and mentoring. And King carved out Major Time, a



special 30-minute class period during which all students and teachers read silently. Students can also use part of the period to consult teachers for extra help, make up tests, or complete assignments.

Additionally, King initiated the Capturing Kids’ Hearts kickoff, bringing every staff member from the Mount Vernon pyramid together for a program that taught them new ways to make a difference in students’ lives.

Last year, she also promised to cut her hair into a Mohawk if students raised their SOL scores to 80% or higher in each of the four core areas. In addition to meeting that goal, 28 students in the class of 2007 earned the International Baccalaureate (IB) diploma—the highest number in the school’s history.

Last November 20, King headed to the hairdresser to make good on her promise. ■

McManus refine their approaches to teaching. Last spring, in fact, her PLC was analyzing SOL data and found students in chemistry teacher Matthew Thompson's class had performed far better than other students.

"The bulk of us in the PLC had been teaching the six chemistry units as a whole—including elements and the periodic table, compounds and bonding, kinetic theory, the mole and stoichiometry, chemical reactions, and Solutions—but Matthew had been spiraling his teaching and unveiling different aspects of the units in layers," McManus explains. "By the time students took the SOLs, the information was ingrained and integrated. Their scores showed his approach was a more effective way to teach."

This year, all of the chemistry teachers at Mount Vernon will be using Thompson's approach, McManus says, thanks to eCART data and the fact the chemistry team worked together to assess the data and find the best approach to help students learn.

Standing on Common Ground

Mount Eagle Elementary Principal Brian Butler is one of 196 FCPS schools that are implementing eCART this year.

"All of our teachers were trained in July, and we'll use it on a quarterly basis to assess how kids are doing," Butler says. "I'm really excited about it because until now, we've only had the BART assessment to help us see how well students are performing. Although that has been useful, it isn't as powerful as eCART, which will enable us to more accurately pinpoint what kids know and that will help us direct our instruction better."

He says eCART fits in beautifully with the overall strategy of having Professional Learning Communities, which he began implementing when he came to Mount Eagle Elementary School three years ago.

"PLC is not a team or a meeting, it is a way of life," says Butler. "The teachers may have been doing great work independently—but they weren't sharing their insights and ideas with each other. I wanted to help bridge that gap and have them collaborate."

Butler began the process by having his entire staff take a class on balanced literacy.

"I wanted to have everyone gain common knowledge, common language, and common expectations as a school," he says. "We now have a philosophy of 'Learning by Doing,' a PLC model that allows for teams to make mistakes without blame and work toward continual improvement relative to the data they receive."

This year, Butler also developed a formal document called *Mount Eagle's Common Language*.

"In 2001, Harvard researchers Robert Kegan and Lisa Laskow Lahey found that changing the conversation in an organization can



Brian Butler is principal of Mount Eagle Elementary. *In the last 21 years, he has worked as a counselor, teacher and athletic coach, and in each role has focused on the power of teamwork over the success of individuals.*

He formerly served as assistant principal of Lemon Road Elementary, and under his leadership, the staff at both schools have achieved high levels of meaningful collaboration.

Butler attributes his success to the many people who have helped him along the way. His goal, he says, is to have the staff, students and parents at all of his schools respect one another and be driven to learn at extremely high levels together.

"My expectation is that the journey to success will be challenging, and sometimes very difficult, but will be great fun along the way," he explains.

Brian has shared his philosophy and approach with numerous parent groups, assistant principals and principals in an effort to spark collaborative cultures in other schools.

Brian's degrees include a BA in speech communications from The George Washington University; teacher certification in physical education and a master's degree in school counseling from George Mason University; and an administrative endorsement from the University of Virginia. ■

have a profound impact on its culture and the day-to-day work of the people within it," Butler shares. "Changes in the conversation, however, call for us to be more specific with our language. Many organizations settle for superficiality in language, using terms so ambiguously and loosely that they can mean very different things to different people. We have come to understand that it's not only important to have a common language, but also to have precision regarding the meaning of that language. This is crucial to the culture of discipline essential to effective schools and districts."

To accomplish this mission, Butler has made time for collaborative team meetings, where grade level teams and the specialist attached to those teams conduct two distinct meetings—one in science and math, and the other in social studies and language arts.

"The teams focus on the critical questions of learning as they collaboratively develop common assessments and identify students who are not successful in relation to the end of unit common assessments to develop a comprehensive corrective plan of action," he explains.

Butler and his Assistant Principal Dawn Hendrick also host lead teacher team meetings where collaborative teams of staff leaders focus on the school's improvement plan.

Additionally, Butler has an extended contract teacher team meeting, where teachers who work on a 208-day contract come together and prepare for how they'll use their extra days at work to improve student achievement.

"Now that teachers have developed a common language, we are able to maximize our time during the variety of professional development opportunities that my staff is involved in, as well as learning and working with eCART," he concludes. "I believe this is a very effective approach—one that I am confident will generate terrific results for our students." ■

Recommended Reading

Books you can use

PETER NOONAN recommends:

Checking for understanding; formative assessment techniques for your classroom by Douglas Fisher, Nancy Frey

How to give effective feedback to your students by Susan Brookhart

BRIAN BUTLER recommends:

On Common Ground by DuFour, DuFour, and Eaker

The Servant by James Hunter

MARK GREENFELDER recommends:

The Art and Science of Teaching by Robert Marzano

Learning By Doing by DuFour, DuFour, Eaker, et al

Test Better Teach Better by James Popham

NARDOS KING recommends:

Professional Learning Communities at Work by Richard DuFour and Robert Eaker

Transformative Assessment by W. James Popham

Assessment for Learning an Action Guide for School Leaders by Stephen Chappuis, Richard J. Stiggins, Judith Arter and Jan Chappuis

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