

Schools Rooted in Student-Centered, Real-World Learning

There is no magic bullet to ensure high student achievement. But there are many ways to increase student performance, including quality instruction, actively engaging students and good classroom management practices.

This newsletter explores the value of positive reinforcement, project-based learning and designing schools around career pathway courses aligned with emerging career opportunities — all with the goal of having a high-performing school with a track record of preparing students for college and careers.

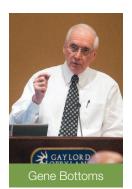
SAVE the DATES.

Join us for the **32nd Annual HSTW Staff Development Conference**,
July 11-14, 2018, in Orlando, Florida.

Come early for the **Sixth Annual College- and Career-Readiness Standards Networking Conference**,
July 9-11, in Orlando.

This newsletter describes best practices presented at the 31st Annual HSTW Staff Development Conference in Nashville, Tennessee, July 2017.

Schools Designed Around Career Pathway Courses



Students envisioning themselves in a career role is a powerful motivating factor," says Gene Bottoms, SREB's senior vice president. It's the "hook" they need to see relevance in school and learning.

Schools designed around career pathway courses and career-themed academies offer huge educational benefits that help students see into the future and connect the dots between what they are learning in school and what their lives could be like after school. Such a career pathway focus, combined with a college-ready academic core, can prepare students not just for college but for careers.

Bottoms defines career pathway programs of study as a sequence of career-related courses at the secondary and postsecondary level that provides students the foundational literacy and math skills needed for work, advanced training and college.

Quality Assignments

"Assignments matter," Bottoms maintains. He says career pathways provide students with authentic learning experiences that require them to work independently and in teams; do background research; develop a design or work plan; and apply technical,



technological, academic and personal skills to complete. Teachers must shift from "GPSing" (providing step-by-step procedures to solve problems) students through assignments to asking good questions, promoting critical thinking and allowing students to struggle and figure things out on their own. That's when learning takes place, he emphasizes.

Career-Themed Academies

Bottoms is also an advocate of transforming high schools into career-themed academies as a way of providing students with the authentic learning experiences necessary to prepare for college and the workforce. Academies are made up of three to five career pathways within a broad career field. They draw students with common interest; and require similar sets of related academic courses and ways of thinking in addressing work-related assignments. The pathway programs of study join a college-ready academic core with quality career and technical education (CTE) studies and require students to compete real-world assignments.



Career academies may be part of a larger whole-school approach where every student is a member of an academy. For example, a STEM (science, technology, engineering and math) academy may have an Advanced Career curriculum with a sequence of four courses related to energy and power. Those courses would be taken in grades nine, 10 and 11 with an internship between grades 10 and 11 or grades 11 and 12.

The career exposure is invaluable. It helps students see school not as a chore and something to be endured, but something that taps into their interests, aptitudes and aspirations.

Student Outcomes

Schools that operate effective career themed academies see greater student engagement, motivation, retention and desire to continue in their career field for advanced training and postsecondary studies, notes Bottoms.

Attending Bottoms' session at the HSTW conference was Al Taylor, principal at Berkmar High School in Gwinnett County, Georgia, and a strong supporter of career-themed academies. Berkmar serves 3,600 students and was transformed into a career-themed academy in 2015. In 2013 when Taylor became principal, he says the school's graduation rate was 54 percent. In the 2016-17 school year, it had climbed to 74 percent, and he said discipline problems are "pretty much non-existent."

Taylor gives a lot of credit to the implementation of academies. Berkmar has five career-themed academies and a ninth-grade academy, which Taylor credits as "probably the best thing we've done." The freshman academy emphasizes success for all students, cross curricular teacher teams, a centralized location for freshmen, bi-weekly data-driven discussions about students and continual student recognition.

Taylor says that the ninth-grade promotion rate went from the mid 40s percentage range in 2013-14 to 80 percent in 2016-17 — a significant accomplishment. Most educators know success in the ninth grade can be a make-or-break year for students as performance in the first year of high school is a powerful indicator whether students will go on to graduate.

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Transforming a Cluster Through Project-Based Learning

Meadowcreek High School in Gwinnett County, Georgia, has a thriving STEM (science, technology, engineering and mathematics) program. Not only that, but all six elementary and two middle grades schools in its feeder school cluster are deeply involved in STEM activities as well due to intentional, targeted efforts to ensure students are well equipped to meet the challenges of the global economy.

Meadowcreek, just north of Atlanta, serves about 3,100 students: 67 percent Hispanic, 20 percent African-American and 9 percent Asian. The school is one of five high schools in the county to team up with SREB to implement career-themed academies. **William Nye** leads the STEM career pathway



academy with majors related to architectural drawing and drafting, advanced integrated manufacturing, mechatronics, and engineering drawing and design. But the real story here is how the high school's STEM academy worked collaboratively with the elementary and middle grades schools to form the Meadowcreek Cluster Vertical STEM Team.

The Journey to Forming a STEM Cluster



In 2015, a student data review revealed that a significant percentage of students transfer within the cluster of six elementary schools and two middle grades schools. It indicated that it was common for a student to attend several elementary schools and sometimes both middle grades schools before reaching high school, and often these students had gaps in learning at a greater rate than other students.

A cluster STEM team, made up of teachers from all schools in the cluster, was created to share instructional practices and better align academic calendars so that students transferring within the cluster would have a more seamless transition. During the meetings, it also became clear there was a desire to expand STEM education in the cluster, share instructional practices, align curricula and assist with project-based

learning between the elementary, middle grades and high schools. The process leads to the development of a common STEM cluster theme — sustainability — and a collective desire to increase its robotics and urban agriculture programs.

To address the STEM Team's requests, grants were secured for a robotics, aquaponics and community gardens programs. Nye says a student peer-to-peer teaching program was created called Colts to Mustangs (named after school mascots). In this program, high school students work with elementary and middle grades students through clubs and academic competition teams. Students from the high school robotics competition team mentored elementary and middle grades students in the LEGO League Robotic Competition team — assisting coaches and students with robot building and coding.



In addition, the cluster robotics program expanded to include the FIRST LEGO League Jr teams for kindergarten through second grade and to the FIRST Tech Challenge for seventh- and eighth-graders.

With STEM programs in place at all grade levels in the Meadowcreek cluster, teachers began using project- or problem-based learning using the SREB model — "You step back and be the facilitator," says Nye.

Project-Based Learning Activities

To provide project-based learning support to the elementary and middle grades students, the cluster STEM team partnered with Georgia Commute Options to bring the Wheels Up Campaign to each school. The scripted PBL activity required the integration of math, science and language arts standards and provided a framework that each teacher could modify.



Students worked on projects that included traffic studies, carpool and mass transit impact on pollution, ground level ozone, no idling campaigns and more. The projects were among 268 exhibits at the cluster's STEM College & Career Fair and PBL Expo.

Grant funding also paved the way to build a community garden and an aquaponics lab at Meadowcreek High School. Students produced their own food. Some of the food grown was given to children in need or to the culinary arts program.

Aquaponics combines aquaculture (raising fish) with hydroponics (cultivating plants in water) producing a sustainable growth system with reduced waste and the need for chemical fertilizers. The waste from the fish becomes the nutrients for the plants.

These aeroponics units were placed in several elementary schools, one middle grades school and the high school. Aeroponics is the process of growing plants in an air or mist environment without the use of soil.

Outcomes

The Meadowcreek cluster experiences approximately a 40 percent transient rate annually. Yet, since implementing the academy model, the graduation rate has improved from 52 percent in 2013-14 to nearly 69 percent in 2014-15; 73 percent in 2015-16 and 75 percent in 2016-17. According to Nye, "Students who remain in the cluster from kindergarten to 12th grade have about a 95 percent graduation rate."

These initiatives are just the beginning of the transformation into a working STEM cluster, but already the increased communication and collaboration is making a difference in the community and in students' lives. Science Olympiad and math competition teams are in place at both middle grades schools and the Colts to Mustang program is bringing the middle grades and high school Science Olympiad and math students together.

Each cluster school has a STEM or science night that affords the high school students a chance to promote their STEM clubs and competition teams and hold demonstrations and mini-lessons in robotics, microbiology, biotechnology, astronomy and more. "This has increased science and STEM across the cluster," says Nye. Additionally, the gender gap in STEM education has been narrowed. There are several girls-only robotics competition teams and an increase in females in the architecture, engineering and mechatronics high school pathways.

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Strategies for Reducing Suspensions

To maintain order and discipline in the classroom, teachers' needs must be met first says, **Bert Simmons**, founder of the Education Company. "The teacher is the boss in the classroom, not bossy, but the boss," he explains. Teachers must be assertive and exhibit a proper level of dominance. For example, they are friendly with students, but they are not their friends; teachers never tear down or attack students; instead discipline is prescribed in a professional manner. He also notes, every teacher must have a classroom management plan.

Classroom Management Strategies

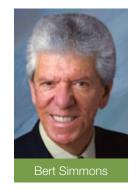
- Use a classroom management plan that is visible, readable and consistent.
- Have a positive reinforcement system that is employed on a regular basis.
- Employ redirecting techniques. This could be a look, name, move-in gesture, verbal direction, etc.
- Put in place a consequence delivery plan and stick to it.
- Build relationships with parents. Know when to call them about disciplinary issues.
- Count on support from administrators responsible for handling flagrant violations such as violent behavior.

Administrative Plan

The administrative team must also have a classroom plan, says **Thomas Glanton**, president of the Education Company. He's a big advocate of the Discipline Card — a tool implemented by administrators to support teachers in the classroom and to provide alternatives to suspensions. Glanton says the card is used to provide consistent monitoring and support for students. Students pick up the card each morning from the principal's or administrator's office and return it at the end of the day with teachers' initials applied.

Essential Components of the Discipline Card

- Expectation for behavior: Students must be on time; have a seat; do not argue; have materials, etc.
- Attendance: Teachers must initial the card to verify students attended classes.





- Consequences: First, students get a warning for poor behavior; next, spend 15 minutes in timeout; third, spend 30 minutes in timeout with an administrator; and finally, in-school suspension or whatever is the most severe consequence in the school.
- Positive Feedback: This is the "most powerful component," says Glanton. Teachers write complimentary, morale-boosting comments on students' Discipline Card when they do not get any warnings for inappropriate behavior You're the best!, You're number 1.
- Parents, who are partners in the administrative plan, also provide rewards or privileges to their children when they get a good report on the Discipline Card.

A conference to review students' performance occurs when the card is returned to the administrator or principal at the end of the day. "The greatest gift ever given to an administrator is the Discipline Card," says Glanton. "It will change a students' behavior in three days, because kids are not used to adults following through," he insists. Consistency is key, he adds.

However, he cautions, "There's no magic in the card. The magic is in the commitment of the kids to follow through with the card." The strength of the card is the use of consistent, positive reinforcement and clarity when it comes to consequences.

Strategies Yield Results

Principals who participated in video testimonials on the Education Company's website point to dramatic improvements after putting in place the strategies: reduced tardiness and discipline problems; a big reduction in discipline referrals to the office; improved achievement scores in math and reading; and a better understanding and cooperation among parents and teachers.

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Improving Classroom Management in High Poverty, High Minority Schools



Little learning takes place in out-of-control and chaotic-classrooms. Many teachers in high-poverty classrooms struggle to establish order. According to Assistant Principal **Rhonda Robbins**, good classroom management not only deals with minimizing student misconduct, but also maximizing student engagement and the amount of time students are in the classroom in a productive learning environment.

Robbins is the new assistant principal at **STRIVE Prep-Excel, a Denver**, Colorado, charter high school that focuses on urban youth. Previously she taught literacy at a middle grades school and a high school — both in high-poverty and high-minority areas. When students misbehave and pose disciplinary problems, intervention must take place, but "the purpose of intervention is to help students, not to punish them," says Robbins.

Robbins highlights several tips and essentials of classroom management:

- Build relationships with students, not friendships.
- Have high expectations for academics and behavior.
- Believe that students can do it.
- Create a warm and safe environment.
- Use appropriate intervention.
- Exude confidence. "If you don't have it, fake it; kids smell fear," insists Robbins. She notes teachers must present that, "I'm in charge; I know what I'm doing" attitude.
- Respect yourself and your students.
- Model appropriate behavior. In other words, "Walk the walk and talk the talk." If students can't eat in class, then neither should the teacher.
- Organize and implement instruction in ways that optimize student access to learning.
- Use group management methods that encourage student engagement with academic tasks.



"Students want teachers to set boundaries and limitations and hold them to high expectations — in short, to really teach them and value them as students. Teachers have to start out believing, really believing that students can learn, and then making sure that their instruction provides the students with what they need.

Rhonda Robbins, assistant principal

The Warm Demander

Robbins says students generally consider her as being tough but fair; having fun in class, having a tough curriculum and requiring a lot of critical thinking. She uses the warm demander approach to classroom management. A warm demander communicates both personal warmth and demands students perform at a high level.

Engaging lesson plans is an excellent strategy of good classroom management, she notes. However, "Often when at-risk students misbehave, I believe, they are testing the adults in the building. They wonder if they will give up on them," she maintains. She's adamant that students want teachers to set boundaries and limitations and hold them to high expectations — in short, to really teach them and value them as students. "Teachers have to start out believing, really believing that students can learn, and then making sure that their instruction provides the students with what they need." She continues, "What I hear kids say is that we're not doing our jobs when we back off and don't require and demand they do work."

Students from high-poverty backgrounds learn less and fall behind more when classrooms lack order and teachers must focus too much on discipline. They become disengaged. They often don't get or take advantage of second chances to catch up and are less likely to graduate. **That's one reason Robbins says, teachers "...must like kids. If you don't like kids, please get out of education. It ruins lives."**

Robbins is emphatic that it's essential for teachers to establish relationships with students' parents as well. She believes teachers should never wait until misbehavior becomes a habit before calling parents. The same is true for informing parents about their child's parent academic parformance. One reason parents get angre is that teachers call their

informing parents about their child's poor academic performance. One reason parents get angry is that teachers call them too late. "Don't wait until they're (students) are about to be suspended," she maintains. **She also believes parents are much more open to teachers' feedback when they know teachers care about students and not the rule.**

It Works

The warm demander approach to classroom management resulted in increased student performance on Colorado's state exam. One year Robbins 10th-grade honors English class not only scored the highest rate of Proficiency on the state exam, but they also had the highest rate of growth.

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Helping English Language Learners Gain Confidence in STEM Courses

Maria Royle, an English to Speakers of Other Languages (ESOL) teacher in South Carolina, encounters many challenges while working in a school where nearly a third of students are not native English speakers. Among those challenges is the stigma attached to the ESOL label. Her students' lack of a background in math and science and cultural differences are prevalent among Americans and immigrants. Royle finds having a supportive administration and integrating art into the ESOL curriculum solves many of these problems.

Royle teaches at **R. B. Stall High School**, a Title 1 school in North Charleston. One might expect her to have an advantage given her native language is Spanish; however, only 27 to 30 percent of Stall's ESOL students speak Spanish. The rest speak as many as 15 other languages.



Changing the Stigma Attached to ESOL Students

Assimilating ESOL students into the school population is one of Stall's goals, but Royle finds that her students often shy away from social interaction because they feel the ESOL label marks them as inferior. Their feelings are validated by the work of Jeannie Oakes, president of the American Education Research Association, who says, "These students, far more so than dominant-culture students, are often tracked into the lowest level classes with the least highly qualified teachers and with consistently low expectations made of them."

Royle says the school works hard to change the stigma of ESOL. "These students are not dummies," she says, "They are learning to be bilingual." The bilingual label will benefit them later in life when they apply for jobs and will give them an edge over their classmates who speak only English. Royle notes her more gregarious students often try to speak English.

ESOL administrator **Claudia Newbern** notes, "It takes up to seven years to learn academic language." Students are in survival mode and trying to fit in, so they learn street language and vulgar terms to be "cool." **Royle addresses that situation by teaching them appropriate greetings and the difference between proper and improper speech.**

She also provides ESOL training to core teachers so they understand inappropriate language is not purposeful misbehavior. She also makes sure they understand that her course is part of the curriculum and not a study hall where they can send students who are having trouble with their classwork.

STEM Literacy Depends on Language Mastery

One of the first things Royle, a certified science teacher, noticed as she made the transition from the science classroom to ESOL was that "ESOL is not just language arts." In her group of students alone, "35 percent of them had little to no background in math or science; 21 percent of those students lacked basic multiplication skills; 10 percent had not attended school since second or third grade, Royle notes."

Royle laments that teachers in the United States do not understand that second grade in the U. S. is not necessarily like second grade in other countries; uncertified teachers may teach foreign students. According to Royle, "It is so hard for them when they come in with nothing — no background." She gives them the opportunity to develop math and science background information because "if you don't get them that first year, it is very difficult to keep them in school."

Relying on the research of Merrie Koester that found achieving science literacy depends primarily on English reading and listening fluency," Royle developed a curriculum designed around a weekly science topic to expose students to science concepts and give them the skills to read, write and speak English. **Integral parts of the instruction were writing products and field trips to expose them to the arts and provide social and cultural enrichment.**

"Incorporating the arts helps students develop critical thinking skills and teaches them to work on their expressive language," Royle explains. She adds that in schools where personnel are limited and the ESOL teacher cannot have a class based on math or science content, having the ESOL teacher co-teach with a content area teacher may be the best option.

Visual and Auditory Stimulations

Based on the learning styles inventory Royle's administers to all new students, she has learned that most are kinesthetic or auditory. **"The more hands-on activities you can do, the better,"** she says. Additionally, experience has shown "pictures are very important," and she uses a variety of art forms with her students.



For example, she uses poetry, music and drawing to teach the water cycle; and her students use "deconstructed" Oreo cookies to illustrate the phases of the moon. **She finds these art forms are "simulating and stimulating" and engaging for her students and reports that students who use art in ESOL have fewer disciplinary referrals.** She also reports that 98 percent of her students mastered the state's science content last year.

Although Royle has encountered obstacles in working with the ESOL population, she has found that "an ESOL student's success is communication with teachers." When the administration works directly with students and parents, and teachers keep in mind that ESOL is more than just language arts, students will be successful.

This philosophy has worked well at R.B. Stall High School, but Royle encourages staff members to see for themselves. "Try to find what works for your school."

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