INCREASING
ACCESS & EQUITY:
A WHOLE SCHOOL APPROACH

By Dale Winkler & Scott Warren

D espite a pervasive national rhetoric around college and career readiness, just eight percent of high school graduates complete a full college- and career-preparatory curriculum, and nearly half of all graduates complete neither a college- nor a career-preparatory curriculum, according to the Education Trust (Bromberg & Theokas, 2016). The numbers are worse in schools serving high percentages of minorities and schools in geographically isolated or economically disadvantaged communities.

Many youth also graduate without basic workplace knowledge and skills. Leading employers report struggling to find qualified workers with the broad mix of skills described by the Business Roundtable — industry-specific technical skills; all-purpose skills in science, technology, engineering and math (STEM); and essential employability skills like the ability to communicate well, read technical materials, work in teams and solve complex problems.

We believe that career pathway programs that blend quality career and technical education (CTE) and college-preparatory academics offer a way to increase readiness, postsecondary attainment, career advancement and economic stability for youth of all genders, races, socioeconomic backgrounds and ability levels.

States are using career pathways as an essential element of college and career readiness initiatives that satisfy the requirements of the Every Student Succeeds Act (ESSA) and Perkins V.

Adopt Improvement Frameworks

The Southern Regional Education Board (SREB) has a long history of helping K–12 schools and technology centers in racially, economically and geographically diverse communities adopt school improvement frameworks that are based on the belief that students can master challenging academic and career pathway curricula when taught in environments that encourage them to succeed.

SREB's Making Schools Work frameworks are also grounded in research showing that high-quality CTE keeps students engaged and achieving at higher levels,

Bold Goals for Student Achievement

In the **middle grades**, 90 percent of students should enter high school able to read and understand grade-level texts and prepared to take Algebra I.

In **high schools and technology centers**, 90 percent of students should earn enough credits as first-time ninth-graders to enter the 10th grade, 95 percent should graduate on time, 80 percent should graduate college- and career-ready, and 60 percent should earn a credential or degree of value by age 25.

prevents dropout, promotes successful transitions to postsecondary education and the workplace, and offers special benefits to minorities, young men, and students from low-income families (Kemple & Willner, 2008; Stone, 2017).

Our approach began in 1987 with the High Schools That Work framework, which we expanded to address the unique needs of middle grades schools and technology centers with Making Middle Grades Work and Technology Centers That Work. Now encompassing all of K–12, Making Schools Work engages educators and leaders in identifying problems of practice that prevent at-risk students from

achieving, implementing research-based solutions to those problems, and learning within a collaborative network.

Schools that adopt these frameworks implement key practices that expand access to rigorous curricula, help academic and CTE teachers integrate their instruction, improve the quality of instruction in all classrooms, provide students with personalized supports, and help leaders foster a culture of continuous improvement.

Network schools report experiencing fewer absences and disciplinary incidents as well as increased attendance, graduation rates and achievement. They can also set and achieve Making Schools Work's bold goals (sidebar).

Increase Access to Career Pathways

In December 2013, SREB convened national CTE experts and state leaders to determine actions to address growing gaps in workforce preparation and credential attainment. The result was *Credentials for All* (Bottoms & Sundell, 2015), a report that gave states, districts and schools a set of actions for increasing access to pathways that:

- Are driven by labor market demand
- Are comprised of a college-ready academic core and a challenging sequence of technical courses
- Align three stages of learning — secondary, postsecondary and workplace
- Offer guidance systems that connect career exploration with ongoing advisement
- Allow students to accelerate their

learning and earn advanced credentials and college credits
- Lead to postsecondary credentials and degrees and high-skill, high-wage, high-demand careers

We responded to this report by intensifying the focus of our frameworks on helping districts and schools develop or expand career pathway programs, align pathways with labor market demand, and conduct curriculum and instruction reviews and pathway reviews that now help districts meet the access and equity requirements of Perkins V.

We also partner with districts and schools to design pathways that attract underrepresented and nontraditional students.

One such collaborative effort is Kentucky's new nursing pathway. In October 2015, SREB convened state leaders around the goal of building pathways from high school to careers in high-growth industries. At the meeting, Kentucky leaders committed to developing a seamless, secondary-to-postsecondary pathway in nursing, one of the state's most in-demand fields (Sundell & Shaughnessy, 2017).

Kentucky's nursing pathway is delivered alongside a college-ready academic core. SREB recommends that the core include four years of college-preparatory English, three years of lab-based science, three years of social studies, and four years of college-prep math that is tailored to students' career interests. For example, students pursuing credentials and careers in STEM fields like nursing or health care would take Algebra II and

higher math. Students pursuing credentials and careers in non-STEM fields might take Algebra I, geometry and two career-related math courses.

Introduce Students to Careers

In 2009, SREB published a commission report that challenged states, districts and schools to expand access to curricula that blend college-ready academics with hands-on learning and introduce students — especially at-risk and nontraditional students — to career options (Bottoms, Spence & Young, 2009).

Later that year, SREB began partnering with state leaders, employers, postsecondary educators and master teachers to design 10 Advanced Career (AC) curricula that prepare high school students for industry and postsecondary credentials and degrees and exciting careers (sidebar). Each four-course pathway was purpose-built to attract underrepresented and nontraditional students and spark their interest in STEM careers through project-based assignments. As an out-of-the-box curriculum, AC can also help rural and urban schools and districts address access and equity.

Schools have found that AC helps students find a purpose for learning because its multiweek projects challenge them to apply their knowledge and skills to solve complex, real-world problems. Postsecondary and workplace learning opportunities — key elements of ESSA and Perkins V — are baked into AC's curricula and projects.

Perkins V also calls on state and local education agencies to provide career exploratory experiences as early as fifth grade. Early learning experiences are key to introducing students to STEM degrees and careers. In a 2011 survey of students and parents commissioned by Microsoft, nearly four in five STEM college students said they decided to study STEM in high school or earlier; one in five decided in the middle grades or earlier (Harris Interactive, 2011).

In response to this need, SREB developed a project-based middle grades STEM curriculum that introduces students to the principles of scientific inquiry and the engineering design process. As a "pre-AC" curriculum, middle grades STEM projects were designed to appeal to nontraditional students and students whose exposure to a broad range of STEM career opportunities may be limited.

To further address the cultural, geographic and economic limitations diverse students face, Making Schools Work frameworks also encourage schools to offer career aptitude surveys along with interest inventories to help students make the connection between their talents and career possibilities.

Focus on Quality Instruction

High-quality instruction is essential to school and student success. Schools implementing SREB's improvement frameworks use project-based learning to infuse CTE with high-level math, science, language arts and problem-solving skills that prepare students for the modern workplace and continued learning.

The frameworks also provide tools and practices that enhance the quality of instruction and help students connect what they learn in the classroom with their career and college goals.

Literacy is an essential workplace skill. Our powerful literacy practices advance students' reading, writing, speaking and listening skills and content achievement. Literacy-based assignments in every class require students to read grade-level or higher texts and demonstrate their understanding in writing and discussions.

Effective schools create an organizational structure and schedules that give

Six Elements of Professional Development

1. Build the capacity of teacher-leaders with professional development and job-embedded coaching.

2. Develop local certified literacy and math trainers who can provide coaching support within schools and across the district or region.

3. Conduct classroom observations and provide feedback that helps teachers shift their practices.

4. Work toward schoolwide and districtwide implementation by developing lead teachers and local trainers.

5. Work with principals to conduct classroom observations that focus on powerful literacy and math practices.

6. Adopt rubrics and tools that give teachers and leaders a common vision for best instructional practice.

> "'Struggling students don't learn more by us teaching them less.' I learned that as principal of Decatur High School. With SREB support, we opened access to high-level courses, removed 'basic' options, and brought equitable experiences to students of all backgrounds and achievement levels. Raising the floor and removing the ceiling transformed our school."
>
> –Lauri Johnson, division director, SREB

teams of academic and CTE teachers time to co-plan instruction, design standards-driven assignments and assessments, and model and share effective instructional strategies.

To support these shifts, SREB developed a six-element approach to professional development (sidebar) that changes professional learning from an event to a process.

SREB's improvement frameworks also help schools expand access to job shadows, internships, co-ops, school-based enterprises and service learning. Schools plan a range of developmentally appropriate work-based learning experiences in partnership with employers. Experiential learning is especially valuable for low-income students who may lack the social capital to learn about careers.

Support Students

As changes in curriculum and instructional practices occur, SREB's school improvement frameworks help schools adopt a systematic approach to identifying and supporting each student's unique needs. Evidence suggests that literacy and math courses like SREB's can increase students' academic achievement and prepare them for college-level coursework.

In spring 2016, SREB worked with Arkansas and Mississippi to offer students the opportunity to retake the ACT exam after completing SREB's college-preparatory Literacy Ready and Math Ready courses.

Over 50 percent of students who took Literacy Ready increased their overall ACT score by an average of two or more points and their English and science scores by an average of three or more points (Bottoms & Squires, 2017). SREB found that 40 percent of Literacy Ready students who fell within three points of a cutoff score in ACT's English, reading or science exams met the state readiness benchmark and could avoid remediation in college.

About 60 percent of students who took Math Ready increased their overall ACT score by an average of two or more points and their math and science scores by two or more points in math and three or more points in science. More than 35 percent of Math Ready students who fell within three points of a cutoff score in ACT math or science met the state readiness benchmark and could avoid remediation in college.

Increase Access & Equity for All

In urban, suburban and rural settings, SREB's school improvement frameworks provide a structure that empowers schools to make the changes needed to expand or improve access to high-quality programs and ensure that all students — regardless of their gender, race, socioeconomic background, ability level or location — discover a purpose for learning and life.

With support, middle grades schools, high schools, technology centers, postsecondary partners and workforce leaders can create career pathway programs that expand opportunities for all. ■

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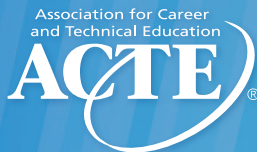
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