

# Principal's Research Review

Supporting the Principal's Data-Informed Decisions

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## Boosting College and Career Readiness

By Rhonda Barton

**A**t St. Ignatius High School on Montana's remote Flathead Indian Reservation, a poster declares: "Diddly squat (What most kids know about preparing for college)." The bold warning is part of a multimedia campaign by the American Council on Education, Lumina Foundation for Education, and the Ad Council to help 8th- through 10th-graders take concrete steps toward pursuing college.

Some students may be perplexed about what it takes to be ready for postsecondary options, and educators also debate what readiness means. US Secretary of Education Arne Duncan addressed this issue in remarks at a College Board AP Conference, where he debunked the myth that "high school educators and counselors cannot really prepare students for college and careers because the concept of college and career-readiness is too elusive to evaluate meaningfully with assessments or

to track with longitudinal data systems" (US Department of Education, 2010, p. 1).

One widely held definition of readiness is offered by ACT, the testing service that has collected and reported data on students' academic readiness for college for more than half a century. According to ACT, college and career readiness is "the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution (such as a two- or four-year college, trade school, or technical school) without the need for remediation" (ACT, 2011, i).

Applying this definition, ACT found US students unprepared for postsecondary challenges. Only 25% of ACT-tested high school graduates in 2011 met college readiness benchmarks in four subjects: English, reading, mathematics, and science. The greatest number of students (52%) met the reading

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### Just the Facts

- Only 25% of ACT-tested high school graduates in 2011 met college readiness benchmarks in four subjects: English, reading, mathematics, and science.
- Symonds, Schwartz, and Ferguson (2011) argued that focusing on college readiness alone does not equip young people with all the skills they will need in the workplace or to complete the transition to adulthood.
- The Association for Career and Technical Education (ACTE) makes the case that college ready and career ready are not the same thing.
- By reconceptualizing the role of the middle grades, Balfanz (2009) asserted, the nation is more likely to achieve the goal of graduating all students prepared for college and careers.

benchmark, while the lowest number (30%) met the science benchmark (ACT, 2011). Despite that showing, ACT reported that the percentage of students meeting the four benchmarks increased slightly (by 2%) from 2007 to 2011 (ACT, 2011).

According to the education reform organization Achieve, college and career readiness are the same thing, and being ready means having content knowledge and skills in English and mathematics—including reading, writing, communications, teamwork, critical thinking, and problem solving. Citing research from throughout the last decade, Achieve asserted that there is “a convergence in the expectations of employers and colleges in terms of the knowledge and skills high school grads need to be successful after high school” (Achieve, n.d., p. 1).

Another definition of readiness is provided by the Educational Policy Improvement Center (Conley, 2011). The Center maintained that college readiness should not be defined only by high school course-taking, grades, and national test scores. Rather, students’ readiness should also be judged by:

- Cognitive capabilities such as analysis, problem solving, and reasoning
- Content knowledge, including the ability to write well
- Attitudes and behavior such as time management and study skills
- Contextual knowledge such as applying to college and adjusting to campus life. (Conley, p. 1)

Whether education leaders apply a narrow or an expanded definition of readiness, the issue raises a number of questions: What support do schools need to provide to ensure that students are ready for college and careers? Is there a difference between the two? What role does middle school play in readiness? How do minority students and English lan-

guage learners fare when it comes to access to educational resources that promote readiness? How do the Common Core State Standards impact readiness?

### Supports to Ensure Readiness

A recent report by the Harvard Graduate School of Education by Symonds, Schwartz, and Ferguson (2011) argued that focusing on college readiness alone does not equip young people with all the skills they will need in the workplace or to complete the transition to adulthood. The authors pointed out that only 30% of young adults graduate from a

four-year college after completing an academic course of study in high school. They called for multiple pathways that recognize students’ diverse needs and abilities, and allow them to pursue traditional postsecondary degrees or credentials short of a four-year bachelor’s degree. They asserted that “both hard and soft skills are essential for success in this economy” (Symonds, Schwartz, & Ferguson, p. 4), and so-called soft skills, such as problem-solving, creativity, and communication, are often given short shrift in the push for more rigorous high schools.

To rectify the situation, the report suggested that the US educational system must clearly show how course-taking patterns from the beginning of high school are linked

to all major occupations. Schools must also offer more robust career counseling. The business sector should have a major role in supporting pathways by setting standards and designing programs of study, advising students, and providing work-linked learning opportunities, such as internships. And students should have access to career counseling, job shadowing, and on-the-job learning no later than middle school.

The Southern Regional Education Board (SREB) also suggested that educators challenge

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traditional distinctions between college- and career-oriented studies and provide multiple pathways that guarantee every student a challenging and engaging educational experience (Bottoms, Young, & Han, 2009). On the basis of its research and experience with High Schools That Work, SREB identified six strategies for preparing students for college and the 21st century workplace:

- A rigorous core curriculum with four college-prep English courses, four mathematics courses (including Algebra I and geometry), three lab science courses, and three social studies courses
- High-quality career and technical (CT) programs that include strong academic content and authentic learning experiences
- An emphasis on skills defined by industry and business leaders
- High expectations for students in both academic and CT classrooms
- Support for students that enables them to master all courses
- An adult adviser or mentor assigned to each student. (Bottoms, Young, & Han, 2009)

SREB pointed out that blending academic and CT education isn't easy and may require substantial structural changes. Schools may have to consider creating new schedules, implementing dual-enrollment programs, restructuring large schools into smaller units, and extending learning beyond the campus. In addition, schools must bridge differences among program standards and teachers with varying professional backgrounds (Bottoms, Young, & Han, 2009).

An evidence-based practice guide by the Institute of Education Sciences'

What Works Clearinghouse offered preparedness recommendations that are more geared toward supporting a college-going culture. In *Helping Students Navigate the Path to College: What High Schools Can Do*, Tierney, Bailey, Constantine, Finkelstein, and Hurd (2009) reviewed 99 studies

conducted from 1988 to 2008 and based their findings on 16 that offered the strongest evidence of the effectiveness of college access programs. The guide recommended that schools:

1. Offer courses and curricula that prepare students for college-level work, and ensure that students understand what constitutes a college-ready curriculum by ninth grade. This includes developing a four-year course trajectory individually with every ninth-grade student.
2. Utilize assessment measures throughout high school so that students are aware of how prepared they are for college, and assist them in overcoming deficiencies as they are identified. This calls for creating individualized plans for students who are not on track.
3. Surround students with adults and peers who build and support their college-going aspirations. This involves providing students with hands-on opportunities to explore careers and align their plans with their career aspirations, as well as matching students with mentors who recently enrolled in college.
4. Engage and assist students in completing critical steps for college entry. This encompasses coordinating college visits and helping students fill out applications.
5. Increase families' financial awareness, and help students apply for financial aid. This includes organizing parent-student workshops on college affordability, financial aid processes, and available scholarships prior to 12th grade. (Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009, p. 11)

The practice guide emphasized that students need to start taking college preparation courses in ninth grade in order to be academically prepared by graduation. It is incumbent on schools to make sure that students get and stay on the path to college. School staff members also need to provide adequate advice

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about the discrete steps involved in enrolling in college—from taking entrance exams and submitting applications to selecting a postsecondary institution.

### Ready for Work Versus College

While organizations such as ACT and Achieve argue that all students should be educated according to a common academic expectation that prepares them for both college and careers, the Association for Career and Technical Education (ACTE) makes the case that college ready and career ready are not the same thing. ACTE argues that high schools that prepare students for college do not necessarily provide them with the skills needed to succeed in the workplace. An ACTE report stated that three major skill areas are needed for career readiness:

core academic skills and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities; employable skills (such as critical thinking and responsibility) that are essential in any career area; and technical, job-specific skills related to a specific career pathway. (ACTE, 2010, p. 1)

The ACTE (2010) report emphasized that academic proficiency—particularly in English and mathematics—is essential for both postsecondary education and career pathways. However, ACTE believes that students preparing for the world of work need to be able to apply those core academics in specific ways. For example, students must be able to analyze and use technical manuals, research articles, and other written communications that are common in the workplace. Math skills should focus on data analysis and statistics, reasoning, and solving mathematical problems. Further, students must be able to apply academic knowledge to authentic situations that they will encounter in their chosen fields—from

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a nurse's need to calculate ratios for drug dosages to a construction worker's ability to apply geometry to execute building plans.

### The Pivotal Middle Years

Whether students are ultimately headed for college or careers, the middle grades are critical in getting to the finish line, a tenet of NASSP's *Breaking Ranks* framework. In a 2009 policy and practice brief that was based on field work and a decade of research at the Center for the Social Organization of Schools at Johns Hopkins University, Balfanz stated,

The middle grades, broadly defined as fifth through eighth grade, need to be seen as the launching pad for a secondary and post-secondary education system that enables all students to obtain the schooling and/or career training they will need to fully experience the opportunities of 21st century America. (p. 3)

Balfanz (2009) further claimed that the middle grades are especially pivotal in high-poverty communities.

Following several cohorts of low-income students in 30 Philadelphia schools from grade 6 through one-year past on-time graduation, Balfanz (2009) found that sixth-graders who failed math or English/reading, attended school less than 80% of the time, or had an unsatisfactory behavior grade in a core class had only a 10% to 20% chance of graduating from high school on time. Fewer than a quarter of students with at least one off-track indicator graduated within one extra year of on-time graduation. Those findings were replicated in a subsequent study involving five school districts.

Balfanz (2009) also stressed that the studies suggested specific steps to be taken to put middle school students on the path to graduation and future success. These include measuring absences and pub-

licly rewarding good attendance; surveying students on their perceptions of school safety and whether negative perceptions are linked to absenteeism; providing avenues for short-term success through engaging electives; recognizing positive behavior; teaching study and time-management skills; improving the quality of middle school coursework; creating developmentally appropriate high school and college readiness indicators; and offering extra help as soon as the need arises. Developing effective early warning and intervention systems is also a part of the mix.

By reconceptualizing the role of the middle grades, Balfanz (2009) asserted, the nation is more likely to achieve the goal of graduating all students prepared for college and careers.

### Disparities in Access to Resources

Some student groups are at greater risk of being unprepared for future success. According to the 2009–10 Civil Rights Data Collection (US Department of Education, 2011), low-income, Black, and Hispanic students continue to face disparities in accessing educational opportunities and resources that can pave the way toward college and careers. The data were derived from a survey of approximately 7,000 school districts and more than 72,000 schools. Within that sample:

- 3,000 schools with nearly a half-million high school students do not offer Algebra II classes, and more than 2 million students have no access to calculus classes
- Schools serving mostly Black students are twice as likely to have teachers with less experience—one or two years—than teachers at schools serving primarily White students in the same district
- Only 2% of students with disabilities take at least one Advanced Placement class
- While students with limited

English proficiency represent 6% of all high school students, they represent 15% of the students for whom Algebra I is the highest math class taken by their senior year. (US Department Education Office of Civil Rights, 2011)

In reporting college readiness by race and ethnicity, ACT (2011) found that Black graduates were least likely to meet readiness benchmarks in English, reading, math, and science. Only 4% of Black students met all four benchmarks, but 11% of American Indian and Hispanic students did so. Forty-one percent of Asian graduates met the benchmarks—a figure that was equal to the combined rates for Black, Hispanic, American Indian, and Pacific Islander students and 10% more than for the rate of White students.

### The Common Core and Readiness

The Common Core State Standards (CCSS), an initiative spearheaded by the National Governors Association and the Council of Chief State School Officers, are intended to provide a clear understanding of what students should know and be able to do in order to succeed in college and careers. As the CCSS's mission states, "With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy" (Common Core State Standards Initiative, 2011). As of fall 2011, all but six states have adopted the CCSS.

The Harvard *Pathways to Prosperity* paper (Symonds et al., 2011) called the adoption of national standards "long overdue." However, the authors also stated that the challenge will be to provide enough differentiation in the CCSS so that students in grades 11 and 12 can take steps toward viable careers if they're headed for jobs that require less formal academic preparation.

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“Our hope is that states will recognize the importance of providing such options and not make the mistake of mandating a narrow common college prep curriculum for all” (Symonds et al., 2011, p. 24). The authors further stated that requiring all students to take the most demanding college prep curriculum—even if they’re not headed for a four-year college—might be counterproductive and might affect school completion rates.

Meanwhile, a study by the Educational Policy Improvement Center (Conley, Drummond, deGonzalez, Rooseboom, & Stout, 2011) found that college instructors of entry-level courses consider the English/language arts and math CCSS to be applicable to the courses they teach. The study asked two questions of instructors of almost 1,900 courses at 944 two- and four-year colleges in all states and the District of Columbia: Do the high school standards represent material that will be covered or reviewed or considered a prerequisite in your course? If so, on a scale of 1 to 4, how important is mastery of each strand or category of standards—to success in your course?

The survey found that English/language arts and literacy standards received higher importance ratings on the whole, compared to the math standards. However, almost every standard had a mean rating above 2.5, which was the midpoint between “less important” and “more important” and the mean rating for most standards exceeded 3 on the 4-point scale.

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In English/language arts, instructors in all disciplines rated the speaking and listening skills as most applicable to college courses. In math, the “mathematical practices” skills, such as applying math knowledge to everyday problems were rated the highest (Conley et al., 2011).

Conley, Drummond, Drummond, deGonzalez, Rooseboom and Stout (2011) concluded that

students who are generally proficient in the Common Core standards will likely be ready for a wide range of postsecondary courses, and the more Common Core standards in which they are proficient, the wider the range of postsecondary-level classes they will be ready to undertake (p. 7).

### Summary

Whether or not college readiness is considered equal to being ready for careers, the data show that US schools need to step up their efforts to prepare students for postsecondary success. As Secretary Duncan put it, “The mission of high school can no longer be to simply get students to graduate. Their expanded mission, as President Obama has said, must also be to ready students for careers and college—and without the need for remediation” (US Department of Education, 2010, p. 1). [PRR](#)

The logo for 'Breaking Ranks' features the word 'Breaking' in a large, bold, black sans-serif font, with 'Ranks' below it in a smaller, bold, red sans-serif font. A registered trademark symbol (®) is located to the right of 'Ranks'.

**BREAKING RANKS RECOMMENDATION 23: The school’s instructional practices and organizational policies demonstrate its belief that each student—with work, effort, and support—can achieve at high levels.**

The *Breaking Ranks* school improvement framework guides the efforts of a school toward the goal of college and career readiness for all students. But that work can only bear fruit if the school’s culture allows it. Attending to the *Breaking Ranks* change process allows school leaders to implement initiatives in a way that moves the culture as well—making the improvement sustainable.

[www.nassp.org/breakingranks](http://www.nassp.org/breakingranks)

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