

Do All Students Need a College-Prep Curriculum?

A common concern in states and communities that are considering raising high school graduation standards is that it is unfair to require all students to take a rigorous curriculum. Not all students will go to college, the argument goes, so they do not all need a college-preparatory curriculum.

While it is true that some students will go directly to the workforce after high school, new research suggests that the skills needed to get and keep good jobs are very similar to what colleges demand of incoming freshmen. In fact, most well-paying jobs today require education beyond high school.

Skills Needed for Jobs and College Are Similar

In the past, students bound for the workforce needed less-rigorous preparation than those bound for college. Times have changed. A growing body of research shows that the skills needed for success in college and good jobs are converging, particularly jobs that pay well and allow for career advancement.

The American Diploma Project interviewed college professors and employers from around the country and found that the skills needed to succeed in freshman-level courses in two- and four-year colleges *are the same* as the skills needed for living-wage entry-level jobs and careers. To be successful, all high school graduates need advanced reading, writing, communications and mathematics skills. Their curriculum should consist of four years of grade-level or honors English and mathematics classes through at least Algebra II.

Blue-Collar Jobs Require Higher Skills As Well

It is not only white-collar jobs that demand higher skills today. Due to advancements in technology, the level of education required to get blue-collar jobs is higher than ever before. Tool and die makers must have four or five years of apprenticeship training after high school. They need to master the content and skills covered in algebra, geometry and trigonometry. And they need advanced technical reading skills.

Those in the construction industry today, including electricians, pipe fitters, sheet metal workers, draftsmen and surveyors, all need algebra, geometry, trigonometry and physics to be successful in their jobs.

What about service-sector jobs, such as cashiers and food service workers? It is true that high school graduates can get these jobs without taking a rigorous curriculum. But these jobs typically provide low pay, few benefits and little room for career advancement. Preparing students only for the lowest rung of the economic ladder is neither educationally sound nor socially responsible. It is our responsibility to give graduates more options.

Nearly All Graduates Need Education Beyond High School

Discussions about high school graduation requirements often devolve into debates about whether all students need to go to college. While it is true that not every student needs a four-year college degree to be successful, most will need an additional credential beyond their high school diplomas to be marketable in today's economy. The value of the high school diploma has declined dramatically over the past 50 years.

In 1950, 60 percent of jobs were classified as unskilled, attainable by young people with high school diplomas and even high school dropouts. In 2005, only 14 percent of jobs were unskilled, while 86 percent were skilled or professional jobs requiring higher levels of education and training. More than two-thirds of new jobs created by 2010 require some education beyond high school, like technical training or an associate's or bachelor's degree.

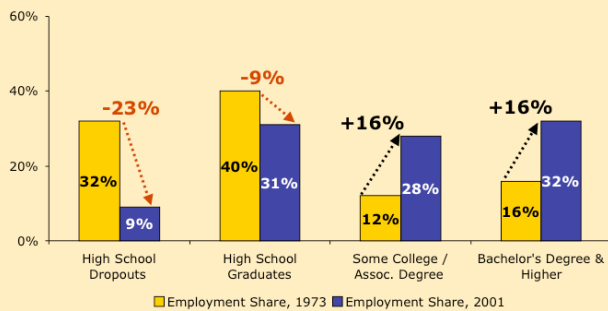
Math required for good jobs

Algebra I, Geometry & Algebra II	Trigonometry, Precalculus or Statistics	Trigonometry, Precalculus or Calculus
<ul style="list-style-type: none"> ■ Arts, A/V Technology & Communications 	<ul style="list-style-type: none"> ■ Architecture & Construction ■ Business, Management & Administration ■ Finance ■ Government & Public Administration ■ Hospitality and Tourism 	<ul style="list-style-type: none"> ■ Human Services ■ Information Technology ■ Manufacturing ■ Marketing, Sales and Service ■ Transportation, Distribution & Logistics
		<ul style="list-style-type: none"> ■ Agriculture, Food & Natural Resources ■ Education & Training ■ Health Science ■ Law, Public Safety, Corrections & Security ■ Science, Technology, Engineering and Mathematics

A new study from ACT draws the same conclusion. ACT studied results from high school juniors who took both the college admissions test and the Work Keys tests, which measure the academic skills needed to perform various jobs. Researchers honed in on training programs for occupations that offer a salary sufficient for supporting a family of four and that include opportunities for career advancement, and they found that those programs require the same knowledge foundation as colleges do.

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Change in the distribution of education in jobs, 1973 v. 2001



Source: Carnevale, Anthony P. and Donna M. Desrochers, *Standards for What? The Economic Roots of K-16 Reform*, ETS, 2003.

What's more, earning potential increases dramatically the more education young people receive. The typical bachelor's degree recipient can expect to earn 73 percent more over a 40-year working life than a high school graduate; those with an associate's degree will earn 25 percent more.

How does earning power differ between high school and college graduates?

Educational attainment and median earnings

Education	Annual	Lifetime
High school dropout	\$22,000	\$1.1 million
High school diploma	\$31,000	\$1.4 million
Associate degree	\$38,000	\$1.8 million
Bachelor's degree	\$50,000	\$2.5 million

Source: College Board's EDUCATION PAYS 2004.

The result is high college remediation rates and low college completion rates, particularly for low-income and minority students. One student summed it up this way: "They showed me how to fill out a McDonald's application in my Life Skills class. I think that they should have at least taught me how to fill out a college application or told me what the college requirements are."

Closing the Expectations Gap

In most states, students can take all of the required courses and earn a diploma without being prepared for success in college or good jobs. Simply put, graduation requirements have not kept pace with the changing world students will enter after high school.

The good news is that some states and communities are raising graduation requirements so that all students take a challenging core curriculum. Arkansas, Indiana, Kentucky, Michigan, Oklahoma and Texas are among the states that have put more rigorous requirements in place. Boston, Chicago, Los Angeles and San Jose also have raised requirements. In each of these states and districts, students will be expected to take four years of rigorous English, math courses through Algebra II, and a challenging sequence of courses in science and other subjects as well. This should dramatically improve their preparation for the world they will enter after high school.

The Bottom Line:

When students take challenging courses in high school, they have more options when they graduate. What used to be thought of as "college-prep" curriculum is now the basic level of preparation all students need to be successful in college and the workplace.

Most Students Want To Go to College, but Too Few Are Prepared

If you ask high school students themselves, most want to go to college. Eighty-two percent say they plan to go to college. Sadly, though, only a subset end up taking a curriculum that prepares them for college. Too often, students are tracked into low-level courses that lead to dead-end diplomas. This is particularly true for low-income and minority students. One study found that although 74 percent of minority girls want to take advanced math courses, only 45 percent of their schools offer the courses.