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Are High Schools Failing Their Students? Strengthening Academic Rigor in High School Curriculum

The Need

Does earning a diploma guarantee that a high school graduate is ready for work and college? It should, for very practical reasons. Entrance requirements for colleges have increased. Employers expect more. Students must be able to communicate effectively, think critically, analyze and interpret data, and evaluate a variety of materials. Sixty-seven percent of new jobs in the market today require some postsecondary education (Achieve Inc., 2006).

Yet despite these demands, many high school graduates are inadequately prepared to continue their education or to enter the workforce. According to the National Center for Education Statistics (NCES), at least 28 percent of students entering four-year public colleges in the fall of 2000 were required to take remedial courses when they started, especially in mathematics and language arts, as did 42 percent of those enrolled in two-year public colleges (NCES, 2004). Employers also have noted that many recent high school graduates do not possess the basic reading, writing, and mathematics skills they need to function on the job; and providing remedial training to address this problem costs employers millions of dollars each year (The American Diploma Project [ADP], 2004).

Growing concern about the academic proficiency of high school graduates has placed high school reform at the forefront of the education policy agenda. Critics have begun to question the degree of academic rigor in our nation's high schools, and many states and school districts are looking for ways to address this issue. This month's newsletter explores the issue of academic rigor and highlights current efforts to challenge and support high school students.

Rigorous Curriculum for All

It is no secret that a challenging curriculum has a positive effect on student performance after high school. A study released by the U.S. Department of Education (Adelman, 1999), for example, found that "the academic intensity and quality" of a student's course of study was a far more powerful predictor of bachelor's degree attainment than class rank, grade point average, or test scores. And this impact is "far more pronounced" for African-American and Latino students than for any other group. A rigorous curriculum also predicts greater skill in the workforce and greater wage-earning potential. An extensive study conducted by ETS found that 84 percent of highly paid professionals and 61 percent of "well-paid, white-collar" professionals had taken Algebra II or higher level mathematics courses while only 30 percent of low-to-moderately skilled and low-paid workers had done so (ADP, 2004). These findings make a strong case for high schools nationwide to provide all students—not just those enrolled in "college prep"—with a challenging academic program.

What Does a Rigorous Curriculum Look Like?

A collaborative effort of Achieve Inc., The Education Trust, and the Thomas B. Fordham Foundation, the American Diploma Project (ADP) was created to investigate curricular reform in high schools. In 2004, it published *Ready or Not: Creating a High School Diploma That Counts*, which outlines in explicit terms "the English and mathematics [skills] that graduates must have mastered by the time they leave high school if they expect to succeed in postsecondary education or in high-performance, high-growth jobs" (p. 10). ADP concluded that a rigorous high school curriculum demands four years of mathematics courses—not only Algebra and Geometry, but also Data analysis and Statistics—and four years of English, including courses covering "language, communication, writing, research, logic, informational text, media, and literature" (p. 22). It recommends that school districts set high school graduation requirements aligned with both state standards and with the coursework required for incoming freshman at colleges and universities within their

Contents

[The Need](#)[Rigorous Curriculum for All](#)[What Does a Rigorous Curriculum Look Like?](#)[Is Rigor Enough?](#)[The How-To of Rigor](#)[Conclusion](#)[References](#)

states.

Both Texas and Indiana have taken leadership roles in implementing this curriculum reform strategy. Texas has aligned its Recommended High School Program curriculum with the ADP-recommended benchmarks (Texas Education Agency, n.d.). Indiana's Core 40 curriculum (Indiana Department of Education, 2006) is a product of Indiana's Education Roundtable committee, whose members include leaders in K-16 education, business, the community, the government, and parent organizations. This core curriculum requires high school graduates to take four years of English courses, including literature, composition, and communication, and at least three years of mathematics courses, including Algebra I, Algebra II, and Geometry. In addition to articulating high standards, Indiana's Education Roundtable (2003) emphasizes the equally important need to align standards, curriculum, instruction, and assessments throughout the state's education system, from elementary through postsecondary education. Both Texas and Indiana require students who wish to opt out of these courses of study and be placed in a general education curriculum to obtain the approval of a guardian and/or a school counselor.

Is Rigor Enough?

As the idea of challenging all students to learn more takes hold, the complexities of this issue become more evident. Increasing course requirements—while lowering expectations—will not result in either challenging academic content or higher outcomes for students. In January, the Education Commission of the States published a policy brief titled, *Ensuring Rigor in the High School Curriculum: What States Are Doing* (Dounay, 2006), which warns that increasing graduation and course requirements alone “does not necessarily translate into a more rigorous and challenging curriculum” (p. 1). It cites a recent survey conducted by the Horatio Alger Association, which found that close to 60 percent of high school students felt that they were only *moderately* or *somewhat* challenged in their coursework. It also references a report by the National Center for Educational Accountability, which found that 60 percent of low-income students in Texas who completed Algebra I, Algebra II, and Geometry failed the state test, which covers only Algebra I. These statistics suggest a need for clarifying the distinction between rigorous standards and rigorous course content and more clearly specifying what challenging courses look like in the classroom. And even when that content is defined clearly, whether and how it actually is being taught must be monitored. Dounay (2006) suggests that increasing rigor also requires “developing versatile, dynamic and efficient assessment systems that both reflect and reinforce higher standards of teaching and learning” (p. 2).

The How-To of Rigor

Several programs exist that can help schools and districts navigate through the challenges of increasing rigor in their high schools, including First Things First, High Schools That Work, and Advancement Via Individual Determination (AVID). Another is the Talent Development High Schools (TDHS) program at Johns Hopkins University. TDHS works with low-performing schools that face grave challenges with student attendance, discipline, and dropout rates. In schools that adopt the TDHS model, all students are enrolled in a college-preparatory curriculum, but they also are provided with academic support services to ensure that they succeed. One of these services, the Ninth Grade Success Academy (NGSA), helps students make a smooth transition into high school. The NGSA schedules “double-dose” courses, meaning students take Algebra I and a course that teaches them how to transition into advanced mathematics at the same time. Similarly, while enrolled in English I, they participate in a strategic reading course. All ninth-grade students also are enrolled in a freshman seminar that helps them learn how to learn, with topics such as study skills, education planning, and career exploration. The TDHS program “ensures that students have a consistent network of teachers and peers from which to draw support and guidance, which is especially necessary for low-income students” (Martinez & Klopott, 2005, p. 23). A study conducted by Balfanz, Legters, and Jordan (2003) found that ninth-grade students in TDHS outperformed their peers in both reading and algebra in the matched-control schools. It also concluded that the program's positive effects were evident in all students regardless of prior levels of academic achievement.

Studies and reports on the topic of high school reform that have emerged in recent years provide direction for schools and districts that want to create and implement a rigorous high school curriculum. They suggest the following:

- High expectations for all students

- Collaboration with university officials and business leaders to determine what students need to know to be prepared for work and college
- A curriculum aligned with state standards and assessments
- Clear goals in each course that spell out what students will be taught and what they are expected to learn
- Academic and career support services for students, such as tutoring, afterschool programs, career counseling, or workshops addressing topics from study skills to note taking
- Continuous professional development and resources for teachers, including information on how to vary instructional methods and how to modify instruction to ensure that all students learn

Conclusion

"Our progress as a nation," said John F. Kennedy (1961), "can be no swifter than our progress in education." Increasing rigor in high school curriculum is one way to ensure that high schools are preparing students—all students—for work, college, and citizenship.

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