This document addresses the issue of dual enrollment as a means for addressing educational inequities. Though progress has been made in the last four decades, it still remains true that race, income, and family educational background are indicators of success in higher education. First generation college students are about twice as likely as those with college-educated parents to withdraw from a four-year college before the second year. Upper income students are seven times more likely than low-income students to earn a Bachelor's degree by age 24. African Americans, who represent 16% of the 15-18 year-old population, earn only 10% of all Associate's degrees. Hispanics, who constitute 14% of that population, earn only 7% of Associate's degrees. Only 18% of African Americans and 10% of Hispanics earn a B.A. by age 29, compared to 34% of whites. Additionally, minority students are often concentrated in the 40% of high schools that do not offer advanced placement (AP) classes. This paper examines whether or not underrepresented students are earning college credits in high school, and the implications of dual enrollment for education and policymakers. The author also examines blended institutions: middle colleges and Early College High Schools. In these hybrids, the high school and college experiences are combined, and they are integrated socially and intellectually. (NB)
College Credit in High School: Increasing Postsecondary Credential Rates of Underrepresented Students

By Nancy Hoffman, Jobs for the Future

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Increasing Postsecondary Credential Rates of Underrepresented Students

If an archaeologist were to search among the artifacts of high school reform, she would find layer upon fragmented layer of improvements—with only tangential relation to one another. Now, a seismic shift is causing some of the fragments to rearrange themselves into a coherent landscape. Pushing into view is a bedrock of “reform” fragments that result from a dual focus on raising the achievement levels of high school students and getting more young people into and through postsecondary education.

What joins the fragments? Over the last decade, particularly in the last three years, the opportunities have expanded for high school students to earn college credit. Added together, the cluster of possibilities is quite robust. Advanced Placement and International Baccalaureate courses and their accompanying tests give students ways to take college courses, usually during their senior year, from their regular teachers. Students in dual enrollment programs remain in high school but take college courses, taught by high school or college faculty in their high school or on a college campus. More and more community colleges are engaging in ways to accelerate high school students and high school drop outs into college courses. A number of postsecondary incentive programs reward students with free or reduced college tuition for finishing some college work in high school. And at the most dramatic end of the continuum, students at middle colleges and Early College High Schools complete up to two years of a college program while in high school.

The upturn in options to earn college credit in high school underscores recent progress in creating a seamless education system, from kindergarten through college (K-16), as well as the contributions of standards-based reforms to promoting higher levels of achievement and getting students to meet those standards earlier. These possibilities add up to a small but real student invasion of the land between high school and college.

Until recently, this educational terrain had belonged almost exclusively to a privileged group of young people: those whose families could afford high-quality private high schools and those in well-funded public school districts that offered options to their highest achieving students. But today’s programs for college credit in high school are no longer limited to elite schools, and students from a wide range of backgrounds and with diverse accomplishments are showing that the academic challenge of college courses is an inspiration not a barrier. The question then is the degree to which such opportunities will increase the number of young people gaining a college diploma or other postsecondary credential—especially students still underrepresented in higher education.
Two Transitions: To High School, To Postsecondary Education

Born in the wake of the struggle for civil rights and bolstered by the implementation of affirmative action, the movement to diversify the population of young people entering college has made progress. In general, college campuses are more diverse today than they were four decades ago. Nonetheless, access, retention, and graduation rates still correlate with race, income, and family educational background. Only 18 percent of African Americans and 10 percent of Hispanics complete a four-year college degree by age 29, compared with 34 percent of whites (Digest of Education Statistics 2001). Native-American students are more likely to drop out and less likely to complete college than any other ethnic group in the United States. In contrast, upper-income students are seven times more likely than low-income students to earn a Bachelor’s degree by age 24.

While underrepresented learners are distributed across two- and four-year, open-admission, and highly selective institutions, they are concentrated at the two-year and less selective institutions. I use the term “underrepresented” here to mean the following groups of traditionally aged college students: students of color, first generation college-goers, and English language learners.

A variety of additional data highlight the cause for concern:

- **Access to college:**
  
  - In the 18- to 24-year-old group, about 90 percent of white students complete high school, but only 81 percent of African Americans and 63 percent of Latinos.
  
  - 90 percent of current high school seniors expect to attend college, but only 75 percent of high school graduates now go to college.
  
  - A top-quartile, low-income student is less likely to enter college than a bottom-quartile, high-income student.

- **College completion:**
  
  - One-third of college entrants drop out before their second year, and over half fail to complete a degree.
  
  - First-generation college students are about twice as likely as those with college-educated parents to leave a four-year college before their second year.
  
  - African Americans, who represent 16 percent of the 15- to 18-year-old population, earn only 10 percent of all Associate’s degrees.
  
  - Hispanics, who constitute 14 percent of the population, earn only 7 percent of Associate’s degrees.

*This draft contains partial citations. Full references will be available in the final document.*
Thus, urgent challenges of both equity and access persist: students should be able to choose their postsecondary institutions on the basis of what best suits their talents and interests, not be tracked by race and income; and the rates of earning Associate's and Bachelor's degrees should be much higher. The current school reform effort is poised to pay increased attention to these issues.

During the past five years of nationwide, high-stakes testing and high school reform, attempts to improve student outcomes focused on the first big transition in which we lost many students: the leak in the education pipeline around ninth grade, when leaving school is legal. Indeed, many school reform models depend on ninth-grade academies, supplemental skills courses, and structures for socializing young adolescents to the demands of high school. These programs simultaneously redesign institutions and demand more of students.

Now, as the "tested" generation reaches college age, huge questions are appearing about the next transition: to postsecondary education. Who graduates from high school? Who gets into college? How do they do, and how will they afford it? Who is attaining a credential?

Beyond concern at the state and district levels, passionate educators from the small high schools and schools-within-schools that have sprung up over the last five years are graduating their first classes, and increasingly following them into college. These educators are discovering that college retention and graduation are the next big hurdles. As a result, the myriad, often loud voices shouting at one another about standards, high-stakes testing, and accountability seem to agree on one thing: students should graduate from high school prepared for non-remedial college-level work. Young people and families know college is a goal; policymakers see college as necessary for labor force development and civic action; and legislators and governors attend to college preparation in their state education accountability systems. Yet the success rates in attaining an Associate's or Bachelor's degree are still low for all students and especially for underrepresented ones.

Now there is evidence that underrepresented students—and not just those with vocational orientations served by Tech Prep—are taking advantage of opportunities to earn college credits while in high school. Although still in small numbers, these students are sufficiently committed to college-going that they are opting for a higher academic challenge while in high school, apparently motivated by several factors, including the chance to save money, the chance to prove they can do college work, and the chance to speed entrance to a career.

If this is the case, we need to know great deal more about this trend—and to use that knowledge to expand opportunities to provide college in high school as an additional strategy for increasing the postsecondary credential attainment rate.
As Michael Kirst and Kathy Bracco (forthcoming) point out, “students in advanced, honors or accelerated tracks” get signals that they are college-bound: they get recruitment information, use college texts, and are automatically prepped for entrance exams. What can we learn from the young person on the verge of dropping out of high school who flourishes when put in the company of college freshmen in a demanding, first-year-college English course, or from an inner-city 15-year-old who does well in a community college’s selective computer graphics program, or from an entire urban high school class that gets enthusiastically competitive about passing AP calculus?

**Improving the Second Transition**

In scanning the terrain between high school and college, we need a vocabulary to use in the conversation. What do we mean by “college credit in high school?” Researchers have come to a reasonable taxonomy defining the most prevalent forms of college credit in high school, grouping them into several categories.

- **Examination-based college credit**, exemplified by Advanced Placement, has the longest, most visible history. About 700,000 students take over one million AP exams, which were begun in the 1950s for prep school student. The much smaller and even more challenging International Baccalaureate program serves 1,382 schools in 114 countries, including some inner-city high schools in the United States. Interest in IB is growing because of its global, non-Eurocentric curriculum.

- **School-based credit** is both more varied and less visible. In the best-known variant, “concurrent enrollment,” courses are taught by high school teachers under the guidance of college professors. A reflection of the extent of this phenomenon is the three-year-old National Association of Concurrent Enrollment Programs. The NACEP has its own standards and guidelines and runs several national meetings each year. (For more information, see www.nacep.org.) School-based credit is particularly appealing to rural students because their courses are taught either by their own high school teacher or by a professor who travels to their school.

- **College-based credit** includes what is usually meant by dual enrollment. Students take college courses, taught by college faculty, on a college campus or at a satellite center, but they remain enrolled in high school, and the courses bear high school and college credit simultaneously. Dual enrollment can also mean courses taught in high school buildings by anyone, and the term “postsecondary options program” can apply to all permutations taken together.

- **Virtual college-credit courses** are available to home schoolers, high school students, and out-of-school youth. Many of these require fees, but nonetheless the array is growing. There is little data on results.
Sometimes all these options are available to young people, and some states add incentives for gaining credit. Utah, for example, pays 75 percent of the tuition for two upper-division years of public postsecondary education if students graduate from high school with an Associate’s degree.

**Underrepresented Students and Postsecondary Options: What Little We Know**

Combining these options, we can ask: are underrepresented students earning college credits in high school? Yes and no. In one of the few areas for which reliable statistics are available, the number of high schools preparing students for AP exams grew from 9,786 in 1990-1991 to 14,157 in 2001-2002, although the percentage of African-American (4 percent) and Latino (9 percent) students taking the test has been flat since 1994. Minority students are often concentrated in the 40 percent of schools that do not offer AP, or they are excluded because they are not considered adequately prepared (*Education Week* August 7, 2002).

Yet achievement levels rise when schools with large numbers of underrepresented students offer AP courses and tests, according to Jay Mathews, the *Washington Post* education reporter who wrote *Escalante: The Best Teacher in America* and became a staunch supporter of AP for all kids. Clifford Adelman’s research at the U.S. Department of Education’s supports this observation: Adelman shows that “the best predictor of college completion was not how good [students'] high school grades or SAT scores were, but how difficult their high school courses were. The harder the courses, the better they did in college. This was particularly true for minority students.”

To buttress his argument that those students excluded from AP would most benefit from what he calls “a blast of collegiate learning,” Mathews has tracked the growth in AP courses school-by-school across the United States, with a particular interest in those schools with high percentages of students eligible for a lunch subsidy. For example, in 1998 Fairfax County, Virginia, opened all its honors and AP courses to anyone who wished to take them and required that every student taking these courses also take the AP tests. The district paid the test fees. The number of AP tests taken doubled in one year. And while the pass rate dropped from 75 to 61 percent, it is now about 65 percent, with more tests than ever. This compares quite closely to the national pass rate in 2002: about 63 percent. Mathews’ Challenge Index, available on the *Washington Post* Web site, tracks all schools offering AP and has additional stories about how schools serving low-income students use AP courses to promote college-level work in high school.

A number of states and districts are using AP as a way to convince underrepresented students that they are college material and to get them college credits on this “gold-standard” test. Among many examples of the broadening of
opportunities for underrepresented students, the Dana Center at the University of Texas sponsors the AP Equity Initiative to increase equity and access to advanced courses. The center will soon release a study of nine high-poverty high schools in three large districts in Texas with above average percentages of eleventh- and twelfth-grade students enrolled in AP calculus.

If underrepresented students are taking advantage of AP to accelerate their learning and signal their readiness for college, the same is likely true for dual enrollment and other postsecondary option programs. However, few states keep demographic data on their programs (Orr 2002 in Bailey). In general, dual enrollment programs have grown steadily in the last several years, both in interest from policymakers and numbers of participants. The Education Commission of the States, the National Conference of State Legislators, the American Association of State Colleges and Universities, the American Association of Colleges and Universities, the Community College Research Center at Columbia University, and the National Center for Public Policy and Higher Education have all issued reports and analyses on the topic; and those that are analytical (as opposed to informational) see dual enrollment as a strategy for promoting college access and completion for a wider range of students. For example, the AASCU document, "The Open Door . . ." [State Policy Briefing, Vol. 1, No. 1, May 2, 2002] cites various benefits: to students—better preparation for college; to institutions—lower remediation costs and higher retention; and to high schools—improved understanding of the demands of college and an expanded set of curricular offerings.

Nearly every state has some form of dual enrollment, and 21 states provide incentives to increase student and institutional participation. While the largest dual enrollments are in community colleges, some four-year public institutions, although not many flagships, also participate. Moreover, several large programs have grown rapidly. In 1999-2000, about 20 percent of Minnesota High School seniors (12,000 students) took advantage of Post-secondary Enrollment Options (created in 1985). Increasing by about 3 percent a year, Running Start (created in 1990) had a total of 13,669 students taking courses for free at Washington State's 34 state community and technical colleges and several universities. College Now in New York City was created by agreement between CUNY and the New York City Public Schools in 1984. When CUNY imposed more stringent entrance requirements in 2000, College Now grew from 6 to 17 schools as a strategy to better prepare students for admission. It now includes a pilot for ninth graders and has a goal to serve 45,000 students in 2002-2003. In Arizona, 11,000 students took dual enrollment classes. Dual enrollment in the Florida Community College System had an 82 percent cumulative increase between 1991-1992 and 2000-2001. At Salt Lake City Community College, with 18,450 full-time students, 8,000 students were taking college-level courses at their high schools.

Legislation creating these programs is sometimes explicit about introducing students to college work at an earlier point—based on performance rather than
seat time—and often cites the goal to reduce the costs of postsecondary
education to families and the state. The Minnesota State Colleges and
Universities auditor's report (2001) recommends making such options more
widely available, and it explicitly cites the promise for at-risk students.

Extending the Terrain of the Known

If there is an argument that higher education is in fact changing, and that there is
a new terrain between high school and college, the most interesting evidence
may be in what Jobs for the Future, the non-profit where I work, has named
"blended" institutions”—middle colleges and Early College High Schools. These
alternative institutional forms are physical places that go substantially beyond
dual enrollment and AP in giving students a head start on college. While dual
enrollment and AP can offer students a taste of college, the course taking is often
random and decontextualized—a course here and there rather than a coherent
program of college study. And students get little if any support. In the
secondary/postsecondary hybrids, the high school and college experiences are
combined, and they are integrated intellectually and socially. Students are
coached through their college programs. The curriculum is designed as a unit,
with high school and college level work seamlessly melded into a single
academic program. In addition, because college is both free and part of high
school, these schools allow young people to focus on their studies in their last
years of high school rather than confront the daunting maze of college and
financial-aid applications.

The longest-lived blended institutions are middle colleges, which are high
schools on or adjacent to community colleges. Students graduate with some
college credits. At middle colleges, the “power of the site” is the key to eliciting
adult behavior and serious learning from adolescents at risk of school failure. The
30 middle colleges in the Middle College High School National Consortium are
explicitly designed to serve at-risk youth by improving the transition from high
school to college and increasing motivation for rigorous academic work earlier in
the student’s school career. In 1999-2000, 41 percent of the 4,500 students
enrolled in consortium schools, took college classes, with a 97 percent pass rate.
The two best-known middle colleges, both located on the campus of LaGuardia
Community College, have achieved excellent results with newcomers to the
United States and with students facing severe challenges in completing high
school.

The newest form of blended institution focused on underrepresented students is
the Early College High School. Like middle colleges, these are small,
autonomous schools that offer college-level work, but they go further. Students
earn not just some college credit while in high school but an Associate’s degree
or two years of college credit toward the Baccalaureate.
Four schools have a several-year history of working toward the Early College High School model: Portland Community College Prep in Portland, Oregon; Ocaloosa Walton Charter School in Niceville, Florida; Washtenaw Technical Middle College in Ann Arbor, Michigan; and Bard High School Early College in New York City. And within the Middle College Consortium, a number of schools are converting to Early College High Schools. Over the next five years, at least 100 new Early College High Schools will appear throughout the country through an initiative funded by the Bill & Melinda Gates Foundation, with support from the Carnegie Corporation, the Ford Foundation, and the W.K. Kellogg Foundation and coordinated by Jobs for the Future.

These Early College High Schools have a bold purpose and design. They aim to make higher education more accessible, affordable, and attractive by bridging the divide between high school and college in a physical place. Among their goals are to eliminate time wasted during the junior and senior years of high school and to provide guidance and support from adults through the first two years of college. The bottom line of the initiative is to increase the number of first-generation, low-income, English language learners, and students of color attaining the Associate's degree or two years of college credit and improved opportunities to attain a Bachelor's degree.

Building on experience with the various options for earning college credit in high school, Early College High Schools have the potential to unify and reconceptualize academic work from ninth grade through the second year of college. Even during the first year of implementation, these schools have challenged the divided structure of our current secondary/postsecondary systems, raising issues about funding across jurisdictions, the awarding of credit, the credentialing of faculty, and the compatibility—or lack thereof—of accountability systems for high school and postsecondary education. They have also elicited considerable interest from state-level education policymakers in a time when the press for high achievement is colliding with economic restraint and creating a greater imperative for investments in human capital and the acceleration of young people into the labor market.

The Implications for Education and Policymakers

The ideas about college credit in high school pulled together here point in several directions. Most important is a need to gather more data on student demographics and achievement to supplement the very tentative positive outcomes already reported: that dual enrollment students have higher postsecondary grades than those who had not been in dual enrollment program; and that such students were retained at higher rates at the institutions in which they were dually enrolled.

A second area of research concerns equity of access to such programs. While underrepresented students are taking advantage of postsecondary options, the
benefits are unevenly distributed. Students are shut out of participation by the lack of rigorous high school curricula, the lack of information about options for earning college credit, and, in some states, substantial fees.

A third area for policy analysis concerns the barriers to implementing educational options that cross borders between high school and college. These ideas lead, in turn, to two major questions.

- Should there be an entitlement to education through the minimum required for success in today's world: an Associate's degree or two years of other postsecondary education? In other words, if postsecondary credentials are required for the labor market, wouldn't it be smart to support students' full preparation for middle-class jobs?

- Do we need new institutions designed to serve the needs of late adolescents, given that students in most states can now pass high school exit-level exams in the tenth grade and that college specialization begins the junior year and continues through a Master's degree? Such institutions would look more like what is evolving in the European community: the end of general or technical education at age 19 followed by a three-year Baccalaureate and a two-year Master's.

If we are serious about creating a seamless system at least through what now constitutes the first two years of postsecondary education, the questions above are worth pondering.
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