Double the Numbers: A Jobs for the Future Initiative

Add and Subtract

Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students

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JOBS FOR THE FUTURE
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About Double the Numbers

Add and Subtract is one of a series of *Double the Numbers* publications from Jobs for the Future. *Double the Numbers*, a JFF initiative, is designed to deepen support for state and federal policies that can dramatically increase the number of low-income young people who enter and complete postsecondary education. The initiative identifies, assesses, and promotes new and promising approaches to increasing efficiencies and reducing inequities in secondary and postsecondary education attainment. *Double the Numbers* publications address controversial policy debates. They propose creative ways to break through existing barriers to improved educational and economic outcomes, particularly for students from groups traditionally underrepresented in higher education. *Double the Numbers* is supported by the Bill & Melinda Gates Foundation and the Ford Foundation.

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Table of Contents

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Add and Subtract

Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students

Executive Summary

Dual enrollment—the arrangements by which high school students take college courses during the junior and senior year—is a promising "next best thing" for states wishing to increase the number of underrepresented students gaining a postsecondary credential. Dual enrollment also has the potential to save money for families and taxpayers and shorten time to degree. To make dual enrollment a centerpiece of a strategy to improve college access and success, however, requires shifts in typical dual enrollment policy and legislation and a new way of thinking about its mission. By "adding" supports at the front end—in eleventh and twelfth grades—in order to enable young people to succeed in college-level courses in high school, states can potentially "subtract" from the total expense of educating a young person.

Add and Subtract is a policy primer for states wishing to implement dual enrollment as a strategy for increasing college credentialing rates of underrepresented students. It provides:

- An overview of dual enrollment and a rationale for its expansion;
- Guidelines (including funding models) for states wishing to implement dual enrollment for a wider range of students; and
- Brief case studies of substantial dual enrollment programs that serve a wide range of students—Florida and Utah and College Now at the City University of New York—and offer lessons for an expanded mission for dual enrollment.

The extent of participation in dual enrollment is substantial. In states with long-term programs and no costs to students, between 10 and 30 percent of juniors and seniors gain college credit in high school. When promoted as an acceleration mechanism or head start on college rather than a program for gifted students, a wide range of students benefit. In some states, students headed for career and technical certificates and Associate's degrees make up half of dual enrollments. But while program participation is growing, there is a need for research on such basic questions as which program design elements are most effective, whether dually enrolled students are more likely to get credentialed than their similar peers who move into postsecondary education on the usual timetable, and whether dual enrollment increases college attainment of those who are not tagged as "college bound."

Although we know little about the impact of dual enrollment *programs*, we know a lot about dual enrollment *policies*. In 2002, the federal Office of Vocational and Adult Education initiated an ongoing, multi-part study, Accelerating Student Success through Credit-Based Transition Programs. The study builds on other state-by-state surveys and identifies state-level policies that support or inhibit the development of dual enrollment programs for middle- to low-achieving students. In addition, in its work since 2002 to guide the implementation of 180 early college high schools—small schools that combine high school and the first two years of college—Jobs for the Future has proposed changes to dual enrollment policies that would better enable a wider-range of students to participate.

To serve as a strategy for promoting college access and credential attainment, dual enrollment programs should meet a number of criteria:

- The mission is to serve a wide range of students.
- The program is embedded within a K-16 structure and a high school reform initiative.
- There is equal access for all qualified students across all the state's schools.
- Concurrent credits are used as a proficiency-based acceleration mechanism.
- The secondary and postsecondary sectors share responsibility for dual enrollment students.
- The program collects data for purposes of assessing impact and improving the program.
- Funding mechanisms are based on the principle of no cost to students and no harm to partnering institutions.

Add and Subtract uses these criteria as a frame to assess three dual enrollment approaches. The chart summarizes the key elements of each policy and program and indicates how close each is to meeting these guidelines.

Key Elements of Three Dual Enrollment Approaches

	Florida	Utah	CUNY-College Now
Mission to serve a wide range of students	No. Articulated acceleration	Partially. Acceleration, challenge, and transition to postsecondary	Yes. Helps underprepared students meet CUNY admission standards without remediation
Embedded in K-16/high school reform	Yes. K-20	No. K-16 discussion just beginning	Yes, within city; not state policy
Equity of access	Yes. Admission set by state; reasonably open; all two-year and some four-year postsecondaries participate; liberal arts and career/technical courses	Yes. Admission set locally, reasonably open; all two-year and four-year postsecondaries participate; liberal arts and career/technical courses	Yes. Serves all NYC high schools; two- and four-year postsecondaries participate; diverse participants from grades 9-12, admission set by College Now
Concurrent credits/acceleration	Yes. State-mandated course equivalency system; can attain AA	Yes. Up to 30 credits per year; can attain AA	No. Most courses in addition to high school classes
Secondary/postsecondary shared responsibility for students	Local agreements; varies	Local agreements; varies	Yes. High school and College Now staff assess, advise, and support
Data collection	Yes. Significant data; some analysis of costs, participation by race/ethnicity	Some. Participation data, a few studies; currently organizing data electronically	Yes. Following cohort since 2001; considerable data, some analysis; participation by race/ethnicity
Funding holds partners harmless or almost harmless	Yes. High school retains ADA, community college waives tuition, generates FTE	Yes. State appropriation for discounted tuition; high school retains ADA; post-secondary generates FTE	Yes. State, city, and CUNY co-fund; students generate FTE only in "regular" college classes on campus

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Introduction

What if the borders between high school and college were actually melting away as a result—not of global warming—but of high school students crossing back and forth between the two institutions? What if more families each year were lowering their college costs by encouraging their daughters and sons to take as much as a year's worth of college credits for free while in high school? And what if we found that structuring high school to include substantial college work would make success more likely for students for whom the transition from high school to postsecondary is most problematic?

In several states, college is already integrated with high school for a substantial number of students. *This experience suggests that dual enrollment—as such arrangements are commonly called—is a promising "next best thing" for states wishing to increase the number of underrepresented students gaining a postsecondary credential. Dual enrollment also has the potential to save money for families and taxpayers and shorten time to a college degree.*

To make dual enrollment a major element of a strategy to improve college access and success requires shifts in typical dual enrollment policy and legislation and a new way of thinking about its mission. By "adding" supports at the front end—in eleventh and twelfth grades—in order to enable young people to succeed in college-level courses in high school, states can potentially "subtract" from the total expense of educating a young person.

Add and Subtract is a policy primer for states wishing to implement dual enrollment as a strategy for increasing college completion rates of underrepresented students. It provides guidelines (including funding models) for states wishing to implement dual enrollment for a wider range of students. In addition, brief case studies of substantial dual enrollment programs serving a wide range of students—the states of Florida and Utah and College Now at the City University of New York—offer lessons toward an expanded mission for dual enrollment.

Dual enrollment ultimately raises two "wild card" questions:

- Should states use dual enrollment to radically restructure the last years of high school to provide greater choices and options for all young people?
- More broadly, should public education extend through grade 14 or its equivalent so that every young person can attain a free postsecondary credential?

Dual enrollment is a promising "next best thing" for states wishing to increase the number of underrepresented students gaining a postsecondary credential.

Why Dual Enrollment: The Rationale for an Add and Subtract Strategy

Educators, politicians, and the general public all concur: to earn a middle-class wage, young people need a postsecondary credential. But the country has a long way to go to meet that standard. Despite a significant increase in the number of students entering college since the 1980s, we have failed to move the needle much. In the last two decades, we have been stuck with about 30 percent of the population earning a Bachelor's degree. Moreover, the education pipeline "leaks" the most for those young people at the bottom of the income scale—those for whom a decent wage could eventually launch a new family into the middle class. And the following oft-cited statistic affronts our sense of fairness: high-achieving, low-

income students are as likely to attain a postsecondary credential (70 percent) as low-achieving, high-income students. If you have family wealth and enter a four-year college as a full-time student, college graduation is all but assured. If you are poor and a high achiever who is accepted at a highly selective institution, you would be among the just 3 percent from the bottom income quartile at your college. A full 74 percent of students would come from families in the top quartile of income—$75,000 or above (Carnevale and Rose 2003).

Nevertheless, this is hardly an ideal time to advocate for investing more dollars in postsecondary education. State budgets are stripped bare. College tuition is rising and the number of seats available is declining. If additional education dollars become available, they will likely go to K-12. The federal government is not likely to raise Pell dollars much, which at *current* levels cover only 40 percent of the cost of a public four-year college, down 84 percent from 25 years ago (Corrigan 2004). Thus, states are on a collision course in regard to higher education: more demand than ever before, higher pressure to "double the number" of graduates, and fewer dollars to spend. How then to increase the number of young people who stay in the education pipeline and persist through to the college dream? How particularly to use education effectively as a lever for social and economic mobility—that is, to benefit those young people who have few other means of advancement—not family connections, not social networks, not high schools with strong career training or high-quality college placement services?

For the last 15 years, American education has responded by moving slowly toward the goal of a seamless educational system, often called "K-16" or "P-20." One goal of K-16 is to better support low-income students and students of color who, for a variety of reasons, need more effective scaffolds to make transitions from one segment of the education system to another—from eighth grade to ninth grade, and from high school to and through college.

Within this K-16 framework, there are many approaches to improving postsecondary success:

- Providing better signals to young people about what academic work is required to be prepared for college, get admitted, and secure financial aid;
- Aligning high school exit standards with college admission and placement standards—a work in progress in several states and implemented at the City University of New York;
- Strengthening high school curricula and coupling them with high-stakes assessments that put academic pressure on schools, teachers, and students to improve (e.g., including honors, AP, and IB courses in the curriculum; making college prep the "default" curriculum);
- Using financial awards and incentives, like Georgia's Hope Scholarships and Indiana's 21st Century Scholars program, that reward strong high school performance with college scholarships; and
- Implementing first-year college programs, like learning communities, that ease the transition and promote persistence.

These strategies, especially when used in combination with one another, make sense, but progress is slow and implementation costly. Given the severe limitation of public funds for the foreseeable future, policymakers must use these approaches as cost efficiently as possible. If middle- to high-income students are already doing relatively well and have more resources with which to help themselves, then the focus ought to be on those without such resources. And because new initiatives are costly, this is the time to exploit the systems already in place, looking for hidden opportunities.

Dual enrollment fits the bill in a variety of ways. The advantages of dual enrollment or "real" college courses for high school students include:

- *Time to a college degree may be shortened by as much as two years.* The stretch to meet college standards is a better use of student time during the junior and senior years than study halls and repetitive course work, the results of which are boredom and disengagement.
- *Families can save money.* Students are motivated by free college credits transferable to the partner institution and more broadly within public state systems. Families can save thousands of precious dollars. (Advanced Placement is an "iffier" proposition for accelerating time to degree, because many institutions use AP scores for placement purposes but do not award college credit.)
- *Students try out the college environment.* Students experience this new world while they continue to have a supportive home base in high school, especially if courses are offered not as "college in the high school" but on a college campus by college faculty. The college try out can allay the fears of first-generation college goers and their families that college will be too difficult or the environment unwelcoming.
- *College learning is measured in multiple ways.* Assessment takes place throughout a semester not by a single, all-or-nothing test as in Advanced Placement. Students gain pride and confidence by getting "regular" college grades, and with support they can see growth throughout a semester.
- *Young people begin college work as full-time students.* Young people who attend college part-time—especially in their first year of post-secondary—are much more likely to drop out than those who go full time. Full-time study contributes to persistence.

As one teacher working in a dual enrollment high school put it: "The best way to get ready for college is to do college."

Because new initiatives are costly, this is the time to exploit the systems already in place, looking for hidden opportunities.

PART I.

What We Know About Dual Enrollment Programs

There are no consistent state or national data answering the crucial questions below regarding dual enrollment programs:

- What is the extent of participation?
- What are the academic profiles of participants?
- Do dually enrolled students get credentialed more quickly or with greater success than their similar peers?

These are questions states should answer before investing further in dual enrollment or asking what changes would be needed if additional students were to benefit. And without such basic data, it is hard to know whether some policy sets are more effective than others: Does it matter if students take one course or two? In what sequence? On campus or off? What academic and social supports are required? Are college professors and credentialed high school teachers equally effective instructors for college courses? Does the promise of free courses increase student enrollment in college-level work?

Nonetheless, programs are growing, and policymakers who want to put in place the structures that will allow broader access must draw on the tools at hand. Following are partial answers to the questions above using data from the case study states and several others whose programs serve a wide range of students.

Several states are in the early stages of using innovative forms of dual enrollment not just as a marginal high school option but as an explicit strategy for increasing college credentialing rates and building a better-educated workforce.

Participation in Dual Enrollment

The evidence of state and family interest in dual enrollment is substantial and growing in the states that encourage access for a wide range of students. States measure participation in credit hours earned, courses completed, full-time equivalents (FTEs), and/or number of students participating. Only a few states disaggregate data by race or calculate growth rates, and there is little consistency across states in how data is reported. Nonetheless, an educated guess is that 10 to 30 percent of high school juniors and seniors take at least one college course. In the five states and one college system listed below, participating students are more likely to be seniors than juniors; to be taking their classes at a community college although four-year institutions participate; and not to be bound for highly selective private postsecondary institutions (see Table 1)[1] There may be other states with broad participation than those listed in Table 1, but little data is collected about participation because dual enrollment is still under the radar or marginal to education policy in most states. Indeed, try as we might, we could not make data comparable across the case study states: some states only count FTEs while others count courses and credits; thus, the numbers should be read with caution.

Several states are in the early stages of using innovative forms of dual enrollment not just as a marginal high school option but as an explicit strategy for increasing college credentialing rates and building a better-educated workforce. Maine and Virginia are building the expectation of dual enrollment into their secondary/postsecondary education systems to create new pathways for large numbers of older adolescents—especially those who are not thriving in high school. Under the auspices of the Maine Great Schools Project, Maine's Early College Program, now in its first full year, serves disengaged youth, first-generation col-

continued on page 8 ▸

TABLE 1.

Data on Dual Enrollment Programs, 2003-2004

	Students in Credit Courses	Credits/ Courses	Increase in Participation	Minority Participation	Other Comments
Case Study States					
Florida	34,762	90,756 courses 11,347 FTE	2% increase from 2002-03 to 2003-04; 20% increase from 1998-99 to 2002-03	9% black 10 % Hispanic 4% Asian Less than 1% Native American 1998-2003 increase: 34%, black; 58%, Latino	Several dual enrollment high schools give AA degree
Utah	23,384	153,727 credits 5,000+ courses	6.8% increase from 2002-03 to 2003-04; 100% since 1995	Not available	Since 2000, 270 students have earned AA in high school and New Century Scholarships
CUNY	14,170	54,492 credits 19,520 enrollments	10% increase 2003-04 over students in college-credit courses in 2002-03	22.2% black 20.2% white 18.8% Hispanic 20% Asian 5.4% Other 13.3% Unknown	32.4% of NYC public high school students who entered CUNY in fall 2003 had College Now experience
Selected Other States					
Washington	15,610 Running Start 13,690 Tech Prep	9,533 FTE 86,189 credits	6% increase from 2002-03	17% students of color	10% of juniors and seniors; 788 AA degrees
Illinois	20,405	28,994 credits	625% 1990-2001 35% 2002-03	7% black 6.4% Hispanic 4.6% Asian/Pacific 1.9% Native American	9% of all high school students participated
Virginia	13, 915	Not available	4.4% increase from 2002-03	Increase: 2.8% Asian 15.4% Hispanic 200% Unspecified Decrease: 10.9% black 14.3% Hawaiian 85.9% American Indian	Piloting Governor's Initiative: "Senior Year Plus"; under previous plan, districts could ask students to pay

Sources:

Florida: Impact of Dual Enrollment on High Performing Students, Data Trend #26, Florida Department of Education (March 2004); Dual Enrollment students are More Likely to Enroll in Postsecondary Education, Fast Fact # 79, Florida Departments of Education, March 2004; personal communication, Patricia W. Windham, October 2004, Florida Department of Education.

Utah: Personal communications: Brett Moulding, Utah State Department of Education, November 2004; Dr. Gary S. Wixom, Assistant Commissioner, Utah System of Higher Education; and Concurrent Enrollment Summary, Utah State Office of Education—Summary 2003-2004 School Year, September 24, 2004.

CUNY: College Now, December 9, 2004, PowerPoint, prepared by College Now for conference: "College in High School: For Whom and For What," City University of New York, Graduate Center.

Washington: Running Start, 2003-04 Annual Progress Report, State Board for Community and Technical Colleges, State of Washington.

Illinois: 2003-2004 Census of High School Students Enrolled in Community College Courses for High School Credit, Finding and Data Tables, Illinois State Board of education, Data Analysis and Progress Reporting, September 2004.

Virginia: Personal communication, Doris Brown, Data Management Analyst, Educational Information Management, Virginia Department of Education, February 2005.

lege goers, and students without a plan for the future (Great Maine Schools Project 2004). Virginia, a state where about 20 percent of seniors currently take a dual enrollment course, is piloting "Senior Year Plus," a two-pronged, statewide program. College-bound seniors—the typical dual enrollees—can earn up to a full semester of college credit in high school. For students lacking a postsecondary plan, the state is offering an accelerated start on an industry certificate that can be completed at state expense after high school graduation.[2] As the president of the National Governors Association, Virginia Governor Mark Warner is placing college-level work in high school squarely on the states' agendas.

With support from the Bill & Melinda Gates Foundation as well as other foundations, Jobs for the Future is guiding the establishment of 180 autonomous small schools that blend high school and college so that students earn an Associate's degree and a high school diploma simultaneously. These "dual enrollment schools" draw on lessons learned from middle college high schools—small schools situated on community college campuses—and from other small-scale experiments in reconfiguring grades 11-14. The Early College High School Initiative is based on a theory of change that, by altering the structure of the high school years, compressing the number of years to a college degree, and removing financial and other barriers to college, states can improve high school graduation rates and better prepare traditionally underserved students for family-supporting careers. Networks of early college high schools are under development in California, Georgia, New York, North Carolina, Ohio, Texas, Utah, and Washington, and will serve about 50,000 students by 2008.[3] Beyond the 180 early college high schools in the initiative, North Carolina has established an innovation fund to support a total of 100 such schools.[4]

The Academic Profile of Dual Enrollment Participants

Participation criteria vary widely from state to state. Some are highly selective, while others provide access for average achievers. Most states screen students for dual enrollment through academic gatekeepers: high school GPA; scores on SAT, ACT, and high school exit exams; scores on standard placement tests such as ACCUPLACER or COMPASS; and teacher recommendations. Also, students must actively "select" into the program—that is, decide they want to get a head start on college.

Nonetheless, several states with large dual enrollment programs do not set a high bar for participation. Florida students must have 440 on each section of the SAT, substantially below the national average of 508 (verbal) and 518 (math) for 2004. Scores are lower for the technical/career track (Florida Department of Education 2004). CUNY's College Now program requires 480 on the math and English SAT or 75 on the relevant New York State Regents exam for access to math or English courses and provides pre-college courses and workshops to get students prepared for this standard.[5] Utah leaves the decision about participation to the district, local school, and, in reality, the student and her/his counselor—one reason this is an interesting state to study. In Illinois, dual enrollment is solely a program of community colleges, which set their own entrance criteria. At some of these colleges, career and technical education students are not tested; at others, multiple measures are used, and admission is based on student desire to participate and advisor recommendations. In many states, Tech Prep students have long benefited from dual enrollment.

In the case study programs—Florida, Utah, and CUNY—the question is not whether more students would benefit if gatekeepers were eased; access is already appropriately open. Rather, how many more students could meet standards for dual enrollment if encouraged or if stronger incentives were in place? Such thresholds are encouraging and suggest that states could adopt the standards for non-remedial, first-year college courses in community and state colleges and still admit a wide range of students.

The Results

The Florida Department of Education and CUNY's College Now have assembled promising results data. In Florida, dual enrollment students (those who have taken one college course or more) enroll in higher education at rates "significantly higher than students who do not enroll." The data are particularly strong for African-American and Hispanic students (70 percent enroll as opposed to 45 percent; and 69 percent versus 54 percent respectively) (Florida Department of Education 2004). CUNY's College Now program and Florida both show that while most dual enrollment courses are given by community colleges, students complete their degrees in four-year institutions. For the 5,000+ College Now students who entered CUNY in fall 2003, 45 percent entered senior colleges; 31 percent entered comprehensive colleges (award both Associate's and Bachelor's degrees); and 24 percent entered community colleges. CUNY's preliminary research indicates that College Now alumni are also more likely to persist in their pursuit of a degree than other New York City public school graduates, as measured by their rates of reenrollment for a third semester (City University of New York and New York City Public Schools 2004).

Working with a population it considers seriously at risk of dropping out of high school, the Middle College National Consortium provides significantly more support for students in their early and middle college high schools than do dual enrollment programs. For the 2003-04 academic year, among the 10 early college high schools associated with the consortium, 633 students enrolled in 1,893 courses and 96 percent of them passed their courses.[6] There is a need for much more research of this kind, as well as research on student preparation for dual enrollment, patterns of course taking, and time to degree.

PART II.

What We Know about Policies: Guidelines for States Using Dual Enrollment as a Pipeline Improvement Strategy

The assumption of most dual enrollment advocates is that dual enrollment is attractive because it is an escape from high school, rather than an enhancement of the high school experience. Reframing dual enrollment as a key platform for high school success alters that equation.

Although we know little about the impact of dual enrollment *programs*, we know quite a lot about dual enrollment *policies*. Interest in dual enrollment began to surge in 2000. The Education Commission of the States (ECS) Center for Community College Policy published a basic state-by-state chart of dual enrollment legislation.[7] The Pew Charitable Trusts supported a multi-volume study, *Dual Credit: A Report of Progress and Policies that Offer High School Students College Credits* (Clark 2001). And in the same time period, two additional reports appeared: "College-level Learning in High School: Purposes, Policies, and Implications" from the American Association of Colleges and Universities (Johnstone and Del Genio 2001) and "The Open Door . . . Assessing the Promise and Problems of Dual Enrollment" from the American Association of State Colleges and Universities (2002). The former was skeptical about the maintenance of standards and the readiness of high school students developmentally for college-level work; the latter was an early voice proposing dual enrollment as a strategy for improving college access.

In 2002, policy analysis in regard to dual enrollment as an access/success strategy began in earnest. The federal Office of Vocational and Adult Education is carrying out an ongoing, multi-part study, Accelerating Student Success through Credit-Based Transition Programs.[8] Like the ECS study, the OVAE study analyzes legislation in all 50 states. The goal is to find out to what extent and how these programs with their community college partners are serving and could serve a broader range of students. The study identifies state-level policies that support or inhibit the development of such programs and answers questions about the potential effectiveness of these strategies for middle- to low-achieving students.[9]

Also funded by OVAE, the National Center for Education Statistics is doing a companion survey of dual enrollment programs.

Jobs for the Future has also examined state dual enrollment policies in depth as an aspect of its work to guide the implementation of early college high schools. Early college high schools might be seen as an extreme form of dual enrollment because students earn the AA degree while still in high school, and meeting that goal requires drawing on a wide variety of dual enrollment policies—who is eligible, who pays, who teaches, how credit is awarded, who governs, and what supports and incentives are provided. In addition, early college high schools require modification of a number of these policies (Hoffman and Vargas 2005). Both JFF and the OVAE researchers have begun to collect data and prepare case studies of what the OVAE study calls "comprehensive" or "enhanced comprehensive" programs—structures such as early college high schools, middle colleges, Tech Prep arrangements, and College Now.

Because JFF is involved in supporting school implementation, the organization recommends specific and detailed policy changes for various states with clusters of early college high schools; JFF's work encompasses public and private four-year institutions and is an aspect of a broader advocacy agenda that would restructure the education pipeline using a number of policy levers—not just dual enrollment but also forms of "blended institutions" and other pathways for students who are least well served by the system today. JFF is setting stretch goals for states to "double the numbers" of young people who attain postsecondary credentials.

Reframing Dual Enrollment Policies

While there is substantial research about dual enrollment policies themselves, there has been little attempt to link dual enrollment policy with policies for high school reform or to position it within K-16. Currently, the assumption of most dual enrollment advocates is that dual enrollment is attractive because it is an escape from high school, rather than an enhancement of the high school experience. Reframing dual enrollment as a key platform for high school success alters that equation. It embeds dual enrollment in the larger agenda of constructing a seamless transition to postsecondary education—an agenda that requires collaboration across secondary and postsecondary sectors and changes both.

What would need to change if dual enrollment had a mission to staunch leaks in the educational pipeline? What might states ask of their current policies or use in constructing new policies if greater equity of postsecondary outcomes were the goal?

The good news is that we know the range of rules and regulations to be considered. We have models that fit a range of state cultures and political environments, from highly centralized to locally autonomous. And we can point to several states where only a few policy changes could make dual enrollment a transition strategy for larger numbers of underrepresented students.

Thirty-eight states have dual enrollment policies or regulations. The OVAE researchers characterize each state according to program features (e.g., target population, admission requirements, location, student mix). In addition, they chart the choices states make in crafting policies: whether to set student eligibility criteria such as grade point averages and year in high school, how tuition is paid with a combination of ADA/FTE, who is able to teach, and whether there are quality controls or monitoring mechanisms. These descriptors are helpful in comparing legislation and regulations across states, and in setting forth the elements a state might consider in new or revised legislation. For example, among the 12 states having some regulation in regard to instructors for dual enrollment, some mandate that postsecondary faculty carry out instruction, while others permit credentialed high school teachers to instruct. In some states students pay tuition; in others the decision is local; in still others all courses are free. The decisions likely to have the greatest impact on equity—and on whether dual enrollment leads to a seamless system to grade 14 for all—are *whether states mandate that all two-and four-year institutions and all high schools within a state participate and whether the program provides academic and social support.*

Premises for a Reframed Dual Enrollment Policy

If dual enrollment is to be a pipeline improvement strategy, its reconceptualization must begin from this premise:

> ***Dual enrollment is a mechanism for aligning high school and postsecondary education, not just a way to move bored or advanced students out of high school.***

If the mission of dual enrollment is to improve results for underrepresented students, there is an additional premise:

> ***The secondary and postsecondary sectors must take collective responsibility for moving students successfully from one level of education to the next.***

Seen thus—as a plank in the platform of "college readiness for all"—dual enrollment presents new possibilities. Legislation might build in one or two free general education courses as high school graduation requirements—as some small schools are already doing. Some number and sequence of college courses might be provided free to all students who have met their tenth- or eleventh-grade high school exit requirements. The courses would be guaranteed to lop off a semester of college because the curriculum would be co-designed by the partner institutions and aligned with high school courses and standards.

Dual enrollment would necessitate a structure for ongoing conversation about the state's high school and postsecondary goals and their interconnections.

Dual enrollment would also have implications for governance. It would necessitate a structure for ongoing conversation about the state's high school and postsecondary goals and their interconnections. It would demand solutions to the disconnect between Carnegie units and college credits and between ADA allocations and FTE funding. It could reconcile high school exit, college admission, and placement tests. And most important, it would save time and money by eliminating duplicated course work and testing and by moving students into postsecondary courses as soon as they were ready, rather than on the basis of seat time.

In regard to the operation of the high school-college partnerships, joint responsibility would mean that both institutions draw on the best knowledge available to provide not just courses but the "added" supports necessary for student success and the later "subtraction" of dollars and time. These additions include a coherent course of study, not random course taking; individualized advising; supplemental instruction as needed to bolster skills needed in college-level classes; students progressing into college courses in a cohort rather than individually; and wraparound services, including access to health, housing, and other non-school functions.

Questions for States to Ask in Auditing or Developing Dual Enrollment

As noted in the introduction, research and practice suggest a number of approaches to supporting underrepresented students in the transition to college. These include: providing clear signals about preparation; aligning high school exit and college entrance standards; requiring a college prep curriculum for all; putting high-stakes tests in place to pressure schools to make demands on teachers and students; and using college scholarships to motivate students. In addition, such approaches are more powerful when they are not *ad hoc* inventions of individual secondary/postsecondary partnerships but rather exist within a state policy frame that explicitly structures collaboration between sectors and enlists state and community leaders in sending a strong message about the state's interest in increasing the education level of all of its citizens.

Reframed dual enrollment policies and practices must incorporate and intensify these approaches; indeed, they can serve as a catalyst for institutionalizing them. This report draws on the research and practice, as well as on the work of designing early college high schools, to propose criteria that dual enrollment programs should meet to serve as a strategy for promoting college access and credential attainment (see Table 2):

- The mission is to serve a wide range of students.
- The program is embedded within a K-16 structure and a high school reform initiative.
- There is equal access across all the state's schools.
- Concurrent credits are used as a proficiency-based acceleration mechanism.
- The secondary and postsecondary sectors share responsibility for dual enrollment students.
- The program collects data for purposes of assessing impact and improving the program.
- Funding mechanisms are based on the principle of no cost to students and no harm to partnering institutions.

Mission

The mission statement would pose dual enrollment as a pathway to postsecondary education open to a wide range of students, including those headed for technical or career education. The mission statement would indicate that free college courses can help students understand and experience the demands of college, accelerate the process of earning a degree, and save money for students and their families. The mission would also state that a second purpose of dual enrollment is to foster collaboration across secondary and post-

continued on page 14

TABLE 2

A Snapshot of Dual Enrollment for Increasing Postsecondary Success for Underrepresented Students

	Question	The Current Picture
Mission	Is the mission to serve a wide range of students?	Legislation generally states the mission as acceleration and expansion of opportunities for gifted or advanced students or is enabled by a few paragraphs of legislation, with no explicit mission or mention of population to be served. Texas, Michigan, and states affiliated with Southern Regional Education Board have launched "go to college" campaigns, and could include dual enrollment as a way to try out college or get a head start.
K-16 and High School Reform	Is the program embedded within a K-16 structure and a high school reform initiative?	Twenty-five states have a K-16 policy, and many are working on better alignment between high school exit standards and college entrance and placement standards. Some states have high school reform plans, but neither their K-16 nor high school reform plans position dual enrollment as an explicit transition mechanism or way to improve postsecondary outcomes. CUNY is the rare system to set a high school test score (75 on the Regents) as a college entrance score without remediation
Equitable Access	Is there equal access for all qualified students across all the state's schools?	Many states restrict dual enrollment to juniors and seniors and peg eligibility to "all or nothing" criteria, such as an overall GPA or a single test score. CUNY's College Now addresses the issue by mounting developmental courses for high school students to prepare them for the Regents examinations and college credit. In most states, dual enrollment mechanisms are permitted but not required, so only some high schools and colleges choose to participate. If required, the partnerships are more likely between high schools and community colleges than four-year institutions. While enterprising families may seek out postsecondary opportunities for their children, many students who might benefit cannot do so.
Concurrent Credit	Are concurrent credits used as a proficiency-based acceleration mechanism?	Some states do not permit dual credit: students get college but not high school credit or must chose between the two. Only a few states have guaranteed credit transfer policies that make credits portable within any public institution in the state.
Shared Responsibility	Do the secondary and postsecondary sectors share responsibility for dual enrollment students?	Academic and social supports are a major challenge in making dual enrollment work for a wide range of students. State legislation is silent, in general, on support and leaves arrangements to local discretion. Models of appropriate support are emerging from middle and early college high schools, both of which are built on the premise of joint responsibility for student success and have such support mechanisms as: liaison staff to sustain the partnership; college prep seminars; team-taught courses with high school and college instructors; and guided use of college facilities such as tutoring centers, libraries, and laboratories.
Data Collection	Does the program collect data for purposes of assessing impact and improving the program?	States measure participation in credit hours earned, courses completed, and students or full-time equivalents (FTEs) enrolled. Only a few states disaggregate data by race or calculate growth rates, and there is little consistency across states in how data is reported.
Funding	Are funding mechanisms based on the principle of no cost to students and no harm to partnering institutions?	Given the potential cost savings from dual enrollment, the use of the politically charged term "double dipping" for dual enrollment, with a connotation of waste and abuse, is inappropriate. "Hold harmless" or "almost hold harmless" plans ensure that dual enrollment is not a zero-sum game. Such plans exist in a few states, but most take money away from high schools to pay for postsecondary credits.

Institutional arrangements in each location would give the secondary and postsecondary partners joint responsibility for identifying qualified students and for advising, supporting, and acculturating them to postsecondary expectations and demands.

secondary institutions, with a better alignment of exit, entrance, and placement requirements. The best mission statements would set a numerical goal for increasing degree attainment of underrepresented students and link that goal to a "go to college" campaign, as some states already do.

K-16 and High School Reform

State policies would include high school and postsecondary reforms and improvements within a single strategic plan that includes targets for specific secondary and postsecondary completion rates. Dual enrollment would be among a number of mechanisms and pathways to move students smoothly and more quickly through the key transition points in education from kindergarten through a postsecondary credential. Dual enrollment would require the alignment of standards, assessments, and accountability systems across sectors. High schools could use the successful completion of a college course as a college readiness standard. Dual enrollment would be administered jointly by the state's departments of education and higher education, which together would provide incentives for students to accelerate. In addition, a joint legislative committee would oversee dual enrollment. Governance bodies would have decision-making power, not just advisory responsibility, and would be located within a K-16 structure.

Equitable Access

Programs would be available free of charge (including books, transportation, and laboratory and special fees) in the high school, on a college campus, or by distance learning. All of the state's two- and four-year public institutions would participate. Students in all public high schools would be notified each year of dual enrollment opportunities and would be provided with advising and academic support to prepare and to remain enrolled. The most equitable programs would encourage low-income students to dually enroll by publicizing the advantages of free college courses while in high school and providing incentives (e.g., scholarships and loan forgiveness for postsecondary completion).

Concurrent Credits

The program would provide simultaneous high school and college credit under a proficiency-based acceleration policy. Students would be assessed for college readiness in specific disciplines, so they could move forward in math, for example, while working on high school English language arts. Readiness would be pegged to proficiency against state standards, which could occur as early as ninth grade. Clear, consistent, statewide high school/college course equivalency and numbering systems would help ensure both acceleration and credit transfer. Transfer of all credit would be guaranteed within the state's institutions from high school to community college to Bachelor's-granting institution. States would have standing committees that assess new high school and college courses and add them regularly to the roster (as Florida does today). Under the best condition, AP and IB results would be integrated into the credit transfer system.

Shared Responsibility

Institutional arrangements in each location would give the secondary and postsecondary partners joint responsibility for identifying qualified students and for advising, supporting, and acculturating them to postsecondary expectations and demands. The strongest programs would ensure that students had access to social services and health care beyond those offered through their schools. Governing boards with representatives of the partners would meet regularly, as would teachers, professors, guidance counselors, and college advisors. Partnership agreements and memoranda of understanding would specify the use of campus tutoring facilities, responsibility for books and transportation, and local governance mechanisms. A dedicated staff line would be devoted to enabling and maintaining the partnership.

Data Collection

States wishing to use dual enrollment as a strategy to scaffold underrepresented students into college would keep records by demographics, credits achieved, postsecondary pathways taken, and costs. They would study such issues as the impact of dual enrollment on students' postsecondary persistence, grades, and graduation rates. They would monitor carefully to ensure that no qualified student is excluded, that low-income students and students of color are adequately represented, and they would use their data to improve their programs.

Funding

Secondary and postsecondary institutions would be compensated for the student's education in such a way that both are "held harmless" rather than having either lose dollars when both continue their responsibility for the student.

Given the potential savings for one year of college in high school (see box on page 16), the use of the politically charged term "double dipping" for dual enrollment, with a connotation of waste and abuse, is inappropriate. "Hold harmless" or "almost hold harmless" plans, as they are called in this report, ensure that dual enrollment is not a zero-sum game. Funds must be allocated so that it is in the best interest of secondary and postsecondary partners to participate. "Hold harmless" plans exist in a number of states, most using the fundamental building blocks: ADA or the per pupil spending for a high school student; FTE or the full-time equivalency rate at which states allocate dollars to postsecondary institutions; and tuition. Several states allocate special funding streams to dual enrollment. The variety can be categorized as follows (see box at right):

- Statutory permission to "double dip" (Florida and Texas);
- Special appropriation for accelerated learning (Utah); and,
- Grants (Illinois).

Other inventive solutions for funding dual enrollment might include: the creation of a pool of dollars distributed competitively to high schools and postsecondary institutions for "blended" or integrated programs; or enabling students taking 50 percent or more of their courses in college to be eligible for Pell Grants and state financial aid. (Current federal law does not permit high school students to receive financial aid.)

While currently most students take only one or two college courses in high school, the hypothetical funding model that follows assumes a year of college credit starting in the junior year—a trend that is growing.

Examples of Hold Harmless Plans

Permission to Double Dip

In Florida, school districts get full ADA, and postsecondary institutions generate FTE but are required to waive tuition—an "almost harmless" plan. In 2003-04, Florida's community colleges were reimbursed $51.9 million to support the dual enrollment of 11,347 full-time equivalent students (an average per FTE pupil cost of $4,578, and an average per student cost of $1,497). Since 2003, Texas has permitted high schools to retain full ADA for the student taking credits in postsecondary. Colleges are permitted (but not required) to waive tuition, and contact hours of high school students are counted in the determination of state funding. However, because dual enrollment is not a state-mandated acceleration mechanism, school participation is voluntary; funding sources must be worked out by the secondary/postsecondary partnership.[10] This policy raises problems of access because some districts require students to pay for courses, books, transportation, and the like.

Appropriation for Accelerated Learning

Utah appropriates dollars for dual enrollment ($5.4 million in 2003-04). The state reimbursed school districts at $39.34 per credit for the 2003-04 school year. Each high school receives its proportional share of district dual enrollment monies allocated to the district based the number of semester hours successfully completed by students in the prior year compared to the state total of completed concurrent enrollment hours. Although Utah students do generate ADA, the current formula does not equal full tuition.

Grants

In 2001-02, 44 percent of colleges participating in Illinois' P-16 Initiative Grants (formerly Accelerated College Enrollment/ACE grants) used this funding to waive all tuition charges, and 24 percent waived between one-quarter and three-quarters; 32 percent used other tuition reduction formulas. Illinois appropriated $1.3 million to P-16 Initiative Grants in 2004.

A Funding Model for Dual Enrollment

	High School ADA	Tuition Per Student, Per Year	State FTE & Other Funds	Total Cost
11th Grade	$6,500	$600 (4 courses)	$2,000 (0.4 FTE)	$9,100
12th Grade	$3,250	$900 (6 courses)	$3,000 (0.6 FTE)	$7,150
First year of college	0	$1,500	$5,000	$6,500
Grades 11-14 in four years without dual enrollment	*$13,000*	*$3,000*	*$10,000*	*$26,000 (completes Associate's degree)*
Grades 11-14 in three years with dual enrollment	$9,750	$3,000	$10,000	$22,750 (completes Associate's degree)
Savings to State				**$3,250**

The dual enrollment funding model would be calculated according to the following principles:[11]

- The high school would retain full ADA for students taking less than half of their coursework/credit hours in a postsecondary institution.
- The high school would retain 50 percent ADA for students taking more than half of their coursework/credit hours in a postsecondary institution; high schools would need the funds to meet costs of student support, a liaison with the college, and not to disadvantage the school staffing plan.
- College tuition would be paid by a state appropriation for dual enrollment courses under 50 percent participation and by a combination of ADA transferred to the college and state appropriation for over 50 percent participation.
- State would provide FTE for the student at the regular rate.

This funding model makes the following assumptions (see table):[12]

- The Associate's degree requires 20 three-credit courses for completion; student completes one year or 10 college courses in high school.
- Student takes four community college courses as a high school junior; the high school retains full ADA because the student is enrolled more than 50 percent in high school.
- Student takes six community college courses as a senior; the high school loses 50 percent of ADA because the student is enrolled more than 50 percent in postsecondary courses.
- ADA is $6,500 per year (about the national average).
- Community college tuition is $1,500 a year or $150 a course (about the national average).
- Cost to college for student beyond tuition is $5,000 FTE (average amount supplied by state, local, foundation, and other funds directly to college).

In this model, the cost per student is greater per year than average ADA when the student is in high school taking college courses, but in college the higher cost is made up both directly and indirectly:

Direct savings

- Time to degree is accelerated so the state pays more for the student "up front" but subtracts or saves by cutting up to two years from time to Associate's degree or Grade 14. (In this model, the savings are approximately $3,250 per student for one year of college in high school.)
- College remediation costs are reduced because a condition of dual enrollment is placement into non-remedial courses.
- College persistence is increased because students starting without remediation are more likely to graduate.

Indirect benefits

- Rates of college access and degree completion increase.
- Income, employment, and other job benefits increase.
- Government dependency and crime costs decrease.
- Tax revenue increases.
- Citizenship activities, such as charitable giving and political involvement, increase.[13]

Jobs for the Future makes this kind of argument for early college high schools, one form of dual enrollment that shortens time to degree by two years. Average per pupil costs are 4 to 12 percent more than the national average, but "the investment also buys considerably more . . . up to two years of college during the high school years" (Webb 2004).

PART III.

Case Studies: Dual Enrollment Policies in Action

Florida, Utah, and College Now, profiled against the guidelines in Part II, illustrate how differing dual enrollment policies, all serving a wide range of students, play out in states and on campuses. Each has unique features:

- Florida has a highly centralized K-20 education system and a tiered high school/postsecondary system with consistent, well-publicized gatekeepers and incentives for accelerated advancement from high school to postsecondary education.
- Utah's dual enrollment program provides substantial local latitude for the design and implementation of dual enrollment, and it is unusual for the large number of students dually enrolled at public four-year institutions.
- The City University of New York's College Now program, a unique partnership developed locally in a state without dual enrollment legislation, holds lessons for states with comprehensive public higher education institutions partnering with their local school districts on a large scale. College Now is designed explicitly with an access/success mission: to increase the number of high school graduates prepared to attend higher education without remediation.

These models do not reflect the range of dual enrollment programs, but, like programs in Illinois and Washington, they are long established, growing, and free to students. They serve a relatively wide range of students in career and technical education and in liberal arts, and most two-year institutions participate. However, other states would have to make major policy shifts if dual enrollment were to serve as a college access/success strategy. Dual enrollment in Minnesota and Michigan, for example, primarily serves advanced students, and Michigan, Virginia, and Texas students may be required to pay tuition. Although Texas has recently moved to permit "hold harmless" financing, the arrangements are voluntary so that districts choose whether or not to participate; thus access is not equitable across the state. A number of states have dual enrollment on the books, but, for various reasons, the programs remain small and peripheral to the state's education reform and improvement plans.

Florida[14]

Florida ranks 49th in the number of students completing high school: of every 100 ninth graders, 53 complete high school four years later. While high school graduation rates have increased over the decade, especially for students of color, only 32 students of 100 go on to college within four years of ninth grade. Yet Florida ranks at the top in the percentage of first-year students in community colleges who return for their second year. Compared with other states, a very high proportion of students complete certificates and degrees relative to the number enrolled (NCPPHE 2004). It is not clear, then, what role dual enrollment plays in easing the transition for Florida's young people into postsecondary education. Given the high rates of postsecondary completion for those who enter, however, building an even larger dual enrollment population might result in increases in both high school and college credential attainment.

College Now is designed explicitly with an access/success mission: to increase the number of high school graduates prepared to attend higher education without remediation.

Mission

Florida positions dual enrollment as a transition mechanism. Called articulated acceleration and including IB, AP, and early admission, "articulation" refers to the process of aligning "joints" or levels in the education system. The stated purposes are:

- Broaden the scope of high school curricular options;
- Increase the depth of high school study; and
- Shorten the time to college degree.

Some Florida community colleges have created innovative "blended" dual enrollment institutions in which students get a high school diploma and an Associate's degree concurrently.

K-16 and High School Reform

Dual enrollment exists within a K-20 set of policies that attend to the relation between levels in the education process. The dual enrollment legislation is the best in the country for accommodating early college high schools and middle colleges without the need for waivers or new funding models because it is already set up to move students between high school and college. Some community colleges have created innovative "blended" dual enrollment institutions in which students get a high school diploma and an Associate's degree concurrently (e.g., Okaloosa Walton, Broward, and Valencia community colleges).

Equitable Access

Florida has the most highly articulated and centralized public system in the country. Its dual enrollment legislation mandates that all 28 community colleges and specific four-year institutions participate. The state sets admission requirements. Students must have an unweighted GPA of 3.0 and/or a 440 Verbal and 440 Math SAT, or an appropriate score on the Florida College Placement Test scores in the areas in which they wish to study. The program is accepted as a path to college for middle achievers and students on a career/technical track as well as students classified as gifted. Some community colleges actively recruit students. Students may attend during the school day, before or after school, or during the summer, thereby relieving overcrowding and also giving students maximum flexibility to participate. Dual enrollment is publicized and an increasing number of students of color participate. Some community colleges admit students for a single dual enrollment course and simultaneously as a degree candidate, so there is no need to reapply.

Concurrent Credit

Beyond meeting academic criteria that are less stringent for career and technical education, Florida's only restriction on course taking is *that the course count simultaneously both for college and high school graduation.* A state Articulation Coordinating Committee, comprised of secondary and postsecondary faculty and administrators, evaluates high school courses, including AP, and assigns them equivalency prefixes and numbers that match comparable college courses. Credit transfer is guaranteed by the state, and students can access Web-based information that provides guidance in choosing college courses. The state provides incentives for postsecondary degree completion though its lottery-funded Bright Futures Scholarship Program.

Shared Responsibility

Florida's Articulation Coordinating Committee is appointed by and reports to the Commissioner of Education. The committee is comprised of representatives from all levels of public and private education: the state university system, the community college system, independent postsecondary institutions, public schools, applied technology education, a student member, and a member-at-large. The ACC meets regularly to coordinate the movement of students from institution to institution and from one level of education to the next. Standing committees are charged with such issues as postsecondary transitions and course numbering. Required

local partnership agreements spell out the division of responsibilities for the student in regard to books, transportation, advising, and support.

Data Collection

Known nationally for its sophisticated student tracking system that can follow students within the state from high school to postsecondary education or employment, Florida keeps more data on dual enrollment than any other state. Consequently, researchers have performed a variety of analyses, a number of which address the achievement gap and the access and success of underrepresented populations.

Funding

Florida's funding falls into the category of "hold *almost* harmless": school districts do not lose ADA; postsecondary institutions generate FTE for dually enrolled students but must waive tuition. Districts pay for books and fees. Many consider such students a good bet to graduate with the Associate's degree and transfer to a baccalaureate-granting institution, thus resulting in a success story for the community college and a plus for its graduation rate, making the sacrifice of tuition acceptable.

How It Works On the Ground: Broward Community College[15]

Broward Community College's dual enrollment program aligns high school learning and college expectations, and it scaffolds students securely into postsecondary institutions—especially students who might not have gone to college otherwise. Over the 12 to 14 years of its existence, dual enrollment at Broward has become a vehicle for expanding the school district/community college partnership and a means for the college to understand and intervene in the preparation of the district's students for postsecondary education. The current program serves about 1,500 juniors and seniors per semester from the 280,000-student Broward County district. Latino and African-American students are well represented; their numbers grew by one-third between 1998 and 2003.

As per Florida law, students are exempt from tuition and fees; the community college recovers FTE, but it loses tuition dollars. The school district pays for textbooks at $125 per course. Students may take up to 11 credits per semester while in high school, so they can graduate with as many as 44 credits or almost one and a half years of college and more than the state-required 36 hours of general education. State policy requires the college to negotiate a new agreement with the district every year, detailing the responsibilities of each party down to shared student advising. Data on participation must be reported to the state.

A premise of the Broward program, but not all Florida programs, is that the best preparation for a university degree begins in a "real" college course. High schoolers are mixed in with "regular" students—often one or two per class; they are advised to take courses in the standard general education sequence because all will transfer to the four-year institution. The program is governed by an articulation coordinating council, which has in its purview dual enrollment, remediation, teacher preparation, and other policy issues. Although the state requires that the college advertise in such a way as to ensure equity of access, access is limited somewhat because students must provide their own transportation.

Initially, both the school district and the faculty were resistant to starting a dual enrollment program.[16] However, from a beginning of 10 courses open to high schoolers in the 1990s, the program has evolved to a comprehensive list of general education courses. In addition, dual enrollment has provided the college an opportunity to reflect on the preparation of high school students through the test scores of tenth and eleventh graders. The partners are now running a college prep summer "boot camp," contemplating a middle school outreach program, and working to better align high school and college math expectations.

Early College High School. In 2001, as a supplement to the outreach program and as a result of the positive experience with dual enrollment, Broward started College Academy, a full-time, accelerated small school in which juniors and seniors receive a college-ready diploma from the School Board of Broward County and an Associate of Arts degree from Broward Community College simultaneously and at no cost to the students. College Academy students also qualify for the Bright Futures Scholarship Program. Although its admission criteria are the same as those for dual enrollment, students take more college courses: 12 to 18 college credits in the fall and winter terms and approximately 6 credits in the second summer session. Students must maintain a 2.5 unweighted GPA in order to remain at College Academy. The student body is about 50 percent students of color: 22 percent Latino, and 17 percent African-American; these demographics are similar to those for dual enrollment in general.[17]

In Utah, proficiency-based career and technical education is free to high school students and articulated with and integrated into the two- and four-year postsecondary system.

Other

Despite the prescriptiveness of Florida's legislation, the actual implementation of dual enrollment varies from institution to institution: some provide college in the high school; others bring large numbers of high school students onto campus. Community colleges provide the greatest number of credits and are accessible to almost every student. Four-year institutions differ in the extent of dual enrollment they offer, with the University of Florida restricting students to two courses per semester and only on a "seat available" basis, while the University of West Florida allows fifteen credit hours per semester.

Utah[18]

Although Utah is ranked fourth in the nation in high school graduation, with 83 of 100 ninth graders graduating in four years, college completion rates rank the state at 31st.[19] The state has both the highest birth rate and lowest per pupil spending in the United States ($4,500), and Utah high schools average 40 students per class. Utah ranks at the top in affordability of postsecondary education, and many students take advantage of concurrent enrollment—as dual enrollment is termed in Utah—to make postsecondary education even more affordable. Proficiency-based career and technical education is articulated with and integrated into the two- and four-year postsecondary system.

Mission

Established before the 1980s to expand options for rural students, the stated purpose of the Utah "accelerated learning program" is "to provide challenging college-level and productive secondary school experience, particularly in the senior year, and to provide transition courses to be applied to postsecondary education."[20] With a strong tradition of local control, Utah's legislation requires that "concurrent enrollment course offerings . . . reflect the strengths and resources of the respective schools and institutions of higher education and be based upon students' needs."

K-16 and High School Reform

Utah has neither a statewide K-16 initiative nor a high school reform plan. Nonetheless, concurrent enrollment legislation is structured to foster school-college collaboration. The state's concurrent enrollment funds can be spent on joint activities such as professional development. The partners jointly negotiate student eligibility; secondary schools identify students who might benefit. While both can nominate adjunct faculty, the postsecondary institution retains the final approval. Some districts and some postsecondary institutions have two or three partnerships. A joint committee of the Board of Regents oversees concurrent enrollment.

Equitable Access

Concurrent courses are offered in all 109 Utah high schools, all 141 middle schools, and the 10 state colleges. Concurrent enrollment in career and technical education is widely promoted, sending a signal that it is not just for advanced students bound for the liberal arts. Because of costs, the value of "real" college credit, the attractive CTE option, and New Century Scholarships described below, concurrent enrollment has supplanted AP in number of participants. Unusual for the country, two- and four-year institutions are treated similarly in the legislation. Most courses are taught on high school campuses by high school teachers with adjunct status, but three urban school districts record 1,400, 1,200, and 4,500 semester hours on college campuses. To meet workforce needs in science and technology, Utah has established six early college high schools—autonomous, accelerated schools intended to serve underrepresented and underachieving students interested in math, science, and technology.

Concurrent Credits

Students may take up to 30 concurrent semester hours per year. About half of the 2003-04 credits were in technical courses, a percentage that has increased over the last several years. Students who complete the Associate's degree or its equivalent in high school (by September 1 of the post-high school year) are eligible for New Century Scholarships that cover 75 percent of an eligible student's tuition cost for up to two years (60 credit hours) at any of Utah's public baccalaureate programs and 75 percent of the average tuition costs at two private institutions.

This scholarship program, created in 1999, has received national attention because of its generous benefits and the high bar it sets for college credit attainment in high school. New Century Scholarships were one attraction for the Bill & Melinda Gates Foundation to establish the network of early college high schools in the state. A second was the state's design of proficiency-based high school exit standards.[21]

Shared Responsibility

Participating students must have a "student education/occupation plan" (SEOP). There is no legislative requirement for joint advising or academic support, so programs differ from campus to campus.

Data Collection

The state is currently systematizing data collection for concurrent enrollment to link it with the state's student information system, modifying and tightening certain provisions in the legislation, and gearing up to assess progress.[22]

Funding

Utah's funding mechanism is innovative for its structure and the allowable activities. Districts receive funds per postsecondary credit completed "in the prior year compared to the state total of completed concurrent enrollment hours." Thus, this funding mechanism gives high schools an incentive to recommend students who are prepared to succeed. Given the large number of participants, this mechanism may serve to motivate rather than exclude. Dollars are allocated by ratio to schools from the district. Funds may pay for tuition and the development and maintenance of a concurrent enrollment program including: staff development, quality monitoring, collaborative work with university employees, and the purchase of textbooks. About $5.4 million was appropriated in 2003-04 for dual enrollment, a sum that has more than doubled in a decade, as has the number of students participating.

How It Works On the Ground: Weber State University[23]

Weber State University, a regional institution of 18,000 students, offers four "early credit options" for high school students: Early College, which enrolls students full time on campus, Concurrent Enrollment, Advanced Placement, and the College Level Examination Program. A fifth option, an early college high school funded in part by the Bill & Melinda Gates Foundation, will open in fall 2005; it will have a science theme and target students underrepresented in postsecondary education.

Concurrent enrollment is the centerpiece of Weber State's pre-college offerings, advertised on the college's Web site as "Two for One Deal." In contrast, AP is described as a program that "may give you the chance to enter college with a few college credits in hand."

The third largest concurrent enrollment program in Utah, Weber State serves 4,000 high school students, who earned 19,000 credit hours per semester in 2003-04. Most courses are taught in high schools by high school teachers, but some take place on the Weber State campus and at satellites. Academic departments approve all syllabi and work with high school teachers to ensure quality and consistency of course offerings. In regard to access, the purpose of the program is for students who have already demonstrated ability, not to motivate the underprepared.[24] Nonetheless, more students are achieving the admission standards than had been anticipated; these standards include a B average in high school, a 90 percent attendance record, and a teacher recommendation. Given the size and variety of Weber State's programs, with demographic analyses the university could provide valuable insight into the profile of participants (e.g., income, previous academic record, race, ethnicity). The Weber State concurrent enrollment Web site lists all partner high schools. Students can search for courses, semesters available, and other information.

Weber State is an active member of a young national organization, the National Alliance of Concurrent Enrollment Partnerships.[25] Founded in Salt Lake City in 1999, NACEP "links college-school programs offering college courses in high schools. NACEP supports and promotes its constituent partners through quality initiatives, program development, national standards, research, and communication."

College Now: The City University of New York and the New York Department of Education[26]

College Now was designed specifically to serve students who might not otherwise be able to attend postsecondary institutions and who receive inadequate college preparation in the city's high schools.

Without state dual enrollment legislation, the City University of New York, the largest urban postsecondary system in the country, and the New York Department of Education, the largest urban school district in the country, have established a high school/postsecondary partnership that rivals in size those of entire states. CUNY's Collaborative Programs comprises a continuum of college preparation approaches serving students at different developmental stages and with different needs: early colleges, comprising sixth through twelfth grade, designed so that in seven years students earn a high school diploma and the equivalent of an Associate's degree simultaneously; university-developed high schools of which there are 15 on or near CUNY campuses; Gear Up serving cohorts in single schools; and College Now, which offers credit and non-credit courses and activities, including summer arts and theatre activities that acquaint students with college faculty, college culture, and college campuses. College Now is a responsibility of the executive vice chancellor for academic affairs. Thus, it is associated with the academic side of CUNY. The director of the program, who reports to a central office dean, works with a small staff of program developers, and each program has a campus-based coordinator and staff.

The centerpiece of College Now is its free, credit-bearing college courses. In some of its programs, College Now also helps prepare students for English and Mathematics Regents exams and offers non-credit "developmental" college preparatory courses. In 2003-04, 31,800 students participated, with 51,900 "course and activity enrollments."[27]

Begun in 1984 at Kingsborough Community College, College Now expanded in 1999 when the CUNY board voted to end remediation at CUNY's senior colleges. The city schools and CUNY both were under pressure to raise standards if CUNY were not to exclude large numbers of city high school graduates, thereby limiting access to an institution that was enshrined in intellectual and social history as the symbol of educational opportunity for immigrants and workers in New York City.

College Now models vary. The largest, at Kingsborough Community College with 6,840 college credit enrollments in 2002-03, teaches almost all its courses in high schools. Baruch College's smaller College Now program, profiled below, brings most of its students to campus.

Mission

College Now's mission is to help students meet high school graduation and college entrance requirements without remediation and to be retained through a degree. The program was designed specifically to serve students who might not otherwise be able to attend postsecondary institutions and who receive inadequate college preparation in the city's high schools.

K-16 and High School Reform

Established in 1784, New York State's Board of Regents is responsible for public higher education, the public schools, and other public and private educational and cultural institutions, such as museums and libraries. Although all these areas are governed together, there is no statutory authority to promote policies and programs that would make the high school/postsecondary transition seamless. CUNY, with 213,000 students in 17 institutions, and the State University of New York, with over 410,000 students in 64 institutions, each have their own boards of trustees and make separate policy decisions. For example, CUNY made a decision to accept the Regents exams for high school exit with cut scores of 75 on math and English for college placement without remediation, while SUNY did not. CUNY and the Board of Regents see themselves as collaborators in high school reform and K-16.

Equitable Access

Student eligibility for credit courses in College Now is based on Regents exam scores, high school records, and other measures, including substantial personal advising. While the philosophy of the program is to be stringent about admission to credit courses, the rigor of courses, and the standards of exit assessments, the program provides multiple and widespread opportunities for students to prepare for their free college courses. The remaining access challenges include the need for a more systematic provision of information to eligible students, greater rigor in the preparatory classes, and, based on recently collected data, moving more males of color into credit-bearing courses.

Concurrent Credits

All credits are transferable within the CUNY system, but college courses do not necessarily replace high school courses. Given the economic and academic challenges facing most College Now students, the purpose is to improve access and persistence, not acceleration. Most CUNY students are poor (average family income is $28,000), most work, and persistence and graduation rates are low even at six years. Acceleration appears most feasible in early college high schools, under development by CUNY in partnership with the New York City Department of Education.

Shared Responsibility

Mutual self-interest joins CUNY and the public schools in improving high school outcomes by starting students earlier on the college path. Student academic support and advising is provided by College Now staff based in schools and by high school advisors and counselors. College Now is amplifying its ninth- and tenth-grade and summer programs—especially in the arts—to provide more students with access to CUNY courses, faculty, and facilities.

How It Works On the Ground: The Baruch College Partnerships[28]

Situated on prime real estate in midtown Manhattan, Baruch College is the largest business school in the United States, with 15,000 undergraduates and 2,500 graduate students. It is also the second most selective public institution in New York State, and one that speaks to the middle-class aspirations of the many immigrant and working-class students who seek admission.

Baruch is located in what was Community School District 2 before the most recent Department of Education reorganization. The district was known to students of school reform for its successes under Anthony Alvarado, the district superintendent of the late 1990s. Baruch's partnerships with the public schools grew in the late 1990s when Alvarado and Matthew Goldstein, then president of Baruch College, and now chancellor of the CUNY system, created a small, liberal arts high school on the college campus. Serving 400 students, Baruch College Campus High School is a "screened" school: to be eligible, students must have an 85 percent seventh-grade average and fewer than 10 absences.

Outreach programs beyond the high school began with Baruch Prep in 1998, a project that paired high school and Baruch English faculty in teaching writing in the neighboring high schools. The formal College Now program began in 1999 when Baruch began to offer credit courses for high school students. Baruch partners with ten mostly small high schools, including the Museum School, the School of the Future, the School for the Physical City, University Neighborhood High School, and the Institute for Collaborative Education. In fall 2003, 40 of the 85 students who had participated in College Now at Baruch as high school students were matriculated as freshmen, with another 31 at other CUNY four-year institutions (the pattern noted above in CUNY's College Now research findings). The balance were scattered across the community colleges.

College Now is serving about 90 high school students in college-credit courses in fall 2004. Other activities under the College Now banner include an academic summer program, non-credit "Let's Get Ready," and college awareness courses for ninth graders. High school and Baruch English faculty team-teach "Transition to college" writing courses at two high schools. To ensure quality, cohort courses use the same texts and give the same final exams as "regular" Baruch courses, and Baruch faculty in the relevant departments approve all course syllabi.

All courses take place after school. For example, "cohort" courses, comprised only of high school students, are held twice a week from 4:10 to 5:20. Thus, there are few scheduling problems. Students must provide their own transportation.

College Now shows evidence that it is a pipeline into CUNY's four-year colleges: for fall 2003, more than 45 percent of the New York City public school graduates who entered Baruch College had been in College Now.

Data Collection

With limited funds, the Office of Collaborative Programs carries out research about CUNY's partnership programs. Along with Florida, CUNY is one of the few sources nationally of data about the impact of dual enrollment on high school students. Data collected include demographics, types of courses and credits earned, dollar value of credits, and participation in postsecondary education at CUNY and elsewhere (using data from the National Student Clearinghouse). In addition, and holding promise as a contribution to our knowledge about the impact of dual enrollment, College Now data has been merged with CUNY data to follow the 2002, 2003, and subsequent CUNY freshman cohorts of College Now students to determine factors that affect their college performance. The data collection effort was intended for program development and improvement, but significant outcomes with policy implications are emerging.

Indeed, College Now shows evidence that it is a pipeline into CUNY's four-year colleges: for fall 2003, more than 45 percent of the New York City public school graduates who entered Baruch College had been in College Now. The comparable figures at the other senior colleges are 41 percent at Brooklyn College; 36 percent at City College; 44 percent at Hunter College; 24 percent at Lehman College; 41 percent at Queens College, and 36 percent at York College (City University of New York and New York City Public Schools 2004).

Funding

CUNY's Collaborative Programs is co-funded by the city and state, with CUNY contributing about $10 million a year. Book costs alone will soon reach $1 million a year. College Now funds pay for credit courses at three rates: by the hour in high schools with high school teachers; at an hourly rate (average of $2,800) on campus for cohorts of high school students taught by CUNY adjuncts paid per course; and through "course tuition waivers" that enable students to enroll in "regular" college courses.

Conclusion: A Free Postsecondary Credential for All Young People?

There is an inescapable logic that develops from the Utah, Florida, and CUNY cases: If states take steps to restructure dual enrollment to promote college going for their most vulnerable students, why should the benefits not accrue to all?

To return to the tantalizing questions set out in the introduction: Should states use dual enrollment to restructure the last years of high school to provide greater choices and the option to accelerate for all young people? And, more broadly, should public education extend through grade 14 or its equivalent so that every young person can attain a free postsecondary credential?

The answer to question one is likely yes. This report and other work in progress make the case that dual enrollment, if reframed as part of a high school pathway and with appropriate supports added, has the potential to launch young people more successfully into productive adulthood. Some states are almost there.

The answer to question two is much more complicated, but answers are emerging "on the ground." Without saying flat out, "Our young people must have a free postsecondary credential at the state's expense," Maine, Virginia, Florida, CUNY, North Carolina, and Utah are taking steps that may add up to such a reality.

Maine and Virginia are particularly informative because their programs are counterintuitive: they are designed for precisely those students who are least likely to attend and succeed in college. Maine's pilot specifically seeks disengaged students without college aspirations, and it recruits them to attend college while still in high school. The Maine program provides extensive academic and social support. Virginia takes a two-pronged approach under its Senior Plus Program: along with an "Early College Scholars Program" serving college bound students wishing to accelerate, it has also implemented "Path to Industry Certification," targeting students without a plan for the future. Virginia students who chose this option can earn industry certification starting in the senior year of high school, and then complete the requirements post-high school at state expense. While not strictly a dual enrollment *college* program—students are getting certificates, not college credit—Path to Industry does accelerate students. They get a head start on post-high school career preparation and replace some high school requirements.

North Carolina's Earn and Learn initiative sends students to small schools on college campuses where within five years they can earn a high school diploma and an Associate's degree. With 15 sites in operation using foundation dollars and $2.2 million from the state, Governor Mike Easley is touting the initiative as a way to improve the state's workforce. Students participate in internships and study in emerging, high-demand fields: sciences, health care, and technology.

Dual enrollment, if reframed as part of a high school pathway and with appropriate supports added, has the potential to launch young people more successfully into productive adulthood. Some states are almost there.

Essentially, without any fanfare, and without the public rhetoric of K-16, something historic is beginning to emerge in these states: the creation of an "almost" seamless, free system with new roles for postsecondary education.

By and large, though, today's systems are jerrybuilt and small. States are negotiating among incompatible systems to combine funding streams, reconcile Carnegie units and college credits, work out class schedules, and ensure high quality—to say nothing of attempting to earn buy-in from teachers, professors, and taxpayers. While these wired-together programs will likely work on their current small scale, they operate under the radar, and perhaps that is best. Few governors would get far declaring today that universal, free public education will soon be available to all through grade 14; that high school as we know it will be replaced by a "blended" institution—a merger of high school and first two years of college; and that upper-division postsecondary and the Master's degree combined will be the more selective end point. Nor would a governor have many believers were she or he to say that underperforming students will do better skipping some high school and moving on to college.

The best answer then to the question—should a postsecondary credential at the equivalent of grade 14 be the default end point of every young person's education?—is, let's watch these experiments carefully. Young people may succeed in accelerating their education, and we may figure out systemic solutions to the five key barriers: funding, governance, Carnegie unit/credit reconciliation, student academic support, and curricular alignment. But we must not forget that in part the "universal college solution" is a response to a K-12 problem: the failure of the comprehensive high school to educate the majority of students to high standards and to a high school diploma that truly meets demanding postsecondary and career standards. And the last two decades of school reform have been focused on just that issue. For example, the American Diploma Project (2004) promotes its standards as "the specific English and mathematics knowledge and 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." Reviewers of ADP agree that the standards are extremely challenging, and that there remains a substantial gap between those standards and most state high school exit assessments.

Which will happen first: a strong, credible high school diploma that is—to paraphrase the Education Trust—a "ticket to somewhere valuable" rather than a ticket to nowhere or a combined, free 11-14 system? The next decade is likely to tell.

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Endnotes

[1] For more information, see: www.governor.virginia.gov/Initiatives/Ed4Life/SeniorYear.htm. The Web site of the Governor of Virginia says that students earning a college degree in seven semesters instead of eight can save an average of $5,000 in tuition.

[2] For more information, see: www.earlycolleges.org

[3] For more information, see: http://ncforum.org/programs/nsp

[4] See: www.collegenow.cuny.edu/info/requirements/index.html

[5] Personal communication, Elizabeth Barnett, NCREST, January, 2005.

[6] Available at www.ecs.org/ecsmain.asp?page=/html/issuesPS.asp

[7] For more information, see: www.tc.columbia.edu/ccrc/PROJECTS/dualcredit.htm

[8] OVAE has funded Thomas R. Bailey and Melinda Merchur Karp of the Community College Research Center at Teachers College, Columbia University to carry out this study. For more information, see www.ed.gov/about/offices/list/ovae/pi/cclo/cbtrans/index.html

[9] Because funding is the greatest challenge facing states wishing to make dual enrollment accessible to a wider range of students, this report provides a cost model based on national averages for per pupil spending, community college tuition, and state contribution to postsecondary, as well as examples of actual state funding models.

[10] For information about dual enrollment and accelerated programs in Florida, see: www.firn.edu/doe/postsecondary, http://measuringup.highereducation.org/stateprofilenet.cfm?myyear=2004&stateName=Florida, and *NCEHMS News*, May 2003

[11] See: www.aacc.nche.edu/Content/NavigationMenu/AboutCommunityColleges/Fast_Facts1/Fast_Facts.htm

[12] Savings and benefits are drawn from two internal memos: Bridget Terry Long, Associate Professor of Education, Harvard Graduate School of Education, October 2004, and Augenblick, Palaich, and Associates, December 2004. Washington State provides estimates of savings in 2001-2002. "Students and their parents saved $17.4 million in tuition. The program saved taxpayers $34.7 million since students take high school and college courses simultaneously." www.learningconnections.org/rs/guide/purple2.htm

[13] See Texas Higher Education Coordinating Board, Rules, Chapter 4, SubChapter D, www.thecb.state.tx.us/cfbin/rulesearch.cfm

[14] See: www.broward.edu/locations/dtc/aa/accel/dualenrole.jsp

[15] Personal Communication with Donna Henderson, Associate Vice President for Academic Affairs, Broward Community College, November 2004.

[16] See www.broward.k12.fl.us/collegeacademy

[17] Information about Utah is available at: www.rules.utah.gov/publicat/code/r277/r277-713.htm

[18] The low graduation rate is in part attributable to the Mormon mission that takes young adults out of the pipeline for two years usually immediately after high school graduation.

[19] The author of the legislation is unknown.

[20] See: www.utahsbr.edu/html/new_century.html

[21] Personal communication with Brett Moulding, Utah State Office of Education Director of Curriculum, November 2004.

[22] For information about concurrent enrollment at Weber State, see http://departments.weber.edu/ce/concurrent/default_new.asp

[23] Personal communication with Dianne Siegfreid, November 2004.

[24] See: www.nacep.org/index.html. Dianne Siegfreid is serving a term as NACEP vice president.

[25] For information about College Now, see www.collegenow.cuny.edu; various personal communications with Tracy Meade, Director, College Now, and Stuart Cochran, Director of Research for Collaborative Programs, November 2004-March 2005.

[26] "Activities" include non-credit prerequisites to specific college courses and content-rich workshops, such as an ELL history course, to aid in Regents' exam preparation.

[27] "Activities" include non-credit prerequisites to specific college courses and content-rich workshops, such as an ELL history course, to aid in Regents' exam preparation.

[28] For information about the Baruch College Now program, see: www.baruch.cuny.edu/collegenow/index.htm

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