Defending the Community College
Equity Agenda

Edited by

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For C. Lloyd Bailey and David J. T. Smith
our fathers

NOTES

1. In the goals students declared when they applied for the fall 2000 semester, 29.4% said they wanted to transfer; 3.3% said they were there to "formulate plans"; 21.9% were undecided; and 30.9% did not respond to the question, which I interpret to mean that they were undecided. This means that 56% of entering students were unsure, compared to 29% who said they wanted to transfer.

2. For evidence that high schools fail to provide their students much help in finding direction, aside from preaching "College for All," see Krei and Rosenbam (2001), Rosenbaum (2001), and Grubb and Watson (2002).

3. This triage model is consistent with the findings in Grubb (1996, chap. 2), based on interviews with about fifty community college students in California. The students with the clearest career plans and those with the least initiative and sense of purpose admitted to not using counseling services.

4. The one exception is a college that hired an additional counselor specifically for mental health issues, because the local deinstitutionalization of mental health had increased the numbers of students needing specialized services.

5. This finding confirms results in the literature, particularly from Keim's (1988) survey and from research by Coll and House (1991).

6. The split between financial counseling and other types of counseling is also reflected in the sparse literature, none of which mentions the potential need for financial counseling.

7. Similarly, the seminars included in cooperative education programs at LaGuardia, intended to serve as career exploration for liberal studies students, are sometimes taught as simple information transfer through lecture and sometimes taught in more conceptual and constructivist ways (Grubb and Badway, 1998).

8. The provision of information is the dominant approach to counseling in this country, in virtually all institutions. See, for example, Table 10.a in Herr and Cramer (1992), in which three of the top five services are occupational information, educational information, and individual assessment information.

9. Many developmental conceptions of career planning are described in Herr and Cramer (1992), especially chapter 4. These concepts, however, were rarely mentioned by counselors in the fifteen colleges. The typical system of advising, where students see counselors on a drop-in basis, cannot possibly be developmental, because there is no continuity.

10. None of the National Field Study colleges had PACE programs; on this approach see Grubb and Associates (1999), chapter 7.

11. The results should be interpreted cautiously: they are based on 5,800 students in forty-seven institutions, both two- and four-year colleges, half of whom were enrolled in the TRIO Student Support Services program for disadvantaged students with the other half a matched sample. Their application to *all* students, in community colleges *only*, is therefore a leap of faith. On the other hand, these are some of the only evaluation results of student support services at the college level. See Muraskin (1997) and the third-year longitudinal study results at www.ed .gov/offices/OUS/PES/higher/sssyr3html and sss3.html (accessed January 31, 2006).

Twice the Credit, Half the Time?

The Growth of Dual Credit at Community Colleges and High Schools

VANESSA SMITH MOREST AND MELINDA MECHUR KARP

It is Wednesday afternoon and students are taking their seats for Nancy Johnson's English 101 class at NWSCC, in Washington. These are not typical community college students. Although about 30% of the enrollments at this college are nonwhite, there are no African American or Hispanic students in the class. Of twenty-four students here today, four are of Asian descent, roughly reflecting the distribution of Asian students schoolwide. The students are strikingly different from those in other classes we have observed because they all know one another. Before the beginning of class, they turn in their chairs and chat in small gender-differentiated groups. They appear to be very young, and the three visibly older students sit on the periphery of the noisy mass of younger students, quietly looking through the materials they brought to class. We notice that several of the students flash smiles full of braces.

Nancy begins class by collecting papers. As she does so, she explains that the purpose of the homework was to develop analytical writing skills. As an example, she asks students how they would structure an essay around convincing readers about the characteristics that make a successful Running Start student: determination, good study skills, and reliable transportation are the suggestions made by students. Elaborating on her example, Nancy asks the class what the study-time rule is for college. A number of the students respond "two hours at home for one hour in class." No doubt, Nancy's example was contrived for our benefit, because later, as we walk out of the classroom together, she tells us that within the last few years she has had to reformulate her curriculum and pedagogy since well over half of the students in her English classes are now local high school students who are able to attend NWSCC tuition-free through the state's Running Start program. Nancy is nearing retirement and has been teaching English 101 at NWSCC for around thirty years.

Community colleges are increasingly engaging in partnerships with high schools that seek to provide high school students with the opportunity to enroll in college courses. These arrangements, usually called "dual enrollment" or "dual credit" programs,[1] are not new, because colleges have long allowed academically gifted students to enroll in advanced coursework. But dual enrollment has seen rapid growth over the past few years, both in terms of the numbers of students involved and the types of students targeted.

As programs expand, dual enrollment is drawing from a wider student population, providing the opportunity for college level study to middle- and even low-achieving students in addition to the most advanced. These developments reflect a belief on the part of policy makers and educators that participation in rigorous academic experiences such as dual enrollment can promote student access to and success in college (Adelman, 1999; Martinez and Bray, 2002). Engaging in college-level work prior to high school graduation may encourage students to enter into postsecondary education when they might otherwise have chosen to forgo college.

In today's policy environment, dual enrollment programs are frequently seen as mechanisms for making access to postsecondary education more equitable and increasing the likelihood that disadvantaged and academically disengaged students will be successful in college (Bailey and Karp, 2003). Because students often participate in dual enrollment free of charge, these programs are also assumed to save families money and shorten students' time to degree. Though we will describe in this chapter other reasons for secondary and postsecondary institutions to encourage the expansion of dual enrollment, such as financial incentives and the opportunity to enhance institutional prestige, the potential for positive outcomes for students is perceived to be a primary motivation.

There is an inherent tension between opening access and ensuring that only students ready for college-level work participate in college courses. Colleges may be interested in ensuring the integrity of their academic programs, even more so than high schools. In addition, educators do not want to put their students in jeopardy of failure by enrolling them in college-level courses too soon. Thus, they may want to maintain high admissions standards for dual enrollment programs. Doing so, however, may exclude the middle- and low-achieving students most in need of an extra "push" toward college.

It is not surprising that institutions have both incentives and disincentives for expanding the range of students in dual enrollment programs. Although there is a growing literature on dual enrollment and other credit-based transition programs (cf. Hoffman, 2005; Karp et al., 2005; Kleiner and Lewis, 2005; Waits, Setzer, and

Lewis, 2005; Hughes et al., 2005), this study takes a unique approach by analyzing the incentives that both community colleges and high schools have to participate in dual enrollment. What are the pressures shaping dual enrollment at community colleges and their partner high schools? What are the motivations and drawbacks for developing the programs? This institutional analysis allows us to develop a stronger understanding of the equity implication of the dual enrollment movement.

In this chapter we begin by discussing the history and background of dual enrollment. We then describe the dual enrollment programs at our study sites, including a discussion of the characteristics of dual enrollment students, looking at whether they are typical college-bound students or a more academically diverse group of students. The subsequent section analyzes the incentives that colleges and high schools have to participate, and we end with conclusions, focusing on the implications of dual enrollment for the community college equity agenda.

Background

Dual enrollment allows high school students to enroll in and earn credit for college courses while they are still in high school. Unlike the College Board's Advanced Placement (AP) program, dual enrollment courses are offered directly by the colleges, and students receive college transcripts indicating their successful completion of courses. Course requirements and standards are set by the colleges themselves, as opposed to an external coordinating board. Both four-year and two-year institutions may sponsor dual enrollment programs, though community colleges are more likely than other postsecondary institutions to offer dual enrollment (Johnstone and Del Genio, 2001; Kleiner and Lewis, 2005). During the 2002–2003 school year, 98% of public two-year institutions enrolled high school students in college-credit courses, compared with 77% of public four-year and 40% of private four-year institutions.

There is a long history of collaboration between high schools and community colleges. In fact, a substantial number of public community colleges began as junior colleges in the early 1900s. Early community colleges were extensions of local K–12 school districts, and students continued from high school to junior college without leaving a common school building (Cohen and Brawer, 2003). These continuing students received instruction from the same teachers they had in high school, and the school administrators who provided leadership for their prior education often championed the creation of junior colleges. In these early days, the local public education systems at the secondary and postsecondary levels were virtually indistinguishable from one another. As the community college sector grew following World War II,

however, a division between high schools and community colleges developed. Community colleges increasingly became part of state community college and higher education systems, and their involvement in local school districts became less direct.

.   Still, the linking of colleges and high schools existed in various forms throughout the twentieth century. High school students have long been able to earn college credit through programs like the AP program, the International Baccalaureate Organization's diploma program, and the College Board's College-Level Examination Program (CLEP) tests. In general, however, these programs have been targeted at academically advanced students and require financial and time commitments from students that make widespread participation unlikely.

The establishment of LaGuardia Middle College High School on the campus of LaGuardia Community College in New York City in 1974 represented a major organizational development linking high schools and colleges. Located on community college campuses, middle college high schools began providing students with access to high school and college-level courses simultaneously, as well as with counseling and other support to help them succeed academically. This organizational approach is interesting from the standpoint of community colleges because the schools tend to focus explicitly on students at risk of dropping out of high school as opposed to high achievers.

In the early years of the new century, this model has been expanded on by the Bill and Melinda Gates Foundation. According to the foundation's web site (www.gates foundation.org), by 2005 it had invested more than $114 million to create early college high schools around the country. Like middle colleges, early college high schools are located on college campuses; however, rather than taking a few college courses during high school, early college students accrue enough college credits to earn an associate degree or the equivalent of the first two years of a bachelor's degree. The Gates Early College Initiative has funded the start-up of these schools in more than twenty-five states; by 2008, 170 early college high schools are expected to be operating throughout the United States (Jobs for the Future, 2004).

During the early to mid-1990s, Tech Prep and the School-to-Work Opportunities Act began offering federal funding for the creation of institutional partnerships between community colleges and secondary schools for occupational education. Tech Prep encourages the development of a variety of programs linking high schools and community colleges. In some instances, high school students in Tech Prep programs take occupational courses at their high schools that can later be assigned college credit if the student decides to attend a community college with articulation agreements in place. Alternatively, some Tech Prep programs allow high school students to enroll in

college technical courses. Finally, some Tech Prep programs emphasize career awareness through short-term activities such as mentoring and job shadowing.

In many communities, high school students have regularly been able to enroll in community college courses. Under this arrangement, students in need of academic enrichment or challenge could register at a college for a course or two, as a supplement to their regular high school curriculum. Dual enrollment began to receive widespread attention at the state level in the late 1980s and early 1990s, when a number of states passed legislation ensuring that all students had access to college courses while still in high school. In 2005, the National Governors Association recommended expanded access to dual enrollment and other college- level courses as a key action strategy for states engaging in secondary education reform (National Governors Association, 2005).

Minnesota is credited with being the first state to adopt a policy supporting dual enrollment (Boswell, 2001; Clark, 2001). In 1985, the state created Postsecondary Enrollment Options (PSEO) to "promote rigorous academic pursuits and provide a variety of options" to high school juniors and seniors (Minnesota Statute Sec. 123.3514). Five years later, the state of Washington followed, implementing the Running Start program. Like PSEO, Running Start provides public high school students with the opportunity to take college courses.

State policies addressing dual enrollment have become more common during the past fifteen years. Forty states have some sort of dual enrollment policy, though the comprehensiveness of these policies varies widely (Karp et al., 2005). Some states require schools to provide dual enrollment opportunities to students, whereas other states permit these options but let individual institutions decide whether to offer them. Likewise, some states place many regulations on course content or student admissions, while others do not.

With respect to the states in the National Field Study, Washington established its Running Start program in 1990. Texas and Florida both developed state dual enrollment policies during the early 1990s. California passed dual enrollment legislation in the late 1990s, formalizing what had until then been an informal process of allowing high school students to take college courses. Illinois began implementing a scholarship-based dual enrollment program in the late 1990s. Of the states in our study, only New York did not have a statewide policy for dual enrollment at the time of our research. Despite this, dual enrollment programs were common at the institutional level, and the City University of New York developed a system-wide policy for dual enrollment in 1999.

Reflecting the situation nationally, the content of the dual enrollment policies in

the National Field Study states varied widely. California, Florida, and Washington mandated that postsecondary institutions offer dual enrollment opportunities to students, but in Texas and Illinois offering dual enrollment was voluntary. In California, students paid tuition for their dual enrollment courses, whereas in Illinois the state paid students' tuition. In Florida, the participating institutions paid tuition so that the program was free to students. At the time of our research, California and Illinois double-funded dual enrollment, meaning that both high schools and colleges received their average daily attendance (ADA) or full-time equivalent funding for high school students enrolled in college classes. In Texas and Washington, high schools lost ADA funding for students enrolled in college dual enrollment courses.

Nationally, participation in dual enrollment has increased as state systems have matured. The National Center for Education Statistics (NCES) estimates that 813,000 high school students nationwide took a course through a postsecondary institution during the 2002–2003 twelve-month academic year (Kleiner and Lewis, 2005); 619,000 of these students enrolled at public two-year institutions. In the 1990s, dual enrollment grew rapidly in some states. For example, in Virginia the number of students in dual enrollment more than tripled between 1991 and 1997 (Andrews, 2001). The number of students enrolled in dual credit courses in Illinois has grown from 2,220 in 1990 to 25,554 in 2001 (Barnett, 2003). Enrollments in the state of Washington have experienced rapid growth as well, tripling from 3,350 in 1992 to 13,699 in 2000 (Washington State Board for Community and Technical Colleges, 2001b). In New York City, the number of colleges offering dual enrollment increased from six to seventeen between 2000 and 2001 (Kleiman, 2001). Nearly 13,000 New York City high school students enrolled in a credit-based college course during the 2002–2003 school year (S. Cochran, personal communication).

This rapid program growth results in part from widespread beliefs about the potential benefits of dual enrollment programs for a wide range of students. Policy makers find many reasons to support dual enrollment. First, research has shown that many students do not challenge themselves during the senior year of high school (National Commission on the High School Senior Year, 2001). Dual enrollment provides value-added for students who have finished their high school curriculum early by allowing them to learn college-level material and prepare for the academic rigors of college. Second, aside from curricular benefits, dual enrollment offers the practical advantage of lowering the cost of postsecondary education. Because students are living at home and the cost of dual enrollment is frequently state-subsidized, they are able to accrue transferable credits that may shorten their time in college. In some states and localities the high schools also pick up a share of the cost, and high school

students pay only for books and transportation when they enroll in college courses. As the cost of attending college continues to rise, the potential savings of dual enrollment are a significant benefit for students and their families.

Finally, some policy makers have taken the view that attending college classes can be beneficial to middle- and even low-achieving high school students (Lords, 2000). The central assumption is that dual enrollment will increase access to and improve retention in postsecondary education because students will enter college with a more realistic understanding of the skills they need to succeed in college. Moreover, many dual enrollment programs require students to pass college assessment tests before entering the program. Even if students fail these tests and cannot enroll, they have received an early warning about their lack of preparation (Kleiman, 2001).

The rest of this chapter looks at the development of dual enrollment at the National Field Study colleges. Data on dual enrollment programs were collected through interviews with personnel at the colleges who have direct involvement with high school partnerships, and interviews with admissions counselors and senior administrators. High school partnership personnel included Tech Prep directors, dual enrollment program directors, and a charter high school principal. Often these individuals had responsibility for more than one high school partnership program. At some sites, high school students who had participated in dual enrollment were interviewed in focus groups and faculty were interviewed whose classes enrolled large proportions of high school students.

In addition to conducting interviews at the fifteen National Field Study colleges, we interviewed guidance counselors of high schools partnering with eight of the colleges. Fourteen high schools were contacted, representing a geographically diverse subset of National Field Study college partnerships. Our questions of high school counselors fell into several categories. First, we asked about the features of the schools' dual enrollment programs, including course location and teachers, funding streams, and student recruitment and selection processes. We also asked about the history of the programs and the primary motivations for offering them. Next, we asked about student and parent views of dual enrollment, as well as the impact of dual enrollment on the school as a whole. Finally, we asked informants to tell us about other curricular options within their schools and districts.

The results of college and high school interviews were analyzed using N5 software for qualitative research (QSR International, 2000). Data were coded deductively, as a way to identify key themes related to institutional incentives and disincentives to participation. Because this analysis was exploratory in its framework and goals, we also sought and documented themes emerging from the data. Relatively little is

TABLE 9.1
High Schools in the Study

School	State	Location	Enrollment	Percent Free Lunch	Percent Non-white	Percent Attending College after Graduation[1]	Percent Participating in Dual Enrollment[2]	Dual Enrollment Selection Criteria
SWSHS#1	Texas	Rural	1,428	7.8	24.9		20	College placement test
SWSHS#2	Texas	Suburban	358	22.5	21.8	75	31	Counselor recommendation
SWSHS#3	Texas	Rural	480	24.8	26.7	50	3	College placement test
WRHS	California	Small Town	1,924	13.1	52.0	85	13	College placement test
NESHS	New York	Urban	1,299	40.1	25.9	87	55	Counselor recommendation
NEUHS	New York	Urban	437	83.7	99.8	90	18	College placement test
SUHS#1	Florida	Suburban	3,400	44.7	60.0		11	3.0 GPA
SUHS#2	Florida	Suburban	2,137	17.3	13.5	65	30	3.0 GPA
NWRHS#1	Washington	Small Town	1,742	30.6	26.0	50		College placement test
NWRHS#2	Washington	Rural	1,254	3.8	6.4	71	14	College placement test
NWSHS#1	Washington	Suburban	1,274	13.4	8.5	60[3]	13	College placement test
NWSHS#2	Washington	Suburban	1,392	0.0	20.3	75		
NWSHS#3	Washington	Suburban	1,497	1.7	13.8	92	8	College placement test
MWSHS	Illinois	Suburban	2,875	0.0	20.7	97		College placement test

SOURCES: U.S. Department of Education (2000a) Common Core of Data 2000–2001 and interviews with high school counselors.

1. This is an estimate given to us in interviews by the school counselors.
2. In schools where juniors may take dual enrollment courses, percent of juniors and seniors participating. In schools where only seniors may participate, percent of seniors only.
3. Sixty percent to four-year colleges; "a lot" go to two-year colleges.

known about the practices and scope of dual enrollment, and therefore our primary aim is that the findings presented here will pave the way for further research.

The Sites

All of the National Field Study partnered with high schools in some way. Specifically, all but one (SWRCC) offered Tech Prep. Three colleges partnered with middle college high schools (WSCC, SMCC, and WUCC). The most significant differences among the colleges included where courses were taught (at the high school or the community college), who taught the courses (high school teachers or community college faculty), and how students were taught (classroom or distance learning such as NERCC's offering of dual credit courses through a fiber optic network funded by Cablevision). Of the fifteen community colleges studied, one allowed only high school faculty to teach the classes and six allowed only college faculty, with the remaining eight allowing either high school or college faculty to teach courses. Similarly, one college allowed dual enrollment courses to be taught only at the high school, three allowed them to be taught only at the college, and the rest allowed them to be taught at both.

The characteristics of the high schools in our sample are described in Table 9.1. The high schools ranged in size from fewer than 400 students to nearly 3,500. Somewhat contrary to the popular perception of large urban schools and small rural ones, some of the largest schools in the sample were in rural areas, whereas the smallest was in a central city. The schools also varied in their racial and ethnic diversity. Although a few schools enrolled students who were predominantly or nearly all nonwhite, others enrolled only small numbers of minority students. Some of these partnering high schools enrolled high proportions of students from low socioeconomic backgrounds, but most had fewer than 25% of their students receiving free or reduced-price lunch.

Dual enrollment participation rates in the high schools varied widely. At one school, only 3% of students in the junior or senior classes participated in the dual enrollment program, whereas at another school 55% did so. In general, between 10% and 20% of juniors and/or seniors at the high schools were participating, with seven schools falling within this range. These proportions are quite high, given that in many cases we learned that students spend between half and all of their time on the college campuses.

In light of the eagerness of policy makers and college administrators to expand access to dual enrollment, we expected to find a wide range of students participating at our fourteen high schools. Program entrance requirements and counselor interviews, however, indicated that was not the case. In general, the dual enrollment

programs targeted high-achieving or academically proficient students. All but two schools required students to pass a college placement test or have a certain grade point average (GPA) to enroll in a dual enrollment course. The two schools without such standards relied heavily on individual counseling to ensure that only students with potential for success could enroll. One of these schools explicitly counseled only the most advanced students into the program. The other school worked with students to place them in dual enrollment courses that were most appropriate to their abilities—the most advanced students enrolled in math and science courses, while lower-achieving students took a personal computing course.

These findings reflect the practices of dual enrollment programs nationally. Sixty-two percent of respondents to a survey of high schools conducted by NCES indicated that their school had admissions requirements for students wanting to enroll in a dual credit course (Waits, Setzer, and Lewis, 2005). These requirements commonly included meeting a set GPA, being recommended by a teacher for the course, or meeting a minimum score on a standardized test. Many schools required students to meet multiple admissions requirements.

Almost all informants in our study described dual enrollment students as focused, intellectually curious, and academically able. Many also commented that successful dual enrollment students were more than just academically proficient. Rather, they were emotionally mature and more responsible than the average high school student. One counselor said that "it is much easier to qualify for the program than it is to succeed in it" (NWRHS#2). Many students may be academically, but not socially or developmentally, ready for college work.

Most respondents said that the "typical" dual enrollment student was in the top 10%–20% of his or her class, but informants at three of the schools noted that the most advanced students tended not to enroll in dual enrollment, preferring to earn college credit through the AP program. Instead, dual enrollment students were those who are college-bound but shy away from the high-stakes nature of AP or are reluctant to commit the time necessary for success in AP courses.

Interviews with college staff indicate that participation in at least some dual enrollment programs is limited to those students coming from families with significant resources. Washington provides the clearest example of this. Although the Running Start program is popular with multiple interest groups such as legislators, parents, and students because of its cost-saving and choice-providing options, the director of these programs at NWSCC described the program as primarily a middle-class phenomenon, in part because students must have a car to drive to the community college to take dual enrollment courses.

Pressures Shaping Participation

From the standpoints of institutions and individuals, the incentives to participate in dual enrollment outweigh the disincentives. First, for community colleges, dual enrollment is well aligned with the mission "to meet the total post–high school needs of its community" (President's Commission on Higher Education, 1947). Community colleges can keep policy makers and taxpayers content by framing dual enrollment programs as community services that support the local high schools. Second, there appears to be a great deal of enthusiasm on the part of students and parents for dual enrollment programs. This means that dual enrollment can aid in recruitment for both college and high schools and help them maintain positive relationships with stakeholders. Finally, dual enrollment was perceived by some of the colleges in this study as being an important new revenue source.

Dual enrollment was frequently seen by college administrators and staff as a way to meet the needs of the local community and, as such, was perceived as fitting into the larger mission of the community college. Dual enrollment programs fit into this community service–oriented view of the college in a variety of ways. Dual enrollment programs frequently enabled the colleges to share institutional resources with local high schools. For example, when enrollments at high schools surge, dual enrollment allows for the absorption of increases without expanding buildings, particularly if high school students leave their building to attend dual enrollment classes at the college. On the other hand, community colleges make use of empty high school classrooms in the evening by running classes that enroll both college and high school students. This allows for a synergy in which each institution can maximize the use of its classrooms. From the standpoint of the colleges and high schools, dual enrollment allows for enrollment increases without capital investment.

Another type of resource sharing occurs around technical education, which is expensive for both community colleges and high schools to provide. For example, a Midwest urban college administrator mentioned that the original intent behind creation of dual enrollment programs was to share resources supporting career-technical education (CTE) courses so CTE would continue to be available to high school students. This administrator alluded to the possibility that secondary schools would eliminate CTE courses viewed as expensive or duplicative of those available at the postsecondary level. Current developments in federal support for dual enrollment hint at a shift of technical education from the secondary to postsecondary levels (U.S. Department of Education, 2003h).

In lower socioeconomic-status communities in particular, community colleges

may offer dual enrollment as one of several college-preparation programs that may help high school students improve their odds of successfully transitioning to college. For example, at NEUCC, dual enrollment is one option among many, including Gear Up, Upward Bound, Liberty Partnerships, Tech Prep, and Project STEP. At a college in Texas, three high school-to-college transition programs provided a package of options through which high school students could earn college credit, rather than as individual programs. In this way, the colleges can contribute to local efforts to improve high school students' educational outcomes.

Some colleges also saw dual enrollment programs as helping local economic development efforts. For example, a technical education dean at SWUCC told us that, "because our region is in the high tech area, they are screaming for entry-level technicians, and the pipeline is not large enough. There aren't enough adults ready to go to work in these jobs. . . . [The] pipeline needs to expand to the high school level and start bringing more kids through." In teacher education, another high-demand field, WSCC had initiated planning for an articulated program to recruit prospective students in high school and provide dual enrollment opportunities at the community college along with a capstone option allowing students to matriculate to the local four-year institution to complete a bachelor's degree.

Although the motivation to provide services to the community was strong in the National Field Study colleges, the most compelling reasons to offer dual enrollment seemed to stem from other sources, including educators, policy makers, parents, and students. The enthusiasm for dual enrollment found among various stakeholders, encouraged colleges and high schools to offer dual enrollment options. Second, educational institutions, particularly colleges, saw dual enrollment as financially beneficial.

Much of the enthusiasm for dual enrollment programs stemmed from educators' beliefs that dual enrollment is beneficial to students. High school counselors, for example, reported that the primary motivation for high school involvement in dual enrollment was a conviction that students benefit from a variety of curricular options. Although most respondents described multiple benefits to dual enrollment, the positive nature of customizing students' educations was the most frequently stated. From this perspective, dual enrollment was a way to offer students more options, such as the ability to take interesting or challenging courses not available at the high school level. Explained one guidance counselor, "[O]ptions can't do anything but help kids succeed" (SUHS#1). Another asked, "Why should [the students] sit in English IV when they could do more?" (SWSHS#2). Likewise, one high school principal saw this as an extension of the individualization that occurred in the junior high school, in which students could begin to take high school courses earlier than their

freshman year. He believed that students were "exhausting" the high school curriculum. Dual enrollment allowed these students to supplement their coursework and, in his opinion, increased their motivation through more individualized learning.

Two counselors reported that, for those with very specialized interests or clear career goals, dual enrollment allows students to build their own areas of interest. For example, students who desire intensive study in the sciences often cannot obtain it in high school because of the expense of lab equipment. Instead, students can take science-related courses at local colleges, or they can begin to take the prerequisites for their college majors (such as nursing) rather than taking high school courses that might not be interesting and would not benefit them as much in the future.

Some high schools offered dual enrollment in an attempt to reduce "senioritis." They believed that offering seniors the opportunity to take college classes increased students' motivation and made the senior year more meaningful and worthwhile. The staff of one school believed that dual enrollment courses exposed their students (who were primarily from low-income homes and whose parents had not, by-and-large, attended college) to the social and academic demands of postsecondary education.

Students also benefited from dual enrollment, according to high school staff, because it enabled them to receive free or low-cost college credit. This benefit seemed particularly salient for schools with a significant portion of students from low-socioeconomic-status families: "Even private local [colleges] as well as state schools accept credit from [the partner college]. So, dual enrollment kids really do end up with a full semester of college credit, which has a huge financial benefit" (SWSHS#3). In fact, college personnel take advantage of these programs for their own children.

At the colleges, individual instructors felt that they benefited from dual enrollment. Many college instructors perceived dual enrollment students as highly motivated and intelligent. Explained a math instructor at NWSCC, "[The Running Start] students were very pleased to say who they were because they were so proud of it because they wanted to learn because they were going to take calculus earlier. I mean they had a whole different perspective and the mix was marvelous. So I find them to be quite a treat."

Some regularly matriculated students concurred with their instructors, noting that the Running Start students in their courses were difficult to tell apart from other students. In addition, they perceived the dual enrollment students as interested in academic success and highly motivated, in contrast to recent high school graduates who were in college only because "it's their next step that they are supposed to do" (NWSCC student).

Sensing parental enthusiasm for dual enrollment—the counselor at school SUHS#1

said that parents' "eyes light up" when they learn about the program—some high schools and colleges found that there were institutional benefits to participation. In one urban high school (NESHS) that had been losing its students as their families moved to the suburbs, dual enrollment was an explicit mechanism for stemming white flight and salvaging the reputation of the school. This school was actively expanding dual enrollment offerings, in part to increase student motivation and help the students save money on college tuition, but also because dual enrollment was an important factor in maintaining enrollment levels. A counselor explained that the school needed to be seen by parents as "flexible and offering good courses so that families will stay in the area and not move to the suburbs" (NESHS). Dual enrollment was a good public relations tool in this way, and it helped maintain a reputation as "a good school."

Similarly, some colleges hoped to parlay student participation in a single dual enrollment course into increased prestige for their institutions. Community colleges have long been stigmatized as the bottom rung in the postsecondary hierarchy. Dual enrollment gave the colleges an opportunity to provide convincing evidence to parents that their curricula overlap with those of four-year institutions. For instance, at MWSCC, a suburban college in Illinois where dual enrollment was just beginning to take root, an admissions officer noted that this was a long-awaited opportunity for the college to prove its value to reluctant parents and students: "This particular demographic here is a pretty affluent area, and what we battle, particularly in the high schools, is parental pressure, social pressure of the families, for the students to go to a four-year institution and not the local community college."

Community colleges viewed dual enrollment as a valuable mechanism for allowing high school students to sample community college programs. For example, a K–12 partnership director at NESCC told us that "a lot of our high school students are opting to go someplace else. So by beginning to broaden the appeal of the collaborative programs, we're beginning to help high school students see the college as slightly different. Collaborative programs, in my opinion, are the first line of contact for many school administrators, teachers, and students too, to the college. So, we're your first impression."

Finally, colleges in our sample agreed that financial incentives were an important element in their decision to offer dual enrollment opportunities. An administrator at SWSCC referred to the dual credit program at his college as a "cash cow." Another SWSCC official commented that financial benefits have made dual credit attractive to community colleges in the state and also to universities that are seeking new revenue streams. This official pointed out, "[Dual credit has] grown to the point now that four-year colleges and universities are wanting to get in on the game, and [the state] has legislation pending now saying we should be able to go into the high schools and

offer college credit courses as well. They [referring again to the universities] were never interested in it until it became big business."

An NESCC administrator confirmed the importance of dual credit as a new funding source, admitting that the program helped to make up for lost revenue associated with the college's regular curriculum, saying, "[I]n the last two years, the college has made its budget because of this [dual credit] program and the growth in it, because our [regular] enrollment has decreased." He went on, speaking glowingly about the funding incentives associated with dual credit courses: "It's sort of a gold mine. It doesn't cost them [the community college] anything. Very little. They don't have to have a classroom. It's all done in the high school. [M]any times high school teachers have master degrees so that they actually certify the high school teacher as a community college professor, taught in the high school classroom by the high school teachers. They get state and local reimbursement, and of course the high school continues to get whatever funding they've raised." At this particular college, both the state and the county reimburse community colleges on the basis of full-time equivalent enrollments.

It is important to point out that, although funding for dual enrollment may benefit colleges and individuals, it is not clear that it benefits states. This has come to be known as a problem of double-dipping, in which both the colleges and high schools receive state funding for the same students. An example of this comes from Illinois' Accelerated College Enrollment (ACE) initiative. In 1997, a new funding formula permitted both high schools and community colleges to collect state funding for students enrolled in dual credit courses. In 2001, the state of Illinois implemented the ACE program, which provided state funding at the rate of $55 per credit hour to public community colleges to underwrite all or a portion of students' dual enrollment expenses (Barnett, 2003). Since the initiation of the ACE grant, dual credit enrollments have risen dramatically, to 25,554 during the 2001–2002 school year, with 17,006 of them supported by the state's ACE grants.

Although community service, individual and institutional benefits, and financing are all compelling reasons for colleges and high schools to engage in dual enrollment, the data also revealed some disincentives. In particular, community college faculty were not unilaterally supportive of the programs, logistical and scheduling problems were common, and high school counselors reported several disadvantages for their institutions.

Faculty resistance focused on quality, job security, and territorial issues. According to a vice president at NESCC, dual credit courses were perceived as threatening student enrollments and therefore teaching jobs, saying, "The union has been trying to bury the high school program ever since we started it. You are taking students out

of seats. You are taking work away from faculty by shifting it to another area." A K–12 director at another college (NESCC) noted that "there is a suspicion on the part of the faculty that the high school teachers aren't doing as good of a job." Other faculty felt that teaching high school students threatened their status, because they were "the lowest one[s] on the totem pole if you go out to the high schools and teach. They're [college faculty] not used to discipline; they're not used to interruptions and announcements" (SUCC, Director of Dual Enrollment Programs).

Some faculty also found that including high school students in their classes created additional pressures to which they were unaccustomed. For example, according to the K–12 director at SWSCC, parents of seniors in danger of failing a dual enrollment course sometimes tried to pressure their instructors to give passing grades for failing work.[2] The performance of dual enrollment students had to be carefully followed, so high school graduation was not threatened by failure of college courses (NWRCC, Tech Prep Coordinator). Other faculty members reported feeling constrained by the young age of dual enrolled students. Explained the director of dual enrollment at SUCC, "I've had calls from parents, like in the psychology class, a parent had complained that they touched on sexuality and things. And I have to tell them, that's the content of a college course." This respondent also indicated that such concerns should not—but might—change the tenor of a college classroom: "But there's a maturity thing, particularly when they [high school students] come to campus. There's a poor maturity thing. People in the class shouldn't have to feel uncomfortable because there's a child in the class, a fourteen-year-old and they don't want to say something that should be part of the discussion in a college classroom."

Colleges sought ways to minimize faculty resistance. In response to parental concerns regarding sexuality and other course content, SUCC limited dual enrollment participation to high school juniors and seniors. Administrators at MWRCC were successful at putting conciliatory language into the union contract about dual credit courses: " Dual credit courses shall not be used for the purpose of reducing the number of, consolidating, or eliminating bargaining unit positions at the college" and that "specific policies and procedures for dual credit at [the college] shall be reviewed annually by representatives of the faculty and the administration." Further, SWSCC began to offer financial incentives to encourage college faculty to teach courses at high schools.

High school teachers and counselors also saw disincentives to participation, because, from their point of view, some of the best students may be abandoning high school to attend college classes. In some high schools, dual enrollment was seen as competing with other curricular offerings or school goals. Some of these schools were losing funding when their students enrolled in dual enrollment courses and therefore

felt budgetary constraints when a critical mass of students participated. One school, for example, was facing staff cuts because they had lost too many full-time-equivalent students in the past year. Although this loss was not directly attributed to dual enrollment, the counselor we spoke to noted that if the sixty-two dual enrollment students were on the high school campus instead of at the college, the school might not be confronting this situation (NWSHS#3).

As a result of the loss of funding for dual enrollment students, some schools were reluctant to advertise the program: "We'd rather keep [the students] here . . . but we live with it, we cooperate with it, we realize we're going to have to send kids to [the college]" (NWRHS#1). Counselors' reluctance was often magnified because, at least in some states, high schools are expected to counsel dual enrollment students and keep track of their progress toward high school graduation, even when the students no longer attend the high school and the high school receives no funding. This added burden was understandably troublesome for schools and counselors already strapped for both time and money. A few interviewees, however, did note that the loss of funding, while unfortunate, was something that the schools could adjust to and learn to budget for, and so it could become less of a concern over time.

Other schools felt negative consequences from dual enrollment in terms of the loss of students, particularly those at the top of their class. Three schools described the difficulties of maintaining large AP or honors programs while encouraging dual enrollment participation. One school (SUHS#2) had dropped its honors English course for seniors in favor of dual enrollment. Administrators at the other two schools (SWSHS#3 and NWSHS#3) had considered doing this as well, although at the time of our interview they had not yet dropped any courses. In essence, there was competition for the best students between the high school-based courses, such as AP, and the college courses. In light of the prestige of AP and honors courses and the desire on the part of many high school teachers to teach these classes, the loss (or threat of the loss) of advanced high school courses is an undesirable side effect of offering dual enrollment. At some schools, teachers resented the pressure put on AP courses by dual enrollment and, in the words of one informant, "talk[ed] it down to their students" (SWSHS#3) in an attempt to maintain AP and honors enrollments. The difficulty of balancing the schools' desire to offer AP courses and please their teachers while offering students dual enrollment was not lost on a number of our interviewees.

Three schools also noted that, even if course offerings themselves were not affected by dual enrollment, the loss of the most advanced students to dual enrollment had a negative impact on the school. Because dual enrollment students tend to be some of the best in their classes, their loss was felt in terms of a changed academic atmosphere

in the classrooms. Course discussions, for example, were perceived to be suffering without the input of the brightest students. One counselor called this aspect of dual enrollment a "brain drain" for the school. As he explained, "[I]t takes some of the best students away from the school . . . and that's fine but we won't actively recruit [students to dual enrollment]. We are trying to maintain the academic integrity of our programs" (NWRHS#2).[3]

Navigating the different organizational structures and institutional cultures at the K–12 and higher education levels poses additional challenges to dual enrollment programs. A dean at WUCC related the ways that different schedules and requirements complicated dual credit offerings: "The college had its normal seventeen-week structure, and we discovered that many times, that [the local high] school was successful at football, so the students were not allowed to come to school because they had to go to a pep rally. Or teachers had some in-service, so the students had the day off. . . . It was gumming up the system. We'd have to make up classes because the students were being taken out of class, and we [would still] have to meet a minimum number of Carnegie hours."

Offering related complaints, a K–12 administrator at SWSCC reported a similar observation on institutional differences, saying that faculty of dual credit courses "had to get grades out every six weeks, unlike the college. It was a hassle. They are grading on a high school basis, maintaining the high school hours and holidays, which aren't consistent with ours and so there's extra effort." Such challenges were not insurmountable. In both cases creative scheduling and shifting school calendars helped bridge the two educational sectors. Nonetheless, it is evident that these programs create many logistical challenges to participating individuals and institutions.

Discussion and Conclusions

In general, the incentives to offer dual enrollment outweighed the disincentives at the institutions in our study. Faculty at both colleges and high schools appeared to be some of the programs' most significant detractors. Their voices, however, are not likely to be heard amid the din of enthusiasm generated by policy makers, college financial officers and other college officials, and parents. Furthermore, we found no shortage of faculty at both levels who were supportive of the programs.

Many educational institutions have a financial interest in dual enrollment. Community colleges, and in some cases high schools, are able to obtain additional funds for dual enrolled students. There are also hidden savings for the colleges, depending on how the dual enrollment classes are structured. In some cases, dual enrollment classes are being run off-site at high schools, using high school faculty with master's

degrees. These classes do not require the time of full-time college faculty, and they do not displace college-age students by using college classroom space. From the standpoint of high schools, the savings may be even greater, because enrolling in college courses potentially costs less than K–12 per-student expenditures. Finally, high schools whose dual enrollment students attend class on a college campus may be able to alleviate some overcrowding. This, however, does not take into account economies of scale, because high schools cannot easily eliminate teachers even when class sizes drop below normal.

Many at community colleges see dual enrollment as a recruitment strategy. From the perspective of community colleges, high school students are a relatively untapped resource. Although it is true that, in some communities, many students may attend the local community college after high school, the colleges can now enroll them prior to graduation. Furthermore, our interviews indicated that the students who are taking advantage of dual enrollment are not the ones who typically would attend community college. In this sense, community colleges are tapping into the resources of four-year colleges. At one of our sites (NESCC), this had been recognized by four-year colleges, which were either starting their own programs or developing strict criteria about coursework that would be awarded transfer credit.

High schools, as we learned through our interviews, are also using these programs as recruiting tools. The concept of the "shopping mall high school" evolved at the beginning of the last century with the expansion of compulsory secondary schooling (Powell, Farrar, and Cohen, 1985). As long as we have laws mandating that students stay in high school until they reach a certain age, high schools are likely to diversify curricula to keep as many of their constituents as happy as possible. In today's climate of expanded "consumer" choice in public education, a program of dual enrollment that promises to save parents on college tuition can become a significant factor in a school's ability to retain the best students.

Prestige also accrues to community colleges with dual enrollment programs. Certainly from the standpoint of community colleges, the opportunity to enroll students who would otherwise attend four-year institutions can distinguish the colleges. College personnel spoke about these connections as offering opportunities to inform high school counselors about their programs. Community colleges are also expanding honors programs that aim to prepare students to transfer to top universities, both public and private. These programs can recruit high school students early, helping to recast the colleges as part of a pipeline to higher status postsecondary education options. From the standpoint of the high schools, the availability of dual credit expands the college preparation possibilities for students who do not qualify for honors or AP programs.

There are many questions about dual enrollment programs that remain unanswered. To begin with, there is little evidence of their effectiveness for high school students or their efficiency from the standpoint of state governments, because colleges and high schools do not track the progress of students in these programs. For example, what proportion of participants successfully earns college credits? Do they apply the credits toward further postsecondary education? If so, which colleges and universities accept the credits, and what do they count toward? If the situation is anything like the articulation between community colleges and four-year colleges in traditional transfer programs, it is likely that dual enrollment credits only count as electives. While elective credits are helpful, they may end up displacing other credits that can encourage students to develop cultural awareness or expand their experiences into new fields. Research may later show that dual enrollment credits may not count toward graduation.

In addition, our data indicate that dual enrollment may not actually increase middle- or lower-achieving students' access to college-level coursework. All but two of our high schools had admissions requirements for their dual enrollment programs; the majority of these schools required students to pass a college entrance exam or have a high GPA to participate in dual enrollment. Guidance counselors were mixed in their assessment of a "typical" dual enrollment student, and, although some indicated that dual enrollment reaches a broader range of students than do AP or honors programs, most indicated that dual enrollment students are academically strong and oriented toward college attendance prior to their participation. It is not clear, then, that dual enrollment enables a broader range of students to take college-credit courses in high school. Instead, dual enrollment may be an additional curricular option for those students already being well served by honors or AP courses. In fact, in one high school in our sample, dual enrollment supplanted honors courses, and others felt that dual enrollment and AP courses competed for the same students.

The admissions requirements put in place at the schools in our sample may have excluded many middle-range and academically disadvantaged students. A 2004 set of case studies of college and high school dual enrollment programs that purposefully sought a sample of programs serving a wide range of student came to similar conclusions (Hughes et al., 2005).

One way to minimize the negative impact of admissions requirements on access is to implement comprehensive and enhanced comprehensive dual enrollment.[4] These programs build students' skills over time by aligning developmental coursework (often offered by the partner college) with the program's admissions standards so that, ultimately, students are able to meet the necessary requirements. By including a pathway of developmental coursework culminating in a college credit dual enroll-

ment course, such programs ensure that students are ready for college-level work while at the same time maintaining access for those students in need of additional assistance (Hughes et al., 2005). None of the sites in the current study used this strategy. Therefore, students who could not meet the college course entry standards were prevented from participating in the dual enrollment program altogether.

In light of the academic proficiency of dual enrollment students, and the selection bias that may occur, it is not at all clear that dual enrollment is helping disadvantaged or even middle-achieving students enter and succeed in postsecondary education. If dual enrollment students are more successful in college (which, it should be noted, has not been indicated by any current research), this may be an artifact of their already strong academic performances, not their dual enrollment participation. Even more disconcerting for those concerned with expanding educational equity, it seems unlikely that dual enrollment is expanding curricular options for students in need of such opportunity. It is possible that dual enrollment programs actually increase, rather than reduce, curricular stratification within high schools.

From the standpoint of equity and access, the implications are therefore mixed. These programs increase access for some students to postsecondary education. Students need not leave home and may save significant amounts of money by enrolling early. The equity implications, however, are not as clear. First, it is too early to tell whether the quality of these courses is equivalent to other college options. We have yet to find out how acceptable these credits are to four-year colleges and universities, and, in all likelihood, these outcomes may be influenced by market pressures. Colleges and universities most in need of enrollments may be most likely to accept the credits. Furthermore, it may take a substantial amount of self-advocacy for the average student to maximize the value of credits earned in high school. Both of these results will favor students who have access to the best information and financial support.

Finally, from a public standpoint, the structure of financing for dual enrollment suggests that state governments pay a large part of the bill. In some cases, state governments are paying the bill twice by compensating both high schools and community colleges. In instances where only one institution is compensated, arrangements have to be made between the school districts and the college. Because community colleges subsidize the cost of tuition with state funds, there is no question that some of the local cost of public education is being shifted to the state. Although high school–age students win in this game, it remains unknown whether there is a population of college-age students who ultimately lose if colleges shift their focus toward enrolling a younger population.

Although there is considerable variation in the structure of dual enrollment by state and institution, the findings of our study suggest that its underlying motivations

do not necessarily favor increasing equity. As with other programs at community colleges, the financial stakes of dual enrollment are linked to enrollment of students rather than retention. In fact, as we have said, community college faculty and administrators reported the perception that most dual enrolled students do not attend community colleges after high school, making retention a moot point.

Furthermore, motivations make it unlikely that dual enrollment will move in the direction of serving low-income or disadvantaged students for several reasons. Because increased institutional status is one byproduct of dual enrollment programs, along with strengthened connections to taxpayers, community colleges are unlikely to abandon the opportunity to serve higher-income, better-prepared students. Dual enrollment is also seen as financially beneficial by colleges in part because participating students require limited support services. For colleges to focus on lower-income or disadvantaged students, they would have to increase their student support services (Bailey and Karp, 2003; Hughes et al., 2005). Along with the problem of support services, we know that most dual enrollment programs are avoiding the issue of remediation by having entry requirements in place. In most cases, it would be very difficult for a community college to provide college preparatory or explicitly high school–level education to high school students, as would be the case with developmental coursework.

Developing the equity agenda in dual enrollment is thwarted by the shortage of data. Some of the colleges in the study had a coordinator for dual enrollment who kept track of the names of dual enrolled students. Unless the colleges do something in their data system to flag high school students or have a coordinator who tracks them, there is no way to distinguish between high school and college students. On the other side of the equation, high schools are generally ill equipped to collect and analyze data on their students, though this is sometimes done at the district level (particularly since the development of No Child Left Behind). Systematic data at the high school level on postsecondary activities of students is particularly scarce. Research conducted by Hughes et al. (2005) finds that, even if data on students are collected at one level, they are rarely shared with the other.

The result of this shortage of data is that knowledge of dual enrollment is formed mostly through anecdote and individual perception. Although colleges and high schools claim that the students they enroll in dual enrollment come from the middle range of students, they may be serving lower-income and disadvantaged students without realizing it. They might also significantly improve the ability of students to apply their college credits if more were known about where students go to college and whether retention should be a concern.

Addressing these problems would probably best be done at the system or state

levels, because the incentives and time are not available at the institutional level. Furthermore, if education is conceptualized as a PK–16 pathway, centralizing information about where students are earning and applying their credits would be essential to understanding how well students move through the system. This is particularly true of dual enrollment, where students may earn credits at a community college and apply them to a four-year college. In light of the current uses and motivations underlying the development of dual enrollment, it is therefore fair to say that much work is needed if these programs are to increase equity by providing not only access but also outcomes to a broad range of students.

NOTES

1. All high school students taking college courses are participating in dual enrollment, as they are simultaneously enrolled in high school and college. Sometimes, these students earn high school as well as college credit under an arrangement referred to as "dual credit." Both arrangements existed at National Field Study colleges, though most colleges sponsored dual enrollment, rather than dual credit, programs. In this chapter, we tend to use the more general term.

2. In some cases, students took dual credit courses to fulfill high school graduation requirements. If they failed these courses, the students not only missed out on earning college credit, but also did not earn credit needed for their high school diploma. Occasionally, this could prevent students from graduating with their class. Students, however, were often not aware of this potential consequence when enrolling.

3. The colleges were not blind to high schools' reluctance to encourage dual enrollment participation. A director of dual credit programs at a northwest suburban college described the behavior of secondary administrators as "passive-aggressive," pointing to problems with their failing to inform students of dual credit course options, saying, "They just don't circulate the info as much as they should. They don't promote it to parents as much as we [community college administrators] think they should."

4. Bailey and Karp (2003) define comprehensive dual enrollment programs as those programs containing a sequence of dual enrollment courses such that they encompass much of a students' educational experience. Enhanced comprehensive dual enrollment programs also include support services for students, such as counseling and assistance with college applications.