

# Access and Equity in Dual Enrollment Programs: Implications for Policy Formation

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*Each year, a substantial number of high school students throughout the United States participate in dual enrollment programs to simultaneously earn high school and college credit. Such dual enrollment programs offer numerous benefits to students, institutions, and society. Specifically, dual enrollment can be viewed as a potential tool for increasing preparation for and expanding access to postsecondary education. Dual enrollment programs, however, also have the potential to exacerbate already existing inequities in postsecondary opportunity. The aim of this study was to explore participation in dual enrollment programs throughout the Commonwealth of Pennsylvania. The results indicate that White and affluent students are considerably more likely to take advantage of dual enrollment opportunities than their racial/ethnic minority and less affluent counterparts. Implications for policy formation regarding dual enrollment programs are offered.*

## Access and Equity in Dual Enrollment Programs: Implications for Policy Formation

Although administrators and policymakers in American higher education made significant progress in increasing access to colleges and universities in the twentieth century, many qualified students fail to benefit from the rewards that result from postsecondary attendance and degree completion. Historically low-income and racial/ethnic minority students still lag far behind their White and more affluent counterparts in postsecondary participation and degree completion (Berkner, Chavez, & Carroll, 1997; Berkner, He, & Cataldi, 2002). According to Berkner et al. (1997), approximately twice as many college-qualified high school graduates from high-income families enroll in four-year colleges and universities than their low-income counterparts.

Since the mid-twentieth century, federal and state governments have invested considerable financial resources into expanding access to higher education, primarily in the form of student financial aid (College Board, 2001). Another approach state governments have taken to increase college participation among historically underrepresented groups in higher education is to invest resources and encourage participation in dual enrollment programs (Hoffman, 2003). Unfortunately, there is limited understanding of who benefits from such programs. The study presented in this article examined participation in dual enrollment programs in the Commonwealth of Pennsylvania in order to understand current levels of access to and equity in these programs.

### Diversity and Growth in Dual Enrollment Programs

Dual enrollment programs, by definition, allow high school students to enroll in college coursework and receive both high school and college credit (Greenburg, 1989). This broad definition encompasses a wide range of programs offering college credit to high school students (Hoffman, 2003). These include standard dual enrollment programs that offer courses on college campuses, “college high” programs that offer college-level courses in high schools, and “tech prep” programs with articulated agreements between high schools and community colleges for the purposes of technical and professional training. In addition to location and method of delivery, such programs differ according to many characteristics including funding mechanisms (Education Commission of the States, 2001). Dual enrollment programs vary widely by sources of funding. A 2001 report by the Education Commission of the States (ECS) revealed

that four state governments provided tuition for students who participated in dual enrollment programs, while school districts paid the tuition of dually enrolled students in five states. In addition, 20 states required dually enrolled students to cover the costs of their own tuition.

Understanding the nature of dual enrollment programs is of major importance to both K-12 and postsecondary educators for at least two reasons: (1) the increasing expansion of dual enrollment programs throughout the nation and (2) their potential to mitigate the numerous barriers that students may face on their path to college. Dual enrollment programs are nearly ubiquitous in the United States. Thirty-eight state governments currently have established programs that encourage the provision of dual enrollment options (Boswell, 2001), and an additional 10 states sponsor dual enrollment programs at the institutional level. At the institutional level, 48 percent of Title-IV degree-granting institutions were serving dually enrolled high school students in 2002-2003 (U.S. Department of Education, 2005). Although only 64 percent of public four-year institutions and 29 percent of private four-year institutions served dually enrolled students, 95 percent of public two-year institutions enrolled such students. Together, these institutions provided educational services for approximately 680,000 high school students.

### Dual Enrollment and Student Outcomes

Hoffman (2003) asserted that the continued expansion of dual enrollment programs can be seen as a function of efforts to create a more seamless education system. Indeed, some of the ills that pervade the pathway to college for American youth are viewed as resulting from a disconnection between high school and postsecondary education (Venezia, Kirst, & Antonio, 2003). Nevertheless, the extent to which dual enrollment efforts have mended the seam between high school and postsecondary education and positively influenced the educational outcomes of students remains largely unknown. Even with the considerable growth and presence of such programs, research assessing the impact that dual enrollment has on student outcomes remains sparse (Orr, 2002).

Current researchers suggest that students are generally satisfied with their dual enrollment experiences (Orr, 2002; Robertson, Chapman, & Guskin, 2001) and that participation in dual enrollment programs can encourage students to attend college (Peterson, Anjewerden, & Corser, 2001). There is also evidence that community college dual enrollment programs can provide a bridge to four-year institutions (Washington State Board of Community and Technical Colleges [WSBCTC], 2004) and

that dual enrollment programs expand educational choices, reduce time and expenses required to complete a degree, promote academic success after transfer to universities, and promote higher levels of postsecondary academic performance relative to non-participants (Finch, 1997; Program Evaluation Division of the Office of the Legislative Auditor [PEDOLA], 1996; Spurling & Gabriner, 2002; WSBCTC, 2004). However, many of these studies fail to control for a number of critical pre-enrollment factors (Bailey & Karp, 2003; Bailey, Hughes, & Karp, 2002), rendering their conclusions weak in terms of validity.

#### *Potential Benefits of Dual Enrollment*

Despite the limitations of existing evidence regarding the impact of dual enrollment programs, there is a significant literature on the potential consequences of involvement in such programs. Potential consequences include important benefits for society (e.g., a better-prepared workforce and increased future economic production) as well as colleges and universities (e.g., added revenue, greater visibility, and broader college access) (American Association of State Colleges and Universities [AASCU], 2002; Boswell, 2001; Greenburg, 1989). Most of the benefits of dual enrollment programs, however, are likely to accrue to the individual students who participate in the programs. Such individual benefits include economic (e.g., reduced tuition costs), psychological (e.g., easier transitions to college, reductions in boredom with curriculum during the latter years of high school, greater satisfaction and motivation from rigorous coursework), and academic (e.g., preparation, broader course offerings and more challenging courses, accumulation of college credit, and accelerated progress toward a degree) benefits (AASCU, 2002; Bailey, Hughes, & Karp, 2002, 2003; Boswell, 2001; ECS, 2001; Greenburg, 1989; National Center for Education Statistics [NCES], 2003). Therefore, students who participate in dual enrollment programs may enjoy several and important benefits that result in subsequent development and educational attainment. Perhaps one of the most obvious benefits of dual enrollment programs is their impact on the transition from high school to college.

#### *Dual Enrollment and the College Choice Process*

Participation in dual enrollment programs may significantly impact students' decisions about attending college in a myriad of ways. Cabrera and La Nasa (2000) conducted a comprehensive review of the factors that influence the college choice process. Among those factors were students' educational and occupational aspirations, availability of information about college, cost of attendance, and financial aid. If curricular rigor positively influences educational aspirations (Hauser & Anderson, 1991; Hauser,

Sewell, & Alwin, 1976; Kandel & Lesser, 1979) and those aspirations are a key predictor of students' college choices (Cabrera & La Nasa, 2000), the completion of college-level coursework by high school students in dual enrollment programs could play a salient role in those students' decisions about whether and/or where to enroll in college. Likewise, if information students possess about college plays a role in their choices to pursue postsecondary education, the amount of time and energy dually enrolled students spend navigating their way through college environments and learning about student life could also significantly impact those students' college choice processes. Moreover, in states where dual enrollment is funded by the government or educational institutions, students could complete several credits in dual enrollment programs tuition-free, thereby reducing the total cost of attaining a four-year degree and positively influencing those students' decisions about whether and where to go to college.

#### *The Unintended Consequence of Inequity*

Despite increases in access to higher education in the second half of the twentieth century, inequities in postsecondary participation persist (NCES, 2003; The Pell Institute, 2004). Rates of postsecondary enrollment indicate that students from low socioeconomic statuses and racial/ethnic minority groups are severely disadvantaged with regard to access to higher education (Berkner et al., 1997). While dual enrollment programs could be a useful tool in better preparing high school students for and expanding access to higher education, there is some indication that these programs disproportionately serve more affluent students.

#### *Economic and Racial Inequalities in Postsecondary Access*

During the 1999-2000 academic year, 79 percent of 18-24 year-olds with families in the nation's top income quartile (over \$75,000) attended some type of postsecondary institution compared to only 54 percent of their middle-income (\$25,000-75,000) and 31 percent of their low-income (less than \$25,000) counterparts (Pell Institute, 2004). These disparities are not trivial and are often confounded by racial/ethnic disparities. Data from the National Center for Education Statistics (NCES, 2003) reveal vast inequities in college access by race/ethnicity. In 2001, 64 percent of White students were enrolled in a postsecondary institution during the October following high school graduation compared to only 55 percent of Black and 52 percent of Latino students. Examination of trends in access for different racial/ethnic subgroups indicates that these gaps in higher education participation fluctuate but are now larger than they were in 1980 (St. John, 2003).

*Inequity in Dual Enrollment Participation*

While dual enrollment programs hold great promise for increasing postsecondary educational opportunity, they also have the potential to exacerbate persisting inequities in college access. If policymakers are not conscious of the potential unintended consequences of dual enrollment policies and programs, opportunities for involvement in these programs could be inadvertently limited to relatively affluent and other traditional student populations, thereby contributing to increases in college access and success among already advantaged student populations and excluding those students who have historically been the victims of educational inequity. Indeed, there is some indication that the benefits of such programs are unevenly distributed, and that there may be inequitable access to existing dual enrollment programs (Boswell, 2001; PEDOLA, 1996).

Several factors contribute to this inequity in access to dual enrollment programs. One reason for unequal access and participation in dual enrollment is students' lack of information about options for earning college credit (Hoffman, 2003). Even if racial/ethnic minority and low-income youth do gather information about participation in dual enrollment programs, barriers such as out-of-pocket fee requirements, lack of transportation, and exclusion based on past academic performance still present major obstacles for those students (Hoffman, 2003; PEDOLA, 1996). In 2002-2003, students and families were responsible for covering the entire cost of tuition at 20 percent of institutions serving dually enrolled students (USDE, 2005). Furthermore, in 45 percent of institutions, standardized test scores – on which students from low socioeconomic and racial/ethnic minority backgrounds do not fare as well as their more affluent and White counterparts – were used to determine eligibility. Finding ways to overcome these barriers and expand access to dual enrollment programs appears to be an important method to improve college-going rates and high school-to-college transitions (Venezia et al., 2003) for those who otherwise lack access to such programs.

Although dual enrollment programs have, in the past, largely been reserved for high-achieving students (NCES, 2003; PEDOLA, 1996), they have recently been recognized as a method by which policymakers and educators can expand access to higher education for moderate- and low-achieving high school students (Bailey & Karp, 2003). Failure to include underrepresented populations in advantageous opportunities, such as dual enrollment, is contrary to the public mission of higher education because it excludes particular subgroups of students and limits access to postsecondary education among these populations (Greenburg, 1989).

Thus, state policymakers are beginning to employ dual credit opportunities to motivate underrepresented students to attend college (Hoffman, 2003). There are, however, still many unanswered questions regarding the impact that dual enrollment is having on access to higher education for underrepresented populations and ways in which policymakers can ensure their programs reach these populations.

### Social and Political Context

In order to provide context for the current study, this section contains a brief discussion of the disparities in college access among different racial/ethnic and socioeconomic subgroups as well as an overview of the dual enrollment legislation that was being advocated during the period in which our data were collected. Recent data indicate that underrepresented racial/ethnic minority (e.g., Black and Latino) and low-income students are less likely to develop plans to attend college than their White and more affluent counterparts (Pennsylvania Department of Education [PDE], 2005). During the crafting of dual enrollment policy in the Pennsylvania Department of Education, policymakers wanted to provide public funds to support dual enrollment participation and ensure that such legislation did not exacerbate the aforementioned inequities.

#### *Economic and Racial/Ethnic Disparities in Pennsylvania Education*

Although the availability of data on college access in the Commonwealth of Pennsylvania is lacking, there is some existing information on the percentages of high school students who are college-bound by race/ethnicity. The term college-bound is defined as those who plan to attend a postsecondary institution after high school graduation. PDE (2005) reported that 72 percent of White Pennsylvania high school graduates were college-bound, compared to only 65 percent and 58 percent of their Black and Latino peers, respectively. Although the PDE report did not contain information with regard to income-level or socioeconomic status, it did indicate that racial/ethnic minority students are highly overrepresented in low-income brackets. Over 31 percent of Black students and over 38 percent of Latino students qualified for the Pennsylvania free and reduced lunch program, compared to only 11 percent of their White counterparts.

#### *Dual Enrollment Legislation in Pennsylvania*

Although dual enrollment programs previously have been administered at the institutional level in Pennsylvania, legislators and policymakers in the Pennsylvania Department of Education have proposed legislation aimed at the provision of public funds for reimbursing and providing

assistance to institutions that serve dually enrolled students (L. Shorr, personal communication, February 15, 2005). Pennsylvania state senators submitted Senate Bill 150, the Opportunities for Educational Excellence Act, on February 2, 2005, to provide a state funded dual enrollment program (Opportunities for Educational Excellence Act, Pennsylvania SB 150, 2005). Policymakers in the Pennsylvania Department of Education aimed to advise state legislators in crafting dual enrollment policy that would not only benefit current students and institutions participating in dual enrollment programs but also provide opportunities for Pennsylvania's underrepresented and low-income high school students to participate in such programs. Therefore, the Pennsylvania policymakers wanted to avoid implementing policies that would produce unintended consequences and exacerbate existing inequities in college access. They faced the formidable task of crafting policy for the formulation of dual enrollment programming that provided both incentives for high-achieving students to accelerate their studies and opportunity for underrepresented students who are capable of succeeding in postsecondary education to participate in such programs.

To provide current information on students participating in Pennsylvania dual enrollment programs and aid the policymakers in crafting the dual enrollment legislation, this study was designed and executed to examine the current distribution of access to existing dual enrollment programs. If inequities exist in participation in current institution-level dual enrollment programs, consideration by policymakers of the possible consequences of their state-level policies with regard to equity is warranted. Therefore, this study was designed to ask one overarching question: Who participates in dual enrollment programs in Pennsylvania?

### Data and Methods

For this study, we conducted a survey of all two- and four-year colleges and universities in the Commonwealth of Pennsylvania. The survey constructed for data collection was designed to gather descriptive information to understand who was participating in dual enrollment programs at institutions of higher education in Pennsylvania during the 2003-2004 academic year (see Appendix A). The entire survey consisted of a one-page questionnaire including six questions about the backgrounds of dually enrolled students served by the institutions in our sample. The survey included questions regarding the number of dually enrolled students at each institution and the race/ethnicity, gender, and family income levels of those students.

### *Sample*

All private and public, two- and four-year colleges and universities in Pennsylvania represented the population of institutions under investigation. Among these institutions, we identified 89 two- and four-year colleges and universities that served a total of 12,410 dually enrolled students. Of the 89 institutions serving dually enrolled students, 42 institutions serving 5,475 dually enrolled students responded to the survey, constituting an institutional response rate of 47 percent.

### *Data Collection and Analysis Procedures*

Data collection occurred in three waves. The first and second waves were conducted using an electronically delivered questionnaire sent to institutional representatives and researchers identified by the Pennsylvania Department of Education. The third wave consisted of a follow-up telephone survey designed to obtain data from representatives and researchers who had not yet responded to the electronic survey. After delivery of the first questionnaire, the survey questions were modified due to the extremely low number of institutions that recorded family income data for the students participating in their programs. In order to obtain economic data on the program participants, the survey was altered to include a question requesting information regarding participants' high schools. Institutions that responded to the questionnaire during the first wave were also contacted a second time to obtain information on the high schools in which their students were enrolled. Because socioeconomic background data was not collected by the colleges and universities in the institutional population, the socioeconomic status of the high schools in which students were enrolled was used as a proxy for socioeconomic status. Thus, the survey data were then merged with information collected by the Pennsylvania Department of Education on the average poverty levels of each public school district. The linking of participants to school districts and their respective poverty levels permitted the assignment of economic background to the participants by region of origin and the use of that information in our calculations. Once data were collected, descriptive statistics were used in order to examine the rate of participation among various subgroups of students.

### Results

Examination of the demographic characteristics of students enrolled in dual enrollment programs in Pennsylvania reveals vast inequities in access and participation in those programs. Table 1 contains a comparison of dual enrollment participation and total public secondary school enrollment

by race/ethnicity in the Commonwealth of Pennsylvania. With regard to race/ethnicity, White and Asian students participated in dual enrollment at disproportionately high levels in 2003-2004. Although White students made up only 78 percent of the total public secondary school enrollment in Pennsylvania during the 2003-2004 academic year, they accounted for 90 percent of participation in dual enrollment programs throughout the commonwealth. Asian students also participated at a relatively high rate compared to their Black and Latino counterparts, constituting two percent of the total Pennsylvania public secondary school student population and accounting for three percent of the total participation in dual enrollment programs in 2003-2004. Black and Latino students were less likely to participate in dual enrollment programs throughout the state. In 2003-2004, Black students accounted for 15 percent of the total public secondary school enrollment, while their proportion of dual enrollment participation was five percent in the same year. Similarly, Latino students participated at a relatively low rate, accounting for five percent of the total public secondary school enrollment in Pennsylvania and only two percent of dual enrollment participants.

Table 1. *Proportion of Total Dual Enrollment Participation by Race/Ethnicity and Poverty-Level*

Race/Ethnicity	Proportion of total dual enrollment participation	Proportion of total public secondary school enrollment*
White	89.9	78.1
Asian	3.0	2.2
Black	5.2	14.8
Latino	1.8	4.8
Poverty quartile	Proportion of total dual enrollment participation	Proportion of total public secondary school enrollment*
Low	68.8	49.5
2nd	25.2	28.9
3rd	5.2	20.2
High	0.8	1.4

\* Pennsylvania Department of Education (2004)

Examination of the participation of Pennsylvania students by poverty-level reveals similar inequities in dual enrollment participation. School districts' poverty quartiles were determined by the proportion of students who received free or reduced lunch. Although almost 50 percent of Pennsylvania public secondary students attended schools in low-poverty (less than 25 percent of families in poverty) districts, those students comprised 69 percent of those who participated in dual enrollment programs. In contrast, students coming from the third poverty quartile (50-74 percent of families in poverty) constituted 20 percent of the total secondary school population, but only five percent of dual enrollment participants. Finally, students from the highest poverty quartile comprised 1.4 percent of the secondary school population and 0.8 percent of the dually enrolled student population. These numbers indicate that students who come from school districts in the lowest poverty quartile were substantially more likely than those from the two highest poverty quartiles to participate in dual enrollment programs.

Both two and four-year colleges in Pennsylvania housed dual enrollment programs during the 2003-2004 academic year. When dual enrollment participation was disaggregated into enrollment at two- and four-year institutions, racial/ethnic and economic disparities in the type of institution students attend were evident as well (see Table 2). While White students constituted approximately 82 percent of dually enrolled students attending two-year colleges, they comprised 93 percent of the students attending four-year colleges. Alternatively, Black and Latino students made up 11 and four percent of dually enrolled two-year college students and only three and one percent of dually enrolled four-year college students, respectively. With regard to poverty level, students from the lowest two poverty quartiles made up a much larger portion of dually enrolled four-year college students (90 percent) than dually enrolled two-year college students (74 percent), while dually enrolled students from school districts with higher poverty levels were disproportionately concentrated in two-year institutions.

### Implications for Policy Formation

Dual enrollment is becoming an important means by which state policymakers can potentially increase access to higher education and provide more students with an opportunity to participate in postsecondary education while completing their high school diplomas. This analysis, however, confirms earlier findings (PEDOLA, 1996) that dual enrollment programs can disproportionately serve students who are already most

Table 2. *Proportion of Total Dual Enrollment Participation at Two- and Four-Year Institutions by Race/Ethnicity and Poverty-Level*

Race/Ethnicity	Two-year colleges	Four-year colleges
White	81.5	92.8
Asian	3.8	2.7
Black	11.0	3.3
Latino	3.8	1.2
Poverty quartile	Two-year colleges	Four-year colleges
Low	56.1	65.0
2nd	17.8	25.3
3rd	21.6	9.6
High	4.4	0.1

privileged with academic resources. Therefore, if policymakers wish to ensure that dual enrollment policies and programs are both an effective and equitable tool for expanding access and opportunity, it is beneficial to foster dialogue focused on the proper and equitable formation of dual enrollment policy. In order to aid efforts to ensure future dual enrollment programs include consideration of equitable access, we conclude with a set of recommendations aimed at helping policymakers understand how they can ensure their programs equitably extend opportunities to qualified high school students, regardless of racial/ethnic, social, or economic background.

#### *Include Equity Assurance in the Program's Intended Outcomes*

Considering equal access to dual enrollment programs will help policymakers ensure that the formation of policy and components of the resulting programs will be tailored specifically to produce such equity. If the intended goals do not include a provision for equity, those involved in the formation and implementation of the program run the risk of producing unintended consequences that exacerbate already problematic racial/ethnic and socioeconomic disparities in college access. Thus, consideration of access to participation in dual enrollment programs is essential.

#### *Tailor Programs to Ensure They Reach all Intended Stakeholders*

If access and equity are deemed an important purpose of dual enrollment programs, such programs should be designed to meet the needs of diverse groups of students. Economically disadvantaged students, in particular,

should be considered when forming policy regarding qualifications and support services so that they are not inadvertently excluded. One example of crafting equitable access to dual enrollment programs would be to individually review applications. This would allow program administrators to determine which candidates are qualified on an individual basis and expand opportunity to those who have shown adequate progress but may not have outstanding composite academic records or standardized test scores. Additionally, if equity is an important consideration, efforts should be made to provide information about the program to students from less affluent school districts. Finally, academic support services should be provided to assist those who may have difficulty adjusting to the college environment.

*Allocate Resources to Remove Financial Barriers to Participation for Economically Disadvantaged Students*

In order for inclusive dual enrollment programs to be simultaneously effective and equitable, policymakers must take into consideration the needs of all program participants in the allocation of funding. Florida's Dual Enrollment Program (Florida Department of Education, 2005) specifies that it provides funding for textbooks as well as tuition and fees to cover a large portion of the cost of attendance, thereby making participation possible for students from less affluent backgrounds. Another approach that has been used to accommodate less affluent students is to provide reimbursement for transportation costs for those who demonstrate financial need (Minnesota Postsecondary Enrollment Options Program, 2004). These are two examples of how policymakers can construct dual enrollment programs so that they are accessible to all students, regardless of their economic background.

*Encourage Incorporation of Articulation Agreement Information into Academic Advising of Dually Enrolled Students*

During the 1980s and 1990s, many states established articulation agreements to facilitate transfer of students from two- to four-year colleges (Anderson, Alfonso, & Sun, 2006). Given the disproportionate concentration of underrepresented dually enrolled students in two-year colleges, articulation agreements may be particularly critical for the transfer and subsequent educational attainment of these students. Because many dually enrolled students may not be aware of future challenges in transferring two-year college coursework into degree programs at four-year institutions, it is important that articulation agreements between two- and four-year institutions exist and that advisors working with dually enrolled

students be cognizant of those articulation policies to ensure that students are aware of the outcomes that accompany the completion of particular courses and facilitate the transfer of those students from two- to four-year institutions.

#### *Consider the Importance of Long-Term Data Collection*

One of the most salient findings of this study, evident in the absence of students' socioeconomic data, is the lack of information on dual enrollment programs and participants being collected by states and colleges financially supporting such programs. As a result of the sparse nature of dual enrollment data, the linkages between participation in dual enrollment programs and improved student outcomes are tenuous, at best. This failure to collect data on dually enrolled students is problematic, considering that many states are investing substantial amounts of public funds into such programs, because it leaves many unanswered questions regarding whether or how those public dollars are being utilized most effectively. Therefore, states and institutions should make concerted efforts to collect longitudinal data from the commencement of dual enrollment participation through postsecondary education.

#### *Conduct Continuous Assessment of Dual Enrollment Programs*

Related to the importance of collecting sufficient data on dual enrollment programs and participants is utilizing that data to continuously evaluate whether those programs are achieving intended outcomes. With increased calls for accountability permeating the education system, it may be desirable for both state and institution-level administrators and policymakers to collect and utilize data in order to facilitate improvement, maximize the quality of their programs, and ensure that desired levels of equity are achieved. In order to facilitate this data collection and utilization, policymakers should be cognizant of the need to reserve funds and other resources for the implementation of adequate program evaluation.

### Conclusion

Dual enrollment has evolved as a promising method by which state and institutional policymakers and educators are attempting to combat many problems that continue to pervade secondary and postsecondary education. From easing high school-to-college transitions to enhancing the affordability of higher education, dual enrollment is increasingly viewed by policymakers as a cost-effective method of expanding opportunity for both economically disadvantaged and academically gifted students. Unfortunately, in the Commonwealth of Pennsylvania, dual enrollment

programs at the institutional level have disproportionately served already privileged high school students. In order for policymakers to ensure that dual enrollment programs are a promising opportunity for all types of students, policymakers and program administrators should design their programs so that access and equity are central factors in the formation and implementation of program policy, structure, and practice.

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Appendix A: Questionnaire

Please respond to the following questions for all dually enrolled students for the 2003-2004 12-month academic year. Dual enrollment, variously called “dual credit,” “concurrent enrollment,” and “joint enrollment,” refers to an organized system with special guidelines that allows high school students to take college-level courses through a post-secondary institution and earn credits for both high school and college simultaneously or college only. Information from summer programs for students who have already graduated from high school should not be included. If you collect the following data using categories other than those listed below, please provide the information as you collect it.

1. How many dually enrolled students in each racial/ethnic category below attended your institution in the 2003-2004 academic year?

- White \_\_\_\_\_
- African American \_\_\_\_\_
- Asian/Pacific Islander \_\_\_\_\_
- Latino \_\_\_\_\_
- Other \_\_\_\_\_
- Information not collected \_\_\_\_\_

2. How many dually enrolled students in each yearly family earning category below attended your institution in the 2003-2004 academic year?

- Less than \$24,999 \_\_\_\_\_
- \$25,000-34,999 \_\_\_\_\_
- \$35,000-74,999 \_\_\_\_\_
- \$75,000- or above \_\_\_\_\_
- Information not collected \_\_\_\_\_

3. How many dually enrolled students of each gender attended your institution in the 2003-2004 academic year?

- Male \_\_\_\_\_
- Female \_\_\_\_\_

Information not collected \_\_\_\_\_

4. Please list the high schools from which the dually enrolled students come and the number of students that come from each high school.

If High Schools are unknown, please list the School Districts for the question above.

Information not collected on high schools \_\_\_\_\_  
 Information not collected on school districts \_\_\_\_\_

5. Of dually enrolled high school seniors from the 2003-2004 academic year, what percentage matriculated at your institution as freshmen in the fall of 2004? \_\_\_\_\_

Information not collected \_\_\_\_\_

6. Please explain briefly why your institution offers dual enrollment to high school students.

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