

Forum Brief

Dual Enrollment: A Strategy for Improving College Readiness and Success for All Students Forum – February 10, 2012

Increasingly dual enrollment is becoming a strategy to support and encourage more students into postsecondary education and beyond. Yet, the research is only beginning to allow us to understand the long-term impacts on student success as well as understand the necessary design elements for student success. This forum reviewed the range of research conducted by the National Center on Postsecondary Research, as well as discussed ways that dual enrollment has been/can be used as a strategy to promote college and career readiness for all students. Presenters included Katherine Hughes, National Center for Postsecondary Research; Cecilia Speroni, National Center for Postsecondary Research; Julie Alexander, Florida Department of Education; and Chad Aldeman, US Department of Education.

Katherine Hughes, National Center for Postsecondary Research (NCPR), began her presentation with an overview of dual enrollment, as well as past and current research conducted by NCPR. While there are many terms to describe these kind of policies (e.g. concurrent enrollment, joint enrollment, etc.), Hughes defined dual enrollment as opportunities that allow high school students to enroll in college courses, though they may or may not be for dual high school and college credit. She said that student participation in dual enrollment has been widespread, with 800,000 high school students taking a college course in the 2002-03 school year, with numbers increasing in the past ten years. Hughes noted that dual enrollment has become popular, as it mirrors the goals of prominent trends in education today, namely increasing the rigor of secondary education, as well as improving the link between secondary and postsecondary education.

Hughes then provided an overview of prior and current research in the field of dual enrollment policy. In the past, the Community College Research Center (CCRC) at Teachers College has conducted analyses of dual enrollment outcomes in New York City and Florida, while controlling for student and school characteristics. The Florida dataset had records for all students enrolled in a Florida public high school, whether they were Career and Technical Education (CTE) students or not, while the New York dataset included only students who attended one of New York City's 19 vocational high schools and enrolled in the City University of New York (CUNY) after graduation. The Florida study found that participation in dual enrollment opportunities were positively related to enrolling in college, and enrolling full-time; persistence in college; higher GPA one year after high school graduation; and more credits earned three years after high school graduation. The New York study also found positive student outcomes, with participation related to the pursuit of a BA; higher first semester GPA; and higher credit accrual. New research in this field includes a study of the California Concurrent Courses Initiative (CCI), a career-focused dual enrollment program funded by the Irvine Foundation. Whereas dual enrollment traditionally has been targeted for high-achieving and more motivated students, the CCI targets students who are underrepresented in higher education and who are middle-achieving. Hughes reported that longitudinal tracking of students found that CCI participants are more likely to enroll in college and to enroll in 4-year colleges, with further results forthcoming.

Cecilia Speroni, National Center for Postsecondary Research, provided an overview of the most recent NCPR study of Florida dual enrollment, reported on the findings, and made recommendations for future research. Speroni conducted two studies, the first of which assessed the relative power of Advanced Placement (AP) and dual enrollment (DE) in Florida for predicting students' college access (defined as postsecondary education enrollment and completion of first year a 4-year college), and success (defined as attainment of BA degree within five years). The second study examine the causal effect of DE and the effect of DE college Algebra on Florida students' college access and success using a quasi-experimental method known as Regression Discontinuity. Using two cohorts of public high school seniors from 2001 and 2002, the two studies controlled for student characteristics, including among many variables, gender, race, and test score data. Speroni differentiated between AP and DE opportunities, as AP students take a college-level course in a high school setting, administered by a certified high school teacher, with an option of taking a final exam for college credit, while DE students enroll in an college course, administered by a professor for college credit, and taken at either a high school or community college.

Speroni revealed the findings of both studies. The first study found that there was a predictive effect of DE versus AP course enrollment on college access and success. Both DE and AP students were found to have higher rates of college attendance (6 percentages points), enrollment in 4-year universities, and attainment of BA degrees. While DE students were found to attend college at higher rates than their AP counterparts, it was also found that those enrolled in AP classes were more likely to attend 4-year institutions of higher education, and attain BA degrees than DE students. The data also indicated differences between DE courses administered in a high school versus college setting. According to Speroni, students physically taking DE courses on the community college campus were found to have higher rates of college access and success than those taking DE courses at high schools. While Speroni made clear that the methodology was not a true experimental study, she hypothesized that this trend may indicate a lower quality of courses taken at the high school level, or that there is a boost in student confidence and preparation by going to the college campus. The second study evaluated the relative performance of students just above and below the eligibility requirement to enroll in DE (3.0 unweighted GPA and a College Placement Test, or CPT), and found that there was no significant effect on college access and success for students enrolled in non-math, English, and science DE courses. By contrast, there was a large positive effect of enrollment in DE Algebra courses, with an increase of 16 percentage points on college enrollment and 23 percentage points on degree attainment (AA/BA), for students on the margin of eligibility.

Speroni concluded with a summary of the findings, and suggested areas of future research. She noted that DE and AP are strong predictors of students' success, though programs are not equal predictors. DE has strong positive effects on college enrollment and completion, but where students take DE classes and what classes they take seem critical. Speroni suggests that other states follow Florida's example, and create databases that allow longitudinal tracking of students from high school to college; record DE participation for all students (not just college-goers); and contain information on DE vocational vs. academic, course location, teacher affiliation. She ended her presentation with a suggestion that future research should use an experimental design to establish causal relationships between participation in DE/AP courses and outcomes.

Julie Alexander, Florida Department of Education, provided an overview of the dual enrollment policies currently active in the state of Florida. According to Alexander, Florida DE policies allow high school students an opportunity to enroll in postsecondary courses and receive both high school and postsecondary credit, while at the same time, students are exempt from payment of tuition, and are required to meet eligibility standards. She said that through faculty involvement at the postsecondary level, the state can review course content and map it back to an appropriate credit at the secondary level in what is known as the DE equivalency list. Another Florida statute requires the Department of Education to adopt guidelines designed to achieve comparability across school districts of both student qualifications and teacher qualifications for DE courses. The resulting expectations set forth by the Florida Department of Education include communication and data sharing between colleges to high schools regarding student performance, as well as the high schools' responsibility to monitor student eligibility. Alexander explained that Florida statutes also require District superintendents and Florida College System institutions to develop a comprehensive articulation agreement. Today, this agreement includes provisions outlining communications with parents and students; courses available via dual enrollment; courses that meet high school graduation requirements; eligibility criteria; District screening and monitoring process; maintenance of instructional quality; and posting of postsecondary grade to high school transcript.

Alexander then provided some statistics regarding the Florida DE program. A 2010 analysis of the DE data suggested that on average, DE students perform better than non-DE students. While 91.4 percent of DE students received a grade of C or better in College Algebra, only at 74.5 percent of non-DE students achieved the same grade. The same can be said of Freshman English, with 94.9 percent dual enrollment receiving a grade of C or better, compared to 83.3 percent non-DE students. Alexander noted that the DE benefits seemed to travel with students to the state universities, with 91.1 percent DE students that transferred to a state university receiving grades of C or better in their first year. She also said that the major factor in collecting this data was the common course numbering system for all colleges in FL system, and that this data has been used to facilitate the DE discussion greatly in the state. It is also due to this level of sophistication that beginning in the 2009-10 school year, Florida has included participation and performance in acceleration mechanisms such as DE, AP, and International Baccalaureate (IB) in their accountability measures for school report cards and district grades. For DE courses, successful completion is defined as a passing grade of "C" or higher in a DE course for college credit.

Alexander concluded her presentation with a report on the current state of DE in Florida, and potential challenges that will need to be addressed. To date, both the colleges and school districts report dual enrolled students for funding purposes. In the In 2010-11 school year, districts received approximately \$3,542 per student in state support, while colleges received only \$2,929. The challenge of DE is that students are not assessed tuition and fees for colleges, and yet, the colleges are required to provide these services. In the 2010-11 school year, Florida College System institutions waived approximately \$49.7 million in these tuition and fees, placing great strain on the college system. Alexander said that there is an acceleration bill (House 7059) currently moving through Legislature, which will strengthen DE policy, and provide greater supports to the Florida College System.

Chad Aldeman, US Department of Education, provided a national perspective of college and career readiness in the United States, and reported on related efforts and policies in effect at the federal level. Aldeman reported that since 1973 the United States has made strong gains at 4th and 8th grade NAEP scores, with 9-year-olds having made close to two years of academic gains, and 13 year olds about year of academic gains. However, 17-year-olds have made virtually no academic gains since 1973, and while white-black and white-Hispanic achievement gaps have closed since the 1970's, no progress has been made since the mid-1990s. Aldeman also noted that the news regarding college access and completion is mixed, with over 70 percent of young people enrolled in some kind of postsecondary education, but a third requiring remediation, and half failing to complete a degree or certificate within six years of initial enrollment. He said that it is the stagnant high school and college graduation rates that have led to a loss in college completion world leadership, with the United States ranking 16th in college completion.

Aldeman reported on current efforts being pursued by the federal government to enhance college and career readiness and success. He first discussed the US Department of Education's publication *Elementary and Secondary Education Act Reauthorization: A Blueprint for Reform*. The Blueprint stresses college- and career-readiness throughout, and specifically calls for the reform of ESEA to encourage states to adopt of college- and career-ready standards; report on college-going and college remediation rates; and gives states the option to include assessments in other subjects. In addition, the Blueprint proposes \$86 million College Pathways program for expanding the availability of AP and IB courses; dual-enrollment programs; and "early college high schools" that allow students to earn a high school degree and an Associate's degree or 2 years of college credit simultaneously. Aldeman noted that more recently the US Department of Education has provided the opportunity for states to apply for waivers that would provide states a degree of flexibility from ESEA. Requirements of the waivers reflected the core elements of the Blueprint, requiring the adoption of college- and career-ready standards, as well as states to report on college-going and college credit accumulation rates. Aldeman announced that on February 9th the US Department of Education had granted waivers to 10 of the 11 states that had applied, and that the one state that was not granted a waiver, New Mexico, was working with the Department to revise their application. He also provided a breakdown of proposed policies of the waivers, including 10 states that added new subjects; 6 states that would hold schools accountable for AP/ IB tests (FL, GA, IN, NJ, NM, OK); 2 states that added dual enrollment (IN & NM); 5 states that proposed using ACT/ SAT scores (CO, GA, KY, NJ, NM,); 3 states that proposed using college-going and the need for remediation (FL, GA, NJ) ; and 6 states that proposed career-readiness measures (GA, IN, KY, NJ, NM, OK).

Question and Answer

The first question asked how accountability has impacted dual enrollment strategies. Alexander responded that on the student side, Florida's required articulation agreement between high schools and colleges has a component of accountability. She added that focusing on the student-unit record is important not just for a weighted scale, but also to make sure that students are being properly advised and placed, as dual enrollment is an acceleration mechanism that is not for everyone. Aldeman pointed out that what is measured largely determines what matters, and that if the right measurements are included and students are gaining towards those measures, then there is real progress. Additionally, he said that on the federal level, there is an effort to set common, high measures in order to look at and compare different program outcomes.

The panel was asked how the desire to increase access and to protect students is balanced in Florida. Alexander stated that in many ways this is similar to the discussion between placement assessments in the Florida College System and remediation courses. She explained that the current policies were made to ensure that students are prepared for the rigor of college courses, and that while there are some pilot programs being conducted outside of current policy requirements, she is reluctant to create full policy which could have negative effects on students. Hughes added that Florida is different than most states with regard to student academic eligibility requirements. She said that in most states it is left to the colleges to determine entry requirements, which she supports from an access standpoint.

The next question was directed toward Speroni, and asked if researchers and policymakers have reached the point where they can make some determination as to what critical elements are needed in DE policies and programs to yield the desired results. Speroni stated that there is a need for more research in the field, and that there is only one study that has really tried to isolate these elements. She added that from what researchers have gathered so far, making sure that students take at least one college-level course, or taking some part of their education on the community college campus has been helpful in preparing students for future success. Speroni also encouraged states to emphasize so-called “gatekeeper” courses, such as algebra, that are required for graduation.

The final question addressed the unique space between k-12 and higher education in which DE operates, and asked how this relationship has developed over time. Aldeman responded that recently there has been a lot more communication between k-12 and higher education, with data serving as the primary mechanism by which the sharing occurs. Hughes said that on the programmatic level, she has seen an increase in the communication between high school and college staff, occasionally going as far as shared professional development opportunities. Alexander answered that the DE program in Florida has been around a long time, but with the dramatic increase in demand recently, there is a need for both the state and school districts and colleges to work collaboratively much more than in the past to ensure quality of instruction, as well as equitable distribution of resources. She also mentioned a need for future collaboration and professional development between college faculty and high school teachers. Speroni noted that DE programs typically ensure that these teachers are certified with the same standards that the community colleges have for their staff, but mentioned the issue that this certification has very little predictive power for student outcome.

Audience Question and Answer

The first question asked the panel to describe the ideal data and research they would like to see in the field of DE. Speroni responded first, and stated that she would like to see a true set of national data that would provide the material for a randomized experimental design that would randomly assign students to be taught identical courses by identical instructors, one in a high school setting, and the other in a college setting, with a control group as well. Speroni explained that this type of experiment could serve to isolate the variables between the two groups, and could reveal if physically taking a course on a college campus is responsible for the results found in her studies. Aldeman said that he would like to find more information on why more states have not taken advantage of and expanded their DE programs, as it is a cheaper way to educate

students. Alexander wished to see some program-specific information on future achievement for students that completed their general requirements in DE programs, and took higher-level courses in college.

Another question recognized the importance of DE course offerings on a high school or college campus, and asked that in light of tougher quality controls and accountability in Florida's model, if there have been more DE courses offered in high schools. Alexander responded that with the Florida data system it is difficult to find the location of instruction, but anecdotally there has been much more interest in offering DE courses in high schools. Hughes added that data collected from student focus groups indicates that there have been many students that would not be able to take DE courses offered on college campuses.

The final question asked how schools, districts, and states could ensure quality of instruction for college courses that are taught by high school teachers in a high school setting. Alexander responded that in Florida, regardless of who is teaching the course, it is the credit-granting college is responsible for that instructor. This would mean that if a high school teacher provides a college-level course for credit, they would have to meet the same requirements that a college instructor would be expected to meet. Aldeman provided the closing remark, and stated that unfortunately credentials do not really tell researchers and policymakers how well a student is prepared, and that he would like to see follow-through with tracking how well students do in the future.