

What We Know About Dual Enrollment



What Is Dual Enrollment?

In dual enrollment (DE), high school students are enrolled in a college course and complete all the assignments that would normally be completed as part of the course. At the end of the course, they are given a final grade on a college transcript and course credit that can be applied toward a college degree. Dual enrollment programs differ from Advanced Placement and International Baccalaureate programs in that students take college courses rather than high school courses with college-level content.

DE programs vary widely in terms of how many and what college courses they offer, where the courses take place (on college or high school campuses), and who teaches them (college faculty or high school teachers who qualify as college adjuncts).

The most recent national data (2002-2003) show that 71% of high schools offer dual enrollment opportunities and that 800,000 high school students take at least one college course during the school year.

Why Dual Enrollment?

Colleges and school districts have begun to embrace dual enrollment as a strategy for improving college attendance and persistence among students who might lack sufficient preparation for college. Participation in DE can help these students succeed in higher education by giving them a realistic idea of what college requires and giving them a head start on college-level work. DE has the added benefit of potentially reducing the cost of college by providing low- or no-cost college credit and shortening time to a degree.

Dual enrollment programs may benefit institutions as well as students, as they give colleges and high schools an opportunity to come together and discuss college readiness standards and curriculum alignment. Colleges and high schools develop relationships through their work in dual enrollment and often go on to jointly design high school content, pedagogies, and student services that better prepare students for college success.

Who Benefits from Dual Enrollment?

In some places, dual enrollment programs continue to target more advanced students, but the national and state focus has moved toward recruitment of disadvantaged, first-generation, and middle-achieving students. Nevertheless, some dual enrollment programs still require a minimum GPA for students to participate.

Participation in dual enrollment can help students succeed in higher education by giving them a realistic idea of what college requires and giving them a head start on college-level work.

What the Research Tells Us

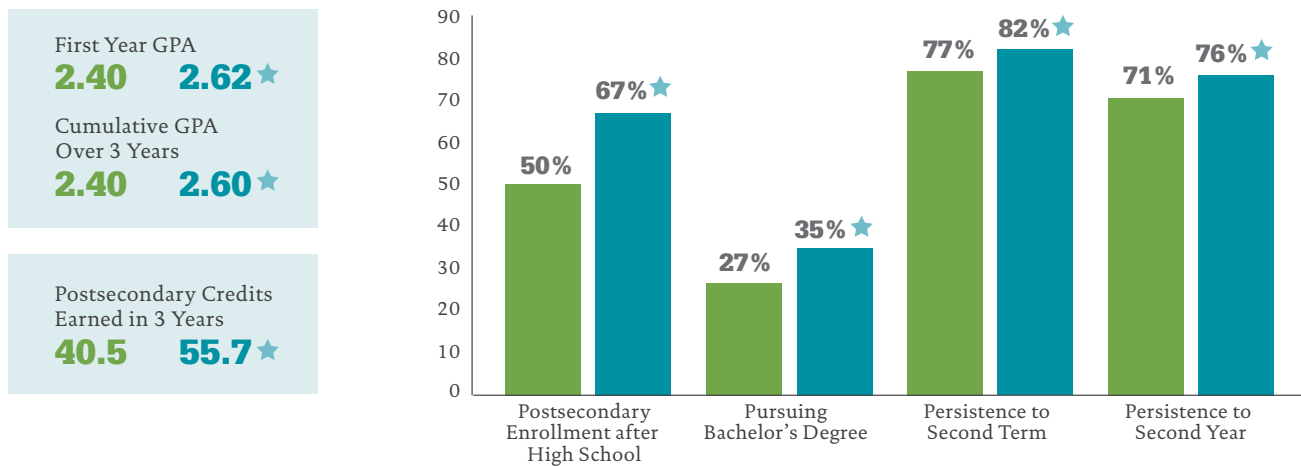
Studies Have Found Positive Outcomes for Students in Dual Enrollment.

The Community College Research Center (CCRC) has conducted studies in Florida, New York City, and California and found that dual enrollment participation is positively related to a range of college outcomes, including college enrollment and persistence, greater credit accumulation, and higher college GPA.

Dual Enrollment Students vs. Non-Dual Enrollment Students in Florida¹

■ Non-Dual Enrollment Students
 ■ Dual Enrollment Students
 ★ Increase Is Statistically Significant

All percentage figures have been rounded to nearest whole number



¹ FL outcomes based on 299,685 students in 2000-01 and 2001-02 high school graduating cohorts. Either a logit or OLS regression was used to estimate the impact of DE participation with controls for student and school characteristics.

About the Research

Except when noted, our researchers used nonexperimental methods to estimate the effects of dual enrollment on students. These methods, including ordinary least squares (OLS) and logistic regressions, controlled for various student and school characteristics. However, these analyses could not control for other student characteristics—such as motivation—that may have contributed to the estimated effects found for students who participated in dual enrollment.

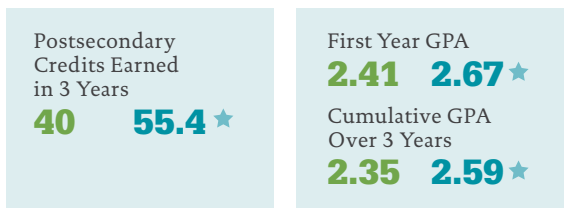
Dual Enrollment May Improve Outcomes for Students in Career-Technical Pathways.

Some dual enrollment programs are career-focused—targeted to students in career-technical education (CTE) high schools or pathways. In these programs, high school–college partnerships develop a sequence of career–technical courses that create a bridge between high school CTE pathways and college CTE programs. Research has found that student participation in CTE dual enrollment is associated with gains in college enrollment, GPA, and credit accumulation. In Florida, it was also associated with greater college persistence.

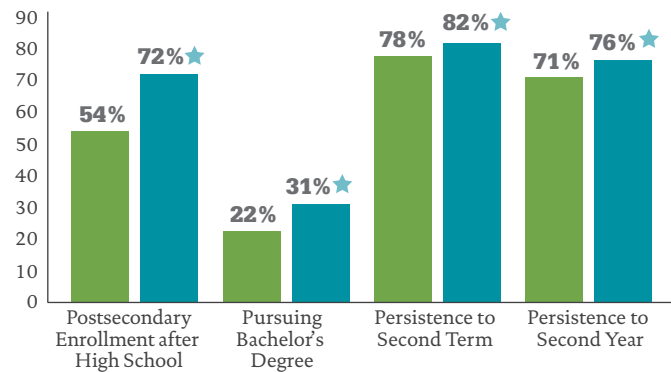
Dual Enrollment CTE Students vs. Non-Dual Enrollment CTE Students

■ Non-Dual Enrollment CTE Students
 ■ Dual Enrollment CTE Students
 ★ Increase Is Statistically Significant
All percentage figures have been rounded to nearest whole number

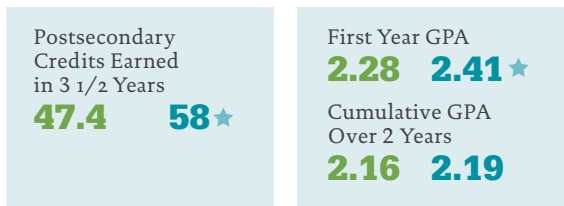
FLORIDA²



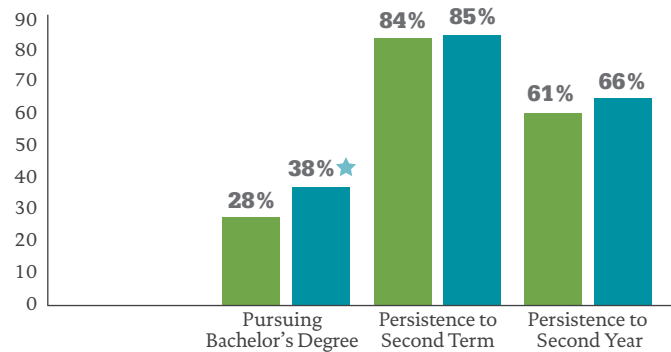
² FL outcomes based on 38,479 students in the FL CTE subsample.



THE CITY UNIVERSITY OF NEW YORK (CUNY)³



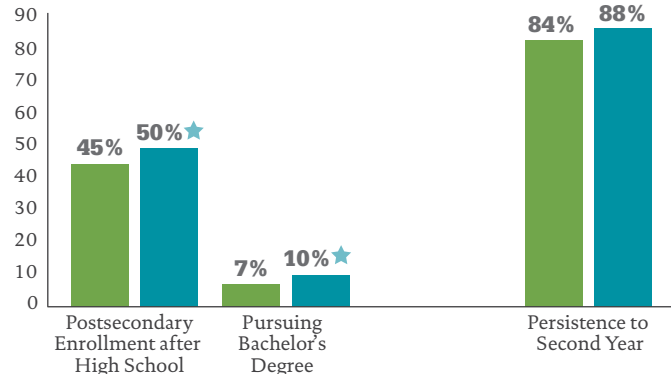
³ CUNY outcomes based on 2,303 students who attended vocational high schools in NYC and enrolled in CUNY in 2001 & 2002. Either a logit or OLS regression was used to estimate the impact of DE participation with controls for student and school characteristics.



CALIFORNIA⁴



⁴ CA outcomes are based on 691 students who participated in five CTE DE programs from 2008–2009. Regression analyses were used to estimate the impact of DE participation with controls for student characteristics.



Completing More Than One Dual Enrollment Course May Lead to Improved College Outcomes.

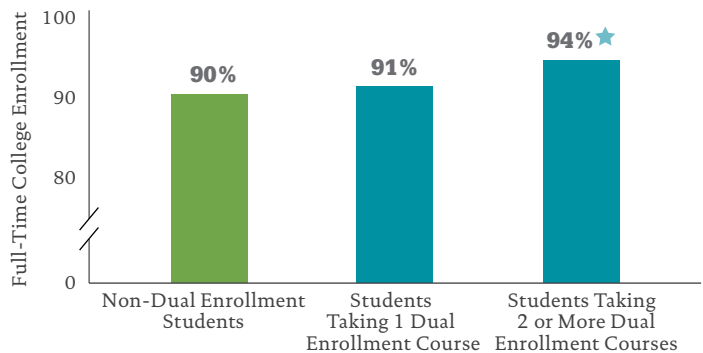
The CUNY study found that CTE students who completed two or more dual enrollment courses were more likely to enroll in college full time and had higher first-term GPAs than students who completed just one dual enrollment course.

GPA and Full-Time Enrollment Outcomes by Number of Dual Enrollment Courses Taken

■ Non-Dual Enrollment CTE Students ■ Dual Enrollment CTE Students ★ Increase Is Statistically Significant

All percentage figures have been rounded to nearest whole number

	First-Term GPA
Non-Dual Enrollment Students	2.28
1 Dual Enrollment Course	2.29
2 or More Dual Enrollment Courses	2.48 ★

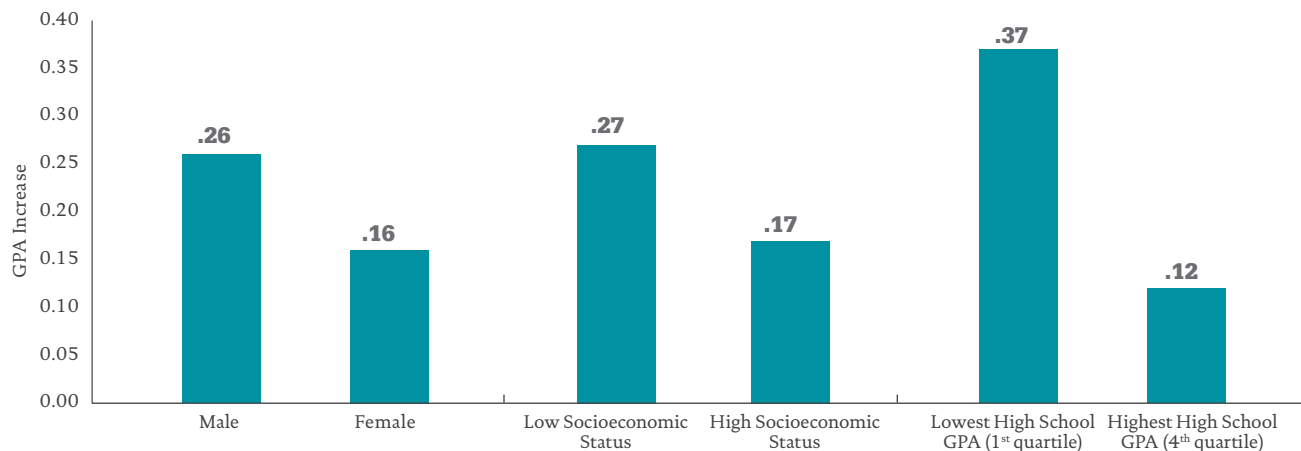


Dual Enrollment May Have Greater Benefits for Groups That Struggle in College.

In Florida, dual enrollment participation was associated with greater than average gains for low-income, lower achieving, and male students. These students showed larger increases in college enrollment and GPA than female, high-income, and high-achieving students, who tend to do better in college.

Increase in GPA is Larger for Low-Income, Low-Achieving, and Male Students

■ Dual Enrollment Students



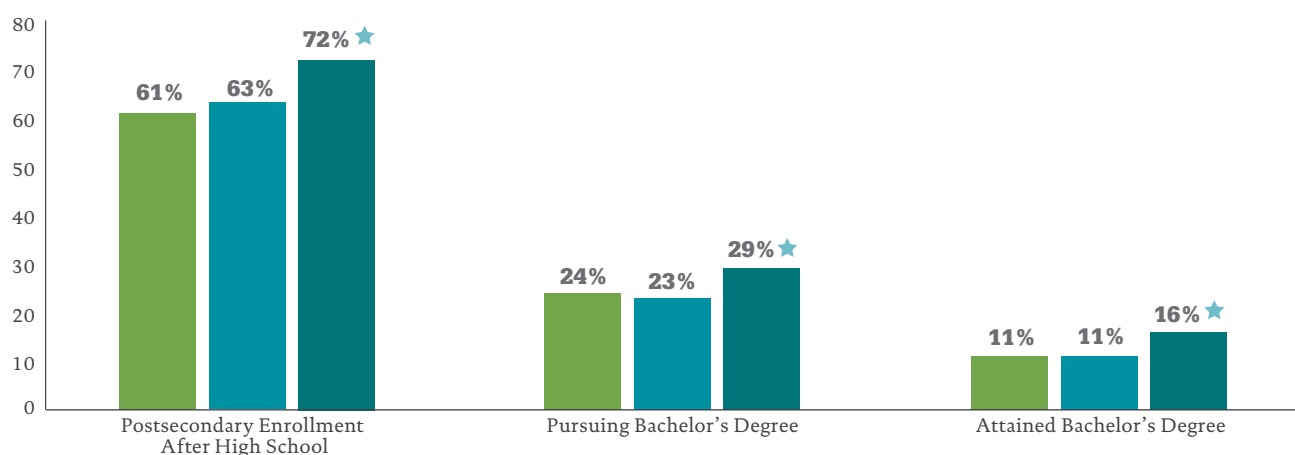
Where Students Take Their College Courses Makes a Significant Difference.

A statewide study of dual enrollment students in Florida found that students who took dual enrollment on college campuses had higher rates of college enrollment and degree attainment. Students who took dual enrollment courses on high school campuses showed no significant improvement in college outcomes.

Dual Enrollment Courses on College Campuses May Yield Better Outcomes⁵

■ Non-Dual Enrollment Students
 ■ Students Taking DE Courses on High School Campus
 ■ Students Taking DE Courses on College Campus
 ★ Increase Is Statistically Significant

All percentage figures have been rounded to nearest whole number



⁵ Outcomes based on all FL students in the 2000-01 & 2001-02 public high school graduating cohorts. Regression analyses were used to estimate the impact of DE participation with controls for student, school, and district characteristics.

Which Courses Students Take Makes a Difference.

In a quasi-experimental study, researchers compared outcomes for Florida students scoring just above and below the minimum GPA required by the state to qualify for dual enrollment. The students who scored above the GPA cutoff were able to participate in dual enrollment, while those who scored just below the GPA cutoff—and who were statistically indistinguishable from their barely-passing peers—could not. The results of this study showed no benefits for the dual enrollment students compared with the nonparticipating students.

However, the above analysis hid important differences in the effects that individual DE courses had on students. A second analysis looked at the impact of a particularly rigorous dual enrollment algebra course on high school students who scored just above and just below the minimum score on a college placement test (CPT) required for participation. The analysis found that students who took the college algebra course were **16 percentage points** more likely to go to college and **23 percentage points** more likely to earn an associate or bachelor's degree than similar students who just missed the eligibility cutoff on the CPT.

High school students who took college algebra course were 23 percentage points more likely to earn an associate or bachelor's degree.

What States and Schools Can Do

- ▶ **Eliminate restrictive eligibility requirements for dual enrollment,** since program participation can benefit a range of students.
- ▶ **Expand outreach to underserved populations and provide dual enrollment courses tuition free for low-income students (if not for all students)** in order to ensure that they are able to take advantage of dual enrollment opportunities.
- ▶ **Integrate dual enrollment into high school CTE pathways and programs,** since participation may positively impact college outcomes for these students.
- ▶ **Include dual enrollment as part of a high school senior year redesign effort.** Florida’s senior year “College Success Academies,” for example, are comprised of remedial and dual enrollment courses to help prepare students for college.
- ▶ **Create measures within high school accountability systems to reward high schools** for providing dual enrollment opportunities. In Florida, high schools receive credit on annual “report cards” for student participation and performance in college courses.
- ▶ **Whenever possible, offer dual enrollment courses on college campuses,** since research suggests that students benefit more from attending DE courses held at colleges.
- ▶ **Take measures to ensure that DE courses are high quality and rigorous** so that students derive maximum benefits from participating.

High school accountability systems should reward high schools for providing dual enrollment opportunities.

Sources

Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The postsecondary achievement of participants in dual enrollment: An analysis of student outcomes in two states*. Saint Paul, MN: University of Minnesota, National Research Center for Career and Technical Education.

Speroni, C. (2011). *High school dual enrollment programs: Are we fast-tracking students too fast?* (An NCPR Working Paper). New York, NY: Teachers College, Columbia University, National Center for Postsecondary Research.

Speroni, C. (2011). *Determinants of students' success: The role of Advanced Placement and dual enrollment programs* (An NCPR Working Paper). New York, NY: Teachers College, Columbia University, National Center for Postsecondary Research.

Concurrent Courses Initiative 2008-2011, James Irvine Foundation. Publication forthcoming, 2012.

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