

Dual Enrollment Participation, Experiences, and School-Desired Supports Among College-Bound High School Students

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Conclusions

Six out of ten college-bound students surveyed were taking or planning to take dual enrollment courses. Group differences existed in dual enrollment participation based on school policies and demographic backgrounds. Dual enrollment participation was associated with positive college readiness outcomes, including better ACT performance, accurate self-evaluation of academic preparedness, and confidence in college success. Students reflected on dual enrollment challenges, which related to course rigor and processes, scheduling, and college policies. They also highlighted how schools could better support dual enrollment, emphasizing the need for more information, availability, access, affordability, and academic help.

So What?

While a large body of empirical studies have examined dual enrollment, most studies have focused on policies or college outcomes. Despite the extensive literature documenting the benefits of dual enrollment, there remains a need to better understand how to support students in accessing and navigating these opportunities by incorporating their perspectives. Gaining insight into the benefits students perceive and the challenges they encounter can inform efforts to better support students' dual enrollment participation and experiences.

Now What?

Based on students' experiences with and thoughts about dual enrollment, we recommended several actions that high schools could take to better help students, including advertising dual enrollment opportunities and including greater detail, expanding course variety and access, providing financial resources for eligible students, assisting with the process of enrolling in courses, offering academic support, and developing students' durable skills.

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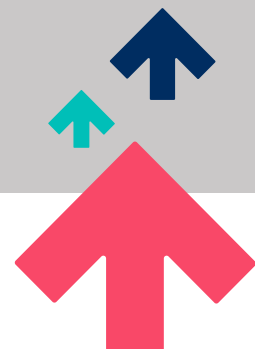
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Introduction

The transition from high school to college can be challenging for some students. The knowledge and skills they learned in their K–12 education and their expectations about college may not translate well when they enter postsecondary education (An & Taylor, 2019). Over the past two decades, dual enrollment course-taking, originally seen as a way to help advanced high school students start college early, has become a strategy to facilitate the transition to college (Barnett & Stamm, 2010). As the pandemic brought higher education enrollment declines, more attention began to be paid to how to get high school students ready for college through programs like dual enrollment (Schaller et al., 2025). These efforts have rapidly increased the number of high school students participating in dual enrollment opportunities (Hu & Ortagus, 2022).

The definition of dual enrollment (also called dual credit, concurrent enrollment, or joint enrollment) may vary slightly based on state policies (Barnett & Stamm, 2010). Some key differences in state policy definitions revolve around the types of postsecondary institutions offering dual enrollment, locations where students take dual enrollment courses, eligibility requirements, course types, course content regulations, credit offerings and transferability, tuition and fee provisions, and expectations for instructor qualifications (An & Taylor, 2019; Barnett & Stamm, 2010). No matter how states set their policies and define dual enrollment, most definitions highlight the enrollment of high school students in a college course. While other college credit-bearing courses (CCBC), such as Advanced Placement (AP) and International Baccalaureate (IB), are high school courses that cover college-level materials, dual enrollment courses are actual college courses (Burns & Leu, 2019). In this study, we define dual enrollment learners as students enrolled in high school who are taking college-level courses and possibly earning high school and college credits at the same time.

There are three main delivery modes for dual enrollment. One involves dual enrollment courses being taught in the student's high school by either a high school teacher or a regular college instructor. Based on a National Center for Education Statistics (NCES) report (Shivji & Wilson, 2019), this is the most common location for participating in dual enrollment. A second delivery mode involves high school students taking dual enrollment courses on college campuses from college instructors, which allows them to experience the college environment and study alongside college students (Barnett & Stamm, 2010). The third mode involves delivering dual enrollment courses online; the number of courses available through this mode has been increasing since the pandemic. These dual enrollment courses are usually delivered via an online learning management system (Greene, 2024).

Dual enrollment offers multiple benefits. It allows high-achieving students to challenge themselves academically. It offers an opportunity for students to experience the role of a college student. It allows students to have an early start on earning college credits before they get to college (Giani et al., 2023). Multiple studies have found a positive association between dual enrollment and various educational outcomes, including high school graduation, college enrollment, college persistence (Lee et al., 2022), college GPA (An & Taylor, 2019), and college graduation and degree attainment (Schaller et al., 2023).

While a large body of empirical studies have been conducted on dual enrollment, most studies focus on either dual enrollment policies or college outcomes. Few studies have investigated students' experiences with and perspectives on dual enrollment. This study was designed to investigate the following questions:

1. Which students do and do not participate in dual enrollment, and why?
2. What do students gain from participating in dual enrollment?
3. What challenges do students experience with dual enrollment?
4. How can schools better support students' participation in dual enrollment?

In July 2025, we reached out to a random sample of college-bound high school students who registered for the July 2025 ACT national test. In an online survey, we asked students to share their experiences with dual enrollment, including how many courses they took, how many subject areas the courses were in, where they took the courses, how satisfied they were, and what challenges they faced. We also asked students their reasons for taking, or not taking, dual enrollment and the types of school support they desired. In this paper, we share what we learned from 4,151 high school students on these topics (see the technical appendix for more details about the student sample).

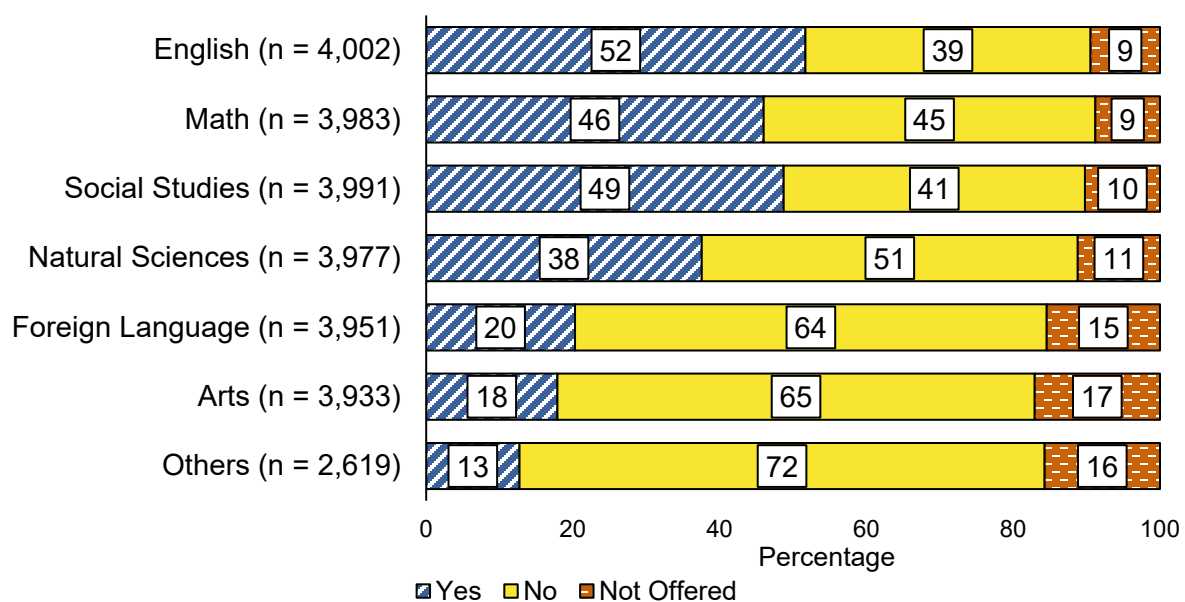
Findings

Which students do and do not participate in dual enrollment, and why?

Among the high school students surveyed, six out of ten indicated that they had taken or would like to take dual enrollment courses in high school (see the technical appendix for all the survey questions). This percentage is higher than the percentages reported in some other data sources (e.g., NCES reported 34% in 2019), potentially due to both the recent expansion of dual enrollment programs and the college-bound nature of the study sample. Half of these students had not yet started taking dual enrollment courses but planned to take them later in high school. About four in ten students had taken between one and six dual enrollment courses, and one in ten students had taken seven or more.

Students also reported taking or planning to take dual enrollment courses in different subject areas (Figure 1). The most common were English (52%), social studies (e.g., history, geography, psychology, economics; 49%), and math (46%). Almost four out of ten students (38%) had taken or planned to take dual enrollment courses in the natural sciences (e.g., physics, biology, chemistry), and about one fifth of the students had taken or planned to take foreign language (20%) or arts (18%) dual enrollment courses. Additionally, a few students (13%) reported that they had taken or were planning to take dual enrollment courses in other subject areas. Examples of these areas included engineering, health science, medical terminology, and public speaking. It is noteworthy that a proportion of students (ranging from 9% to 17%) reported that dual enrollment courses in certain subject areas were not offered to them.

Figure 1. Percentage of Students Taking or Planning to Take Dual Enrollment in Different Subject Areas



Note. Percentages do not add up to 100% due to rounding. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

In terms of the locations of dual enrollment courses, 80% of students reported that course-taking occurred or would occur at high schools, 42% online, and 19% on college campuses.

Students who had already started taking dual enrollment courses also rated their level of satisfaction with the quality of these courses. Overall, students were satisfied with the course quality, with more than 80% selecting very satisfied (31%) or satisfied (51%). Another 15% said they were somewhat satisfied, and only 3% expressed dissatisfaction. One student clearly illustrated this satisfaction with the dual enrollment experience in her response to an open-ended question:¹

“Dual Enrollment offers a more realistic preview of college life. You’re taught by college professors, graded through various assignments and exams, and expected to manage your time and workload independently. It encourages critical thinking, deeper engagement with the material, and practical skill development. Plus, the college credits earned are often more widely accepted, which can save you time and money later on. Overall, Dual Enrollment better prepares you for the challenges of college and gives you a stronger foundation for academic success.”

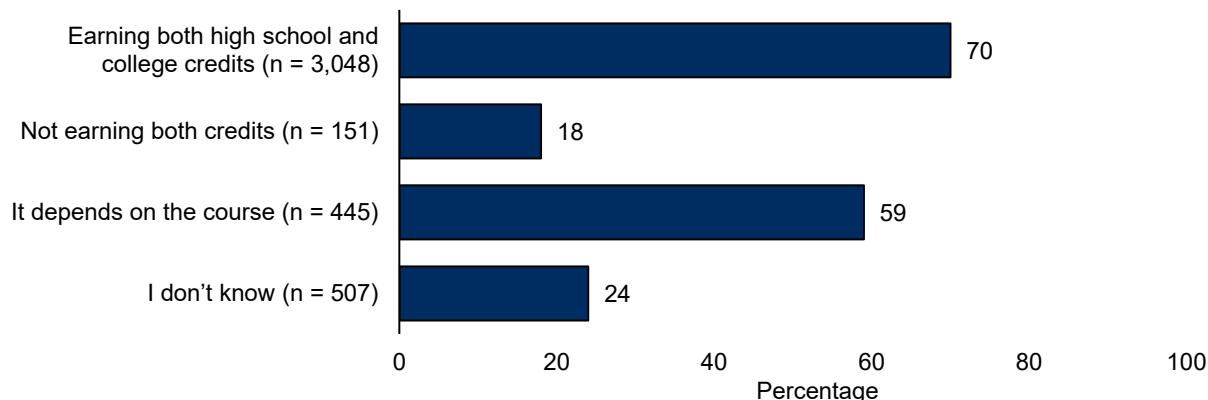
Group Differences in Dual Enrollment Participation

Previous studies have shown that disparities exist among students from different backgrounds in terms of dual enrollment participation (e.g., Hooper & Harrington, 2022; Spencer & Maldonado, 2021). In this study, we explored group differences in dual enrollment participation as they related to two factors—school policies and students’ demographic backgrounds.

School Policies

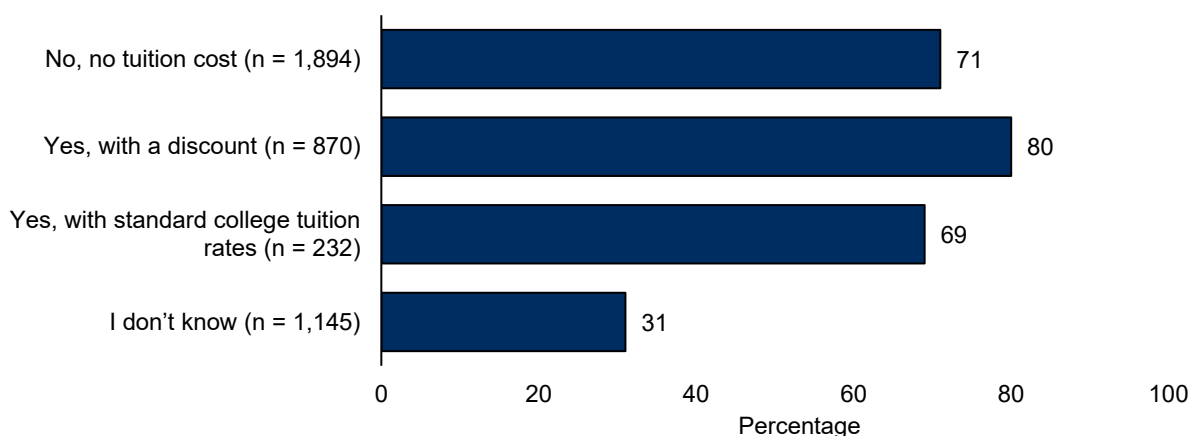
States set their own policies for dual enrollment, and within the framework provided by states, each school district and each school establishes its own policies regarding dual enrollment. In this study, we focused on four aspects of school policies. The first was whether students earned both high school and college credits for taking dual enrollment courses; nearly three quarters (71%) of the surveyed students selected yes, 4% selected no, 10% selected “it depends on the course,” and another 17% said they did not know. The second school policy question was whether high schools had a minimum GPA requirement for students to enroll in dual enrollment courses, with 32% reporting yes, 19% reporting no, 7% reporting “it depends on the course,” and 42% reporting they did not know. The third policy question asked for the grade level at which students were allowed to begin taking dual enrollment courses. Twenty percent of students selected Grade 9, 21% selected Grade 10, 29% selected Grade 11, 3% selected Grade 12, and 28% did not know. The last school policy question asked whether students had to pay tuition for taking dual enrollment courses; 43% of students reported no dual enrollment tuition cost, 20% reported they had to pay tuition but at a discount, 5% paid a standard college tuition rate, and 32% did not know their school’s tuition policy.

We conducted a logistic regression model to investigate whether certain school policies were associated with students’ likelihood of dual enrollment participation (see Table A2 in the technical appendix for model details). The results indicated that two school policies were related to the odds of dual enrollment participation. Students whose high schools did not offer both high school and college credits for dual enrollment were 86% less likely to take dual enrollment courses than students whose high schools did offer both types of credit after we held other school policies (i.e., minimum GPA, starting grade level, and tuition) and the learner’s demographic variables constant. Students whose high schools offered both credits only for certain courses were 38% less likely to participate in dual enrollment than students who could earn both credits for all dual enrollment courses. Figure 2 displays the percentages of students taking or planning to take dual enrollment courses by credit offering at their high schools. While 70% of the students who could earn both high school and college credits were taking or planning to take dual enrollment courses, only 18% of the students whose schools did not offer both credits were doing so. Also, the participation rate of students who selected “I don’t know” for this policy (24%) was much lower than that of students who could earn both credits.

Figure 2. Percentages of Dual Enrollment Participation by High School Credit Policy

Note. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

The second school policy related to taking dual enrollment courses was tuition. As shown in Figure 3, 71% of students who did not need to pay tuition for these courses were taking or planning to take them, and the percentages were 80% and 69%, respectively, among those who had to pay at a discount and those who had to pay standard college tuition. It is interesting that for students with a tuition discount, the odds of dual enrollment participation were 1.54 times the odds for students who did not need to pay at all when we controlled for other school policies and demographic variables (see Table A2 in the technical appendix). Additionally, as with the credit policy, students who selected “I don’t know” were much less likely to participate in dual enrollment than students who knew the tuition policy.

Figure 3. Percentages of Dual Enrollment Participation by High School Tuition Policy

Note. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

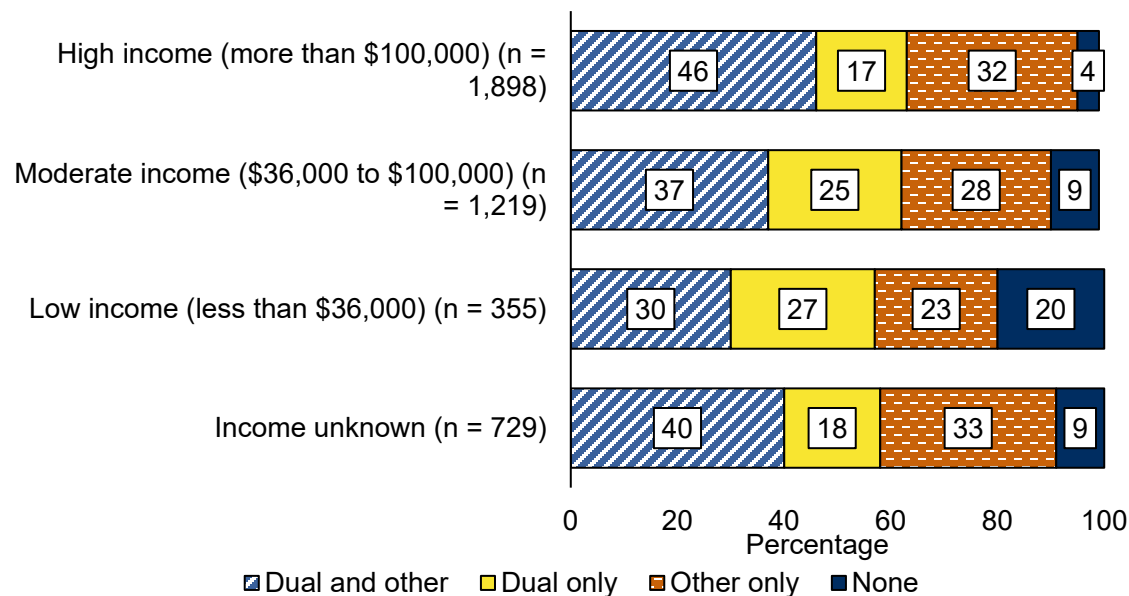
Demographic Backgrounds

Previous studies (e.g., Rivera et al., 2019; Shivji & Wilson, 2019) found that students from some demographic backgrounds (e.g., those who have a high family income or who have caregivers who went to college) were more likely to participate in dual enrollment than their counterparts. In this study, however, we did not see the significant differences among groups highlighted in the literature (e.g., high-income versus low-income, caregivers with college degrees versus caregivers without; see Table A2 in the technical appendix for model details). We then investigated whether such differences existed if we considered not only dual enrollment courses but also other college credit-bearing courses (e.g., AP, IB). We placed students' course-taking patterns into four groups:

- dual and other: taking both dual enrollment courses and other CCBC
- dual only: taking dual enrollment courses but no other CCBC
- other only: taking other CCBC but no dual enrollment courses
- none: taking no type of CCBC

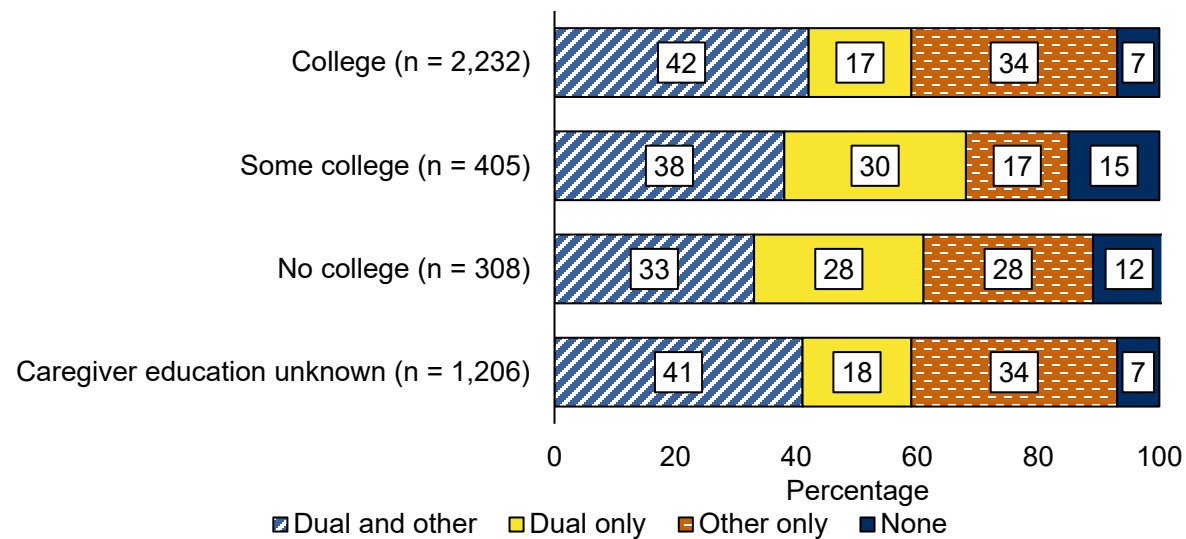
We explored whether students' family income backgrounds and caregiver education levels were associated with course-taking patterns.

Figure 4 displays students' course-taking patterns by family income group. There was a statistically significant association between family income and taking CCBC.² Students from high-income families (46%) were more likely to take both dual enrollment courses and other CCBC than students from moderate- and low-income families (37% and 30%, respectively). Meanwhile, in the case of students taking either only dual enrollment courses or only other CCBC, students from low-income families were more likely to take only dual enrollment courses (27%) than students from high-income families. The reverse pattern was observed for taking only other CCBC, with 32% of students from high-income families being in this group, higher than the 23% of students from low-income families. It is not surprising that students from low-income families were more likely to take no type of CCBC (20%) than students from moderate- and high-income families (9% and 4%, respectively).

Figure 4. Students' College Credit-Bearing Course Participation, by Family Income

Note. Percentages do not add up to 100% due to rounding. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

Caregiver education level was also significantly associated with course-taking.³ As shown in Figure 5, students whose caregivers had college degrees were more likely to take both dual enrollment courses and other CCBC (42%) than students whose caregivers did not have any college experience (33%). In the case of students taking either only dual enrollment courses or only other CCBC, students whose caregivers had no college experience or some college experience were more likely to take only dual enrollment courses (28% and 30%, respectively) than students whose caregivers had college degrees (17%). Meanwhile, students whose caregivers had college degrees were more likely to take other CCBC without dual enrollment (34%) than their counterparts whose caregivers had no college experience or some college experience (28% and 17%, respectively).

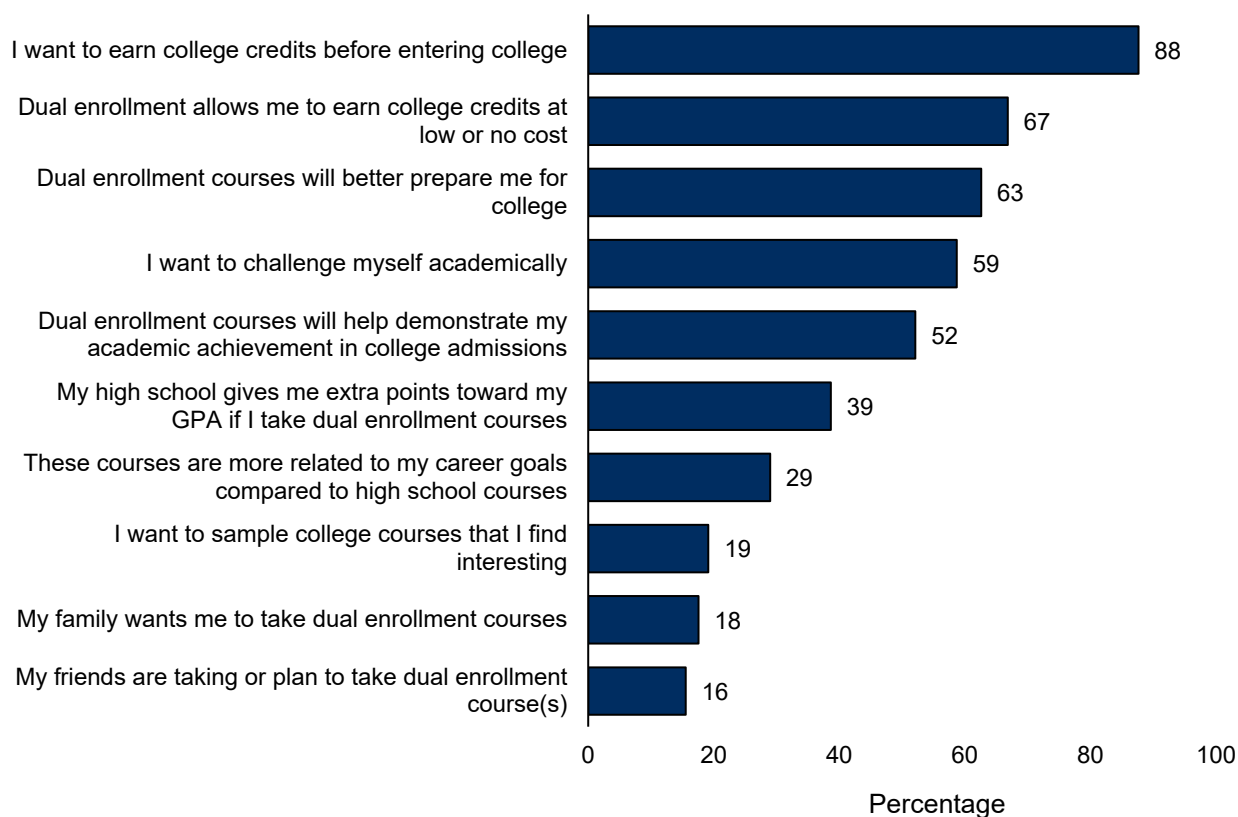
Figure 5. Students' College Credit-Bearing Course Participation, by Caregiver Education Level

Note. Percentages do not add up to 100% due to rounding. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

Reasons for Taking or Not Taking Dual Enrollment Courses

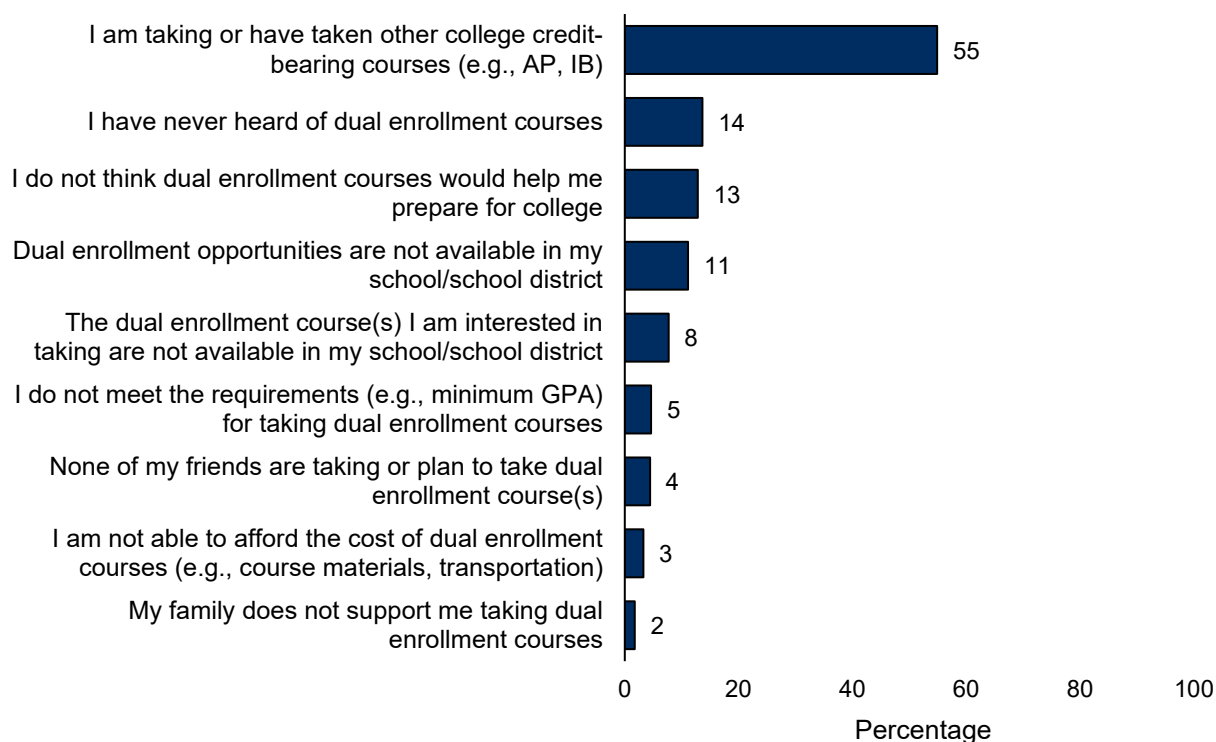
Depending on students' dual enrollment status, we asked either why they'd chosen to take dual enrollment courses or why they did not plan to take dual enrollment courses (these were "select all that apply" questions; see the technical appendix for the actual questions). Students who had taken or were planning to take dual enrollment courses recognized the value of these courses (Figure 6). The top three reasons students selected were wanting to earn college credits before entering college (88%), earning college credits at low or no cost (67%), and better preparing themselves for college (63%). Also, six out of ten students wanted to challenge themselves academically by taking dual enrollment courses, and more than half (52%) thought dual enrollment would help them demonstrate their academic achievement in college admissions.

Figure 6. Percentages of Students Selecting Reasons for Dual Enrollment Participation
(*n* = 2,427)



Among students who did not plan to take dual enrollment courses, the most common reason was that they were taking or had taken other CCBC (Figure 7). However, when we further explored the reasons by examining students' demographic backgrounds, we found several differences in certain groups.⁴ First, although taking other CCBC was the top-selected reason for all groups, the percentages of those selecting this reason were significantly different among certain groups. Students from high-income families were more likely to select this reason (67%) than students from moderate- and low-income families (57% and 41%, respectively). Similarly, students whose caregivers had college degrees (59%) were more likely to select this reason than students whose caregivers did not have any college experience (38%). Second, students from low-income families (21%) were significantly more likely than their peers from high-income families (8%) to report that they did not participate in dual enrollment because they had never heard of it. Students from low-income families (11%) were also more likely to report not being able to afford dual enrollment courses (e.g., course materials, transportation) than their peers from moderate-income (8%) and high-income families (2%).

Figure 7. Percentages of Students Selecting Reasons for Not Taking Dual Enrollment ($n = 1,305$)



What Do Students Gain From Participating in Dual Enrollment?

Multiple studies (e.g., An & Taylor, 2019; Lee et al., 2022; Schaller et al., 2023) have suggested that taking dual enrollment courses is related to better education outcomes, but most of these studies focused on college outcomes. In this study, we investigated whether dual enrollment participation was also associated with better college readiness outcomes.

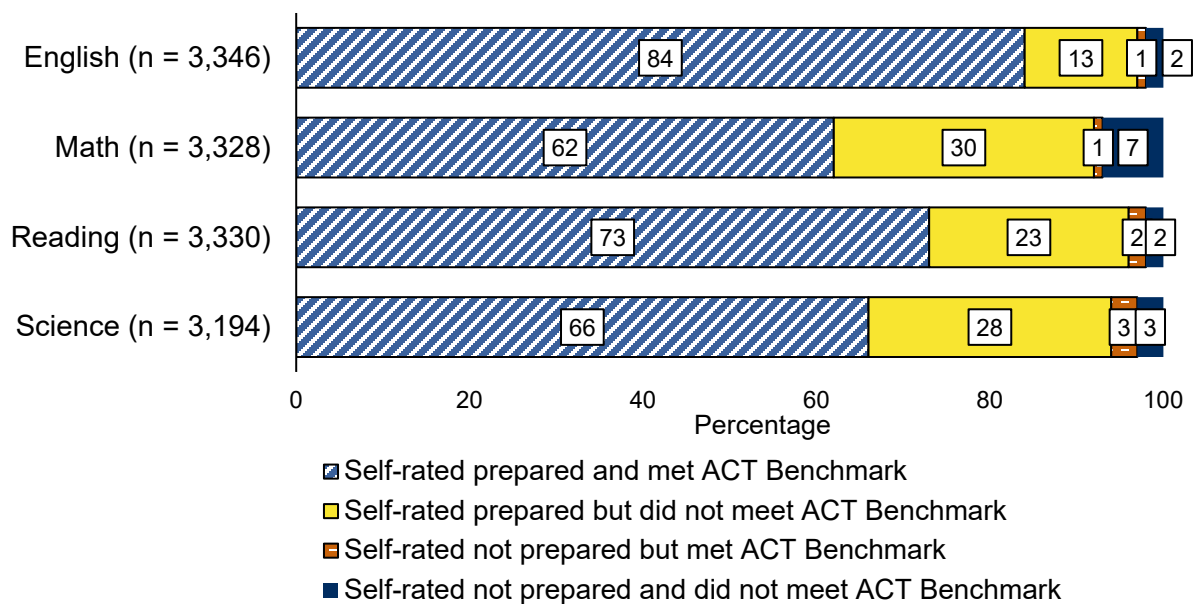
Better ACT Performance

We first explored whether dual enrollment participation was a predictor of ACT Composite score, an important indicator of students' academic readiness for college. We used whether a student had taken a dual enrollment course to predict the student's ACT Composite score while controlling for other variables, including enrollment in other CCBC, race/ethnicity, grade level, gender, family income, caregiver education level, and students' satisfaction with the types of dual enrollment courses offered (see Table A3 in the technical appendix for model details). The results showed that dual enrollment participation was a significant predictor of ACT Composite score. Assuming the values of all other variables were the same, students who had taken one or more dual enrollment courses were expected to score 1.30 points higher on the ACT compared to students who did not take any dual enrollment courses, indicating a positive relationship between dual enrollment participation and ACT performance.

More Accurate Self-Evaluation of Academic Preparedness

An accurate evaluation of academic preparedness for college is important for students as they transition to the next stage of their education. An inaccurate evaluation may affect students' academic decisions. For example, overestimation of academic preparedness could be negatively linked to students' short-term study behaviors and long-term academic decisions (Serra & DeMarree, 2016). We were interested in whether dual enrollment participation was related to students' self-evaluation of their academic preparedness for college. To gauge self-rated academic preparedness, we asked students to indicate whether they thought they had at least a 50% chance of earning a B or higher in first-year college courses that correspond to each of the four ACT College Readiness Benchmark subject areas (English, math, reading, and science). The college courses used in the survey item were the courses used to establish the ACT Benchmarks: English Composition I, college algebra, a humanities course (e.g., history, psychology, sociology, political science, economics), and biology (Allen & Radunzel, 2017). Students who meet the Benchmarks have at least a 50% chance of earning a B or higher in the corresponding college course. We then examined students' ACT scores to see whether they actually met or exceeded the Benchmarks (18 for English, 22 for math, 22 for reading, and 23 for science). Figure 8 shows students' self-rated academic preparedness and their academic preparedness reflected by their ACT scores in the four subject areas. More than half of the surveyed students rated themselves as academically prepared and met the Benchmarks (84%, 62%, 73%, and 66% in English, math, reading, and science, respectively). In addition, a group of students (ranging from 14% to 31% for the four subject areas) either overestimated or underestimated their academic preparedness.

Figure 8. Students' Self-Rated Academic Preparedness and Meeting ACT Benchmarks



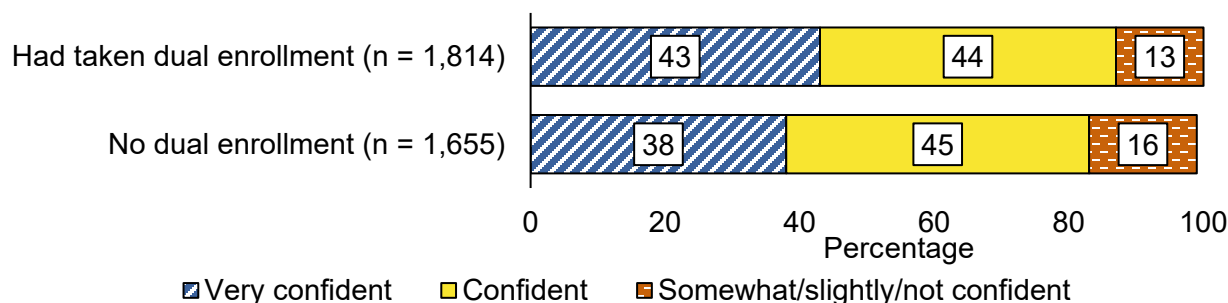
Note. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

We further examined whether the accuracy of students' self-evaluation was associated with whether they had taken dual enrollment courses. If a student self-evaluation (i.e., prepared or not prepared) was consistent with what their ACT scores demonstrated (i.e., met ACT Benchmark or not), we considered their self-evaluation accurate. We conducted a series of logistic regression models for the four subject areas, in which we used dual enrollment participation as a predictor while controlling for the status of other CCBC, race/ethnicity, grade level, gender, family income, and caregiver education level. Based on the results (see Tables A4–A7 in the technical appendix for model details), dual enrollment participation was a significant predictor of accurate self-evaluation in each of the four subject areas. For students who had taken one or more dual enrollment courses, the odds of accurate self-evaluation were 1.79 times those of their counterparts who did not take dual enrollment courses in English, 1.46 times in math, 1.40 times in reading, and 1.50 times in science.

Greater Confidence in College Success

The concept of college readiness incorporates not only academic factors but also nonacademic skills and beliefs, which have been found to predict college outcomes (Giani et al., 2023). In the survey, we asked students to rate how confident they were that they would be successful in college, and we explored whether students taking dual enrollment courses had higher confidence ratings than students without such course experience. As shown in Figure 9, students who had taken one or more dual enrollment courses were significantly more likely to select “very confident” (43%) than students who did not have any dual enrollment experience (38%).⁵

Figure 9. Students' Rating of Confidence in College Success by Dual Enrollment Status



Note. Percentages do not add up to 100% due to rounding. The *n* counts are unweighted sample sizes, while the percentages were calculated after weighting.

What Challenges Did Students Experience With Dual Enrollment?

Although students who had taken dual enrollment courses were satisfied overall with the quality of these courses and their enrollment was associated with positive college readiness outcomes, students also reported certain challenges when taking dual enrollment courses. In an open-ended question, we asked students to share the biggest challenge they had or thought they would have when taking dual enrollment courses. By analyzing 1,554 responses,⁶ we found three major themes across six top categories (Table 1).

Table 1. Themes and Categories of Challenges Students Experienced With Dual Enrollment

Theme	Category	Count (n)
College course rigor	Workload	233
	Content difficulty	220
Managing busy schedules	Balancing multiple responsibilities	194
	Time management	285
Processes, rules, policies, and expectations	Dual enrollment processes and rules	129
	College policies and expectations	77

Note. A student could refer to more than one category.

College Course Rigor

This theme reflects students’ academic challenges due to the rigor of college courses. The two categories that fall under this theme are workload and content difficulty.

Workload

Many students mentioned the course workload as a major challenge for students taking dual enrollment courses. The heavy workload included the amount of material they needed to learn inside and outside of class and the number of assignments they were expected to complete. Students felt that the workload in a dual enrollment course was heavier than in a regular high school course and that dual enrollment courses required them to put in considerably more time and effort to keep up with the assignments. This is reflected in the comments of three students:

“I would say my biggest challenge went taking it to Dual enrollment courses has been the volume of material expected to be learned.”

“The biggest challenge I have faced in dual enrollment courses is simply the amount of coursework students are expected to complete, as compared to other classes.”

“The increased workload of covering so much more material. The classes moved at a significantly faster pace than regular high school courses.”

Content Difficulty

Because dual enrollment courses are at college level, high school students had to master the advanced curriculum in those courses, which was one of the biggest challenges for some of them. Some students thought that the content was difficult because they did not have enough basic knowledge in the area. Others had a hard time comprehending all the materials and keeping up with college students in the same class. Many students mentioned that dual enrollment courses were usually more fast-paced than high school courses, making understanding the content even more challenging. In online dual enrollment courses, there were students who found it difficult to learn all the content by themselves; without a teacher present to

explain key points, it was challenging to understand the materials. Two students remarked on their difficulties:

“The biggest challenge I have faced is taking a type of course that I have never had previous practice in. I knew nothing about Microeconomics when I took it, and since I had no background knowledge, it made the class much more challenging.”

“I have struggled making sure that I am comprehending all of the information that I need to sense I do not have someone in person teaching me.”

Managing Busy Schedules

High school students usually have very busy schedules. Some students found that adding dual enrollment courses to their already busy schedules and managing these more complicated schedules was one of their greatest challenges. Two primary struggles included balancing multiple responsibilities and time management.

Balancing Multiple Responsibilities

High school students may have a wide range of responsibilities, such as high school coursework, extracurricular activities, family responsibilities, volunteering, and employment. When taking dual enrollment courses, students must still meet their multiple other responsibilities. Some students considered it challenging to balance these responsibilities. They wanted to allocate enough effort to do well in dual enrollment courses without sacrificing the effort needed for other activities in their lives. Comments from two students highlighted this point:

“[My biggest challenge is] balancing the rigorous coursework whilst preparing for other standardized tests, normal classes, work, physical activity, volunteering, ect. ”

“The biggest challenge is finding a balance between my high school coursework, college work, and after-school extracurricular activities.”

Time Management

A relevant challenge brought up by most students was time management. College-level courses often involve multiple deadlines for assignments and exams. There were students who thought that managing their time wisely and keeping up with all the deadlines was one of the biggest challenges. This difficulty was even more pronounced when students took online dual enrollment courses, which required that they stay on schedule and be responsible for the use of their time. A few students also mentioned that they tended to procrastinate, which did not help with handling their busy schedules. Three students told us the following:

“The biggest challenge for me with taking dual enrollment classes was prioritizing time management at home.”

“Keeping up with due dates is tough when working online. I had to make a to do list with all the due dates because the penalty for late work is much more severe compared to high school coursework.”

“Meeting deadlines has been my biggest challenge due to the fact that I am a chronic procrastinator.”

Processes, Rules, Policies, and Expectations

The third theme revolved around the challenges students had with processes, rules, policies, and expectations. These could be dual enrollment processes and rules or college policies and expectations.

Dual Enrollment Processes and Rules

Challenges with dual enrollment processes and rules often occurred before students started taking dual enrollment courses. Some students expressed their frustration with processes such as applying, registering at a college, signing up for classes, and transferring credits. Other students considered it a challenge in terms of the rules their schools set for dual enrollment, such as the limit on the number of courses they could take and the prerequisites for enrolling in dual enrollment. These struggles are illustrated by the following students:

“[My biggest challenge is] difficulties in administrative processes. (Sign-up, testing in, registration, etc.)”

“I’m not sure if I’ve applied for them properly and don’t know if the credits will go through.”

“Dual enrollment courses, where I’m from, are limited to only four every school year. For someone who excels in academic capability, this has staggered my overall career of studying college-level courses.”

College Policies and Expectations

After students started dual enrollment courses, a few had difficulties complying with college policies and expectations. Some mentioned grading policies different from those at their high schools. Others pointed out that the policies around deadlines were stricter in college than in high school. Also, some students were not aware of college expectations, such as those related to the course format, assignments, and communication with their professors. These difficulties were highlighted by the following students:

“Professors are different than high school teachers and deadlines are stricter.”

“The biggest challenge has been understanding the format and expectations of the course, especially if the professor is not very communicative.”

“The only issue I had experienced was professors not putting in grades until last minute therefore holding my grade down or not knowing what to improve in.”

“Grading policy is hard to understand.”

While students’ dual enrollment experiences can be influenced by a variety of challenges, as shown above, dual enrollment participation itself can also be related to different factors. We examine these factors in the next section.

How Could Schools Better Support Students’ Participation in Dual Enrollment?

In an open-ended question, we asked students to share their thoughts about how their schools or school districts could better support students interested in taking dual enrollment courses. By analyzing 1,696 responses,⁶ we identified the top six categories of suggested supports, which centered on themes of information, availability, access, affordability, and academic help as ways that schools could better support students interested in dual enrollment; these are described in more detail below.

Table 2. Top Categories Describing Supports Schools or Districts Could Provide Students Interested in Dual Enrollment

Category	Count (n)
Advertise dual enrollment	323
Offer more courses (e.g., subject area, location)	308
Explain dual enrollment details (e.g., purpose, benefit, process)	306
Make dual enrollment more affordable	111
Expand access to dual enrollment	105
Provide academic support (e.g., tutoring, study group)	93

Advertise Dual Enrollment

Many students believed that their schools could do better at advertising and promoting dual enrollment as a course-taking option. Some students mentioned that they did not know about dual enrollment until they learned it from someone who mentioned it. A few students also emphasized that schools should advertise the availability of dual enrollment courses early on in high school, starting with the freshman year. This way, students would not miss the opportunity to participate in dual enrollment. Three students illustrated the need for this support:

“I think my school can advertise these opportunities more so that students know this is an option that they have access to.”

“[My school could] get the idea of it out there more. Most of the time High Schoolers will have to know a kid or teacher in Dual Credit to know about it and to understand the ways of getting into it.”

“[My school could] inform incoming freshman that they qualify to take online dual enrollment classes as well. I was unaware of this when I was a freshman and would’ve taken more classes if I knew.”

Offer More Courses

Another thing students thought their schools or districts could do better was to offer more dual enrollment courses. Students wished they had more courses in different subject areas to choose from, which would allow them to select courses based on their interests. Also, several students mentioned that offering more courses from different colleges would be beneficial because students would have more options and more flexibility to fit dual enrollment courses into their busy schedules. Three students shared this support need:

“I think they should offer more courses and opportunities for more students to participate and earn credit.”

“My school district could offer courses outside the scope of social studies so that our school can offer a variety of subjects that can be tailored to different students.”

“I think offering courses from a wider array of colleges could be helpful, and a better variety of classes would also be very beneficial.”

Explain Dual Enrollment Details

Several students pointed out that although they knew of dual enrollment, they did not clearly understand things like the purposes, the benefits, and the expectations. They also wanted to learn other details about dual enrollment, such as the enrollment process, the cost, and how to choose courses. Helping students foresee the challenges along the way was also considered important. Some students believed that it would be very helpful if their schools or districts better explained these details, especially at the early stage of high school. This is reflected in the comments of these students:

“Make it more well known that this is an option and explain the benefits and process behind it.”

“[My school could] describe the importance of how it could help you in the future and prepare you for college.”

“My school/school district could teach students more about dual enrollment as a whole. Not much is taught about the benefits, options, and costs of taking dual enrollment. Many details are lacking and most students are hesitant to take dual enrollment.”

Make Dual Enrollment More Affordable

A few students mentioned that financial support would be beneficial for students interested in dual enrollment courses. Examples of these supports included lowering the cost of dual enrollment courses, allowing students to take some courses for free, offering financial aid to cover dual enrollment fees, and offering free transportation and technology to help students access these courses. These students believed more students would take dual enrollment courses if they were more affordable. For example, students said the following:

“I think it would be better to offer financial aid options when the dual enrollment fee comes into question because some people may struggle to afford even the discounted high school version.”

“[My school/school district could be] offering courses at lower cost for students who don’t have all of their tuition paid.”

“Our district covers the first eight classes, with a limit of two per semester. It would be nice if they paid for more classes as well as more classes per semester.”

Expand Access to Dual Enrollment

Making dual enrollment courses more accessible was also mentioned by a few students. They suggested schools and districts remove some of the restrictions on dual enrollment and open these courses to more students. Their ideas for expanding access included allowing students to take dual enrollment courses in freshman or sophomore year, relaxing the grade point average requirement for starting dual enrollment, and letting students take more dual enrollment courses each semester instead of setting a limit. Comments from three students illustrate these thoughts:

“My school could better support students by removing the gpa requirement and allow more students to take courses they are interested in.”

“I think offering the Dual Credit classes starting in sophomore year rather than junior year would be beneficial to some students.”

“The school could allow the students to take more than 15 hours of dual enrollment a school year. Should allow them to take 12-15 hours per semester.”

Provide Academic Support

The last category is related to academic support. Some students found dual enrollment courses challenging and hoped their schools could help them academically. Examples of such support included tutoring sessions, study groups, and one-on-one time with teachers. Several students found it hard to communicate with their professors, especially in an online course. They wished their schools could help them connect students with professors who could explain key academic

points. The following students highlighted the academic support their schools or school districts could offer:

“[My school/school district could] give us more opportunities for student workshops on every subject/course offered. Also provide more tutoring opportunities.”

“I think our school could better support students interested in taking dual enrollment courses by allowing us to meet with professor every once in while to discuss the class or grades.”

“I would say promote study groups for students, in my experience learning really happens when you have peers to bounce information off of, specifically in math/STEM classes.”

Discussion

In this study, we investigated college-bound high school students’ experiences with and perspectives on dual enrollment. Overall, 60% of the students surveyed were taking or planning to take dual enrollment courses. This percentage is higher than the percentages reported in some other data sources (e.g., NCES reported 34% in 2019). This could be partly due to the rapid growth of dual enrollment programs in recent years. It could also be that since the students in this study sample were all college-bound, they were more likely to take college credit-bearing courses. In addition, among the 60%, only half were actually enrolled in dual enrollment courses, while the other half said they planned to take them in the future, meaning that the percentage of surveyed students actively taking dual enrollment courses was very close to the percentages reported elsewhere. In terms of dual enrollment subject areas, the most common three areas were English, social studies (e.g., history, geography, psychology, economics), and math. A majority of dual enrollment courses were taken at the student’s high school, followed by online. Only about 20% of students took dual enrollment courses at a college campus. These numbers were consistent with the NCES 2019 report (Shivji & Wilson, 2019) except for a higher percentage of online courses in this survey, which could be due to ongoing course-taking changes that occurred during the pandemic.

Students participating in dual enrollment recognized the value of these courses. Their reasons for taking these courses included earning college credits before entering college, earning college credits at low or no cost, becoming better prepared for college, challenging themselves academically, and helping to demonstrate their academic achievement in college admissions. The reasons these students took dual enrollment courses thus match the reasons high schools and colleges choose to offer them (An & Taylor, 2019). Most students surveyed in this study were satisfied with the course quality, with more than 80% reporting that they were satisfied or very satisfied. However, students also shared the challenges they experienced, including coping with the rigor of college courses, managing busy schedules, and understanding and following policies, processes, and rules.

We also investigated group differences in dual enrollment participation. At the school policy level, the double credit policy was positively associated with the odds of dual enrollment participation: Students who would get both high school and college credits were more likely to enroll than students who would not get credits for both or whose credits depended on the courses. This is consistent with findings in other studies suggesting that dual enrollment credits for both high school and college could save students money and time (Schaller et al., 2023), increasing their likelihood of participating in dual enrollment programs. Another factor related to dual enrollment participation was the tuition cost. It is interesting that students who needed to pay tuition with a discount were more likely to take dual enrollment courses than students who did not need to pay tuition. There are a few possible explanations for this finding. First, we did not control for the course type or course quality in the model, so it is possible that students in the sample paying for dual enrollment with a discount had more course options or higher quality courses than students who had free dual enrollment opportunities, potentially increasing the chances of participation. Second, students with free dual enrollment options may also have opportunities to take other CCBC for free, which could decrease the rate of dual enrollment participation. A third explanation is that students may consider free courses less valuable or lower quality than courses that have some cost, which reflects the zero price paradox, an interesting phenomenon in the study of economics and consumer behavior (Aripin et al., 2024).

Another interesting finding related to school policies was that students who selected “I don’t know” in these school policy questions were less likely to take dual enrollment courses compared to their peers who knew the policies. Although it is possible that students who were taking or planning to take dual enrollment courses tended to seek out such information voluntarily, it is also possible that the lack of knowledge of dual enrollment, including school policies, was one of the reasons these students did not take dual enrollment courses. In fact, when asked what supports schools or districts could provide, many students mentioned that they did not have enough information about dual enrollment and would like to know more about it, which supports the hypothesis.

In terms of demographic group differences in the taking of college credit-bearing courses, this study did not find the group differences highlighted in previous studies, especially that students from traditionally underserved populations (e.g., students from low-income families and students whose caregivers had no college degrees) were less likely to take CCBC than their peers (e.g., Rivera et al., 2019; Spencer & Maldonado, 2021). Our findings may have been inconsistent in part because we were missing a lot of data about students’ family income and caregiver education levels. However, when we examined students’ dual enrollment status alongside their enrollment in other CCBC, we found that the percentages of students who did not take any CCBC were higher among students from low-income families, consistent with previous findings. More interestingly, we found that students from high-income families and students whose caregivers had college degrees were more likely to participate in dual enrollment and take other CCBC than students from traditionally underserved groups; these students could be using dual enrollment programs as a supplement to other CCBC (Spencer & Maldonado, 2021). On the other hand, when students took either only dual enrollment courses or only other CCBC, students from underserved groups were more likely to participate in dual enrollment alone than

their peers. This finding suggests that dual enrollment programs may have offered an opportunity for students who otherwise could not access or afford other CCBC.

The reasons students provided for not taking dual enrollment courses shed further light on the group differences. Although taking other CCBC was the most common reason selected, students from high-income families were more likely to report this reason compared to their peers from moderate- and low-income families. This difference was consistent with the finding that students from high-income families were more likely to take other CCBC without dual enrollment participation. A similar difference was found between students whose caregivers had college degrees and students whose caregivers did not. On the other hand, students from low-income families were more likely than students from high-income families to choose “never heard of it” and “not being able to afford the cost” as reasons for not participating in dual enrollment. A previous study (Hooper & Harrington, 2022) also identified lack of awareness and financial barriers as two causes of lower dual enrollment participation rates among an underserved population.

We investigated the relationship between dual enrollment participation and college readiness indicators, an area that has received limited attention in prior research. The results were promising, as dual enrollment participation was associated with better ACT performance, accurate self-evaluation of academic preparedness, and higher confidence in college success. Although we cannot assume a causal relationship between dual enrollment participation and these college readiness outcomes, these findings echoed those of some previous studies. For example, one study found that students with dual enrollment experience were less likely to take a remedial course after entering college than students without such experience (Kim & Bragg, 2008), implying that students with dual enrollment experience are more college ready. Findings from this study suggest that dual enrollment participation can help students become more ready for college.

At the end of the survey, students suggested ways their schools and districts could better support students interested in dual enrollment, which included advertising the opportunity, offering more courses, explaining the details, making it more affordable, expanding access, and providing academic help. Based on their ideas and other findings from this study, we suggest several actions high schools could take to better help students before they participate in dual enrollment and as they progress through the courses.

To increase students’ dual enrollment participation, schools could do the following:

- **Advertise dual enrollment opportunities with details.** Schools could start promoting dual enrollment courses as soon as students enter high school so that students have enough time to learn about the program and make an informed choice about participation. Various means of communication (e.g., emails, brochures, webinars) could be used to help students and their parents understand the details, such as purposes, benefits, requirements, course options, and cost. Schools could also make dual enrollment a standard part of discussions when students and educators develop learning plans or at parent-teacher conferences. It

would also be beneficial for students to learn about the formats and expectations of college courses in advance so that they could foresee the potential challenges.

- **Expand course variety and access.** Within state policies, schools could find ways to provide more dual enrollment courses. One way would be to promote professional development so that more high school teachers would be qualified to teach a dual enrollment course. Schools could also help students explore the possibility of taking a dual enrollment course at a different high school in the district, at a college, or online. Additionally, preparing students academically is critical to better ensuring their eligibility for dual enrollment courses.
- **Provide financial resources for eligible students.** Financial barriers may prevent students, especially students from low-income families, from participating in dual enrollment courses. Schools could help students look for state-funded scholarships to reduce the cost of tuition. Financial assistance with other associated costs would also be useful. For example, providing textbooks, devices, or transportation for free would reduce the costs for these students.

To support students during their dual enrollment coursework, schools could do the following:

- **Assist with the process of enrolling.** Schools could organize workshops to help students understand the dual enrollment application process and provide support with the preparation of materials. If enrollment involves using a college's system, helping students get familiar with the system or walking them through the sign-up process would be highly supportive. School counselors could also play an important role in advising students to choose courses that fit well with their education and career goals. Schools could also support a mentorship program where students participating in dual enrollment in upper grades can help students in lower grades.
- **Offer academic support.** Schools could provide tutoring sessions for students taking dual enrollment courses to help them understand the content. Organizing study groups or setting up study hall for these students would also be helpful. Another option would be to collaborate with colleges offering dual enrollment courses to provide support through student services on campus. In addition, schools could identify a liaison to help students connect with college instructors, especially when they are taking courses online. College students in relevant areas could also work as tutors to answer high school students' academic questions.
- **Develop students' durable skills.** Teachers and counselors could foster students' durable skills, such as time management, perseverance, and resilience, in the high school classroom. These skills would be important for helping students manage their busy schedules and address the challenges that can arise during dual enrollment courses. Schools could also invite college students who participated in dual enrollment in high school to share how they managed their time and responsibilities.

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Notes

1. This is a quote from one student's response to the open-ended question "How could your school/school district better support students interested in taking dual enrollment courses?" The student first described her satisfaction with dual enrollment and then offered suggestions. All student quotes in this paper are reproduced as written and without editing. Text in brackets is an addition from the authors.

2. A chi-square test of independence was conducted to examine whether students' family income backgrounds were associated with taking CCBC. The test was significant at the alpha level of .05, with chi-square = 233.9. The follow-up comparisons showed that the differences between low income and moderate income, low income and high income, moderate income and high income, and high income and unknown income were all significant at the adjusted alpha level of 0.0083 (Bonferroni correction).

3. A chi-square test of independence was conducted to examine whether students' caregiver education levels were associated with taking CCBC. The test was significant at the alpha level of .05, with chi-square = 114.6. The follow-up comparisons showed that the differences between college and some college, college and no college, some college and unknown education level, and no college and unknown education level were all significant at the adjusted alpha level of 0.0083 (Bonferroni correction).

4. A series of chi-square tests of independence were conducted to examine whether students' reasons for not taking dual enrollment courses were associated with their family income backgrounds and caregiver education levels. The reported group differences were all significant at the adjusted alpha level of 0.0083 (Bonferroni correction).

5. A chi-square test of independence was conducted to examine whether students' confidence in college success was associated with whether they had taken dual enrollment courses. There were three confidence levels—very confident, confident, and somewhat/slightly/not confident (combined due to low *n* counts). The percentage difference between the dual enrollment and no dual enrollment group was significant at the alpha level of .05, with chi-square = 10.82.

6. Thematic qualitative analysis procedures were conducted to analyze students' responses to the open-ended questions. All responses were read, segmented by relevance (irrelevant comments were excluded), and coded by a qualitative research expert to build tentative categories. These categories were then reviewed and verified by a second qualitative research expert. If applicable, themes were generated based on the original categories.

Technical Appendix

Sample

This survey study focused on students' experiences with and perceptions of dual enrollment, including whether they were taking dual enrollment courses, the number and subject areas of their dual enrollment courses, their reasons for taking or not taking dual enrollment courses, their schools' dual enrollment policies, their satisfaction with the type and quality of dual enrollment courses, the challenges they had with dual enrollment, and the supports they believed their schools or school districts could provide. This report summarizes the findings of the quantitative and qualitative data analyses.

The target population was high school students in Grades 11 and 12 who registered for the July 2025 ACT national test and reported that they were residing in the U.S. It also included students who had a missing value for grade level. The sampled population was $N = 52,645$ and did not include students who opted out of ACT communications or who were included in recent student survey samples. A stratified random sample of 46,470 high school students nationwide was drawn from the sampled population for this study. These students were presumed to be college-bound, although it is possible that some of them will not attend college. The sample was stratified on race/ethnicity.

Students were invited via email to participate in the online survey. The survey opened on July 12, 2025, and closed on August 28, 2025. At the beginning of the survey, participants first answered a question about their grade level. Only students in Grade 11 or Grade 12 were shown the rest of the survey questions. A total of 4,151 students answered at least half of the required questions (i.e., the multiple-choice questions). This group was used as the analytical sample of the survey (a response rate of 9%). This response rate is not unusual for online surveys, and we do not know whether nonrespondents' opinions would have been similar to those of the respondents, which is a limitation of this study.

We used propensity weighting to weigh the responses to match the sampled population, compensating for the differences in sample size and the overrepresentation of respondents from subgroups.

Student characteristics (gender, race/ethnicity, family income, parental education, high school GPA) are reported in Table A1 for the survey's sampled population, the analytical sample, and the weighted analytical sample. All the characteristics in the table were reported by students and were collected when the students registered for the ACT test. Also, students who chose to participate in the survey were asked to provide additional information about family income at the end of the survey.

Table A1. Characteristics of the Sampled Population, Analytical Sample, and Weighted Analytical Sample (Percentage^a)

Characteristic	Group	Sampled population (N = 52,645)	Analytical sample (n = 4,151)	Weighted analytical sample (n = 4,151)
Gender	Female	59	71	60
	Male	40	27	39
	Other/unknown	1	1	1
Race/ethnicity	Asian	10	14	9
	Black / African American	12	12	12
	Hispanic/Latinx	13	14	12
	Other ^b	5	5	5
	White	56	51	57
	Missing	4	4	5
Family income	Less than \$36,000	4	9	4
	\$36,000 to \$100,000	12	29	12
	More than \$100,000	27	45	27
	Missing	57	18	57
Caregiver education^c	No college	7	7	7
	Some college	9	10	9
	College or higher	55	54	54
	Missing	29	29	30
High school GPA	3.5 and above	77	87	78
	3.4 and below	22	12	21
	HSGPA missing	1	1	1

^a Some percentages in the table do not add up to 100% due to rounding. ^b Other races/ethnicities include Native American, Native Hawaiian / other Pacific Islander, and two or more races/ethnicities. ^c Caregiver (parent/guardian) education levels: no college = less than high school or high school graduate / GED; some college = business/technical school, certificate program, some college with no degree or certificate, or associate's degree (2 year); college or higher = bachelor's degree (4 year) or higher.

Regression Results Tables

Table A2. Weighted Logistic Regression Coefficients for Predicting Dual Enrollment Participation Using School Policy Items

Independent variable	Estimate	Standard error	z (Wald statistic)	p
(Intercept)	1.06	0.28	3.72	<0.01
Both credits: no ^a	-1.95	0.24	-8.11	<0.01
Both credits: it depends on the course	-0.47	0.12	-4.02	<0.01
Both credits: I don't know	-1.33	0.11	-11.65	<0.01
Minimum GPA: no ^b	-0.08	0.11	-0.72	0.47
Minimum GPA: it depends on the course	-0.02	0.16	-0.11	0.92
Minimum GPA: I don't know	-0.13	0.09	-1.46	0.14
Grade level to begin: Grade 11 ^c	0.18	0.23	0.76	0.45
Grade level to begin: Grade 10	0.26	0.24	1.11	0.27
Grade level to begin: Grade 9	0.20	0.24	0.85	0.39
Grade level to begin: I don't know	-0.41	0.23	-1.77	0.08
Tuition: yes, with a discount	0.43	0.11	3.97	<0.01
Tuition: yes, with standard college tuition rates	-0.23	0.17	-1.35	0.18
Tuition: I don't know	-1.29	0.09	-14.45	<0.01
Black	-0.25	0.16	-1.53	0.13
Hispanic/Latinx	-0.30	0.16	-1.86	0.06
Other race/ethnicity	0.80	0.22	3.58	<0.01
White	0.07	0.13	0.51	0.61
Race/ethnicity missing	-0.38	0.21	-1.81	0.07
Grade 12	0.20	0.09	2.17	0.03
Male	-0.25	0.08	-3.25	<0.01
Other gender or gender unknown	0.77	0.45	1.74	0.08
Moderate income (\$36,000 to \$100,000)	-0.13	0.13	-0.96	0.34
Low income (Less than \$36,000)	-0.08	0.21	-0.37	0.71
Family income missing	-0.04	0.09	-0.41	0.69
Caregiver education: some college	0.36	0.14	2.55	0.01
Caregiver education: no college	0.24	0.16	1.54	0.12
Caregiver education missing	0.04	0.09	0.45	0.65

^a Three dummy variables and a reference group were used to represent four levels of whether students earned both high school and college credits for taking dual enrollment courses at their high school: yes (reference group), no, it depends on the course, and I don't know. ^b Three dummy variables and a reference group were used to represent four levels of whether a high school had a minimum GPA for students to enroll in dual enrollment courses: yes (reference group), no, it depends on the course, and I don't know. ^c Four dummy variables and a reference group were used to represent five grades at which students were allowed to begin taking dual enrollment courses: Grade 9, Grade 10, Grade 11, Grade 12 (reference group), and I don't know. ^d Three dummy variables and a reference group were used to represent four levels of

whether students had to pay tuition for taking dual enrollment courses at their high school: no tuition cost (reference group), yes with a discount, yes with standard college tuition rates, and I don't know.

Table A3. Weighted Regression Coefficients for Predicting ACT Composite Score^a

Independent variable	Estimate	Standard error	<i>t</i>	<i>p</i>
(Intercept)	25.10	0.46	53.99	<0.01
Dual enrollment participation	1.30	0.18	7.26	<0.01
Other college credit-bearing courses ^b	4.52	0.20	22.95	<0.01
Black	-6.56	0.40	-16.54	<0.01
Hispanic/Latinx	-4.32	0.39	-10.95	<0.01
Other race/ethnicity	-2.14	0.46	-4.67	<0.01
White	-2.59	0.32	-8.18	<0.01
Race/ethnicity missing	-0.43	0.54	-0.79	0.43
Grade 12 ^c	-0.48	0.21	-2.24	0.03
Male	1.11	0.18	6.26	<0.01
Other gender or gender unknown	-0.36	1.04	-0.35	0.73
Moderate income (\$36,000 to \$100,000)	-1.36	0.27	-5.09	<0.01
Low income (Less than \$36,000)	-2.82	0.44	-6.41	<0.01
Family income missing	-1.25	0.20	-6.16	<0.01
Caregiver education: some college	-1.49	0.31	-4.82	<0.01
Caregiver education: no college	-2.71	0.37	-7.26	<0.01
Caregiver education missing	-0.85	0.21	-4.10	<0.01
Dual enrollment satisfaction: satisfied ^d	-0.25	0.24	-1.06	0.29
Dual enrollment satisfaction: somewhat satisfied	0.64	0.26	2.48	0.01
Dual enrollment satisfaction: dissatisfied (somewhat-very)	0.78	0.31	2.46	0.01

^a The adjusted R^2 for this model was 0.33. ^b This variable was based on students' responses to the question "What college credit-bearing courses have you taken or will you take in high school?" If AP, IB, or other courses were selected, this variable was coded as 1. Otherwise, it was coded as 0. ^c Grade 11 was the reference group for grade level. ^d Students' satisfaction with the type of dual enrollment courses offered at their school/district was used as a covariate. Three dummy variables and a reference group were used to represent four satisfaction levels: very satisfied (reference group), satisfied, somewhat satisfied, and dissatisfied (somewhat dissatisfied, dissatisfied, and very dissatisfied selections were combined due to low *n* counts).

Table A4. Weighted Logistic Regression Coefficients for Predicting Accurate Self-Evaluation of Academic Preparedness (English)

Independent variable	Estimate	Standard error	z (Wald statistic)	p
(Intercept)	1.99	0.38	5.28	<0.01
Dual enrollment participation	0.58	0.13	4.39	<0.01
Other college credit-bearing courses	1.31	0.13	9.68	<0.01
Black	-2.07	0.34	-6.04	<0.01
Hispanic/Latinx	-1.40	0.35	-4.00	<0.01
Other race/ethnicity	-1.40	0.39	-3.55	<0.01
White	-0.58	0.33	-1.75	0.08
Race/ethnicity missing	0.77	0.70	1.09	0.27
Grade 12	0.24	0.15	1.61	0.11
Male	0.41	0.14	2.98	<0.01
Other gender or gender unknown	0.84	1.16	0.72	0.47
Moderate income (\$36,000 to \$100,000)	-0.57	0.19	-3.03	<0.01
Low income (Less than \$36,000)	-1.00	0.25	-4.02	<0.01
Family income missing	-0.18	0.17	-1.09	0.28
Caregiver education: some college	-0.38	0.21	-1.85	0.06
Caregiver education: no college	-1.03	0.23	-4.50	<0.01
Caregiver education missing	-0.74	0.15	-4.84	<0.01

Table A5. Weighted Logistic Regression Coefficients for Predicting Accurate Self-Evaluation of Academic Preparedness (Math)

Independent variable	Estimate	Standard error	z (Wald statistic)	p
(Intercept)	0.80	0.24	3.30	<0.01
Dual enrollment participation	0.38	0.10	3.89	<0.01
Other college credit-bearing courses	0.97	0.10	9.50	<0.01
Black	-1.47	0.23	-6.51	<0.01
Hispanic/Latinx	-0.94	0.22	-4.18	<0.01
Other race/ethnicity	-0.34	0.28	-1.24	0.22
White	-0.49	0.20	-2.49	0.01
Race/ethnicity missing	0.49	0.35	1.38	0.17
Grade 12	-0.09	0.12	-0.82	0.41
Male	0.67	0.10	6.71	<0.01
Other gender or gender unknown	-1.18	0.51	-2.32	0.02
Moderate income (\$36,000 to \$100,000)	-0.47	0.14	-3.48	<0.01
Low income (Less than \$36,000)	-0.33	0.21	-1.55	0.12
Family income missing	-0.24	0.11	-2.15	0.03
Caregiver education: some college	-0.61	0.16	-3.86	<0.01
Caregiver education: no college	-0.54	0.20	-2.75	0.01
Caregiver education missing	-0.33	0.11	-2.95	<0.01

Table A6. Weighted Logistic Regression Coefficients for Predicting Accurate Self-Evaluation of Academic Preparedness (Reading)

Independent variable	Estimate	Standard error	z (Wald statistic)	p
(Intercept)	1.23	0.27	4.56	<0.01
Dual enrollment participation	0.34	0.10	3.28	<0.01
Other college credit-bearing courses	1.18	0.11	11.06	<0.01
Black	-1.49	0.25	-6.04	<0.01
Hispanic/Latinx	-0.86	0.25	-3.42	<0.01
Other race/ethnicity	-0.79	0.29	-2.72	0.01
White	-0.43	0.22	-1.95	0.05
Race/ethnicity missing	0.11	0.38	0.30	0.76
Grade 12	-0.21	0.12	-1.68	0.09
Male	0.13	0.10	1.26	0.21
Other gender or gender unknown	0.50	0.74	0.68	0.50
Moderate income (\$36,000 to \$100,000)	-0.53	0.15	-3.64	<0.01
Low income (Less than \$36,000)	-0.92	0.22	-4.22	<0.01
Family income missing	-0.25	0.12	-2.03	0.04
Caregiver education: some college	-0.19	0.17	-1.15	0.25
Caregiver education: no college	-0.48	0.20	-2.37	0.02
Caregiver education missing	-0.06	0.12	-0.53	0.60

Table A7. Weighted Logistic Regression Coefficients for Predicting Accurate Self-Evaluation of Academic Preparedness (Science)

Independent variable	Estimate	Standard error	z (Wald statistic)	p
(Intercept)	0.60	0.25	2.37	0.02
Dual enrollment participation	0.40	0.10	3.98	<0.01
Other college credit-bearing courses	1.11	0.11	10.38	<0.01
Black	-1.70	0.24	-7.11	<0.01
Hispanic/Latinx	-0.98	0.24	-4.11	<0.01
Other race/ethnicity	-0.38	0.29	-1.31	0.19
White	-0.52	0.21	-2.51	0.01
Race/ethnicity missing	0.11	0.34	0.32	0.75
Grade 12	0.15	0.12	1.27	0.21
Male	0.78	0.10	7.50	<0.01
Other gender or gender unknown	-0.05	0.55	-0.09	0.93
Moderate income (\$36,000 to \$100,000)	-0.52	0.14	-3.68	<0.01
Low income (Less than \$36,000)	-0.51	0.23	-2.28	0.02
Family income missing	-0.45	0.12	-3.86	<0.01
Caregiver education: some college	-0.20	0.17	-1.15	0.25
Caregiver education: no college	-0.83	0.21	-3.98	<0.01
Caregiver education missing	-0.34	0.12	-2.89	<0.01

Survey Instrument

The following are the survey items explored for this issue brief:

1. What college credit-bearing courses have you taken or will you take in high school? (Select all that apply.) Note: dual enrollment refers to students enrolled in high school taking college-level courses and possibly earning high school and college credits at the same time.
 - ☐ AP (i.e., Advanced Placement)
 - ☐ IB (i.e., International Baccalaureate)
 - ☐ Dual enrollment (also known as dual credit, concurrent enrollment)
 - ☐ Other (please describe) _____
 - ☐ None of above
2. Do students earn both high school and college credits for taking dual enrollment courses at your high school? (Scale: Yes; No; It depends on the course; I don't know)
3. Does your high school have a minimum GPA for students to enroll in dual enrollment courses? (Scale: Yes; No; It depends on the course; I don't know)
4. In which grade are students at your high school allowed to begin taking dual enrollment courses? (Scale: Grade 9; Grade 10; Grade 11; Grade 12; I don't know)
5. Do you have to pay tuition for taking dual enrollment courses at your high school? (Scale: No, no tuition cost; Yes, with a discount; Yes, with standard college tuition rates; I don't know)
6. In each of the following areas, indicate whether you have taken or will take dual enrollment courses. (Scale: Yes; No; Not offered)
 - English
 - Math
 - Social Studies (e.g., History, Geography, Psychology, Economics)
 - Natural Sciences (e.g., Physics, Biology, Chemistry)
 - Foreign Language
 - Arts
 - Other (please describe) _____

The following question (Q7) was displayed only to students who did not select “dual enrollment” in Q1.

7. Why do you not plan to take any dual enrollment courses? (Select all that apply)
 - ☐ I have never heard of dual enrollment courses
 - ☐ I do not think dual enrollment courses would help me prepare for college
 - ☐ Dual enrollment opportunities are not available in my school/school district

- ☐ I am not able to afford the cost of dual enrollment courses (e.g., course materials, transportation)
- ☐ I am taking or have taken other college credit-bearing courses (e.g., AP, IB)
- ☐ The dual enrollment course(s) I am interested in taking are not available in my school/school district
- ☐ I do not meet the requirements (e.g., minimum GPA) for taking dual enrollment courses
- ☐ My family does not support me taking dual enrollment courses
- ☐ None of my friends are taking or plan to take dual enrollment course(s)
- ☐ Other reasons (please describe)

The following questions (Q8–Q12) were displayed only to students who selected “dual enrollment” in Q1.

8. How many dual enrollment course(s) have you taken during high school? (Select "0" if you plan to take dual enrollment class but have not started yet) (Scale: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; More than 15)
9. Where have you been taking or plan to take the dual enrollment courses? (Select all that apply)
 - ☐ In high school
 - ☐ On college campus
 - ☐ Online
10. Why do you choose to take dual enrollment courses? (Select all that apply)
 - ☐ I want to earn college credits before entering college
 - ☐ Dual enrollment allows me to earn college credits at low or no cost
 - ☐ Dual enrollment courses will better prepare me for college
 - ☐ I want to challenge myself academically
 - ☐ My high school gives me extra points toward my GPA if I take dual enrollment courses
 - ☐ Dual enrollment courses will help demonstrate my academic achievement in college admissions
 - ☐ These courses are more related to my career goals compared to high school courses
 - ☐ I want to sample college courses that I find interesting
 - ☐ My family wants me to take dual enrollment courses
 - ☐ My friends are taking or plan to take dual enrollment course(s)
 - ☐ Other reasons (please describe) _____
11. What is the biggest challenge you have had or think you will have when taking dual enrollment courses? (Open-ended)
12. Overall, how satisfied or dissatisfied are you with the **quality** of the dual enrollment courses you took or are taking? (Scale: Very satisfied; Satisfied, Somewhat satisfied; Somewhat dissatisfied; Dissatisfied; Very dissatisfied)

13. Overall, how satisfied or dissatisfied are you with the **types** of dual enrollment courses offered at your school/district? (Scale: Very satisfied; Satisfied, Somewhat satisfied; Somewhat dissatisfied; Dissatisfied; Very dissatisfied; No dual enrollment course offered)
14. To what extent do you think it is fair or unfair to include college credit-bearing course taking in the college admissions process? (Scale: Very fair; Fair; Somewhat fair; Somewhat unfair; Unfair; Very unfair)
15. Do you think you will have at least a 50% chance of earning a B or higher grade in the following courses, which are typically taken in the first year of college? (Scale: Yes; No)
- English Composition I
 - College Algebra
 - A humanities course (e.g., American History, Other History, Psychology, Sociology, Political Science, Economics)
 - Biology
16. How confident are you that you will be successful in college? (Scale: Very confident; Confident; Somewhat confident; Slightly confident; Not confident)
17. How could your school/school district better support students interested in taking dual enrollment courses? (Open-ended)



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