

Update on Dual Credit Programs

Enrollment and Credit Attainment



Authorizing Legislation:

[RCW 28A.600.280: Dual credit programs](#)

Education Research and Data Center

Forecasting and Research

Office of Financial Management

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About the ERDC

The research presented here uses data from the Education Research and Data Center, located in the Washington State Office of Financial Management. ERDC works with partner agencies to conduct powerful analyses of learning that can help inform the decision-making of Washington legislators, parents, and education providers. ERDC's data system is a statewide longitudinal data system that includes de-identified data about people's preschool, educational and workforce experiences.

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Executive Summary

Dual credit courses give high school students the potential to earn both college and high school credit. There are six dual credit programs in Washington state. Table 1 describes each of these programs, as well as provides information about how students participate in the courses and become eligible for and attain postsecondary credit.

This report examines dual credit participation and high school and postsecondary credit attainment, but it is important to note that access to different types of dual credit courses varies across Washington state and that schools with high rates of low-income and minority students have more limited access, which may impact participation rates.¹ For College Preparatory Programs with Exams (CPPE) dual credit courses (defined below), a student must opt to take an exam and get a specific score on the exam to be eligible to earn postsecondary credit. The different dual credit course options and varied access to these opportunities across Washington state must be considered when interpreting the results of this report.

This report fulfills the reporting requirement in Chapter 75, Laws of 2022 (Substitute House Bill 1867). It was previously assigned to the Office of Superintendent of Public Instruction in RCW 28A.600.280. The required components of the report include:

- a) Data about student participation rates, award of high school credit, award of postsecondary credit at an institution of higher education, and academic performance for each dual credit program.
- b) Data on the total unduplicated head count and percentage of students enrolled, students who have been awarded high school credit, and students who have been awarded postsecondary credit at an institution of higher education, in at least one dual credit program course.
- c) Disaggregation of student participation rates and credit attainment by dual credit program, by the student categories and subcategories described in RCW [28A.300.042](#) (1) and (3), and by gender, students who are dependent² or homeless, and students who are multilingual/English learners.

The key findings of this report support previous findings around dual credit programs in Washington. This report also expands our understanding of dual credit enrollment and achievement by introducing new analyses of intersectional/multiple identities and detailed race and ethnicity data.

¹ [Increasing Equitable Access, Participation, and Success for Students in Dual Credit Legislative Report from the Dual Credit Task Force](#). December 2021, Washington Student Achievement Council.

Key findings include:

1. As has been documented in prior reports by OSPI, WSAC, SBCTC, and others, students in the 2017 cohort who are low-income participate in dual credit courses at lower rates than higher-income students, and Black, Hispanic, Native American and Pacific Islander students participate at lower rates than White and Asian students.
2. Data limitations impact ERDC's ability to accurately report on postsecondary credit attainment.
3. Analysis of dual credit participation by the expanded Asian race and ethnic categories confirms that there is variation in student experiences within the Asian student population and supports the continued analytical practice of disaggregating racial groups when possible.

Finally, per the requirements of Chapter 75, Laws of 2022, this report offers recommendations on future data reporting and disaggregation of dual credit data. Below is an overview of the recommendations, with additional details available in Section VII, page 53.

- Focus on improving the quality and completeness of existing data collections and do not require additional categories of data reporting and disaggregation.
- Do not require additional data collection or reporting related to the application of postsecondary credits earned through a dual credit program towards postsecondary credentials and degrees.
- Include in future reports the comparison of postsecondary credential and degree attainment between students who did or did not participate in a dual credit program, and between students who participated in different dual credit programs.
- Use a dashboard format for some of the content covered in this report to allow for easier comparisons across student groups and dual credit programs.
- Continue to use the expanded race and ethnic categories within the context of dual credit reporting and continue to support efforts to better understand how to collect and analyze student data related to gender, race, and ethnicity.
- The 2023 Dual Credit report should include: (1) a dual credit dashboard; (2) a case study to understand challenges in collecting data on the use of dual credit courses to meet certificate and degree requirements; (3) an update on progress to address accuracy and completeness of postsecondary credit attainment data; (4) recommendations for different measures of academic achievement; and (5) list of prioritized research questions that will address specific topics. This list will be developed in partnership with our named partners in RCW 28A.600.280 and the education committees of the legislature.

Dual Credit Overview

Dual credit courses give high school students the potential to earn both college and high school credit. There are six dual credit programs in Washington state. Table 1 describes each of these programs, as well as provides information about how students participate in the courses and become eligible for and attain postsecondary credit.

This report examines dual credit participation and high school and postsecondary credit attainment, but it is important to note that access to different types of dual credit courses varies across Washington state and that schools with high rates of low-income and minority students have more limited access, which may impact participation rates.³ For CPPE dual credit courses (defined below), a student must opt to take an exam and get a specific score on the exam to be eligible to earn postsecondary credit. The different dual credit course options and varied access to these opportunities across Washington state must be considered when interpreting the results of this report.

Table 1: Description of the Dual Credit Programs Included in this Report

Dual Credit Type	Dual Credit Program Description	Postsecondary Credit Attainment
I. Concurrent enrollment / course based dual credit	The Running Start program (RS) is open to 11 th and 12 th grade students to take college courses at WA community and technical colleges and some 4-year baccalaureate institutions.	High school and postsecondary credit are earned when the student completes the course for credit and, in the case of CiHS the fee is paid. The credit and grades students earn are added to their high school and college transcripts.
	The College in the High School Program (CiHS) is open to 9 th -12 th grade students to take courses taught at the high school, by high school teachers with college curriculum and textbooks, and oversight by college faculty and staff.	

³ [Increasing Equitable Access, Participation, and Success for Students in Dual Credit Legislative Report from the Dual Credit Task Force](#). December 2021, Washington Student Achievement Council.

Dual Credit Type	Dual Credit Program Description	Postsecondary Credit Attainment
II. College Preparatory programs with Exams (CPPE)	Advanced Placement (AP), Cambridge International (CI), and International Baccalaureate (IB) are high school courses, taught by high school teachers, at the high school for which students may earn college credit through recognized standardized exams. Taking the standardized exam is voluntary, but necessary if a student wants to earn college credit.	Colleges determine the type and amount of credit earned based on the exam and the exam score. Generally, students must take the exam and earn a score of '3' or better on the Advanced Placement (AP) test; a '4' or better on the International Baccalaureate (IB) exam; or an 'E' or better on the Cambridge International (CI) Program exam.
III. CTE Dual Credit	High school students can take CTE Dual Credit courses that integrate academics with technical skill development to help prepare them for advanced education and careers related to professional-technical occupations. This program helps students transition from high school into postsecondary professional-technical programs. Courses are taught by high school teachers at the high schools but they are a cooperative effort between K-12 schools, community and technical colleges, and the community.	Credit attainment requirements vary among the CTE DC articulation agreements between school districts and community and technical colleges. Students must meet the minimum grade level for a career and technical education (CTE) dual credit course that is offered at the high school or skill center and has an articulation agreement in place. Districts and colleges vary in college credit transcription. In some cases, credits are automatically awarded and transcribed upon student attainment of a qualifying end-of-course grade. Other programs require students to submit a formal request for credits to be added to their transcript.

Purpose of this Report

The benefits of dual credit courses have been well documented in Washington, most recently in the [2021 Dual Credit Task Force report](#) published by the Washington Student Achievement Council (WSAC). These benefits include higher rates of college enrollment, persistence, and completion for students who participate in dual credit. Further, inequities in access and participation in dual credit courses by low-income students, students of color and other marginalized groups such as students experiencing homelessness and students in foster care are well established⁴. As a result of previous research and focus on dual credit, there have been several policy recommendations,⁵ strategies to address inequities,⁶ and an intentional focus on consistent data and analysis, including annually updated data dashboards to track dual credit participation and monitor inequities.⁷

Building on previous work, this report focuses on addressing the requirements in [RCW 28A.600.280](#), while also providing additional student group analysis. This report answers the below questions by following a **cohort of students** that includes **all** Washington public high school students who were expected to graduate in 2017 and looking both backwards at their high school dual credit participation and forward to examine postsecondary credit attainment.

- **What are student participation (enrollment) rates in dual credit programs?**
- **What is the total number and percentage of students who have been awarded high school credit in dual credit courses?**
- **What is the total number and percentage of students who have been awarded postsecondary credit at an institution of higher education in at least one dual credit program course?**
- **Can detailed race/ethnicity data provide further insights into examining student dual credit enrollment?**

Finally, this report identifies recommendations that focus on opportunities for collaboration around refinements to current data collections that would position Washington state to better understand the impact of dual credit course enrollment and achievement on future student outcomes.

⁴ [Home - Washington State Report Card \(ospi.k12.wa.us\)](#), [PFL_CaseStudy-DualCredit_2.2022-FINAL.pdf \(partnership4learning.org\)](#)

⁵ [2021-12-Dual-Credit-Legislative-Report.pdf \(wa.gov\)](#).

⁶ [Dual Credit Programs | OSPI \(www.k12.wa.us\)](#)

⁷ [Home - Washington State Report Card \(ospi.k12.wa.us\)](#)

Data and Analytical Approach

Data Sources. The data for this report came from the ERDC P20W data warehouse. This data warehouse links administrative records from several contributing education state agencies. Data sources for this report include:

- Office of Superintendent of Public Instruction (OSPI): Comprehensive Education Data and Research System (CEDARS) — For data on enrollment and high school completion for AP, IB, CI, CiHS and CTE-Dual Credit, average final grade point average, student characteristics and K-12 program participation.
- Washington State Board for Community and Technical Colleges (SBCTC) — For data on credits earned in a CTC for CiHS and Running Start; and enrollment and high school completion for Running Start.
- Public Centralized Higher Education Enrollment System (PCHEES) housed at the Office of Financial Management (OFM) — For data on enrollment and completion for Running Start and credit earning for CiHS at selected Washington public 4-year institutions.

What is not included in this report:

- Dual credit participation or postsecondary attainment at out-of-state institutions or private colleges or at the Northwest Indian College
- Dual credit programs at technical high school programs at Lake Washington Institute of Technology, Bates Technical College, and Clover Park Technical College
- Dual credit programs at private high schools

Cohort Description. The group of students that is followed over time and included in the analysis for this report includes *all* Washington public high school students who were expected to graduate in 2017⁸ (total = 81,438 students). Most of the students in this group graduated on time (about 80%), although some dropped out or graduated early or late. This analysis includes students with an expected graduation year of 2017 regardless of students' final status. This report refers to this group of students as "the 2017 cohort."

Analysis. At the request of the Legislature, the data presented in this report is disaggregated by the following student characteristics or program participation categories: 1) Gender; 2) Students who are dependent pursuant to chapter 13.34 RCW; 3) Students who are homeless as defined in

⁸ This is defined as students with graduation requirements in the year of 2017. Students are expected to meet the requirements of graduation that are in place for their expected graduation year. For example, a student entering 9th grade in 2014 would be expected to meet the graduation requirements for the class of 2018 even if they took longer or fewer than 4 years to graduate.

RCW 43.330.702; and 4) Multilingual/English learners who are in the Transitional Bilingual Instruction Program (TBIP). Beyond the legislative request, ERDC is also reporting the dual credit measures by 1) Race and gender; 2) Race and income; 3) Income and gender; 4) Students receiving Special Education; 5) Students with a 504 Plan; and 6) Students in the Migrant Education Program. ERDC also reported enrollment data by disaggregated Asian student groups using OSPI's detailed race and ethnicity data. This report represents the first time ERDC has provided analysis using intersectional identities and disaggregated race and ethnicity data.

There are different ways to analyze data to understand the role of dual credit course participation in K-12 and the impact on postsecondary outcomes for students. Each of the education sectors report on their unique, sector-specific aspects of dual credit. However, ERDC is uniquely positioned to follow students over time and across different education sectors to understand dual credit access and participation (enrollment), completion of dual credit courses in Washington public K-12 schools, credit attainment in postsecondary institutions, and long-term student outcomes such as postsecondary retention or degree attainment.

This report uses an analytical approach that follows the 2017 cohort over time. It should be noted that this is different from the approach taken in OSPI's annual reports to the Legislature on dual credit.⁹ OSPI's prior reports looked at a specific school year and identified all students in that school year who participated in dual credit courses. This "annual snapshot" approach allows for monitoring school and student performance and enrollment in dual credit in a timely manner. However, it is not suited to following students over time (a longitudinal approach) to understand the role of dual credit as students move from high school into postsecondary education. Since the longitudinal approach covers student course-taking throughout their high school career as opposed to just one year (in the snapshot approach), the enrollment rates in this report will typically be higher than those reported in OSPI's annual reports.

Programs. The following dual credit programs are included in this report: 1) Running Start; 2) College in the High School (CiHS); 3) AP/IB/Cambridge combined;¹⁰ and 4) CTE Dual Credit. Additionally, each figure displays findings for Any Dual Credit (all 6 programs) and Any Dual Credit Except CTE (Running Start, College in the High School, and AP/IB/Cambridge). Because a student can enroll in multiple dual credit programs during their high school career, a student may be counted in more than one program. This means the summation across the different dual credit programs would exceed the count of unique students in the Any Dual Credit category.

⁹ [OSPI Reports to the Legislature | OSPI \(www.k12.wa.us\)](https://www.k12.wa.us/OSPI/Reports-to-the-Legislature)

¹⁰ Of the students who enrolled at any time in an AP, IB or Cambridge course, 86% enrolled in AP, 13% enrolled in IB and just 1% in Cambridge.

I. What are student enrollment rates in dual credit programs?

Figures 1-8 show enrollment rates for the 2017 cohort in the dual credit programs. The corresponding data tables with student counts can be found in Appendix A (see Tables A1-A5).

For each figure in this section, as well as the corresponding table, the numerator is the count of students in the specific student group who enrolled in one or more courses of the dual credit type and the denominator is ***all*** of the students in the specific student group in the 2017 cohort.

Formula to calculate all student enrollment rate:

Number of students in the 2017 cohort enrolled in one or more courses of the dual credit type

All students in the 2017 cohort

Example of formula to calculate specific student group enrollment rate:

Number of low-income students in the 2017 cohort enrolled in one or more courses of the dual credit type

All low-income students in the 2017 cohort

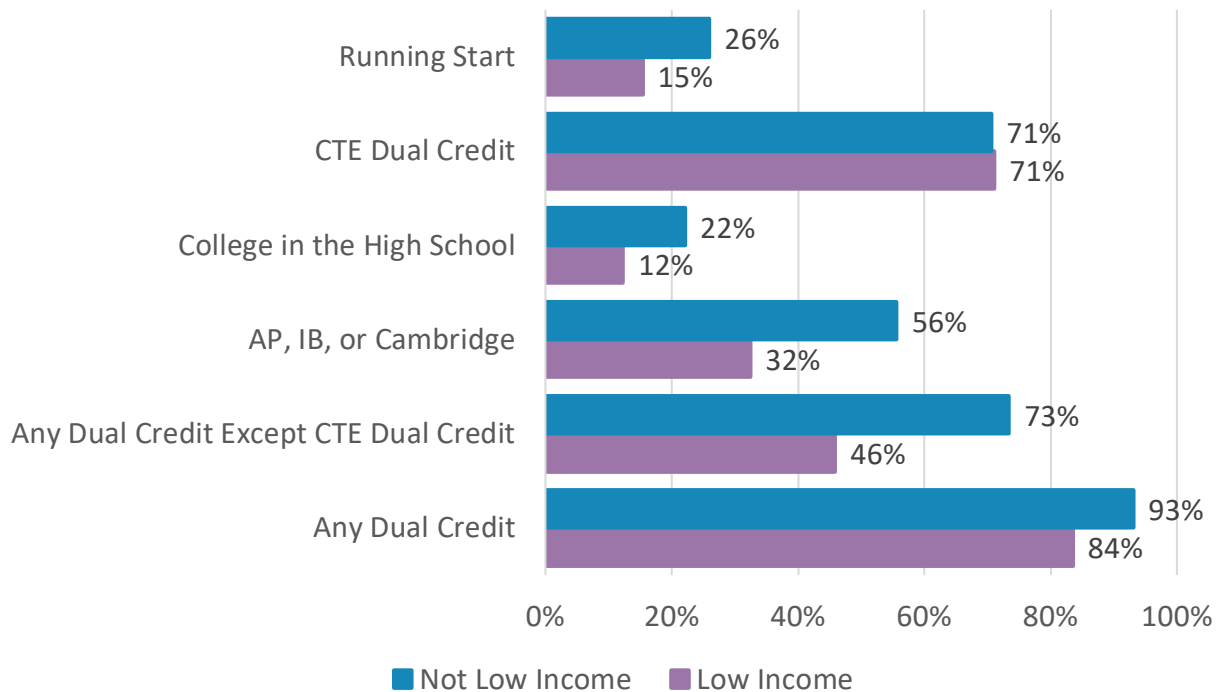
Key findings include:

- CTE Dual Credit has the highest participation rates regardless of income, gender, race, or participation in additional OSPI services.
- When CTE Dual Credit is removed from the analysis, it is possible to see more variation in program enrollment trends across student characteristics.
- Income and homelessness status continue to be factors in enrollment in Running Start, College in the High School, and AP, IB, or Cambridge classes.
- Male students have lower enrollment rates than female students in all programs except CTE Dual Credit.
- Asian students have higher enrollment rates in Running Start, College in the High School, and AP, IB, or Cambridge classes.
- Enrollment patterns for students receiving additional OSPI services (Special Education, 504 plans, Migrant Education, Multilingual Learners) suggests that CTE Dual Credit is the most common way for these groups of students to enroll in dual credit programs, followed by AP, IB, Cambridge, then CiHS, and finally Running Start.
- Students experiencing homelessness had lower rates of Dual Credit participation than low-income students, highlighting the importance of not just income, but also housing status for student success.

Income Level

Students with higher income levels were more likely to participate in any form of dual credit. While enrollment in CTE Dual Credit was comparable for students regardless of income, enrollment in the other three Dual Credit programs suggests enrollment differences based on income status. Reference Table A1 for student counts.

Figure 1: Enrollment in Dual Credit Programs by Income for the 2017 Cohort



Notes: Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type.

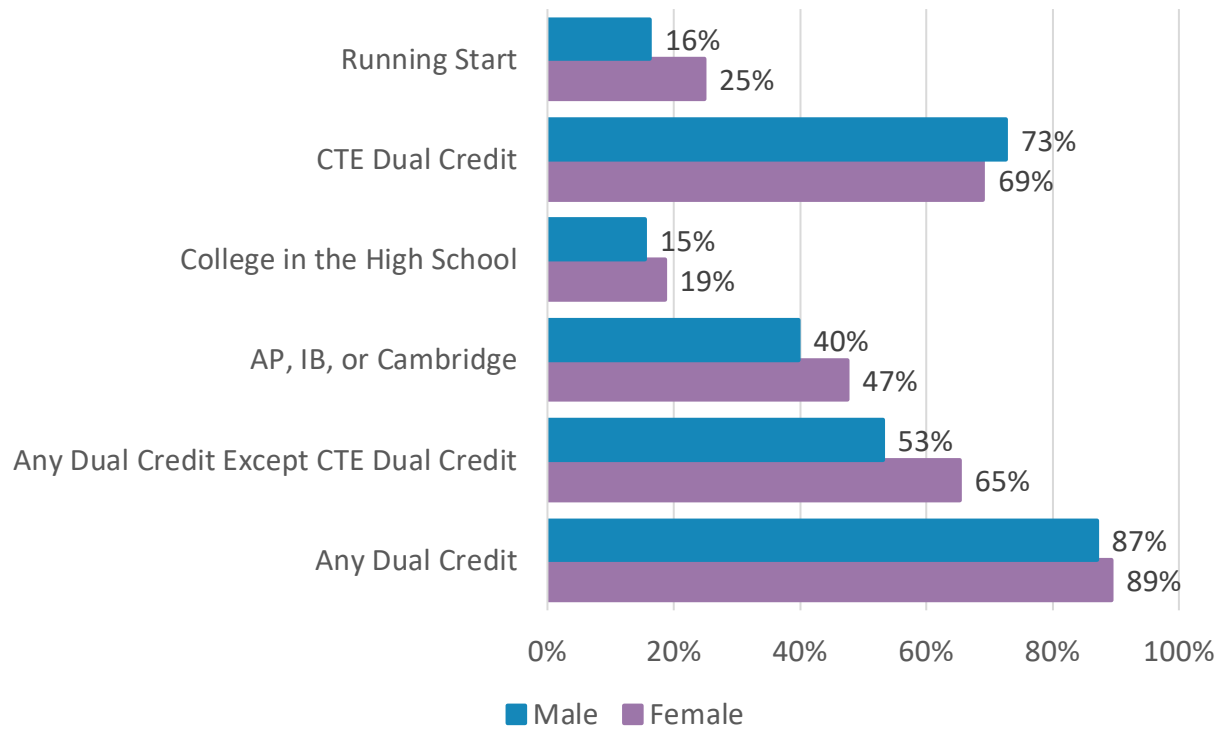
Denominators: All students in the cohort identified as either eligible or not eligible for free or reduced-price meals.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Gender

Females enroll in dual credit programs at a higher rate than males (89% compared to 87%). Females have higher enrollment rates in three out of the four programs, while males enroll in CTE Dual Credit courses at a slightly higher rate (See Figure 2). Reference Table A2 for student counts.

Figure 2: Enrollment in Dual Credit Programs by Gender for the 2017 Cohort



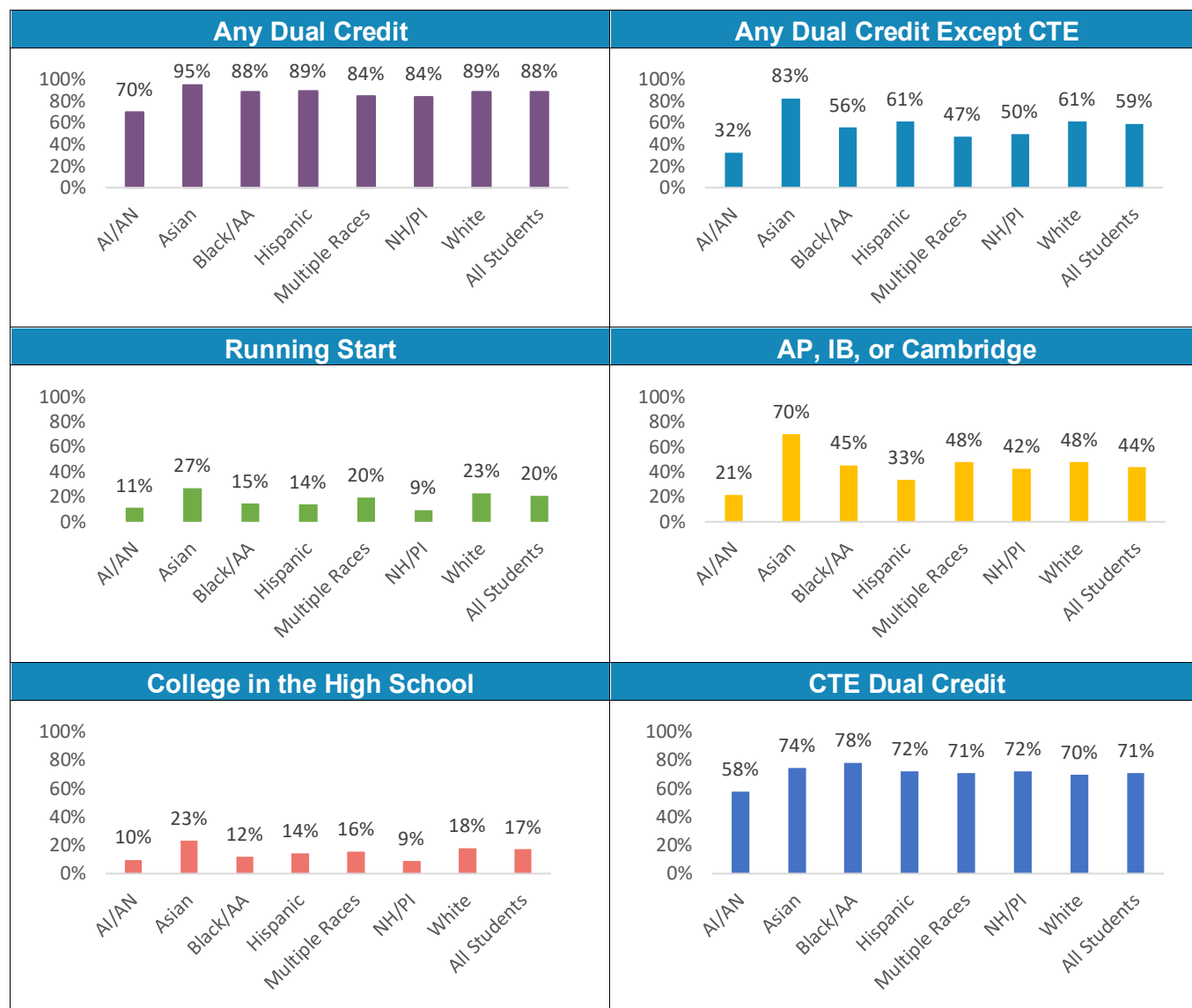
Notes: Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either male or female.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Race & Ethnicity

Different dual credit programs have different rates of enrollment by racial group (see Figure 3). Asian students have higher enrollment rates in Dual Credit Programs. Specifically, they lead the racial categories in enrollment rates in Running Start, AP, IB, or Cambridge, and College in the High School. Across racial categories, the CTE Dual Credit has the highest rate of enrollment. Reference Table A3 for student counts.

Figure 3: Enrollment in Dual Credit Programs by Race & Ethnicity for the 2017 Cohort



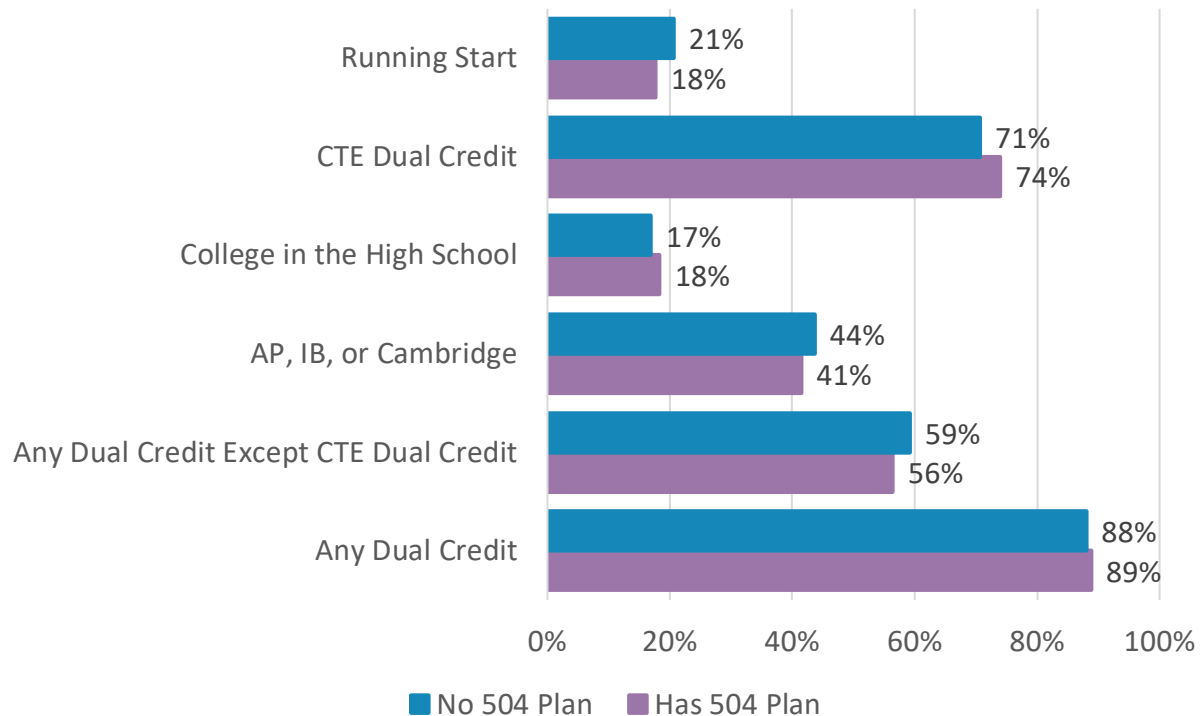
Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Numerators: all students in the race or ethnic category who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort in the race or ethnic category.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

OSPI Program Participation

504 Plan Status. For students who have 504 plans, the rate of participation in any dual credit program is comparable to students who do not have 504 plans. Slight differences in participation are revealed by looking at enrollment patterns by dual credit program type. For example, students with 504 plans are enrolled at a higher rate than students without 504 plans in College in the High School, but at a lower rate in Running Start. CTE Dual Credit has the highest rate of participation. Reference Table A4 for student counts.

Figure 4: Enrollment in Dual Credit Programs by 504 Plan Status for the 2017 Cohort



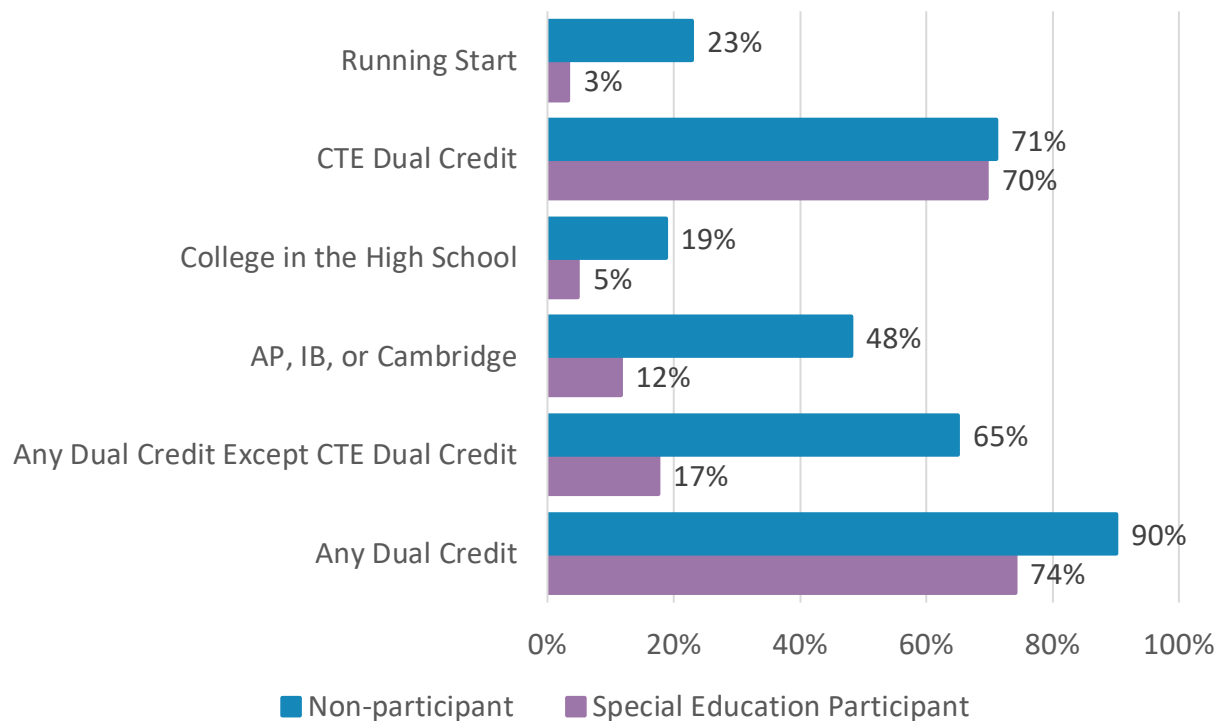
Notes: A student is defined as having a [504 plan](#) if they had a 504 plan at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type.

Denominators: All students in the cohort who are identified as either having or not having a 504 plan.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Special Education Status. For students that participate in special education, the rate of participation in any dual credit program is lower than students who do not receive special education services. Notable differences in enrollment trends exist for Running Start, CiHS, and AP, IB, or Cambridge programs. Enrollment in CTE Dual Credit is relatively comparable for students who do and do not receive special education services. Reference Table A4 for student counts.

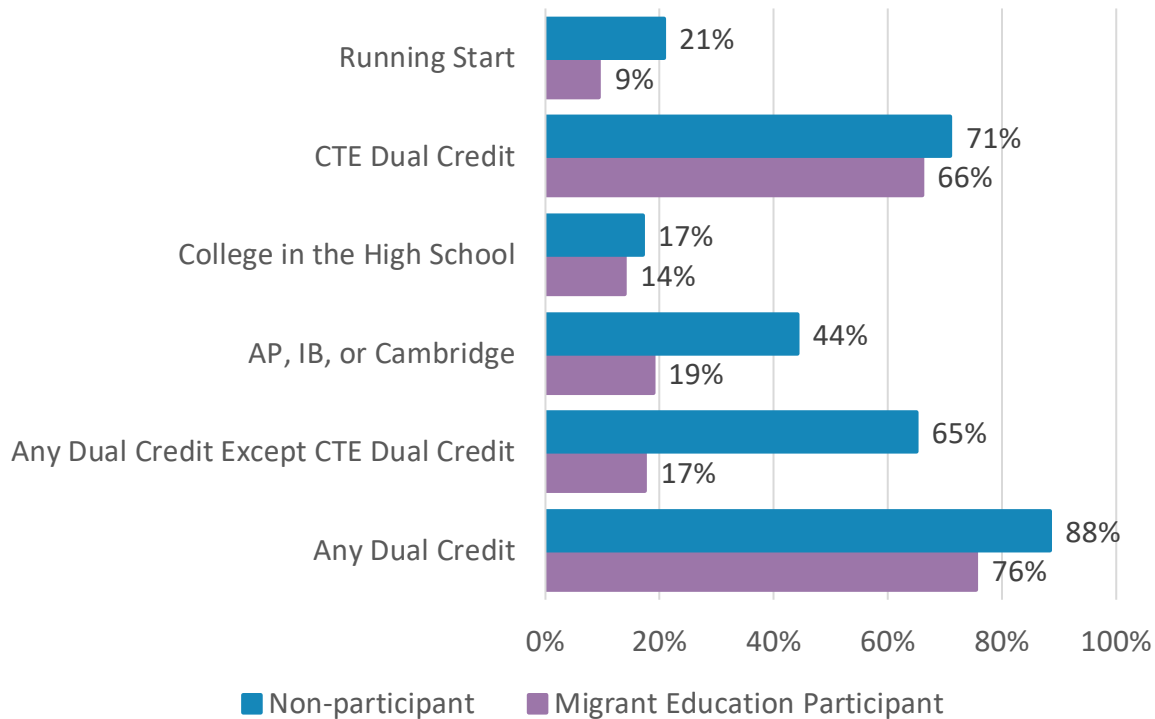
Figure 5: Enrollment in Dual Credit Programs by Special Education Status for the 2017 Cohort



Notes: A student is defined as participating in [Special Education](#) if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in Special Education. Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Migrant Education Program Status. Overall, students who participate in Migrant Education Programs (MEP) enroll in dual credit programs at a lower rate than students not in the program. Participation in MEP seems to relate to lower enrollment in the three non-CTE Dual Credit programs, whereas the rate of enrollment in CTE Dual Credit is much higher for students in MEP. Reference Table A4 for student counts.

Figure 6: Enrollment in Dual Credit Programs by Migrant Education Program Status for the 2017 Cohort



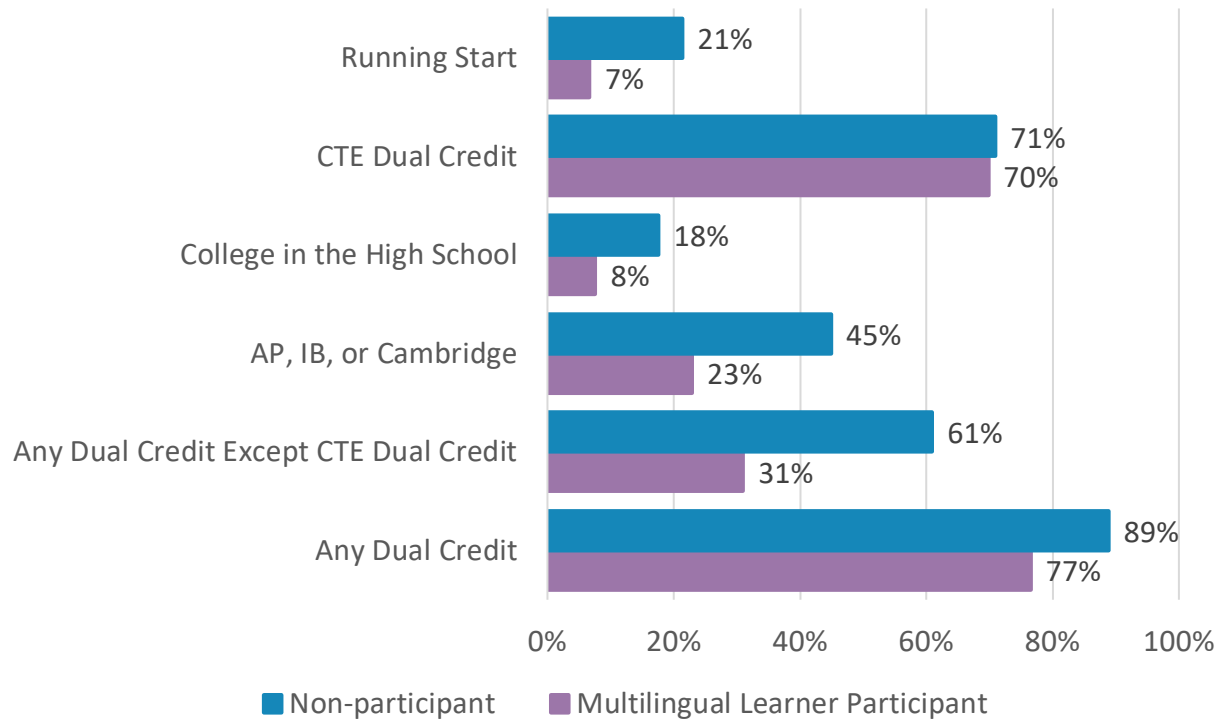
Notes: A student is defined as participating in [Migrant Education](#) if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Migrant Education program.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Multilingual Learner Status (participation in Transitional Bilingual Instructional Program).

Dual Credit program participation for Multilingual Learners is very comparable to participation rates for students in MEP. Again, students identified as Multilingual Learners have lower enrollment in the three non-CTE Dual Credit programs, whereas the rate of enrollment in CTE Dual Credit is much higher for Multilingual Learners. Reference Table A4 for student counts.

Figure 7: Enrollment in Dual Credit Programs by Multilingual Learner Status for the 2017 Cohort

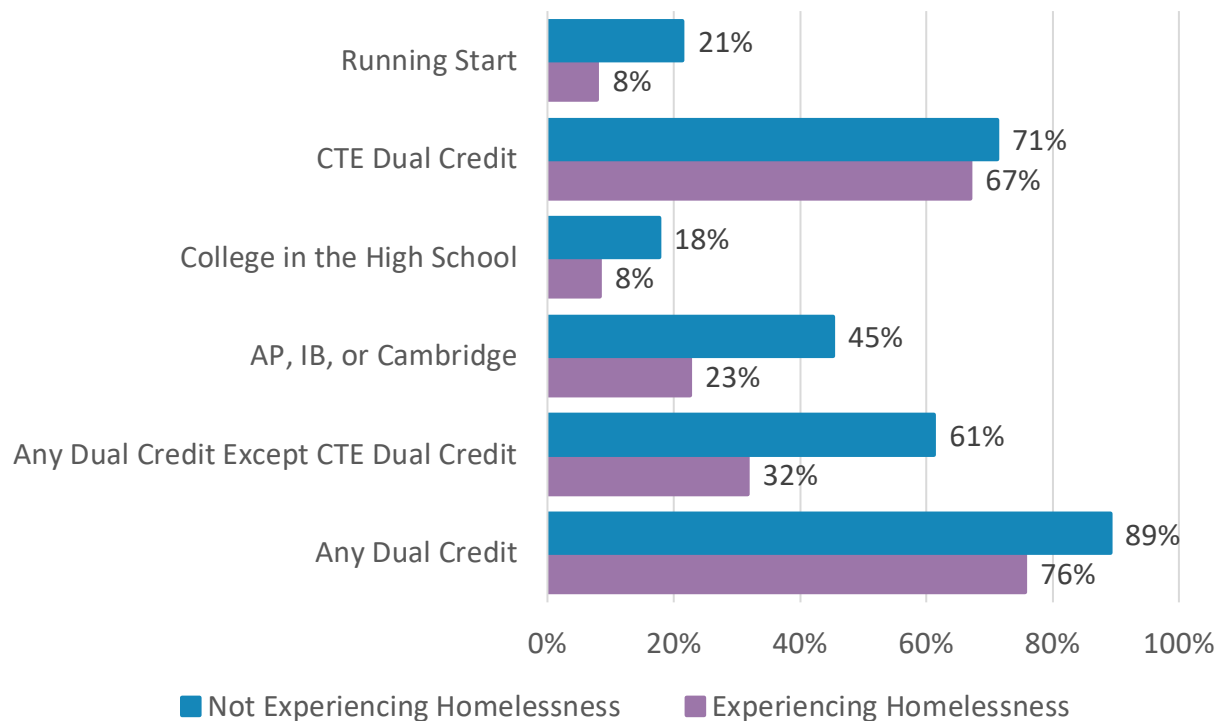


Notes: A student is defined as a multilingual learner in this report if they receive services through the [Transitional Bilingual Instructional Program](#), excluding students served under Title III services, at any time during their enrollment in grades 9 – 12 in a Washington public school.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Homelessness Status. Finally, homelessness status also may have an impact on Dual Credit program participation. Students experiencing homelessness enrolled in Dual Credit programs at a lower rate than students that were not experiencing homelessness. Once again, CTE Dual Credit offered the highest rates of dual credit enrollment for this student group. Running Start, CiHS, and AP, IB, Cambridge programs were less likely dual credit options for students experiencing homelessness. Reference Table A5 for student counts.

Figure 8: Enrollment in Dual Credit Programs by Homelessness Status for the 2017 Cohort



Notes: A student is identified as experiencing homelessness if they were identified in CEDARS data as homeless, [as defined in the McKinney-Vento Act, Section 725\(2\)](#), at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either experiencing homelessness or not.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

II: What can intersectional analysis tell us about enrollment trends in dual credit programs?

Figures 9-21 show enrollment rates in dual credit programs for the 2017 cohort. The corresponding data tables with student counts can be found in Appendix A (see Tables A6-A8). Different from Figures 1-8, these figures look at intersectional identities. For example, this type of analysis highlights differences in dual credit enrollment between low-income males and low-income females, or Black males compared to Black females.

For each figure and table in this section, the numerator is the count of students in the specific student group (e.g., low-income females) who enrolled in one or more courses of the dual credit type and the denominator is **all** of the students in the specific student group (e.g., low-income females) in the 2017 cohort.

Key findings include:

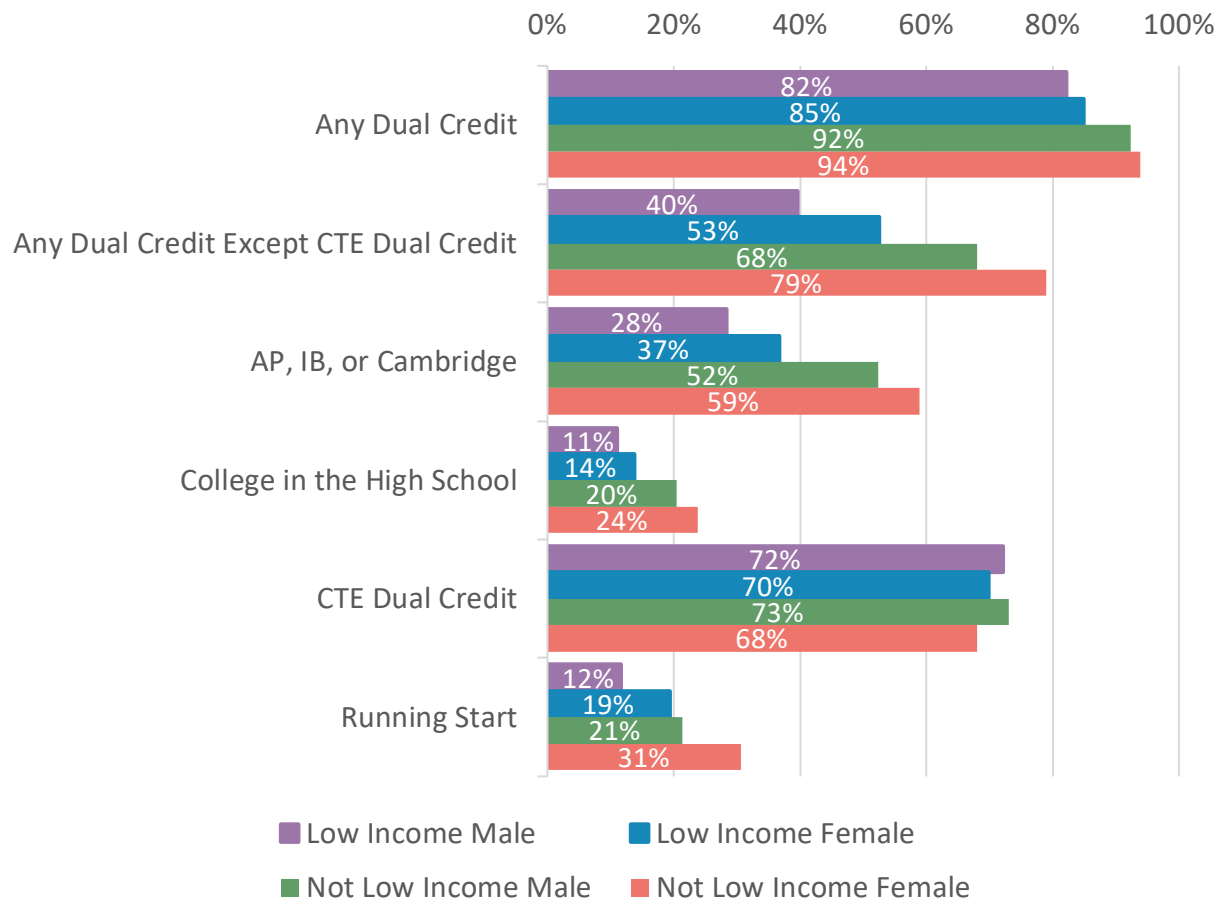
- Students hold multiple identities, and reporting by a single student identity in the absence of others does not capture the complexity necessary to understand student experience. When students with multiple marginalized identities interact with the education system, we may see different results and program implications. Therefore, providing analysis that looks at the ways that student identities intersect provides a more nuanced look at the data.
- Even though female students enroll at a higher rate than male students, when in combination with income, we see that enrollment rates for low-income females are less than that of high-income males.

Income by Gender Analysis

As previously mentioned, students with higher income levels were more likely to participate in any form of dual credit, and females enroll in dual credit programs at a higher rate than males. An intersectional analysis allows for an additional level of analysis. Figure 9 shows that not low-income, female students had an enrollment rate that was 12 percentage points higher than low-income male students (94% compared to 82%).

CTE Dual Credit had the highest enrollment rate for all intersectional groups. However, CTE Dual Credit enrollment had a different enrollment pattern when compared to the other three dual credit programs. CTE Dual Credit had the greatest rate of enrollment for not low-income males, followed by low-income males, low-income females, and then not low-income females.

Figure 9: Enrollment in Dual Credit Programs by Income & Gender for the 2017 Cohort



Notes: Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort.
 Notes: Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school.

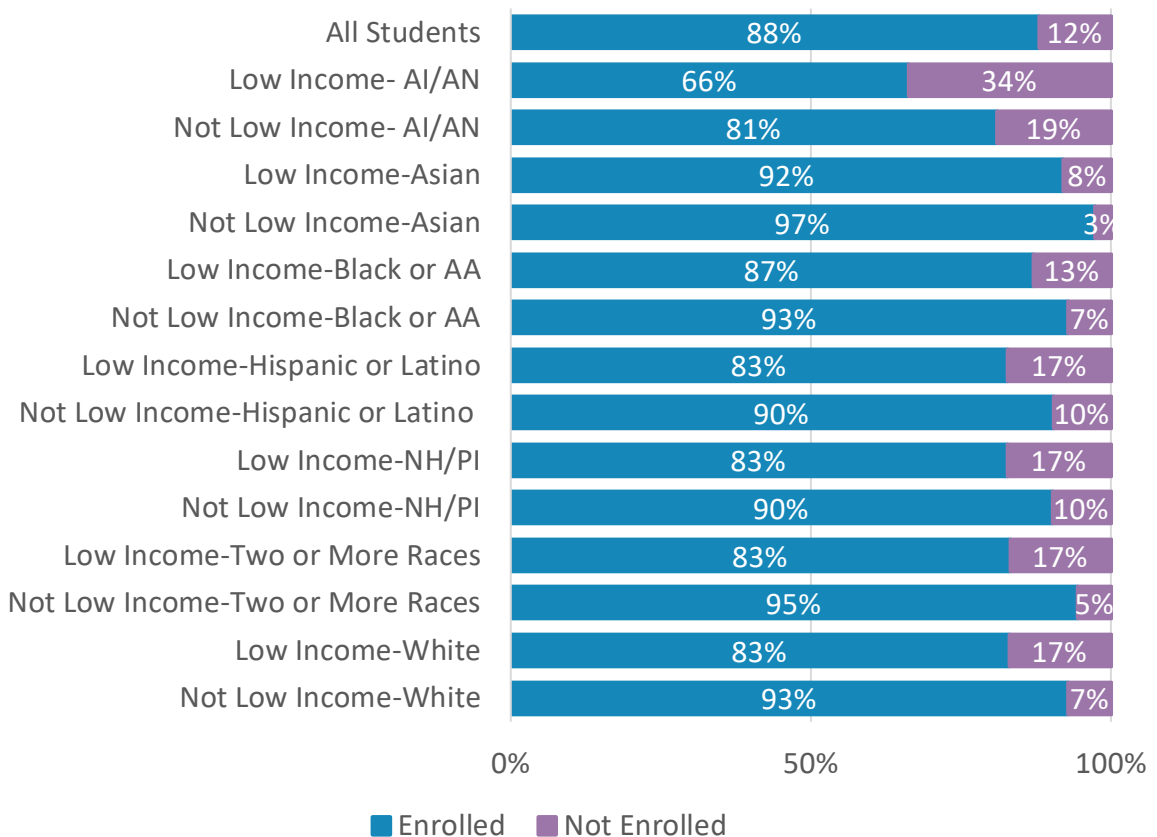
Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Income by Race Analysis

Any Dual Credit Program. While the analysis presented earlier identified differences in enrollment patterns across racial groups, looking at race in combination with income allows us to examine if the intersection of these two characteristics have an impact on dual credit enrollment trends.

Across each racial group, the low-income students had lower enrollment rates in dual credit programs. There is also variation in enrollment rates across racial groups when comparing within the low-income student groups (see Figure 10).

Figure 10: Enrollment in Any Dual Credit Program by Income & Race for the 2017 Cohort

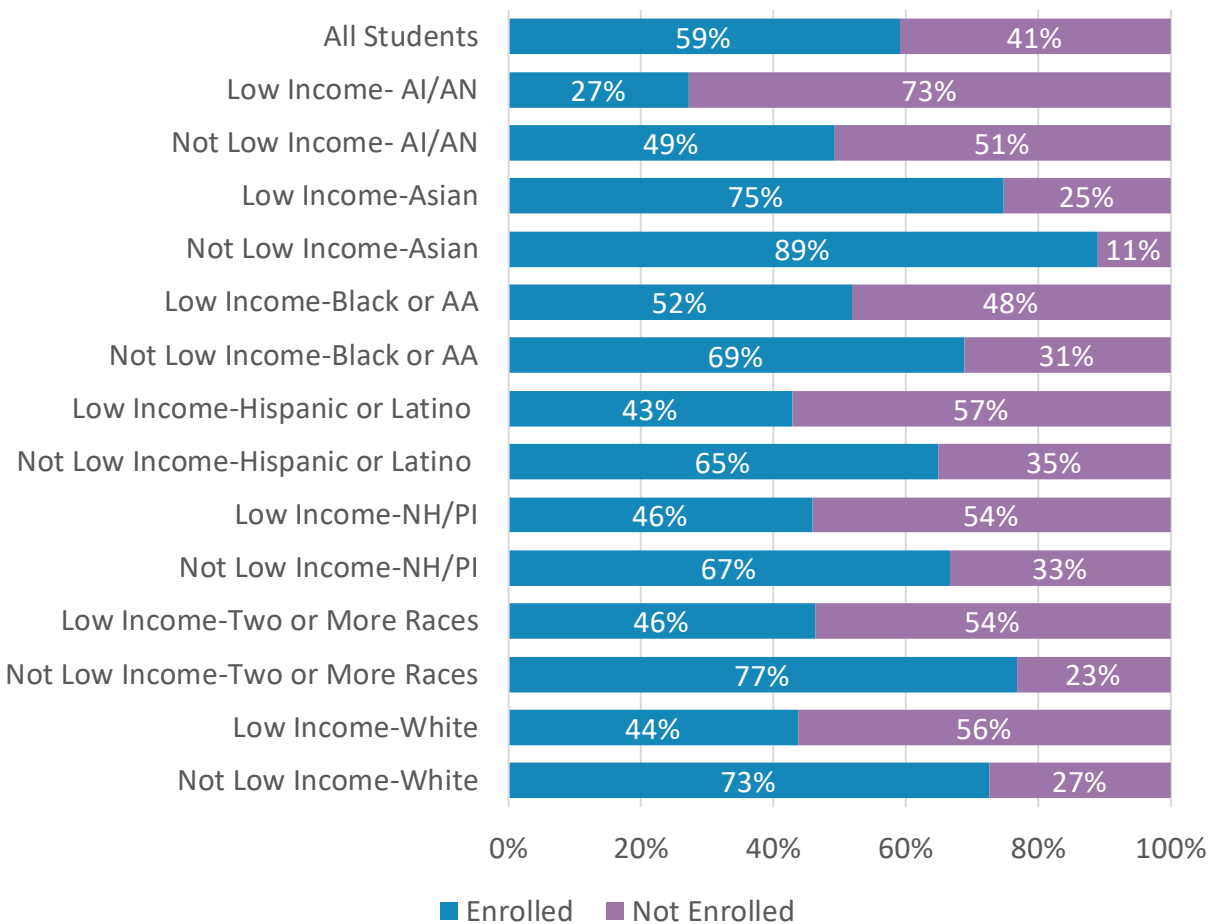


Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Any Dual Credit Program EXCEPT CTE. By removing CTE Dual Credit from the analysis, the enrollment patterns show more variability (see Figure 11). Again, low-income students enroll at a lower rate than not low-income students within their racial category. Income seems to have a particular impact on enrollment for White students and students of two or more races. The rate of enrollment is 29 percentage points lower for both White students and for students of two or more races. Alternatively, the rate of enrollment for Asian students (14 percentage points) and Black or African American students (17 percentage points) seems to be less impacted by income. However, a key difference between those groups is that the Asian student group overall has much higher enrollment compared to the Black or African American student group.

Figure 11: Enrollment in Any Dual Credit Program Except CTE by Income & Race for the 2017 Cohort

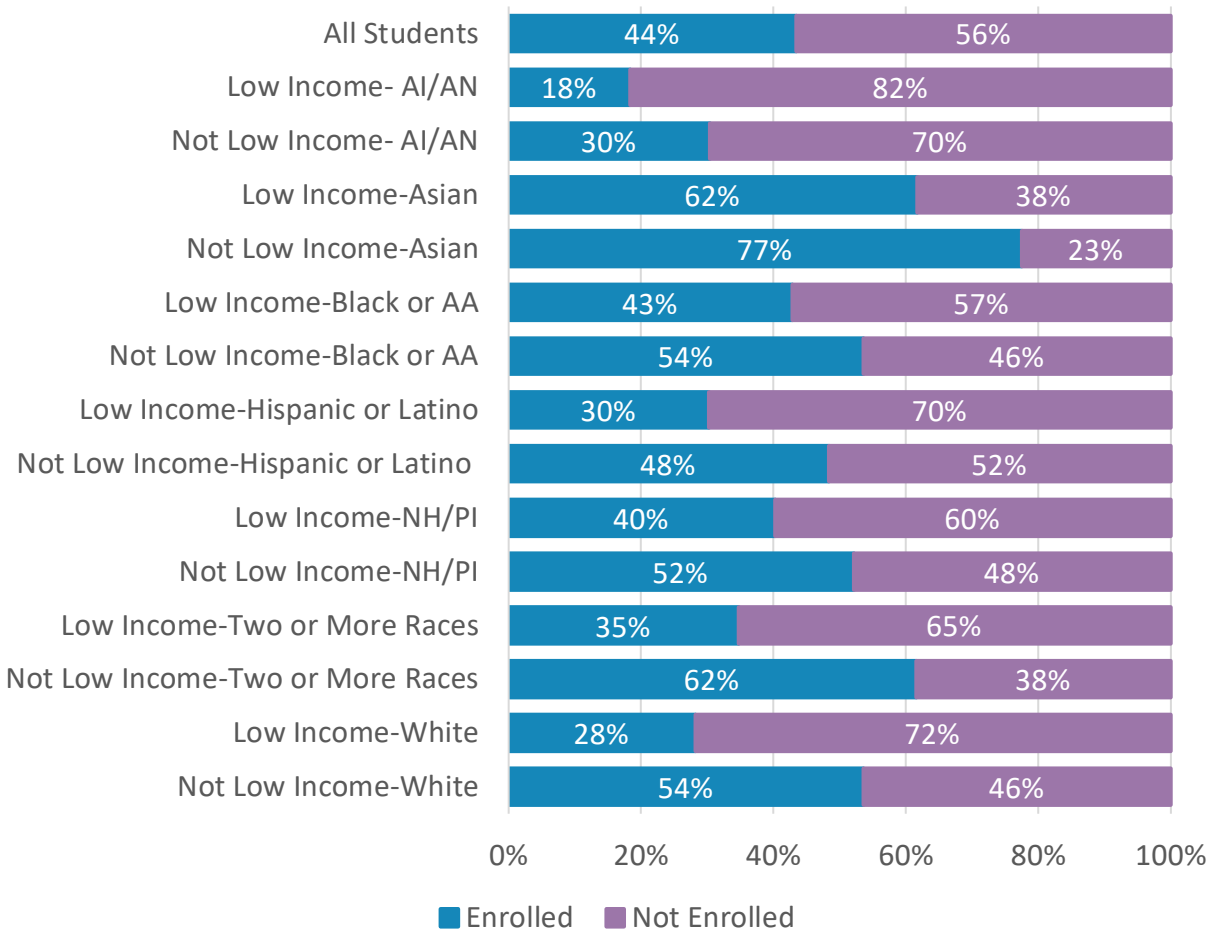


Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school.

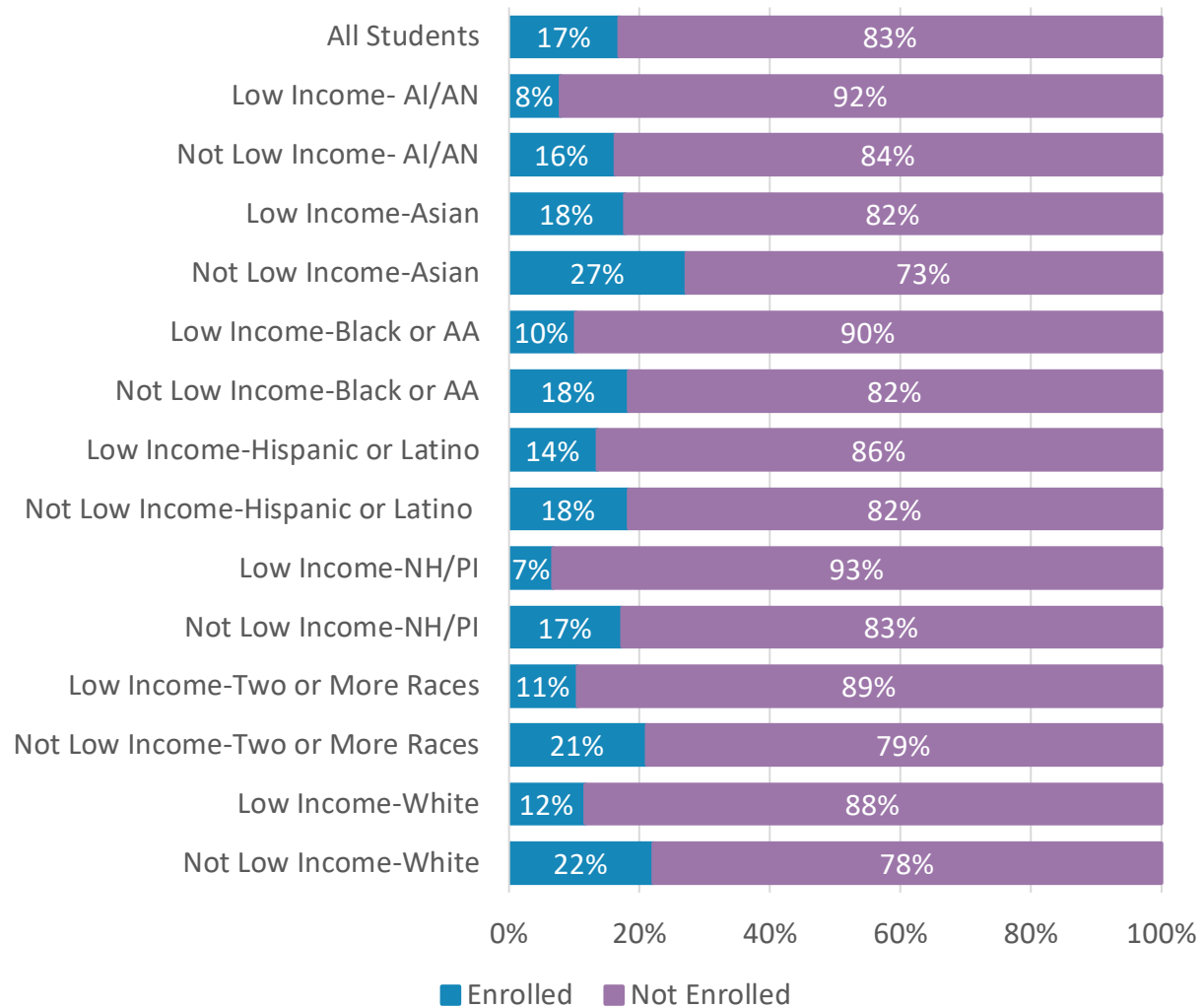
Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Specific Dual Credit Programs. Figures 12-15 display the enrollment analysis of income and race for the 2017 cohort by each specific program type.

Figure 12: Enrollment in AP, IB, or Cambridge by Income & Race for the 2017 Cohort

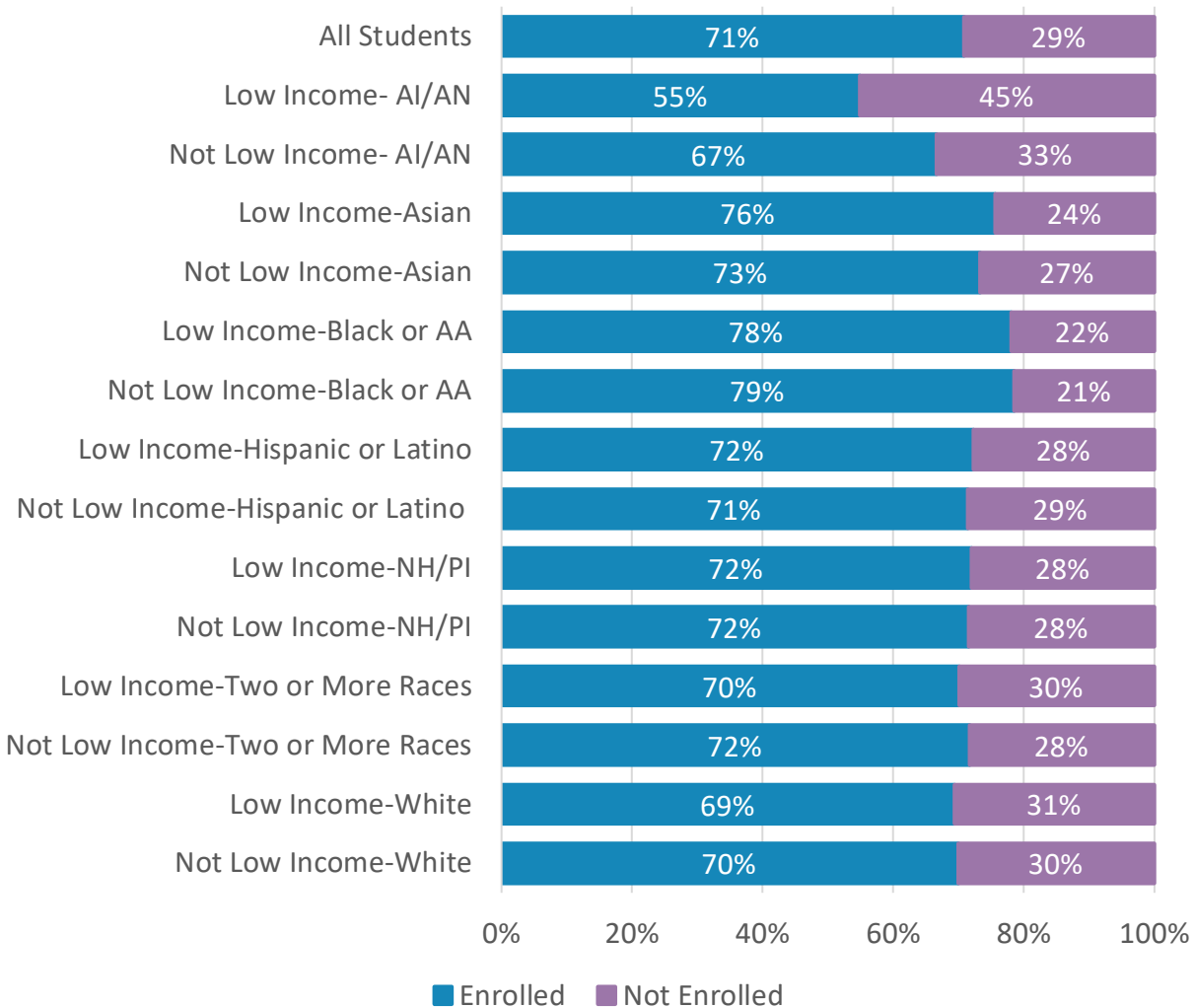


Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school. Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 13: Enrollment in College in the High School by Income & Race for the 2017 Cohort

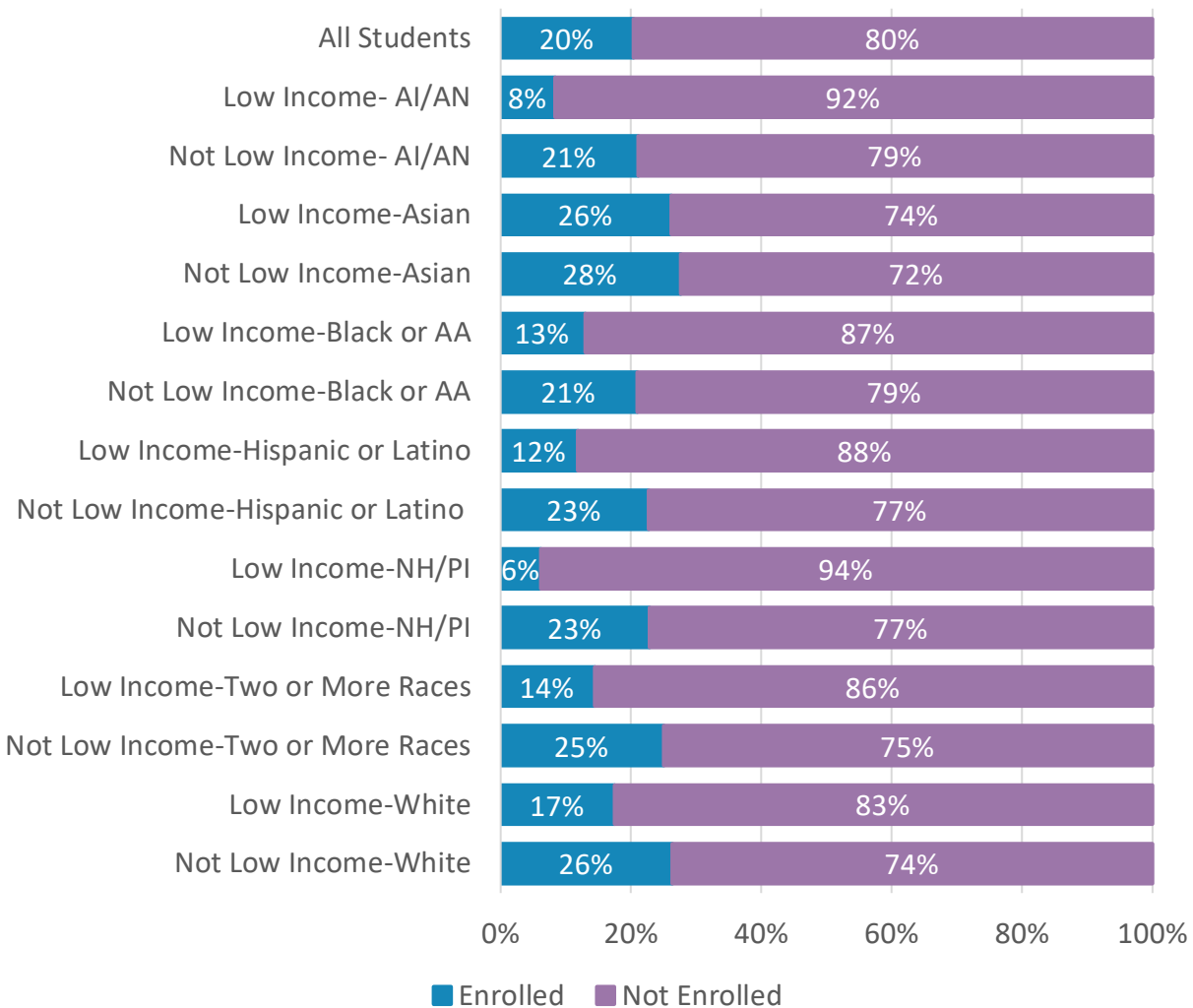
Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 14: Enrollment in CTE Dual Credit by Income & Race for the 2017 Cohort

Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 15: Enrollment in Running Start by Income & Race for the 2017 Cohort

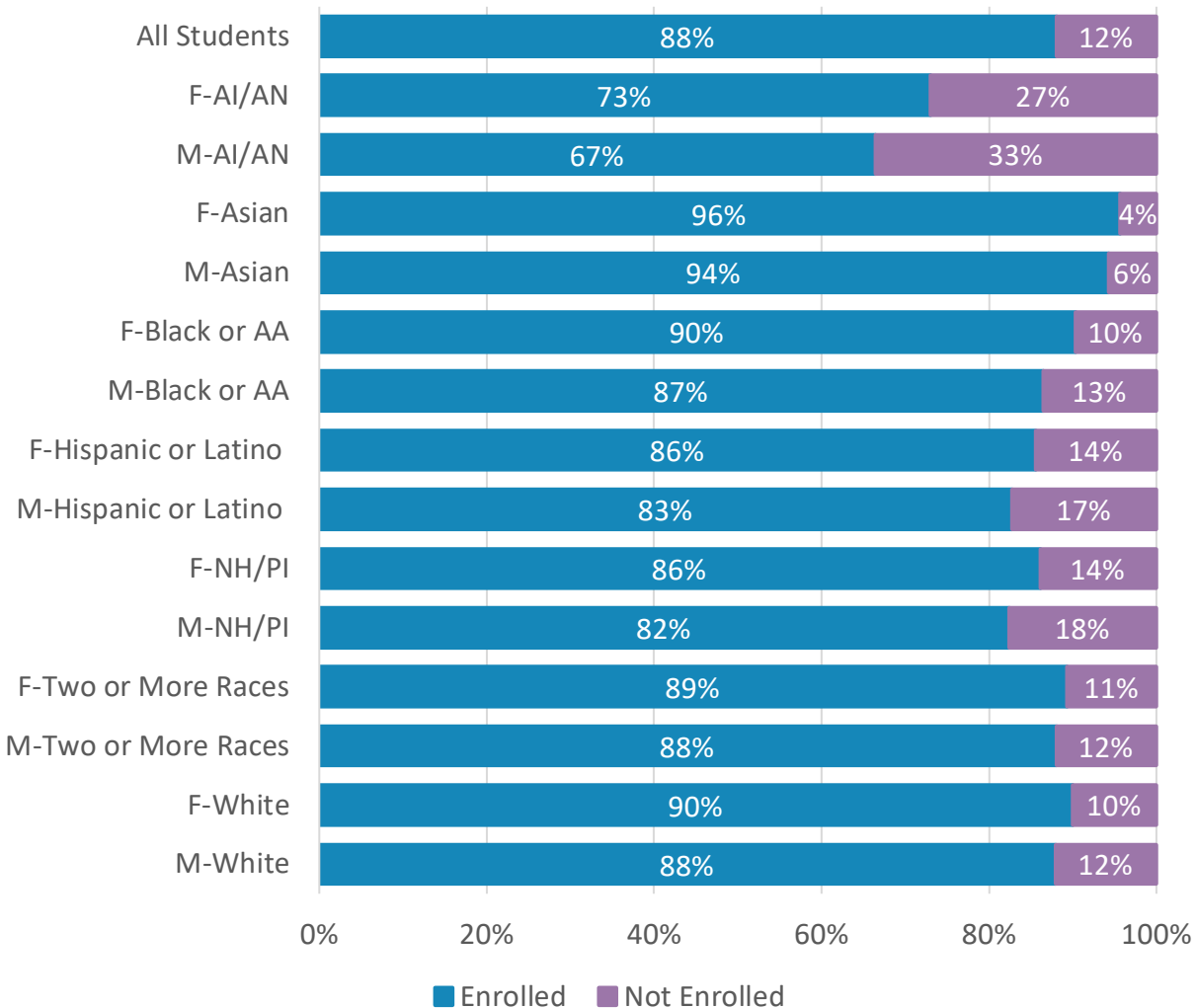
Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report. Low income is defined as eligible for free or reduced-price meals at any time during their enrollment in grades 9 – 12 in a Washington public school.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Race by Gender Analysis

Any Dual Credit Program. An analysis of the intersectional identities of race and gender can again highlight different enrollment trends across different program types. Figure 16 shows that when looking across all dual credit programs, there are only slight differences in enrollment between gender groups across racial categories (ranging from 1 percentage point to 6 percentage points). However, as the following figures will show, the differences are more apparent across certain dual credit program types.

Figure 16: Enrollment in Any Dual Credit Program by Race & Gender for the 2017 Cohort

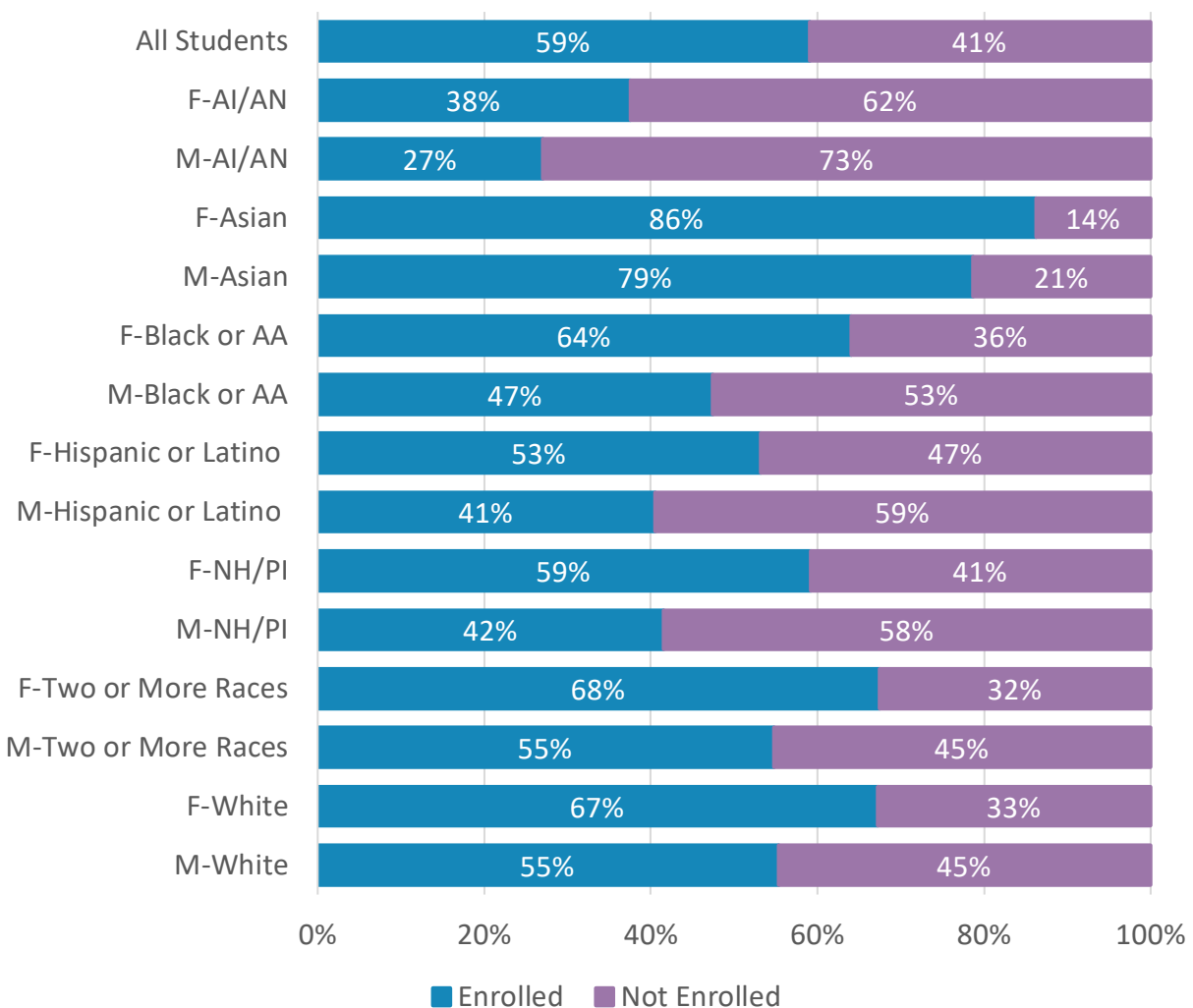


Notes: Race, Ethnicity, and Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander and F=Female, M=Male. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Any Dual Credit EXCEPT CTE. Once again, removing CTE Dual Credit from the analysis reveals different observations (see Figure 17). While enrollment trends in Figure 16 were consistent, with the exception of lower enrollment rates for male and female AI/AN students, Figure 17 reveals greater differences between males and females across racial groups. Across racial groups, females enroll at higher rates. The greatest difference in enrollment across gender existed in the Black or AA and the NH/PI student groups (in both cases, females enrolled at a rate that was 17 percentage points higher than males). The smallest gap existed between males and females in the Asian student group.

Figure 17: Enrollment in Any Dual Credit Program EXCEPT CTE by Race & Gender for the 2017 Cohort

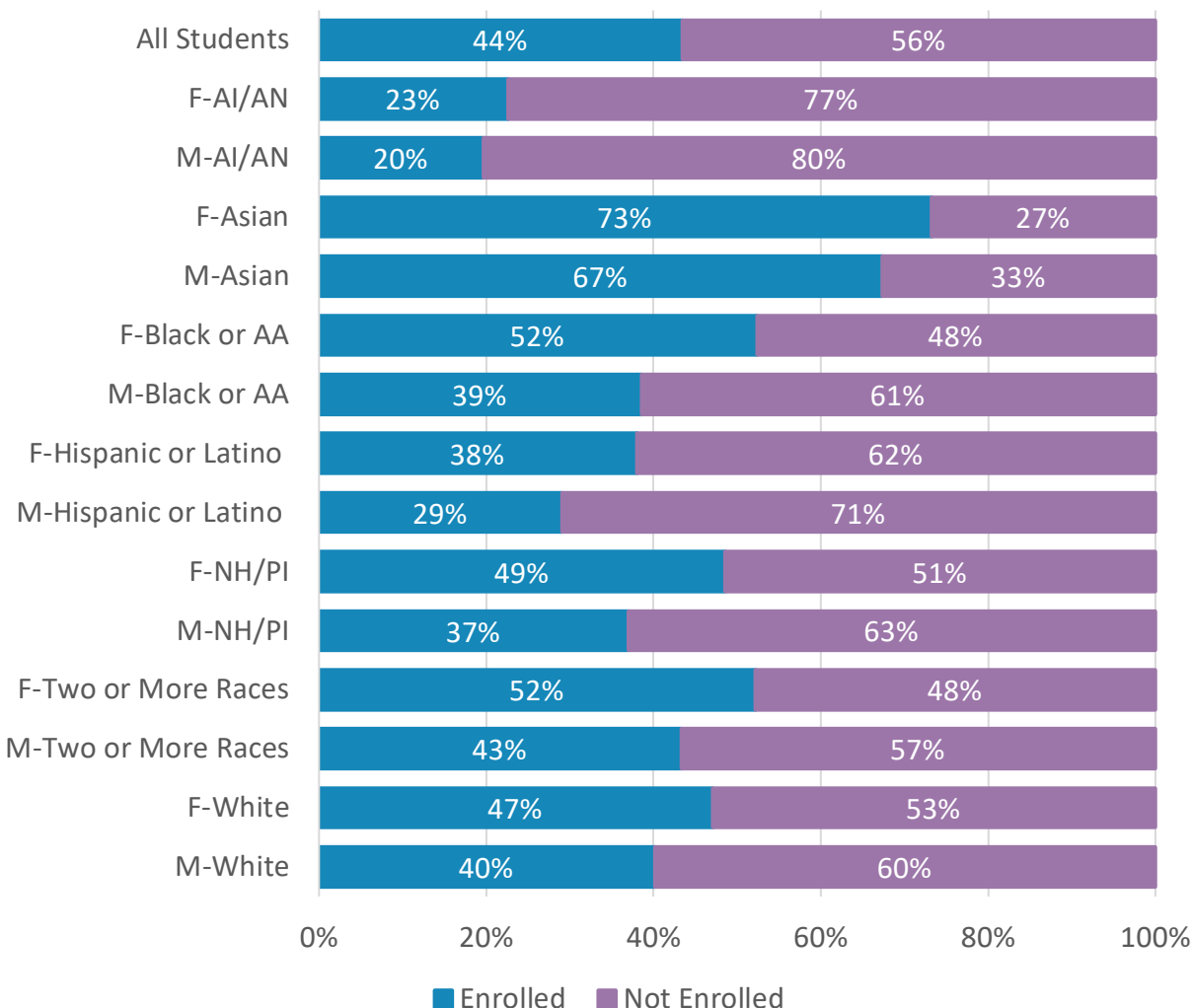


Notes: Race, Ethnicity, and Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander and F=Female, M=Male. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

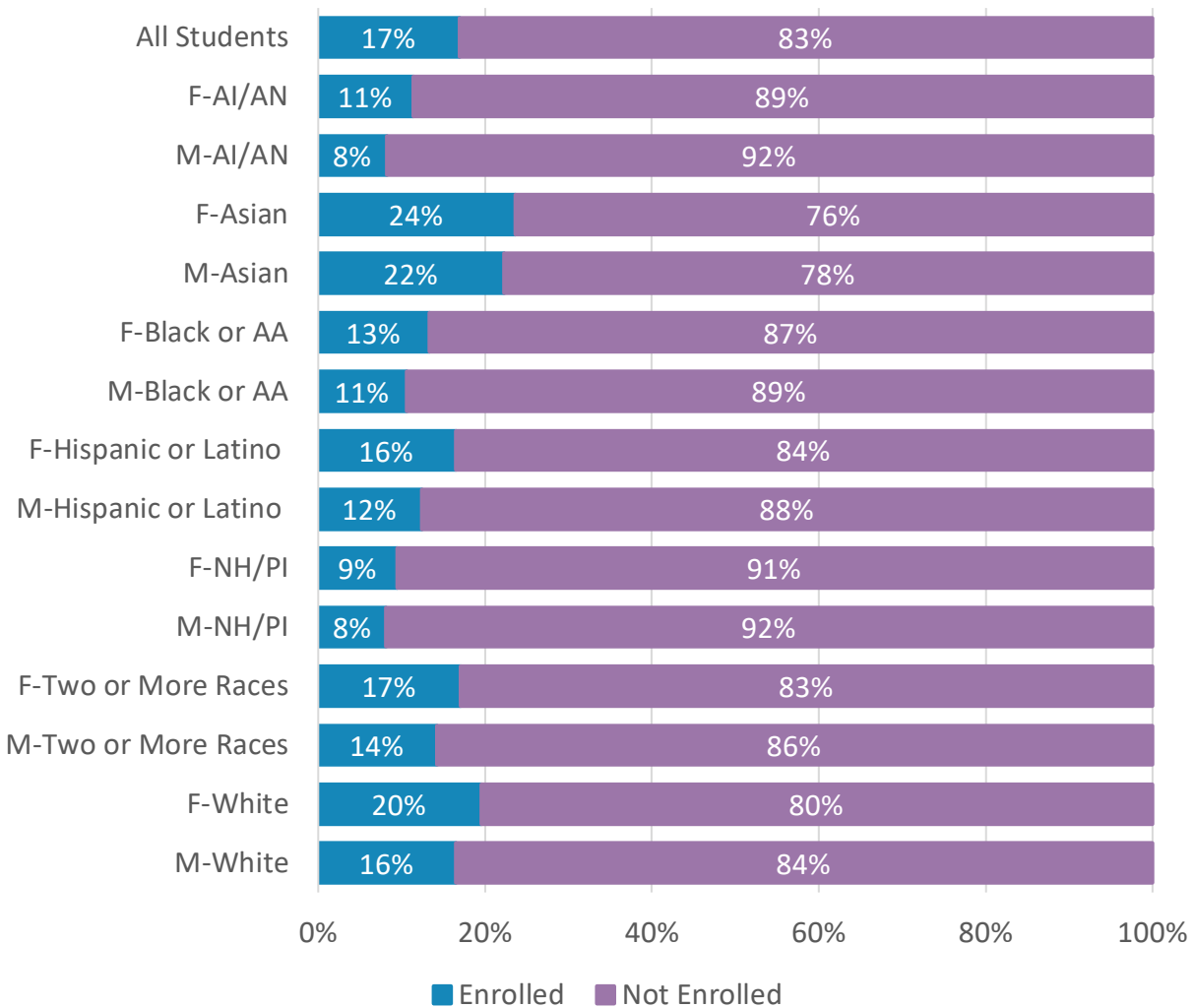
Specific Dual Credit Programs. Figures 18-21 display the enrollment analysis of race and gender for the 2017 cohort by each specific program type.

Figure 18: Enrollment in AP, IB, or Cambridge by Race & Gender for the 2017 Cohort



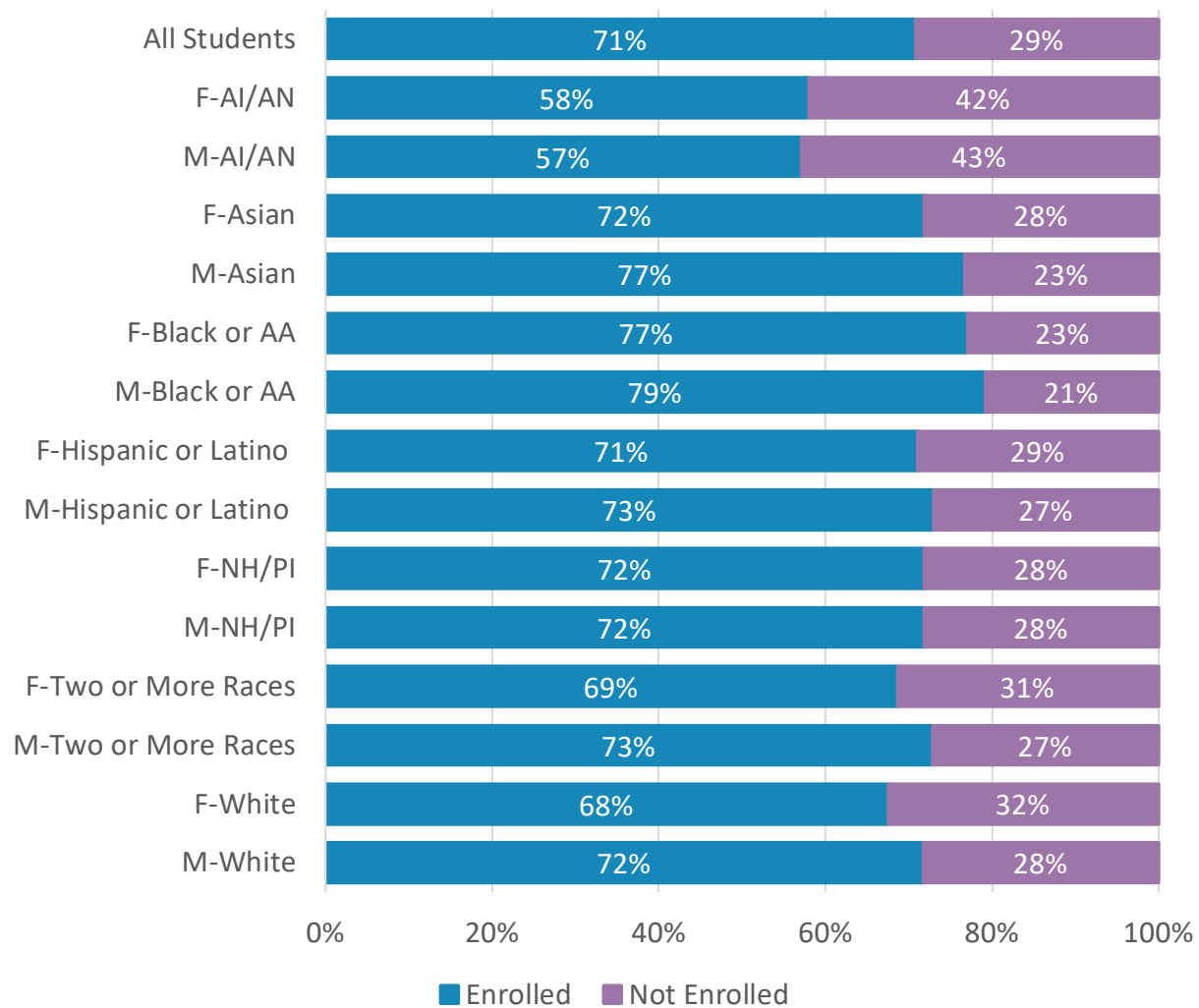
Notes: Race, Ethnicity, and Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander and F=Female, M=Male. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 19: Enrollment in College in the High School by Race & Gender for the 2017 Cohort

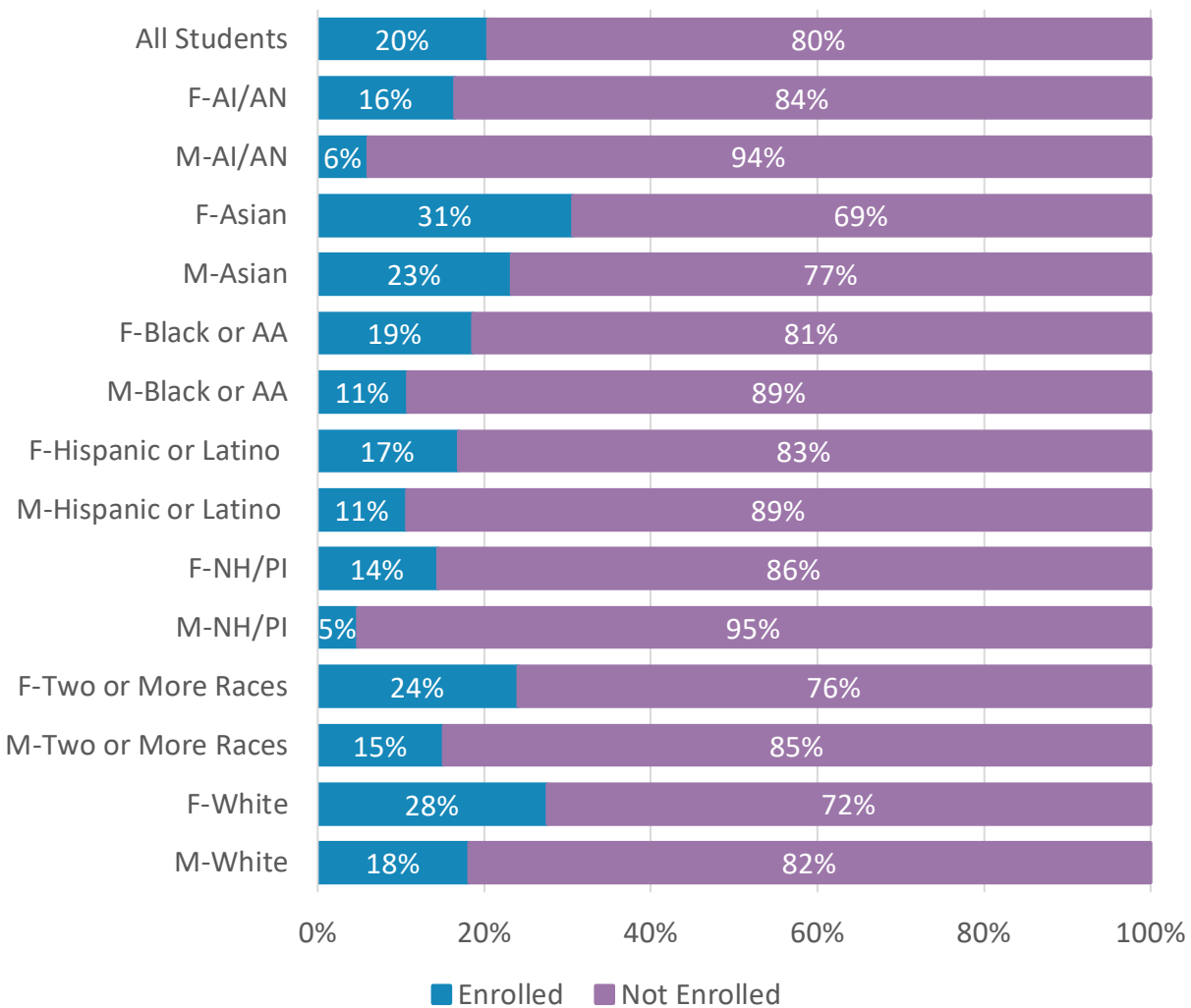
Notes: Race, Ethnicity, and Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander and F=Female, M=Male. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 20: Enrollment in CTE Dual Credit Race & Gender for the 2017 Cohort

Notes: Race, Ethnicity, and Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander and F=Female, M=Male. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 21: Enrollment in Running Start by Race & Gender for the 2017 Cohort

Notes: Race, Ethnicity, and Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander and F=Female, M=Male. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the federally required race categories in this report.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

III: What is the total number and percentage of students in the 2017 cohort who have been awarded high school credit?

Most students who enroll in a dual credit course complete the course and earn high school credit. Table 2 illustrates this by displaying the counts and percentages of all students in the cohort who enrolled in one or more dual credit course and who earned high school credit for dual credit courses by dual credit type. For example, 17 percent of all students in the cohort enrolled in CiHS courses and, similarly, 16.5% of all students in the cohort earned high school credit for one or more CiHS courses.

It is important to note that the percentages in this section are out of all students in the cohort and not out of the students who enrolled in the courses. Knowing what proportion of students who enroll in dual credit courses actually complete the courses is a different measure, which can be explored in a future report. The figures that follow break out high school credit attainment by the student subgroups.

Table 2: Enrollment and Award of High School Credit in Dual Credit Programs for All Students in the Cohort

Dual Credit Program Type	Enrolled	Earned High School Credit
Any Dual Credit	88.1% 71,745	85.3% 69,480
Any Dual Credit Except CTE Dual Credit	59.0% 35,432	57.2% 46,615
AP, IB, or Cambridge	43.5% 35,432	42.2% 34,342
College in the High School	17.0% 13,827	16.5% 13,419
CTE Dual Credit	70.9% 57,703	68.2% 55,510
Running Start	20.4% 16,636	19.7% 16,064
All Students in the cohort	81,438	81,438

Figures 22-29 show high school credit attainment rates for Washington students in various dual credit programs. The corresponding data tables with student counts can be found in Appendix A (see Tables A9-A13).

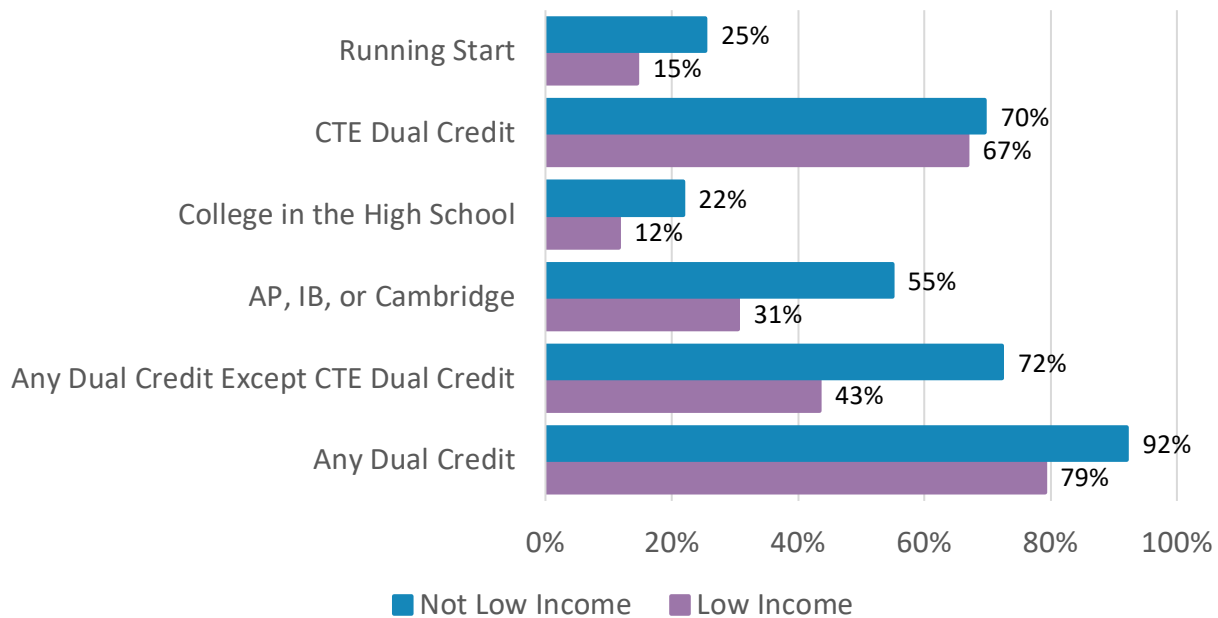
Key findings related to high school credit attainment include:

- Patterns seen in differences between student groups for enrollment persist when we look at high school credit attainment for dual credit courses. There is little difference between enrollment and high school credit attainment rates for dual credit courses across all student groups.
- As with enrollment rates, male students, low-income students and students experiencing homelessness have lower high school credit attainment rates compared to their counterparts.
- Of the OSPI programs analyzed, Migrant Education and Multilingual Learner programs show the biggest gaps in high school credit attainment between participants and non-participants followed by special education. A student's 504 plan status did not reveal notable gaps.

Income Level

As previously mentioned, students with higher income levels were more likely to *participate* in any form of dual credit compared to low-income students. Overall, this trend continues, with students who are not low income *earning high school credit* at a higher rate (92% for Any Dual Credit) than low-income students (79%). This pattern holds for all of the dual credit course types, with the largest gap (24%) between low income and higher income students occurring with the AP, IB and Cambridge programs.

Figure 22: High School Credit Attainment in Dual Credit Programs by Income for the 2017 Cohort



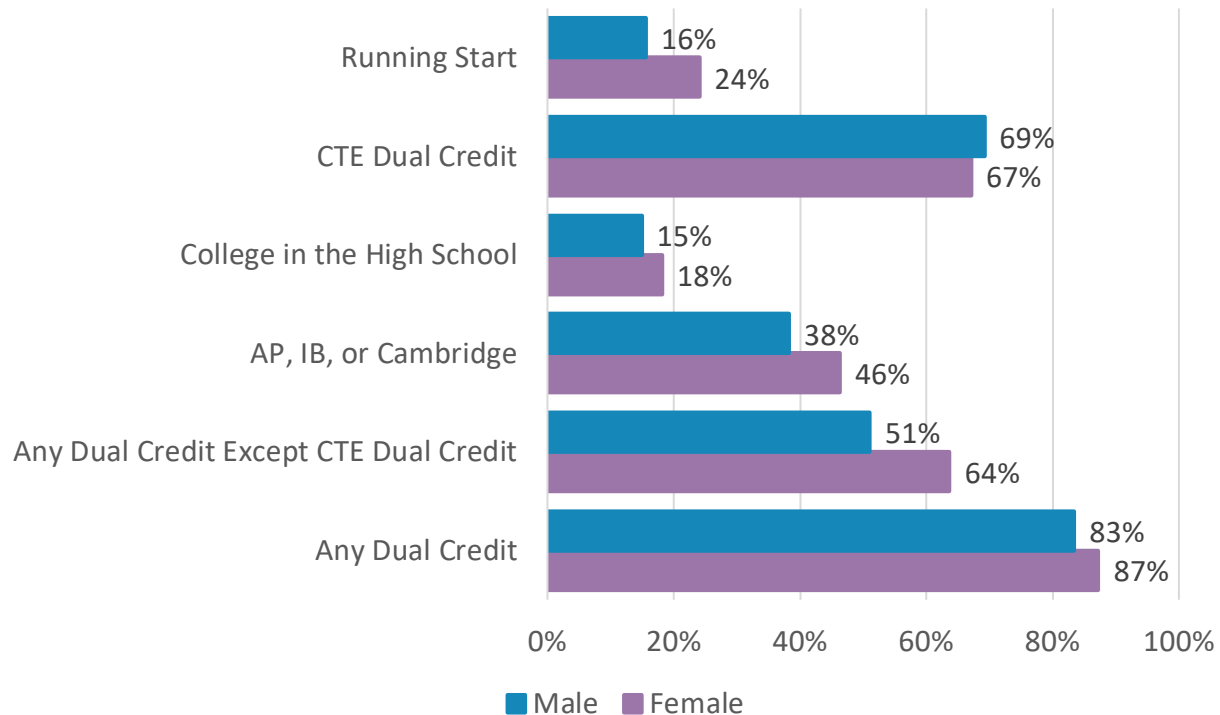
Notes: Low income is defined as eligible for free or reduced-price meals. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either eligible or not eligible for free or reduced-price meals.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Gender

High school credit attainment patterns almost exactly mirror the enrollment patterns by gender. Once again, females are more likely to earn high school credit in three out of the four dual credit programs, with the exception being CTE Dual Credit. Overall, females earn high school credit at a higher rate (87%) than males (83%) for their dual credit participation.

Figure 23: High School Credit Attainment in Dual Credit Programs by Gender for the 2017 Cohort



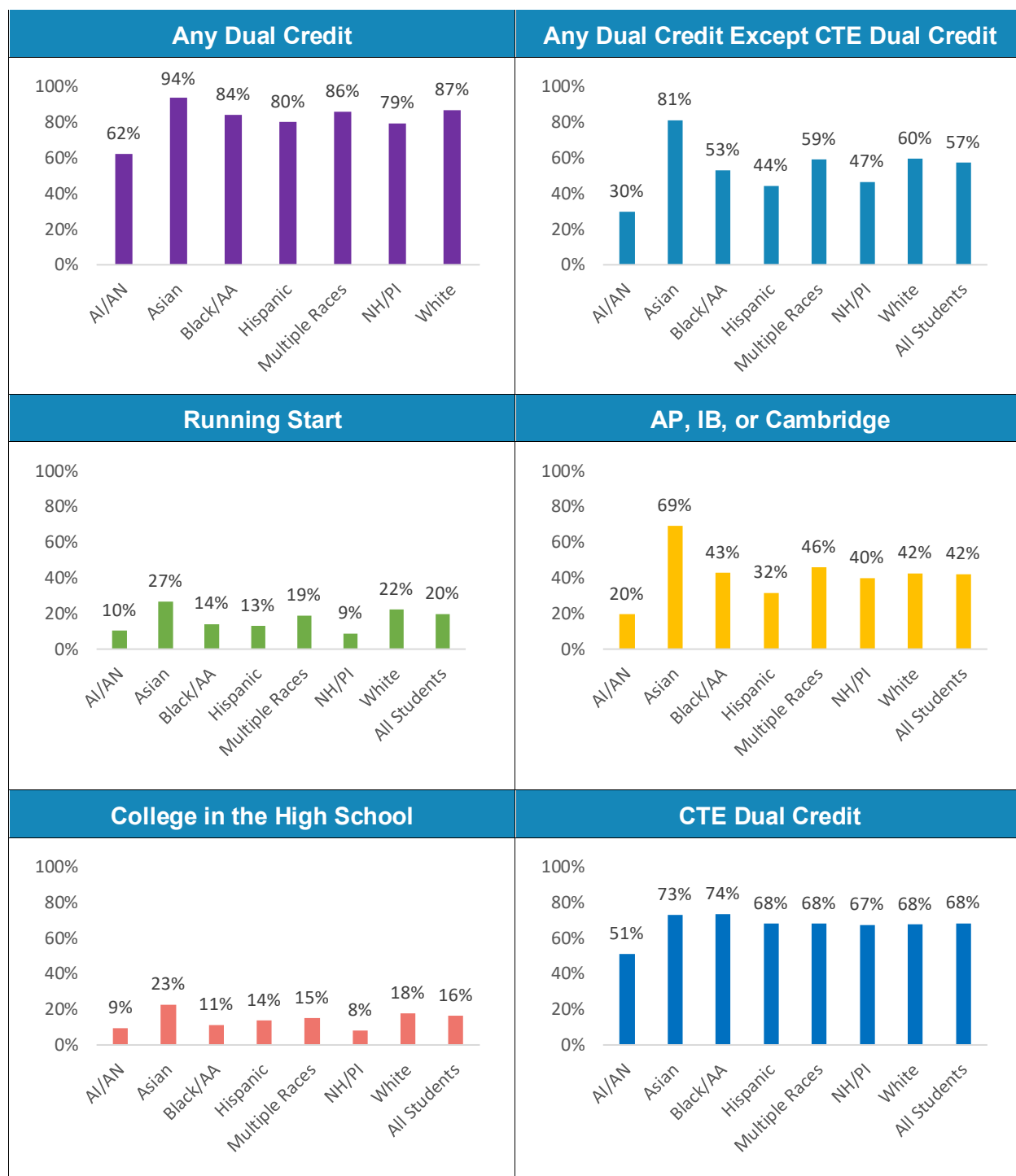
Notes: Gender is taken from the student's final high school enrollment record. Nonbinary student data is not available for this cohort. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either male or female.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Race & Ethnicity

There is little difference between student enrollment in any dual credit and high school credit attainment rates when comparing across different race and ethnic groups. For example, the range of percentage point differences between students who enroll in any dual credit and students who earn high school credit is just one percentage point for Asian students (95% enrollment rate compared to 94% credit attainment rate). The difference is largest for AI/AN students (8 percentage points), followed by NH/PI students (5 points), Black/African American students and students of multiple races (4 points each), White students (3 points), and finally Hispanic students (2 points). The trend is relatively comparable across all four programs, with no notable outliers that would represent a program failing to support the success of any specific racial group.

Figure 24: High School Credit Attainment in Dual Credit Programs by Race & Ethnicity for the 2017 Cohort



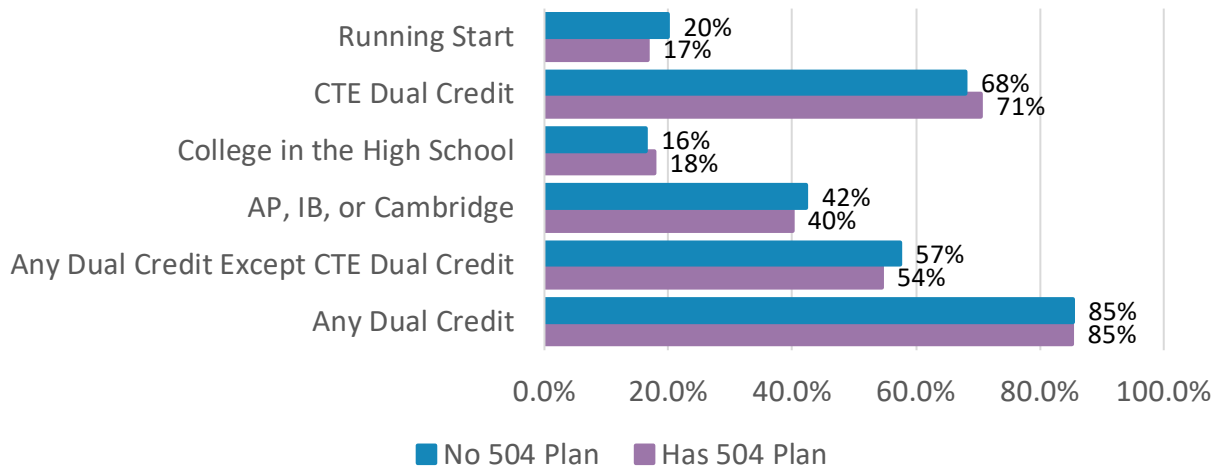
Notes: Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the race categories in this report. Numerators: Students in the racial category who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified in the racial category.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

OSPI Program Participation

Students participate in different programs to support their academic success. Figure 25–29 show dual credit high school credit attainment for students participating in different support programs.

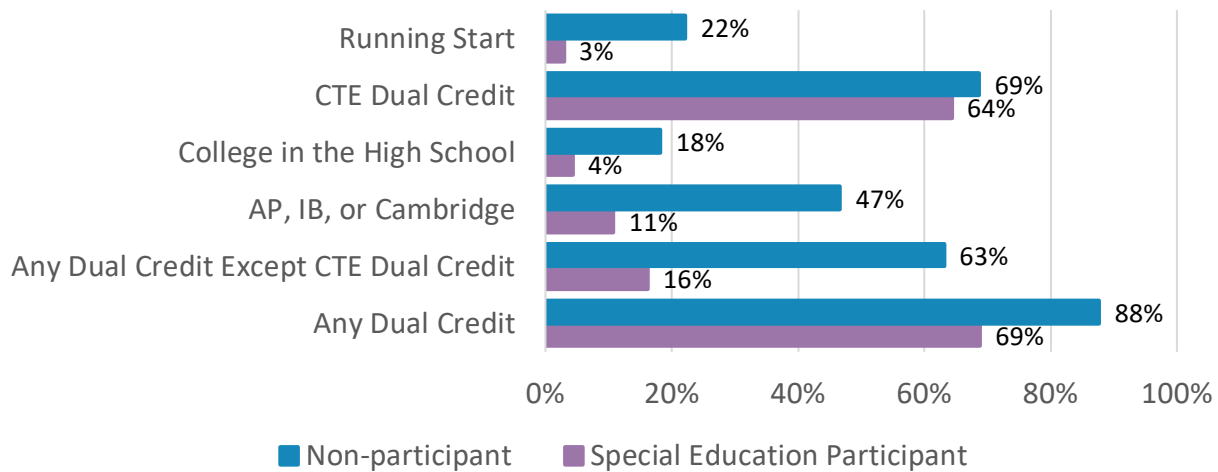
Figure 25: High School Credit Attainment in Dual Credit Programs by 504 Plan Status for the 2017 Cohort



Notes: A student is defined as having a 504 plan if they had a 504 plan at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either having or not having a 504 plan.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

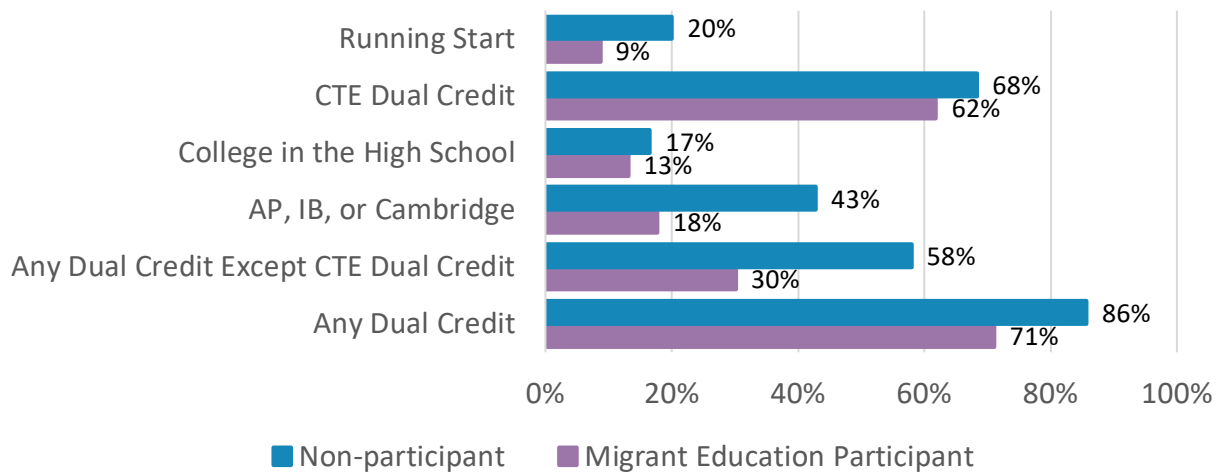
Figure 26: High School Credit Attainment in Dual Credit Programs by Special Education Status for the 2017 Cohort



Notes: A student is defined as participating in [Special Education](#) if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in Special Education.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

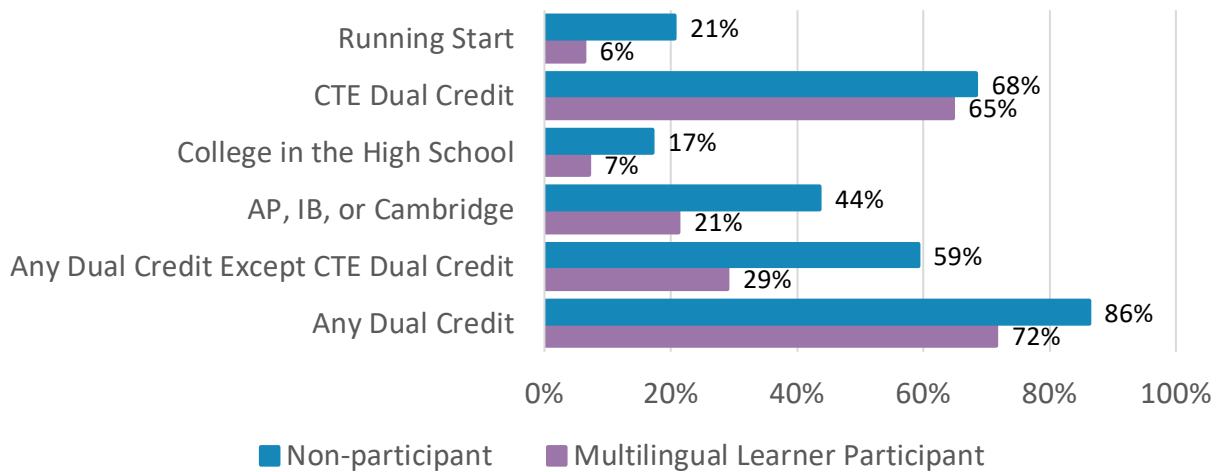
Figure 27: High School Credit Attainment in Dual Credit Programs by Migrant Education Program Status for the 2017 Cohort



Notes: A student is defined as participating in [Migrant Education](#) if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Migrant Education program.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

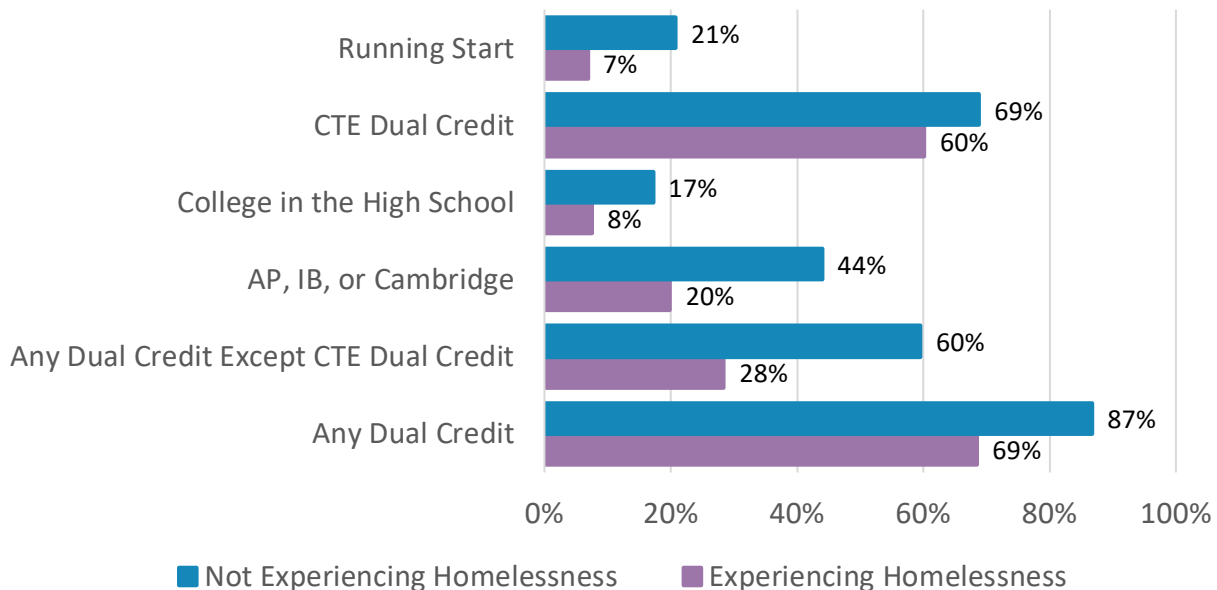
Figure 28: High School Credit Attainment in Dual Credit Programs by Multilingual Learner (participation in Transitional Bilingual Instruction Program) Status for the 2017 Cohort



Notes: A student is defined as a multilingual learner in this report if they receive services through the [Transitional Bilingual Instructional Program](#), excluding students served under Title III services, at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Transitional Bilingual Instructional Program.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 29: High School Credit Attainment in Dual Credit Programs by Homelessness Status for the 2017 Cohort



Notes: A student is identified as experiencing homelessness if they were identified in CEDARS data as homeless, as defined in the McKinney–Vento Act, Section 725(2), at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either experiencing homelessness or not.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

IV: What is the high school academic performance for students who participated in dual credit?

High School Academic Performance

Tables 3a-c show the average final cumulative high school grade point average (GPA) for students who enrolled in a dual credit program, compared to students who did not enroll in the program, by type of program. The GPA is unweighted and includes all courses, dual credit and non-dual credit courses, and students who have earned differing amounts of credit from dual credit courses in high school. Results are presented by the different student groups represented in this report. In general, students who enrolled in any of the dual credit programs achieved a higher GPA than those who did not enroll in the program. The highest GPAs are among students who enrolled in Running Start followed by those who took AP, IB or Cambridge courses.

Table 3a: Average Final High School GPA of Students in the 2017 cohort who enrolled in one or more dual credit program vs those who did not across student groups

	Participated in Any Dual Credit Program		Participated in Any Dual Credit Program Except CTE	
	Yes	No	Yes	No
Income status based on FRPM eligibility				
Low Income	2.43	2.01	2.80	2.07
Not Low Income	2.97	2.47	3.15	2.49
Gender				
Female	2.91	2.30	3.11	2.34
Male	2.59	2.09	2.90	2.11
Federal Race Category				
American Indian or Alaska Native	2.33	1.95	2.68	1.99
Asian	3.13	2.52	3.23	2.50
Black or African American	2.45	2.05	2.66	2.08
Caucasian or White	2.83	2.30	3.07	2.30
Hispanic or Latino	2.45	1.97	2.77	2.03
Native Hawaiian or Other Pacific Islander	2.44	1.76	2.74	1.93
Two or More Races	2.71	2.08	2.98	2.10
Student experiencing homelessness				
Yes	2.18	1.93	2.50	1.93
No	2.79	2.22	3.03	2.24
Multilingual Learner program				
Participant	2.36	2.08	2.69	2.11
Non-participant	2.77	2.19	3.02	2.21
Special Education				
Participant	2.28	2.22	2.52	2.21
Non-participant	2.81	2.16	3.03	2.20
Student with 504 Plan				
Yes	2.56	2.14	2.80	2.14
No	2.76	2.18	3.03	2.21
Migrant Education program				
Participant	2.37	1.96	2.77	2.04
Non-participant	2.76	2.19	3.02	2.21
All Students	2.75	2.18	3.01	2.20

Table 3b: Average Final High School GPA of Students in the 2017 cohort who enrolled in one or more dual credit program vs those who did not across student groups

	Participated in AP, IB or Cambridge		Participated in College in the High School	
	Yes	No	Yes	No
Income status based on FRPM eligibility				
Low Income	2.82	2.20	2.81	2.35
Not Low Income	3.21	2.68	3.13	2.94
Gender				
Female	3.16	2.56	3.11	2.79
Male	2.96	2.24	2.90	2.46
Federal Race Category				
American Indian or Alaska Native	2.66	2.09	2.77	2.16
Asian	3.26	2.71	3.22	3.06
Black or African American	2.68	2.18	2.65	2.37
Caucasian or White	3.13	2.50	3.06	2.71
Hispanic or Latino	2.79	2.17	2.80	2.31
Native Hawaiian or Other Pacific Islander	2.74	2.03	2.85	2.27
Two or More Races	3.04	2.28	2.97	2.58
Student experiencing homelessness				
Yes	2.51	2.00	2.53	2.08
No	3.08	2.43	3.03	2.66
Multilingual Learner program				
Participant	2.70	2.17	2.66	2.26
Non-participant	3.08	2.41	3.02	2.64
Special Education				
Participant	2.52	2.23	2.53	2.25
Non-participant	3.08	2.43	3.03	2.68
Student with 504 Plan				
Yes	2.87	2.27	2.82	2.45
No	3.08	2.40	2.82	2.45
Migrant Education program				
Participant	2.78	2.15	2.86	2.18
Non-participant	3.07	2.40	3.02	2.63
All Students	3.06	2.39	3.01	2.62

Table 3c: Average Final High School GPA of Students in the 2017 cohort who enrolled in one or more dual credit program vs those who did not across student groups

	Participated in CTE Dual Credit		Participated in Running Start	
	Yes	No	Yes	No
Income status based on FRPM eligibility				
Low Income	2.40	2.42	2.95	2.31
Not Low Income	2.94	3.09	3.15	2.92
Gender				
Female	2.83	2.89	3.15	2.75
Male	2.51	2.59	2.97	2.44
Federal Race Category				
American Indian or Alaska Native	2.26	2.17	2.88	2.14
Asian	3.07	3.17	3.25	3.04
Black or African American	2.41	2.39	2.83	2.33
Caucasian or White	2.74	2.87	3.10	2.68
Hispanic or Latino	2.38	2.36	2.92	2.29
Native Hawaiian or Other Pacific Islander	2.39	2.15	2.90	2.26
Two or More Races	2.62	2.70	3.03	2.55
Student experiencing homelessness				
Yes	2.12	2.12	2.68	2.07
No	2.70	2.80	3.09	2.63
Multilingual Learner program				
Participant	2.31	2.24	2.98	2.24
Non-participant	2.68	2.78	3.08	2.61
Special Education				
Participant	2.26	2.28	2.72	2.25
Non-participant	2.72	2.82	3.08	2.64
Student with 504 Plan				
Yes	2.49	2.61	2.85	2.45
No	2.67	2.76	3.09	2.59
Migrant Education program				
Participant	2.31	2.19	2.92	2.21
Non-participant	2.67	2.76	3.08	2.60
All Students	2.66	2.75	3.08	2.59

Note: Average Final GPA is defined as the student's cumulative Grade Point Average as of their last enrollment in a Washington public school, as calculated by OSPI. This data was missing for 4 percent of the 81,438 students in the cohort.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

V: What is the total number and percentage of students who have been awarded postsecondary credit at an institution of higher education in at least one dual credit program course?

Data Limitations

The data available to ERDC on postsecondary credit earning by students taking dual credit courses is incomplete for all the dual credit programs. Therefore, ERDC is limited as to what we can accurately and confidently report. Table 4 describes the data limitations and what information we can measure on postsecondary credit earning, for each dual credit program type.

Table 4: Data availability across dual credit programs in Washington

Dual Credit Program/Credit earning criteria	How and where credits are earned	Data Limitations	What can we measure?	What don't we know and would be helpful to know?
AP, IB or Cambridge Credit Earning Criteria: Exam score must meet threshold established in statute by the postsecondary institutions (RCW 28B.10.054)	Exam scores submitted to postsecondary institution. Credits are accepted at all public WA postsecondary institutions and most WA private institutions and out-of-state institutions.	Credits earned for AP or IB are reported by the six WA public 4-year institutions in PCHEES and by the community and technical colleges (CTCs). Only PCHEES-sourced data is available at ERDC for this specific analysis. No data is available for credits earned from Cambridge International exams. No data is available on credits earned from any of these programs at WA private or out-of-state postsecondary institutions.	What proportion of the students who completed an AP or IB course and went on to enroll in a WA public 4-year institution after HS earned postsecondary credits from AP or IB?	What proportion of students who complete exam-based courses earn an exam score that qualifies them to receive college credit? What proportion of students who complete exam-based courses and earn an exam score that qualifies them to receive college credit at private or out-of-state institutions?

Dual Credit Program/Credit earning criteria	How and where credits are earned	Data Limitations	What can we measure?	What don't we know and would be helpful to know?
College in the High School Credit Earning Criteria: Complete the course for credit and pay the CiHS fee	Register for college credit, earn credit, and pay CiHS fee at the postsecondary institution that offers the course.	Data on CiHS courses and credit earning at three WA public 4-year institutions that offer CiHS (UW, EWU, CWU) have been incorrectly reported in PCHEES and are not available to ERDC. WSU had CiHS programs through the 2016-2017 academic year and reported correctly. WSU does not currently offer CiHS; it was last offered in Spring 2017. ERDC and the 4-year institutions are currently working to correct this.	What proportion of students who completed a CiHS course earned postsecondary credit at a CTC or at any WSU campus?	CiHS course enrollment and credit earning at all of the WA public 4-year institutions that offer CiHS. ERDC and the institutions are making this change to the PCHEES data collection in the 2023-24 school year.
Running Start Credit Earning Criteria: Complete the course for credit	Passing a Running Start course results in credits earned at the postsecondary institution.	Data on Running Start courses and credit earning at two of the four WA public 4-year institutions that offer Running Start (EWU, CWU) have been incorrectly reported in PCHEES and are not available to ERDC. WSU only offers Running Start at two campuses: WSU-Tri Cities and WSU-Pullman. These campuses have reported correctly.	What proportion of students who enrolled in a Running Start course earned postsecondary credit for Running Start courses at a CTC or at any WSU campus?	Running Start course enrollment and credit earning at all the WA public 4-year institutions that offer Running Start. ERDC and the institutions are making this change to the PCHEES data collection in the 2023-24 school year.

Dual Credit Program/Credit earning criteria	How and where credits are earned	Data Limitations	What can we measure?	What don't we know and would be helpful to know?
CTE Dual Credit Credit Earning Criteria: Complete the course with a minimum grade as required by the CTC and register in the Statewide Enrollment and Reporting System (SERS).	Some programs automatically transcribe credits and others require students to submit a request for the credits, which can only be earned, initially, at the CTC offering the course.	Credits earned at CTCs through CTE Dual Credit courses are reported to SBCTC. However, at the time of this report, ERDC could not tie the credit to the student through the SBCTC data unless that student also enrolled at a CTC. As a result, ERDC cannot identify all students who earn CTC credits for CTE Dual Credit courses, only those who go on to enroll in a CTC.	What proportion of all students who completed a CTE DC course have CTC credit from CTE DC that can be found in ERDC data? What proportion of all students who completed a CTE DC course have CTC credit from CTE DC that can be found in ERDC data?	To what extent are students who do not enroll in a CTC earning CTE Dual Credits on CTC transcripts that cannot currently be found in SBCTC data?

CWU=Central Washington University, EWU=Eastern Washington University, UW=University of Washington, WSU=Washington State University

Analysis of Postsecondary Credits

Table 5 provides results of postsecondary credits earned based on the current data available. See the recommendations section of this report for in-depth suggestions on how to improve data collection for future iterations of this report.

Table 5: Postsecondary credits earned for selected Dual Credit course types for all students in the 2017 cohort, through the 2018-2019 academic year.

Dual Credit Program	Question	Result
AP or IB	What proportion of the students who completed an AP or IB course and went on to enroll in a WA public 4-year institution after HS earned postsecondary credits from AP or IB? Numerator = All students in the 2017 cohort who earned high school credit in an AP or IB course (in CEDARS) and enrolled in a WA public 4-year institution AND earned AP or IB credits at a WA public 4-year institution, according to PCHEES data. Denominator = All students in the 2017 cohort who completed an AP or IB course and enrolled in a WA public 4-year institution	4,402 37.7%
College in the High School	What proportion of students who earned high school credit in a CiHS course also earned postsecondary credit at a CTC or any WSU campus? Numerator = All students in the cohort who earned high school credit in a CiHS course (according to CEDARS data) AND earned postsecondary credit from CiHS at a CTC (as identified in SBCTC data) or from a WSU campus (as identified in PCHEES data). Denominator = All students in the cohort who earned high school credit in a CiHS course, according to CEDARS data.	2,918 21.8%

Dual Credit Program	Question	Result
CTE Dual Credit	What proportion of all students in the cohort who completed a CTE DC course have CTC credit from CTE DC that can be found in ERDC data? Numerator = All students in the cohort who earned high school credit in a CTE Dual Credit course and enrolled in a CTC and earned CTC credit from CTE Dual Credit, according to SBCTC data. Denominator = All students in the cohort who earned high school credit in a CTE Dual Credit course, according to CEDARS data.	42 1.7%
Running Start	What proportion of students who enrolled in a Running Start course earned postsecondary credit for Running Start courses at a CTC or any WSU campus? Numerator = All students in the cohort who earned credit from Running Start at a CTC, according to SBCTC data, or at any WSU campus, as found in PCHEES data. Denominator = All students in the cohort who enrolled in Running Start at a CTC or WA public 4-year institution, as recorded in the postsecondary data from SBCTC and PCHEES data.	13,965 86.9%

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

VI. Can detailed race/ethnicity data provide further insights into examining student dual credit enrollment?

Starting in 2009-10, with the roll-out of the Comprehensive Education Data and Research System (CEDARS) and in response to the 2007 United States Department of Education guidance, OSPI began implementing the two-question data collection to collect ethnicity and race separately and expanded the options for race and ethnicity identification. In the first year, use of the new questions and categories was voluntary, with full implementation in the 2010-11 school year.

For the new race and ethnicity data collection that was fully implemented in the 2010-11 school year, districts were instructed, but not required, to report their students' identity by ethnicity (Hispanic or Latino origin) and by race. The expanded ethnicity question had nine categories to further disaggregate the responses of Hispanic or Latino students. The expanded race collection had 32 categories for students who identified as American Indian or Alaska Native, 16 categories for students who identified as Asian, and 9 categories for students who identified as Native Hawaiian or Pacific Islander. In all, there are 59 categories for race. There were no additional options that allowed for disaggregation of data for students that identified as Black/African American or White. The 2017 cohort analysis uses the 2010-11 version of the CEDARS race/ethnicity data collection.

Although the expanded race/ethnicity data collection was fully implemented in 2010-11 CEDARS, ERDC has not used this data in any public reporting to help us understand whether the federal race and ethnicity categories mask differences among the different races represented in the broader category. As a first step towards using disaggregated race and ethnicity data, ERDC chose to focus on the students that were identified under the Asian federal race category and to further disaggregate into the additional groups as allowed by the CEDARS data collection started in 2010-11¹¹.

Figures 30-35 show enrollment rates for Washington students in various dual credit programs. The corresponding data table with student counts can be found in Appendix A (see Table A14). The number of students in each expanded race category vary and it is important to take the size of the student group into account to interpret and compare the rates appropriately.

¹¹ Data Notes: 1) Count of students for whom detailed race data is missing = 92. 2) Count of students who identified in more than one Asian group = 447. These students are counted in each group that they identified as part of. 3) "Other Asian" was an option for students/families to choose from if they did not identify with any of the listed groups of the OSPI data collection form.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Figure 30: Enrollment in Any Dual Credit, Asian Federal Race Category disaggregated by OSPI Race/Ethnicity Codes for 2017 Cohort

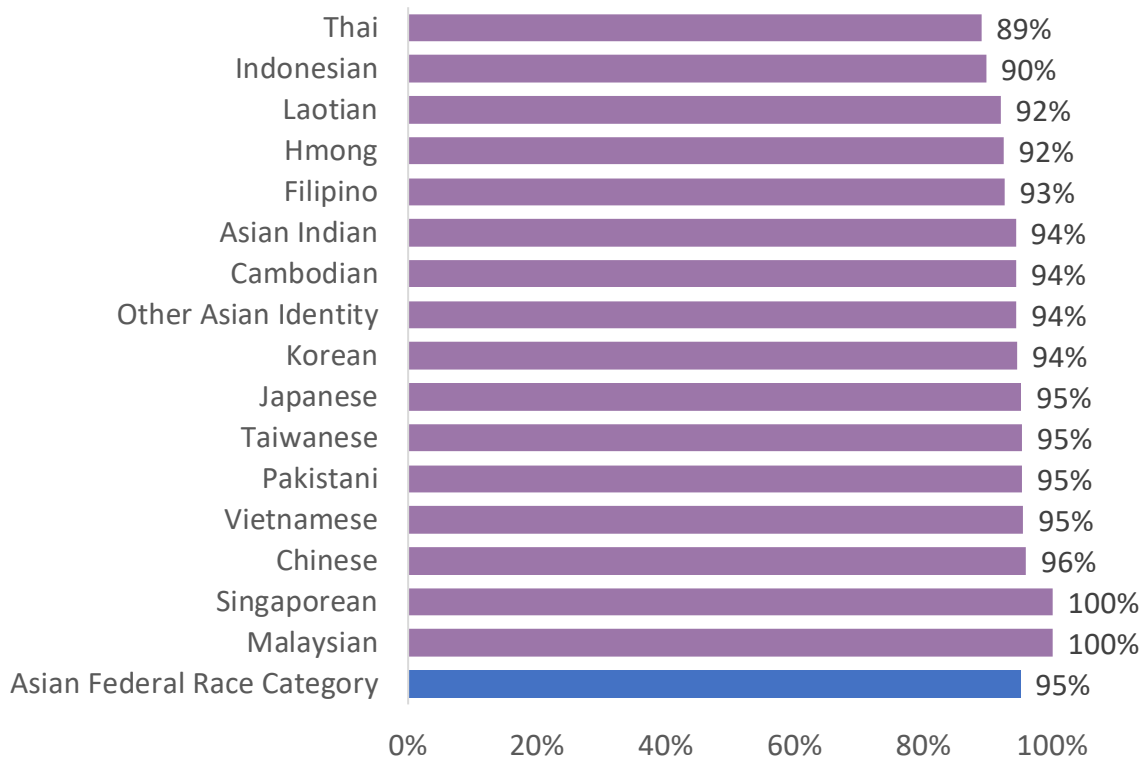


Figure 31: Enrollment in Any Dual Credit Except CTE, Asian Federal Race Category disaggregated by OSPI Race/Ethnicity Codes for 2017 Cohort

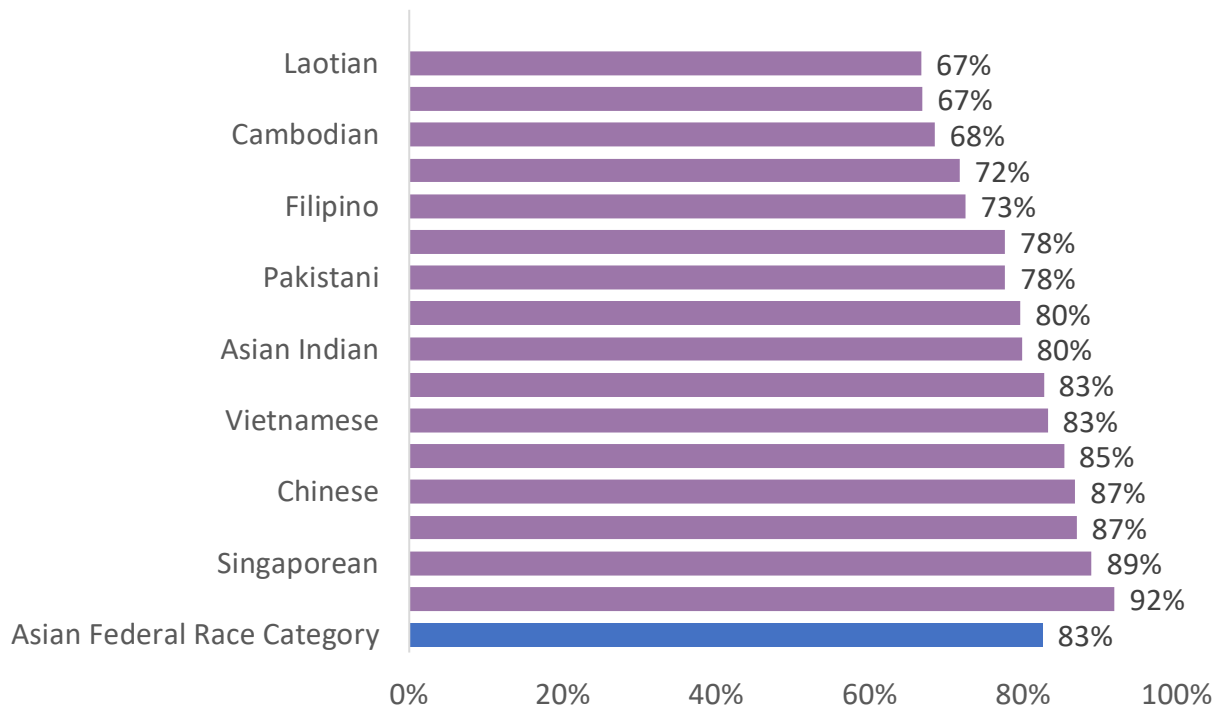


Figure 32: Enrollment in AP, IB, or Cambridge Asian Federal Race Category disaggregated by OSPI Race/Ethnicity Codes for 2017 Cohort

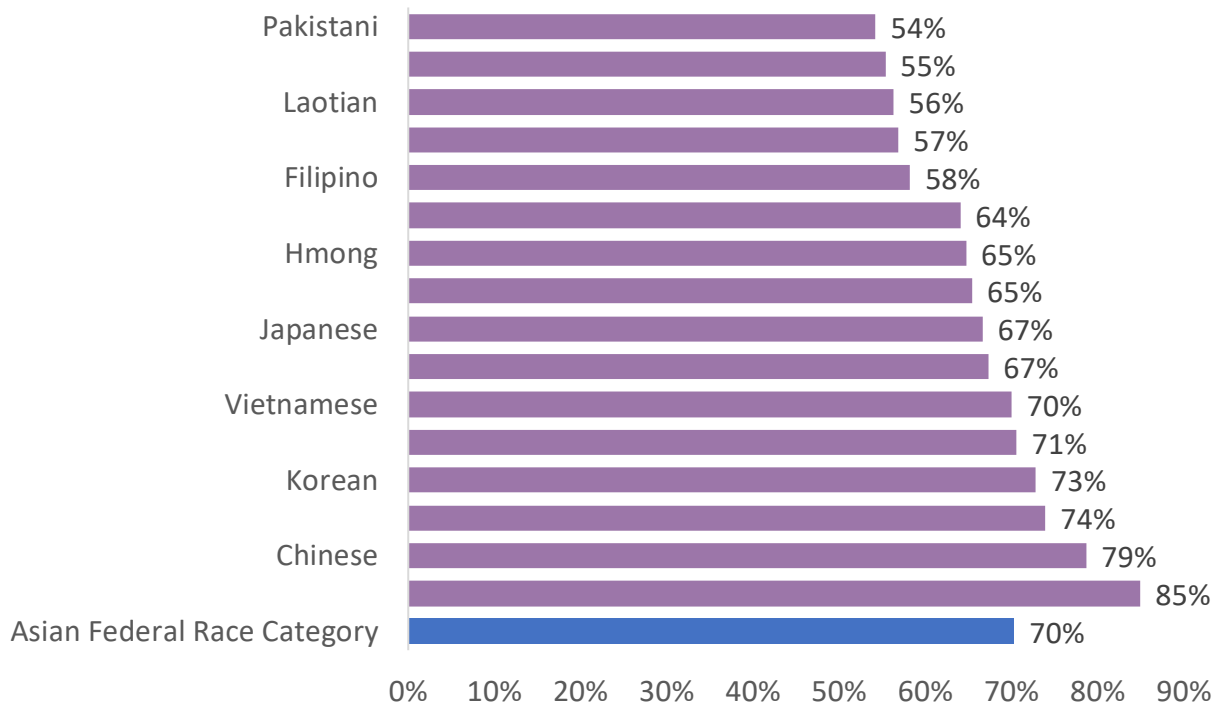
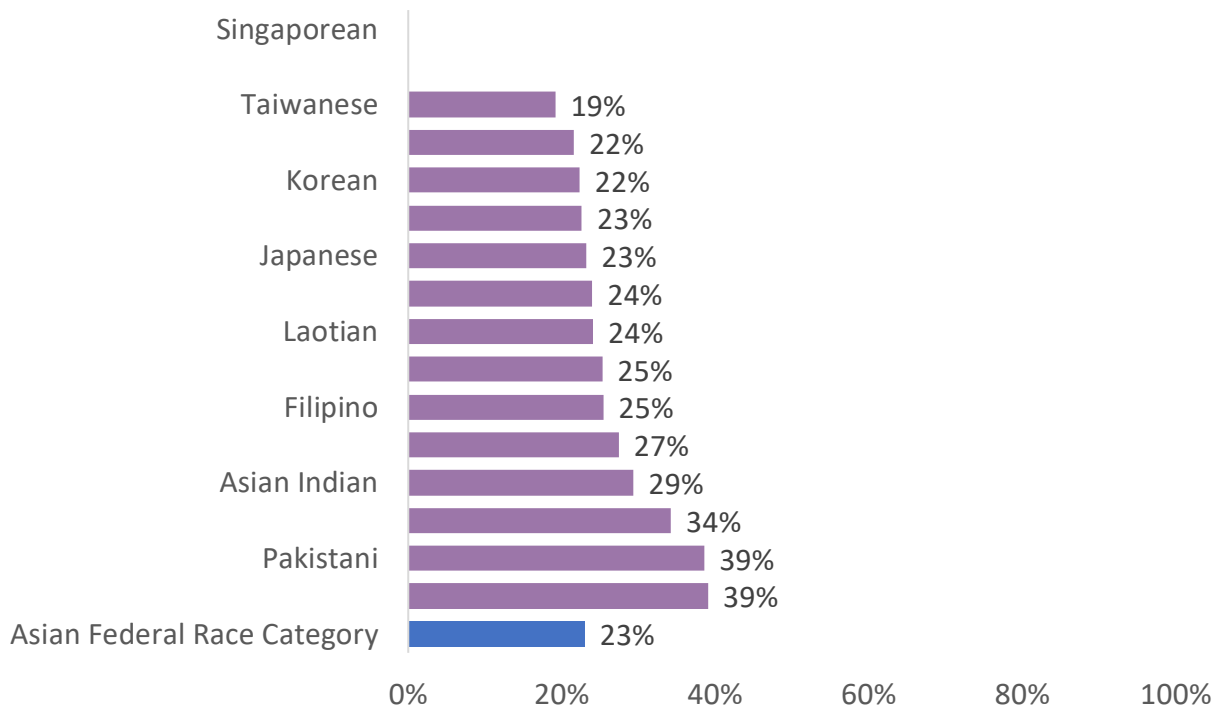


Figure 33: Enrollment in College in the High School, Asian Federal Race Category disaggregated by OSPI Race/Ethnicity Codes for 2017 Cohort



Note: N < 10 for students that identified as Malaysian or Singaporean. These two groups have been excluded to protect student privacy.

Figure 34: Enrollment in CTE Dual Credit, Asian Federal Race Category disaggregated by OSPI Race/Ethnicity Codes for 2017 Cohort

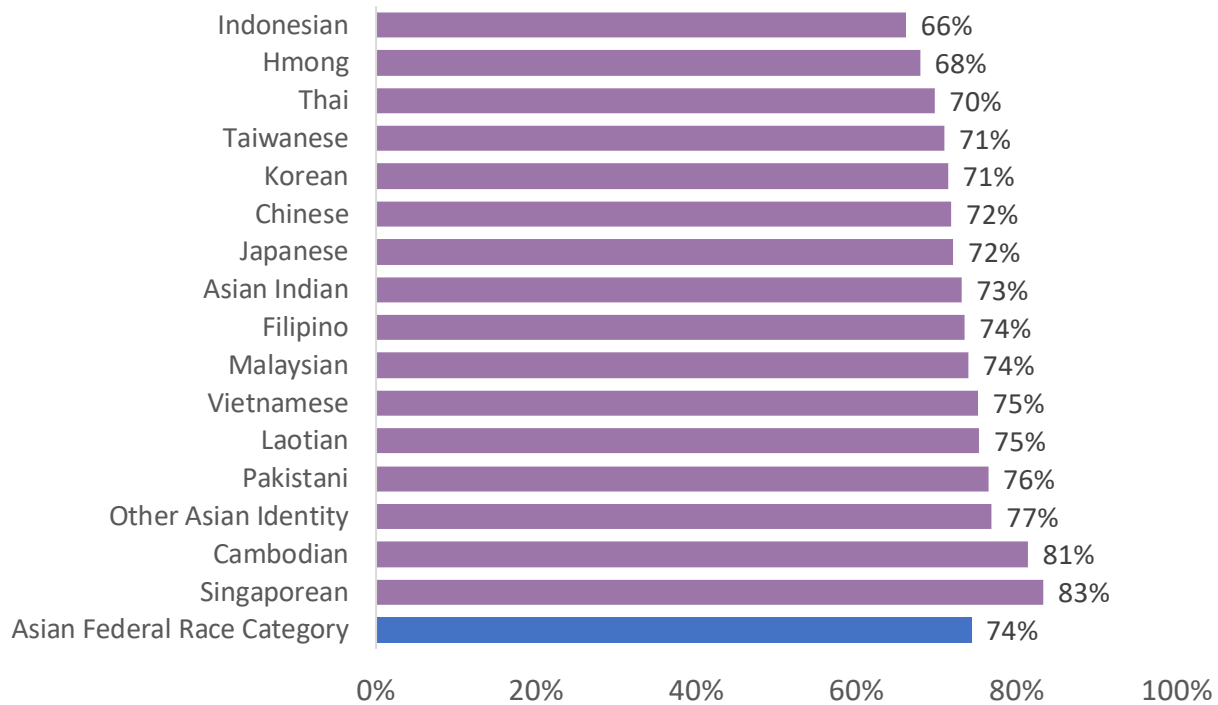
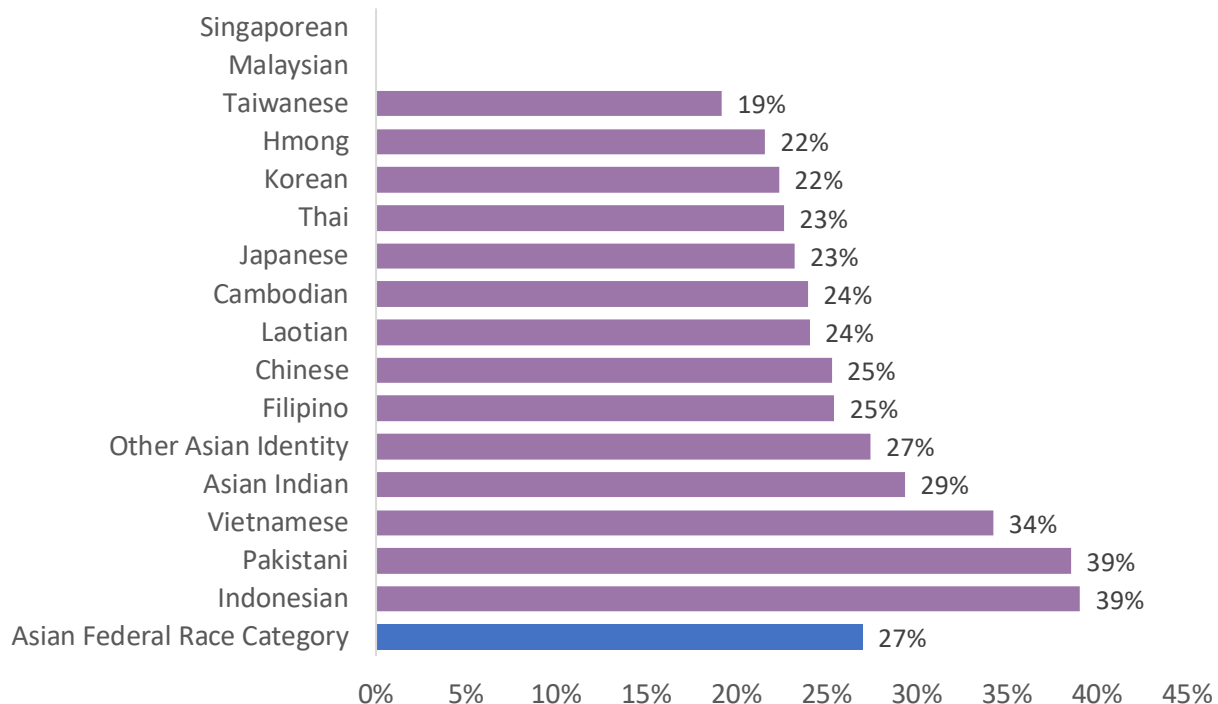


Figure 35: Enrollment in Running Start, Asian Federal Race Category disaggregated by OSPI Race/Ethnicity Codes for 2017 Cohort



Note: N < 10 for students that identified as Malaysian or Singaporean. These two groups have been excluded to protect student privacy.

VII. Conclusion and Recommendations

Pursuant to Chapter 75, Laws of 2022, this report must include recommendations on:

- Additional categories of data reporting and disaggregation.
- Whether to require: (i) Reporting of data related to the application of postsecondary credits earned through a dual credit program towards postsecondary credentials and degrees; and (ii) comparison of postsecondary credential and degree attainment between students who did or did not participate in a dual credit program, and between students who participated in different dual credit programs.

Section V. Table A identifies the limitations of the data that is currently available through existing data collections and compiled by ERDC. These current limitations come from unclear, incomplete, or untapped data sources. **The overall recommendation from ERDC is to focus on improving the quality and completeness of existing data collections and to not require additional categories of data reporting and disaggregation.**

Recommendations for improving data quality and completeness (postsecondary)

These recommendations focus on data collection components that would allow ERDC to better understand how dual credit course participation does or does not result in earning postsecondary credits and in the case of exam-based dual credit, the role of the standardized assessments in earning postsecondary credit.

AP, IB, and Cambridge

ERDC will work with SBCTC to extract data on postsecondary credits earned from AP, IB and Cambridge International from the student data that SBCTC provides to ERDC. ERDC will explore options with OSPI for gaining access to the AP, IB, and Cambridge score data to determine whether students met the exam-based criteria to get college credit.

College in the High School and Running Start

ERDC has been working with the public 4-year institutions to correct PCHEES reporting errors in relation to College in the High School and Running Start courses. Correct reporting is expected to be reflected in the PCHEES data for the 2023-24 academic year. In the meantime, ERDC proposes that we work with each institution to obtain this information to be included in future Dual Credit Annual Reports until the standardized, statewide PCHEES data collection is a reliable source for this information.

CTE Dual Credit

The SERS system could potentially provide more accurate and complete data on both the intent of CTE DC course takers to attain postsecondary credit and on earning of the credit, but the system is not used by all high schools and CTCs and is outdated. ERDC recommends that a common statewide reporting platform is funded for all high schools, districts and colleges to use to report on CTE Dual Credit course taking and outcomes. This is also recommended in the June 2021 [CTE Dual Credit Research Report](#), funded by a Perkins Special Grant Project from the Washington State Board for Community and Technical Colleges (SBCTC).

SBCTC is working with ERDC to more accurately identify, in the data SBCTC provides to ERDC, credits earned from CTE Dual Credit courses by students who attend a CTC.

To know which students are taking CTE Dual Credit courses with the intent to earn the college credits, OSPI could issue guidance to school districts, requiring them to ensure that the designations of courses as CTE Dual Credit are accurate and updated annually.

Additional Required Recommendations

ERDC was asked to recommend whether to require: (i) Reporting of data related to the application of postsecondary credits earned through a dual credit program towards postsecondary credentials and degrees; and (ii) comparison of postsecondary credential and degree attainment between students who did or did not participate in a dual credit program, and between students who participated in different dual credit programs.

At this time, ERDC *does not recommend* requiring additional data collection or reporting related to the application of postsecondary credits earned through a dual credit program towards postsecondary credentials and degrees. Before undertaking additional data collections, ERDC wants to ensure existing data collections are being fully implemented. Additionally, to design a method to collect data on how dual credits are applied to degrees and credentials will require substantial information gathering and understanding of the different ways this happens across different colleges. The ability to map a credit to a specific degree requirement is very challenging within student information systems. Students have multiple options and pathways to obtain a degree, and the specific courses that count towards a specific degree reflect core credit requirements, major requirements, options within that major, course availability, and the specific interests of the student. Not every dual credit class/credit has a direct articulation at every institution.

ERDC *recommends* including the comparison of postsecondary credential and degree attainment between students who did or did not participate in a dual credit program, and between students who participated in different dual credit programs.

Other Recommendations by ERDC:

1. Well-established dual credit measures that are supported by accurate and complete data, such as participation and the rate of students who earn K-12 credits should be presented in a dynamic dashboard format to allow for easier comparisons across student groups, across dual credit programs, and across participation and K-12 credits earned. This dashboard would take the place of figures 1-29 in this current report and would be updated annually with the most recent year of cohort data available by September 1 each year. This report would be different from what OPSI currently reports on the Washington State Report Card because it would be based on cohorts of students as described in this report and not on the annual or “snapshot” reporting already presented by OSPI.
2. The expanded race and ethnic categories available from the education sectors included in ERDC’s data will continue to be used within the context of dual credit reporting, as well as other future ERDC reports. ERDC will ensure that limitations on data use because of small subpopulations are identified and will provide appropriate guidance on how the results can be used. To the extent possible, this work will be done in consultation with the State’s ethnic commissions and other entities positioned to inform how to best present, interpret, and disseminate results using this information.
3. As the characteristics of the Washington student population continue to change, we recognize the importance of ensuring data collection represents all students, while also protecting their individual identities. As such, we recommend continued support for efforts to better understand how to collect and analyze student data related to gender, race, and ethnicity.
4. A case study should be conducted to better understand the challenges of applying dual credit to student degree requirements and the challenges to data collection so that the effort to tie postsecondary credits earned to specific certificate or degree requirements can be weighed against the value of having this data.
5. The 2023 Dual Credit report should include: (1) a dual credit dashboard; (2) a case study to understand challenges in collecting data on the use of dual credit courses to meet certificate and degree requirements; (3) an update on progress to address the accuracy and completeness of postsecondary credit attainment data; (4) recommendations for different measures of academic achievement; and (5) a list of prioritized research questions that will address specific topics. This list will be developed in partnership with our named partners in RCW 28A.600.280 and the fiscal and education committees of the Legislature.

Appendix A: Data Tables

Enrollment

Table A1: Enrollment in Dual Credit Programs by Income

Dual Credit Program Type	Income Level	
	Low Income	Not Low Income
Any Dual Credit	84% 35,543	93% 36,202
Any Dual Credit Except CTE Dual Credit	46% 19,534	73% 28,550
AP, IB, or Cambridge	32% 13,799	56% 21,633
College in the High School	12% 5,239	22% 8,588
CTE Dual Credit	71% 30,261	71% 27,442
Running Start	15% 6,551	26% 10,085
All Students in the cohort	43,561	38,877

Notes: Free/Reduced Price Meal Eligibility is used as a proxy for income. AP = Advanced Placement; IB = International Baccalaureate. Notes: Low income is defined as eligible for free or reduced-price meals. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either eligible or not eligible for free or reduced-price meals.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A2: Enrollment in Dual Credit Programs by Gender

Dual Credit Program Type	Gender	
	Female	Male
Any Dual Credit	89.3% 35,455	87.0% 36,290
Any Dual Credit Except CTE Dual Credit	65.3% 25,928	53.1% 22,156
AP, IB, or Cambridge	47.5% 18,857	39.7% 16,575
College in the High School	18.6% 7,371	15.5% 6,456
CTE Dual Credit	69.0% 27,406	72.6% 30,297
Running Start	24.8% 9,851	16.3% 6,785
All Students in the cohort	39,714	41,724

Notes: Gender is taken from the student's final high school enrollment record. Nonbinary student data not available for this cohort.

Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either male or female.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A3: Enrollment in Dual Credit Programs by Race & Ethnicity Federal Categories

Dual Credit Program Type	Federal Racial Categories						
	AI/AN	Asian	Black /AA	Hispanic	Multiple Races	NH/PI	White
Any Dual Credit	69.7%	95.0%	88.4%	89.0%	84.2%	84.1%	88.7%
	835	5,743	3,397	13,657	4,701	653	42,759
Any Dual Credit Except CTE Dual Credit	32.2%	82.5%	55.5%	61.1%	46.7%	49.7%	61.0%
	386	4,988	2,134	7,577	3,233	386	29,380
AP, IB, or Cambridge	21.1%	70.3%	45.2%	33.4%	47.7%	42.4%	47.7%
	253	4,251	1,739	5,425	2,527	329	20,908
College in the High School	9.8%	23.0%	11.9%	14.4%	15.6%	8.8%	18.0%
	117	1,388	459	2,335	828	68	8,632
CTE Dual Credit	57.6%	74.3%	78.2%	72.1%	70.8%	71.9%	69.7%
	690	4,495	3,006	11,701	3,754	558	33,499
Running Start	11.2%	27.0%	14.7%	13.8%	19.5%	9.3%	22.8%
	134	1,632	564	2,232	1,036	72	10,966
All Students in the cohort	1,198	6,046	3,844	16,223	5,300	776	48,051

Notes: AI/AN = American Indian or Alaskan Native. Black/AA = Black/African American. NH/PI = Native Hawaiian or Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the race categories in this report. Numerators: Students in the racial category who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified in the racial category.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A4: Enrollment in Dual Credit Programs by OSPI Program Participation

Dual Credit Program Type	OSPI Program Participation							
	Migrant Education		Multilingual Learners (TBIP participants)		Students in Special Education		Students with 504 Plan	
	Enrolled	Not Enrolled	Yes	No	Participant	Not Participant	With	Without
Any Dual Credit	76%	88%	77%	89%	74%	90%	89%	88%
	1,557	70,188	3,979	67,766	7,569	64,176	4,447	67,298
Any Dual Credit Except CTE Dual Credit	17%	65%	31%	61%	17%	65%	56%	59%
	1,788	46,296	1,611	46,473	1,788	46,296	2,827	45,257
AP, IB, or Cambridge	19%	44%	23%	45%	12%	48%	41%	44%
	389	35,043	1,190	34,242	1,182	34,250	2,077	33,355
College in the High School	14%	17%	8%	18%	5%	19%	18%	17%
	287	13,540	392	13,435	491	13,336	919	12,908
CTE Dual Credit	66%	71%	70%	71%	70%	71%	74%	71%
	1,360	56,343	3,628	54,075	7,116	50,587	3,705	53,998
Running Start	9%	21%	7%	21%	3%	23%	18%	21%
	194	16,442	345	16,291	334	16,302	887	15,749
All Students in the cohort	2,062	79,376	5,198	76,240	10,221	71,217	5,007	76,431

Students with 504 Plan Notes: A student is defined as having a 504 plan if they had a 504 plan at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either having or not having a 504 plan.

Students in Special Education Notes: A student is defined as participating in Special Education if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in Special Education.

Migrant Education Notes: A student is defined as participating in Migrant Education if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Migrant Education program.

Transitional Bilingual Instructional Program Notes: A student is defined as participating in the Transitional Bilingual Instructional Program if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Transitional Bilingual Instructional Program.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A5: Enrollment in Dual Credit Programs by Homelessness Status

Dual Credit Program Type	Homelessness Status	
	Experiencing Homelessness	Not Experiencing Homelessness
Any Dual Credit	76% 4,610	89% 67,135
Any Dual Credit Except CTE Dual Credit	32% 1,932	61% 46,152
AP, IB, or Cambridge	23% 1,375	45% 34,057
College in the High School	8% 502	18% 13,325
CTE Dual Credit	67% 4,081	71% 53,622
Running Start	8% 478	21% 16,158
All Students in the cohort	6,093	75,345

Notes: A student is identified as experiencing homelessness if they were identified in CEDARS data as homeless, as defined in the McKinney–Vento Act, Section 725(2), at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who enrolled in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either experiencing homelessness or not.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Intersectional Enrollment

Table A6: Enrollment in Dual Credit Programs by Income & Gender

Dual Credit Program Type	Income x Gender			
	Low Income		Not Low Income	
	Male	Female	Male	Female
Any Dual Credit	82%	85%	92%	94%
	18,065	17,478	18,225	17,977
Any Dual Credit Except CTE Dual Credit	40%	53%	68%	79%
	8,713	10,821	13,443	19,137
AP, IB, or Cambridge	28%	37%	52%	59%
	6,228	7,571	10,347	11,286
College in the High School	11%	14%	20%	24%
	2,412	2,827	4,044	4,544
CTE Dual Credit	72%	70%	73%	68%
	15,872	14,389	14,425	13,017
Running Start	12%	19%	21%	31%
	2,567	3,984	4,218	5,867
All Students in the cohort	21,984	20,577	19,740	19,137

Note: Data on nonbinary students is unavailable for this cohort. Free/Reduced Price Meal Eligibility is used as a proxy for income.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A7: Enrollment in Dual Credit Programs by Income & Race

		Federal Racial Categories						
Dual Credit Program Type		AI/AN	Asian	Black /AA	Hispanic	NH/PI	Multiple Races	White
Low Income Students	Any Dual Credit	616	2,524	2,621	11,109	523	2,278	15,872
		66.4%	92.2%	87.1%	82.9%	82.8%	83.2%	83.1%
	Any Dual Credit Except CTE Dual Credit	253	2,048	1,560	5,749	290	1,267	8,367
		27.3%	74.8%	51.8%	42.9%	45.9%	46.3%	43.8%
	AP, IB, or Cambridge	171	1,689	1,291	4,063	254	950	5,381
		18.4%	61.7%	42.9%	30.3%	40.2%	34.7%	28.2%
	College in the High School	73	487	306	1,818	43	288	2,224
		7.9%	17.8%	10.2%	13.6%	6.8%	10.5%	11.6%
	CTE Dual Credit	510	2,071	2,350	9,690	455	1,917	13,268
		55.0%	75.6%	78.1%	72.3%	72.0%	70.0%	69.4%
	Running Start	77	389	39	3,340	914	639	641
		8.3%	12.9%	6.2%	17.5%	27.6%	22.7%	25.0%
All Students (Count)		928	2,739	3,009	13,405	632	2,737	19,111
Not Low-Income Students	Any Dual Credit	219	3,219	776	2,548	130	2,423	26,887
		81.1%	97.3%	92.9%	90.4%	90.3%	94.5%	92.9%
	Any Dual Credit Except CTE Dual Credit	133	2,940	574	1,828	96	1,966	21,013
		49.3%	88.9%	68.7%	64.9%	66.7%	76.7%	72.6%
	AP, IB, or Cambridge	82	2,562	448	1,362	75	1,577	15,527
		30.4%	77.5%	53.7%	48.3%	52.1%	61.5%	53.7%
	College in the High School	44	901	153	517	25	540	6,408
		16.3%	27.2%	18.3%	18.3%	17.4%	21.1%	22.1%
	CTE Dual Credit	180	2,424	656	2,011	103	1,837	20,231
		66.7%	73.3%	78.6%	71.4%	71.5%	71.7%	69.9%
	Running Start	57	914	175	639	33	641	7,626
		21.1%	27.6%	21.0%	22.7%	22.9%	25.0%	26.4%
All Students (Count)		270	3,307	835	2,818	144	2,563	28,940

Table A8: Enrollment in Dual Credit Programs by Race & Gender

		Federal Racial Categories						
Dual Credit Program Type		AI/AN	Asian	Black /AA	Hispanic /Latino	NH/PI	Multiple Races	White
Female Students	Any Dual Credit	430	2,885	1,682	6,752	310	2,314	21,082
		73.0%	95.7%	90.3%	85.6%	86.1%	89.4%	90.0%
	Any Dual Credit Except CTE Dual Credit	221	2,603	1,193	4,198	213	1,748	15,752
		37.5%	86.3%	64.1%	53.2%	59.2%	67.5%	67.3%
	AP, IB, or Cambridge	133	2,209	975	2,998	175	1,352	11,015
		22.6%	73.2%	52.4%	38.0%	48.6%	52.2%	47.0%
	College in the High School	67	712	249	1,297	34	443	4,569
		11.4%	23.6%	13.4%	16.4%	9.4%	17.1%	19.5%
	CTE Dual Credit	342	2,168	1,436	5,608	259	1,778	15,815
		58.1%	71.9%	77.1%	71.1%	71.9%	68.7%	67.5%
	Running Start	97	925	348	1,333	52	624	6,472
		16.5%	30.7%	18.7%	16.9%	14.4%	24.1%	27.6%
All Students (count)		589	3,016	1,862	7,885	360	2,589	23,413
Male Students	Any Dual Credit	405	2,858	1,715	6,905	343	2,387	21,677
		66.5%	94.3%	86.5%	82.8%	82.5%	88.0%	88.0%
	Any Dual Credit Except CTE Dual Credit	165	2,385	941	3,379	173	1,485	13,628
		27.1%	78.7%	47.5%	40.5%	41.6%	54.8%	55.3%
	AP, IB, or Cambridge	120	2,042	764	2,427	154	1,175	9,893
		19.7%	67.4%	38.5%	29.1%	37.0%	43.3%	40.2%
	College in the High School	50	676	210	1,038	34	385	4,063
		8.2%	22.3%	10.6%	12.4%	8.2%	14.2%	16.5%
	CTE Dual Credit	348	2,327	1,570	6,093	299	1,976	17,684
		57.1%	76.8%	79.2%	73.1%	71.9%	72.9%	71.8%
	Running Start	37	707	216	899	20	412	4,494
		6.1%	23.3%	10.9%	10.8%	4.8%	15.2%	18.2%
All Students (count)		609	3,030	1,982	8,338	416	2,711	24,638

High School Credit Attainment

Table A9: High School Credit Attainment in Dual Credit Programs by Income

Dual Credit Program Type	Income Level	
	Low Income	Not Low Income
Any Dual Credit	79.1%	92.1%
	33,665	35,815
Any Dual Credit Except CTE Dual Credit	43.4%	72.4%
	18,478	28,137
AP, IB, or Cambridge	30.5%	54.9%
	12,990	21,352
College in the High School	11.6%	21.8%
	4,955	8,464
CTE Dual Credit	66.8%	69.6%
	28,437	27,073
Running Start	14.6%	25.3%
	6,210	9,854
All Students in the cohort	42,561	38,877

Notes: AP = Advanced Placement; IB = International Baccalaureate. Low income is defined as eligible for free or reduced-price meals. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either eligible or not eligible for free or reduced-price meals. Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A10: High School Credit Attainment in Dual Credit Programs by Gender

Dual Credit Program Type	Gender	
	Female	Male
Any Dual Credit	87.3%	83.5%
	34,659	34,821
Any Dual Credit Except CTE Dual Credit	63.7%	51.1%
	25,302	21,313
AP, IB, or Cambridge	46.3%	38.2%
	18,388	15,954
College in the High School	18.1%	14.9%
	7,198	6,221
CTE Dual Credit	67.1%	69.2%
	26,632	28,878
Running Start	24.1%	15.6%
	9,558	6,506
All Students in the cohort	39,714	41,724

Notes: Gender is taken from the student's final high school enrollment record. Nonbinary student data not available for this cohort.

Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either male or female.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A11: High School Credit Attainment in Dual Credit Programs by Race & Ethnicity

Dual Credit Program Type	Federal Racial Categories						
	AI/AN	Asian	Black /AA	Hispanic	Multiple Races	NH/PI	White
Any Dual Credit	62.3%	93.9%	84.1%	80.1%	86.0%	79.4%	86.7%
	746	5,675	3,232	12,989	4,556	616	41,666
Any Dual Credit Except CTE Dual Credit	29.5%	81.1%	52.9%	44.3%	58.9%	46.5%	59.6%
	354	4,906	2,034	7,190	3,122	361	28,648
AP, IB, or Cambridge	19.5%	69.0%	42.7%	31.7%	46.0%	39.9%	42.5%
	234	4,173	1,640	5,139	2,439	310	20,407
College in the High School	9.3%	22.6%	11.4%	13.6%	15.1%	8.0%	17.5%
	112	1,366	437	2,210	800	62	8,432
CTE Dual Credit	51.3%	73.1%	73.6%	68.1%	68.1%	67.4%	68.1%
	614	4,421	2,830	11,054	3,610	523	32,458
Running Start	10.3%	26.5%	14.2%	12.9%	18.8%	8.8%	22.1%
	123	1,603	544	2,099	997	68	10,630
All Students in the cohort	2,062	79,376	5,198	76,240	10,221	71,217	5,007

Notes: AI/AN= American Indian/Alaska Native; Black/AA = Black/African American; NH/PI = Native Hawaiian/Other Pacific Islander. Race and ethnicity are taken from the student's final high school enrollment record. Prior to providing the data to ERDC, OSPI aggregated the race and ethnicity of the student into the race categories in this report. Numerators: Students in the racial category who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified in the racial category.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A12: High School Credit Attainment in Dual Credit Programs by OSPI Program Participation

OSPI Program Participation								
Migrant Education			Multilingual Learners (participants in TBIP)		Students in Special Education		Students with 504 Plan	
Dual Credit Program Type	Participant	Not Participant	Yes	No	Participant	Not Participant	With	Without
Any Dual Credit	71.1%	85.7%	71.6%	86.3%	68.8%	87.7%	85.2%	85.3%
	1,466	68,014	3,722	65,758	7,032	62,448	4,268	65,212
Any Dual Credit Except CTE Dual Credit	30.1%	57.9%	29.0%	59.2%	16.2%	63.1%	54.4%	57.4%
	621	45,994	1,508	45,107	1,655	44,960	2,726	43,889
AP, IB, or Cambridge	17.7%	42.8%	21.2%	43.6%	10.8%	46.7%	40.0%	42.3%
	366	33,976	1,103	33,239	1,104	33,238	2,003	32,339
College in the High School	13.1%	16.6%	7.1%	17.1%	4.4%	18.2%	17.7%	16.4%
	270	13,149	368	13,051	446	12,973	888	12,531
CTE Dual Credit	61.9%	68.3%	64.7%	68.4%	64.3%	68.7%	70.5%	68.0%
	1,276	54,234	3,364	52,146	6,575	48,935	3,530	51,980
Running Start	8.7%	20.0%	6.4%	20.6%	3.0%	22.1%	16.6%	19.9%
	180	15,884	332	15,732	302	15,762	833	15,231
All Students in the cohort	2,062	79,376	5,198	76,240	10,221	71,217	5,007	76,431

504 with 504 Plan Notes: A student is defined as having a 504 plan if they had a 504 plan at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either having or not having a 504 plan.

Special Education Notes: A student is defined as participating in Special Education if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in Special Education.

Migrant Education Notes: A student is defined as participating in Migrant Education if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Migrant Education program.

Transitional Bilingual Instruction Program Notes: A student is defined as participating in the Transitional Bilingual Instructional Program if they received the services at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort who are identified as either participating or not participating in the Transitional Bilingual Instructional Program.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Table A13: High School Credit Attainment in Dual Credit Programs by Homelessness Status

Dual Credit Program Type	Homelessness Status		
	Experiencing Homelessness	Not Experiencing Homelessness	All Students
Any Dual Credit	68.5% 4,174	86.7% 65,306	85.3%
Any Dual Credit Except CTE Dual Credit	28.4% 1,732	59.6% 44,883	57.2%
AP, IB, or Cambridge	19.9% 1,214	44.0% 33,128	42.2%
College in the High School	7.6% 461	17.2% 12,958	16.5%
CTE Dual Credit	60.2% 3,668	68.8% 51,842	68.2%
Running Start	6.9% 420	20.8% 15,644	19.7%
All Students in the cohort	6,093	75,345	

Notes: A student is identified as experiencing homelessness if they were identified in CEDARS data as homeless, as defined in the McKinney–Vento Act, Section 725(2), at any time during their enrollment in grades 9 – 12 in a Washington public school. Numerators: Students in the subgroup who earned high school credit in one or more courses of the dual credit type. Denominators: All students in the cohort identified as either experiencing homelessness or not.

Source: Education Research and Data Center (ERDC) – P20W Data Warehouse

Asian Student Data, Disaggregated by Racial Groups

Table A14: Count and Enrollment Rate (%) of students across different dual credit programs for 2017 Cohort

	Any Dual Credit		Any Dual Credit except CTE Dual		AP, IB or Cambridge		College in the HS		CTE Dual Credit		Running Start	
Racial Group	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Other Asian	2,006	94.4	1,692	79.6	1,413	67.3	491	23.4	1,634	76.9	576	27.4
Filipino	1,684	92.6	2,006	72.5	1,036	58.2	350	19.7	1,337	73.5	452	25.4
Chinese	1,356	95.9	1,227	86.8	1,077	78.7	304	22.2	1,016	71.9	346	25.3
Vietnamese	953	95.5	830	83.2	679	70.0	217	22.4	750	75.2	332	34.2
Korean	839	94.5	734	82.7	632	72.8	215	24.8	634	71.4	194	22.4
Japanese	662	95.2	662	77.6	557	66.6	196	23.4	615	72.1	194	23.2
Asian Indian	663	94.3	561	79.8	446	65.4	166	24.3	514	73.1	200	29.3
Cambodian	299	94.3	217	68.5	178	56.9	47	15.0	258	81.4	75	24.0
Thai	153	89.0	115	66.9	93	55.4	33	19.6	120	69.8	38	22.6
Laotian	149	92.0	108	66.7	89	56.3	31	19.6	122	75.3	38	24.1
Taiwanese	141	95.3	136	91.9	124	84.9	37	25.3	105	71.0	28	19.2
Pakistani	81	95.3	66	77.7	45	54.2	17	17.0	65	76.5	32	38.6
Indonesian	61	89.7	58	85.3	41	64.1	16	25.0	45	66.2	25	39.1
Hmong	49	92.5	38	71.7	33	64.7	10	19.6	36	67.9	11	21.6
Malaysian	23	100.0	20	87.0	17	73.9	*	*	17	73.9	*	*
Singaporean	18	100.0	16	88.9	12	70.6	*	*	15	83.3	*	*
Asian Category	5,743	95.0	4,988	82.5	4,251	70.3	1,388	23.0	4,495	74.4	1,632	27.0