

Understanding Your Dual-Credit Students: Southwestern Oregon Community College 2012/13 Report

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Prepared by Regional Educational Laboratory Northwest
for the Oregon College and Career Readiness Research Alliance



About the Oregon College and Career Readiness Research Alliance

The Oregon College and Career Readiness Research Alliance (OR CCR) is one of eight Regional Educational Laboratory (REL) Northwest research alliances. The goal of OR CCR is to increase Oregon students' college and career readiness and success through research, policy, and practice. A wide range of education stakeholders are involved in OR CCR's work, including representatives from the Oregon Department of Education, Higher Education Coordinating Commission, Chief Education Office, and leaders from local education agencies, schools, and postsecondary institutions. OR CCR activities include facilitating a collaborative process for secondary and postsecondary faculty to align curriculum, developing workshop materials on social-emotional learning, supporting the evaluation of Eastern Promise, and conducting research on accelerated college credit programs and developmental education. Please contact Ashley Pierson (Ashley.Pierson@educationnorthwest.org) with any questions about OR CCR or this report.

Limited circulation document

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What is community college dual credit?

Courses with credit awarded through a community college, offered in a high school during regular school hours, and taught by approved high school instructors for the purpose of awarding secondary and postsecondary credit. This may include lower division collegiate courses, career and technical education courses, and online courses. Eligibility requirements vary by college and school/district.

Why this report?

Oregon's postsecondary attainment goal states that by 2025, 40 percent of Oregon adults will hold a bachelor's degree or higher, 40 percent will have an associate's degree or postsecondary certificate, and the remaining 20 percent will hold a high school diploma or equivalent. As in other states, Oregon is investing in accelerated learning options that provide high school students the opportunity to earn college credit as a strategy for increasing high school graduation and postsecondary attainment. Oregon's investments in this area have focused on historically disadvantaged student groups.

How to use the report

The purpose of this report is to examine data about the proportion of students who take dual credit at your college and to identify gaps in participation between students from your dual-credit feeder high schools (i.e., high schools that have 10 or more students who take dual credit from your college) who take dual credit from your college and those who do not. High schools may be included as dual-credit feeder schools for multiple colleges. This report can be used to inform efforts and discussion related to expanding equitable access to community college dual credit. This could include outreach, particular classes, or programs targeted to your dual-credit feeder high schools, as well as to specific groups of students who are underrepresented in your dual-credit population.

Organization of the report

This report begins by exploring the percentage of students who take dual credit at your college, followed by details about feeder high schools, subjects taken, and student outcomes. Next, we explore equity and access in depth by analyzing state, feeder high school, and dual-credit demographics. We then examine dual-credit data on race/ethnicity compared to gender and free or reduced-price lunch eligibility, followed by race/ethnicity and student achievement on state standardized tests.

Context of the report

At the request of OR CCR, REL Northwest conducted a study that describes the various accelerated learning options available to Oregon students and the characteristics of the students who enroll in them, providing a statewide view on dual credit. To conduct this study, REL Northwest developed a dataset linking data from the Oregon Department of Education, the Higher Education Coordinating Commission, and the National Student Clearinghouse. To connect these data, students were matched using name and birthdate. This report includes information on community college dual credit (including Eastern and Regional Promise) but does not include early college or expanded options programs. This dataset provides information on students who took dual-credit at your community college in grades 9–12 from 2010/11 to 2014/15. Except for figure 1, all results in this report are for the 2012/13 school year.

¹ S. 253, 76th Leg., Reg. Sess. (Or. 2011). Retrieved from <https://olis.leg.state.or.us/LIZ/2011R1/Measures/Text/SB0253/Enrolled>

² This study will be publicly available in fall 2016. For a limited distribution version available only to alliance members, please contact Ashley Pierson at Ashley.Pierson@educationnorthwest.org.

Community college dual-credit participation

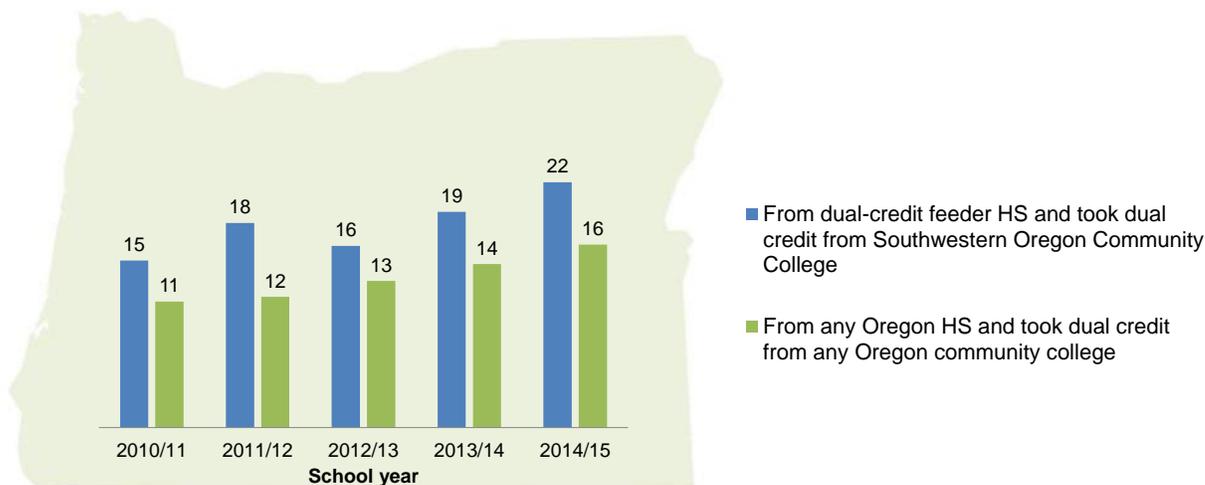
Figure 1 compares the proportion of students at all Oregon public high schools who took dual credit from any community college during high school compared to the proportion of students who took dual credit at any dual-credit feeder high school for Southwestern Oregon Community College from 2010/11 to 2014/15. Only students who attended these dual-credit feeder high schools are included in results for your college.

In 2012/13, the Southwestern Oregon Community College dual-credit feeder high schools (where 10 or more students took dual credit from your college; see table 1 for district information) included in this report are:

- Pacific High School
- Oregon Coast Technology School
- Brookings-Harbor High School
- North Bend Senior High School
- Gold Beach High School
- Myrtle Point High School
- Coquille Junior Senior High
- Marshfield Senior High School

Students from Southwestern Oregon Community College dual-credit feeder high schools (schools where 10 or more students took dual credit at your college) took dual credit from Southwestern Oregon Community College more frequently than the state average, with 22 percent of students in the latest school year taking a dual-credit course from your college compared to 16 percent across the state at any community college. Both the state and Southwestern Oregon Community College have experienced an overall increase in the dual-credit participation rate from 2010/11 to 2014/15.

Figure 1. Southwestern Oregon Community College dual-credit participation is higher in 2014/15 than the statewide dual-credit participation rate



Note: Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

For high school students in 2013/14, 19 percent of students in Southwestern Oregon Community College dual-credit feeder high schools took dual credit at Southwestern Oregon Community College compared to 14 percent of students statewide.

Discussion questions

1. What might explain any changes in dual-credit coursetaking among your dual-credit feeder high schools?
2. What might explain differences between your dual-credit feeder high schools and the state average?

Feeder high schools

Table 1 presents the dual-credit feeder high schools and districts of students who are taking dual credit from Southwestern Oregon Community College in 2012/13. Only schools where 10 or more students took dual credit from your community college are included. Only students who attended these dual-credit feeder high schools are included in results for your college throughout this report.

Table 1. Most dual-credit students are from Brookings-Harbor SD 17C in 2012/13

| Dual-credit feeder high schools | District | Number of students from this high school who took dual credit at your college | Percent of students from this high school who took dual credit at your college |
|---------------------------------|-----------------------------|---|--|
| Pacific High School | Port Orford-Langlois SD 2CJ | 34 | 33.7 |
| Oregon Coast Technology School | North Bend SD 13 | 55 | 24.2 |
| Brookings-Harbor High School | Brookings-Harbor SD 17C | 135 | 22.7 |
| North Bend Senior High School | North Bend SD 13 | 63 | 14.2 |
| Gold Beach High School | Central Curry SD 1 | 27 | 14.1 |
| Myrtle Point High School | Myrtle Point SD 41 | 31 | 14 |
| Coquille Junior Senior High | Coquille SD 8 | 34 | 12.1 |
| Marshfield Senior High School | Coos Bay SD 9 | 82 | 10 |

Note: Certain articulation agreements may be in place for specialized courses with certain colleges. Schools with fewer than 10 students taking dual credit were not included in this table to protect student privacy. Students attending schools with fewer than 10 students taking dual credit were not included in these analyses.

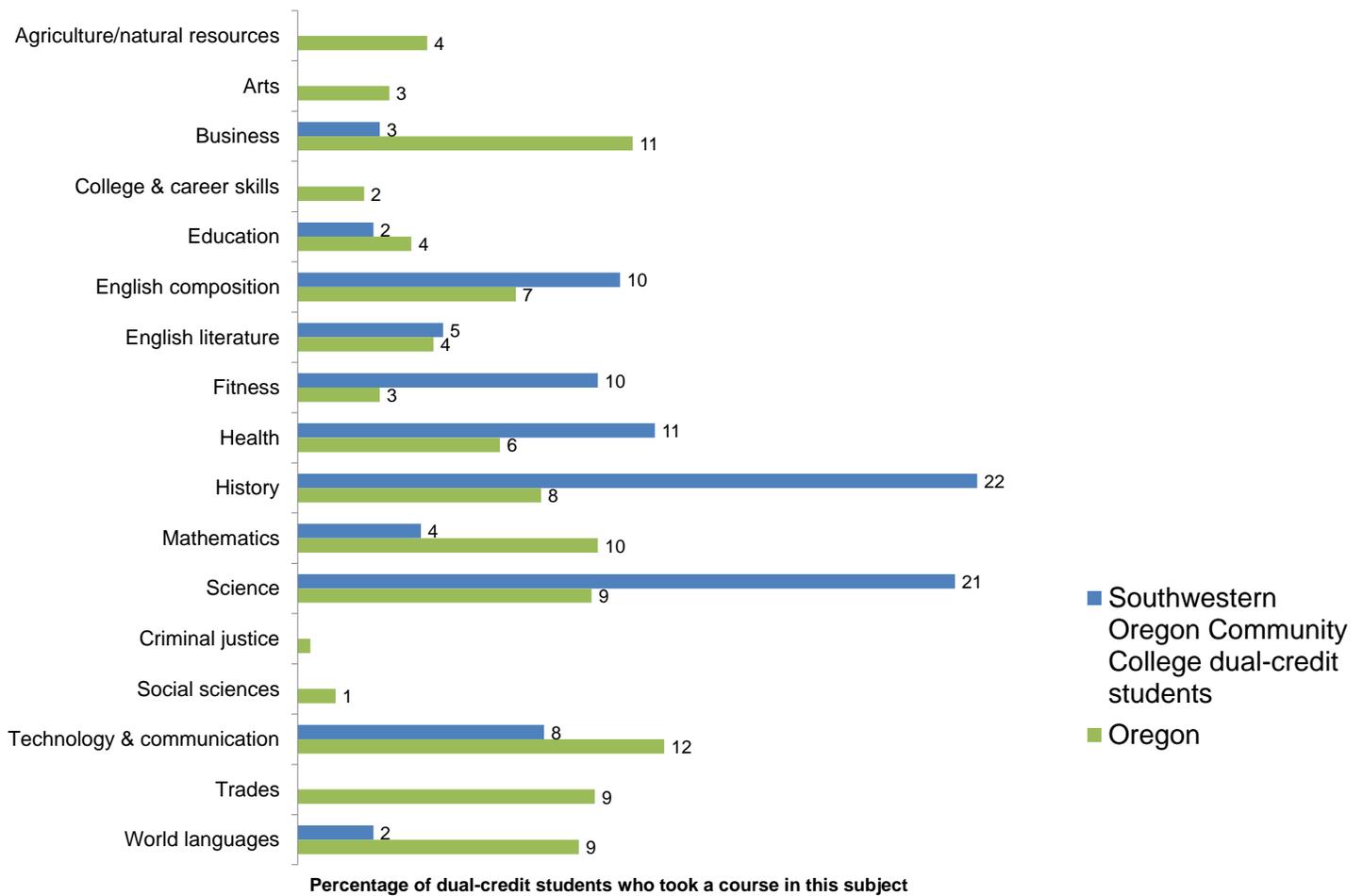
Discussion questions

1. Are you surprised by any of the feeder high schools listed here?
2. Does the number of high schools your dual-credit participants are attending match what you expected?

Dual-credit subjects

Figure 2 presents the subject areas in which dual-credit participants took courses. (See table A1 in the appendix for the top five courses taken statewide in each subject.) History was the most frequently-taken subject among dual-credit takers at your community college, with 21.5 percent of dual-credit takers enrolling in this subject. Science and Health courses were second and third in terms of subject popularity at your community college. Further examining these top subjects, your college has higher dual-credit participation rates in History, Science, and Health than the state average in 2012/13.

Figure 2. History was the most popular community college dual-credit subject at Southwestern Oregon Community College in 2012/13



Note: REL Northwest categorized individual course names into subject areas. Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

For History, you would read this figure as: 22 percent of students who took dual credit at your college and attended a dual-credit feeder high school for your college took a History class, while 8 percent of students across the state who took community college dual credit took a History class in 2012/13.

Discussion questions

1. Are there subject areas in which your college may want to expand participation?
2. Do you need more information about the specific dual-credit coursework students are taking?

Student outcomes

In this section, we present the outcomes of all students compared to all dual-credit participants in Oregon and of all students at Southwestern Oregon Community College dual-credit feeder high schools compared to dual-credit participants at Southwestern Oregon Community College dual-credit feeder high schools. Dual-credit participants tend to have much higher high school graduation and postsecondary enrollment outcomes than nonparticipants. These differences do not mean that enrolling in dual-credit courses causes these higher outcomes.

As you will see in the next section, dual-credit participants tend to come from historically advantaged groups who tend to have higher high school graduation and postsecondary outcomes. Students who choose to participate in dual credit likely have different aspirations and motivation than students who do not choose to participate. The data do not include measures of aspiration and motivation and these factors cannot be controlled for by using analysis techniques. However, some research indicates that dual credit may be a promising strategy for improving student outcomes.

Table 2. Outcomes of all students and dual-credit students in the state compared with all students and dual-credit students attending Southwestern Oregon Community College dual-credit feeder high schools in 2012/13

| | Oregon high school students | | Your community college's dual-credit feeder high school students | |
|---|-----------------------------|-----------------|--|-----------------|
| | All (%) | Dual credit (%) | All (%) | Dual credit (%) |
| High school outcomes for students in the 2012/13 school year | | | | |
| Average annual attendance rate ^a | 91.1 | 94.8 | 93.5 | 95.4 |
| Grade 12 high school completion ^b | 72 | 93.3 | 67.1 | 91.3 |
| Postsecondary outcomes among grade 12 students who graduated in 2011/12* | | | | |
| Enrolled in Southwestern Oregon Community College | 1 | 1.6 | 36.6 | 40.3 |
| Enrolled in Oregon community college | 33.5 | 32.9 | 44.3 | 46.9 |
| Enrolled in Oregon public four-year university | 18.8 | 28.8 | 10.4 | 15.9 |
| Enrolled in any college (including public, private, in-state, out-of-state) | 69.4 | 81.5 | 65.9 | 76.8 |
| Persisted in college from first to second term | 73 | 81.7 | 66.8 | 76.7 |

Note: Missing values (if present) indicate that data were suppressed to protect student privacy. ^aAttendance is average annual attendance over all schools a student attended in the given year, defined as total days attended divided by total eligible days enrolled at any Oregon public school. ^bGrade 12 high school completion is the percentage of grade 12 students who graduated from high school and differs from the cohort graduation rate. *Postsecondary outcomes are calculated for the year prior to the academic year of the report; this allows for inclusion of results from the same group of students in both enrollment and persistence outcomes. Enrollment is restricted to students who graduated high school; persistence is restricted to students who enrolled in college. National Student Clearinghouse data was used for these outcomes and was last updated in the spring of 2016.

Example of how to read this table

This example focuses on the row titled Enrolled in Southwestern Oregon Community College. Statewide, 1 percent of all high school graduates in Oregon enrolled in your college as their first college after high school. Of all high school graduates who took dual credit at any community college while in high school, 1.6 percent enrolled in your college as their first college after high school. Focusing just on your dual-credit feeder high schools, 36.6 percent of all students and 40.3 percent of dual-credit students who took dual credit at your college enrolled in your college as their first college after high school in 2012/13.

Discussion questions

1. Are you surprised by the percentage of students who took dual credit and later matriculate to your college?
2. What could be driving the higher outcomes for dual-credit students compared to all students from your dual-credit feeder high schools?

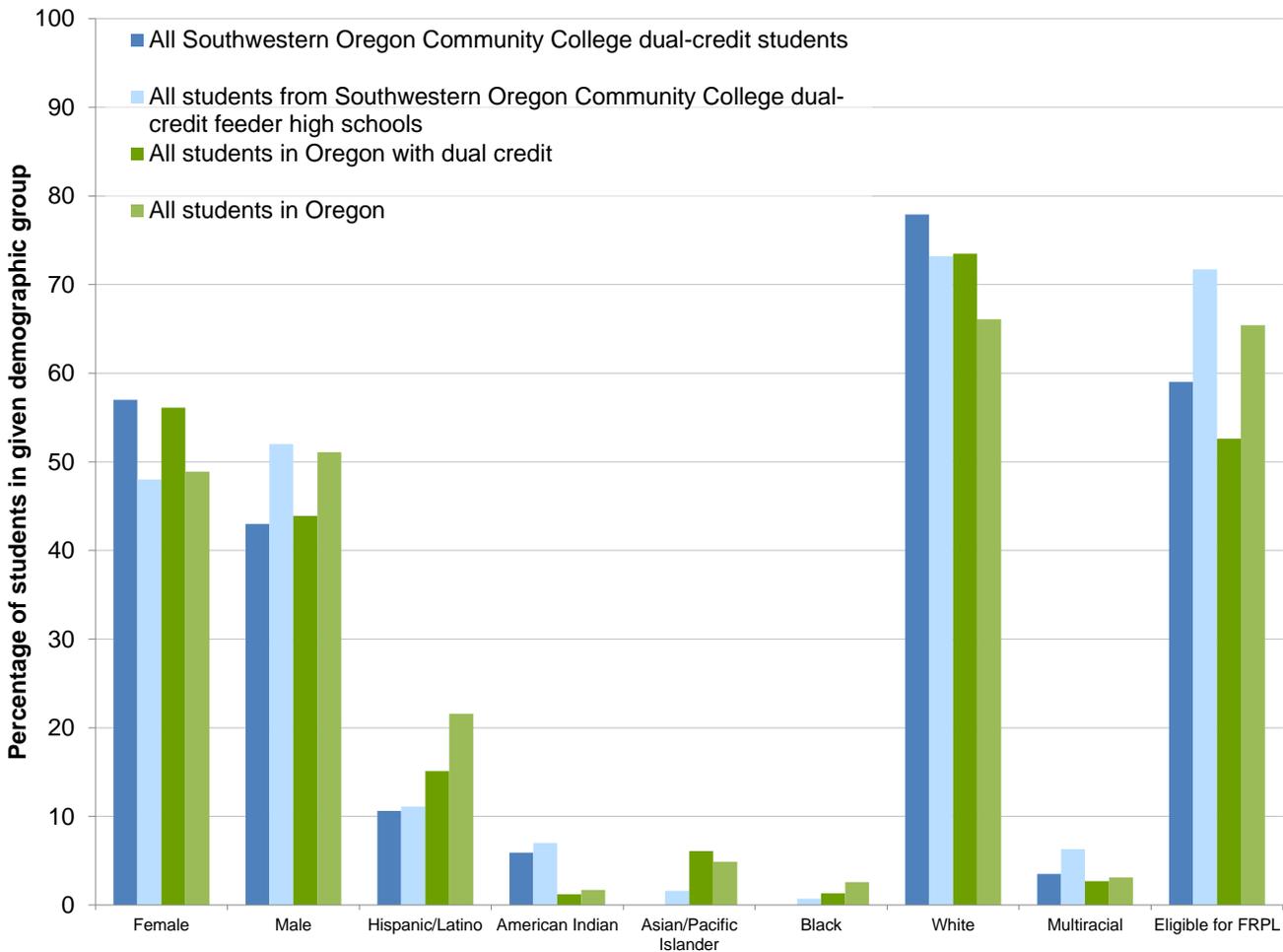
Equity gaps in dual-credit participation

This section examines gaps in dual-credit participation based on gender, race/ethnicity, and eligibility for free or reduced-price lunch (FRPL).

Equity gap: Demographic comparison

Figure 3 compares the demographics of the state population to the Southwestern Oregon Community College dual-credit feeder high school population and the demographics of the state dual-credit population to the Southwestern Oregon Community College dual-credit population in order to understand who is under- and overrepresented in dual credit. These results show that there was a higher percentage of students who took dual credit and identified as female, or White than would be expected based on the overall dual-credit feeder high school population in 2012/13.

Figure 3. Southwestern Oregon Community College dual-credit feeder high school and dual-credit populations have different demographics than the state average in 2012/13



Note: Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

Statewide, 65 percent of all students were eligible for FRPL, compared to 72 percent of students from Southwestern Oregon Community College dual-credit feeder high schools. In addition, 53 percent of all dual-credit students in Oregon were eligible for FRPL, compared to 59 percent of all students who took dual credit from Southwestern Oregon Community College in 2012/13.

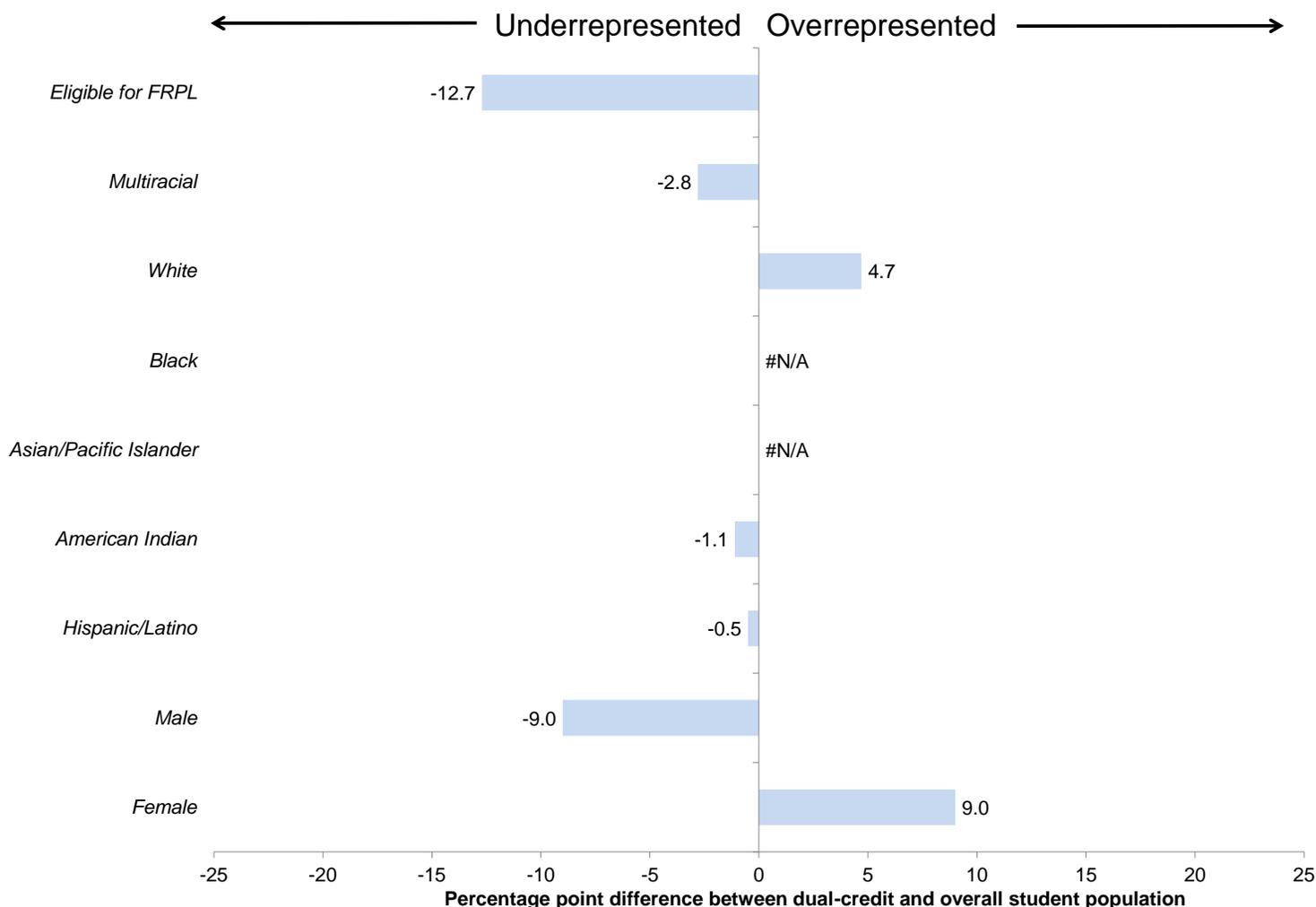
Discussion questions

1. How is your dual-credit feeder high school population different from the state population (light green compared to light blue bar)?
2. How is your dual-credit population different from the overall dual-credit population (dark green bar compared to dark blue bar)?

Equity gap: Over- and underrepresentation

Figure 4 represents the under- or overrepresentation of student groups taking dual credit relative to the overall dual-credit feeder high school population in 2012/13. The bars in the figure are calculated from the difference between the percentage of the student group in the dual-credit population and in the feeder high school population shown in figure 3 for your college. Groups that are underrepresented in this chart could be targeted for outreach or specific programs to increase their participation in dual credit. These student groups were underrepresented in the dual-credit population: male, Hispanic/Latino, American Indian, Multiracial, and eligible for FRPL. Conversely, these student groups were overrepresented in the dual-credit population: female, and White.

Figure 4. Certain student groups tend to be over- or underrepresented in dual credit participation in 2012/13



Note: Not applicable (indicated with #N/A if present) indicates that data were suppressed to protect student privacy. Values of 0.0 indicate that no gap exists between the dual-credit and overall student population.

Example of how to read this figure

Students eligible for FRPL were underrepresented by 12.7 percentage points in your college's dual-credit population compared to the overall dual-credit feeder high school population in 2012/13.

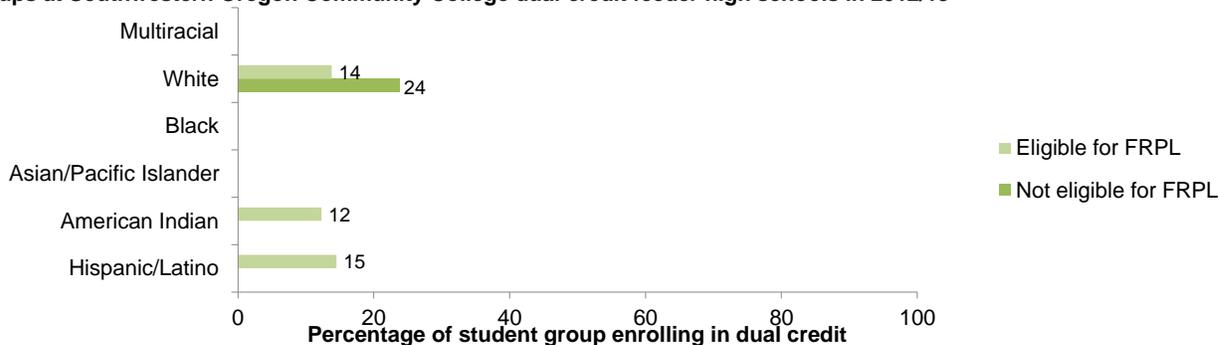
Discussion questions

1. What could explain the underrepresentation in dual-credit participation of certain student groups from your dual-credit feeder high schools taking dual credit from your college?
2. What outreach efforts could your college make to underrepresented groups?
3. How might your college collaborate with your local high schools to close equity gaps?

Equity gap: Race/ethnicity and free or reduced-price lunch eligibility

Figure 5 shows gaps in dual-credit participation between students eligible for FRPL and students who were not eligible for FRPL within each racial/ethnic group. In some of the racial/ethnic groups shown, students not eligible for FRPL participated in dual credit at higher rates.

Figure 5. Gaps in dual-credit participation exist between students who were eligible for FRPL and students who were not eligible for FRPL by racial/ethnic groups at Southwestern Oregon Community College dual-credit feeder high schools in 2012/13



Note: Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

Among students at your dual-credit feeder high schools, 24 percent of White students not eligible for FRPL participated in dual credit at your college in 2012/13. At your dual-credit feeder high schools, 14 percent of White students who were eligible for FRPL participated in dual credit at your college in 2012/13.

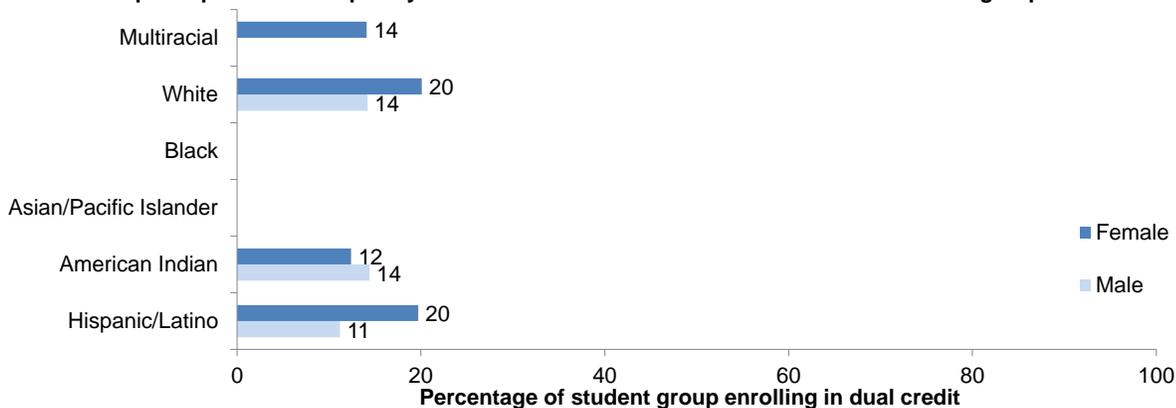
Discussion questions

1. Do the gaps shown between students eligible for FRPL and students not eligible vary by race/ethnicity?
2. Are you surprised by any of the gaps shown in this figure?
3. What do you think might be driving these gaps?

Equity gap: Race/ethnicity and gender

The results in figure 6 demonstrate gaps between males and females in terms of their participation in dual credit across different racial/ethnic groups. This gap varied from 2 to 9 percent by race/ethnicity. In some of the racial/ethnic groups shown, males participated in dual credit at lower rates than females in 2012/13.

Figure 6. Male students participated less frequently in dual credit than females across some racial/ethnic groups in 2012/13



Note: Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

Among students attending your dual-credit feeder high schools, 14 percent of male White students participated in dual credit at your college in 2012/13. At your dual-credit feeder high schools, 20 percent of female White students participated in dual credit at your college in 2012/13.

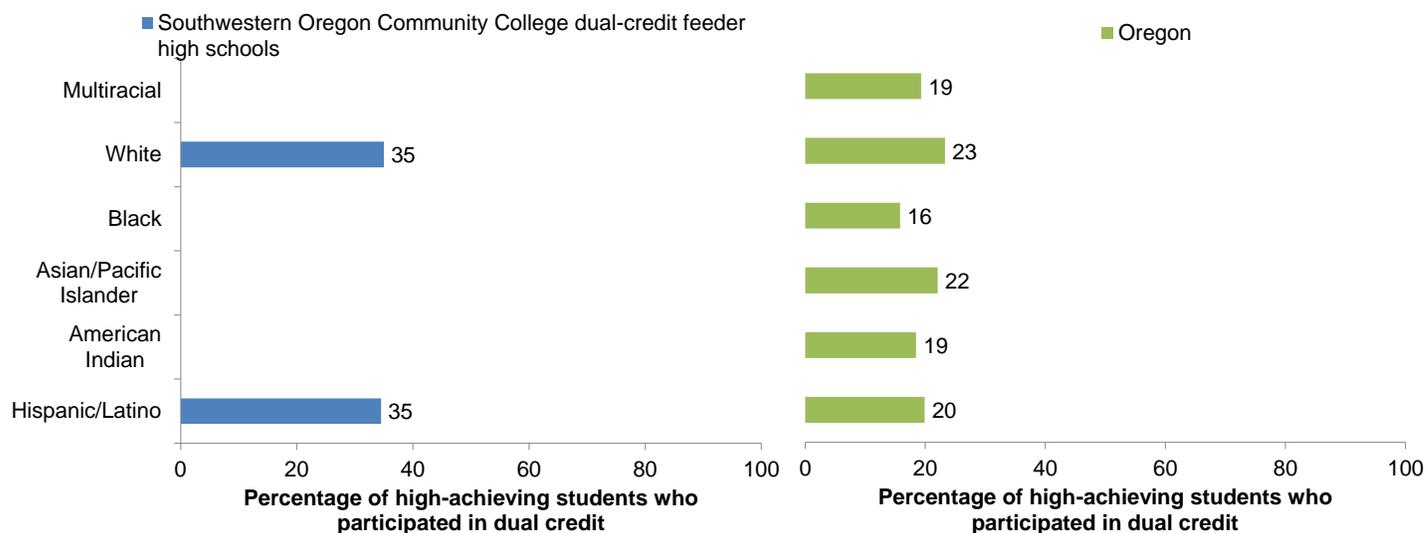
Discussion questions

1. Do the gaps shown between males and females vary by race/ethnicity?
2. Are you surprised by any of the gaps shown in this figure?
3. What do you think might be driving these gaps?

Equity gap: Race/ethnicity and high-achieving students

Figure 7 examines whether there are gaps in participation across racial/ethnic groups for high-achieving students (i.e., students who scored in the top 25 percent on the state assessments in math and reading). State assessments in these data are the Oregon Assessment of Knowledge and Skills (OAKS) from 2011-2014 or the Smarter Balanced Assessment in 2015; if student test scores from high school grades were not available, test scores from 7th or 8th grade were used. Among high-achieving students in your dual-credit feeder schools, White students had the highest participation in dual credit in 2012/13.

Figure 7. Dual-credit participation among high-achieving students varied by race/ethnicity in 2012/13



Note: Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

Among students from your dual-credit feeder high schools, 35 percent of high-achieving Hispanic/Latino students participated in dual credit at your college in 2012/13, compared to 35 percent of high-achieving White students. Statewide, 23 percent of high-achieving White students participated in dual credit at any community college, compared to 20 percent of high-achieving Hispanic/Latino students.

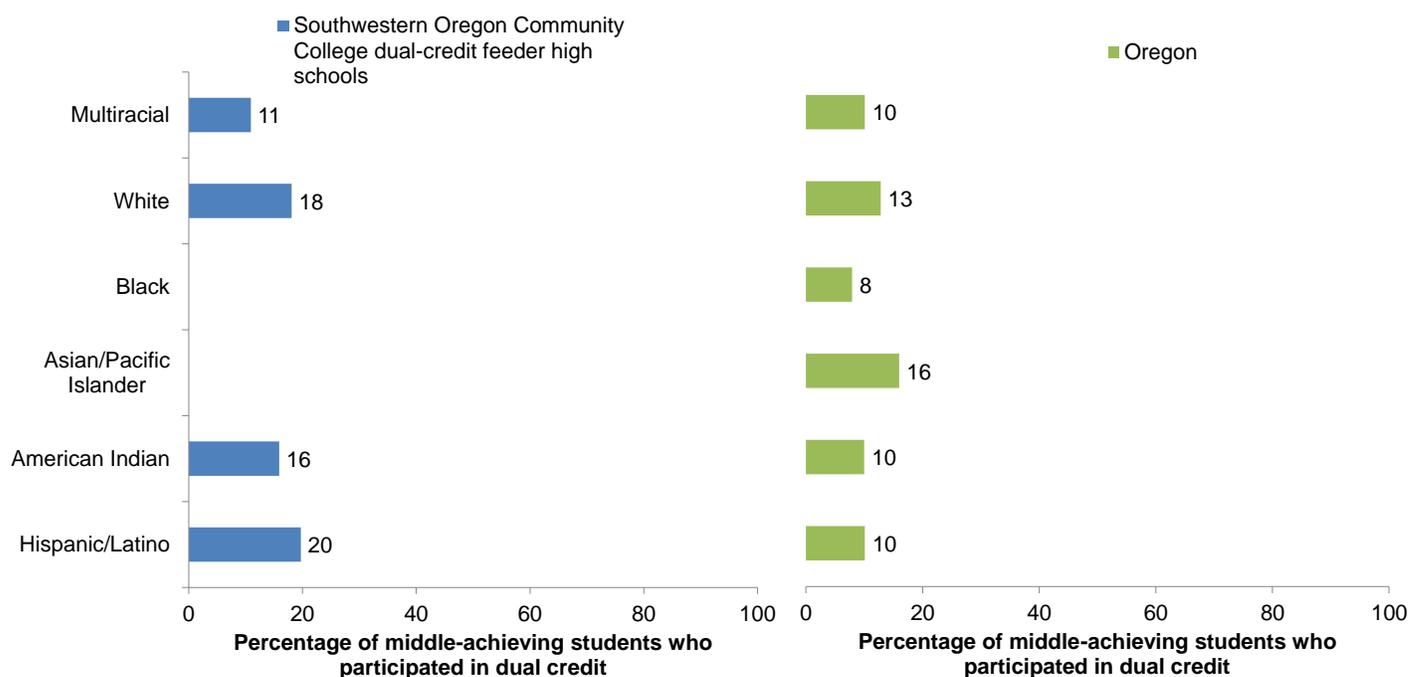
Discussion questions

1. What eligibility requirements does your college have for dual-credit participation? Would any of these eligibility requirements influence these patterns?
2. How could your college work with local high schools to encourage high-achieving students to participate in dual credit?

Equity gap: Race/ethnicity and middle-achieving students

Figure 8 examines gaps in participation across racial/ethnic groups for middle-achieving students (i.e., students who scored in the 26th–75th percentiles on the state assessments in math and reading) at your dual-credit feeder schools. The figure shows that Hispanic/Latino and White middle-achieving students in your dual-credit feeder schools had the highest dual-credit participation in 2012/13.

Figure 8. Dual-credit participation among middle-achieving students varied by race/ethnicity in 2012/13



Note: Missing values (if present) indicate that data were suppressed to protect student privacy.

Example of how to read this figure

Among students from your dual-credit feeder high schools, 20 percent of middle-achieving Hispanic/Latino students participated in dual credit at your college in 2012/13, compared to 18 percent of middle-achieving White students. Statewide, 10 percent of middle-achieving Hispanic/Latino students participated in dual credit at any community college, compared to 13 percent of middle-achieving White students.

Discussion questions

1. Does your college have any programs or course offerings that are geared toward middle-achieving students?
2. How could your college work with local high schools to encourage more middle-achieving students to participate in dual credit?

Conclusion

Now that you've reviewed your college's data, there are overarching questions that you might want to consider. These questions will help you formulate an action plan based on the data in this report.

1. What key issues did you identify based on the data?
2. What might the root causes be for the issues you identified?
 - a. Are any of these root causes things that your college could influence or affect through policy?
3. Are there any changes you can make that would influence these root causes and possibly lead to improved student outcomes?
4. What are some clear and actionable steps you can take to implement those changes?
 - a. Which stakeholders in the education system do you need to involve to implement those steps?
 - b. What goals will you set and how will you measure progress?

Appendix

Table A1. Five most popular dual-credit courses in each subject

| Subject area | Course name, number, and top five courses | Subject area | Course name, number, and top five courses |
|--------------------------------------|--|-----------------------------------|---|
| All subjects | College Algebra (MTH 111) English Composition I (WR 121) Trigonometry/Elementary Functions (MTH 112) English Composition II (WR 122) History of the United States I (HST 201) | History | History of the United States I (HST 201) History of the United States II (HST 202) History of the United States III (HST 203) History of Western Civilization I (HST 102) History of Western Civilization II (HST 103) |
| Mathematics | College Algebra (MTH 111) Trigonometry/Elementary Functions (MTH 112) Calculus I (MTH 251) Calculus II (MTH 252) Introduction to Contemporary Math (MTH 105) | Education | Introduction to Early Childhood Education & Family Studies (ECE 120) Early Childhood Development (ECE 125) Introduction to Education (ED 100) Introduction & Observation in Early Childhood Education (ECE 150) Introduction to Early Childhood Education (ECE 140) |
| Technology | Computer Fundamentals (CIS 101) Keyboarding (CA 121) Beginning Word (CAS 216) Basic Computer Skills/MS Office (CA 133) Beginning Keyboarding (CAS 121) | Social science | American Government & Politics I (PS 201) Introduction to Economics (EC 115) American Government & Politics II (PS 202) Introduction to Psychology (PSY 201) American Government & Politics III (PS 203) |
| Business and management | Computer Typing (BT 120) Introduction to Business Computing (BA 131) Introduction to Business (BA 101) Personal Finance (BA 218) Restaurant Operations (HR 105) | English literature | Introduction to Literature: Fiction (ENG 104) Introduction to Literature: Drama (ENG 105) Introduction to Literature: Poetry (ENG 106) Survey of American Literature (ENG 253) American Literature from 1865 (ENG 254) |
| World languages | First Year Spanish, Term 1 (SPN 101) First Year Spanish, Term 3 (SPN 103) First Year Spanish, Term 2 (SPN 102) Second Year Spanish (SPN 201) Second Year French (SPN 202) | Agriculture and natural resources | Animal Science (ANS 121) Computers in Agriculture (AG 111) Introduction to Animal Science Operation (ANS 122) Plant Propagation (HT 137) Sustainable Ecosystems (CSS 205) |
| Health professions | CPR (HE 261) Emergency First Aid (HE 167) First Aid Basics and Beyond (HE 252) Human Body Systems I (HO 150) Medical Terminology (HM 120) | Arts | Photoshop (VC 130) Ceramics (ART 250) Fundamentals of Acting (TA 141) Introduction to Drawing (ART 131) Graphic Design (ART 225) |
| English composition | English Composition I (WR 121) English Composition II (WR 122) Introduction to Composition (WR 115) English Composition – Research Writing (WR 123) Elements of the Essay (60) | College and career skills | College Survival and Success (CH 100) Study Skills for College Learning (CG 111) Career and Life Planning (CG 140) Early College Odyssey (EL 120) Career Exploration (HD 140) |
| Construction, welding, and mechanics | Basic Drafting (DRF 142) Introduction to AutoCAD (DRF 130) Construction Orientation and Environment (CST 111) Shielded Metal Arc Welding (WLD 121) Engine Repair (AM 145) | Fitness | Volleyball (PE 5) Soccer (PE 5) Yoga (PE 85) Physical Conditioning (PE 185) Sports Conditioning (PE 5) |
| Science | General Biology I (BI 101) General Biology II (BI 102) General Biology III (BI 103) Elementary Anatomy and Physiology (BI 121) Introduction to Human Anatomy and Physiology I (BI 171) | Criminal justice | Survey Criminal Justice System (CJ 100) Introduction to Law Enforcement (CJ 110) Introduction to Criminal Justice System – Courts (CJ 112) Introduction to Criminal Justice System – Police (CJ 111) Introduction to Criminal Justice System – Corrections (CJ 113) |

Note: Courses are listed in order of enrollment, with the highest enrollment course listed first and the next four in descending order. REL Northwest categorized courses into subjects based on course name and department.

Source: Authors.