Dual Credit in Oregon
2010 Follow-up

An Analysis of Students Taking Dual Credit in High School in 2007-08 with Subsequent Performance in College

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Executive Summary

In 2008, the OUS Office of Institutional Research, working with the Office of Community Colleges and Workforce Development, undertook a pilot study to evaluate dual credit instruction – courses taught in an Oregon high school, by a high school teacher sanctioned through a college, that carry both high school and college credit. The study found that dual credit instruction does as well as college-situated instruction in readying students for future college work. After the study appeared, the Joint Boards of Education, acting through the Unified Education Enterprise, directed that it be repeated every two years with the aim of establishing a protocol by which to assess the effectiveness of dual credit programs. To that end, the present study addresses two questions: (1) Do high school students who take dual credit courses succeed when they go on to college?, and (2) Does dual credit instruction do as well as college-situated instruction in preparing students for subsequent college coursework? The earlier study looked at high school students who took dual credit courses in 2005-06; the present study looks at students who took dual credit courses in 2007-08.

In addition, the study includes a statistical sketch of the dual credit program at each participating Oregon college and summary data from community colleges' dual credit programs in career and technical education.

1. Do high school students who take dual credit courses succeed when they go on to college?

An array of evidence says that dual credit students do succeed:

- *Dual credit students have a higher college participation rate than high school graduates overall.* Of Oregon's dual credit seniors in 2007-08, 81.4% continued to some form of postsecondary education by the following winter, compared to 72.6% of Oregon's high school graduating class of 2005, the last year statewide participation rates were available.

- *Dual credit students who go on to college continue to the second year at a higher rate than freshmen who enter college without having earned dual credit.* Within the cohort of freshmen who entered OUS in fall 2008, 87.0% of those who took dual credit in 2007-08 continued to the second year of college, compared to 79.9% of those who did not. The correlation between dual credit enrollment and freshman persistence exists even after controlling for academic strength and other predictive influences on student advancement.

- *Among freshmen who continue to the second year of college, dual credit participants earn a higher first-year GPA.* For the population of freshmen entering OUS in 2008-09 and returning the following year, those who took high school dual credit in 2007-08 completed the first year of college with an average GPA of 3.13, compared to 2.97 for those who did not take dual credit.

- *Students who continue to the second year of college accumulate more college credit if they take dual credit in high school.* In 2008-09, among freshmen new to OUS who returned the following year, dual credit and non-dual credit students alike completed an average of 44 credits. But dual credit students amassed far more cumulative credit. By the start of the second fall, they had accumulated 61.3 college credits, more by almost a full term's worth than the 49.8 credits accumulated by their classmates who took no dual credit in high school.

2. Does dual credit instruction do as well as college-situated instruction in preparing students for subsequent college coursework?

The short answer to the question is yes.

The study identifies a number of core lower-division sequences – in writing, mathematics, and Spanish – where success in the final course of the sequence can be presumed to depend on knowledge gained in the prerequisite. When dual credit students who take the prerequisite in high school and the final course in college are compared to their college classmates who take the entire sequence in college, it turns out that they pass the final course in proportions that are substantially equivalent to those of their college-prepared classmates. It follows that dual credit high school instruction must have done as good a job as college-situated instruction in readying students for the final course of the sequence.

However, this assessment needs qualifying. In several of the mathematics sequences, dual credit students earn a lower average grade in the final term even though their pass rates are largely equivalent. But the indications are mixed. There are other mathematics sequences in which dual credit students' average grade in the final term is as high as or higher than their college-prepared classmates', and in writing and Spanish, it is as high or higher more often than not. If, on the basis of these mixed indications, we were to conclude that dual credit mathematics instruction was inadequate, we would also have to conclude that college-situated writing and Spanish instruction was inadequate. Rather than impugning both instructional venues, it is more reasonable to give dual credit instruction a qualified endorsement. Pass rates in the final term affirm its effectiveness, and average grades in the final term yield conflicting results. The preponderance of evidence therefore favors dual credit instruction, but more than one mathematics sequence calls for close scrutiny in any future study.

Introduction

In 2008, the OUS Office of Institutional Research, in collaboration with the Office of Community Colleges and Workforce Development, undertook a pilot study to evaluate dual credit instruction – courses taught in high school, by a high school teacher sanctioned through a college, that carry both high school and college credit. The study found that dual credit instruction does as well as college-situated instruction in preparing students for subsequent college coursework. After the study appeared, the Joint Boards of Education, acting through the Unified Education Enterprise, directed that it be repeated every two years with the aim of establishing a protocol by which to assess the effectiveness of dual credit programs. To that end, the present study addresses two questions: (1) Do high school students who take dual credit courses succeed when they continue on to college?, and (2) Do dual credit courses give students the preparation they need to handle subsequent college coursework? The study takes up each of these questions in turn.

Part 1 of the study deals with the first question. Are high school students who take dual credit coursework generally successful when they go on to college? To answer the question, the study compares high school students who take dual credit coursework to their peers who don't across a range of measures, including the rate at which they participate in college, their first-year college GPA, and the percentage who continue to the second year of college. The comparisons are based on the overall population of Oregon high school seniors and the class of freshmen who enter college the following year.

Part 2 deals with the second question, which centers on the quality of dual credit instruction. When students take dual credit courses in high school, do those courses prepare them for subsequent college coursework as well as if they had taken the courses in college? Answering this question depends on identifying points in students' educational development where the connection between prior instruction and subsequent performance seems direct and immediate. The study assumes that this connection exists in the introductory writing, mathematics, and foreign language sequences that constitute a core part of the general education curriculum. Accordingly, Part 2 of the study focuses on several of these sequences, and looks in particular at those dual credit students who take the initial term of a sequence in high school and the subsequent term of the sequence the next year in college. Restricting attention to dual credit students in just these sequences significantly reduces the size of the study population, but it has the great merit of allowing their performance in the final term of the sequence to be directly measured against the performance of their college counterparts who take both terms of the sequence in college.

Both parts of the study examine dual credit coursework in 2007-08 and subsequent college coursework in 2008-09. The analysis of dual credit performance is based on courses that are intended for academic transfer; the study does not attempt to evaluate dual credit career and technical education (CTE) programs. However, the study does provide:

- Summary data from community college dual credit CTE programs (Appendices 7-10), as well as
- Individual reports detailing each institution's dual credit program (Appendix 11).

We begin by briefly reviewing the status of dual credit instruction.

Dual Credit in Oregon

Participation in Oregon's dual credit program for academic transfer has grown in the two years since our initial study. In 2007-08, 15,707 students took courses at an Oregon high school for dual credit, up from 11,855 in 2005-06, an increase of 32.5%. In those two years, the number of courses offered as dual credit expanded by 9.1% to 1,820; with the expanded offerings, the number of dual credits taken grew by 22.3% to over 133,000. In 2007-08, high school students completed an average of 8.5 hours of dual credit work, and they performed well in the courses they took, earning a mean course grade of 3.43. As might be expected, seniors were most likely to enroll in dual credit courses, but juniors, sophomores, and even freshmen participated: 49% were seniors, 33% were juniors, 13% were sophomores, and 5% were freshmen. The most common subjects were writing, mathematics, and history.

TABLE 1: Academic Transfer Dual Credit Program Participation, 2005-06 and 2007-08

	2005-06	2007-08	Percent Change
Students Enrolled in Dual Credit[1]	11,855	15,707	32.5%
Credits Enrolled in as Dual Credit	108,913	133,193	22.3%
Average Dual Credit per Student	9.2	8.5	-6.5%
Courses Offered as Dual Credit	1,668	1,820	9.1%
Number of Public Institutions Offering Dual Credit	18	21	16.7%

[1] The 2008 dual credit study reported a student count of 12,027. It has since been determined that some students were double-counted. By removing that duplication, the count was reduced by 172 students to 11,855.

Dual Credit in Other States

Since the publication of our initial report on dual credit in Oregon, two notable studies have appeared elsewhere. The studies were generally affirming: dual credit enrollment was found to have a positive correlation with retention to the second year of college, reduced time to degree, and higher college GPA.

The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States (2007), by the National Research Center for Career and Technical Education in Minnesota, studied Florida and New York high school classes of 2001 and 2002, focusing on dual credit career and technical education. After controlling for high school performance and selected demographic characteristics, the study found that dual credit students in Florida had a higher rate of retention to their second year of college and a higher cumulative college GPA by their third year than their non-dual credit counterparts. However, the same was not the case in New York; there, although dual credit enrollment showed some positive correlation to degree progress, there was no significant relationship to improved retention or higher GPA.

The second study, *An Analysis of the Impact of High School Dual Enrollment Course Participation on Post-Secondary Academic Success, Persistence, and Degree Completion (2008)*, by Dr. Joni Swanson of the University of Iowa, drew upon an NCES dataset to follow a nationally representative sample of dual credit participants from high school graduation in 1992 to subsequent college enrollment. After controlling for gender, socioeconomic status, racial group, first generation status, and high school academic record, the study found that dual credit students had a higher retention rate to the second year of college and improved time to degree. However, the dual credit landscape has changed significantly since 1992, so the results may not hold true for dual credit students in today's schools.

Part 1 – College Participation and Performance

We turn now to the first of the study's two questions: Do high school students who take dual credit courses succeed when they continue on to college? The question can be answered with descriptive statistics that compare high school students who take dual credit courses to their peers who don't; relevant metrics include the proportion of each group that goes on to college, the college-goers' GPA after they arrive, the amount of college credit they accumulate, and the percentage who continue to the second year of college. However, we need to be careful about the conclusions we draw from such descriptive comparisons. As advertised, the comparisons can show whether or not dual credit students enjoy greater success in college than other freshmen, including their non-dual credit peers. But they cannot show that taking dual credit is what leads to students' college success – or even that it helps. To show that, it would be necessary to control for such factors as the comparative academic strength of dual credit students and their non-dual credit peers, using such indicators of strength as high school GPA and SAT scores. After all, it is reasonable to think that academically stronger high school students will do better in college. Suppose that the dual credit student population includes a disproportionate share of strong students, and suppose that, as a group, they do better in college than other groups. Without controlling for academic strength, we cannot tell whether they do better because they took dual credit courses in high school or because they were academically stronger to start with.

It is a limitation of this study that high school GPA and SAT scores are unavailable for a significant portion of the freshman population. Within the group of Oregon's high school graduates who go on to an in-state public college, about three-fifths initially attend an Oregon community college, and because Oregon community colleges have an open enrollment policy, their students do not need to submit high school GPA and SAT scores. Consequently, Part 1 of the study consists of descriptive comparisons that do not attempt to isolate any contribution that taking dual credit might make to subsequent success in college. The single exception is the rate at which OUS students persist to the second year of college; that comparison between dual credit and non-dual credit students does control for an array of characteristics, including indicators of academic strength.

Keeping in mind this caution about the use of descriptive comparisons, here are measures by which students who take dual credit courses can be compared to students who don't:

- Rate of participation in postsecondary education,
- High school GPA,
- Rate of persistence to the second year of college,
- First-year college GPA,
- Credit earned during the first year of college, and
- College credit accumulated by the start of the second year in college.

Participation in Postsecondary Education

Are Oregon dual credit students more likely to go to college than the average high school graduate? And when they go to college, are they more likely to attend in state, or do they take the college credit they earned in an Oregon high school to an out-of-state college? In the table below, high school enrollment data from the Oregon Department of Education was used to identify seniors in 2007-08, and college enrollment data from the National Student Clearinghouse was used to find students' first college in 2008-09. The results are arrayed alongside college-going rates for Oregon's high school graduating class of

2005, as reported in the OUS survey, *Where Have Oregon's Graduates Gone?* The table employs different data years in the comparison – 2007-08 for dual credit seniors vs. 2005 for the overall class of graduating seniors – because college participation rates for more recent overall classes are not available (from 1999 to 2005, the rate for the overall class ranged between 70.5% and 75.0%, so the 2005 figure falls in the middle).

TABLE 2: Initial College Attendance by Winter after Graduation

	2007-08 Dual Credit Seniors	Class of 2005 High School Graduates
Overall College Participation	81.4%	72.6%
Oregon, 2-yr public	21.2%	30.0%
Oregon, 4-yr public	37.5%	21.7%
Oregon, 2- or 4-yr private	6.8%	6.8%
Out of state	15.9%	13.4%
College Unknown	†	0.8%
Did not attend college	18.6%	27.4%

Includes seniors taking dual credit courses intended for academic transfer.
† If college is unknown it will be included in the 'did not attend college' category.
Source: National Student Clearinghouse, *Where Have Oregon's Graduates Gone Class of 2005*.

It comes as no surprise that college-going rates are higher among dual credit students; either early exposure to college coursework through dual credit encourages students to aspire to college, or students who already plan to attend college seek out dual credit courses. Whatever the explanation, to the question of whether dual credit students are more likely than their classmates to attend college, the answer is a clear yes. Within the dual credit population, 81.4% were enrolled in some form of postsecondary education by the winter after graduation, compared to 72.6% of the overall high school class. As to whether dual credit students are more likely than other high school graduates to attend college out of state, taking dual credit does not make much difference: 80.5% of college-going dual credit students chose an Oregon institution, compared to 81.4% of the overall high school class.

A striking tendency exhibited by these data: dual credit students are much more likely to attend a public four-year institution than a community college. Among students who went to college in Oregon, 57.3% of those with dual credit chose a public four-year institution, compared to 37.1% of the overall high school class. National research reveals the same tendency in dual credit students toward four-year colleges.

High School GPA

It makes sense to think that dual credit courses will attract a high school's stronger students. If that is right, then we might also expect that, within the group of graduates who continue on to college, those who took dual credit will be stronger than those who did not. This is certainly true for freshmen who matriculate at an OUS institution, at least as measured by high school GPA. Within the class of freshmen who entered an OUS institution in fall 2008, students who took dual credit in 2007-08 had an average high school GPA of 3.60, compared to an average high school GPA of 3.36 for students who did not take dual credit. The comparison could not be extended to students who enter an Oregon community college. As noted earlier, because community colleges have an open enrollment policy, such data elements as high school GPA and SAT scores are not available.

Persistence to the Second Year of College

Once students get to college, and we compare those who took dual credit courses in high school to those who didn't, are both groups equally likely to continue to the second year of college? Not if their performance in OUS is a guide. Among freshmen who entered an OUS university in fall 2008, those who took dual credit in their last year of high school persisted to the second year of college at a higher rate than those who did not, 87.0% to 79.9%. Of course, in view of dual credit students' stronger average high school GPA, their higher persistence rate might have been expected. But a stronger high school GPA cannot constitute the entire explanation. As the regression model in Appendix 6 shows, even after controlling for academic strength, as represented by high school GPA, SAT scores, and earning college advanced placement credit, the odds that dual credit students would be predicted to persist to the second year of college are increased by 17% compared to students who did not take dual credit ($p < .05$). Perhaps the explanation is that dual credit programs give high school students a preview of college coursework, and this readies them for the greater challenge of college. In any case, there is a statistically significant effect associated with having taken dual credit coursework that is separate from indicators of academic strength.

First-Year College Performance

Judging from the evidence we've discovered so far, it appears that students who take dual credit courses earn higher grades in high school and are more likely to continue to the second year of college than their classmates who take no dual credit. What, then, of the first year in college? Do dual credit and non-dual credit students perform equally well? To answer the question, we look at students who started out in OUS as freshmen in fall 2008 and who returned in fall 2009 for their second year. Restricting the population to students who returned for a second year assures that any comparisons will be based on a full year's work. Students are grouped according to whether or not they took dual credit courses in 2007-08.

TABLE 3: First-Year GPA, Credit Load, and Cumulative Credits
Fall 2008 OUS First-Time Freshmen Who Returned in Fall 2009

	Student Took Dual Credit in 2007-08	Student Did Not Take Dual Credit in 2007-08
First-Year College GPA (2008-09)	3.13	2.97
First-Year College Credits Earned (2008-09)	43.8	44.1
Cumulative College Credits Earned[1]	61.3	49.8

[1] Includes transfer credit, and all credit awarded at the institution through summer 2009.
Public institutions in Oregon follow a quarter calendar; to convert the credits in this table to a semester equivalent, they must be multiplied by 2/3.
Source: OUS Institutional Research

Consider, first, credits earned during the first year of college. Dual credit students earned 43.8 credits on average, and non-dual credit students, 44.1 – a difference of .3 credits, or less than one percent of a full year's coursework. Not much separates the two groups. But compare cumulative credit. Here is where real separation becomes apparent. By the start of the second year of college, students who took dual credit coursework in high school had accumulated an average of 61.3 credits, compared to only 49.8 for their non-dual credit peers. Although both groups of students accrued the same amount of credit during their first

year in college, dual credit students evidently began college with a considerable edge: taking dual credit courses in high school led to a cumulative difference, on average, of 11.5 credits, nearly a full-time load for a college term. That constitutes a significant leg up toward a college degree, and at current OUS resident tuition and fee rates, it represents savings approaching $2,000.

The final measure by which we are able to judge first-year performance is college GPA. Just as dual credit participants were stronger students in high school, so they were stronger students in college. By the end of the first year, OUS freshmen who took dual credit courses in high school had achieved a mean college GPA of 3.13, compared to 2.97 for their non-dual credit classmates. Clearly, when students who take dual credit courses leave high school, they are well situated to succeed in college.

Conclusion

Part 1 of this study began with the following question: Do high school students who take dual credit courses succeed when they continue on to college? The answer, when we compare them to their classmates who do not take dual credit courses, is a resounding yes. To begin with, a greater percentage move on from high school to college. And once they get to college, they do better: their first-year college GPA is higher, and by the start of their second year, they have accumulated almost a term's more college credit. Finally, a greater proportion persist to the second year of college.

The higher rate of persistence undoubtedly is the most important sign that dual credit students enjoy greater postsecondary success. Undergraduate attrition is severest between the first and second years of college. For example, although the six-year graduation rate for freshmen entering OUS in fall 2003 was 58.9%, it was 71.2% for those freshmen who persisted to the second year of college[1]. Since in 2008 dual credit students' rate of persistence to the second year was 7 percentage points higher than for non-dual credit students, simple multiplication (.712 times .07) tells us that 5% more of their numbers will complete a degree. And the advantage enjoyed by dual credit students cannot be attributed solely to their being stronger students in high school; as we noticed above, even after controlling for indicators of academic strength, there is a positive effect on persistence associated with having taken dual credit coursework in high school.

Attaining a college degree is the primary goal of most university undergraduates; any program has value that gives students a chance to move toward that goal. Oregon's dual credit program gives its strongest high school students that chance, and they appear to be taking advantage of it.

[1] For the most recent five cohorts, the graduation rate of freshmen who persisted to the second year of college was 71.3%, on average.

Part 2 – Preparation for Subsequent College Coursework

Methodology - Course Sequences

To this point, we've asked whether dual credit students succeed when they continue on to college. Answering this question has mainly required us to look at student performance during the first year of college. As a group, dual credit students accumulate more credit than non-dual credit students, their first-year college GPA is higher, and they persist to the second year of college at a higher rate. Plainly, they thrive. If the question is whether high school students make good use of the chance to participate in dual credit programs, the answer seems to be yes.

Nevertheless, there is a second question regarding dual credit programs that we have yet to consider. That question concerns the quality of dual credit instruction itself. When dual credit students thrive in college, is this because dual credit instruction has given them a solid foundation? Or would they have been given an even solider foundation if they had taken their dual credit coursework at a college? In other words, does dual credit high school instruction do as well as college-situated instruction in preparing students for subsequent college work? This is the question we take up in Part 2 of this study.

To address the question, it makes sense to examine curricular sequences in which a dual credit course is prerequisite to a course students subsequently take as freshmen in college, and where it can be presumed that success in the subsequent college course depends on knowledge gained in the prerequisite. Accordingly, we will begin by identifying the population of students who take the prerequisite in high school as dual credit and then finish the sequence in college. Against that group, we will compare the population of students who take the entire sequence in college. And then we will ask which group does better in the final course of the sequence, those who take the prerequisite in high school, or those who take it in college? If dual credit instruction is the equal of college-situated instruction, dual credit students should perform as well in the final course as their college-prepared counterparts.

TABLE 4: Typical Two-Course Sequences

Dual Credit Course (taken in 2007-08)		Course in College (taken in 2008-09)
WR121 Composition I	→	WR122 Composition II
MTH111 College Algebra	→	MTH112 Trig/Pre-Calc
MTH112 Trig/Pre-Calc	→	MTH251 Calculus I
MTH251 Calculus I	→	MTH252 Calculus II
MTH252 Calculus II	→	MTH254 Vector Calc I
SPAN103 1st yr Span III	→	SPAN201 2nd yr Span I

A review of dual credit courses in 2007-08 and subsequent college courses in 2008-09 reveals 6 two-course sequences that seem suitable for analysis (Table 4). These are among the most common two-course sequences offered by high schools as dual credit. Notice that it is necessary to follow dual credit students and their college-prepared counterparts across consecutive years. Because our aim is to evaluate dual credit instruction in light of subsequent college performance, we must focus on dual credit students who take the first course of a sequence in high school but who do not complete the sequence until college the following year. In the interest of parity, we will also require that the college students against whom dual credit students are

Student Cohorts Used for Comparisons

Dual Credit Group

Took course 1 as dual credit and course 2 in college*

2007-08 COURSE	2008-09 COURSE
Dual Credit	**College**

College-Only (Control) Group

Took sequence exclusively in college*

2007-08 COURSE	2008-09 COURSE
College	**College**

*Dual credit students are separately compared to community college and OUS college-only students.

being compared take the sequence across consecutive years. Again, the first course will have been taken in 2007-08. Dual credit students will have taken it in high school, and the comparison group will have taken it in college. The second course of the sequence will have been taken in 2008-09, and this time both groups will have taken it in college.

A final methodological point: As we saw in Part 1 of this study, dual credit students are academically stronger coming out of high school than their non-dual credit peers. Accordingly, when we compare their college performance to the performance of their college-prepared counterparts, we need to control for any disparities in academic ability. If we fail to do so, we won't know whether success in the final course of a sequence is evidence of the quality of dual credit instruction or the quality of dual credit students.

Pass Rate in the Last Course of a Sequence

Framing the Issue

In the previous section, we identified course sequences that can be used to compare dual credit-prepared students to college-prepared students. The next step is to gauge the students' comparative success, where we take success to mean passing the final course of the college sequence satisfactorily (i.e., with a grade of C- or better). Using pass rates as a measure of success makes intuitive sense, since it is, after all, by satisfactorily passing their college curriculum that students ultimately meet the requirements for a degree. Accordingly, our strategy will be to compare dual credit- against college-prepared students in terms of their pass rates in the final course of a sequence. If we discover that an appreciably smaller proportion of dual credit students pass the final course than their college-prepared counterparts, this will be evidence that dual credit instruction does not do a good enough job in readying students for subsequent college work. However, if we discover that the same or an even greater proportion of dual credit students pass the final course than their college-prepared counterparts, this will be evidence that dual credit instruction does as well as college-situated instruction in readying students for subsequent college work.

To avoid biasing our results, it is important to compare like students to like, and so we restrict the comparison to those students who are adequately prepared to continue on in the sequence, construing "adequately prepared" to mean those dual credit students and their college-prepared counterparts who earn an A or B in the prerequisite. Such students presumably have mastered the course material well enough to succeed in the sequence's final course, so we are comparing the performance in the final course of dual credit students who ought to be prepared for it against college-only students who likewise ought to be prepared.[2] To recapitulate our reasoning: If, within the population of dual credit students, the proportion who satisfactorily pass the final course of a sequence is equal to or greater than the proportion of college-only students who do the same, then we may conclude that dual credit instruction does as well as college-situated instruction in readying students for the final course.

[2] For the purpose of comparison, we ignore students whose grade in the prerequisite was C or lower. It would be no surprise if C students struggled in the final course, and therefore it would make little sense to criticize dual credit instruction on the grounds that its C students were not well prepared to continue on. But for A and B students, it would be a serious indictment of dual credit instruction if they were not well enough prepared to continue on in the sequence. Within the six sequences under examination, only 11% of dual credit students completed the prerequisite with a grade of C; 88% earned an A or B.

Data and Discussion

The evidence we've assembled appears below. Note that dual credit students are compared separately to community college and to OUS college-only students.

TABLE 5: Percent of Students Satisfactorily Passing the Last Course of a Sequence (Grade of C- or Better) Students who Received an A or B in the First Course of the Sequence

Sequence 2007-08		Sequence 2008-09	Location of 2008-09 Instruction	Dual Credit-to-College #	Dual Credit-to-College % Passed	College-to-College #	College-to-College % Passed	Difference DC - C
MTH111 College Algebra	→	MTH112 Trig/PreCalc	CCWD	11	82%	488	88%	-6%
			OUS	34	82%	179	82%	0%
MTH112 Trig/Pre-Calc	→	MTH251 Calculus I	CCWD	28	86%	351	92%	-6%
			OUS	46	72%	223	76%	-4%
MTH251 Calculus I	→	MTH252 Calculus II	CCWD	10	90%	151	88%	2%
			OUS	60	78%	296	81%	-3%
MTH252 Calculus II	→	MTH254 Vector Calc I	CCWD	12	100%	146	92%	8%
			OUS	75	87%	158	89%	-2%
WR121 Composition I	→	WR122 Composition II	CCWD	111	93%	2,248	92%	0%
			OUS	90	97%	540	99%	-2%
SPAN103 1st Yr Span III	→	SPAN201 2nd Yr Span I	CCWD	9	100%	342	99%	1%
			OUS	26	100%	286	98%	2%

More detailed information on success in the last course of the sequence is available in Appendix 3.
Source: OUS Institutional Research, Community Colleges and Workforce Development

As can be seen from Table 5, students who took the prerequisite course in high school as dual credit passed the final course of the sequence in proportions roughly equal to those who took the prerequisite course in college. In mathematics, there may be some cause for concern, notably in the transition from Pre-Calculus to Calculus I, where dual credit students underperformed their college-only counterparts by several percentage points in both postsecondary sectors. Still, when all four mathematics sequences are grouped together, the pass rates are substantially equivalent: in community college, 89% (54 out of 61) of the dual credit students passed the last course of the sequence satisfactorily, compared to 90% (1,019 out of 1,136) of their counterparts who took the entire sequence in college. The same is true in OUS, where 80% (173 out of 215) of the dual credit students passed the final course satisfactorily, compared to 81% (697 out of 856) of their college-prepared counterparts. Pass rates in composition and Spanish are also substantially equivalent. In community college, dual credit students passed the final course of the composition sequence at the same rate as their college-prepared classmates, and their pass rate in Spanish exceeded the college-prepared rate by a percentage point. In OUS, the composition pass rate for dual credit students lagged the rate for college-prepared students by two percentage points, but in Spanish the dual credit rate exceeded the college-prepared rate by the same amount.

Conclusion

Within these six sequences, it appears that dual credit instruction does as well as college-situated instruction in preparing students to pass the final course of the sequence. It is unfortunate that the number of dual credit students in these sequences is small, but this is an unavoidable consequence of the study's design. Because we need to evaluate high school-situated preparation in terms of subsequent college performance, it is necessary to restrict the study population to students who start a sequence in high school and finish it in college. This reduces the population dramatically, since most dual credit students who start these sequences during high school also finish them there.

At first glance, it also appears to be unfortunate that high school GPA and SAT scores are unavailable for most dual credit students. Evaluating the success of dual credit instruction requires that we compare like students to like, otherwise we cannot relate success in the final course of a sequence to the quality of instruction rather than to the quality of students. If high school GPA and SAT scores were available, they could be used to compare like dual credit- to like college-prepared students. Since they are not, we are forced to an expedient: we identify students whose academic strength is similar by their performance in the first course of each sequence, and so we compare dual credit students who pass the first course of a sequence with an A or B to college-prepared students who do the same. On reflection, however, this expedient may actually be one of the study's strengths. Students' abilities vary from one subject to the next. If we were to rely on students' overall high school GPA to control for their strength in a specific course, we would risk disguising the fact that a selected course might not be among a student's strengths, and so we might end up basing our conclusions about instructional quality on the performance of students who, in the curricular area being examined, are actually dissimilar. By instead connecting students' academic strength to their performance in the prerequisite course in each sequence, we identify students who have demonstrated that they have similar strength in the most relevant respect. And by restricting the comparison to those students who earn an A or B in the prerequisite, we single out those students of similar academic strength who have shown that they ought to be prepared to succeed in the sequence's final course.

When we do this, we discover that the pass rate in the final course of these six sequences is largely the same for dual credit- and college-prepared students alike. We can take this as evidence that high school dual credit instruction does as well as college-situated instruction in readying students to succeed in subsequent college work.

Average Grade in the Last Course of a Sequence

Framing the Issue

In the 2008 pilot version of this study, a considerable portion of the sequence analysis focused on the average grade that students earn in the final course of a sequence. If dual credit instruction is the equal of instruction on a college campus, then dual credit- and college-prepared students earning the same grade in the first term of a course sequence should be equally well prepared to succeed in the second term. True, the ultimate determinant of degree attainment is the satisfactory completion of a required curriculum, and a C grade earns credit every bit as much as an A, so our first indicator of dual credit instructional adequacy is the pass rate of its students in subsequent college work.

Nevertheless, grades measure student performance. If the average grade of dual credit students in subsequent college coursework is lower than the average grade of their college-prepared counterparts, this raises a question concerning the adequacy of dual credit instruction, assuming equal academic strength between the students whose performance is being compared. In the 2008 pilot study, which looked at the college performance of students who completed dual credit courses in 2005-06, dual credit-prepared students attained an average grade in the final course of most sequences that matched or exceeded the performance of their college-prepared counterparts, so we were able to conclude that dual credit instruction was sufficient. However, the same comparison for dual credit students in 2007-08 introduces an ingredient of doubt.

As when comparing pass rates, it is important to minimize differences in academic ability. We therefore look first at how each student performed in the first course of the sequence, and we compare like students to like: we compare the dual credit students who earned an A in the prerequisite against the college-prepared students who earned an A, the dual credit students who earned a B in the prerequisite against the college-prepared students who earned a B, and so forth, each time asking how each subcategory fared in the final course of the sequence. We reason in the same way as before: If the average grade in the final course for the A dual credit students is at least as high as the average grade in the final course for the A college-prepared students, and the average grade for the B dual credit students is at least as high as the average grade for the B college-prepared students, etc., this is evidence that dual credit instruction prepares students adequately for subsequent college courses.

Data and Discussion

The comparison is carried out in the following four charts. The charts match the average grade earned by dual credit students in the final course of two representative sequences, composition and mathematics, against the average grade earned by college-only students. Once again, dual credit students are compared separately to community college and to OUS college-prepared students. The same matching is carried out in Appendix 3 for all six sequences.

CHART 1 & 2: Average Grade in WR122 by Grade Received in WR121, by Instruction Type and Sector

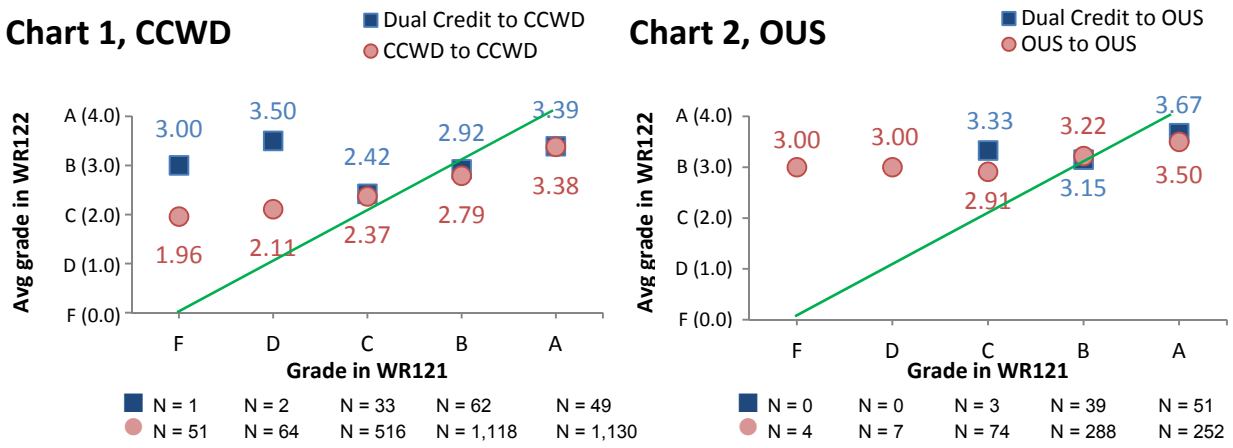
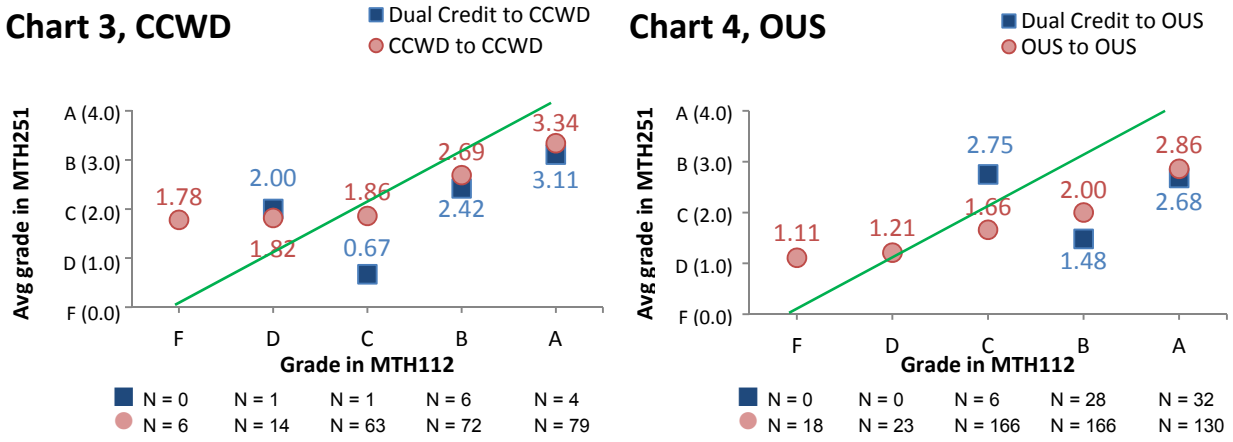


CHART 3 & 4: Average Grade in MTH251 by Grade Received in MTH112, by Instruction Type and Sector



Source: OUS Institutional Research, Community Colleges and Workforce Development. Lower grades for the dual credit group do not appear when there are no dual credit students receiving a D or F grade in the prerequisite who then took the next course in the sequence in college the following year. More data, including standard deviations and distribution of average grade, is available in Appendix 3.

Charts 1 and 2 illustrate the comparison separately for community college and OUS students who took both WR121 (Composition I) and WR122 (Composition II). In both postsecondary sectors, the best dual credit students – those who received an A or B in WR121 – achieved an average grade in WR122 that always roughly equaled, and usually exceeded, their college-only counterparts'. However, this was not the case for all sequences, particularly in mathematics, as Charts 3 and 4 show for MTH112 (Pre-Calculus) to MTH251 (Calculus I). In both sectors, the best dual credit students – again, those who received an A or B in MTH112 – achieved an average grade in MTH251 that was lower than their college-only counterparts'. As a review of Appendix 3 reveals, the overall mathematics story is mixed for the best dual credit students (A or B in the prerequisite). To repeat, we are comparing dual credit students who earned an A in the mathematics prerequisite against college-only students who likewise earned an A, and dual credit students who earned a B in the mathematics prerequisite against college-only students who likewise earned a B. This matching process creates 16 comparisons across the two postsecondary sectors in terms of average grade in the final course of a mathematics sequence. Dual credit students fare better in 6 of the match-ups; their college-only counterparts fare better in 10. And when we include composition and Spanish, and group together all 24

comparisons of the best students across both sectors, dual credit students fare better in 11 match-ups, and their college-only counterparts, in 13.

Conclusion

What conclusion are we to draw? This, perhaps: Based only on the average grade in the final course of a sequence, we cannot definitively say either that dual credit instruction is adequate or that it is inadequate. Clearly, we cannot say that it is inadequate. We might be tempted to make this claim about mathematics, since college-prepared students attain a higher average grade in the final course in 63% of the comparisons. But the sequence analysis cuts both ways. If being on the short end of more mathematics match-ups means that dual credit instruction is inadequate, are we similarly ready to claim that college-delivered writing instruction is inadequate, since college-prepared students are on the short end of those match-ups 75% of the time? Rather than making either claim, it seems wiser to reserve judgment. When looking at the performance of dual credit students in college mathematics, there are indications that they might be having difficulty in comparison to their college-prepared peers. However, the data are inconclusive. It is an area where students' performance should be monitored carefully, and perhaps be given special attention in future studies.

At the same time, we need to keep in mind that the average grade in the final course of a sequence is *not* the only piece of evidence. There also is the pass rate in the final course, and where the average grade may be ambiguous, the pass rate is not. Within mathematics sequences, approximately 86% of dual credit students earn an A or B in the prerequisite course, and, as we saw in the previous section, those students pass the final course at virtually the same rate as their college-prepared counterparts. Accordingly, our concern regarding average grades is not whether dual credit instruction prepares the overwhelming majority of students well enough to pass subsequent college mathematics courses satisfactorily. Clearly, it does. Our question is only whether, in view of ambiguous evidence, there could be some way in which dual credit students' college-prepared counterparts enjoy an edge.

In taking up this question in any future work, we need to remember that, despite our best efforts to eliminate bias, we have not entirely succeeded in comparing like students to like. Because of our need to evaluate the results of high school dual credit instruction on subsequent college work, it is necessary to look at students' performance across consecutive years. To take the present case, it is necessary to look at dual credit students who were high school seniors in 2007-08 and college freshmen in 2008-09, and to compare their performance to college students who were freshmen in 2007-08 and sophomores in 2008-09. In other words, an analysis based on course sequences requires us to compare the performance of first-year college students against the performance of second-year college students. But college attrition is greatest between the first and second years; the stronger students within the first-year class are the ones who persist to the second year. By design, then, our course sequence analysis compares dual credit first-year students against the prior year's better-performing students who at the time of comparison are in their second year of college. If dual credit students' college-prepared counterparts enjoy an edge, this could well be it.

Summary

This study began by asking two questions: (1) Do high school students who take dual credit courses succeed when they go on to college?, and (2) Does dual credit instruction do as well as college-situated instruction in preparing students for subsequent college coursework?

The answer to the first question is a clear-cut yes. Compared to their high school classmates who do not take dual credit coursework, a greater proportion of dual credit students go on to college in the first place. And when they get there, dual credit students earn a higher first-year GPA, they accumulate more credit by the start of the second year of college, and they continue to the second year at a higher rate. Oregon's dual credit program is meant to give its strongest high school students a leg up on college, and those students plainly take advantage of the opportunity.

The answer to the second question also is yes, but it is not so clear-cut. In the final term of selected college sequences, pass rates of dual credit students who take the sequence prerequisite in high school are substantially equivalent to the pass rates of their college-prepared classmates. This gives us good reason for thinking that high school dual credit instruction does as well as college-situated instruction in preparing students for subsequent college work. But other evidence clouds the picture. Dual credit students' average grade in the final term of those sequences sometimes falls below that of their college-prepared classmates, most notably in mathematics. However, the disparity in average grade does not exist in all sequences, and, in fact, in nearly half of the match-ups between the two groups, dual credit students' average grades are equal to or higher than their college-prepared classmates'. Accordingly, since pass rates affirm the effectiveness of dual credit instruction and average grades give conflicting testimony, the preponderance of the evidence favors dual credit instruction: on balance, it appears to do as well as college-situated instruction in preparing students for subsequent college coursework. Nevertheless, more than one mathematics sequence calls for careful scrutiny in any future study.

Appendices

Student Participation in Academic Transfer Dual Credit Programs[1]

Awarded by OUS and Oregon Community Colleges in AY2007-08

Institution	Number of Students	Total Credits Awarded as Dual Credit	% of Total Lower Division Credit Awarded at Institution[2]	Amount of Dual Credit per Student	Average Grade in Dual Credit Courses
Eastern Oregon University	50	263	0.6%	5.3	3.64
Oregon Institute of Technology	718	4,405	7.9%	6.1	3.28
Oregon State University	-	-	0.0%		
Portland State University	1,299	11,238	4.2%	8.7	3.45
Southern Oregon University	804	5,983	6.4%	7.4	3.40
University of Oregon	-	-	0.0%		
Western Oregon University	-	-	0.0%		
Blue Mountain CC	564	5,398	18.0%	9.6	3.21
Central Oregon CC	345	2,424	3.7%	7.0	3.14
Chemeketa CC	1,549	12,698	9.3%	8.2	3.36
Clackamas CC	1,756	17,626	16.9%	10.0	3.56
Clatsop CC	2	6	0.0%	3.0	4.00
Columbia Gorge CC	169	1,289	8.6%	7.6	2.98
Klamath CC	130	605	5.7%		3.58
Lane CC	2,329	22,005	12.8%	9.4	3.37
Linn-Benton CC	1,426	10,249	9.5%	7.2	3.62
Mt Hood CC	1,013	10,892	9.0%	10.8	3.34
Oregon Coast CC	43	445	8.4%		2.98
Portland CC	883	6,469	1.7%	7.3	3.59
Rogue CC	2,142	10,758	15.9%	5.0	3.59
Southwestern Or CC	510	3,062	8.1%	6.0	3.36
Tillamook Bay CC	18	65	1.2%		3.52
Treasure Valley CC	155	2,008	5.2%	13.0	3.44
Umpqua CC	534	5,305	9.9%	9.9	3.14
TOTAL STUDENTS, DUPLICATED[3]	16,439	133,193			
TOTAL STUDENTS, UNDUPLICATED	**15,707**	**133,193**	**5.0%**	**8.5**	**3.43**

Dual Credit by High School Level		Attend Oregon Public University or Community College, 2008-09	
All	15,707	5,998	38%
Seniors	7,001	4,331	62%
Juniors	4,720	983	21%
Sophomores	1,800	167	9%
Freshmen	648	19	3%
Unknown	1,538	498	32%

[1] At OUS, includes all dual credit courses. For community colleges, includes courses intended for academic transfer only. Does not include career and technical education dual credit courses. Credits awarded includes lower division credit only.

[2] At OUS, lower-division credit is calculated as total annual credit hours for admitted and nonadmitted undergraduates in 100- and 200-level courses.

[3] Total students, duplicated includes students taking dual credit through partnerships with more than one institution (i.e., If high school students took dual credit courses from community college Y and OUS institution Z they would be double counted in the duplicated total).

Source: OUS Institutional Research, Community Colleges and Workforce Development, Oregon Dept of Education

Courses Commonly Taken for Dual Credit[1] in OUS and Oregon Community Colleges in AY2007-08: Enrollment in Dual Credit Courses and Their Equivalents at Colleges or Universities

		Dual Credit Courses				Equivalent Courses at Community Colleges			Equivalent Courses at OUS Institutions		
Course		Student Headcount	Awarded Credits	Average Grade	# Partner Colleges[2]	Student Headcount	Awarded Credits	Average Grade	Student Headcount	Awarded Credits	Average Grade
Math courses											
MTH111	College Algebra	2,440	10,749	3.26	16	10,403	41,425	2.87	5,932	23,004	2.39
MTH112	Trig/Pre-Calc	1,877	7,705	3.24	16	3,010	11,642	2.99	3,114	11,964	2.44
MTH243	Statistics I	308	1,232	3.54	7	3,902	13,748	3.09	4,453	17,212	2.84
MTH244	Statistics II	204	816	3.35	4	1,081	3,872	3.20	1,333	5,368	2.83
MTH251	Calculus I	1,381	5,728	3.39	15	1,855	7,045	2.95	3,381	13,511	2.52
MTH252	Calculus II	977	4,228	3.40	14	1,321	5,355	2.99	2,359	9,655	2.45
MTH253	Calculus III	113	440	3.48	6	689	2,679	2.99	418	1,590	2.84
	MATH SUBTOTAL	4,284	30,898	3.31	18	16,786	85,766	2.96	15,533	82,304	2.56
English/Composition courses											
ENG104	Lit: Fiction	1,299	4,724	3.48	11	2,695	7,968	3.26	2,724	8,875	2.99
ENG105	Lit: Drama	550	2,101	3.59	6	985	2,941	3.23	843	2,945	3.05
ENG106	Lit: Poetry	270	1,030	3.43	4	1,148	3,329	3.28	1,099	3,421	2.91
WR115	Intro Composition	140	414	2.99	3	7,862	22,215	2.98	732	2,765	2.94
WR121	Composition I	3,438	10,505	3.35	16	20,621	58,203	3.10	6,103	21,016	3.10
WR122	Composition II	1,585	4,837	3.32	10	11,853	34,141	3.19	3,217	11,732	3.22
WR123	Composition III	565	1,745	3.46	6	4,366	11,016	3.22	750	2,433	3.11
	ENG/WR SUBTOTAL	4,385	25,356	3.40	17	36,487	139,813	3.13	11,915	53,187	3.09
History Courses											
HIST101	History: Western Civ	157	594	3.55	4	1,973	6,193	3.13	736	2,456	2.75
HIST102	History: Western Civ	205	793	3.53	5	1,587	4,870	3.10	828	2,664	2.67
HIST103	History: Western Civ	147	563	3.49	5	1,306	3,933	3.07	908	2,676	2.77
HIST201	History: US	1,117	3,584	3.50	12	2,567	6,989	3.06	1,214	3,915	2.70
HIST202	History: US	1,105	3,613	3.44	12	2,026	5,681	3.02	1,011	3,364	2.72
HIST203	History: US	921	2,916	3.42	12	1,996	5,625	3.07	798	2,568	2.90
HIST250	History: American	180	716	3.21	1				323	1,128	2.84
	HISTORY SUBTOTAL	1,640	12,779	3.45	14	8,590	33,291	3.07	4,810	18,771	2.75

Courses Commonly Taken for Dual Credit[1] in OUS and Oregon Community Colleges in AY2007-08: Enrollment in Dual Credit Courses and Their Equivalents at Colleges or Universities

		Dual Credit Courses				Equivalent Courses at Community Colleges			Equivalent Courses at OUS Institutions		
Course		Student Headcount	Awarded Credits	Average Grade	# Partner Colleges[2]	Student Headcount	Awarded Credits	Average Grade	Student Headcount	Awarded Credits	Average Grade
Language Courses											
FR101	1st Yr French I	294	1,133	3.53	5	483	1,629	3.26	588	2,358	3.17
FR102	1st Yr French II	204	788	3.56	5				515	2,124	3.19
FR103	1st Yr French III	199	828	3.62	4				432	1,842	3.20
FR201	2nd Yr French I	180	805	3.70	4	117	409	3.58	500	1,848	2.96
FR202	2nd Yr French II	136	598	3.76	3	101	355	3.56	453	1,736	2.97
FR203	2nd Yr French III	122	535	3.70	3	97	340	3.55	442	1,684	3.20
GER101	1st Yr German I	201	785	3.68	4				329	1,262	3.34
GER102	1st Yr German II	145	548	3.61	4				253	1,091	3.18
GER103	1st Yr German III	109	403	3.45	4				208	885	3.21
SPAN101	1st Yr Spanish I	979	3,826	3.56	8	3,455	12,281	3.33	1,627	6,395	3.10
SPAN102	1st Yr Spanish II	894	3,493	3.56	8	2,326	8,454	3.35	1,376	5,547	3.07
SPAN103	1st Yr Spanish III	1,289	5,662	3.60	8	1,391	5,146	3.44	1,071	4,411	3.03
SPAN201	2nd Yr Spanish I	726	3,034	3.56	7	811	2,938	3.44	1,556	5,800	3.04
SPAN202	2nd Yr Spanish II	458	1,799	3.58	5	681	2,531	3.45	1,332	5,040	3.24
SPAN203	2nd Yr Spanish III	399	1,570	3.58	5	608	2,254	3.43	1,311	4,988	3.28
	LANGUAGE SUBTOTAL	3,309	25,807	3.59	9	5,562	36,337	3.38	5,869	47,011	3.13
Science Courses											
BIO101	Biology I	629	2,488	3.23	10	4,655	15,816	2.87	2,047	7,779	2.48
BIO102	Biology II	461	1,824	3.23	8	2,651	9,440	2.99	1,819	6,969	2.45
BIO103	Biology III	359	1,432	3.32	7	1,719	6,104	3.03	1,258	4,437	2.76
BIO199	Anatomy & Physiology	121	868	3.13	1	17	41	3.11	178	202	3.95
BIO231	Anatomy I	155	620	3.42	2	4,234	14,927	2.98	453	1,648	2.34
CHEM104	Intro Chemistry	105	192	3.14	3	1,973	7,911	3.09	494	1,342	2.62
CHEM221	Chemistry I	207	990	3.09	3	1,585	6,459	3.05	2,585	10,986	2.59
CHEM222	Chemistry II	187	870	3.19	3	1,129	5,007	3.06	2,010	8,709	2.68
CHEM223	Chemistry III	108	540	3.04	2						
PHYS201	Physics I	121	600	3.42	4	384	1,614	2.98	590	2,240	2.86
	SCIENCE SUBTOTAL	1,372	10,424	3.22	13	14,297	67,319	2.99	8,316	44,312	2.59

Courses Commonly Taken for Dual Credit[1] in OUS and Oregon Community Colleges in AY2007-08: Enrollment in Dual Credit Courses and Their Equivalents at Colleges or Universities

		Dual Credit Courses				Equivalent Courses at Community Colleges			Equivalent Courses at OUS Institutions		
Course		Student Headcount	Awarded Credits	Average Grade	# Partner Colleges[2]	Student Headcount	Awarded Credits	Average Grade	Student Headcount	Awarded Credits	Average Grade
Political Science Courses											
PS201	US Government I	440	1,376	3.51	6	1,451	4,136	3.09	1,710	5,644	2.74
PS202	US Government II	108	335	2.83	4	943	2,773	3.07	233	723	2.87
	POLI SCI SUBTOTAL	444	1,711	3.36	6	2,022	6,909	3.08	1,892	6,367	2.75
Miscellaneous Other Courses											
BA101	Intro Business	134	409	3.62	2				4,022	15,852	2.89
BA111	Intro Accounting	112	405	3.72	2						
BA131	Intro Business Computing	138	552	3.54	1	1,643	5,364	3.14	538	1,834	3.08
BA218	Personal Finance	170	513	3.40	1						
BA223	Principles of Marketing	121	384	3.51	2						
CIS125	PC Software	391	1,295	3.62	4	1,948	4,633	3.27			
CIS133	Programming I	190	772	3.72	1						
ECON115	Intro Economics	275	844	3.73	2	293	810	2.95	10	45	2.25
GS104	Intro Physical Science	176	704	3.45	4	729	2,600	2.96			
HE252	First Aid	105	420	3.70	1	1,655	4,445	3.54	244	681	3.62
HE261	CPR	214	214	3.66	1						
PSY201	Psychology	212	751	3.49	5	7,551	20,942	3.12	4,317	14,410	2.56
SPE111	Speech: Fundamentals	198	588	3.38	1				326	957	3.34
UNST173	Einstein's Universe	254	1,270		1						
UNST174	Einstein's Universe	248	1,240		1						
All Other	All Other Dual Credit	3,341	16,869	3.48	19	20,294	78,692	3.13	25,511	129,025	2.80
	OTHER SUBTOTAL	5,513	27,230	3.52	19	29,324	117,486	3.15	28,851	162,804	2.79
TOTAL ALL DUAL CREDIT COURSES		**15,707**	**134,205**	**3.43**	**21**	**68,711**	**489,206**	**3.10**	**45,665**	**435,538**	**2.80**

Source: OUS Institutional Research, Community Colleges and Workforce Development

[1] Dual credit courses intended for academic transfer. Only courses with more than 100 students are listed.

[2] Partner college: The community college or university that transcripts the dual credit course being taught by a high school

The number of credits awarded for completing a course can vary between colleges.

Courses Taken for Dual Credit in Oregon with Enrollment Greater than 100, AY2007-08:
Headcount by Institution Transcribing the Credit

	Community College										
Course	Blue Mountain	Central Oregon	Chemeketa	Clackamas	Clatsop	Columbia Gorge	Klamath	Lane	Linn-Benton	Mt Hood	Oregon Coast
BA101	-	-	-	-	-	-	-	-	1	-	-
BA111	-	-	-	105	-	-	-	-	-	-	-
BA131	-	-	-	-	-	-	-	-	-	-	-
BA218	-	-	-	-	-	-	-	-	-	-	-
BA223	-	-	-	-	-	-	-	-	-	15	-
BIO101	112	19	-	34	-	18	-	195	6	100	-
BIO102	97	11	-	-	-	17	-	155	-	82	-
BIO103	87	-	-	-	-	17	-	146	20	33	-
BIO199	-	-	-	-	-	-	-	-	-	-	-
BIO231	-	-	-	-	-	-	-	-	-	-	-
CHEM104	-	-	-	13	-	-	-	-	-	11	-
CHEM221	-	-	-	55	-	-	-	140	-	-	-
CHEM222	-	-	-	55	-	-	-	120	-	-	-
CHEM223	-	-	-	-	-	-	-	96	-	-	-
CIS125	-	-	-	-	-	-	-	-	9	-	-
CIS133	-	-	-	-	-	-	-	-	-	-	-
ECON115	-	-	-	-	-	-	-	-	10	-	-
ENG104	99	-	-	249	-	-	-	268	134	58	-
ENG105	-	-	-	73	-	-	-	217	-	-	-
ENG106	-	-	-	23	-	-	-	213	-	-	-
FR101	-	-	-	76	-	-	-	114	57	40	-
FR102	-	-	-	76	-	-	-	77	24	20	-
FR103	-	-	-	76	-	-	-	87	-	29	-
FR201	-	-	-	37	-	-	-	89	-	6	-
FR202	-	-	-	37	-	-	-	62	-	-	-
FR203	-	-	-	37	-	-	-	55	-	-	-
GER101	-	-	-	51	-	-	-	-	116	13	-
GER102	-	-	-	51	-	-	-	-	68	8	-
GER103	-	-	-	51	-	-	-	-	31	7	-
GS104	-	-	-	-	-	-	-	-	74	-	-
HE252	-	-	-	-	-	-	-	-	-	-	-
HE261	-	-	-	-	-	-	-	-	-	-	-

Courses Taken for Dual Credit in Oregon with Enrollment Greater than 100, AY2007-08:
Headcount by Institution Transcribing the Credit

	Community College										
Course	Blue Mountain	Central Oregon	Chemeketa	Clackamas	Clatsop	Columbia Gorge	Klamath	Lane	Linn-Benton	Mt Hood	Oregon Coast
HIST101	-	-	-	56	-	-	-	11	-	-	-
HIST102	-	-	-	56	-	-	-	8	-	-	-
HIST103	-	-	-	56	-	-	-	8	-	-	-
HIST201	18	-	158	22	-	-	-	29	209	139	-
HIST202	18	-	152	22	-	-	-	18	206	131	-
HIST203	18	-	143	22	-	-	5	23	205	111	-
HIST250	-	-	-	-	-	-	-	-	-	-	-
MTH111	101	176	358	395	-	19	76	436	211	177	16
MTH112	76	125	305	382	-	20	58	328	47	137	33
MTH243	-	-	56	-	-	-	-	22	20	24	-
MTH244	-	-	42	-	-	-	-	-	-	15	-
MTH251	6	82	173	107	-	6	-	137	100	87	21
MTH252	-	68	101	106	-	6	-	121	36	70	19
MTH253	-	-	29	20	-	-	-	-	-	-	-
PHYS201	-	-	-	-	-	-	-	37	34	10	-
PS201	30	-	-	-	-	-	-	-	89	17	-
PS202	22	-	-	-	-	-	-	-	-	-	-
PSY201	-	-	-	-	-	-	-	-	-	-	-
SPAN101	40	-	76	388	-	-	-	22	197	182	-
SPAN102	35	-	111	387	-	-	-	40	144	132	-
SPAN103	36	-	86	388	-	-	-	586	60	99	-
SPAN201	48	-	51	192	-	-	-	286	16	35	-
SPAN202	44	-	25	173	-	-	-	142	-	-	-
SPAN203	42	-	24	173	-	-	-	94	-	-	-
SPE111	-	-	-	-	-	-	-	-	-	-	-
UNST173	-	-	-	-	-	-	-	-	-	-	-
UNST174	-	-	-	-	-	-	-	-	-	-	-
WR115	56	-	1	-	-	-	-	-	-	83	-
WR121	215	-	660	376	2	85	-	141	409	317	-
WR122	147	-	433	-	-	84	-	73	-	204	-
WR123	28	-	247	-	-	-	-	71	-	86	-

Courses Taken for Dual Credit in Oregon with Enrollment Greater than 100, AY2007-08:
Headcount by Institution Transcribing the Credit

	Community College						University				Total
Course	Portland	Rogue	SW Oregon	Tillamook Bay	Treasure Valley	Umpqua	Eastern Oregon University	Oregon Institute of Technology	Southern Oregon University	Portland State University	All
BA101	-	133	-	-	-	-	-	-	-	-	134
BA111	-	-	-	7	-	-	-	-	-	-	112
BA131	-	138	-	-	-	-	-	-	-	-	138
BA218	-	170	-	-	-	-	-	-	-	-	170
BA223	-	106	-	-	-	-	-	-	-	-	121
BIO101	94	-	25	-	26	-	-	-	-	-	629
BIO102	51	-	23	-	25	-	-	-	-	-	461
BIO103	35	-	-	-	21	-	-	-	-	-	359
BIO199	-	-	-	-	-	-	-	-	121	-	121
BIO231	-	48	-	-	-	-	-	107	-	-	155
CHEM104	-	-	-	-	-	-	-	81	-	-	105
CHEM221	-	12	-	-	-	-	-	-	-	-	207
CHEM222	-	12	-	-	-	-	-	-	-	-	187
CHEM223	-	12	-	-	-	-	-	-	-	-	108
CIS125	-	339	21	-	-	22	-	-	-	-	391
CIS133	-	190	-	-	-	-	-	-	-	-	190
ECON115	-	265	-	-	-	-	-	-	-	-	275
ENG104	98	1	45	-	-	34	16	-	297	-	1,299
ENG105	62	-	26	-	-	31	-	-	141	-	550
ENG106	-	-	21	-	-	13	-	-	-	-	270
FR101	-	-	-	-	-	7	-	-	-	-	294
FR102	-	-	-	-	-	7	-	-	-	-	204
FR103	-	-	-	-	-	7	-	-	-	-	199
FR201	-	-	-	-	-	-	-	-	-	48	180
FR202	-	-	-	-	-	-	-	-	-	37	136
FR203	-	-	-	-	-	-	-	-	-	30	122
GER101	-	-	-	-	-	21	-	-	-	-	201
GER102	-	-	-	-	-	18	-	-	-	-	145
GER103	-	-	-	-	-	20	-	-	-	-	109
GS104	-	66	30	-	6	-	-	-	-	-	176
HE252	105	-	-	-	-	-	-	-	-	-	105
HE261	-	214	-	-	-	-	-	-	-	-	214

Courses Taken for Dual Credit in Oregon with Enrollment Greater than 100, AY2007-08:
Headcount by Institution Transcribing the Credit

	Community College						University				Total
Course	Portland	Rogue	SW Oregon	Tillamook Bay	Treasure Valley	Umpqua	Eastern Oregon University	Oregon Institute of Technology	Southern Oregon University	Portland State University	All
HIST101	-	30	-	-	-	-	-	-	-	60	157
HIST102	31	11	-	-	-	-	-	-	-	99	205
HIST103	29	9	-	-	-	-	-	-	-	45	147
HIST201	112	138	50	-	38	83	-	-	-	121	1,117
HIST202	118	134	35	-	33	83	-	-	-	155	1,105
HIST203	126	118	39	-	33	78	-	-	-	-	921
HIST250	-	-	-	-	-	-	-	-	180	-	180
MTH111	78	163	82	-	42	95	15	-	-	-	2,440
MTH112	72	100	75	-	28	79	12	-	-	-	1,877
MTH243	-	-	-	-	-	6	-	-	22	158	308
MTH244	-	-	-	-	-	-	-	-	9	138	204
MTH251	114	33	15	-	-	84	-	-	96	320	1,381
MTH252	105	26	15	-	-	25	-	-	39	240	977
MTH253	8	-	-	-	-	34	-	-	10	12	113
PHYS201	-	40	-	-	-	-	-	-	-	-	121
PS201	-	152	-	-	-	90	-	-	62	-	440
PS202	-	1	-	-	-	80	-	-	5	-	108
PSY201	56	59	-	-	3	-	-	35	59	-	212
SPAN101	-	-	46	-	-	28	-	-	-	-	979
SPAN102	-	-	22	-	-	23	-	-	-	-	894
SPAN103	-	-	28	-	-	6	-	-	-	-	1,289
SPAN201	-	-	-	-	-	-	-	-	-	98	726
SPAN202	-	-	-	-	-	-	-	-	-	74	458
SPAN203	-	-	-	-	-	-	-	-	-	66	399
SPE111	-	-	-	-	-	-	-	198	-	-	198
UNST173	-	-	-	-	-	-	-	-	-	254	254
UNST174	-	-	-	-	-	-	-	-	-	248	248
WR115	-	-	-	-	-	-	-	-	-	-	140
WR121	67	141	144	-	39	149	-	488	17	188	3,438
WR122	-	31	77	-	28	142	-	366	-	-	1,585
WR123	-	-	-	-	16	117	-	-	-	-	565

Includes courses intended for academic transfer.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Pass Rate in Last Course of a College Sequence

Percent of Students Satisfactorily Passing 2008-09 Course (Grade of C- or Better): 2007-08 Dual Credit Students and 2007-08 College Students

Sequence		Location of 2008-09 Instruction	**A or B Students** from 2007-08 Course % Passing 2008-09 Course with C- or Better					**All Students** from 2007-08 Course % Passing 2008-09 Course with C- or Better:				
			Dual Credit-to-College		College-to-College		Difference	Dual Credit-to-College		College-to-College		Difference
2007-08	2008-09		#	% Passed 2008-09	#	% Passed 2008-09	DC - C	#	% Passed 2008-09	#	% Passed 2008-09	DC - C
MTH111 College Algebra →	MTH112 Trig/PreCalc	CCWD	11	82%	488	88%	-6%	17	76%	713	80%	-3%
		OUS	34	82%	179	82%	0%	45	78%	368	72%	5%
MTH112 Trig/Pre-Calc →	MTH251 Calculus I	CCWD	28	86%	351	92%	-6%	34	79%	496	84%	-5%
		OUS	46	72%	223	76%	-4%	54	72%	390	70%	2%
MTH251 Calculus I →	MTH252 Calculus II	CCWD	10	90%	151	88%	2%	14	93%	244	83%	10%
		OUS	60	78%	296	81%	-3%	84	76%	544	74%	2%
MTH252 Calculus II →	MTH254 Vector Calc I	CCWD	12	100%	146	92%	8%	14	100%	202	89%	11%
		OUS	75	87%	158	89%	-2%	96	85%	328	73%	13%
WR121 Composition I →	WR122 Composition II	CCWD	111	93%	2,248	92%	0%	172	88%	2,999	89%	0%
		OUS	90	97%	540	99%	-2%	120	98%	664	97%	0%
SPAN103 1st Yr Span III →	SPAN201 2nd Yr Span I	CCWD	9	100%	342	99%	1%	10	90%	377	97%	-7%
		OUS	26	100%	286	98%	2%	26	100%	384	93%	7%

Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Community College (CCWD)

Average Grade in MTH112, Trig/Pre-Calc by Grade in MTH111, College Algebra and Location of Instruction

2007-08 MTH111 → **2008-09 MTH112**

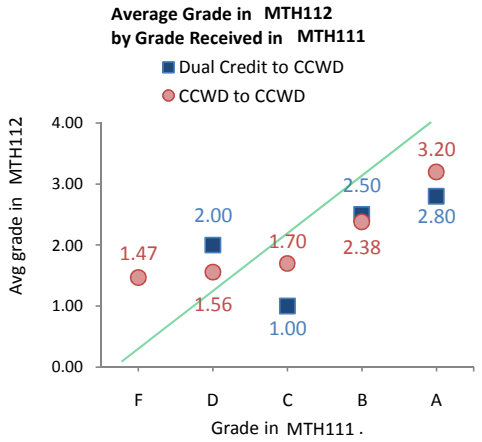
		2005-06 Grade Rec'd in MTH111							
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH111 as dual credit	Total number taking MTH111 in high school	3	23	318	959	949	**1,908**	**2,252**	**2,440**
	Number taking MTH112 for grade in comm. college*	-	1	3	6	5	**11**	**15**	**17**
	MTH112 Average grade	-	2	1.00	2.50	2.80	**2.64**	**2.27**	**2.35**
	Standard deviation	-	-	1.00	1.22	1.64	1.36	1.39	1.32
Students who took MTH111 in an Oregon community college	Total number taking MTH111 in comm. college	831	804	2,138	2,805	2,815	**5,615**	**9,088**	**10,403**
	Number taking MTH112 for grade in comm. college	19	25	145	199	289	**488**	**677**	**713**
	MTH112 Average grade	1.47	1.56	1.70	2.38	3.20	**2.86**	**2.53**	**2.53**
	Standard deviation	-	-	1.00	1.22	1.64	1.36	1.39	1.32
Difference in average grade of college-to-college and dual credit-to-college students (C - DC)		-	(0.44)	0.70	(0.12)	0.40	**0.22**	**0.26**	**0.18**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

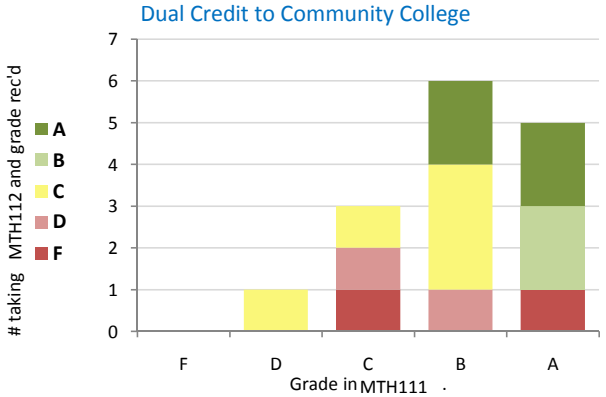
Percent of Students Succeeding in Last Course of Sequence

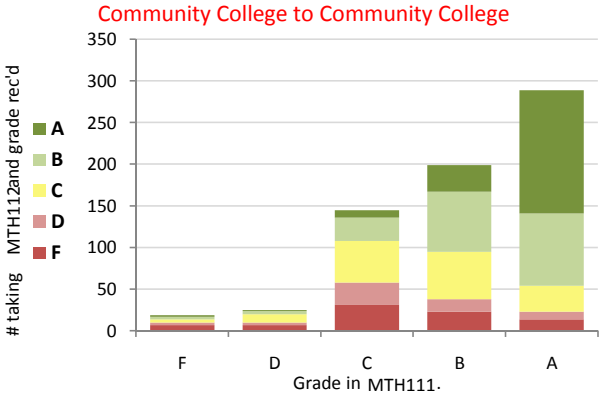
	Grade in MTH111	Grade in MTH112 N	C- or better	A or B
Dual Credit to CCWD students	Rec'd B- or better	11	82%	55%
	Rec'd C- or better	14	71%	43%
	Rec'd any grade	15	73%	40%
CCWD to CCWD students	Rec'd B- or better	488	88%	69%
	Rec'd C- or better	633	81%	59%
	Rec'd any grade	677	79%	57%

Percentages based on all graded students in last course of sequence.



Number of Students Taking the Sequence, by Grade Rec'd in MTH111





Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Oregon University System (OUS)

Average Grade in MTH112, Trig/Pre-Calc by Grade in MTH111, College Algebra and Location of Instruction

2007-08 MTH111 → **2008-09 MTH112**

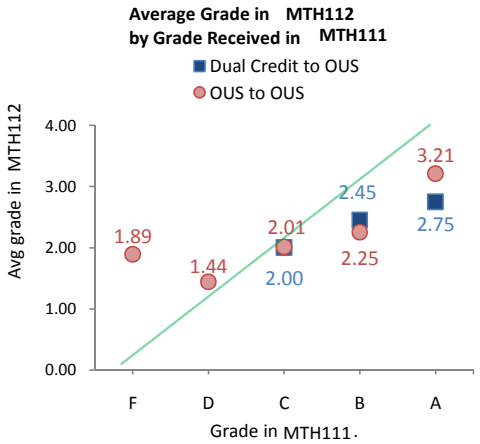
		2005-06 Grade Rec'd in MTH111							
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH111 as dual credit	Total number taking MTH111 in high school	3	23	318	959	949	**1,908**	**2,252**	**2,440**
	Number taking MTH112 for grade in OUS*	-	-	7	22	12	**34**	**41**	**45**
	MTH112 Average grade	-	-	2.00	2.45	2.75	**2.56**	**2.46**	**2.40**
	Standard deviation	-	-	1.73	0.96	1.06	0.99	1.14	1.12
Students who took MTH111 in an OUS institution	Total number taking MTH111 in OUS	536	508	1,165	1,317	1,069	**2,386**	**4,445**	**5,932**
	Number taking MTH112 for grade in OUS	19	25	98	103	76	**179**	**321**	**368**
	MTH112 Average grade	1.89	1.44	2.01	2.25	3.21	**2.66**	**2.32**	**2.31**
	Standard deviation	-	-	-	-	-	-	-	-
Difference in average grade of college-to-college and dual credit-to-college students (**C - DC**)		-	-	0.01	(0.20)	0.46	**0.10**	**(0.14)**	**(0.09)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

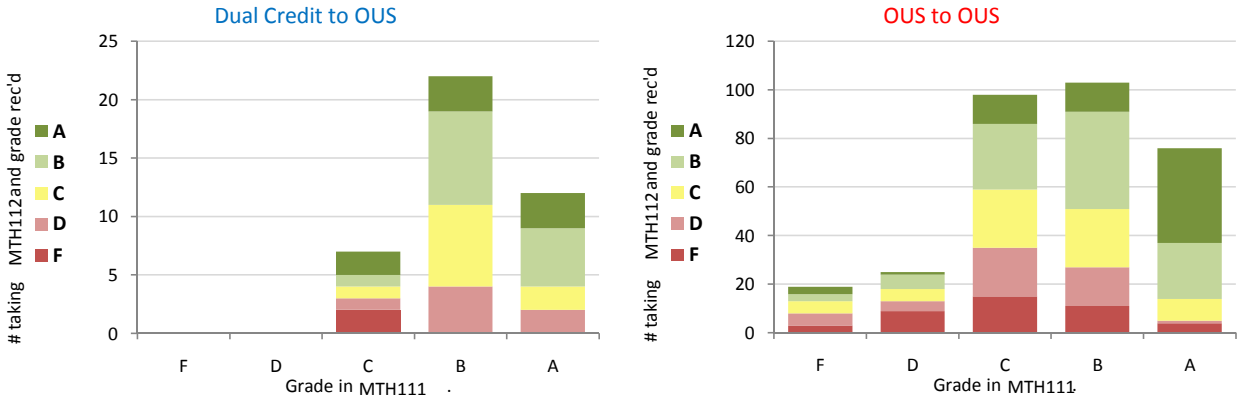
Percent of Students Succeeding in Last Course of Sequence

	Grade in MTH111	Grade in MTH112 N	C- or better	A or B
Dual Credit to OUS students	Rec'd B- or better	34	82%	56%
	Rec'd C- or better	41	78%	54%
	Rec'd any grade	41	78%	54%
OUS to OUS students	Rec'd B- or better	179	82%	64%
	Rec'd C- or better	277	76%	55%
	Rec'd any grade	321	73%	52%

Percentages based on all graded students in last course of sequence.



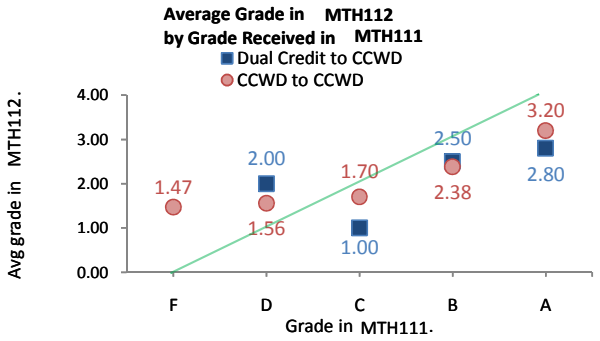
Number of Students Taking the Sequence, by Grade Rec'd in MTH111



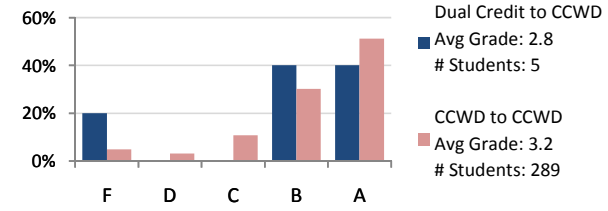
Source: OUS Institutional Research, Community Colleges and Workforce Development

Distribution of Grades in the Last Course of a College Sequence

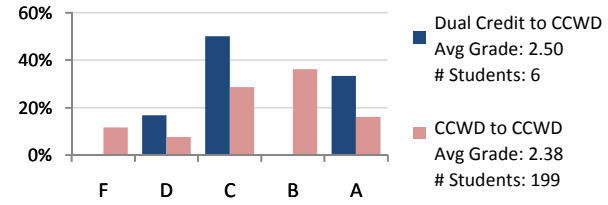
Community College (CCWD)



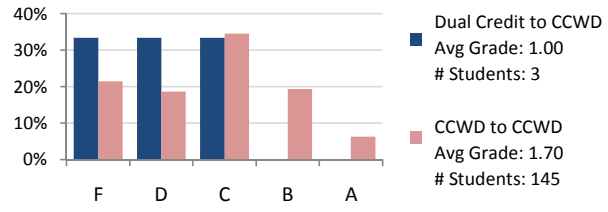
'A' Students from MTH111, by Grade Rec'd in MTH112



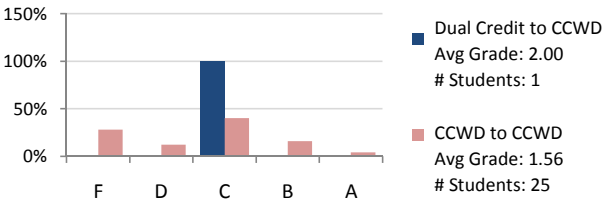
'B' Students from MTH111, by Grade Rec'd in MTH112



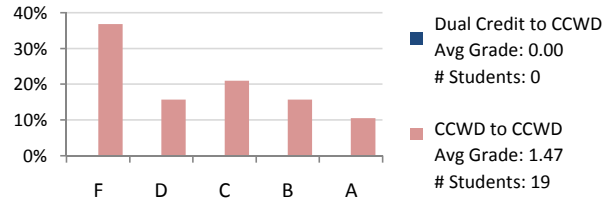
'C' Students from MTH111, by Grade Rec'd in MTH112



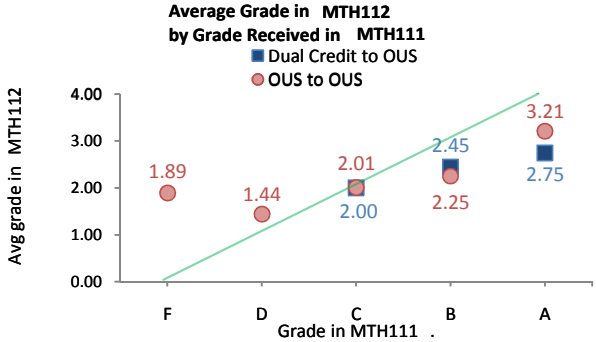
'D' Students from MTH111, by Grade Rec'd in MTH112



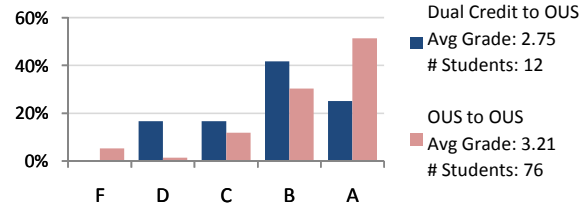
'F' Students from MTH111, by Grade Rec'd in MTH112



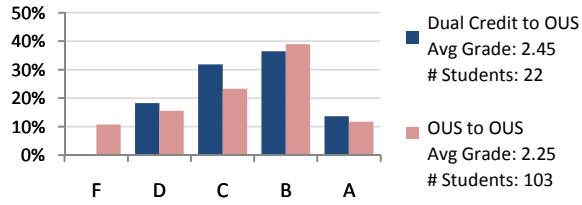
Oregon University System (OUS)



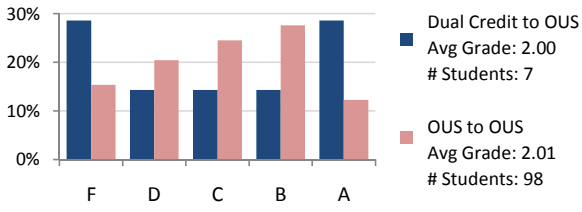
'A' Students from MTH111, by Grade Rec'd in MTH112



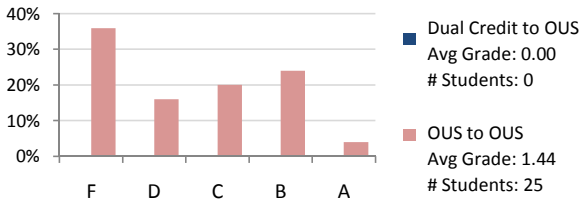
'B' Students from MTH111, by Grade Rec'd in MTH112



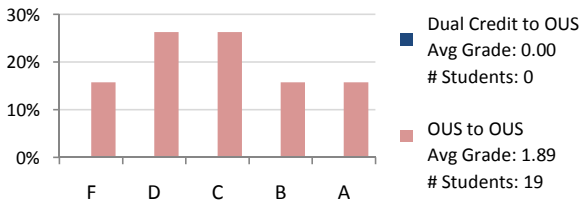
'C' Students from MTH111, by Grade Rec'd in MTH112



'D' Students from MTH111, by Grade Rec'd in MTH112



'F' Students from MTH111, by Grade Rec'd in MTH112



Note: Dual Credit to CCWD and Dual Credit to OUS students took MTH111 in 2007-08 at a high school; all students took MTH112 in 2008-09 in a college setting.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Average Grade in MTH251, Calculus I by Grade in MTH112, Trig/Pre-Calc and Location of Instruction

Community College (CCWD)

2007-08 MTH112 → **2008-09 MTH251**

2005-06 Grade Rec'd in MTH112

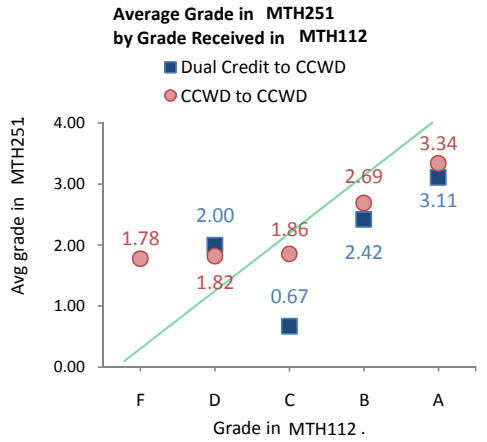
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH112 as dual credit	Total number taking MTH112 in high school	5	25	242	708	690	**1,398**	**1,670**	**1,877**
	Number taking MTH251 for grade in comm. college*	-	1	3	19	9	**28**	**32**	**34**
	MTH251 Average grade	-	2	0.67	2.42	3.11	**2.64**	**2.44**	**2.47**
	Standard deviation	-	-	0.58	1.30	0.93	1.22	1.29	1.28
Students who took MTH112 in an Oregon community college	Total number taking MTH112 in comm. college	191	199	498	824	891	**1,714**	**2,538**	**3,010**
	Number taking MTH251 for grade in comm. college	9	17	93	163	188	**351**	**470**	**496**
	MTH251 Average grade	1.78	1.82	1.86	2.69	3.34	**3.04**	**2.74**	**2.70**
	Standard deviation	-	-	0.58	1.30	0.93	1.22	1.29	1.28
Difference in average grade of college-to-college and dual credit-to-college students (C - DC)		-	(0.18)	1.19	0.27	0.23	**0.40**	**0.30**	**0.23**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

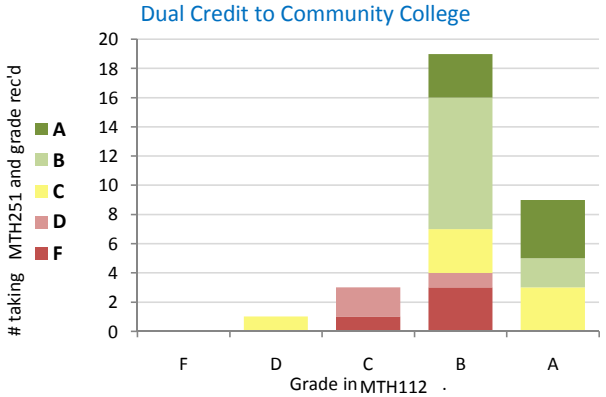
Percent of Students Succeeding in Last Course of Sequence

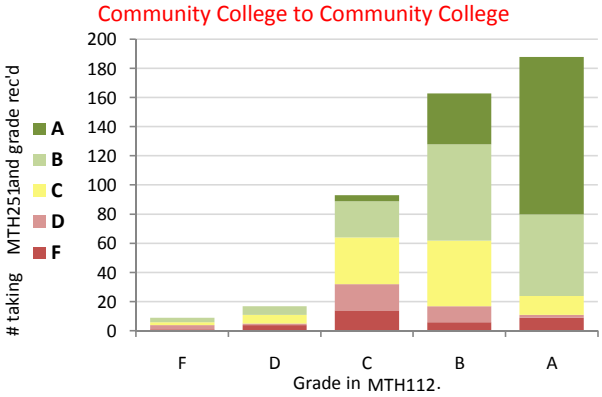
	Grade in MTH112	Grade in MTH251 N	C- or better	A or B
Dual Credit to CCWD students	Rec'd B- or better	28	86%	64%
	Rec'd C- or better	31	77%	58%
	Rec'd any grade	32	78%	56%
CCWD to CCWD students	Rec'd B- or better	351	92%	75%
	Rec'd C- or better	444	86%	66%
	Rec'd any grade	470	85%	64%

Percentages based on all graded students in last course of sequence.



Number of Students Taking the Sequence, by Grade Rec'd in MTH112





Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Oregon University System (OUS)

Average Grade in MTH251, Calculus I by Grade in MTH112, Trig/Pre-Calc and Location of Instruction

2007-08 MTH112 → **2008-09 MTH251**

2005-06 Grade Rec'd in MTH112

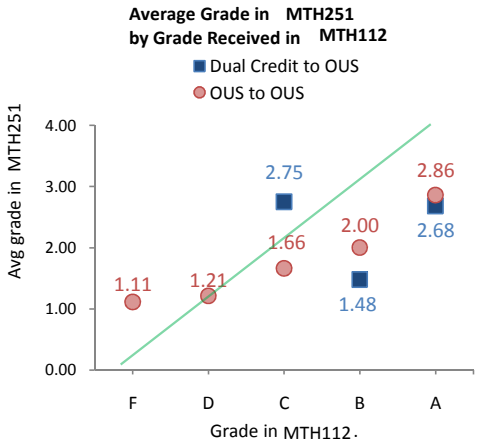
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH112 as dual credit	Total number taking MTH112 in high school	5	25	242	708	690	**1,398**	**1,670**	**1,877**
	Number taking MTH251 for grade in OUS*	-	1	4	27	19	**46**	**51**	**54**
	MTH251 Average grade	-	-	2.75	1.48	2.68	**1.98**	**2.00**	**1.98**
	Standard deviation	-	-	0.96	1.12	1.20	1.29	1.30	1.27
Students who took MTH112 in an OUS institution	Total number taking MTH112 in OUS	276	294	622	692	680	**1,372**	**2,482**	**3,114**
	Number taking MTH251 for grade in OUS	9	28	95	125	98	**223**	**355**	**390**
	MTH251 Average grade	1.11	1.21	1.66	2.00	2.86	**2.38**	**2.06**	**2.13**
	Standard deviation	-	-	-	-	0.58	0.58	0.58	0.58
Difference in average grade of college-to-college and dual credit-to-college students (**C - DC**)		-	-	(1.09)	0.52	0.18	**0.40**	**0.06**	**0.15**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

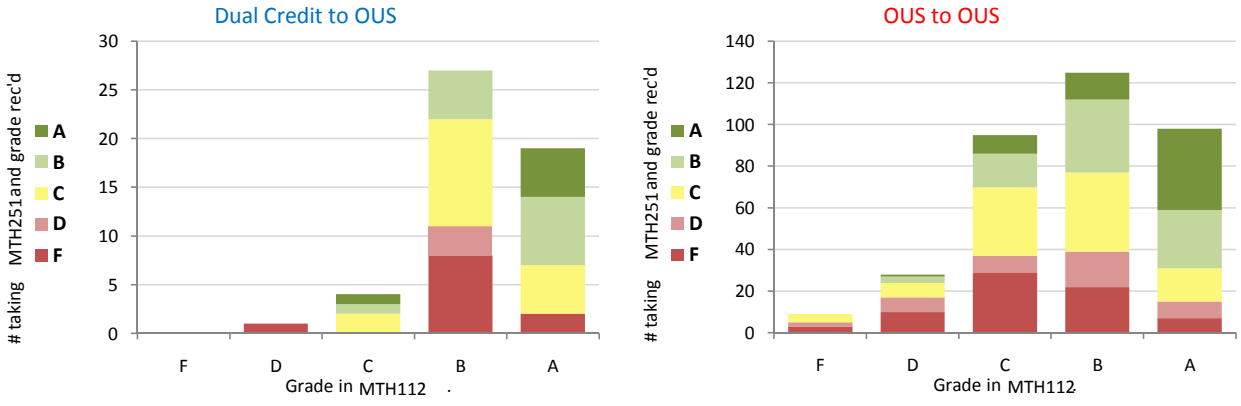
Percent of Students Succeeding in Last Course of Sequence

	Grade in MTH112	Grade in MTH251 N	C- or better	A or B
Dual Credit to OUS students	Rec'd B- or better	46	72%	37%
	Rec'd C- or better	50	74%	38%
	Rec'd any grade	51	73%	37%
OUS to OUS students	Rec'd B- or better	223	76%	52%
	Rec'd C- or better	318	71%	44%
	Rec'd any grade	355	68%	41%

Percentages based on all graded students in last course of sequence.



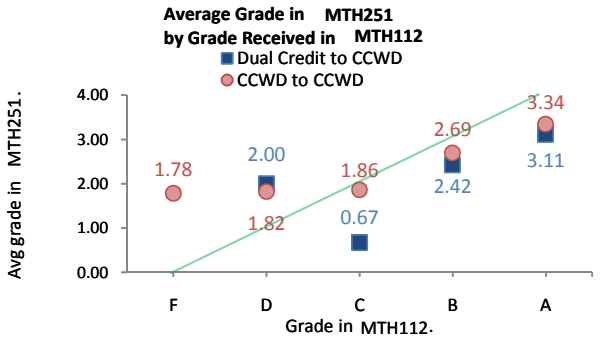
Number of Students Taking the Sequence, by Grade Rec'd in MTH112



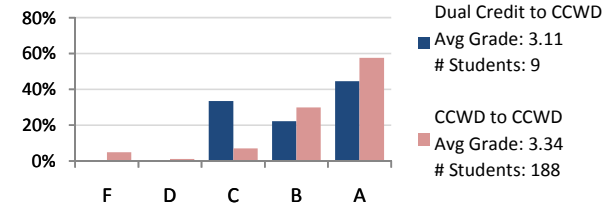
Source: OUS Institutional Research, Community Colleges and Workforce Development

Distribution of Grades in the Last Course of a College Sequence

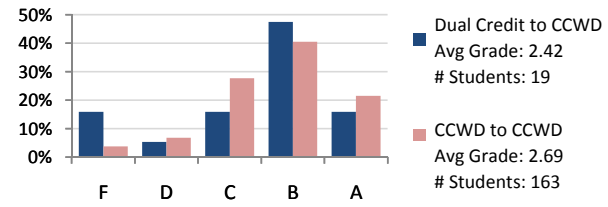
Community College (CCWD)



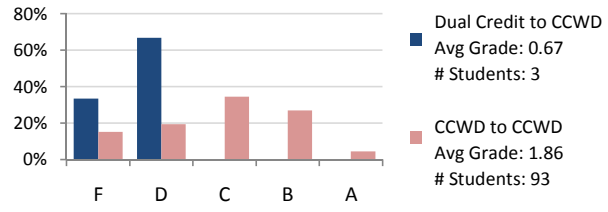
'A' Students from MTH112, by Grade Rec'd in MTH251



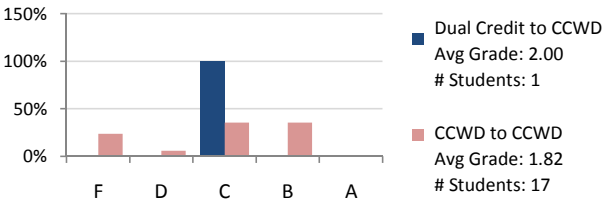
'B' Students from MTH112, by Grade Rec'd in MTH251



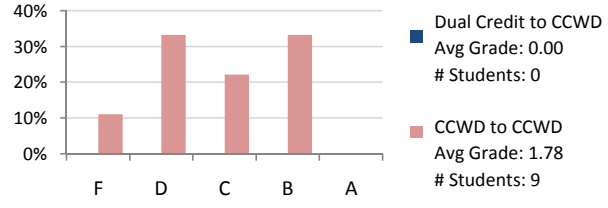
'C' Students from MTH112, by Grade Rec'd in MTH251



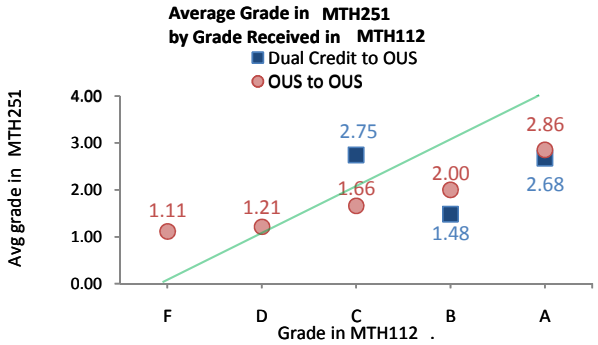
'D' Students from MTH112, by Grade Rec'd in MTH251



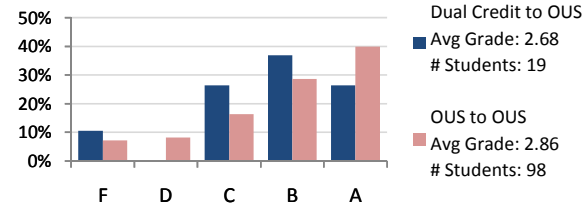
'F' Students from MTH112, by Grade Rec'd in MTH251



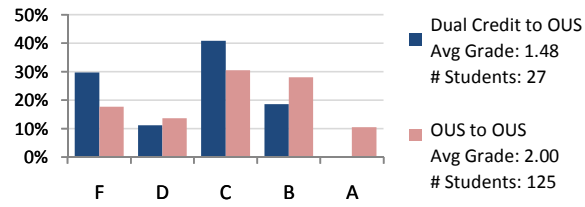
Oregon University System (OUS)



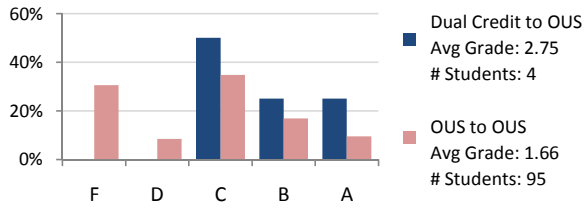
'A' Students from MTH112, by Grade Rec'd in MTH251



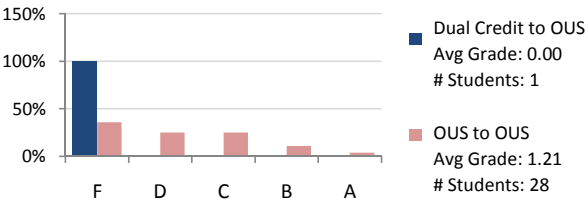
'B' Students from MTH112, by Grade Rec'd in MTH251



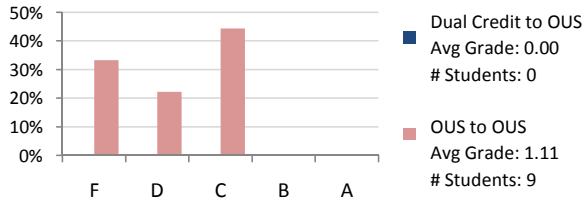
'C' Students from MTH112, by Grade Rec'd in MTH251



'D' Students from MTH112, by Grade Rec'd in MTH251



'F' Students from MTH112, by Grade Rec'd in MTH251



Note: Dual Credit to CCWD and Dual Credit to OUS students took MTH112 in 2007-08 at a high school; all students took MTH251 in 2008-09 in a college setting.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Community College (CCWD)

Average Grade in MTH252, Calculus II by Grade in MTH251, Calculus I and Location of Instruction

2007-08 MTH251 → **2008-09 MTH252**

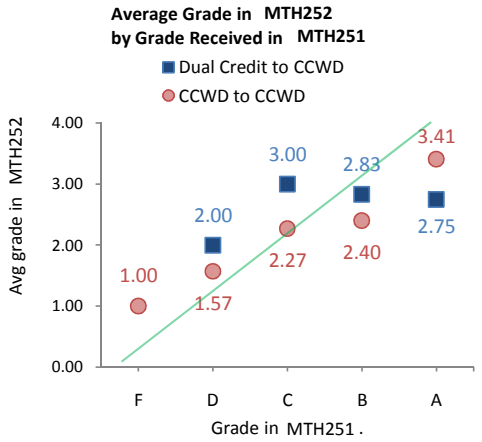
		2005-06 Grade Rec'd in MTH251							
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH251 as dual credit	Total number taking MTH251 in high school	4	16	90	402	529	**931**	**1,036**	**1,381**
	Number taking MTH252 for grade in comm. college*	-	1	1	6	4	**10**	**12**	**14**
	MTH252 Average grade	-	2	3.00	2.83	2.75	**2.80**	**2.75**	**2.64**
	Standard deviation	-	-	-	0.75	1.26	0.92	0.87	0.84
Students who took MTH251 in an Oregon community college	Total number taking MTH251 in comm. college	112	144	344	524	556	**1,080**	**1,607**	**1,855**
	Number taking MTH252 for grade in comm. college	6	14	63	72	79	**151**	**234**	**244**
	MTH252 Average grade	1.00	1.57	2.27	2.40	3.41	**2.93**	**2.62**	**2.63**
	Standard deviation	-	-	-	0.75	1.26	0.92	0.87	0.87
Difference in average grade of college-to-college and dual credit-to-college students (C - DC)		-	(0.43)	(0.73)	(0.43)	0.66	**0.13**	**(0.13)**	**(0.01)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

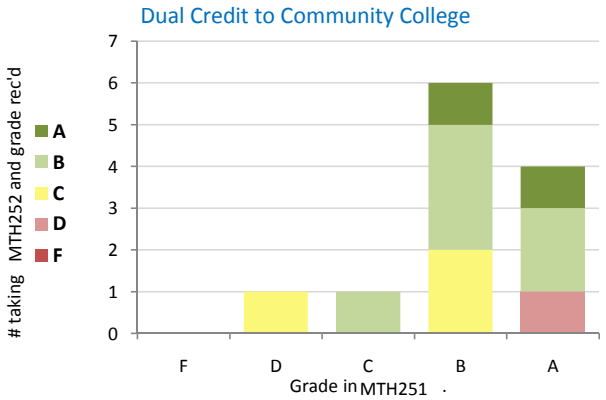
Percent of Students Succeeding in Last Course of Sequence

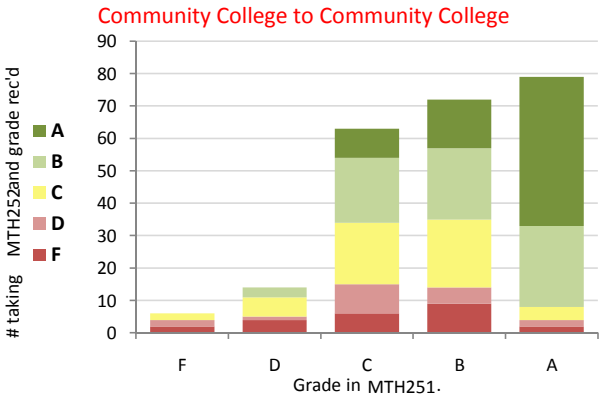
	Grade in MTH251	Grade in MTH252 N	C- or better	A or B
Dual Credit to CCWD students	Rec'd B- or better	10	90%	70%
	Rec'd C- or better	11	91%	73%
	Rec'd any grade	12	92%	67%
CCWD to CCWD students	Rec'd B- or better	151	88%	72%
	Rec'd C- or better	214	85%	64%
	Rec'd any grade	234	82%	60%

Percentages based on all graded students in last course of sequence.



Number of Students Taking the Sequence, by Grade Rec'd in MTH251





Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Oregon University System (OUS)

Average Grade in MTH252, Calculus II by Grade in MTH251, Calculus I and Location of Instruction

2007-08 MTH251 → **2008-09 MTH252**

2005-06 Grade Rec'd in MTH251

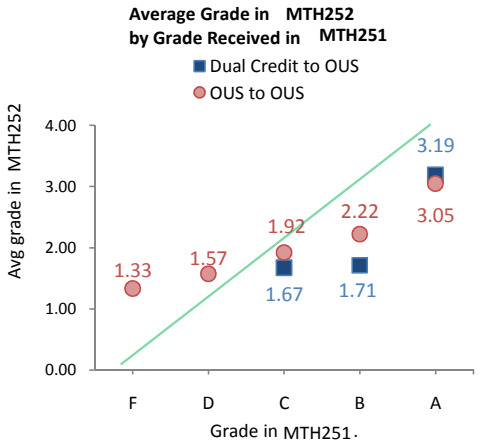
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH251 as dual credit	Total number taking MTH251 in high school	4	16	90	402	529	**931**	**1,036**	**1,381**
	Number taking MTH252 for grade in OUS*	-	-	6	28	32	**60**	**66**	**84**
	MTH252 Average grade	-	-	1.67	1.71	3.19	**2.50**	**2.42**	**2.42**
	Standard deviation	-	-	1.37	1.24	0.93	1.31	1.33	1.32
Students who took MTH251 in an OUS institution	Total number taking MTH251 in OUS	296	271	680	817	793	**1,610**	**2,693**	**3,381**
	Number taking MTH252 for grade in OUS	18	23	166	166	130	**296**	**503**	**544**
	MTH252 Average grade	1.33	1.57	1.92	2.22	3.05	**2.58**	**2.27**	**2.24**
	Standard deviation	-	-	1.41	0.82	0.87	1.49	1.50	1.45
Difference in average grade of college-to-college and dual credit-to-college students (**C - DC**)		-	-	0.25	0.51	(0.14)	**0.08**	**(0.15)**	**(0.18)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

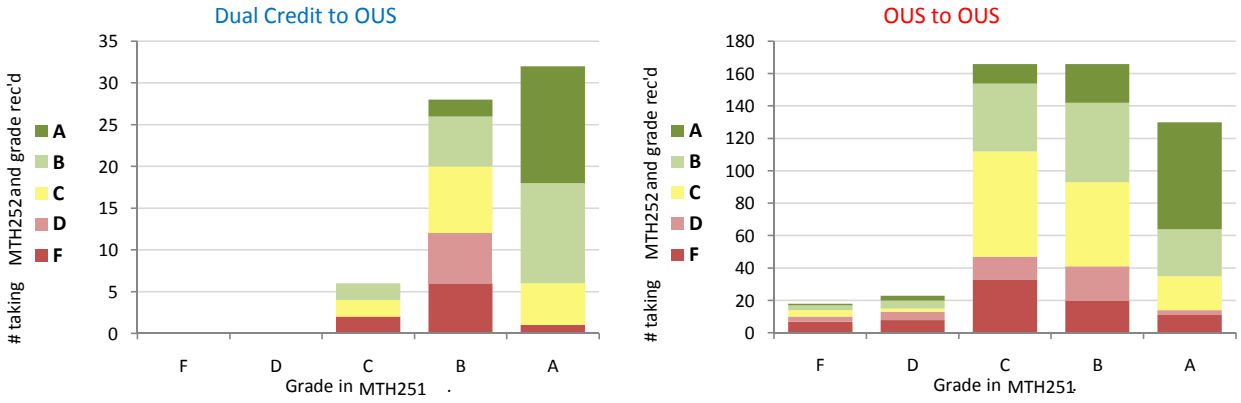
Percent of Students Succeeding in Last Course of Sequence

	Grade in MTH251	Grade in MTH252 N	C- or better	A or B
Dual Credit to OUS students	Rec'd B- or better	60	78%	57%
	Rec'd C- or better	66	77%	55%
	Rec'd any grade	66	77%	55%
OUS to OUS students	Rec'd B- or better	296	81%	57%
	Rec'd C- or better	462	78%	48%
	Rec'd any grade	503	75%	47%

Percentages based on all graded students in last course of sequence.



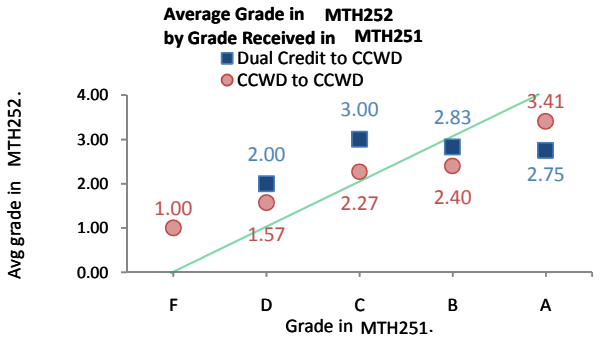
Number of Students Taking the Sequence, by Grade Rec'd in MTH251



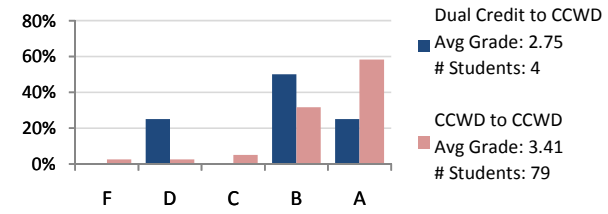
Source: OUS Institutional Research, Community Colleges and Workforce Development

Distribution of Grades in the Last Course of a College Sequence

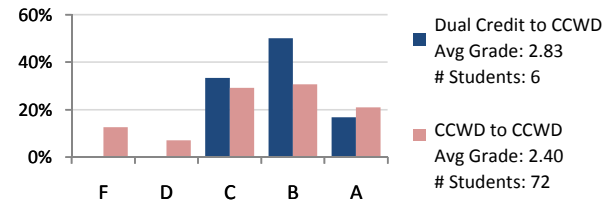
Community College (CCWD)



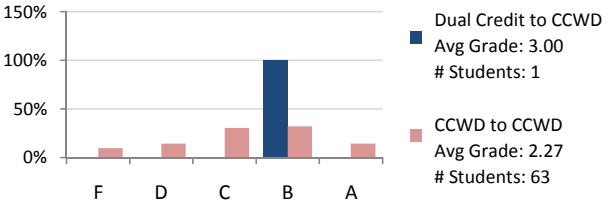
'A' Students from MTH251, by Grade Rec'd in MTH252



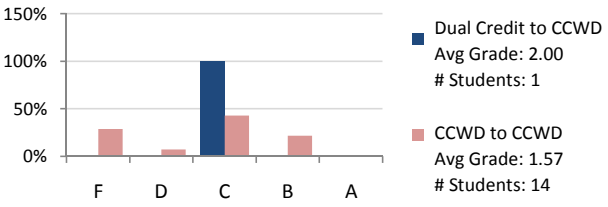
'B' Students from MTH251, by Grade Rec'd in MTH252



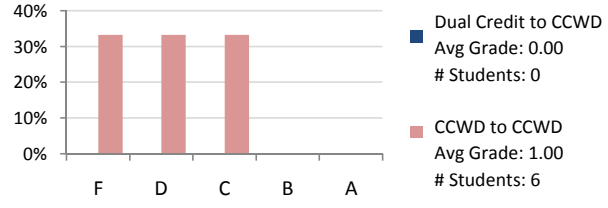
'C' Students from MTH251, by Grade Rec'd in MTH252



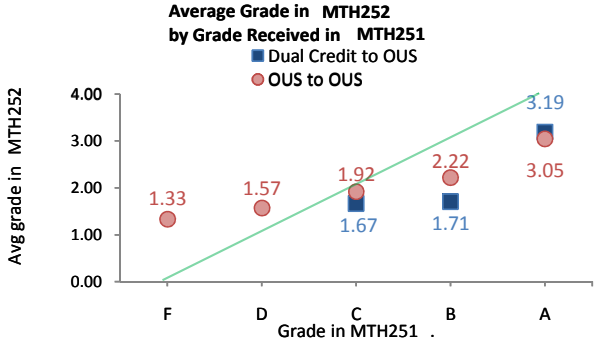
'D' Students from MTH251, by Grade Rec'd in MTH252



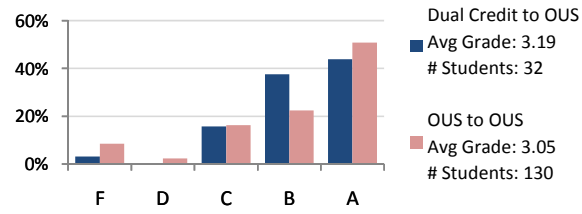
'F' Students from MTH251, by Grade Rec'd in MTH252



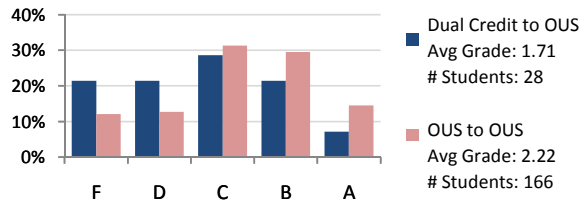
Oregon University System (OUS)



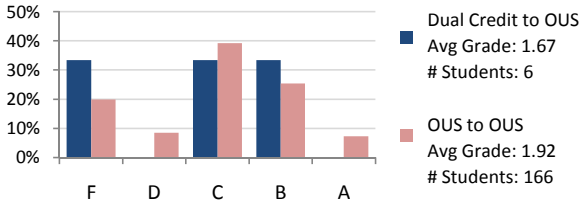
'A' Students from MTH251, by Grade Rec'd in MTH252



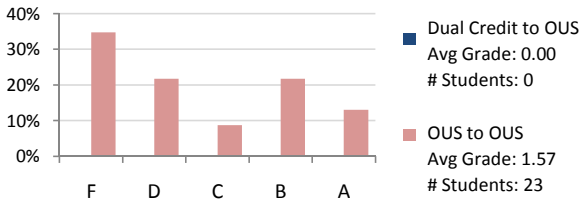
'B' Students from MTH251, by Grade Rec'd in MTH252



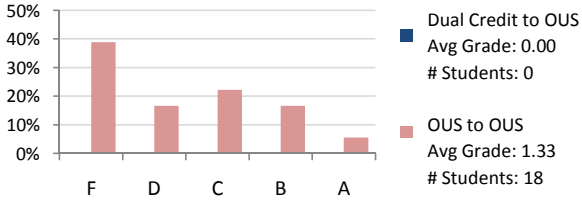
'C' Students from MTH251, by Grade Rec'd in MTH252



'D' Students from MTH251, by Grade Rec'd in MTH252



'F' Students from MTH251, by Grade Rec'd in MTH252



Note: Dual Credit to CCWD and Dual Credit to OUS students took MTH251 in 2007-08 at a high school; all students took MTH252 in 2008-09 in a college setting.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Community College (CCWD)

Average Grade in MTH254, Vector Calculus by Grade in MTH252, Calculus II and Location of Instruction

2007-08 MTH252 → **2008-09 MTH254**

2005-06 Grade Rec'd in MTH252

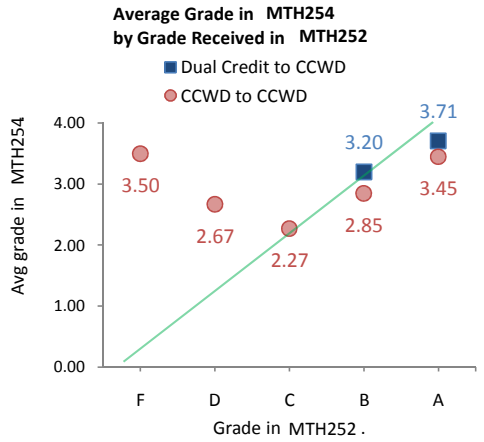
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH252 as dual credit	Total number taking MTH252 in high school	3	8	85	260	405	**665**	**761**	**977**
	Number taking MTH254 for grade in comm. college*	-	-	-	5	7	**12**	**12**	**14**
	MTH254 Average grade	-	-	-	3.20	3.71	**3.50**	**3.50**	**3.57**
	Standard deviation	-	-	-	0.84	0.49	0.67	0.67	0.65
Students who took MTH252 in an Oregon community college	Total number taking MTH252 in comm. college	94	75	246	401	394	**794**	**1,166**	**1,321**
	Number taking MTH254 for grade in comm. college	2	3	48	66	80	**146**	**199**	**202**
	MTH254 Average grade	3.50	2.67	2.27	2.85	3.45	**3.18**	**2.95**	**2.95**
	Standard deviation	-	-	-	0.84	0.52	0.69	0.69	0.69
Difference in average grade of college-to-college and dual credit-to-college students (C - DC)		-	-	-	(0.35)	(0.26)	**(0.32)**	**(0.55)**	**(0.62)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

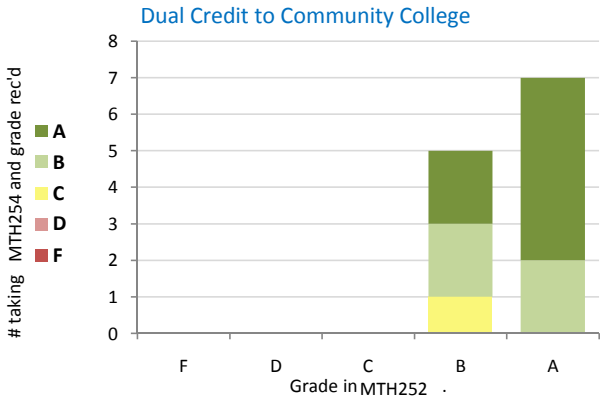
Percent of Students Succeeding in Last Course of Sequence

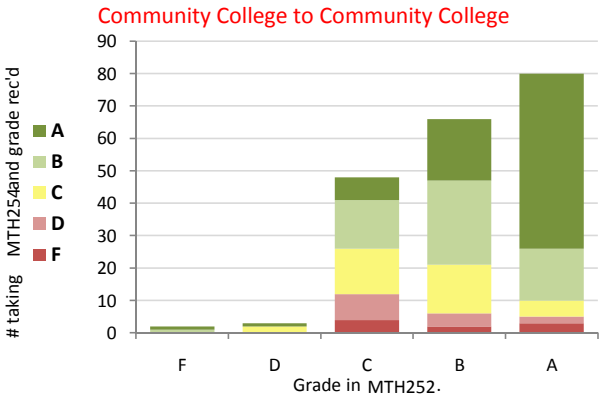
	Grade in MTH252	Grade in MTH254 N	C- or better	A or B
Dual Credit to CCWD students	Rec'd B- or better	12	100%	92%
	Rec'd C- or better	12	100%	92%
	Rec'd any grade	12	100%	92%
CCWD to CCWD students	Rec'd B- or better	146	92%	79%
	Rec'd C- or better	194	88%	71%
	Rec'd any grade	199	88%	70%

Percentages based on all graded students in last course of sequence.



Number of Students Taking the Sequence, by Grade Rec'd in MTH252





Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Oregon University System (OUS)

Average Grade in MTH254, Vector Calculus by Grade in MTH252, Calculus II and Location of Instruction

2007-08 MTH252 → **2008-09 MTH254**

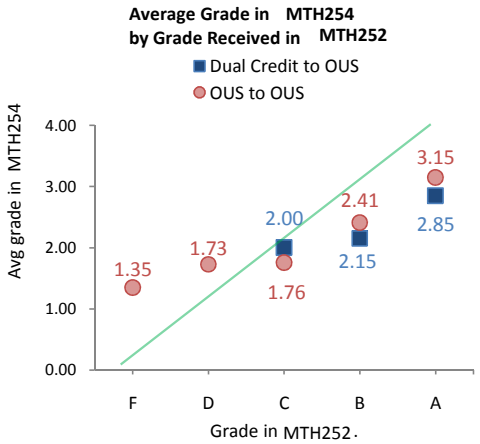
		2005-06 Grade Rec'd in MTH252							
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took MTH252 as dual credit	Total number taking MTH252 in high school	3	8	85	260	405	**665**	**761**	**977**
	Number taking MTH254 for grade in OUS*	-	-	3	20	55	**75**	**78**	**96**
	MTH254 Average grade	-	-	2.00	2.15	2.85	**2.67**	**2.64**	**2.65**
	Standard deviation	-	-	1.00	1.04	1.06	1.09	1.09	1.14
Students who took MTH252 in an OUS institution	Total number taking MTH252 in OUS	192	218	546	538	515	**1,053**	**1,918**	**2,359**
	Number taking MTH254 for grade in OUS	17	26	106	74	84	**158**	**307**	**328**
	MTH254 Average grade	1.35	1.73	1.76	2.41	3.15	**2.80**	**2.27**	**2.20**
	Standard deviation	-	-	0.71	0.58	0.78	0.78	0.87	1.14
Difference in average grade of college-to-college and dual credit-to-college students (**C - DC**)		-	-	(0.24)	0.26	0.30	**0.13**	**(0.37)**	**(0.45)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

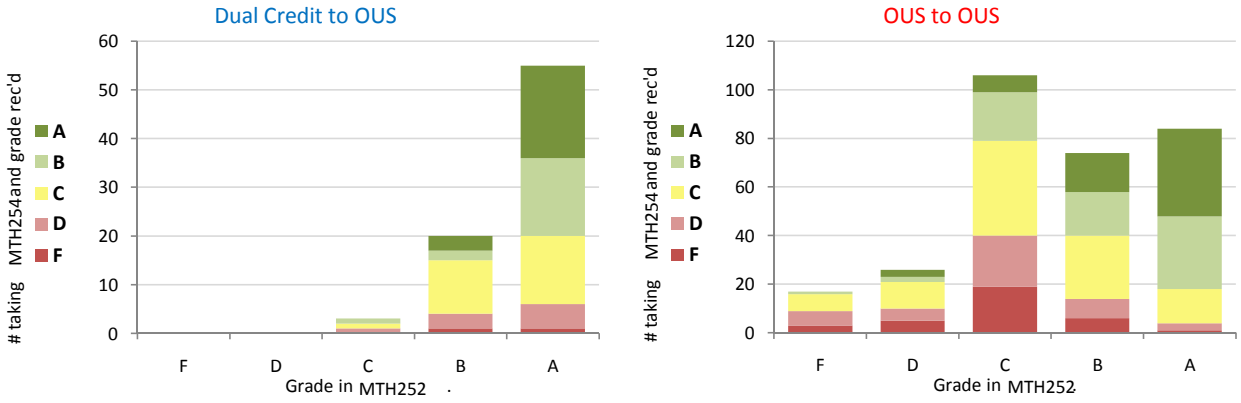
Percent of Students Succeeding in Last Course of Sequence

	Grade in MTH252	Grade in MTH254 N	C- or better	A or B
Dual Credit to OUS students	Rec'd B- or better	75	87%	53%
	Rec'd C- or better	78	86%	53%
	Rec'd any grade	78	86%	53%
OUS to OUS students	Rec'd B- or better	158	89%	63%
	Rec'd C- or better	264	78%	48%
	Rec'd any grade	307	75%	43%

Percentages based on all graded students in last course of sequence.



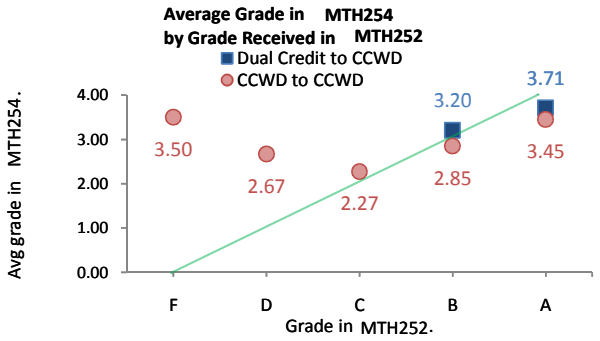
Number of Students Taking the Sequence, by Grade Rec'd in MTH252



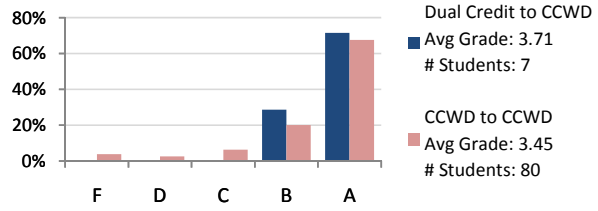
Source: OUS Institutional Research, Community Colleges and Workforce Development

Distribution of Grades in the Last Course of a College Sequence

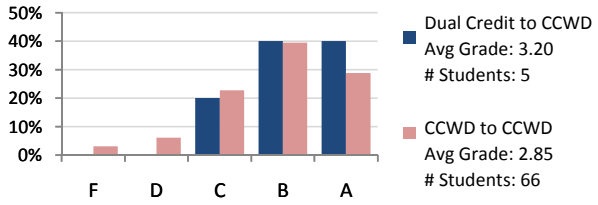
Community College (CCWD)



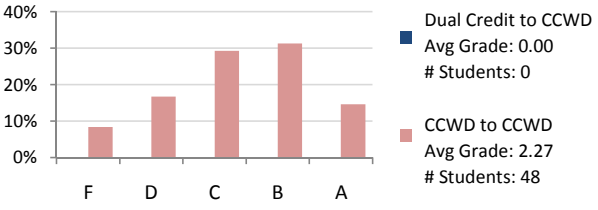
'A' Students from MTH252, by Grade Rec'd in MTH254



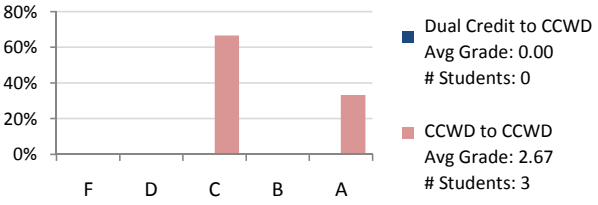
'B' Students from MTH252, by Grade Rec'd in MTH254



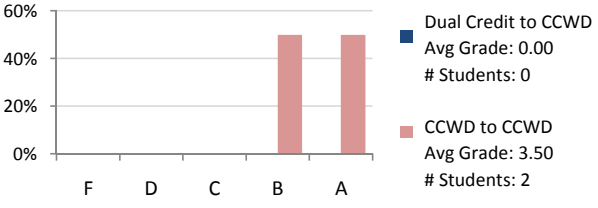
'C' Students from MTH252, by Grade Rec'd in MTH254



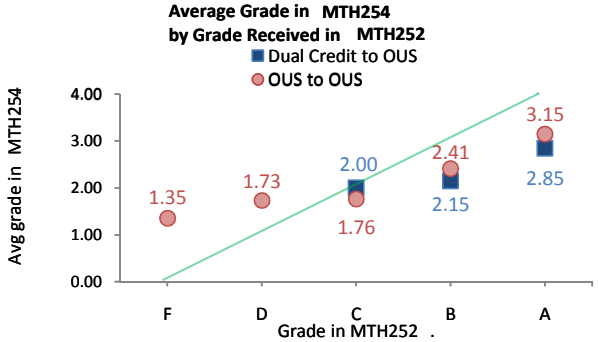
'D' Students from MTH252, by Grade Rec'd in MTH254



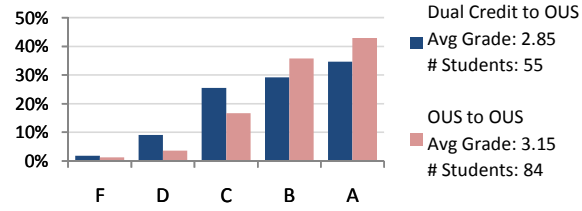
'F' Students from MTH252, by Grade Rec'd in MTH254



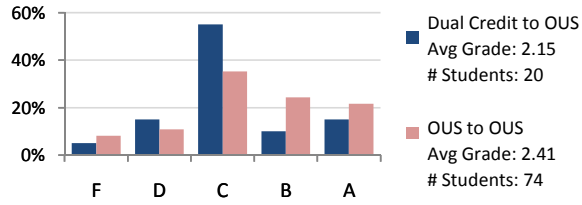
Oregon University System (OUS)



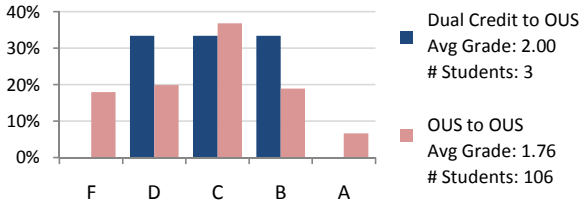
'A' Students from MTH252, by Grade Rec'd in MTH254



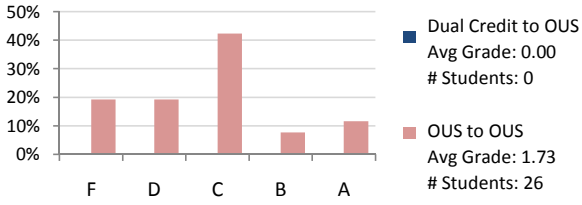
'B' Students from MTH252, by Grade Rec'd in MTH254



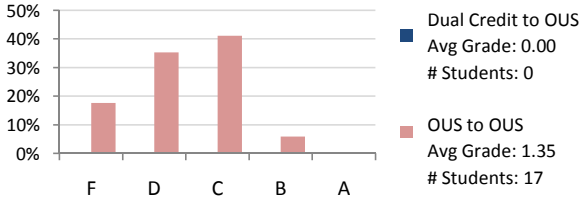
'C' Students from MTH252, by Grade Rec'd in MTH254



'D' Students from MTH252, by Grade Rec'd in MTH254



'F' Students from MTH252, by Grade Rec'd in MTH254



Note: Dual Credit to CCWD and Dual Credit to OUS students took MTH252 in 2007-08 at a high school; all students took MTH254 in 2008-09 in a college setting.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Average Grade in WR122, Composition II by Grade in WR121, Composition I and Location of Instruction

Community College (CCWD)

2007-08 WR121 → **2008-09 WR122**

2005-06 Grade Rec'd in WR121

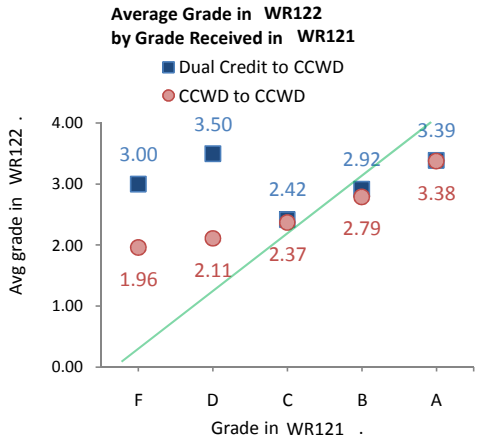
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took WR121 as dual credit	Total number taking WR121 in high school	23	26	281	1,154	1,323	**2,477**	**2,807**	**3,438**
	Number taking WR122 for grade in comm. college*	1	2	33	62	49	**111**	**147**	**172**
	WR122 Average grade	3	4	2.42	2.92	3.39	**3.13**	**2.97**	**2.90**
	Standard deviation	-	0.71	1.32	1.11	0.95	1.06	1.15	1.19
Students who took WR121 in an Oregon community college	Total number taking WR121 in comm. college	1,517	831	3,025	6,279	6,620	**12,895**	**18,018**	**20,621**
	Number taking WR122 for grade in comm. college	51	64	516	1,118	1,130	**2,248**	**2,879**	**2,999**
	WR122 Average grade	1.96	2.11	2.37	2.79	3.38	**3.08**	**2.91**	**2.90**
	Standard deviation	-	0.71	1.32	1.08	0.99	1.05	1.16	1.17
Difference in average grade of college-to-college and dual credit-to-college students (C - DC)		(1.04)	(1.39)	(0.05)	(0.13)	(0.01)	**(0.05)**	**(0.06)**	-

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

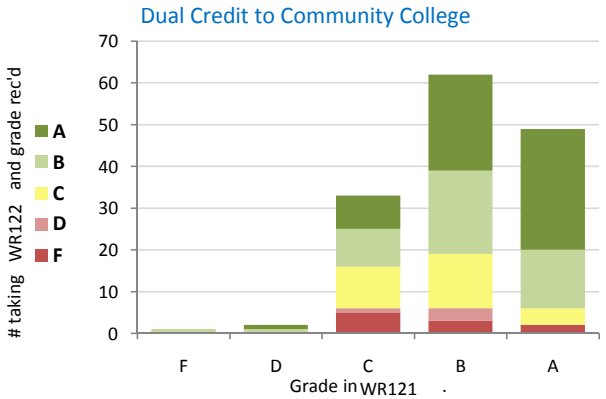
Percent of Students Succeeding in Last Course of Sequence

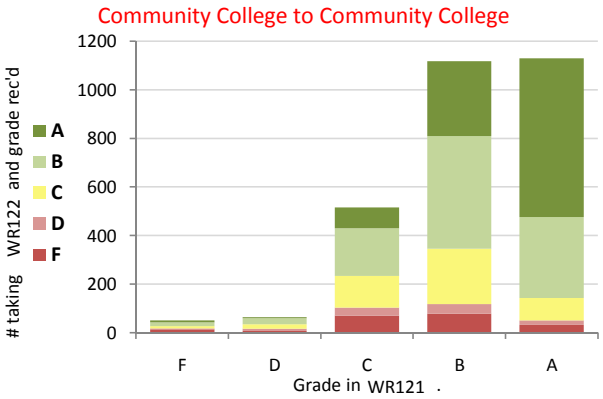
	Grade in WR121	Grade in WR122 N	C- or better	A or B
Dual Credit to CCWD students	Rec'd B- or better	111	93%	77%
	Rec'd C- or better	144	90%	72%
	Rec'd any grade	147	90%	72%
CCWD to CCWD students	Rec'd B- or better	2,248	92%	78%
	Rec'd C- or better	2,764	90%	74%
	Rec'd any grade	2,879	89%	73%

Percentages based on all graded students in last course of sequence.



Number of Students Taking the Sequence, by Grade Rec'd in WR121





Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Oregon University System (OUS)

Average Grade in WR122, Composition II by Grade in WR121, Composition I and Location of Instruction

2007-08 WR121 → **2008-09 WR122**

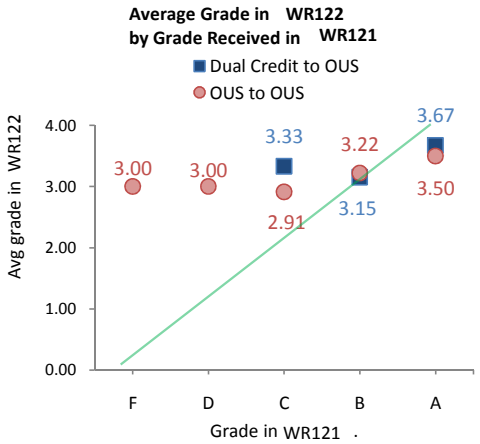
		2005-06 Grade Rec'd in WR121							
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took WR121 as dual credit	Total number taking WR121 in high school	23	26	281	1,154	1,323	**2,477**	**2,807**	**3,438**
	Number taking WR122 for grade in OUS*	-	-	3	39	51	**90**	**93**	**120**
	WR122 Average grade	-	-	3.33	3.15	3.67	**3.44**	**3.44**	**3.44**
	Standard deviation	-	-	0.58	0.87	0.65	0.79	0.79	0.74
Students who took WR121 in an OUS institution	Total number taking WR121 in OUS	203	153	725	2,334	2,159	**4,493**	**5,528**	**6,103**
	Number taking WR122 for grade in OUS	4	7	74	288	252	**540**	**625**	**664**
	WR122 Average grade	3.00	3.00	2.91	3.22	3.50	**3.35**	**3.29**	**3.29**
	Standard deviation	-	-	-	-	-	-	-	0.57
Difference in average grade of college-to-college and dual credit-to-college students (**C - DC**)		-	-	(0.42)	0.07	(0.17)	**(0.09)**	**(0.15)**	**(0.15)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

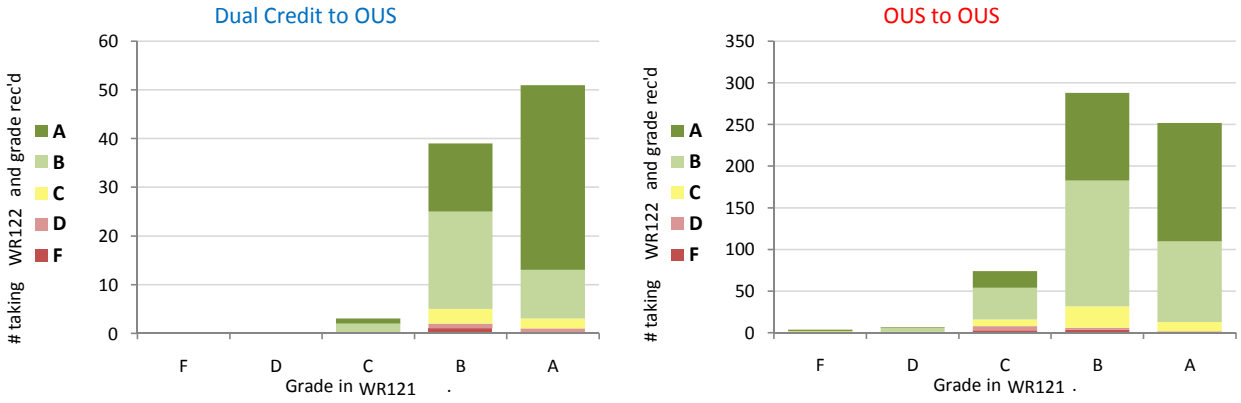
Percent of Students Succeeding in Last Course of Sequence

	Grade in WR121	Grade in WR122 N	C- or better	A or B
Dual Credit to OUS students	Rec'd B- or better	90	97%	91%
	Rec'd C- or better	93	97%	91%
	Rec'd any grade	93	97%	91%
OUS to OUS students	Rec'd B- or better	540	99%	92%
	Rec'd C- or better	614	97%	90%
	Rec'd any grade	625	97%	90%

Percentages based on all graded students in last course of sequence.



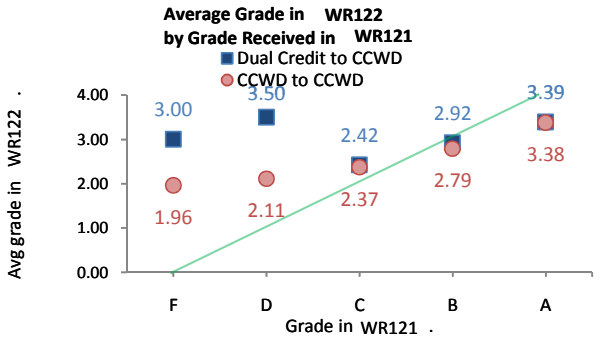
Number of Students Taking the Sequence, by Grade Rec'd in WR121



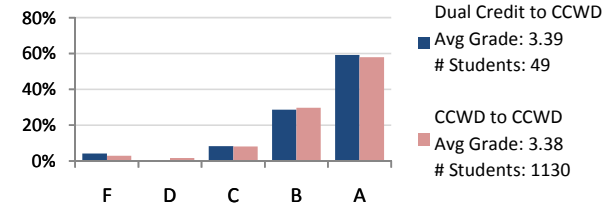
Source: OUS Institutional Research, Community Colleges and Workforce Development

Distribution of Grades in the Last Course of a College Sequence

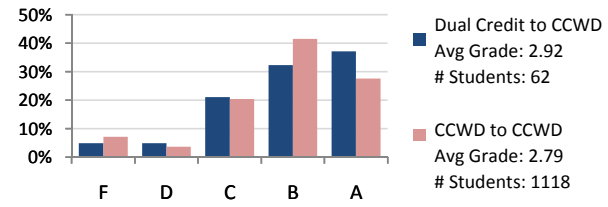
Community College (CCWD)



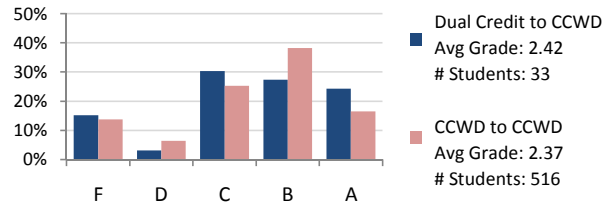
'A' Students from WR121, by Grade Rec'd in WR122



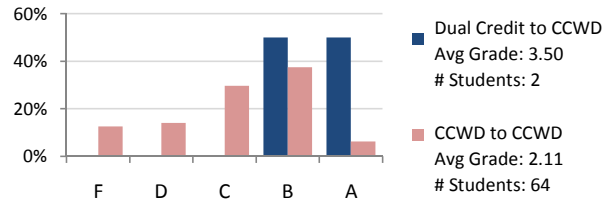
'B' Students from WR121, by Grade Rec'd in WR122



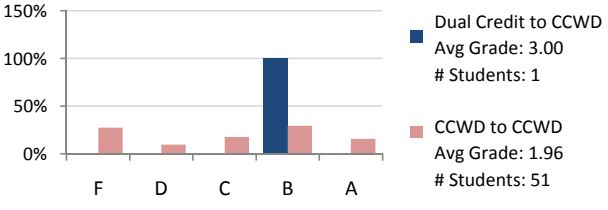
'C' Students from WR121, by Grade Rec'd in WR122



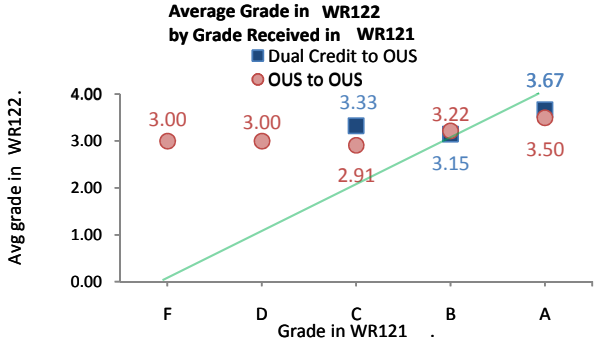
'D' Students from WR121, by Grade Rec'd in WR122



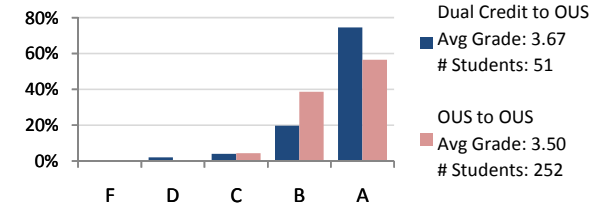
'F' Students from WR121, by Grade Rec'd in WR122



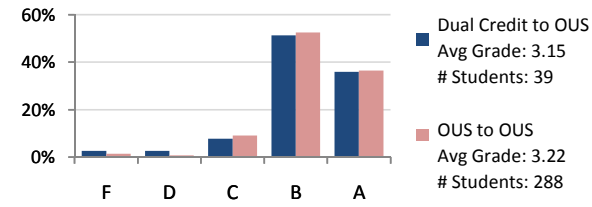
Oregon University System (OUS)



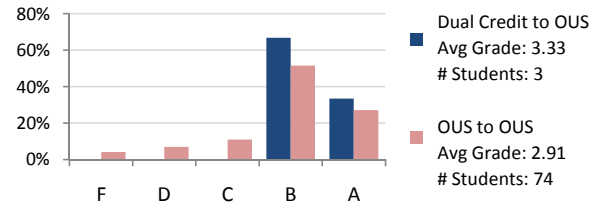
'A' Students from WR121, by Grade Rec'd in WR122



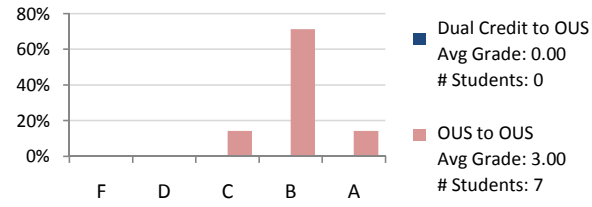
'B' Students from WR121, by Grade Rec'd in WR122



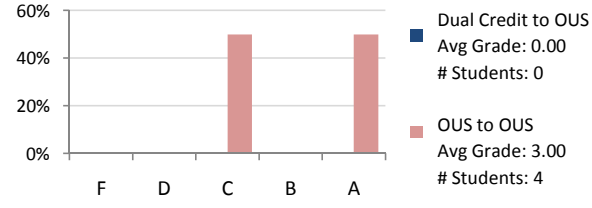
'C' Students from WR121, by Grade Rec'd in WR122



'D' Students from WR121, by Grade Rec'd in WR122



'F' Students from WR121, by Grade Rec'd in WR122



Note: Dual Credit to CCWD and Dual Credit to OUS students took WR121 in 2007-08 at a high school; all students took WR122 in 2008-09 in a college setting.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Community College (CCWD)

Average Grade in SPAN201, 2nd Yr Span I by Grade in SPAN103, 1st Yr Span III and Location of Instruction

2007-08 SPAN103 → **2008-09 SPAN201**

2005-06 Grade Rec'd in SPAN103

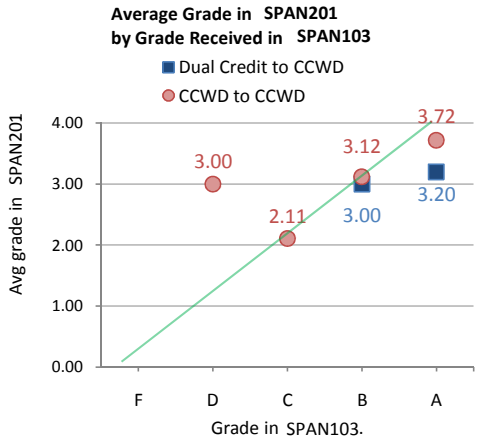
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took SPAN103 as dual credit	Total number taking SPAN103 in high school	4	3	19	399	701	**1,100**	**1,126**	**1,289**
	Number taking SPAN201 for grade in comm. college*	-	-	1	4	5	**9**	**10**	**10**
	SPAN201 Average grade	-	-	-	3.00	3.20	**3.11**	**2.80**	**2.80**
	Standard deviation	-	-	-	0.82	0.84	0.78	1.23	1.23
Students who took SPAN103 in an Oregon community college	Total number taking SPAN103 in comm. college	21	24	100	402	682	**1,084**	**1,228**	**1,391**
	Number taking SPAN201 for grade in comm. college	-	2	18	110	232	**342**	**362**	**377**
	SPAN201 Average grade	-	3.00	2.11	3.12	3.72	**3.52**	**3.45**	**3.41**
	Standard deviation	-	-	-	0.82	0.84	0.78	1.23	1.23
Difference in average grade of college-to-college and dual credit-to-college students (C - DC)		-	-	-	0.12	0.52	**0.41**	**0.65**	**0.61**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

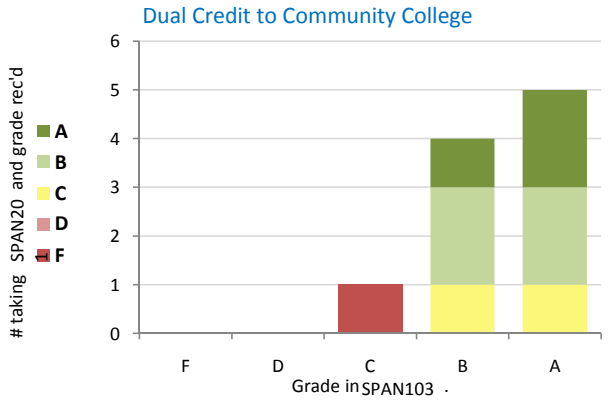
Percent of Students Succeeding in Last Course of Sequence

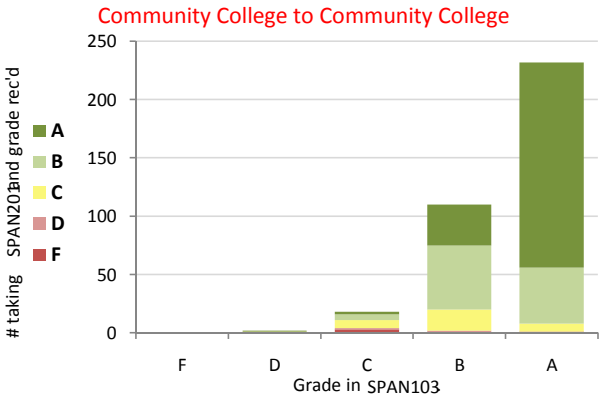
	Grade in SPAN103	Grade in SPAN201 N	C- or better	A or B
Dual Credit to CCWD students	Rec'd B- or better	9	100%	78%
	Rec'd C- or better	10	90%	70%
	Rec'd any grade	10	90%	70%
CCWD to CCWD students	Rec'd B- or better	342	99%	92%
	Rec'd C- or better	360	98%	89%
	Rec'd any grade	362	98%	89%

Percentages based on all graded students in last course of sequence.



Number of Students Taking the Sequence, by Grade Rec'd in SPAN103





Source: OUS Institutional Research, Community Colleges and Workforce Development

Performance in the Last Course of a College Sequence

Oregon University System (OUS)

Average Grade in SPAN201, 2nd Yr Span I by Grade in SPAN103, 1st Yr Span III and Location of Instruction

2007-08 SPAN103 → **2008-09 SPAN201**

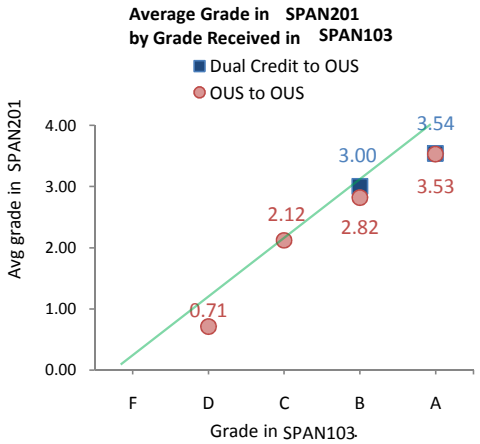
		2005-06 Grade Rec'd in SPAN103							
		F	D	C	B	A	A or B Students	Graded Students	All Students
Students who took SPAN103 as dual credit	Total number taking SPAN103 in high school	4	3	19	399	701	**1,100**	**1,126**	**1,289**
	Number taking SPAN201 for grade in OUS*	-	-	-	13	13	**26**	**26**	**26**
	SPAN201 Average grade	-	-	-	3.00	3.54	**3.27**	**3.27**	**3.27**
	SPAN201 Standard deviation	-	-	-	0.71	0.52	0.67	0.67	0.67
Students who took SPAN103 in an OUS institution	Total number taking SPAN103 in OUS	18	40	176	317	326	**643**	**875**	**1,071**
	Number taking SPAN201 for grade in OUS	-	7	76	138	148	**286**	**369**	**384**
	SPAN201 Average grade	-	0.71	2.12	2.82	3.53	**3.19**	**2.92**	**2.90**
	SPAN201 Standard deviation	-	-	-	-	-	-	-	-
Difference in average grade of college-to-college and dual credit-to-college students (**C - DC**)		-	-	-	(0.18)	(0.01)	**(0.08)**	**(0.35)**	**(0.37)**

*Excludes students taking the course in 2008-09 as dual credit. See Appendix 5 for details.
All Students comprises graded students plus students receiving a grade of Drop, Incomplete, Pass, No Pass, or Other in the first course of the sequence.

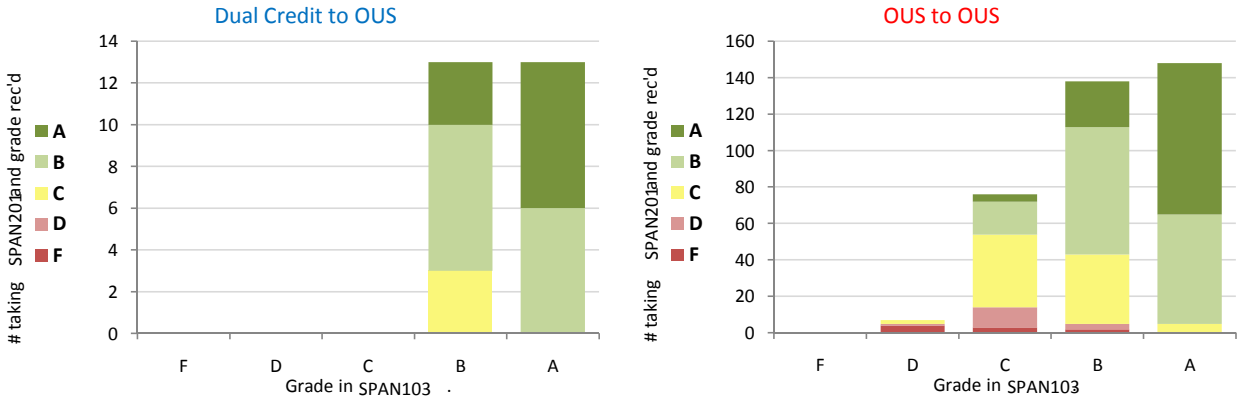
Percent of Students Succeeding in Last Course of Sequence

	Grade in SPAN103	Grade in SPAN201 N	C- or better	A or B
Dual Credit to OUS students	Rec'd B- or better	26	100%	88%
	Rec'd C- or better	26	100%	88%
	Rec'd any grade	26	100%	88%
OUS to OUS students	Rec'd B- or better	286	98%	83%
	Rec'd C- or better	362	95%	72%
	Rec'd any grade	369	93%	70%

Percentages based on all graded students in last course of sequence.



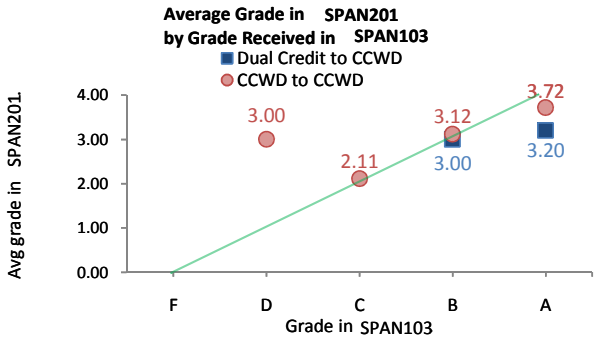
Number of Students Taking the Sequence, by Grade Rec'd in SPAN103



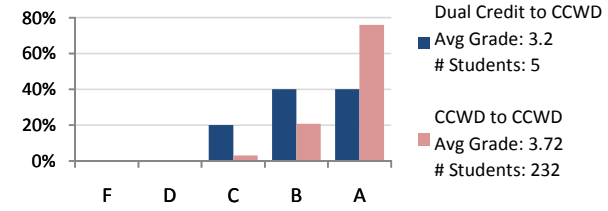
Source: OUS Institutional Research, Community Colleges and Workforce Development

Distribution of Grades in the Last Course of a College Sequence

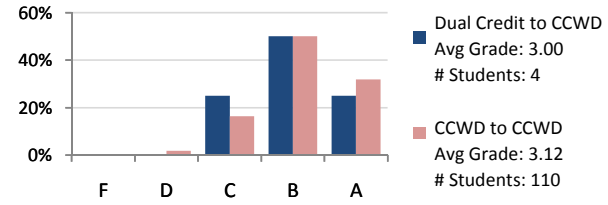
Community College (CCWD)



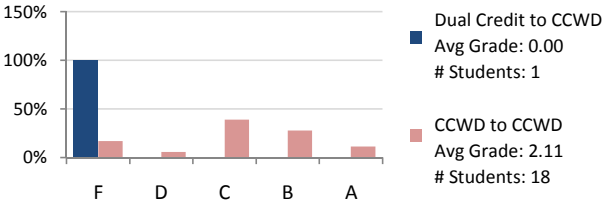
'A' Students from SPAN103, by Grade Rec'd in SPAN201



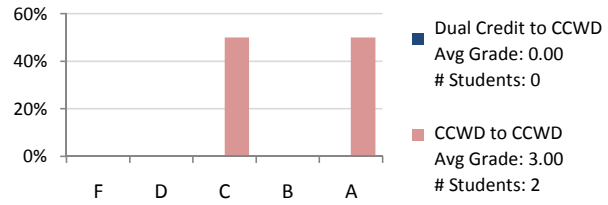
'B' Students from SPAN103, by Grade Rec'd in SPAN201



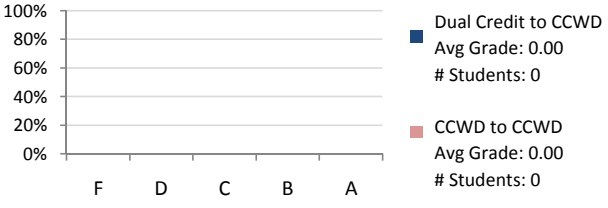
'C' Students from SPAN103, by Grade Rec'd in SPAN201



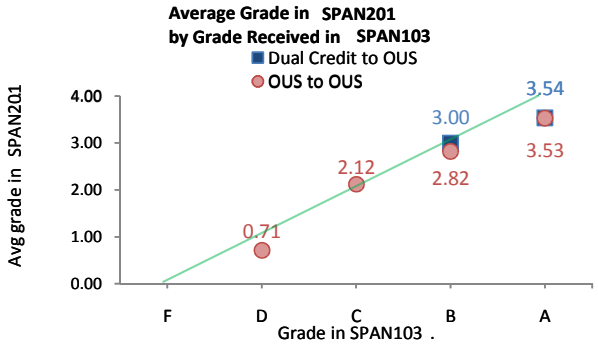
'D' Students from SPAN103, by Grade Rec'd in SPAN201



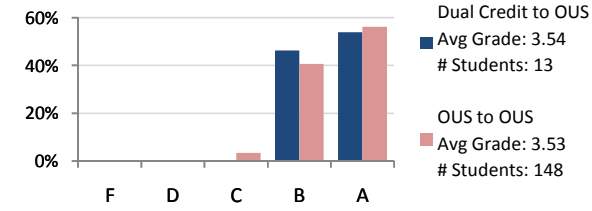
'F' Students from SPAN103, by Grade Rec'd in SPAN201



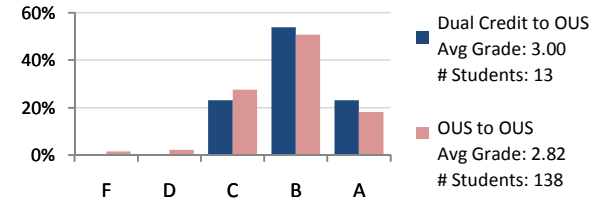
Oregon University System (OUS)



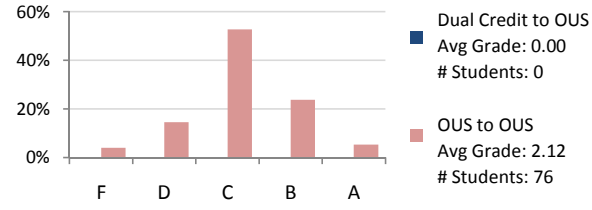
'A' Students from SPAN103, by Grade Rec'd in SPAN201



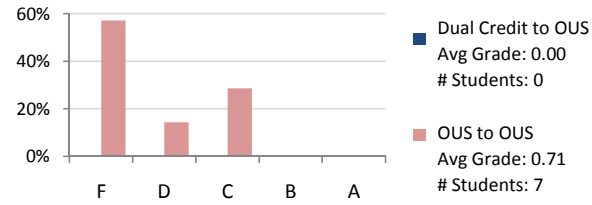
'B' Students from SPAN103, by Grade Rec'd in SPAN201



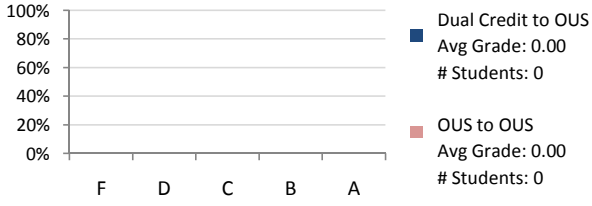
'C' Students from SPAN103, by Grade Rec'd in SPAN201



'D' Students from SPAN103, by Grade Rec'd in SPAN201



'F' Students from SPAN103, by Grade Rec'd in SPAN201



Note: Dual Credit to CCWD and Dual Credit to OUS students took SPAN103 in 2007-08 at a high school; all students took SPAN201 in 2008-09 in a college setting.

Source: OUS Institutional Research, Community Colleges and Workforce Development

What Do Dual Credit Students Take When They Get to College?

College Enrollment in 2008-09 by Dual Credit Courses Completed in 2007-08

		Dual Credit Course Completed in 2007-08[1]														
				History			Mathematics				Spanish			Writing			
		BIO 101	ENG 104	HIST 201	HIST 202	HIST 203	MTH 111	MTH 112	MTH 251	MTH 252	SPAN 101	SPAN 102	SPAN 103	WR 121	WR 122	WR 123	All Courses
2007-08 Dual Credit Headcount[1]		585	1,211	898	930	897	2,226	1,640	1,020	750	869	812	1,119	2,758	1,433	516	13,852
2008-09 College Course																	
ALS199	College Life	11	23	5	5	5	25	18	38	27	5	4	7	90	61	19	208
ANTH110	Cultural Anthropology	6	27	4	5	5	23	15	27	19	4	5	4	85	44	13	190
ANTH210	Comparative Cultures	13	23	2	3	4	18	19	38	30	2	3	5	70	44	22	176
BA101	Intro Business	24	105	6	5	6	74	47	82	67	22	19	23	254	156	58	670
BIO101	Biology I	2	44	4	4	4	41	27	30	21	4	5	6	130	62	23	280
BIO102	Biology II	6	30	7	7	7	34	26	22	16	3	2	5	115	57	23	237
BIO103	Biology III	8	32	5	5	4	22	15	17	15	4	3	3	62	32	18	158
BIO211	Biology I	23	39	3	3	3	29	26	53	40	7	8	7	117	59	13	284
BIO212	Biology II	24	40	4	4	4	25	24	45	36	7	7	5	99	48	14	226
BIO213	Biology III	22	40	5	5	5	23	24	40	31	7	7	5	87	41	11	203
CHEM121	General Chemistry I	15	32	2	1	1	24	18	23	15	5	6	10	89	50	22	211
CHEM122	General Chemistry II	10	25	-	-	-	19	16	23	14	4	6	10	74	46	19	172
CHEM201	General Chemistry	6	38	3	3	4	27	20	76	59	3	2	5	70	36	13	227
CHEM221	Chemistry I	42	88	8	8	7	73	62	129	104	16	18	16	208	129	40	512
CHEM222	Chemistry II	30	62	7	7	6	43	40	106	85	14	12	11	155	95	30	384
CHEM223	Chemistry III	22	52	5	5	4	31	29	77	69	12	11	9	124	74	23	284
CIS120	Computer Concepts I	6	23	1	1	1	22	20	14	8	4	2	1	77	54	11	166
COM111	Public Speaking	2	18	2	2	1	27	22	15	7	2	2	2	90	56	20	161
ECON201	Microeconomics	22	87	4	4	5	52	44	117	95	11	10	14	194	108	45	541
ECON202	Macroeconomics	8	54	3	2	2	37	25	66	53	7	11	10	119	69	28	324
ENG104	Literature: Fiction	15	17	6	5	4	60	50	47	33	10	12	17	174	113	44	377
ENG106	Literature: Poetry	2	21	5	6	5	12	6	14	9	4	4	2	75	44	21	154
HDFS201	Contemporary Families	4	23	2	2	2	22	14	23	18	1	2	4	68	27	16	172
HDFS240	Human Sexuality	4	33	2	3	3	24	17	28	20	1	1	2	83	47	14	198
HHS231	Lifetime Fitness	41	142	14	15	13	89	72	166	138	11	12	13	333	179	65	813
HHS241	Lifetime Fitness	18	65	5	6	6	42	36	90	72	5	4	7	149	100	38	406
HIST102	History: Western Civ II	15	33	6	6	6	18	13	19	11	5	5	7	76	51	14	180
HIST202	US History II	3	34	1	-	-	25	23	25	18	7	6	9	88	63	28	200
HIST203	US History III	6	27	-	-	-	20	15	19	13	7	7	9	70	45	19	162
J201	Mass Media	3	27	1	1	1	17	12	15	14	4	3	6	71	47	17	152

What Do Dual Credit Students Take When They Get to College?

College Enrollment in 2008-09 by Dual Credit Courses Completed in 2007-08

		Dual Credit Course Completed in 2007-08[1]														
				History			Mathematics				Spanish			Writing			
		BIO 101	ENG 104	HIST 201	HIST 202	HIST 203	MTH 111	MTH 112	MTH 251	MTH 252	SPAN 101	SPAN 102	SPAN 103	WR 121	WR 122	WR 123	All Courses
2007-08 Dual Credit Headcount[1]		585	1,211	898	930	897	2,226	1,640	1,020	750	869	812	1,119	2,758	1,433	516	13,852
2008-09 College Course																	
MTH95	Int. Algebra	8	27	2	4	4	2	2	-	-	3	2	3	88	63	24	170
MTH111	College Algebra	46	148	12	9	11	51	27	17	9	27	32	32	461	264	104	992
MTH112	Trig/Pre-Calc	24	75	4	3	3	64	35	21	9	19	15	17	173	95	32	455
MTH241	Calculus for Mgmt	3	31	3	2	1	37	25	5	3	5	7	2	68	38	14	157
MTH243	Statistics I	19	71	1	-	-	36	26	61	52	11	13	10	102	54	19	323
MTH251	Calculus I	61	92	51	50	50	136	120	66	41	14	13	17	179	110	36	615
MTH252	Calculus II	41	60	35	34	34	68	66	91	49	5	7	6	120	70	28	413
MTH254	Vector Calculus I	11	37	11	12	11	9	13	119	100	1	3	4	89	44	21	263
PE185	Physical Education	18	68	6	7	8	67	53	43	26	19	22	17	244	118	59	521
PH211	Physics with Calculus	11	24	4	4	3	12	12	63	49	-	1	3	61	37	15	169
PSY101	Intro Psychology	3	23	2	4	3	24	16	22	12	7	9	7	77	42	20	207
PSY201	General Psychology	51	162	23	20	23	124	98	96	71	24	29	40	443	250	95	969
PSY202	General Psychology	28	108	19	15	14	85	62	53	41	14	18	20	274	179	62	642
SOC204	Intro Sociology	30	102	8	5	6	87	56	59	39	12	17	17	267	170	64	636
SP111	Speech: Fundamentals	20	50	8	7	10	59	43	43	24	14	13	12	194	107	41	423
SPAN101	1st Yr Spanish I	7	52	29	30	26	26	18	20	16	-	-	-	50	26	12	227
SPAN102	1st Yr Spanish II	4	49	30	31	27	28	17	21	15	-	1	-	46	28	12	220
SPAN103	1st Yr Spanish III	2	39	28	29	25	21	15	21	13	4	4	2	35	21	10	183
SPAN201	2nd Yr Spanish I	5	52	20	23	20	22	19	21	12	28	33	36	51	35	11	217
SPAN202	2nd Yr Spanish II	4	41	20	23	20	19	18	18	10	24	28	32	38	26	11	189
WR115	Composition: Intro	13	26	3	2	3	36	24	10	3	4	3	2	13	3	1	219
WR121	Composition I	84	190	18	21	22	233	175	234	168	41	39	45	75	20	3	1,513
WR122	Composition II	39	160	4	8	9	99	75	91	61	18	20	26	255	7	1	812
WR123	Composition III	23	56	3	5	5	40	26	23	15	9	7	8	124	58	-	266

Source: OUS Institutional Research, Community Colleges and Workforce Development

[1] Students completing dual credit course in 2007-08 with a grade of C- or better (select courses).

Excludes 2008-09 college courses with enrollments of 150 or fewer. Excludes lab courses.

Course Taking Patterns: Sequences Started in 2007-08

This data demonstrates that most students take a sequence of courses within the same academic year.

SEQUENCE: MTH111, College Algebra MTH112, Trig/Pre-Calc		Rec'd Passing Grade in MTH111 (A-C, P)		Rec'd Unsatisfactory* Grade in MTH111 (D,F,NP,Drop,I,Other)		UNDUPLICATED TOTAL	
Students who took MTH111 as dual credit	Total taking MTH111	2,226	100%	214	100%	2,440	100%
	and took MTH112 in the same year	1,544	69%	145	68%	1,689	69%
	and took MTH112 the next year for dual credit	97	4%	14	7%	111	5%
	and took MTH112 the next year at OUS or community college	64	3%	8	4%	72	3%
	and did not take MTH112 the following academic year*	521	23%	47	22%	568	23%
Students who took MTH111 in college or university	Total taking MTH111	11,553	100%	6,453	100%	16,335	100%
	and took MTH112 the same year	2,609	23%	362	6%	2,971	18%
	and took MTH112 the following academic year	1,080	9%	229	4%	1,309	8%
	and did not take MTH112 the following academic year*	7,864	68%	5,862	91%	12,055	74%

SEQUENCE: MTH112, Trig/Pre-Calc MTH251, Calculus I		Rec'd Passing Grade in MTH112 (A-C, P)		Rec'd Unsatisfactory* Grade in MTH112 (D,F,NP,Drop,I,Other)		UNDUPLICATED TOTAL	
Students who took MTH112 as dual credit	Total taking MTH112	1,640	100%	237	100%	1,877	100%
	and took MTH251 in the same year	79	5%	5	2%	84	4%
	and took MTH251 the next year for dual credit	461	28%	14	6%	475	25%
	and took MTH251 the next year at OUS or community college	122	7%	12	5%	134	7%
	and did not take MTH251 the following academic year*	978	60%	206	87%	1,184	63%
Students who took MTH112 in college or university	Total taking MTH112	4,278	100%	2,776	100%	6,124	100%
	and took MTH251 the same year	1,364	32%	184	7%	1,548	25%
	and took MTH251 the following academic year	897	21%	157	6%	1,054	17%
	and did not take MTH251 the following academic year*	2,017	47%	2,435	88%	3,522	58%

*"Unsatisfactory Grade" includes unknown grade. Unknown can potentially be a passing grade.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Course Taking Patterns: Sequences Started in 2007-08

This data demonstrates that most students take a sequence of courses within the same academic year.

SEQUENCE: MTH251, Calculus I MTH252, Calculus II		Rec'd Passing Grade in MTH251 (A-C, P)		Rec'd Unsatisfactory* Grade in MTH251 (D,F,NP,Drop,I,Other)		UNDUPLICATED TOTAL	
	Total taking MTH251	1,020	100%	366	100%	1,381	100%
Students who took MTH251 as dual credit	and took MTH252 in the same year	714	70%	226	62%	940	68%
	and took MTH252 the next year for dual credit	25	2%	2	1%	27	2%
	and took MTH252 the next year at OUS or community college	92	9%	26	7%	118	9%
	and did not take MTH252 the following academic year*	189	19%	112	31%	296	21%
	Total taking MTH251	3,739	100%	2,877	100%	5,236	100%
Students who took MTH251 in college or university	and took MTH252 the same year	2,102	56%	136	5%	2,238	43%
	and took MTH252 the following academic year	810	22%	156	5%	966	18%
	and did not take MTH252 the following academic year*	827	22%	2,585	90%	2,032	39%

SEQUENCE: MTH252, Calculus II MTH254, Vector Calculus I		Rec'd Passing Grade in MTH252 (A-C, P)		Rec'd Unsatisfactory* Grade in MTH252 (D,F,NP,Drop,I,Other)		UNDUPLICATED TOTAL	
	Total taking MTH252	750	100%	228	100%	977	100%
Students who took MTH252 as dual credit	and took MTH254 in the same year	-	0%	-	0%	-	0%
	and took MTH254 the next year for dual credit	-	0%	-	0%	-	0%
	and took MTH254 the next year at OUS or community college	100	13%	21	9%	121	12%
	and did not take MTH254 the following academic year*	650	87%	207	91%	856	88%
	Total taking MTH252	2,665	100%	1,763	100%	3,680	100%
Students who took MTH252 in college or university	and took MTH254 the same year	-	0%	-	0%	-	0%
	and took MTH254 the following academic year	492	18%	84	5%	576	16%
	and did not take MTH254 the following academic year*	2,173	82%	1,679	95%	3,104	84%

*"Unsatisfactory Grade" includes unknown grade. Unknown can potentially be a passing grade.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Course Taking Patterns: Sequences Started in 2007-08

This data demonstrates that most students take a sequence of courses within the same academic year.

SEQUENCE: WR121, Composition I WR122, Composition II		Rec'd Passing Grade in WR121 (A-C, P)		Rec'd Unsatisfactory* Grade in WR121 (D,F,NP,Drop,I,Other)		UNDUPLICATED TOTAL	
	Total taking WR121	2,758	100%	680	100%	3,438	100%
Students who took WR121 as dual credit	and took WR122 in the same year	1,305	47%	269	40%	1,574	46%
	and took WR122 the next year for dual credit	7	0%	9	1%	16	0%
	and took WR122 the next year at OUS or community college	255	9%	58	9%	313	9%
	and did not take WR122 the following academic year*	1,191	43%	344	51%	1,535	45%
	Total taking WR121	21,211	100%	6,253	100%	26,724	100%
Students who took WR121 in college or university	and took WR122 the same year	6,643	31%	203	3%	6,846	26%
	and took WR122 the following academic year	3,774	18%	340	5%	4,114	15%
	and did not take WR122 the following academic year*	10,794	51%	5,710	91%	15,764	59%

SEQUENCE: SPAN103, First Year Spanish SPAN201, Second Year Spanish		Rec'd Passing Grade in SPAN103 (A-C, P)		Rec'd Unsatisfactory* Grade in SPAN103 (D,F,NP,Drop,I,Other)		UNDUPLICATED TOTAL	
	Total taking SPAN103	1,119	100%	171	100%	1,289	100%
Students who took SPAN103 as dual credit	and took SPAN201 in the same year	106	9%	11	6%	117	9%
	and took SPAN201 the next year for dual credit	350	31%	21	12%	371	29%
	and took SPAN201 the next year at OUS or community college	36	3%	-	0%	36	3%
	and did not take SPAN201 the following academic year*	627	56%	139	81%	765	59%
	Total taking SPAN103	2,113	100%	380	100%	2,462	100%
Students who took SPAN103 in college or university	and took SPAN201 the same year	297	14%	22	6%	319	13%
	and took SPAN201 the following academic year	858	41%	42	11%	900	37%
	and did not take SPAN201 the following academic year*	958	45%	316	83%	1,243	50%

*"Unsatisfactory Grade" includes unknown grade. Unknown can potentially be a passing grade.

Source: OUS Institutional Research, Community Colleges and Workforce Development

Effect of Demographic and Performance Characteristics on First- to Second-Year Persistence[1]
Fall 2008 OUS Freshman Cohort

	Estimated Coefficient	Standard Error	Wald Chi-Square	Prob. > Chi-Square	Std. Dev.	Odds Ratio	Percentage Change[2] in Odds of Persisting	Predicted Probability[3] (at Mean) of Persisting	Effect on Probability[4] (at Mean) of Persisting	Change in Probability vs. Reference Group
Variable										
African American	0.1990	0.2045	0.9464	0.3306	-	1.220	-	-	-	-
American Indian	-0.1999	0.2334	0.7340	0.3916	-	0.819	-	-	-	-
Asian/Pacific Isl.	0.2836	0.1113	6.4900	0.0108	-	1.328	32.8	0.845	-	0.041
Hispanic/Latino	0.1186	0.1270	0.8721	0.3504	-	1.126	-	-	-	-
Nonresident Alien	-0.4988	0.7282	0.4693	0.4933	-	0.607	-	-	-	-
Unknown race/ethn.	-0.0157	0.1142	0.0190	0.8904	-	0.984	-	-	-	-
White non-Hisp.			--Reference group--					[0.817]		
OR resident	0.2860	0.0697	16.8309	< 0.0001	-	1.331	33.1	0.846	-	0.041
OR nonresident			--Reference group--					[0.817]		
Female	-0.0632	0.0623	1.0286	0.3105	-	0.939	-	-	-	-
Male			--Reference group--					[0.817]		
Received AP credit	0.2076	0.0905	5.2599	0.0218	-	1.231	23.1	0.835	-	0.031
No AP			--Reference group--					[0.817]		
Received Pell grant	0.1096	0.0746	2.1563	0.1420	-	1.116	-	-	-	-
No Pell			--Reference group--					[0.817]		
Dual-credit student	0.1545	0.0780	3.9215	0.0477	-	1.167	16.7	0.828	-	0.023
Not dual-credit			--Reference group--					[0.817]		
5% special admit	-0.1004	0.1854	0.2934	0.5881	-	0.904	-	-	-	-
Other special admit	-0.2938	0.0891	10.8829	0.0010	-	0.745	-25.5	0.754	-	-0.050
Earned coll. hrs. in HS	-0.2521	0.3002	0.7051	0.4011	-	0.777	-	-	-	-
Met HS GPA/subj. req.			--Reference group--					[0.817]		
Delayed college enrl.	-0.3774	0.1248	9.1489	0.0025	-	0.686	-31.4	0.739	-	-0.066
Straight from HS			--Reference group--					[0.817]		
High school GPA	0.7835	0.0897	76.2197	< 0.0001	0.4031	2.189	37.1	0.850	0.045	-
SAT math	0.002150	0.000446	23.1176	< 0.0001	89.5380	1.002	21.2	0.833	0.028	-
SAT critical reading	0.000440	0.000422	1.0891	0.2967	90.8671	1.000	-	-	-	-
Intercept	-2.6669	0.3528	57.1535	< 0.0001						

-2 log likelihood = 8003; chi-square for covariates = 372 with 18 df ($p < .0001$); pseudo R-square = .074. Population persistence rate = 81.7%.

1. Persistence = enrolled at any OUS university as of the second fall.
2. For the continuous independent variables HS GPA, SAT math, and SAT critical reading, the percentage change is estimated for a change of one standard deviation.
3. Predicted probability and change in odds ratio are calculated only where the difference from the reference group is statistically significant at the .05 level.
4. For a change of one standard deviation in the continuous independent variables HS GPA, SAT math, and SAT critical reading.

Source: OUS Institutional Research Services, freshman retention tables, 2008.

Student Participation in Career and Technical Education (CTE) Dual Credit[1]

Dual Credit CTE Awarded by Community Colleges in AY2007-08

Institution	Students Participating in Dual Credit CTE	Total Credits Awarded as Dual Credit CTE	Amount of Dual Credit CTE Credit per Student	Average Grade in Dual Credit CTE Course
Blue Mountain CC	201	789	3.9	3.57
Central Oregon	622	1,959	3.1	3.17
Chemeketa CC	1,466	6,243	4.3	3.59
Clackamas CC	748	3,329	4.5	3.72
Clatsop CC	261	2,310	8.9	3.76
Columbia Gorge CC	88	311	3.5	3.34
Lane CC	3,415	14,109	4.1	3.59
Linn-Benton CC	856	4,516	5.3	3.75
Mt Hood CC	484	2,052	4.2	3.73
Oregon Coast CC	66	229	3.5	3.84
Portland CC	1,126	7,252	6.4	3.64
Rogue CC	963	3,293	3.4	3.64
Southwestern Or CC	95	381	4.0	3.50
Tillamook Bay CC	57	389	6.8	3.30
Treasure Valley CC	207	340	1.6	3.81
Umpqua CC	30	155	5.2	3.86
TOTAL STUDENTS, DUPLICATED[2]	10,685			
TOTAL STUDENTS, UNDUPLICATED	**10,672**	**47,657**	**4.5**	**3.63**

Dual Credit CTE by High School Level		Attend Oregon Public University or Community College, 2008-09	
All	10,672	2,240	21%
Seniors	2,689	1,514	56%
Juniors	2,747	380	14%
Sophomores	2,107	124	6%
Freshmen	2,016	59	3%
Unknown	1,113	163	15%

[1] All courses are taught at a high school by a high school teacher. Credits awarded includes lower division credit only.

[2] Total students, duplicated includes students taking dual credit CTE through partnerships with more than one institution (i.e., If a high school students took CTE courses from Lane Community College and Linn-Benton Community College in 2007-08, they would be double counted in the duplicated total).

Source: OUS Institutional Research, Community Colleges and Workforce Development, Oregon Dept of Education

Student Participation in Career and Technical Education (CTE) Dual Credit by CIP* Area

CTE Dual Credit in AY2007-08 and Subsequent Coursework AY2008-09

CIP Program Area	Number of CTE Dual Credit Students 2007-08		CTE High School Seniors Attending OUS 2008-09		CTE High School Seniors Attending CC 2008-09		CTE 2007-08 Seniors Taking CTE Prep or Apprenticeship courses 2008-09		CTE 2007-08 Seniors Taking CTE Prep in the Same CIP Program Area, 2008-09	
	All	Seniors	N	%	N	%	N	%	N	%
Business, Management, Marketing, and Related Support Services.	3,265	721	162	22%	257	36%	117	16%	53	7%
Engineering Technologies/Technicians.	1,596	233	48	21%	75	32%	47	20%	13	6%
Health Professions and Related Clinical Sciences.	1,541	615	196	32%	217	35%	96	16%	31	5%
Family and Consumer Sciences/Human Sciences.	1,293	296	52	18%	111	38%	49	17%	19	6%
Precision Production.	909	236	48	20%	92	39%	54	23%	19	8%
Mechanic and Repair Technologies/Technicians.	526	137	12	9%	69	50%	47	34%	19	14%
Agriculture, Agriculture Operations, and Related Sciences.	442	121	19	16%	62	51%	40	33%	16	13%
Parks, Recreation, Leisure, and Fitness Studies.	392	88	26	30%	36	41%	16	18%	-	0%
Biological and Biomedical Sciences.	362	143	50	35%	53	37%	26	18%	1	1%
Mathematics and Statistics.	219	24	3	13%	10	42%	5	21%	-	0%
Computer and Information Sciences and Support Services.	213	52	12	23%	25	48%	15	29%	7	13%
Security and Protective Services.	150	46	12	26%	22	48%	10	22%	7	15%
Visual and Performing Arts.	133	43	10	23%	13	30%	1	2%	-	0%
Education.	128	64	22	34%	20	31%	8	13%	1	2%
Undefined/Undeclared Cip Area.	89	21	2	10%	11	52%	4	19%	-	0%
Personal and Culinary Services.	82	15	6	40%	6	40%	3	20%	1	7%
Construction Trades.	70	16	1	6%	6	38%	4	25%	-	0%
Basic Skills.	57	36	8	22%	15	42%	6	17%	1	3%
Liberal Arts and Sciences, General Studies and Humanities.	55	4	2	50%	-	0%	-	0%	-	0%
Transportation and Materials Moving.	50	2	-	0%	1	50%	1	50%	1	50%
Social Sciences.	46	25	10	40%	10	40%	6	24%	-	0%
Communications Technologies/Technicians and Support Services.	42	13	5	38%	3	23%	1	8%	-	0%
Communication, Journalism, and Related Programs.	40	27	10	37%	4	15%	1	4%	-	0%
Physical Sciences.	30	22	9	41%	8	36%	6	27%	-	0%
English Language and Literature/Letters.	24	16	6	38%	5	31%	3	19%	-	0%
Foreign Languages, Literatures, and Linguistics.	13	11	3	27%	3	27%	1	9%	-	0%
Natural Resources and Conservation.	10	5	2	40%	3	60%	2	40%	-	0%
Leisure and Recreational Activities.	3	1	1	100%	-	0%	-	0%	-	0%
TOTAL STUDENTS, UNDUPLICATED	**10,672**	**2,689**	**641**	**24%**	**1,007**	**37%**	**499**	**19%**	**13**	**0%**

*Classification of Instructional Programs - a United States Department of Education classification system for college degrees

Source: OUS Institutional Research, Community Colleges and Workforce Development, Oregon Dept of Education

Courses Commonly Taken for Career and Technical Education (CTE) Dual Credit in Oregon Community Colleges, AY2007-08

CIP Program Area and Course*		Student Headcount	Awarded Credits	Average Grade	# Partner Colleges†
Agriculture, Agriculture Operations, and Related Sciences.		442	1,684	3.89	6
ANS122	Intro to Animal Science Operat	180	180		1
ANS121	Animal Science	86	336	3.90	2
AG111	Computers in Agriculture	79	165	3.93	2
CSS105	Soils and Man	68	204	3.93	1
HT8.137	Plant Propagation	63	252	3.92	1
Basic Skills.		57	107	3.43	3
Biological and Biomedical Sciences.		362	1,738	3.34	3
BI171	Intro to Human Anat & Phys 1	158	471	3.24	1
BI172	Intro to Human Anat & Phys 2	109	327	3.14	1
BI101	General Biology	77	308	3.60	1
BI103	General Biology	68	268	3.45	1
BI102	General Biology	67	268	3.43	1
Business, Management, Marketing, and Related Support Se		3,265	12,849	3.66	14
BT120	Personal Keyboarding	586	1,500	3.73	4
BA218	Personal Finance	295	1,112	3.44	2
CA121	Keyboarding	285	841	3.67	2
CS101	Intro Microcomputer Applicatns	187	483	3.63	3
OA121	Keyboarding	185	374	3.82	5
CAS121	Beginning Keyboarding	158	454	3.81	1
CIS125	Introduction to Presentations	152	323	3.89	4
BT160	Word I	138	381	3.68	1
BA101	Intro to Business	135	408	3.28	3
HRTM105	Restaurant Operations	118	354	3.51	1
CA201	Microsoft Word Processing 1	117	348	3.86	1
BA111	Introduction to Accounting	107	317	3.80	3
HRTM106	Intro to Hospitality Mgt	104	312	3.57	1
OA122	Formatting	102	165	3.81	2
BT161	Word II	93	237	3.56	1
BT129	Business Web Pages	93	279	3.59	1
CAS216	Beginning Word	90	114	3.83	1
HRTM280	Co-op Ed: Hospitality Mgmt	78	258	3.64	1
BT210	Word - Level I (2003)	74	262	3.79	1
CAS109	Beginning PowerPoint	73	73	3.81	1
BT121	Keyboarding	68	204	3.49	2
CAS133	Basic Computer Skill/MS Office	65	260	3.85	1
CS120	Cpts of Comp: Info Processing	58	232	3.39	2
MIC178	Using Internet For Communicatn	57	171	3.65	1

Courses Commonly Taken for Career and Technical Education (CTE) Dual Credit in Oregon Community Colleges, AY2007-08

CIP Program Area and Course*		Student Headcount	Awarded Credits	Average Grade	# Partner Colleges†
BT118	MS Powerpoint for Business	56	168	3.57	1
MIC207	Presentation Software	55	110	3.67	1
BT176	Excel	55	117	3.77	1
OA202	Word Processing: MS Word	53	147	3.88	2
Computer and Information Sciences and Support Services.		213	789	3.71	7
CIS125A1	AutoCAD I	63	224		1
Construction Trades.		70	344	3.62	2
Education.		128	374	3.70	4
ED100	Introduction to Education	64	138	3.78	2
Engineering Technologies/Technicians.		1,596	6,154	3.60	10
CIS101	Computer Fundamentals	790	2,394	3.55	1
DRF142	Graphic Concepts	246	492	3.67	1
CST111	Construction Orient & Environ	148	292	3.18	1
DRF167	CAD 1	146	580	3.73	1
DRF245	Inventor	96	285	3.74	1
CST110	Blueprint Reading 1	76	267	3.28	1
BCT106	Hand Tool/Power Tool Use & Saf	58	174	3.78	2
Family and Consumer Sciences/Human Sciences.		1,293	4,306	3.69	10
ECE120	Intro to Early Childhood	432	992	3.6	3
ECE150	Creative Act for Children	153	456	3.62	2
ECE125	Early Childhood Development	142	429	3.68	1
HDFS226	Child Development	92	276	3.65	1
ECE133	Practicum I	92	270	3.66	2
HDFS298	IS: Child Development	79	209	3.88	1
ECE135	Applied Child Development	63	189	3.84	1
ECE126	Developmentally Appropriate Pr	55	165	3.87	1
ECE140	Intro to Early Childhood Ed	55	110	3.55	1
ECE240	Early Childhood Practicum	55	166	3.93	1
HDF247	Preschool Child Development	51	150	3.88	2
HDF222	Family Relationships	50	150	3.66	2
Health Professions and Related Clinical Sciences.		1,541	6,361	3.53	12
HO150	Human Body Systems 1	266	798	3.63	1
HO152	Human Body Systems 2	216	648	3.64	1
HM120	Medical Terminology 1	199	577	3.44	2
MP111	Medical Terminology	188	732	3.31	3

Courses Commonly Taken for Career and Technical Education (CTE) Dual Credit in Oregon Community Colleges, AY2007-08

CIP Program Area and Course*		Student Headcount	Awarded Credits	Average Grade	# Partner Colleges†
HO100	Medical Terminology	177	528	3.62	1
AH112	Hlth Care Systems & Profession	131	262	3.69	1
AH110	Medical Language for Healthcar	115	230	3.54	1
AH100	Intro Health Occupations	114	184		1
BI121	Anatomy and Function I	102	352	3.17	1
HM121	Medical Terminology 2	99	294	3.55	1
AH5.425	Intro To Health Occupations I	94	160	3.84	1
AH5.426	Intro To Health Occupations II	93	158	3.82	1
MA110	Medical Terminology	88	258	3.81	1
EMT120	Emer Med Serv: First Responder	84	225	3.56	2
AH5.427	Intro To Hlth Occupations III	73	146	3.88	1
BI122	Anatomy and Function II	62	224	3.32	1
Liberal Arts and Sciences, General Studies and Humanities.		55	218	3.54	1
BI55	Human Biology	53	212	3.53	1
Mathematics and Statistics.		219	1,215	3.49	3
MTH65	Fundamentals Of Algebra II	154	620	3.43	1
MTH95	Intermediate Algebra	145	606	3.53	3
Mechanic and Repair Technologies/Technicians.		526	2,610	3.58	9
AM145	Engine Repair	224	413	3.47	1
AM143	Brakes	107	108	3.41	1
AM101	1: Engine Repair I	78	312	3.62	1
AM105	5: Brake Systems I	67	268	3.58	1
AM108	8: Intro to Automotive Sys I	64	256	3.66	1
AM104	4: Steering & Suspension Sys I	63	252	3.60	1
Parks, Recreation, Leisure, and Fitness Studies.		392	391	3.73	2
9.167	Emergency First Aid	318	318	3.73	1
HE110	First Aid and Cpr	74	73	4.00	1
Personal and Culinary Services.		82	261	3.38	4
Precision Production.		909	4,823	3.65	12
WLD121	Shielded Metal Arc Welding I	163	441	3.50	1
DRF130	CAD 1	154	450	3.72	2
WLD122	Shielded Metal Arc Welding 2	94	179	3.32	1
DRF117	Drafting Fundamentals	62	248	3.84	1
DRF131	CAD 2	60	168	3.84	1
CDT103	Computer-Aided Drafting I	50	122	3.86	1

Courses Commonly Taken for Career and Technical Education (CTE) Dual Credit in Oregon Community Colleges, AY2007-08

CIP Program Area and Course*	Student Headcount	Awarded Credits	Average Grade	# Partner Colleges†
Security and Protective Services.	150	707	3.56	5
Transportation and Materials Moving.	50	1,150	3.84	2
Visual and Performing Arts.	133	326	3.77	4
CIP Program Area Unknown/Undeclared	89	355	3.74	3
TOTAL ALL DUAL CREDIT CTE COURSES	**10,672**	**47,657**	**3.63**	**16**

Source: OUS Institutional Research, Community Colleges and Workforce Development

*Only dual credit CTE course types or CIP program areas with more than 50 students are listed. Where more than one course title exists, the most common one is used.

† Partner college: The community college or university that transcripts the tech prep course being taught by a high school.

The number of credits awarded for completing a course can vary between colleges.

Student Participation in All Dual Credit Programs

Includes Academic Transfer and Career and Technical Education

Dual Credit Awarded by OUS and Oregon Community Colleges in AY2007-08

Institution	Number of Students	Total Credits Awarded as Dual Credit*	Amount of Dual Credit per Student	Average Grade in Dual Credit Courses
Eastern Oregon University	50	263	5.3	3.64
Oregon Institute of Technology	718	4,405	6.1	3.28
Oregon State University	-	-		
Portland State University	1,299	11,238	8.7	3.45
Southern Oregon University	804	5,983	7.4	3.40
University of Oregon	-	-		
Western Oregon University	-	-		
Blue Mountain CC	726	6,187	8.5	3.26
Central Oregon CC	890	4,383	4.9	3.15
Chemeketa CC	2,754	18,941	6.9	3.44
Clackamas CC	2,220	22,441	9.4	3.59
Clatsop CC	263	2,316	8.8	3.76
Columbia Gorge CC	242	1,751	7.2	3.05
Klamath CC	130	792	6.1	3.58
Lane CC	5,229	36,114	6.9	3.45
Linn-Benton CC	1,975	14,774	7.5	3.66
Mt Hood CC	1,373	12,968	9.4	3.40
Oregon Coast CC	104	674	6.5	3.27
Portland CC	1,849	13,749	7.5	3.61
Rogue CC	2,713	14,051	5.2	3.60
Southwestern Or CC	547	3,467	6.3	3.37
Tillamook Bay CC	68	454	6.7	3.33
Treasure Valley CC	348	2,348	6.7	3.46
Umpqua CC	551	5,929	10.8	3.16
TOTAL STUDENTS, DUPLICATED***	24,853	183,228		
TOTAL STUDENTS, UNDUPLICATED	**23,982**	**183,228**	**7.6**	**3.48**

Dual Credit by High School Level		Attend Oregon Public University or Community College, 2008-09	
All	23,982	7,338	31%
Seniors	8,732	5,201	60%
Juniors	6,669	1,200	18%
Sophomores	3,540	253	7%
Freshmen	2,534	70	3%
Unknown	2,507	614	24%

** At OUS, lower-division credit is calculated as total annual credit hours for admitted and nonadmitted undergraduates in 100- and 200-level courses.

***Total students, duplicated includes students taking dual credit through partnerships with more than one institution (i.e., If high school students took dual credit courses from community college Y and OUS institution Z they would be double counted in the duplicated total).

Source: OUS Institutional Research, Community Colleges and Workforce Development, Oregon Dept of Education