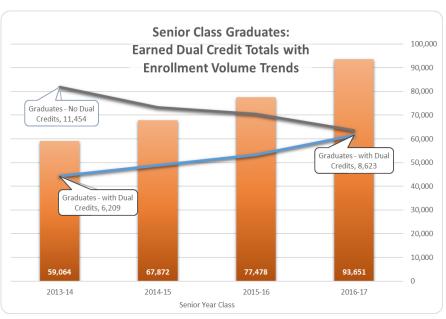
Idaho Dual Credit Evaluation – 2018 Bill Laude, Principal Research Analyst December 7, 2018

In academic year 2013-14, dual credit course expenses were reimbursed up to 18 credits for early high school completers only, and just under one third of the Senior Class graduated with earned dual credit courses in that year. In the 2014-15 academic year, Fast Forward funding was introduced and funds were made available to a

larger population of students, paying for the equivalent of a three credit course for juniors, and two three credit courses for seniors. Even though the volume of credits being paid for was less, the number of students being reached resulted in an increase in the overall volume of credits being earned. Over the two year period with that funding model in place, the presence of dual credit course work for graduating seniors steadily increased, with 42% of the 2015-16 graduates leaving high school with earned college credits. In the 2016-17 school year, Fast Forward funding

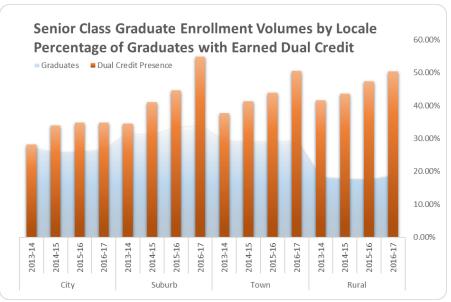


was modified to allow for up to \$4,125 per student over the course of their middle and high school tenures that could be applied toward dual credit courses. Even though an evaluation of the full extent of funding post secondary opportunities over a student's high school career will not be fully available until the 2019-20 graduating class (and through 2023 academic year for outcomes evaluations), a significant increase in dual credit enrollments under the new funding model has resulted in an immediate impact on the percentage of

students now graduating with earned dual credit course work, at 48% for the 2016-17 graduating class². In addition to cumulative credits, the volume of students graduating with an associate's degree have also increased over this period, from 26 in the 2013-14 school year to 126 in 2016-17.

Utilization of Dual Credit Programs

When evaluating the increase in dual credit enrollments, the



¹ The available funds for students under Idaho Code 33-4602 is not limited to strictly dual credit courses, but is also available to offset fees for overload courses and certificate exams (e.g. CTE, CLEP, AP and IB).

² Earned credits in this report are specific to senior year cumulative earned credits and are not analogous to enrollment credits or academic year totals. See Additional Information below for Academic Year Enrollment Totals.

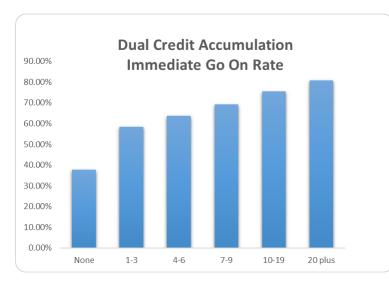
growth of the program can be seen across all geographic areas in the state; though the growth in the metropolitan area, most notably Boise where there is a higher presence of funds being used for Advanced Placement exams, has been more modest. Within the other geographic locales, earned dual credit course work is present in over 50% of graduating senior population and seen to be increasing at a consistent pace from

2013-14 to 2016-17. In reviewing all cohort years in this four year span, one half of seniors with earned dual credit courses graduate with seven or fewer credits, the equivalent of two courses; with the average cumulative credit amount being just over one course. Evaluation of credit bands up to nine credits (typically three courses), show slower growth over time relative to higher volume credit bands, and it is with seniors who are graduating with ten or more credits that the greatest growth in dual credit accumulation is occurring.

	Percentage of High school Seniors Graduating with Dual Credit by							
	Earned Cumulative Credit Totals							
Local	le	Graduating Class	1-3	4-6	7-9	10-19	20 plus	
(City	2013-14	7.9%	7.1%	4.1%	6.5%	2.7%	
		2016-17	10.7%	8.2%	4.9%	7.3%	3.8%	
		Increase	135.7%	115.4%	120.2%	111.7%	142.0%	
Su	uburb	2013-14	9.2%	8.2%	5.8%	7.7%	3.6%	
		2016-17	12.8%	10.7%	7.8%	15.0%	8.4%	
		Increase	138.7%	131.4%	134.8%	194.2%	233.4%	
Т	own	2013-14	10.2%	8.9%	5.7%	8.9%	3.9%	
		2016-17	11.8%	11.0%	7.1%	14.2%	6.4%	
		Increase	115.1%	123.9%	125.6%	158.6%	161.4%	
R	Rural	2013-14	10.1%	8.7%	6.6%	10.9%	5.4%	
S		2016-17	11.6%	9.2%	6.8%	13.9%	8.8%	
		Increase	115.5%	105.7%	104.3%	128.1%	163.5%	

Excluding the City Locale, seniors graduating with ten or more credits represent 22% of the 2016-17 Senior Class, up from 13% in 2013-14. While there has been higher than usual growth in the 1-3 credit band in both City and Suburban areas over this span, that growth has not yet significantly outpaced the overall presence those bands present in other geographic locales; and this increase is outpaced by the growth in the ten plus credit categories across the three higher growth locales.

The only ethnic minority to show any significant variance to the overall growth of the dual credit program as a whole is in the Hispanic community, where enrollment in dual credit courses doubled from 616 graduating seniors in 2013-14 to 1,204 in 2016-17, which now totals just under 43% of the Hispanic graduates (up from 25.6% in 2013-14). However, no other significant variances in relative credit volume accumulation or cumulative enrollment totals displayed within this time frame.

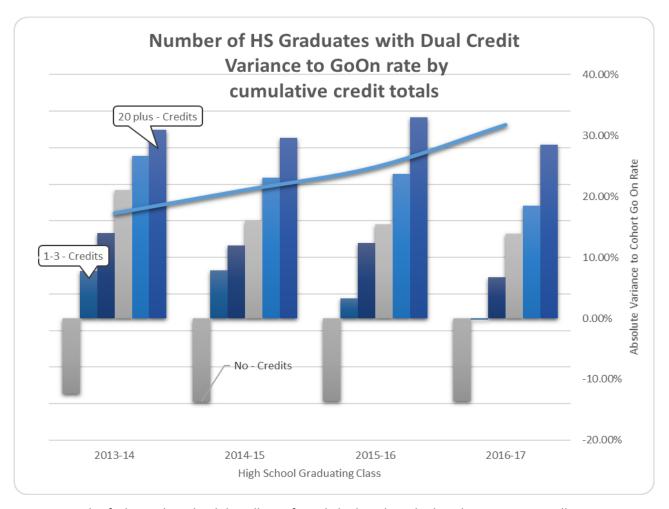


Go On Rate and Post Secondary Trends

The association between college go on rates and Dual Credit course taking behaviors have long been recognized as having a direct relationship, and in reviewing composite totals from 2013-14 through 2014-15, this relationship is readily displayed; the more dual credits accumulated in high school, the more likely a student is to immediately go on and attend a postsecondary institution. However, as the dual credit program grows and is made more accessible to larger populations of

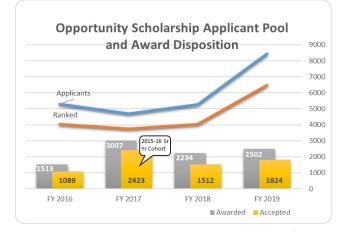
students, the rate at which students immediately go on to college begins to deteriorate as the characteristics of the students within the cumulative bands change.

Setting each year's cohort rate to zero as a baseline, the variance to that rate can be seen across the various cumulative credit bands. Over time, the go on behaviors displayed in the 1-3 Credit range can be seen to drop from 7.73 absolute percentage points over the 2013-14 year to 0.24 percent under the 2016-17 cohort go on



rate. In a similar fashion, though while still significantly higher than the baseline go on rate, all go on rates are dropping over time as more and more students participate in, and accumulate credits under the program. The

go on rate uptick in the higher credit bands in academic year 2015-16 corresponds to a significant increase in awards within the Opportunity Scholarship, when funding changes enabled a significantly larger population of Idaho high school graduates to attend college with support from the scholarship. As funding normalized against applicant population in the subsequent fiscal year, the downward trend in the credit bands resumed, as well.



In addition to the formally published Immediate Fall Go On rate, evaluation of go on rates subsequent to

the immediate Fall term following high school graduation also demonstrate the increased likelihood of college attendance as it relates to dual credit accumulation in high school.

Extended Go On Rates By Graduating Senior Class	
Dual Credit Bands by Farned Cumulative Credit Totals	

Credits at Graduation	Fall	One	Two	Three	Four
2013-14					
20 plus	81.98%	84.23%	86.64%	93.24%	93.99%
10-19	77.74%	80.74%	83.59%	91.22%	92.10%
7-9	72.14%	75.75%	79.67%	85.86%	87.41%
4-6	65.08%	69.77%	74.17%	80.23%	82.23%
1-3	58.80%	62.67%	68.18%	75.14%	76.83%
None	38.74%	43.39%	49.20%	54.39%	56.88%
2014-15					
20 plus	80.07%	82.43%	85.15%	92.57%	
10-19	73.56%	76.83%	80.76%	88.51%	
7-9	66.48%	70.27%	74.98%	81.81%	
4-6	62.35%	67.19%	72.65%	78.44%	
1-3	58.27%	62.31%	67.68%	74.05%	
None	36.73%	41.90%	47.70%	52.87%	
2015-16					
20 plus	83.47%	85.43%	87.40%		
10-19	74.13%	77.39%	80.98%		
7-9	65.89%	69.34%	73.58%		
4-6	62.86%	66.47%	70.90%		
1-3	53.74%	58.31%	62.17%		
None	36.85%	40.64%	46.18%		
2016-17					
20 plus	78.21%	79.12%			
10-19	68.24%	70.00%			
7-9	63.61%	66.58%			
4-6	56.50%	59.14%			
1-3	49.51%	52.10%			
None	36.13%	37.89%			

The Extended Go On Rate Table provides initial college enrollment by aging from high school graduation, and lists cumulative go on rates through the most recently available year, year four of the 2013-14 graduation cohort, and year one for the 2016-17 cohort. Year One student counts would include Spring enrollees who did not immediately attend in the fall, and all subsequent years are annual captures of any enrollment activity within the identified span. As with the Immediate Fall Go On rates, extended go on rates deteriorate slightly as the population within those pools increase, with a similar bump in 2015-16 with the increase in Opportunity Scholarship awards. These totals illustrate a significantly higher percentage of college attendance over time, with the intensity of that trend being significantly more marked in the higher credit accumulation.

In addition to the correlation in go on rates, the retention in year over year Fall enrollment also displays improved performance in the dual credit taking population as those cohorts persist in their

college careers. Within the four year universities and college, students who participated in dual credit were 3% more likely to re-enroll in the subsequent fall term than their non-dual credit taking counterparts (graduation years 2013-14 through 2015-16), and 15% more likely within the community college schools; with no marked changes in those relative performance over that three year span. When evaluating students graduating with 20 or more credits, that performance gap increases to 9% in the four year institutions and within the community colleges, up to 32%. Students with no dual credit course work were more likely to drop out after their first year of attendance.

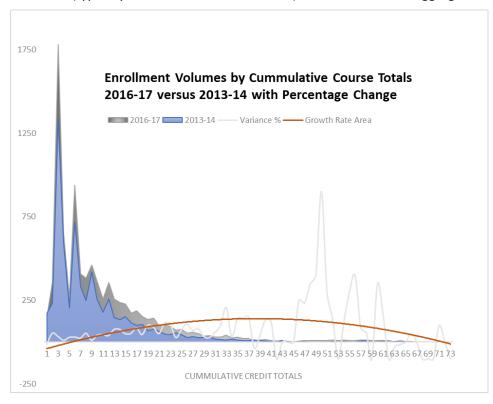
From 2014 through 2017, 273 associate degrees have been awarded to high school seniors who were able to earn college credits though the dual credit programs, and an additional 88 associate degrees were earned within the first year of college attendance. In evaluating the 2013-14 graduating cohort, students who immediately went on to college with dual credit course work were two times more likely to have earned an associates degree at the end of their second year in college, and students in the 2014-15 cohort were more than three times as likely to have earned an associate's degree.

Associate Degree Award By Graduating Senior Class Dual Credit Bands by Earned Cumulative Credit Totals

hs_cohort	CreditBands	in HS	One Year	Two Year
2013-14 Total	All	26	28	356
2013-14	20 plus	26	16	55
2013-14	10-19		6	60
2013-14	7-9		1	39
2013-14	4-6			50
2013-14	1-3		2	30
2013-14	None		3	122
2014-15 Total	All	44	29	218
2014-15	20 plus	44	20	45
2014-15	10-19		5	45
2014-15	7-9		1	25
2014-15	4-6			30
2014-15	1-3			19
2014-15	None		3	54

Additional Information

The below referenced graph illustrates total student enrollment volumes by dual credits earned and the growth from 2013-14 and 2016-17. The spikes in enrollment totals correspond to typical course credit totals, most notably at 3, 6 9 and 12 credits, with total credit accumulation smoothing out as various course taking behavior (typically two and four credit courses) accumulate. While aggregate totals are still most prevalent in



the cumulative volumes under 20 credits, the rate of growth in the higher cumulative totals has persistently increased over this period; 55% increase in students attaining 20-29 credits, and a 75% increase in students attaining 30-39 credits.

Associate degrees awarded in high school from 2014 through 2017 by senior class high school, degree capture includes summer term immediately following high school graduation due to awarding procedures in some post secondary institutions. Renaissance High School academic program focus includes the offering of either an International Baccalaureate (not captured) or an Associate of Arts degree awarded through Idaho State University.

Academic Year Enrollment Totals

Dual credit enrollments grew from 143,667 credits in academic year 2016-17 to 173,830 credits in 2017-18. With CTE credits accounted for 5,083of those credits in 2016-17 and 8,582 in 2017-18.

Associate Degrees Awarded in High School 2014-2017				
High School	Associate Degrees			
Renaissance High School	194			
Idaho Distance Education Academy	12			
Lake City High School	9			
Vision Charter School	9			
Coeur D Alene High School	7			
Coeur D Alene Charter Academy School	6			
Madison Senior High School	5			
Burley Senior High School	5			
Canyon Ridge High School	4			
Idaho Virtual Academy	4			
Melba High School	3			
Kimberly High School	2			
Twin Falls Senior High	2			
Carey Public School	2			
Lakeland Senior High School	2			
Parma High School	1			
Mountain View High School	1			
St Maries High School	1			
Forrest M. Bird Charter School	1			
New Plymouth High School	1			
Hansen Jr/Sr High School	1			
Post Falls High School	1			
Meridian Medical Arts Charter	1			
Timberlake Senior High School	1			
Minico Senior High School	1			
Vallivue High School	1			

Dual Credit and Subsequent College GPA

The following analysis by Chief Research Officer Cathleen M. McHugh, Ph.D evaluates the relationship of dual credit high school enrollment levels and subsequent college GPA performance by comparing students who earned dual credit to students who did not:

Dual Credit and College GPA

Only students who attempted at least 12 college credits in the fall after high school graduation were included in this portion of the analysis. The relationship between dual credits earned in high school and fall-term college GPA was estimated using a linear regression model in which SAT subject scores and the post-secondary institution attended is held constant. This analysis was done only for 2016-17 high school graduates due to the fact that the SAT test was redesigned in spring 2016, and it would not be valid to estimate the model mixing the scores from the different versions of the test.

Table 1: Difference in fall term GPA for students with different levels of dual credit, holding constant SAT subject scores and post-secondary institution attended

	Type of post-secondary institution attended	
Difference in fall term GPA between students with no dual credit and:	Four-year	Two-year
	institution	institution
Students with 1 to 3 dual credits	0.170	NS
Students with 4 to 6 dual credits	0.169	NS
Students with 7 to 9 dual credits	0.313	NS
Students with 10 to 19 dual credits	0.392	0.521
Students with 20 or more dual credits	0.482	0.519

Note: Only the College of Eastern Idaho and the College of Southern Idaho were included in the analysis on two-year institutions.

The results in the table should be interpreted in the following way: A student who earned between 1 and 3 dual credits had a fall term GPA that was 0.170 points higher than a student without any dual credit who had the same composite SAT score and who attended the same four-year postsecondary institution. All reported effects are statistically significant at the 0.01 level. As can be seen, students who earned dual credits in high school have higher GPAs in the first fall term of college than students with the same SAT scores but who earned no dual credits. This suggests that taking dual credit classes could help prepare students for college level coursework with the largest impact for students who take the most dual credits.

END

Dual Credit Presence by County 2016-17 High School Graduates

	Graduates with	Average Cumm	Graduates with
County	Dual Credit	Credits	Dual Credit (Rate)
Ada	2232	11.04	46%
Adams	9	9.11	50%
Bannock	470	9.41	50%
Bear Lake	42	15.26	59%
Benewah	39	20.00	49%
Bingham	280	8.05	43%
Blaine	149	8.48	62%
Boise	29	12.52	54%
Bonner	134	8.83	39%
Bonneville	409	9.28	29%
Boundary	35	12.66	36%
Butte	18	9.94	72%
Camas	4	4.00	80%
Canyon	1227	10.35	58%
Caribou	71	9.96	68%
Cassia	134	10.39	42%
Clark	134	2.00	13%
Clearwater	37	7.92	45%
Custer	13	6.08	41%
Elmore	116	8.20	42%
Franklin	97	9.36	46%
Fremont	46	6.78	37%
Gem	94	10.83	53%
Gooding	9 4 84	7.67	46%
Idaho	72	12.71	61%
Jefferson	134	13.59	40%
Jerome	132	12.52	40% 57%
Kootenai	556	16.81	40%
Latah	162	10.84	64%
Lemhi	24	7.96	56%
Lewis	25	8.00	63%
Lincoln	33	9.64	49%
Madison	262	6.94	53%
Minidoka	126	12.87	56%
Nez Perce	229	11.19	56%
Oneida	31	13.00	44%
Owyhee	71	7.90	56%
Payette	114	13.09	43%
Power	41	8.54	43% 39%
Shoshone	51	8.54 9.16	39% 44%
Teton	59	7.39	55%
Twin Falls	492	13.43	60%
Valley	492 47	7.04	55%
	47 75	7.04 8.88	55% 57%
Washington	/5	8.88	5/%

