



HAWAI'I P-20
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**POSTSECONDARY OUTCOMES OF
HAWAI'I DEPARTMENT OF EDUCATION AND
UNIVERSITY OF HAWAI'I
DUAL CREDIT PARTICIPANTS**

AS OF 2012

January 2014

**Postsecondary Outcomes of
Hawai'i Department of Education and University of Hawai'i
Dual Credit Participants**

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Executive Summary

The Hawai'i Department of Education (DOE), University of Hawai'i (UH), and Hawai'i P-20 Partnerships for Education (Hawai'i P-20) recognize the importance of college completion in helping the state to develop a highly skilled workforce to be positioned for global competitiveness for the 21st century. Research has shown that the intensity and quality of a student's high school curriculum, alignment of curriculum between secondary and postsecondary education, and a clear understanding of college expectations are critical for increasing college access and completion. Accelerated learning options such as dual credit, Advanced Placement, and International Baccalaureate programs may complement or enhance the benefits of a rigorous high school curriculum, and dual credit programs in particular may provide students a bridge across the high school and college experience divide.

Hawai'i's educational policies recognize the importance of dual credit programs in increasing college readiness and, college access, as well as ensuring equity in access to dual credit programs. The purpose of this paper is to summarize the postsecondary enrollment and award outcomes of DOE students who participated in dual credit programs at the University of Hawai'i. The data set included dual credit course outcomes provided by UH, and postsecondary enrollment and award outcomes from National Student Clearinghouse for ten years of DOE graduates from the Classes of 2003 to 2012.

Participation in dual credit programs has nearly doubled from 434 students in academic year 2002-03, to 830 students in academic year 2011-12. During this ten year period, a total of 5,255 DOE students participated in dual credit programs, enrolling in 8,544 UH courses. The 25,074 credit hours taken by these dual credit participants represent over \$1.8 million in tuition revenue. The majority of dual credit participants successfully completed their UH courses, with grades of C or better in 85.9% of all courses taken. Of the graduating Class of 2003 to 2012, 4.2% of DOE graduates participated in dual credit programs. Charter schools had much higher dual credit participation rates (19.2%) than non-charter schools (3.9%), likely reflecting curricular limitations of smaller schools.

Dual credit participants had higher college-going rates, were more likely to enroll in college in the fall term immediately following high school graduation, were more likely to enroll at a 4-year institution, had higher 1-year retention rates in college, were more likely to have earned a degree or certificate, and more likely to have earned a bachelor's degree or higher, as compared to non-dual credit graduates. Overall, dual credit participants had better postsecondary enrollment and award outcomes than non-dual credit graduates.

However, among dual credit participants, Native Hawaiians, Pacific Islanders, males, and economically disadvantaged students had lower dual credit participation rates, lower college-going rates, were less likely to remain enrolled in college, and less likely to have earned a degree or certificate. Though these sub-populations had lower postsecondary outcomes than other dual credit participants, they were much more successful than students in these sub-populations who did not participate in dual credit, indicating that participation in dual credit helps to close the achievement gaps for these groups. Economically disadvantaged dual credit participants who received financial support via the GEAR UP Running Start scholarship had better postsecondary outcomes as compared to economically disadvantaged dual credit participants who did not receive a scholarship, which highlights the importance of providing financial support for economically disadvantaged students to help close the achievement gaps for this group.

Students from these sub-populations were more likely than other students to remain at UH if they did go to college, presenting a great opportunity for the DOE and UH to provide scholarships to these underserved students to encourage participation in dual credit programs and college enrollment immediately following high school graduation.

Future research is needed to assess Hawai'i's various accelerated learning programs, particularly dual credit and Advanced Placement, to understand student motivations and achievement factors and identify areas for improvement to increase the rates of successful transition from secondary to postsecondary education.

Introduction

This report utilizes student demographic data provided by the Hawai'i Department of Education (DOE), course enrollment data provided by the University of Hawai'i (UH), and National Student Clearinghouse (NSC) data on postsecondary enrollments and degree and certificates awarded. Using the combined data set, this report summarizes the postsecondary enrollment and award outcomes of DOE students who participated in UH dual credit programs between the 2002-03 and 2011-12 academic years, as compared to other DOE graduates from the Classes of 2003 to 2012.

Research by Adelman (1999; 2006), Warburton, Bugarin, and Nuñez (2001), and Martinez and Klopott (2005) has underscored the importance of rigorous academic preparation, alignment of curriculum between secondary and postsecondary education, and clear understanding of college expectations for increasing college access and completion. The state of Hawai'i has adopted accelerated learning options such as dual credit, Advanced Placement, and International Baccalaureate programs to increase secondary to postsecondary matriculation and to improve the academic preparedness of students entering postsecondary education.

Dual credit programs in particular generate a multitude of potential benefits for students, institutions, and the state.

- Student benefits from dual credit programs include: academic preparation for the rigors of college, exposure to the skills needed to succeed in college, exposure to college for traditionally non-college-bound students (e.g. first-generation students), shortening the time to degree, reducing the cost of postsecondary education, and additional curricular options that may not be readily available in the normal high school curriculum (Boswell, 2001; Hugo, 2001; AASCU, 2002; Bailey et al., 2002; Bailey & Karp, 2003; Hoffman, 2005; Hunt, 2007; Hoffman et al., 2008).
- Institutional benefits from dual credit programs include: the generation of additional revenue, increasing the utilization of classroom space and fill rate of class sections, providing a forum to discuss student preparation and alignment of knowledge and skills from secondary to postsecondary, recruitment opportunities for postsecondary institutions, and academically engaging students in their senior year of high school (National Commission on the High School Senior Year, 2001; AASCU, 2002; Bailey et al., 2002; Huntley & Schuh, 2002; Bailey & Karp, 2003; Morest & Karp, 2006).
- State benefits from dual credit programs include: a well-educated and highly skilled workforce necessary for maintaining economic competitiveness, higher incomes resulting in higher tax revenues, fewer demands on social services, improved health outcomes, and increased civic engagement (Ewell et al., 2003; National Center for Public Policy and Higher Education, 2004; Brewer et al., 2008; Hanusehek & Woessmann, 2008).

For this report, dual credit is defined as simultaneous enrollment in both high school and college, with the intent of earning both high school credit and college credit for a course. Hawai'i has three dual credit programs: Running Start, Jump Start, and Early Admits. The Running Start program has been legislatively mandated since 2001, and is open to all public high school juniors or seniors who qualify for admission (Hawai'i Revised Statutes, §302A-401). The Jump Start program was developed as a result of a task force convened in response to a senate concurrent resolution from the 2010 legislative session (SCR 103), on the feasibility of creating a DOE Vocational/Technical Education Learning Center at Honolulu Community College. The pilot Jump Start program began in the 2011-12 academic year, and allows high school seniors at participating pilot high schools to register as full-time students in vocational/technical programs at participating UH Community Colleges (UHCC). The Early Admit program at UH serves all other students enrolled in early college courses, but not participating in either Running Start or Jump Start (e.g. students who enroll before the 11th grade). For purposes of this report, any DOE student taking a UH class as a Running Start, Jump Start, or Early Admit student is considered to be a dual credit participant.

A survey of DOE high school administrators and counselors found that participation in the Running Start program has primarily been student-driven. Information about the program is generally disseminated through school bulletins and announcements and students are expected to take the initiative to apply for the program. Some of the reported barriers to student participation included conflicts between UH course schedules and high school class schedules,

transportation to a UH campus, and the cost to participate (tuition, fees, and books). Additionally, 79.2% of the DOE administrators surveyed felt “more scholarship opportunities for free/reduced lunch students” (with free/reduced lunch status as a proxy for low income status) were needed to improve the Running Start program (Osumi, 2010).

In 2007, to address the uneven access of the Running Start program by under-represented populations, the following House Bill was passed into law:

Experience with the running start program has shown that students in under-represented populations may not be participating in the program because of financial difficulty. Experience has also shown that there has been some confusion about obtaining dual credit for courses completed at the University of Hawai‘i. The purpose of this Act is to: (1) Require the department of education to provide students who participate in the running start program with guidance in earning credit toward high school graduation for successful completion of one-hundred level and above University of Hawaii courses; and (2) Increase financial support for the families of low-income and under-represented students.

HB No. 767, HD2, SD2, CD1
2007 Hawai‘i Legislative Session

Hawai‘i’s educational policies recognize the importance of dual credit programs in increasing college readiness and matriculation from secondary to postsecondary, as well as the importance of ensuring equity in access to these programs, particularly for low income and under-represented students. These dual credit programs support both the DOE strategic plan’s student success goal of having all DOE students demonstrate they are on a path toward success in college, career and citizenship, as well as the UH Hawai‘i Graduation Initiative, a system-wide strategic initiative to increase the number of UH graduates by 25% by the year 2015. Additionally, Hawai‘i’s educational leaders set a statewide goal via Hawai‘i P-20 Partnerships for Education (Hawai‘i P-20), of having 55% of working-age adults hold a two- or four-year degree by the year 2025. The intent of this paper is to highlight the postsecondary enrollment and award outcomes of DOE students who participated in dual credit programs at UH to inform future policies or initiatives to increase dual credit participation and improve student success.

Methodology/Subjects

Ten years of DOE graduating classes were analyzed using files returned from NSC on DOE graduates. Dual credit participants were identified in UH’s student information system (Banner) by their Admission Type attributes and matched to DOE student demographic files based on name, gender, and date of birth. The data set does not include dual credit participants who could not be matched due to name change or data entry error, students who have requested that their postsecondary directory information not be disclosed, or students who could not be identified due to missing or incorrect admission attributes. NSC enrollment and award outcomes are reported as of fall 2012.

A total of 110,237 students were included in the data set.

- 109,565 DOE graduates from the Class of 2003 to 2012
 - 4,583 graduates participated in dual credit
 - 104,982 graduates did not participate in Dual Credit
- 672 dual credit participants not yet graduated, not matched to NSC (due to FERPA blocks of directory information, name changes, etc.), or were removed from the analysis because the student was reported as graduating in more than one school year (not able to attribute the student to just one graduating class). Students who were not matched to NSC or had duplicate graduation records were removed from the postsecondary outcomes analysis.

The following research questions formed the basis of this report:

- What are the shared attributes of students that participate in the dual credit program?
- What are the course outcomes for these students in their dual credit courses?
- What are the college-going rates, one year retention rates, and postsecondary award outcomes of students that participate in dual credit programs?
- Are there differences in postsecondary outcomes among dual credit participants?

Limitations

The NSC receives enrollment data from over 3,300 postsecondary institutions that collectively enroll over 96% of students enrolled in public and private U.S. postsecondary institutions, and nearly 85% of detailed college degree data. Hawai'i Pacific University (HPU) does not participate in NSC at this time, but for the Classes of 2010 to 2012 an average of nearly 180 DOE graduates entered HPU in the fall term immediately following high school graduation (J. Fu, personal communication, June 11, 2013). These students who enrolled at HPU represent about 1.6% of the DOE's graduating classes. Though the NSC data set does not cover all postsecondary enrollments, it is currently the most comprehensive data available.

This paper reports the postsecondary outcomes of dual credit and non-dual credit DOE graduates, but does not control for student differences between dual credit and non-dual credit participants (e.g. student motivation, prior academic achievement, etc.).

Results

Dual Credit Enrollment

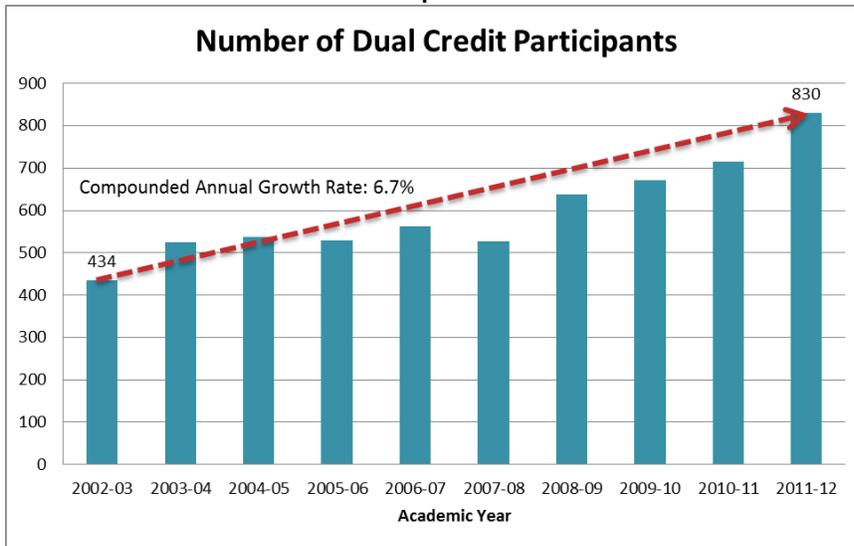
Table 1. Dual Credit Unduplicated Headcount Enrollment by Academic Year and UH Campus

Dual Credit Course Campus	Academic Year										Undup for Campus
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	
UH Mānoa		1	5	1	1		3		1		12
UH Hilo		10	14	17	32	43	54	44	45	39	270
UH West O'ahu						1	6	1	1	60	69
UH Community Colleges											
Hawai'i CC	30	43	93	82	127	87	125	119	159	181	928
Honolulu CC	117	206	167	203	162	129	126	84	60	48	1,114
Kapi'olani CC	118	64	80	61	60	44	85	67	74	80	653
Kaua'i CC	42	25	41	39	33	44	69	66	38	60	398
Leeward CC	63	65	71	49	66	80	76	97	104	107	716
UH Maui College	39	110	59	65	65	78	82	135	161	182	920
Windward CC	29	5	13	21	30	37	36	79	86	88	366
Undup for Acad Yr	434	525	537	529	563	527	637	671	716	830	
% Change		21%	2%	-1%	6%	-6%	21%	5%	7%	16%	

Between academic year 2002-03 and 2011-12, 5,255 dual credit participants enrolled in 8,554 UH courses. These dual credit participants registered for a total of 25,074 credits.

- Students can participate in dual credit programs in more than one academic year, and may be registered for classes at more than one UH campus during an academic year.
 - Unduplicated headcount for the academic year counts students who enroll at more than one UH campus during an academic year once.
 - Unduplicated headcount for the campus counts students who enroll at a UH campus in more than one academic year during this period once.
- Most dual credit participants enroll at a UH Community College. Between academic year 2002-03 and 2011-12, Hawai'i Community College and UH Maui College saw the largest increases in dual credit enrollment.
 - Dual credit enrollment at Hawai'i Community College increased from 30 students in academic year 2002-03 to 181 students in academic year 2011-12 (503% increase).
 - Dual credit enrollment at UH Maui College increased from 39 students in academic year 2002-03 to 182 students in academic year 2011-12 (367% increase).

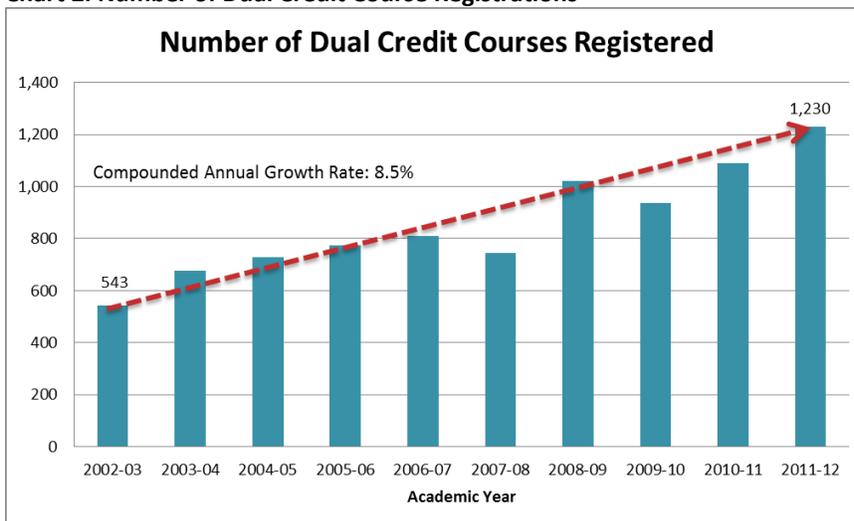
Chart 1. Number of Dual Credit Participants



The number of dual credit participants increased from 434 students in academic year 2002-03 to 830 students in academic year 2011-12, an increase of 91.2%.

- The Compounded Annual Growth Rate (CAGR) of dual credit participants over this time period was 6.7%. The CAGR is the average annualized growth rate between academic year 2002-03 and 2011-12. Unlike the arithmetic average of the annual growth rates, the CAGR represents the rate of growth in the number of dual credit participants over this time period if the number of participants grew at the same rate every year.
- The growth in dual credit participation beginning with the 2008-09 school year was likely due to a change in State of Hawai'i policy and support from DOE to expand the number of courses accepted for both high school and college credit to include all one-hundred level and above UH courses.

Chart 2. Number of Dual Credit Course Registrations



The number of UH courses taken by dual credit participants has grown from 543 in academic year 2002-03 to 1,230 in academic year 2011-12.

- The CAGR of course registrations over this period was 8.5%. The number of courses taken by dual credit participants has grown at a higher rate than the number of participants, indicating more participants are now enrolling in multiple UH courses.

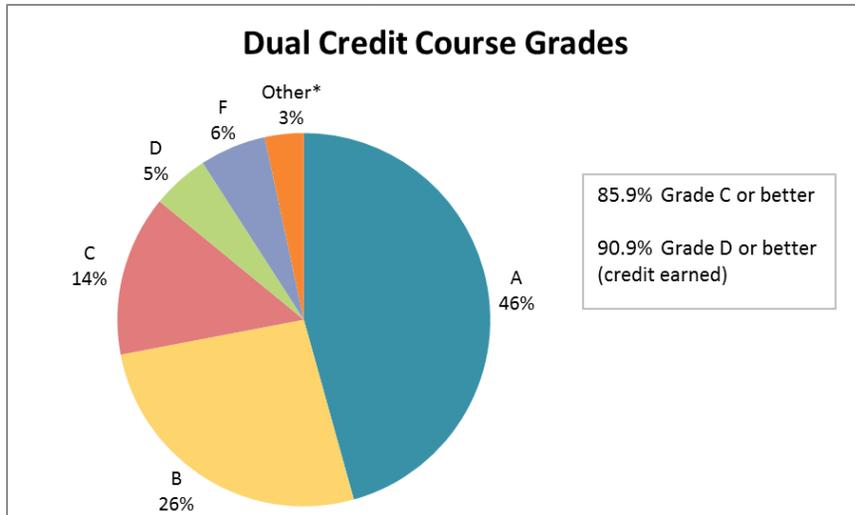
Table 2. Top 10 Dual Credit Courses

Course	Number of Course Registrations	% of Total
1 ENG 100: Composition I	1,879	22.0%
2 PSY 100: Survey of Psychology	1,482	17.3%
3 HIST 151: World Civilization I	494	5.8%
4 SOC 100: Survey of General Sociology	349	4.1%
5 HIST 152: World Civilization II	318	3.7%
6 SP 151: Personal Public Speech	308	3.6%
7 MATH 205: Calculus I	201	2.3%
8 IS 105C: Orientation to Employment	182	2.1%
9 MATH 140: Pre-Calc: Trig & Geometry	134	1.6%
10 MATH 100: Survey of Mathematics	106	1.2%
Top 10 Dual Credit Courses	5,453	63.7%
Total Number of Courses Registered	8,554	

Between academic years 2002-03 and 2011-12, dual credit participants registered for 459 different courses at UH (A course is defined as a unique combination of Course Subject and Course Number).

- The top 10 courses taken by dual credit participants accounted for 63.7% of all dual credit course registrations between academic year 2002-03 and 2011-12.
- ENG 100: Composition I and PSY 100: Survey of Psychology are by far the most popular courses, representing 22.0% and 17.3% respectively of all dual credit courses taken.

Chart 3. Dual Credit Course Grades



*Other includes incomplete, withdraw, no grade, record delayed, or audit grades.

The majority of dual credit participants successfully complete and earn credits for their dual credit courses.

- Students earned a grade of C or better in 85.9% of all dual credit courses taken, and earned a grade of D or better in 90.9% of all dual credit courses taken.

Table 3. Dual Credit Tuition Revenue

Undergraduate resident tuition (per credit)	Academic Year									
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
UH Community Colleges	\$43	\$45	\$47	\$49	\$56	\$63	\$71	\$79	\$88	\$97
UH Mānoa	\$134	\$138	\$142	\$146	\$180	\$214	\$248	\$282	\$316	\$350
UH Hilo (lower div)	\$67	\$72	\$77	\$83	\$125	\$147	\$169	\$191	\$213	\$235
UH West O’ahu	\$85	\$88	\$91	\$94	\$114	\$134	\$154	\$174	\$194	\$214

Credits Attempted	Academic Year										Total
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	
Total UH	1,584	1,960	2,093	2,341	2,433	2,228	3,057	2,731	3,101	3,546	25,074
UH Community Colleges	1,584	1,901	1,993	2,245	2,311	2,046	2,739	2,553	2,908	3,173	23,453
Hawai’i CC	183	193	385	459	644	433	610	515	769	895	5,086
Honolulu CC	376	763	596	734	642	469	499	282	242	329	4,932
Kapi’olani CC	444	305	349	335	222	222	431	351	460	369	3,488
Kaua’i CC	131	102	153	192	178	195	301	323	198	268	2,041
Leeward CC	205	226	251	180	214	268	299	356	377	354	2,730
UH Maui College	133	291	207	247	275	287	416	411	513	578	3,358
Windward CC	112	21	52	98	136	172	183	315	349	380	1,818
UH Mānoa		4	14	3	3		19		4		47
UH Hilo		55	86	93	119	179	278	169	186	193	1,358
UH West O’ahu						3	21	9	3	180	216

Tuition Revenue	Academic Year										Total
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	
Total UH	\$68,112	\$90,057	\$102,281	\$118,162	\$144,831	\$155,613	\$249,397	\$235,532	\$297,368	\$391,656	\$1,853,009
UH Community Colleges	\$68,112	\$85,545	\$93,671	\$110,005	\$129,416	\$128,898	\$194,469	\$201,687	\$255,904	\$307,781	\$1,575,488
Hawai’i CC	\$7,869	\$8,685	\$18,095	\$22,491	\$36,064	\$27,279	\$43,310	\$40,685	\$67,672	\$86,815	\$358,965
Honolulu CC	\$16,168	\$34,335	\$28,012	\$35,966	\$35,952	\$29,547	\$35,429	\$22,278	\$21,296	\$31,913	\$290,896
Kapi’olani CC	\$19,092	\$13,725	\$16,403	\$16,415	\$12,432	\$13,986	\$30,601	\$27,729	\$40,480	\$35,793	\$226,656
Kaua’i CC	\$5,633	\$4,590	\$7,191	\$9,408	\$9,968	\$12,285	\$21,371	\$25,517	\$17,424	\$25,996	\$139,383
Leeward CC	\$8,815	\$10,170	\$11,797	\$8,820	\$11,984	\$16,884	\$21,229	\$28,124	\$33,176	\$34,338	\$185,337
UH Maui College	\$5,719	\$13,095	\$9,729	\$12,103	\$15,400	\$18,081	\$29,536	\$32,469	\$45,144	\$56,066	\$237,342
Windward CC	\$4,816	\$945	\$2,444	\$4,802	\$7,616	\$10,836	\$12,993	\$24,885	\$30,712	\$36,860	\$136,909
UH Mānoa		\$552	\$1,988	\$438	\$540	\$0	\$4,712	\$0	\$1,264	\$0	\$9,494
UH Hilo		\$3,960	\$6,622	\$7,719	\$14,875	\$26,313	\$46,982	\$32,279	\$39,618	\$45,355	\$223,723
UH West O’ahu		\$0	\$0	\$0	\$0	\$402	\$3,234	\$1,566	\$582	\$38,520	\$44,304

GEAR UP Running Start Scholarships	Academic Year										Total
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	
Number of Awards	117	189	219	179	139	172	167	135	144	189	1,650
Scholarship Amounts	\$39,809	\$63,640	\$70,982	\$59,733	\$49,122	\$70,161	\$68,835	\$61,626	\$69,958	\$95,136	\$649,004

The number of UH credit hours attempted by dual credit participants increased from 1,584 in academic year 2002-03, to 3,546 in academic year 2011-12. Based on the credit hours attempted, tuition revenues generated by dual credit students increased from \$68,112 in academic year 2002-03 to \$391,656 in academic year 2011-12, totaling \$1.85 million over this timeframe.

- The number of Running Start scholarships provided by Hawai’i P-20 through the US Department of Education GEAR UP grant, has grown from 117 awards totaling \$39,809 in 2002-03, to 189 awards totaling \$95,136 in 2011-12. Over this period, 1,650 scholarship awards totaled \$649,004.
 - The GEAR UP Running Start scholarships are awarded to students who are considered economically disadvantaged, and covers the cost of tuition, fees, and books for one 3-4 credit UH course.

Table 4. DOE High Schools With the Largest Number of Dual Credit Participants, Class of 2003 to 2012

DOE High School	Number of Dual Credit Graduates	Number of No Dual Credit Graduates	Total Graduates	% Dual Credit
1 MCKINLEY HIGH SCHOOL	472	3,014	3,486	13.5%
2 KALANI HIGH SCHOOL	386	2,145	2,531	15.3%
3 ROOSEVELT HIGH SCHOOL	236	3,072	3,308	7.1%
4 HILO HIGH SCHOOL	207	2,800	3,007	6.9%
5 H P BALDWIN HIGH SCHOOL	187	3,310	3,497	5.3%
6 W R FARRINGTON HIGH SCHOOL	164	4,651	4,815	3.4%
7 WAIPAHU HIGH SCHOOL	164	4,602	4,766	3.4%
8 HONOKAA HIGH SCHOOL	140	1,303	1,443	9.7%
9 KAPAA HIGH SCHOOL	138	2,139	2,277	6.1%
10 MAUI HIGH SCHOOL	137	3,425	3,562	3.8%
Top 10 High Schools	2,231	30,461	32,692	6.8%
ALL DOE HIGH SCHOOLS	4,583	104,982	109,565	4.2%
Non-Charter Schools	4,222	103,464	107,686	3.9%
Charter Schools	361	1,518	1,879	19.2%

The DOE high schools with the largest number of dual credit participants were generally larger non-charter high schools that are geographically located near a UH campus.

- The top 10 high schools covered all major islands and comprised 48.7% of dual credit participants.
- 4.2% of all DOE graduates from the Class of 2003 to 2012 participated in a dual credit program. For non-charter schools, 3.9% of graduates participated in dual credit, whereas 19.2% of charter school graduates participated in dual credit.

Table 5. DOE High Schools With the Highest Proportion of Dual Credit Participants, Class of 2003 to 2012

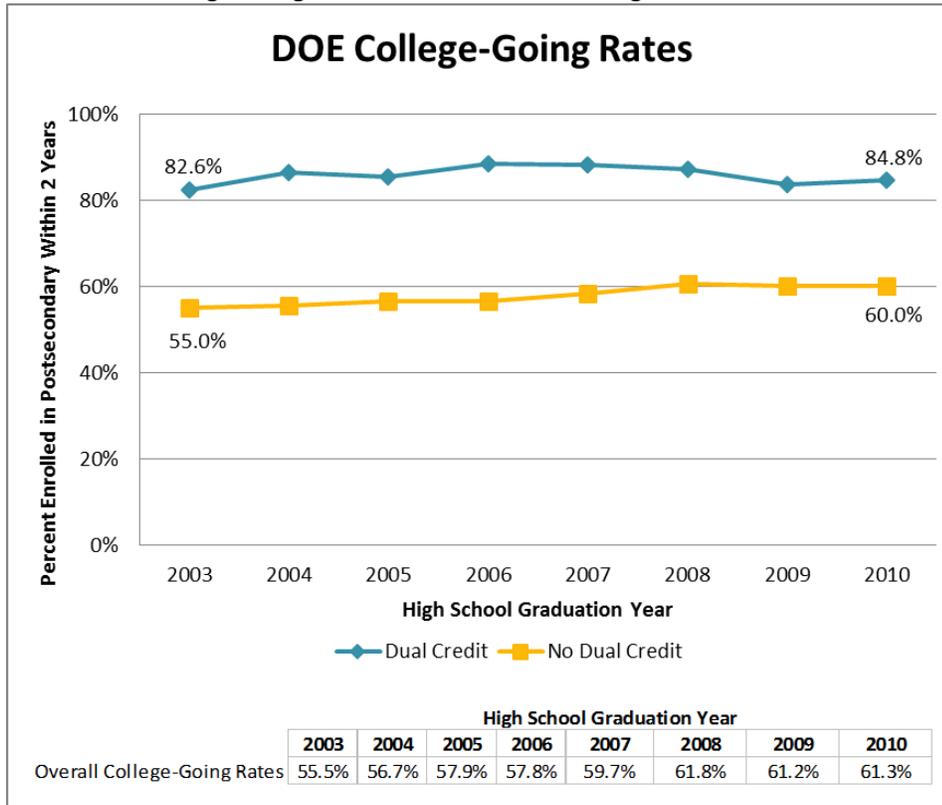
DOE High School	Number of Dual Credit Graduates	Number of No Dual Credit Graduates	Total Graduates	% Dual Credit
1 HAKIPUU LEARNING CENTER	22	6	28	78.6%
2 KIHEI PUBLIC CHARTER HIGH SCHOOL	114	112	226	50.4%
3 KE KULA O SAMUEL M KAMAKAU	4	4	8	50.0%
4 CONNECTIONS PUBLIC CHARTER SCH	39	45	84	46.4%
5 KUA O KA LA PUBLIC CHARTER SCH	13	17	30	43.3%
6 KULA AUPUNI NIIHAU PCS	4	7	11	36.4%
7 WEST HAWAII EXPLORATIONS ACAD	42	76	118	35.6%
8 KAWAIKINI NEW CENTURY PCS	1	2	3	33.3%
9 KANU O KA AINA NEW CENTURY PUB	16	33	49	32.7%
10 HAWAII ACADEMY OF ARTS-SCIENCE	44	118	162	27.2%

The top 10 high schools with the largest number of dual credit participants were all non-charter schools, but the top 10 high schools with the largest percentage of graduates participating in dual credit programs were all charter schools.

- The differential participation rates by charter schools may reflect curricular limitations, that is, smaller charter schools may not be able to support Advanced Placement (AP) programs. Dual credit programs may serve as the accelerated learning option for smaller schools.

Postsecondary Outcomes

Chart 4. DOE College-Going Rates Within Two Years of High School Graduation



Postsecondary enrollments reported by National Student Clearinghouse.

For purposes of this report, the college-going rate is the percentage of a graduating high school class that enrolls in postsecondary during a fall or spring term within two years of high school graduation. Fall terms included enrollment records with start dates between August-December, and Spring terms included enrollment records with start dates between January-May.

- Overall DOE college-going rates have improved, increasing from 55.5% for the Class of 2003 to 61.3% for the Class of 2010 (an increase of 5.8%).
- Dual credit participants have significantly higher college-going rates compared to non-dual credit graduates. College-going rates of dual credit participants increased from 82.6% for the Class of 2003 to 84.8% for the Class of 2010 (an increase of 2.2%).
- College-going rates of graduates that did not participate in dual credit programs increased from 55.0% for the Class of 2003 to 60.0% for the Class of 2010 (an increase of 5.0%).

Table 6. College-Going Rates Within Two Years of High School Graduation, by Institution Type

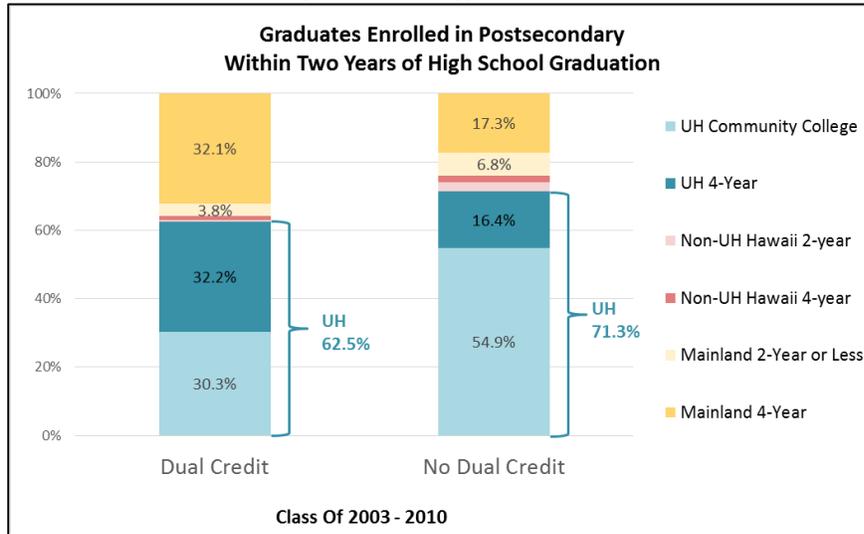
FIRST POSTSECONDARY INSTITUTION TYPE	HIGH SCHOOL GRADUATION YEAR														TOTAL			
	2003		2004		2005		2006		2007		2008		2009		2010		2003-2010	
	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit	Dual Credit	No Dual Credit
Number of Graduates	172	9,988	338	9,949	476	10,398	449	10,219	449	10,430	452	10,994	549	10,966	554	10,371	3,439	83,315
DC % of graduating class	1.7%		3.3%		4.4%		4.2%		4.1%		3.9%		4.8%		5.1%		4.0%	
Percent of Graduates by First Postsecondary Institution Type																		
UH Community College	33.1%	30.0%	28.7%	30.9%	22.7%	29.9%	20.7%	30.4%	23.4%	31.7%	26.5%	34.3%	27.3%	34.0%	30.0%	33.1%	26.1%	31.8%
UH 4-Year	30.2%	10.6%	32.5%	9.5%	31.9%	10.4%	25.8%	8.6%	28.5%	9.3%	26.1%	9.4%	27.3%	9.1%	22.9%	9.3%	27.7%	9.5%
Total UH System	63.4%	40.6%	61.2%	40.4%	54.6%	40.3%	46.5%	39.0%	51.9%	41.0%	52.7%	43.7%	54.6%	43.2%	52.9%	42.4%	53.8%	41.3%
Non-UH Hawaii 2-year	0.6%	1.5%	0.3%	1.2%	0.6%	1.5%	0.4%	1.5%	0.0%	1.6%	0.0%	1.7%	1.1%	2.0%	0.4%	1.9%	0.4%	1.6%
Non-UH Hawaii 4-year	0.6%	0.6%	0.3%	0.7%	0.6%	0.9%	0.9%	1.4%	0.9%	1.1%	0.9%	1.1%	1.5%	1.2%	1.1%	1.3%	0.9%	1.0%
Total Non-UH Hawaii	1.2%	2.0%	0.6%	1.9%	1.3%	2.4%	1.3%	2.9%	0.9%	2.7%	0.9%	2.8%	2.6%	3.1%	1.4%	3.2%	1.3%	2.6%
Mainland 2-Year or Less	2.3%	3.1%	1.5%	3.9%	3.4%	3.5%	3.3%	4.2%	3.3%	4.1%	3.8%	4.4%	4.0%	4.1%	3.4%	4.3%	3.3%	4.0%
Mainland 4-Year	15.7%	9.4%	23.1%	9.5%	26.3%	10.5%	37.2%	10.4%	32.1%	10.7%	29.9%	9.9%	22.4%	9.7%	27.1%	10.1%	27.6%	10.0%
Total Mainland	18.0%	12.5%	24.6%	13.4%	29.6%	14.0%	40.5%	14.6%	35.4%	14.7%	33.6%	14.2%	26.4%	13.8%	30.5%	14.4%	30.9%	14.0%
% Graduates Enrolled	82.6%	55.0%	86.4%	55.7%	85.5%	56.7%	88.4%	56.5%	88.2%	58.4%	87.2%	60.7%	83.6%	60.1%	84.8%	60.0%	86.0%	58.0%

DC = dual credit

The overall college-going rate within two years of high school graduation for dual credit participants from the Classes of 2003 to 2010 was 86.0%. This is 28.0% higher than the overall college-going rate of students who did not participate in dual credit programs (58.0%).

- Of the dual credit participants from these 8 graduating classes, 53.8% enrolled a UH campus, 30.9% enrolled at a mainland institution, and 1.3% enrolled at a non-UH Hawai'i institution within two years of high school graduation.
- Of the graduates from these 8 graduating classes that did not participate in a dual credit program, 41.3% enrolled at a UH campus, 14.0% enrolled at a mainland institution, and 2.6% enrolled at a non-UH Hawai'i institution within two years of high school graduation.
- Dual credit students who enrolled at UH after high school graduation were more likely to start at a UH 4-year campus (UH Manoa, UH Hilo, or UH West O'ahu), whereas non-dual credit graduates were more likely to start at a UHCC campus.
- Though the majority of dual credit participants remain at UH, the percentage of students who enrolled at a mainland institution increased from 18% of the Class of 2003 to 30.5% of the Class of 2010, and the percentage of students who enrolled at UH decreased slightly from 63.4% of the Class of 2003 to 52.9% of the Class of 2010.

Chart 5. First Postsecondary Institution Type of Graduates Enrolled in Postsecondary



Of the DOE graduates from the Class of 2003 to 2010 who participated in dual credit and enrolled in postsecondary within two years of high school graduation, 62.5% enrolled at UH, 35.9% enrolled at a mainland institution, and 1.6% enrolled at a non-UH Hawai'i institution.

- 65.4% of dual credit participants entered a 4-year postsecondary institution
- 35.5% of non-dual credit graduates entered a 4-year postsecondary institution

Table 7. Persistence of Dual Credit Students Within the UH System

First Dual Credit Campus	UH Retention (enrolled at any UH campus)	First UH Campus After High School Graduation		
		Persisted at First Dual Credit Campus	Other UH 2- Year Campus	Other UH 4- Year Campus
UH COMMUNITY COLLEGES				
Hawai'i Community College	64.9%	28.6%	4.3%	32.0%
Honolulu Community College	68.7%	12.2%	17.9%	38.6%
Kapi'olani Community College	65.7%	15.3%	6.9%	43.5%
Kaua'i Community College	49.3%	21.0%	4.4%	23.9%
Leeward Community College	58.9%	27.5%	4.8%	26.7%
UH Maui College	54.3%	31.9%	3.6%	18.9%
Windward Community College	72.0%	35.5%	15.9%	20.6%
UH 4-YEAR CAMPUSES				
UH Hilo	62.0%	37.2%	18.6%	6.2%
UH West O'ahu	57.1%	28.6%	14.3%	14.3%
TOTAL RETAINED WITHIN UH	62.5%	22.5%	9.5%	30.5%

Of the dual credit participants from the Class of 2003 to 2010 who enrolled in postsecondary within two years of high school graduation, 62.5% were retained within the UH system (their first postsecondary institution after high school graduation was a UH campus). Of the 62.5% of dual credit participants who continued at a UH campus, 22.5% persisted at their first dual credit campus, 9.5% enrolled at another UH 2-year campus, and 30.5% enrolled at another UH 4-year campus.

- UH Hilo, Windward CC, and UH Maui College had the highest percentage of their dual credit participants persisting at their campuses after high school graduation.
- Most of the dual credit participants who started at Kapi'olani CC, Honolulu CC, and Hawai'i CC continued at one of the UH 4-year campuses.

Table 8. First Postsecondary Enrollment Term and 1-Year Retention Rate

HIGH SCHOOL GRADUATION YEAR	Graduates	First Postsecondary Enrollment Term After High School Graduation											
		First Fall			First Spring			Second Fall			Second Spring		
		# Enrolled	% of Cohort	1-Yr Retention	# Enrolled	% of Cohort	1-Yr Retention	# Enrolled	% of Cohort	1-Yr Retention	# Enrolled	% of Cohort	1-Yr Retention
DUAL CREDIT													
2003	172	120	70%	89%	10	6%	80%	8	5%	75%	4	2%	50%
2004	338	251	74%	90%	24	7%	75%	10	3%	90%	7	2%	57%
2005	476	373	78%	91%	21	4%	52%	10	2%	70%	3	1%	33%
2006	449	363	81%	94%	11	2%	82%	18	4%	72%	5	1%	80%
2007	449	365	81%	90%	14	3%	64%	10	2%	90%	7	2%	71%
2008	452	363	80%	91%	21	5%	57%	7	2%	57%	3	1%	100%
2009	549	422	77%	90%	16	3%	56%	16	3%	50%	5	1%	100%
2010	554	428	77%	89%	18	3%	61%	20	4%	65%	4	1%	
2011	546	437	80%	88%	17	3%		16	3%				
2012	598	448	75%										
Total Dual Credit	4,583	3,570	78%										
2003-2009	2,885	2,257	78%	91%	117	4%	65%	79	3%	71%	34	1%	71%
NO DUAL CREDIT													
2003	9,988	4,565	46%	78%	446	4%	52%	364	4%	49%	122	1%	41%
2004	9,949	4,581	46%	77%	475	5%	50%	349	4%	55%	138	1%	44%
2005	10,398	4,886	47%	77%	440	4%	47%	417	4%	59%	149	1%	54%
2006	10,219	4,707	46%	78%	496	5%	54%	418	4%	58%	153	1%	38%
2007	10,430	5,041	48%	78%	473	5%	54%	407	4%	56%	173	2%	48%
2008	10,994	5,564	51%	78%	512	5%	55%	442	4%	51%	156	1%	49%
2009	10,966	5,440	50%	77%	596	5%	54%	397	4%	49%	157	1%	45%
2010	10,371	5,217	50%	76%	503	5%	46%	370	4%	56%	136	1%	
2011	10,777	5,716	53%	77%	481	4%		381	4%				
2012	10,890	5,693	52%										
Total No Dual Credit	104,982	51,410	49%										
2003-2009	72,944	34,784	48%	78%	3,438	5%	52%	2,794	4%	54%	1,048	1%	46%
2003-2009 Difference DC to no DC			31%	13%		-1%	13%		-1%	17%		0%	25%

DC = dual credit

1-Yr Retention: counts enrollment at any postsecondary institution one year after first postsecondary enrollment term after high school graduation

Fall term includes enrollments that begin August-December; Spring term includes enrollments that begin January-May

Of the DOE graduates from the Classes of 2003 to 2012, 78% of dual credit participants enrolled in postsecondary in the first fall after high school graduation, whereas just 48% of non-dual credit graduates enrolled in the first fall.

- Both dual credit and non-dual credit students who enrolled in a postsecondary in the first fall semester immediately following high school graduation were much more likely to still be enrolled at a postsecondary institution one year later. An additional 8-10% of the graduating classes have a first term of postsecondary entry after that first fall, and those students (both dual credit and non-dual credit) had much lower 1-year retention rates as compared to the students who immediately enrolled. This seems to indicate that students who don't enter postsecondary immediately following high school graduation are an at-risk population that may benefit from targeted student services.
- The 1-year retention rate of dual credit participants who graduated between 2003 and 2009 and enrolled that first fall was 13% higher than non-dual credit participants (91% vs. 78%). In fact, the 1-year retention rates of dual credit participants were higher than the 1-year retention rates of non-dual credit graduates, regardless of which term students first enrolled.

Table 9. Highest Degree Earned of Students who Enroll in Postsecondary Within Two Years of High School Graduation

HIGH SCHOOL GRADUATION YEAR	Enr in PS (within 2 yrs)	HIGHEST DEGREE/CERTIFICATE EARNED (by 2012)							Total	% Award Earned
		Certificate	Associate's	Bachelor's	Post-Bac	Master's	Doctorate	Degree Type Not Reported*		
DUAL CREDIT										
2003	142	2	14	54	1	4		6	81	57.0%
2004	292	3	29	131		1		8	172	58.9%
2005	407	4	35	205		27	15	4	290	71.3%
2006	397	5	42	195		18	4	18	282	71.0%
2007	396	8	37	179		5		8	237	59.8%
2008	394	5	36	94				10	145	36.8%
2009	459	10	35	5					50	10.9%
Total Dual Credit	2,487	37	228	863	1	55	19	54	1,257	50.5%
Distribution of Awards		2.9%	18.1%	68.7%	0.1%	4.4%	1.5%	4.3%	100%	
Bachelor or higher: 74.6%										
NO DUAL CREDIT										
2003	5,497	120	644	1,360	3	64	12	165	2,368	43.1%
2004	5,543	147	602	1,091		22	2	226	2,090	37.7%
2005	5,892	161	929	1,555	1	126	30	82	2,884	48.9%
2006	5,774	179	899	1,328	4	50	6	78	2,544	44.1%
2007	6,094	206	884	1,095		14		82	2,281	37.4%
2008	6,674	188	819	509		1		78	1,595	23.9%
2009	6,590	155	453	12				28	648	9.8%
Total No Dual Credit	42,064	1,156	5,230	6,950	8	277	50	739	14,410	34.3%
Distribution of Awards		8.0%	36.3%	48.2%	0.1%	1.9%	0.3%	5.1%	100%	
Bachelor or higher: 50.6%										

*Only 83% of NSC participant institutions report the major and type of certificate or degree awarded. Institutions that choose not to provide detailed college degree data to NSC simply report the date a certificate or degree was awarded.

Please note that this table only reflects degrees or certificates earned through 2012, and does not account for students who are still enrolled (either at the same institution or at a different institution).

Of the DOE graduates from the Class of 2003 to 2009 who enrolled in postsecondary within 2 years, 50.5% of dual credit participants earned a degree or certificate by 2012, and 34.3% of non-dual credit graduates earned a degree or certificate by 2012.

- In general, students entering a two-year institution are expected to earn a degree or certificate within 3 years of entry, and students entering a four-year institution are expected to earn a bachelor's degree within 6 years of entry. The graduates from the Classes of 2003 to 2006 have had at least 6 years elapse since high school graduation. A larger percentage of the graduates from these classes have earned a postsecondary award by 2012, in part because the students from these classes have had more time to complete a degree or certificate.
- Of the postsecondary awards earned by DOE graduates by 2012, dual credit participants were more likely than non-dual credit students to have earned a bachelor's degree or higher (74.6% vs. 50.6%).
 - **The percentage of bachelor's degree or higher awards earned through 2012 does not include awards earned from institutions that do not report the award detail to NSC.**

Table 10. Students Who Enroll at UH, by Starting UH Campus Type and High School Graduation Year

Starting UH Campus & HS Grad Year	DUAL CREDIT			NO DUAL CREDIT		
	Enrolled at UH (within 2 yrs)	% Award Earned From UH	% Award Earned Anywhere	Enrolled at UH (within 2 yrs)	% Award Earned From UH	% Award Earned Anywhere
TOTAL	1,556	44.5%	47.0%	30,048	28.3%	31.0%
UHCC	730	35.3%	37.9%	23,093	23.4%	26.2%
2003	57	36.8%	42.1%	2,996	27.9%	31.1%
2004	97	34.0%	37.1%	3,074	24.0%	26.7%
2005	108	43.5%	49.1%	3,106	31.1%	36.7%
2006	93	44.1%	47.3%	3,109	28.5%	31.9%
2007	105	43.8%	43.8%	3,305	25.8%	28.2%
2008	120	30.0%	32.5%	3,772	19.0%	20.5%
2009	150	22.7%	23.3%	3,731	11.1%	12.0%
UH 4-year	826	52.7%	55.1%	6,955	44.4%	46.9%
2003	52	63.5%	69.2%	1,055	62.0%	65.2%
2004	110	60.9%	67.3%	942	53.5%	56.4%
2005	152	75.7%	79.6%	1,080	66.0%	70.0%
2006	116	76.7%	78.4%	874	62.8%	66.0%
2007	128	60.9%	62.5%	972	47.9%	50.5%
2008	118	35.6%	35.6%	1,031	18.4%	19.8%
2009	150	7.3%	7.3%	1,001	1.5%	1.8%

Starting UH Campus is the student's first UH campus after high school graduation

Award Earned from UH includes any degree or certificate awarded by a UH campus by 2012; awarding campus may be different from starting campus.

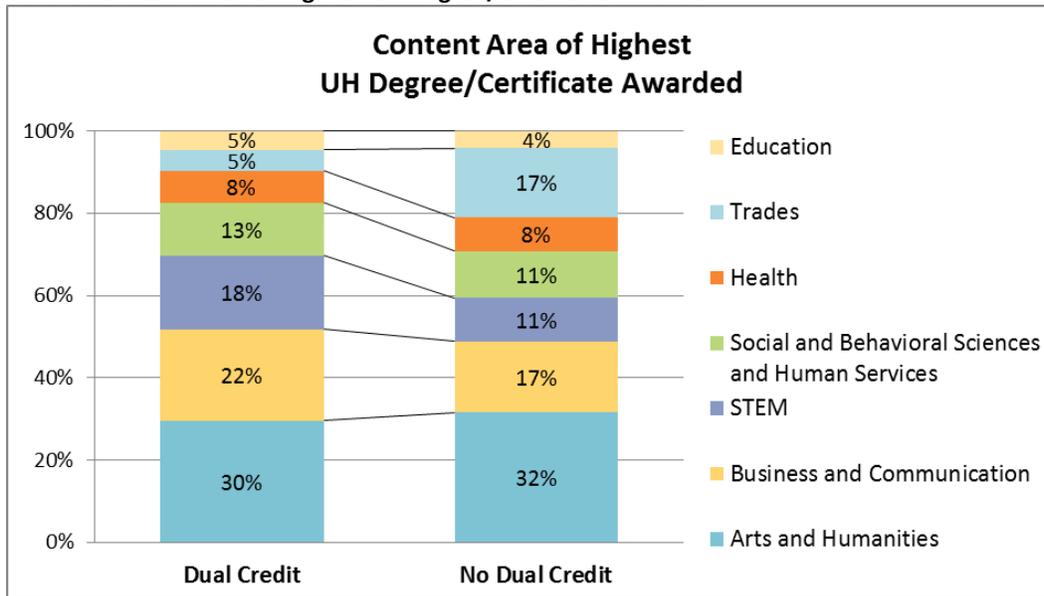
Award Earned Anywhere includes any degree or certificate awarded by a postsecondary institution by 2012 (includes awards earned at UH)

Please note that this table only reflects degrees or certificates earned through 2012, and does not account for students who are still enrolled (either at the same institution or at a different institution).

Of the DOE students who graduated between 2003 and 2009 and enrolled at UH within 2 years, 44.5% of dual credit participants earned a degree or certificate from UH by 2012. Comparatively, just 28.3% of non-dual credit students earned a degree or certificate from UH by 2012.

- Both dual credit and non-dual credit graduates who started at a UH 4-year campus were more likely to have earned a degree or certificate by 2012 than students who started at a UHCC campus.
- Nearly 3.0% of dual credit and non-dual credit graduates who entered UH ultimately transferred to a non-UH institution, and earned a degree or certificate from a non-UH institution.

Chart 6. Content Area of Highest UH Degree/Certificate Awarded



Complete College America Content Areas by Classification of Instructional Programs (CIP) Category

Content Area	CIP Category	Content Area	CIP Category	
STEM	01 Agriculture	Business and Communication	09 Communication, Journalism	
	03 Natural Resources & Conservation		10 Communications Tech	
	04 Architecture		52 Business, Management, Marketing	
	11 Computer and Info Sciences		Trades	12 Personal & Culinary Services
	14 Engineering			43 Homeland Security, Law Enforcement, Firefighting
	15 Engineering Tech			46 Construction Trades
	26 Biological and Biomedical Sciences	47 Mechanic and Repair Technologies		
	27 Math & Statistics	48 Precision Production		
	40 Physical Sciences	Education	13 Education	
	Arts and Humanities	05 Area, Ethnic, Cultural, Gender, Group Studies	Social and Behavioral Sciences and Human Services	19 Family and Consumer/Human Sciences
16 Foreign Languages, Lit & Ling		22 Legal Professions and Studies		
23 English Lang & Lit		25 Library Science		
24 Liberal Arts, General Studies		31 Parks, Rec, Leisure and Fitness Studies		
30 Multi/interdisciplinary Studies		42 Psychology		
38 Philosophy and Religious Studies		44 Public Admin & Social Service Professions		
50 Visual and Performing Arts		45 Social Sciences		
54 History		Health	51 Health Professions	

Of the DOE graduates who earned a degree or certificate from UH by 2012, the most popular degree/certificate content area was Arts & Humanities.

- When we compare the content areas of the highest degree/certificate earned, a higher percentage of dual credit students earned a STEM, Business and Communication, or Social and Behavioral Sciences/Human Services award, as compared to non-dual credit students.
- Non-dual credit graduates were more likely to have earned a Trades degree or certificate. This is likely because the majority of non-dual credit graduates transition to 2-year institutions after high school.
- The content area categories are based on the Complete College America discipline groupings by CIP category. However, the UH STEM definition is slightly different. The UH STEM definition does not include CIP category 04 (Architecture), but does include CIP category 51 (Health) and selected CIP 30 codes (Multi/interdisciplinary Studies).
 - 25.7% of the highest UH degree/certificate earned by dual credit participants are classified as STEM by UH
 - 18.8% of the highest UH degree/certificate earned by non-dual credit graduates are classified as STEM by UH

Table 11. Top 10 Majors of Highest UH Degrees/Certificates Earned by Dual Credit Participants

DUAL CREDIT GRADUATES TOP 10 MAJORS	HIGHEST UH DEGREE/CERTIFICATE EARNED (by 2012)						Total	% of Total
	Certificate	Associate	Bachelor	Post-Bac	Master	Doctor		
1 LIBERAL ARTS		157					157	19.6%
2 BIOLOGY			38				38	4.7%
3 FINANCE			35				35	4.4%
4 ACCOUNTING		2	27		1		30	3.7%
5 PSYCHOLOGY			29				29	3.6%
6 NURSING		5	19				24	3.0%
7 ELECTRICAL ENGINEERING			16		3		19	2.4%
8 CIVIL ENGINEERING			17		2		19	2.4%
9 POLITICAL SCIENCE			17		1		18	2.2%
10 TRAVEL INDUSTRY MANAGEMENT			18				18	2.2%
Top 10 Majors	0	164	216	0	7	0	387	48.3%
Total UH Degrees/Certificates	49	223	498	1	25	5	801	
Distribution of Awards	6.1%	27.8%	62.2%	0.1%	3.1%	0.6%	100%	
Bachelor or higher: 66.0%								

The top 10 majors of the highest degree/certificate earned by dual credit participants at UH accounted for 48.3% of awards earned, and the most popular majors were Liberal Arts, Biology, and Finance.

- Of these top 10 majors, four are UH STEM majors: Biology, Nursing, Electrical Engineering, Civil Engineering.
- 66% of dual credit participants who earned a degree or certificate from UH earned a bachelor’s degree or higher.

Table 12. Top 10 Majors of Highest UH Degrees/Certificates Earned by Students Without Dual Credit

NO DUAL CREDIT GRADUATES TOP 10 MAJORS	HIGHEST UH DEGREE/CERTIFICATE EARNED (by 2012)						Total	% of Total
	Certificate	Associate	Bachelor	Post-Bac	Master	Doctor		
1 LIBERAL ARTS		2,263					2,263	24.0%
2 CULINARY ARTS/FOOD SERVICE	333	239					572	6.1%
3 NURSING/NURSE AIDE	314	87	144				545	5.8%
4 PSYCHOLOGY			283		1		284	3.0%
5 ACCOUNTING	3	68	150		14		235	2.5%
6 AUTOMOTIVE MECHANICS TECH	85	126					211	2.2%
7 BIOLOGY			185				185	2.0%
8 FINANCE			151				151	1.6%
9 COMMUNICATION			150				150	1.6%
10 MARKETING	2	22	122				146	1.5%
Top 10 Majors	737	2,805	1,185	0	15	0	4,742	50.3%
Total UH Degrees/Certificates	1,294	4,170	3,865	8	84	13	9,434	
Distribution of Awards	13.7%	44.2%	41.0%	0.1%	0.9%	0.1%	100%	
Bachelor or higher: 42.1%								

The top 10 majors of the highest degree/certificate earned by non-dual credit graduates at UH accounted for 50.3% of awards earned, and the most popular majors were Liberal Arts, Culinary Arts/Food Service, and Nursing/Nurse Aide.

- Of these top 10 majors, two are UH STEM majors: Nursing/Nurse Aide, Biology.
- 42.1% of non-dual credit graduates who earned a degree or certificate from UH earned a bachelor’s degree or higher.

Dual Credit Participation and Postsecondary Outcomes by Student Attribute

Table 13. Dual Credit Participation Gap, by Student Attributes

Class of 2003 to 2012	Total Graduates		Dual Credit		Participation Gap
	N	% of Total	n	% of Total	
TOTAL	109,565		4,583		
DOE STATE ETHNICITY ROLL UP					
Native Hawaiian	26,100	23.8%	719	15.7%	-8.1%
Pacific Islander	4,230	3.9%	33	0.7%	-3.1%
Asian	46,567	42.5%	2,352	51.3%	8.8%
White/Portuguese	16,165	14.8%	927	20.2%	5.5%
AI/AN/Black/Hispanic	5,437	5.0%	133	2.9%	-2.1%
Multiple/Unknown	11,066	10.1%	419	9.1%	-1.0%
GENDER					
Female	53,979	49.3%	2,972	64.8%	15.6%
Male	55,583	50.7%	1,611	35.2%	-15.6%
Unknown	3	0.0%		0.0%	0.0%
ECONOMIC STATUS					
Economically Disadvantaged	35,185	32.1%	1,391	30.4%	-1.8%
Non-Econ Disadvantaged	74,380	67.9%	3,192	69.6%	1.8%

DOE student attributes from the student's senior year of high school

AI/AN/Black/Hispanic includes American Indian, Alaska Native, Black, and Hispanic

The participation gap is defined as the difference between: 1) the percentage of each sub-population group that participated in a dual credit program; and 2) the percentage of the sub-population group of the total graduating class. The percentage should equate to 0.0%. A negative value means the sub-population is not represented in dual credit programs as their percentage of the graduating class.

- Native Hawaiian students comprised 23.8% of the DOE Classes of 2003 to 2012, but represent only 15.7% of dual credit participants from those graduating classes. That represents a -8.1% participation gap, the largest participation gap of all race/ethnicity groups.
- The race/ethnicity group with the next lowest participation gap was Pacific Islanders (-3.1% participation gap).
- Male students (-15.6% participation gap), and students identified as economically disadvantaged in their senior year of high school (-1.8% participation gap) were also less likely to participate in dual credit programs.

Table 14. College-Going Rate and Enrollment Gap, by Student Attributes

Class of 2003 to 2010	DUAL CREDIT					NO DUAL CREDIT						
	Graduates		Enrolled in PS Within 2 Yrs		College-Going Rate	Enrollment Gap	Graduates		Enrolled in PS Within 2 Yrs		College-Going Rate	Enrollment Gap
	N	% of Total	n	% of Total			N	% of Total	n	% of Total		
TOTAL	3,439		2,957		86.0%		83,315		48,290		58.0%	
DOE STATE RACE/ETHNICITY ROLL UP												
Native Hawaiian	430	12.5%	316	10.7%	73.5%	-1.8%	20,025	24.0%	8,724	18.1%	43.6%	-6.0%
Pacific Islander	17	0.5%	10	0.3%	58.8%	-0.2%	2,927	3.5%	1,153	2.4%	39.4%	-1.1%
Asian	1,836	53.4%	1,640	55.5%	89.3%	2.1%	34,697	41.6%	23,588	48.8%	68.0%	7.2%
White/Portuguese	698	20.3%	593	20.1%	85.0%	-0.2%	12,214	14.7%	7,359	15.2%	60.3%	0.6%
AI/AN/Black/Hispanic	79	2.3%	68	2.3%	86.1%	0.0%	3,818	4.6%	2,012	4.2%	52.7%	-0.4%
Multiple/Unknown	379	11.0%	330	11.2%	87.1%	0.1%	9,634	11.6%	5,454	11.3%	56.6%	-0.3%
GENDER												
Female	2,218	64.5%	1,907	64.5%	86.0%	0.0%	40,511	48.6%	25,438	52.7%	62.8%	4.1%
Male	1,221	35.5%	1,050	35.5%	86.0%	0.0%	42,801	51.4%	22,851	47.3%	53.4%	-4.1%
Unknown							3	0.0%	1	0.0%	33.3%	0.0%
ECONOMIC STATUS												
Economically Disadvantaged	995	28.9%	814	27.5%	81.8%	-1.4%	25,185	30.2%	11,472	23.8%	45.6%	-6.5%
Non-Econ Disadvantaged	2,444	71.1%	2,143	72.5%	87.7%	1.4%	58,130	69.8%	36,818	76.2%	63.3%	6.5%
Economically Disadvantaged RS Scholarship	995	28.9%	814	27.5%	81.8%	-1.4%						
RS Scholarship	710	20.6%	605	20.5%	85.2%	-0.2%						
No RS Scholarship	285	8.3%	209	7.1%	73.3%	-1.2%						
GENDER AND DOE STATE RACE/ETHNICITY ROLL UP												
Female												
Native Hawaiian	295	8.6%	221	7.5%	74.9%	-1.1%	9,701	11.6%	4,854	10.1%	50.0%	-1.6%
Pacific Islander	11	0.3%	4	0.1%	36.4%	-0.2%	1,490	1.8%	648	1.3%	43.5%	-0.4%
Asian	1,173	34.1%	1,045	35.3%	89.1%	1.2%	16,885	20.3%	12,169	25.2%	72.1%	4.9%
White/Portuguese	446	13.0%	383	13.0%	85.9%	0.0%	5,842	7.0%	3,838	7.9%	65.7%	0.9%
AI/AN/Black/Hispanic	60	1.7%	50	1.7%	83.3%	-0.1%	1,872	2.2%	1,082	2.2%	57.8%	0.0%
Multiple/Unknown	233	6.8%	204	6.9%	87.6%	0.1%	4,721	5.7%	2,847	5.9%	60.3%	0.2%
Male												
Native Hawaiian	135	3.9%	95	3.2%	70.4%	-0.7%	10,323	12.4%	3,870	8.0%	37.5%	-4.4%
Pacific Islander	6	0.2%	6	0.2%	100.0%	0.0%	1,437	1.7%	505	1.0%	35.1%	-0.7%
Asian	663	19.3%	595	20.1%	89.7%	0.8%	17,812	21.4%	11,419	23.6%	64.1%	2.3%
White/Portuguese	252	7.3%	210	7.1%	83.3%	-0.2%	6,372	7.6%	3,521	7.3%	55.3%	-0.4%
AI/AN/Black/Hispanic	19	0.6%	18	0.6%	94.7%	0.1%	1,946	2.3%	930	1.9%	47.8%	-0.4%
Multiple/Unknown	146	4.2%	126	4.3%	86.3%	0.0%	4,911	5.9%	2,606	5.4%	53.1%	-0.5%
ECONOMIC STATUS AND DOE STATE RACE/ETHNICITY ROLL UP												
Economically Disadvantaged												
Native Hawaiian	187	5.4%	133	4.5%	71.1%	-0.9%	8,415	10.1%	3,101	6.4%	36.9%	-3.7%
Pacific Islander	9	0.3%	4	0.1%	44.4%	-0.1%	1,710	2.1%	628	1.3%	36.7%	-0.8%
Asian	489	14.2%	421	14.2%	86.1%	0.0%	8,094	9.7%	4,601	9.5%	56.8%	-0.2%
White/Portuguese	163	4.7%	134	4.5%	82.2%	-0.2%	2,536	3.0%	1,197	2.5%	47.2%	-0.6%
AI/AN/Black/Hispanic	29	0.8%	25	0.8%	86.2%	0.0%	1,218	1.5%	549	1.1%	45.1%	-0.3%
Multiple/Unknown	118	3.4%	97	3.3%	82.2%	-0.2%	3,212	3.9%	1,396	2.9%	43.5%	-1.0%
Non-Economically Disadvantaged												
Native Hawaiian	243	7.1%	183	6.2%	75.3%	-0.9%	11,610	13.9%	5,623	11.6%	48.4%	-2.3%
Pacific Islander	8	0.2%	6	0.2%	75.0%	0.0%	1,217	1.5%	525	1.1%	43.1%	-0.4%
Asian	1,347	39.2%	1,219	41.2%	90.5%	2.1%	26,603	31.9%	18,987	39.3%	71.4%	7.4%
White/Portuguese	535	15.6%	459	15.5%	85.8%	0.0%	9,678	11.6%	6,162	12.8%	63.7%	1.1%
AI/AN/Black/Hispanic	50	1.5%	43	1.5%	86.0%	0.0%	2,600	3.1%	1,463	3.0%	56.3%	-0.1%
Multiple/Unknown	261	7.6%	233	7.9%	89.3%	0.3%	6,422	7.7%	4,058	8.4%	63.2%	0.7%

DOE student attributes from the student's senior year of high school

AI/AN/Black/Hispanic includes American Indian, Alaska Native, Black, and Hispanic

RS Scholarship – a GEAR UP Running Start scholarship received at any time

The enrollment gap is defined as the difference between the: 1) percentage of each sub-population group that enrolls in postsecondary within 2 years after high school graduation; and 2) the percentage of the sub-population

group of the total graduating class. The percentage should equate to 0.0%. A negative value means the sub-population is not represented in postsecondary education as their percentage of the graduating class.

- Participating in dual credit helped to close the enrollment gap for Native Hawaiian and Pacific Islander students. Native Hawaiian students comprised 12.5 % of all dual credit participants from the class of 2003 to 2010, and 10.7% of all dual credit participants that enrolled in postsecondary. That represents a -1.8% enrollment gap for Native Hawaiian dual credit participants, an improvement from the -6.0% enrollment gap for Native Hawaiian non-dual credit students. For Pacific Islander graduates, the enrollment gap improved from -1.1% for non-dual credit students to -0.2% for dual credit participants.
- The enrollment gap for male students and economically disadvantaged students also improved with dual credit participation. In particular, the enrollment gap for male, Native Hawaiian graduates saw the highest improvement with dual credit participation, decreasing from -4.4% for non-dual credit participants to -0.7% for dual credit participants.
- The enrollment gap for economically disadvantaged Native Hawaiian graduates (both male and female) shrank considerably, improving from -3.7% for non-dual credit participants to -0.9% for dual credit participants.
- The enrollment gap for economically disadvantaged dual credit participants improved for the students who had received a Running Start scholarship, improving from -1.2% for economically disadvantaged dual credit participants that did not receive a Running Start scholarship to -0.2% for those that did receive a Running Start scholarship.

The enrollment gap is affected by the relative size of a sub-population to the total population, and differences in college access may be masked for smaller-sized groups. The college-going rates within two years of high school graduation provide another view of the proportion of each sub-population that enrolls in postsecondary. For the Classes of 2003 to 2010:

- The college-going rates for all sub-populations of dual credit participants were higher than the college-going rates of non-dual credit graduates.
- The college-going rates of Pacific Islander graduates was the lowest of all ethnicity groups, and though the number of Pacific Islander dual credit participants was quite small, the college-going rate of Pacific Islander dual credit participants (58.8%) was much higher than the college-going rate of non-dual credit graduates (39.4%).
- The college-going rates of dual credit participants was the same by gender (86.0%), but among non-dual credit graduates the college-going rate of male students (53.4%) was lower than the college-going rate of female students (62.8%).
 - Among non-dual credit graduates, the sub-populations with the lowest college-going rates were
 - Male-Native Hawaiian (37.5%)
 - Male-Pacific Islander (35.1%)
 - Economically disadvantaged-Native Hawaiian (36.9%)
 - Economically disadvantaged-Pacific Islander (36.7%)
- The college-going rates of economically disadvantaged graduates was 36.3% higher for dual credit participants (81.8%) than non-dual credit graduates (45.6%). The college-going rates of non-economically disadvantaged graduates was 24.3% higher for dual credit participants (87.7%) than non-dual credit graduates (63.3%).
 - The college-going rates of economically disadvantaged dual credit participants was 11.9% higher for students who received a GEAR UP Running Start scholarship (85.2%) than students who did not receive a scholarship (73.3%).

Table 15. Attributes of Graduates Enrolled in Postsecondary, by First Postsecondary Institution Type

DOE STUDENT ATTRIBUTE	HIGH SCHOOL GRADUATES (Class of 2003 - 2010)	College-Going Rate (within 2 years of HS grad)	DISTRIBUTION OF FIRST POSTSECONDARY INSTITUTION TYPE								
			HAWAII INSTITUTION						MAINLAND		
			UH			Non-UH HI			2-year or less	4-year	Mainland Total
UHCC	UH 4-yr	UH Total	2-year	4-year	Non-UH Total						
TOTAL	86,754	59.1%	53.5%	17.3%	70.8%	2.6%	1.8%	4.4%	6.7%	18.1%	24.8%
DUAL CREDIT	3,439	86.0%	30.3%	32.2%	62.5%	0.5%	1.0%	1.6%	3.8%	32.1%	35.9%
DOE STATE ETHNICITY ROLL UP											
Native Hawaiian	430	73.5%	59.8%	18.4%	78.2%	1.6%	2.8%	4.4%	2.5%	14.9%	17.4%
Pacific Islander	17	58.8%	60.0%	10.0%	70.0%	0.0%	0.0%	0.0%	10.0%	20.0%	30.0%
Asian	1,836	89.3%	24.8%	39.1%	63.8%	0.5%	0.9%	1.3%	2.4%	32.4%	34.8%
White/Portuguese	698	85.0%	29.2%	22.9%	52.1%	0.0%	0.5%	0.5%	8.1%	39.3%	47.4%
AI/AN/Black/Hispanic	79	86.1%	36.8%	20.6%	57.4%	0.0%	1.5%	1.5%	4.4%	36.8%	41.2%
Multiple/Unknown	379	87.1%	29.4%	31.2%	60.6%	0.6%	1.2%	1.8%	3.9%	33.6%	37.6%
GENDER											
Female	2,218	86.0%	31.2%	30.5%	61.7%	0.6%	1.2%	1.8%	3.4%	33.1%	36.5%
Male	1,221	86.0%	28.7%	35.3%	64.0%	0.4%	0.8%	1.1%	4.7%	30.2%	34.9%
ECONOMIC STATUS											
Econ Disadvantaged	995	81.8%	38.1%	29.7%	67.8%	1.1%	2.1%	3.2%	4.5%	24.4%	29.0%
Non-Econ Disadv	2,444	87.7%	27.3%	33.2%	60.5%	0.3%	0.7%	0.9%	3.5%	35.0%	38.5%
Econ Disadvantaged	995	81.8%	38.1%	29.7%	67.8%	1.1%	2.1%	3.2%	4.5%	24.4%	29.0%
RS Scholarship	710	85.2%	34.7%	33.2%	67.9%	0.8%	1.7%	2.5%	4.5%	25.1%	29.6%
No RS Scholarship	285	73.3%	47.8%	19.6%	67.5%	1.9%	3.3%	5.3%	4.8%	22.5%	27.3%
NO DUAL CREDIT	83,315	58.0%	54.9%	16.4%	71.3%	2.8%	1.8%	4.6%	6.8%	17.3%	24.1%
DOE STATE ETHNICITY ROLL UP											
Native Hawaiian	20,025	43.6%	67.8%	9.3%	77.2%	2.4%	2.2%	4.5%	7.2%	11.2%	18.3%
Pacific Islander	2,927	39.4%	40.1%	6.0%	46.1%	9.7%	5.0%	14.7%	24.3%	14.9%	39.2%
Asian	34,697	68.0%	54.8%	20.9%	75.7%	3.3%	1.1%	4.4%	3.4%	16.5%	19.9%
White/Portuguese	12,214	60.3%	46.2%	14.4%	60.6%	0.6%	2.2%	2.8%	11.2%	25.4%	36.6%
AI/AN/Black/Hispanic	3,818	52.7%	48.3%	8.7%	57.1%	1.9%	2.3%	4.3%	16.5%	22.2%	38.7%
Multiple/Unknown	9,634	56.6%	52.0%	16.1%	68.1%	2.9%	2.7%	5.6%	8.1%	18.3%	26.3%
GENDER											
Female	40,511	62.8%	52.7%	17.2%	70.0%	3.5%	2.4%	5.9%	5.0%	19.2%	24.1%
Male	42,801	53.4%	57.4%	15.5%	72.8%	1.9%	1.2%	3.1%	8.9%	15.2%	24.1%
Unknown	3	33.3%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ECONOMIC STATUS											
Econ Disadvantaged	25,185	45.6%	61.8%	11.8%	73.6%	5.2%	2.0%	7.2%	7.8%	11.4%	19.2%
Non-Econ Disadv	58,130	63.3%	52.8%	17.8%	70.6%	2.0%	1.7%	3.7%	6.5%	19.1%	25.7%

DOE student attributes from the student's senior year of high school

AI/AN/Black/Hispanic includes American Indian, Alaska Native, Black, and Hispanic

RS Scholarship – a GEAR UP Running Start scholarship received at any time

The dual credit participants most likely to remain at UH after high school graduation were Native Hawaiian and Pacific Islander students. Overall, 62.5% of dual credit participants from the Classes of 2003 to 2010 who enrolled in postsecondary within two years remained at UH. Comparatively, 78.2% of Native Hawaiian dual credit participants and 70.0% of Pacific Islander dual credit participants remained at UH.

- Native Hawaiian and Pacific Islander dual credit participants were more likely to remain at a UHCC campus after high school than dual credit participants of other race/ethnicity groups.
- Male dual credit participants were slightly more likely than female dual credit participants to remain at UH (64.0% vs. 61.7%).
- Economically disadvantaged dual credit participants were more likely than non-economically disadvantaged students to remain at UH (67.8% vs. 60.5%).

Table 16. First Postsecondary Enrollment Term and 1-Year Retention Rate by Student Attributes

HIGH SCHOOL GRADUATION YEAR	Graduates (Class of 2003-2009)	First Postsecondary Enrollment Term After High School Graduation											
		First Fall			First Spring			Second Fall			Second Spring		
		# Enrolled	% of Cohort	1-Yr Retention	# Enrolled	% of Cohort	1-Yr Retention	# Enrolled	% of Cohort	1-Yr Retention	# Enrolled	% of Cohort	1-Yr Retention
TOTAL	75,829	37,041	49%	78%	3,555	5%	53%	2,873	4%	54%	1,082	1%	47%
DUAL CREDIT	2,885	2,257	78%	91%	117	4%	65%	79	3%	71%	34	1%	71%
DOE STATE RACE/ETHNICITY ROLL UP													
Native Hawaiian	343	218	64%	76%	21	6%	62%	11	3%	82%	6	2%	67%
Pacific Islander	17	7	41%	86%	2	12%	50%	1	6%	0%			
Asian	1,576	1,320	84%	95%	50	3%	76%	29	2%	69%	14	1%	79%
White/Portuguese	570	420	74%	88%	29	5%	52%	26	5%	65%	6	1%	33%
AI/AN/Black/Hispanic	63	47	75%	81%	3	5%	33%	3	5%	67%	3	5%	100%
Multiple/Unknown	316	245	78%	91%	12	4%	67%	9	3%	89%	5	2%	80%
GENDER													
Female	1,857	1,446	78%	91%	80	4%	65%	47	3%	72%	21	1%	71%
Male	1,028	811	79%	90%	37	4%	65%	32	3%	69%	13	1%	69%
ECONOMIC STATUS													
Econ Disadvantaged	798	582	73%	88%	40	5%	63%	24	3%	79%	10	1%	80%
Non-Econ Disadv	2,087	1,675	80%	92%	77	4%	66%	55	3%	67%	24	1%	67%
Econ Disadvantaged	798	582	73%	88%	40	5%	63%	24	3%	79%	10	1%	80%
RS Scholarship	584	447	77%	92%	29	5%	69%	16	3%	75%	8	1%	88%
No RS Scholarship	214	135	63%	76%	11	5%	45%	8	4%	88%	2	1%	50%
NO DUAL CREDIT	72,944	34,784	48%	78%	3,438	5%	52%	2,794	4%	54%	1,048	1%	46%
DOE STATE RACE/ETHNICITY ROLL UP													
Native Hawaiian	17,477	5,897	34%	64%	731	4%	43%	601	3%	46%	250	1%	37%
Pacific Islander	2,547	705	28%	60%	127	5%	42%	105	4%	32%	41	2%	27%
Asian	30,351	17,759	59%	84%	1,425	5%	60%	1,112	4%	60%	374	1%	55%
White/Portuguese	10,892	5,323	49%	76%	547	5%	53%	474	4%	55%	167	2%	49%
AI/AN/Black/Hispanic	3,273	1,284	39%	70%	197	6%	48%	152	5%	56%	72	2%	38%
Multiple/Unknown	8,404	3,816	45%	77%	411	5%	47%	350	4%	54%	144	2%	43%
GENDER													
Female	35,534	18,334	52%	80%	1,821	5%	56%	1,453	4%	56%	560	2%	50%
Male	37,407	16,449	44%	75%	1,617	4%	48%	1,341	4%	52%	488	1%	41%
Unknown	3	1	33%	0%									
ECONOMIC STATUS													
Econ Disadvantaged	21,512	7,362	34%	68%	1,059	5%	48%	839	4%	51%	339	2%	42%
Non-Econ Disadv	51,432	27,422	53%	80%	2,379	5%	54%	1,955	4%	55%	709	1%	48%

DOE student attributes from the student’s senior year of high school

AI/AN/Black/Hispanic includes American Indian, Alaska Native, Black, and Hispanic

1-Yr Retention: counts enrollment at any postsecondary institution one year after first postsecondary enrollment term after high school graduation

Fall term includes enrollments that begin August-December; Spring term includes enrollments that begin January-May

RS Scholarship – a GEAR UP Running Start scholarship received at any time

Of the graduates from the Classes of 2003 to 2009, all dual credit sub-populations had higher 1-year retention rates as compared to non-dual credit graduates.

- Of the dual credit participants, Native Hawaiian students who enrolled in the fall term immediately following high school graduation had the lowest 1-year retention rate of 76% (the overall 1-year retention rate for all dual credit participants who enroll in postsecondary in the first fall was 91%). However, the 1-year retention rates of Native Hawaiian dual credit participants who enrolled in the first fall term was 12% higher than the 1-year retention rates of Native Hawaiian non-dual credit graduates (64%).

- The 1-year retention rates of non-dual credit Pacific Islander graduates was the lowest among all ethnicity sub-populations, regardless of first term of postsecondary enrollment. However, please note these percentages are affected by the small number of dual credit Pacific Islander graduates.
- The 1-year retention rates of male dual credit participants that started in the first fall (90%) was 15% higher than the 1-year retention rates of male non-dual credit graduates (75%).
- The 1-year retention rates of economically disadvantaged dual credit participants that received a GEAR UP Running Start scholarship and started in the first fall (92%) was 16% higher than the 1-year retention rates of economically disadvantaged dual credit participants who did not receive a Running Start scholarship (76%), and was equal to the 1-year retention rates of non-economically disadvantaged dual credit participants.

Table 17. Attributes of Students who Earned a Degree or Certificate

HS Graduates Class of 2003-2009	DUAL CREDIT					NO DUAL CREDIT				
	Enr in PS (within 2 yrs)	Deg/Cert Earned (by 2012)	% Award Earned (Anywhere)	Bachelor or Higher (by 2012)	% Bachelor or Higher (of those who earned an award)	Enr in PS (within 2 yrs)	Deg/Cert Earned (by 2012)	% Award Earned (Anywhere)	Bachelor or Higher (by 2012)	% Bachelor or Higher (of those who earned an award)
TOTAL	2,487	1,257	50.5%	938	74.6%	42,064	14,410	34.3%	7,285	50.6%
DOE State Race/Ethnicity Roll Up										
Native Hawaiian	256	91	35.5%	41	45.1%	7,479	1,632	21.8%	521	31.9%
Pacific Islander	10	3	30.0%	1	33.3%	978	141	14.4%	57	40.4%
Asian	1,413	790	55.9%	613	77.6%	20,670	8,391	40.6%	4,288	51.1%
White/Portuguese	481	206	42.8%	158	76.7%	6,511	2,291	35.2%	1,373	59.9%
AI/AN/Black/Hispanic	56	22	39.3%	12	54.5%	1,705	436	25.6%	210	48.2%
Multiple/Unknown	271	145	53.5%	113	77.9%	4,721	1,519	32.2%	836	55.0%
Gender										
Female	1,594	829	52.0%	614	74.1%	22,168	8,398	37.9%	4,456	53.1%
Male	893	428	47.9%	324	75.7%	19,895	6,012	30.2%	2,829	47.1%
Unknown						1		0.0%		
Economic Status										
Econ Disadvantaged	656	301	45.9%	213	70.8%	9,599	2,656	27.7%	986	37.1%
Non-Econ Disadv	1,831	956	52.2%	725	75.8%	32,465	11,754	36.2%	6,299	53.6%
Econ Disadvantaged	656	301	45.9%	213	70.8%					
RS Scholarship	500	238	47.6%	176	73.9%					
No RS Scholarship	156	63	40.4%	37	58.7%					

DOE student attributes from the student's senior year of high school

AI/AN/Black/Hispanic includes American Indian, Alaska Native, Black, and Hispanic

RS Scholarship – a GEAR UP Running Start scholarship received at any time

Please note that this table only reflects degrees or certificates earned through 2012, and does not account for students who are still enrolled (either at the same institution or at a different institution).

The percentage of bachelor's degree or higher awards earned through 2012 does not include awards earned from institutions that do not report the award detail to NSC.

Of the 2,487 dual credit graduates from the Class of 2003 to 2009 that enrolled in postsecondary within two years of graduating, 1,257 (50.5%) earned a degree or certificate by 2012. Of the 42,064 non-dual credit graduates from the Class of 2003 to 2009 that enrolled in postsecondary within two years of graduating, 14,410 (34.3%) earned a degree or certificate by 2012.

- Of the 1,257 dual credit participants that earned an award, 938 (74.6%) earned a bachelor's degree or higher. Of the 14,410 non-dual credit graduates that earned an award, 7,285 (50.6%) earned a bachelor's degree or higher.

- Both dual credit and non-dual credit Pacific Islander graduates who entered postsecondary were the least likely to have earned a degree or certificate by 2012. The race/ethnicity group that was next least likely to have earned a degree or certificate was Native Hawaiians.
 - Native Hawaiian and Pacific Islander students were also the least likely to have earned a bachelor's degree or higher for those who did earn an award.
- Both dual credit and non-dual credit male graduates were less likely than female graduates to have earned an award. Among dual credit participants, although females were more likely than males to have earned an award, a slightly lower percentage of female students who earned an award earned a bachelor's degree or higher.
- Both dual credit and non-dual credit economically disadvantaged students were also less likely to have earned an award. Of the graduates that earned an award, economically disadvantaged dual credit students were less likely to earn a bachelor's degree or higher than non-economically disadvantaged dual credit students (70.8% vs. 75.8%), but that percentage was much higher than non-dual credit economically disadvantaged students (37.1%).
 - Of the economically disadvantaged dual credit participants, students who had received a GEAR UP Running Start scholarship were more likely to have earned an award (47.6% vs 40.4%), and of those who earned an award were more likely to earn a bachelor's degree or higher (73.9% vs 58.7%), as compared to economically disadvantaged dual credit participants who did not receive a GEAR UP Running Start scholarship.

Scholarship Opportunity

Based on the postsecondary enrollment and award data outcomes for the DOE Classes of 2003 to 2012, participants in dual credit programs were successful in earning high school and college credit (85.9% earned a grade of C or better and 90.9% earned a grade of D or better). Dual credit participants were more likely than non-participants to:

- Enroll in college within two years of high school graduation (86.0% vs. 58.0% for the Classes of 2003 to 2010)
- Enroll in college in the fall term immediately following high school graduation (78% vs. 48% for the classes of 2003-2012)
- Persist in postsecondary one year after initial entry (1-year retention rates 13-25% higher than non-dual credit participants for the Class of 2003 to 2009)
- Enroll in a 4-year institution (65.4% vs. 35.5% for the Class of 2003 to 2010)
- Earn a degree or certificate (50.5% vs. 34.3% for the Class of 2003 to 2009)
- Earn a bachelor's degree or higher (74.6% vs. 50.6%)

In general, dual credit participants had better postsecondary enrollment and award outcomes than graduates who did not participate in a dual credit program. However, among dual credit participants, differences in participation and postsecondary outcomes were observed among sub-populations. Relative to their proportion of the DOE graduating classes, Native Hawaiian and Pacific Islanders, males, and economically disadvantaged students had lower dual credit participation rates. Additionally, these sub-populations also had lower college-going rates, and of the students who did enroll in postsecondary within two years, these students were less likely to remain enrolled after one year and less likely to have earned a degree or certificate. Though the Native Hawaiian, Pacific Islander, male, and economically disadvantaged sub-populations had lower postsecondary outcomes relative to other dual credit participants, their postsecondary outcomes were better than students in these sub-populations who did not participate in dual credit. These underserved sub-populations were also more likely to remain at UH if they continued in postsecondary after high school graduation.

Economically disadvantaged dual credit participants who received financial support via the GEAR UP Running Start scholarship had higher college-going rates, higher one-year retention rates in postsecondary, and were more likely to have earned a degree or certificate as compared to economically disadvantaged dual credit participants who did not receive a scholarship. The postsecondary outcomes for economically disadvantaged dual credit participants who received a GEAR UP Running Start scholarship were closer to the outcomes of non-economically disadvantaged dual credit participants. This appears to indicate that providing financial support for economically disadvantaged students and/or getting these students familiarized with financial aid opportunities and the financial aid process may help to close the achievement gaps for this group.

A dual credit scholarship that targets these underserved students in their early high school years (9th/10th grades) with the promise of dual credit tuition assistance and a scholarship for their first year of college at UH could help to close the participation, enrollment, and completion gaps for these groups. By getting these students to envision themselves attending UH at the start of high school, providing early exposure to the college experience, and providing the financial support needed to attend UH immediately following high school graduation, this scholarship may help to improve the odds of getting more under-represented students successfully transitioning between secondary and postsecondary education. Increasing the number of students moving through this critical juncture in Hawai'i's education pipeline will serve to support the DOE, UH, and state goals of increasing Hawai'i's educational capital.

Conclusion and Future Research

The goal of accelerated learning programs is to provide a bridge between secondary and postsecondary education with a rigorous academic curriculum that satisfies both high school diploma and college degree requirements. Participation in Hawai'i's dual credit programs has grown in the past 10 years, and relative to other DOE graduates who did not participate in dual credit programs, dual credit students had higher college-going rates (particularly in the fall immediately following high school graduation), higher one-year retention rates in postsecondary institutions, were more likely to attend a four-year institution, and were more likely to have earned a degree or certificate. Dual credit programs offer students a plethora of curricular options as well as a glimpse of the college experience.

Future research is needed to deepen our understanding of the role accelerated learning options play in facilitating student transition from secondary to postsecondary education. A comparison of the student outcomes for Hawai'i's two most popular accelerated learning options, Advanced Placement and dual credit, could help to identify any differences between the programs or identify ways the programs can complement each other to help the state maximize limited resources. We would also encourage a mixed methods design for this study to more fully understand the "type" of student that accesses dual credit versus Advanced Placement, the organizational or structural facilitators and barriers to participation in either program, and the way schools utilize the two programs (e.g. charter schools versus non-charter schools). Additionally, we highly recommend conducting a comprehensive survey of the over 5,000 dual credit participants to understand the personal benefits, motivations, and success factors of the dual credit population.

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