External Evaluation of the Transition to Online Learning Within Hawai'i's Early College Program¹

Final Report

Prepared for

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RTI Project Number 0218049.000.001

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R372A20018 to the Hawai'i State Department of Education. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.



¹ Student administrative data for this report were provided by the Hawai'i Data eXchange Partnership (DXP ID 761). Authors appreciate the use of these data and the assistance and advice of Jessica Robles and Laurie Baker on this work.

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Executive Summary

Background

Over the last 10 years, the Early College program in Hawai'i, which provides public school students in grades 9-12 with the opportunity to participate in "sheltered" college classes (i.e., college classes composed only of their high school peers), has become the state's most popular dual credit program. Eighteen percent of high school completers (1,964 students) from the Class of 2019 participated in Early College prior to their high school graduation.² This is particularly notable since previous studies of dual credit programs in Hawai'i — including Early College —found that students who participated in these programs, particularly those from groups underrepresented in higher education (defined as economically disadvantaged, Native Hawaiian, and/or Pacific Islander students in Hawai'i), were more likely to enroll, persist, and graduate from college than their peers who did not participate in dual credit programs.³

Study Purpose and Methods

Prior to the COVID-19 pandemic, the vast majority of Early College classes occurred at students' high school campuses in an effort to eliminate transportation barriers for students and provide dual credit opportunities during the school day. However, during the Spring 2020 term, the COVID-19 pandemic required educational activities at both high school and college campuses to quickly shift online. Surveys of Early College students conducted by the Hawai'i State Department of Education (HIDOE) and Hawai'i P-20 Partnerships for Education (Hawai'i P-20) during the Spring 2020 and Fall 2020 terms, and anecdotal evidence from Early College practitioners in Hawai'i, indicated that there were challenges associated with transitioning Early College classes online and that additional work was needed to improve high school student readiness for online college classes, student engagement in these courses, and academic and nonacademic support services for participating students.

To further study the challenges encountered, lessons learned, and considerations for future offerings for online Early College courses, Hawai'i P-20 contracted with RTI International (RTI) on a short-term evaluation beginning in Spring 2021. This external evaluation examined the effect of the transition to online course offerings on Hawai'i's Early College program. It had four aims:

 Identify the challenges associated with the transition of all Early College classes online and the impact of this transition on student participation and success in Early College classes.

² Hawai'i Data eXchange Partnership (n.d.) College & Career Readiness Indicators Report (CCRI). Accessed from https://www.hawaiidxp.org/ccri-reports/

³ Hawai'i P-20 Partnerships for Education (2020).

- Determine the kinds of solutions that were developed to meet these challenges.
- Highlight key lessons learned related to online Early College courses.
- Make recommendations for offering online Early College courses and enhancing student access to these courses.

To address these aims, RTI conducted a multimethod analysis using student data for Early College participants provided by the Hawaii Data eXchange Partnership (DXP). These data tracked Early College participation and outcomes from Summer 2018 through Spring 2021 and permitted conducting analyses of Early College enrollment and course success by sex, race/ethnicity, economic status, academic grade level, school type (e.g., HIDOE/Charter designation, Title I status, and locale), and course subject area to determine the impact of the transition to online Early College course offerings on each of these variables. Additionally, RTI obtained modality data to examine both the enrollment in different course modalities and the success of students taking courses in different modalities. To solicit information about the perceptions of the transition to online learning, in January and February 2022, RTI conducted online surveys of University of Hawai'i (UH) Early College instructors and high school Early College coordinators and led focus groups of UH and HIDOE Early College coordinators, which included questions about the challenges they encountered, the lessons they learned, and their thoughts about best practices to enhance online instruction. Additionally, findings from student surveys conducted by HIDOE and Hawai'i P-20 in Spring 2020 and Fall 2020 highlight their perceptions of the transition to online learning.

Challenges Associated with the Transition to Online Learning

In surveys and focus groups, high school staff, UH faculty and staff, and Early College students reported their experiences of challenges during the mandated, sudden transition to online learning for Early College courses during Spring 2020.

- High school staff had to help students learn how to access and use the learning management platform and software, but they themselves needed support in shifting to online learning.
- UH instructors needed to develop instructional approaches to ensure that the quality of instruction and student interactions remained consistent to pre-pandemic practices.
- Students missed getting real-time responses from their instructors and interacting with their peers. Additionally, some had family obligations, which made learning remotely more difficult.

Examining educational administrative data about student enrollment and success showed challenges faced by Early College high school staff, UH coordinators, and students.

 Analyses showed a decline in Early College course offerings and enrollment from Spring 2020 to Fall 2020. Prior to the COVID-19 pandemic, course offerings and enrollment had been increasing, which suggested that the onset of the COVID-19 pandemic and transition to online learning did pose some early limitations. However, for most groups, Early College enrollment numbers in Spring 2021 were higher than they had been in Spring 2019.

- In particular, male students suffered more from the rapid switch to online learning during the COVID-19 pandemic than females. Before the COVID-19 pandemic, males enrolled less frequently than females. From Spring 2020 to Fall 2020, male enrollment declined more than female enrollment, and from Fall 2020 to Spring 2021, the male enrollment rate of recovery was less than the female enrollment rate of recovery. However, although males' Spring 2021 enrollment number was lower than it had been in Spring 2020, it was about the same as it had been in Spring 2019.
- Regarding course success, measured by earning a letter grade of "C" or better for the purposes of this report, most groups of students did not experience a statistically significant decline in their Early College success rates from Spring 2019 to Spring 2020, with the exception of males and 9th graders; however, both groups had statistically significant positive increases from Spring 2020 to Spring 2021. For males and 9th grade students, the rate of earning a "C" or better was higher in Spring 2021 than it had been in Spring 2019.
- Rural schools had a statistically significant decline in success rate from Spring 2019 to Spring 2020, but they did not have a statistically significant recovery from Spring 2020 to Spring 2021.
- Early College students enrolled in science courses experienced the steepest decline in their success rate during Spring 2020. Only 73% of them earned a "C" or better; however, by Fall 2020, 86% of Early College students enrolled in science courses earned a "C" or better.

Solutions Developed to Address the Challenges Associated with the Transition to Online Learning

Many Early College students, instructors, and staff were willing to adapt to an online format, and they became more comfortable with it over time.

- In focus groups, participants noted that the online format meant that UH instructors did not have to travel to different high schools to teach Early College courses. In the past, the vast majority of Early College courses were offered in a face-to-face format, which required UH instructors to travel to individual high schools to teach. With online learning, students from different schools could register for and participate in these courses.
- In the survey, UH instructors indicated that they increased collaboration efforts with high school Early College coordinators as a result of the COVID-19 pandemic. UH faculty indicated they alerted the high school Early College coordinator about problematic attendance or low grades during the COVID-19 pandemic at a higher percentage than they did before the pandemic.
- High school Early College coordinators noted that they could expand their reach to more students with online learning.

• In Fall 2020, about two-thirds of Early College student survey respondents reported that, based on their experiences with online Early College courses, they would be interested in taking additional online Early College courses.

An examination of the administrative data reflects the willingness for all parties involved with Early College to adapt teaching and learning in an online setting.

- By Spring 2021, Early College course offerings not only rebounded, but also increased from Spring 2019 (198 courses in Spring 2021 compared with 187 courses in Spring 2019).
- In each term, even during the beginning of the COVID-19 pandemic in Spring 2020, on average, 87% of students earned a grade of "C" or better in their Early College courses.
- This rate of success (i.e., 87% or higher) held in both synchronous and asynchronous courses in Fall 2020 and Spring 2021.
- Many groups that had experienced a decline in enrollment had recovered to some extent by Spring 2021. For example, Native Hawaiian and Filipino students' rates declined from Spring 2020 to Fall 2020 and increased from Fall 2020 to Spring 2021. In Spring 2021, their enrollment numbers were about the same or higher than they had been in Fall 2019. Similarly, 10th and 11th grade students' enrollment declined from Spring 2020 to Fall 2020 and increased from Fall 2020 to Spring 2021 and were the same or higher than they had been in Fall 2019.
- Although many groups experienced a slight decline in course success when the COVID-19 pandemic began, few differences were statistically significant. From Spring 2019 to Spring 2020, the decrease in the percentage of students earning a "C" or better was not statistically significant for any group except males and 9th graders.

Considerations for Continuing to Offer Online Early College Courses

Many Early College students, instructors, and staff expressed an interest in continuing to offer online Early College classes. They noted some considerations for doing so:

- During the COVID-19 pandemic, some courses were shared across schools to optimize enrollment and provide equity of access. If the administrative challenges to this approach (e.g., Family Educational Rights and Privacy Act [FERPA], Title IX, general oversight) could be managed or streamlined, having shared courses could lead to long-lasting economies of scale that have the potential to connect more students to more courses across the state. To best support students, it is also important that these courses are intentionally selected to ensure they will help students further their progress to a degree.
- UH and HIDOE Early College coordinators should collaborate to specify the skills that students need to succeed as online learners in synchronous and asynchronous Early College classes. Some students may be less prepared than others for online learning. Early College coordinators and/or instructors could develop a self-assessment to screen for prepared online learners. Then, they could devise strategies to assist unprepared students to ready themselves for online instruction. Many collegiate and professional learning opportunities continue to be provided in an online format; it is to students' advantage to gain these skills early.

Both synchronous and asynchronous online Early College classes should continue to be offered. In the survey administered by RTI, about half of UH instructors (48%) reported that synchronous course delivery was more effective than asynchronous course delivery. Synchronous classes were more like in-person courses with set times to engage with the coursework, instructor, and other students. Yet, the rate of students earning a "C" or better is about the same in synchronous and asynchronous courses, and some students benefited from the flexibility that asynchronous instruction allowed.

Considerations for Enhancing Student Access to Online Early College Courses

- Strong communication practices between high school Early College coordinators, UH
 Early College coordinators, and UH instructors should be sustained to help all parties
 work more effectively for students. Ongoing efforts to unify staff in services to
 students' success will continually enhance the benefits students receive.
- Students should have a clear person to contact at the high school to help them address online learning as well as general questions/issues. Particularly in an online environment, students may need more assistance creating their schedule, connecting to faculty, and seeking help when they encounter difficulties in class. It is important for students to understand the different roles and responsibilities of their high school Early College coordinator, their UH Early College coordinator, and their instructors.
- In-person support should be offered to those who need it. Students in online courses may benefit from having an established time and place to connect with other students and get assistance from staff. This support may have a particular benefit for those in asynchronous courses. Either the high school or the college could provide this in-person support based on which institution has the greatest capacity to do so.

1. Information About the Early College Program in Hawai'i and Purpose of the External Evaluation

In 2020, educators and students across the world were forced to rapidly transition to online learning as a result of the COVID-19 pandemic. Hawai'i was no exception, and educational institutions at all levels (early learning, K–12, and postsecondary) shifted to virtual instruction in the middle of the Spring 2020 semester. This shift to online learning was particularly complicated for students participating in dual credit programs like Early College because students simultaneously held status and responsibilities as high school and college students. This study seeks to better understand how Hawai'i's Early College program was impacted by the transition to online learning, how instructors and students responded to the transition to online learning, and what practices were developed to address challenges associated with the transition of Early College courses to an online format.

Identifying challenges associated with transitioning Early College courses online and solutions that were developed in response to these challenges will provide a foundation to recommended next steps for the Hawai'i State Department of Education (HIDOE), University of Hawai'i (UH), and Hawai'i P-20 Partnerships for Education (Hawaii P-20) to address long-term challenges and enhance access to and success in online Early College courses in the future.

This report provides results from these analyses in the following sections:

- Section 1: Background includes information about the Early College program in Hawaii, the purpose of the evaluation, and the study design.
- Section 2: Enrollment in Early College Courses During the COVID-19 pandemic reports enrollment numbers in Early College courses, overall, by student demographic group, by school type, and by course type.
- Section 3: Success in Early College Courses During the COVID-19 Pandemic reports the rates at which students taking Early College courses earned a grade "C" or higher.
- Section 4: Insights from Surveys presents perception data collected from the UH instructor and high school Early College coordinator surveys.
- Section 5: Insights from Focus Groups described the themes that emerged during the four focus group discussions with UH Early College coordinators and HIDOE high school Early College coordinators.
- Section 6: Lessons Learned summarizes conclusions from all analyses.

Dual enrollment programs—referred to as "dual credit" programs in the state of Hawai'i—allow high school students to take college courses and earn both high school and college credit, which can give students an advantage in preparing for postsecondary education. College courses are generally more academically challenging than high school courses,

requiring students to acquire not only key content knowledge, but also key cognitive strategies, such as problem formulation, interpretation, and communication.⁴ Further, in college, students are expected to take more responsibility for their education and work more independently.⁵ By taking college courses in high school, students gain the skills they need to meet the expectations of college courses. Students, particularly those from populations underrepresented in higher education, gain confidence in their abilities and momentum toward a future college degree.

Nationally, participation in dual credit programs has increased dramatically over the past two decades. From 1995 to 2015, dual credit participation in public 4-year institutions more than tripled (from 72,000 to 220,000 students) and more than quintupled in 2-year institutions (from 163,000 to 745,000 students). However, opportunities for dual credit are not equally distributed. For example, students whose parents had higher levels of education more often took courses for postsecondary credit in high school. Compared with 42% of those whose parents earned a bachelor's degree or higher, only 26% of those whose parents had not completed high school took postsecondary-level credit courses.

In Hawai'i, collaboration between the HIDOE and UH systems has led to the creation of several dual credit programs in the state. The state's first dual credit program, Running Start, began in 2001 and is still in existence. This program allows high school students in grades 9–12 to enroll in 100-level and above college courses alongside "regular" college students and utilizes a tuition-based model. Historically, most of the college courses taken by Running Start students occurred in-person at the college campus.

Due to barriers which prevented students from participating in Running Start — including but not limited to the price of tuition, transportation to a UH campus, and the alignment of start and end times of courses with high school bell schedules — a new dual credit program was developed to allow more students to participate in dual credit opportunities. In Summer 2012, the first sheltered dual credit college courses were offered at high school campuses, and this early interest by several high schools, coupled with a grant focused on increasing the participation of underrepresented students in dual credit opportunities from 2014 to 2017, led to the creation and expansion of the Early College program in Hawai'i. The Early College program, which provides students in grades 9–12 with the opportunity to participate in "sheltered" college courses (i.e., college courses composed only of their high school peers

⁴ Conley, D. T. (2012). *A Complete Definition of College and Career Readiness*. Eugene, OR: Educational Policy Improvement Center.

⁵ Appleby, D. C. (2014). How do college freshmen view the academic differences between high school and college? *Psychology Teacher Network*. Retrieved from http://www.apa.org/ed/precollege/ptn/2014/08/college-freshmen.aspx.

⁶ Marken, S., Gray, L., & Lewis, L. (2013). *Dual Enrollment Programs and Courses for High School Students at Postsecondary Institutions: 2010–11* (NCES 2013-002). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

⁷ National Center for Education Statistics. (2019). *Dual Enrollment: Participation and Characteristics. NCES: 2019-176.* Washington, DC. U.S. Department of Education.

and charged based on a flat instructional cost), became funded by the Hawai'i State Legislature in 2017 for students at HIDOE schools and is now the state's most popular dual credit program. All 10 UH campuses offer Early College courses, which are taught by UH instructors. Prior to the COVID-19 pandemic, nearly all Early College courses occurred at students' high school campuses.

Student participation in dual credit programs has grown exponentially over the last few years in Hawai'i. For the Class of 2011, only 5% of public high school completers (601 students) graduated with dual credit; for the Class of 2019, 22% of public high school completers (2,388 students) graduated with dual credit. This growth can largely be attributed to the growth in the number of students participating in Early College, with 18% of high school completers (1,964 students) from the Class of 2019 participating in Early College. The number of public high schools offering Early College opportunities to their students has also increased dramatically. In 2012–2013, only four high schools participated in Early College, but by 2019–2020, 47 schools did. Studies of dual credit programs in Hawai'i, including Early College, have found that students who participate in dual credit programs, particularly those from groups who are underrepresented in higher education (defined as economically disadvantaged, Native Hawaiian, and Pacific Islander students in Hawai'i), are more likely to enroll, persist, and graduate from college than their peers who did not participate in dual credit programs.

In Spring 2020, the COVID-19 pandemic required educational activities to quickly shift online. Student surveys conducted by HIDOE and Hawai'i P-20 during the Spring 2020 and Fall 2020 terms and anecdotal evidence from Early College practitioners in Hawai'i indicated that there were challenges associated with transitioning Early College courses online and that additional work needed to be done to improve high school student readiness for online college courses, engagement in courses, and academic and nonacademic support during courses. To further study the challenges encountered and lessons learned in connection with the transition of Early College courses online due to the COVID-19 pandemic, Hawai'i P-20 contracted with RTI International (RTI) on a short-term formative evaluation beginning in Spring 2021. This study examines the effect of the transition of courses online during the COVID-19 pandemic on Hawai'i's Early College program and has four aims:

- Identify challenges associated with the transition of all Early College courses online and the impact of this transition on student participation and success in Early College courses.
- Determine the kinds of solutions that have been developed for these challenges.
- Highlight key lessons learned related to online Early College courses.
- Recommend next steps to enhance student access to online Early College courses.

⁸ Hawai'i P-20 Partnerships for Education (2020). Data provided by the Hawai'i Data eXchange Partnership (DXP ID666).

To meet these four aims, this study assesses the participation and success rates of students in Early College before and during the COVID-19 pandemic, and factors in the perspectives of high school Early College coordinators, UH Early College coordinators, and UH instructors on the challenges they faced and key lessons learned related to online Early College courses.

1.1 Study Data and Methods

To address these study aims, RTI conducted a multimethod analysis using different sources of data: student data for Early College participants, focus groups of UH and high school Early College coordinators, and surveys of UH Early College instructors and high school Early College coordinators. Additionally, in Spring 2020 and Fall 2020, the Hawai'i State Department of Education, Office of Curriculum and Instructional Design, conducted surveys of students, and this report includes some of those results as well.

The Hawai'i Data eXchange Partnership (DXP) provided the student-level Early College participation data, which tracks Early College participation and outcomes from Summer 2018 through Spring 2021. These data include all students who participated in Early College courses during this time frame. Each term is a separate snapshot of all students enrolled in Early College courses at that time. With these data, RTI could analyze the effect of the transition to online learning on Early College enrollment and success by student, school, and course characteristics. Additionally, RTI received information about the modality of the course instruction; that is, whether the course met face-to-face, as a synchronous virtual course, or an asynchronous virtual course.

- Student characteristics include gender, race/ethnicity, economic status, and academic grade level. Analyses of student characteristics address questions about whether the switch to online courses was more challenging for some types of students.
- School characteristics include HIDOE/Charter designation, Title I status, and locale. These data allowed for the analysis of whether the switch to online courses was more challenging in different educational settings.
- In examining course subject areas, RTI could determine whether Early College courses in some subject areas faced different challenges with the switch to online learning. Hawai'i P-20 worked with several individuals involved in academic affairs at UH to group the 230 Early College courses taken into nine subject area categories.
- With the modality data, RTI could report the distribution of course modality each term and determine the course success rates within each modality.

The administrative data allowed for the examination of Early College course enrollment and success. Enrollment measures participation in Early College courses. In this report, students

⁹ Vincent, Wendi. (2021). "Early College Survey: Spring 2020 Results Overview" and "Early College Survey: Fall 2020 Results Overview." Hawaii Department of Education Office of Curriculum and Instructional Design.

are counted once for each term in which they took an Early College course, even if they took more than one course. Success in Early College courses is measured by earning a letter grade of "C" or a "D" in the course. Though this is not consistent across all Early College courses, maintaining a "C" average or better is generally required to earn college credit; students who earn a "D" grade might only receive high school credit. For this metric, if students took more than one course in a term, each course was counted separately. The courses' success rates for students were averaged for each term. In reporting by course level, RTI counted each course separately, even if a student enrolled in more than one course in a term so that analyses focus on trends within subject areas.

In addition to reporting Early College enrollment and success measures, RTI also conducted tests of statistical significance to compare and analyze enrollment and success trend changes between terms as a result of the COVID-19 pandemic. For enrollment counts, because data for students not participating in Early College were not included as part of this evaluation, and enrollment in Early College could not be calculated as a percentage of the whole Hawai'i public high school student population, only tests of "practical significance" could be conducted. These tests measure the percentage change in enrollment between terms by calculating the difference in enrollment and dividing that difference by the number of students enrolled in the first semester being compared (e.g., when comparing Fall 2019 to Spring 2020, the enrollment counts in Fall 2019 were used as the denominator to calculate the percentage change in enrollment). To compare and analyze the differences in success in Early College courses between terms, the percentage of students earning a "C" or better and "D" or better were calculated for each term. A two-sample t-test of proportions was then conducted and p-values were analyzed to determine if the differences in the percentage of students earning a "C" or better (or "D" or better) between two terms was statistically significant. These comparisons were year-to-year comparisons; Fall terms were only compared to Fall terms, and Spring terms were only compared to Spring terms because natural variance in student success between Fall and Spring terms was observed, and there were concerns that comparing Fall to Spring term data could artificially inflate the testing statistic.

RTI used two approaches to collect data about the challenges and successes that high school and UH Early College staff, as well as UH instructors, experienced during the switch to online learning: surveys and focus groups. RTI conducted web-based surveys in January–February 2022 of high school Early College coordinators and UH instructors. The surveys included questions related to the challenges and successes experienced as instructional practices changed during the COVID-19 pandemic and the supports offered to students during this time.

For the high school survey, RTI sought one respondent per HIDOE or charter school, and for the UH instructor survey, RTI sought responses from instructors who taught one or more Early College classes during the Spring 2020 to Fall 2021 terms. RTI used the Alchemer program to collect survey responses. After launching the survey, RTI sent reminder emails to non-respondents weekly throughout the survey window. The overall response rates for the high school Early College coordinator survey and the UH instructor survey were 82% (42 respondents) and 40% (152 respondents), respectively. It is worth noting that of the 683 UH instructors included in the survey sample, approximately 40% (279 faculty members) were not teaching in Spring 2022 and may not have seen the email with the survey request.

RTI conducted focus groups with 22 Early College representatives from 13 HIDOE high schools and 9 UH campuses. The focus groups allowed a more open-ended discussion of Early College experiences during the COVID-19 pandemic and perceptions and recommendations related to future offerings of online Early College courses.

2. Enrollment in Early College Courses During the COVID-19 Pandemic

Key Findings:

- In the terms before the COVID-19 pandemic (Fall 2018 to Spring 2020), Early College course offerings and enrollment were increasing.
- In Fall 2020, the number of Early College course offerings and total enrollment declined from Spring 2020 levels.
- By Spring 2021, Early College offerings and enrollment had rebounded to pre-pandemic numbers. For almost all groups, enrollment counts in Spring 2021 were higher than they had been in Spring 2019. For example, for both economically disadvantaged and more advantaged students, enrollment numbers were higher in Spring 2021 than they had been in Spring 2019.
- Before the COVID-19 pandemic, males enrolled less frequently than females; from Spring 2020 to Fall 2020, male enrollment declined more than female enrollment, and from Fall 2020 to Spring 2021, the male enrollment rate of recovery was less than the female enrollment rate of recovery. However, in Spring 2021, although male enrollment was lower than it had been in Spring 2020, it was about the same as it had been in Spring 2019 before the COVID-19 pandemic began.
- In each term before the COVID-19 pandemic, 9th grade students had lower enrollment than other grades, and from Spring 2020 to Fall 2020, their enrollment declined the most; 12th grade students' enrollment increased from Spring 2020 to Fall 2021.
- Students in Title I schools had a smaller enrollment decline from Spring 2020 to Fall 2020 and a greater rebound in enrollment from Fall 2020 to Spring 2021 than their peers in non-Title I schools.

In the semesters before the COVID-19 pandemic (Fall 2018-Spring 2020), the number of Early College courses offered (Exhibit 2-1) and the number of students taking these courses (Exhibit 2-2) increased. In Fall 2018, 168 courses were offered, and 2,265 students participated in the Early College program. By Spring 2020, 2,542 students were enrolled in 216 Early College courses. Students typically enroll in courses during the term prior to the course being taught. Students would have enrolled in Fall 2019 for their Spring 2020 courses, and in Spring 2020, they would have enrolled for Fall 2020 courses. Students had registered for Spring 2020 courses without knowing about the coming COVID-19 pandemic. Then in Spring 2020, when the COVID-19 pandemic restrictions had begun, students registered for the Fall 2020 term. According to the administrative data RTI received from the Hawaiii DXP, during the Fall 2020 term, the number of courses offered declined to 170 and the number of students enrolled declined to 2,079. However, by Spring 2021, the number of courses offered had rebounded to 198 courses, which is fewer than in Spring 2020 but greater than the numbers in Fall and Spring 2019. Student enrollment numbers had rebounded to 2,331 in the Spring 2021 term, which is slightly higher than student enrollment numbers during the 2018-2019 school year (Fall 2018 and Spring 2019 terms).

250 216 198 187 200 181 170 168 150 100 50 0 Fall 2019 Spring 2020 Fall 2020 Fall 2018 Spring 2019 Spring 2021

Exhibit 2-1. Number of Early College Courses Offered Each Term, Fall 2018 to Spring 2021

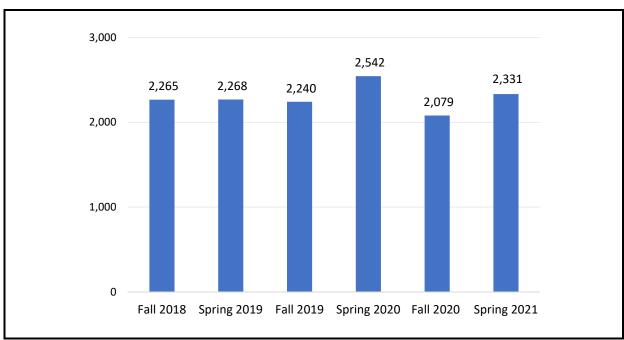


Exhibit 2-2. Enrollment in Early College Courses, Fall 2018 to Spring 2021, All Students

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

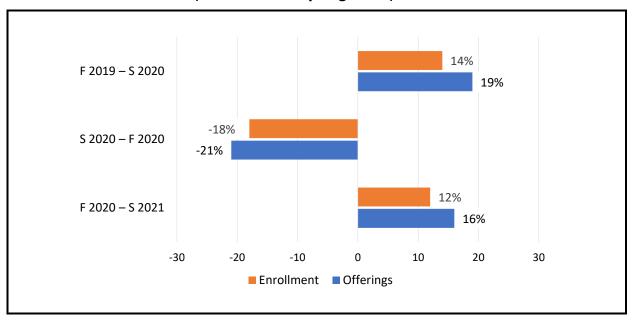


Exhibit 2-3. Percentage-Point Changes in Early College Offerings and Enrollment, Fall 2019 to Spring 2021, Overall

Exhibit 2-3 highlights the changes in course offerings and enrollment that occurred during the COVID-19 pandemic by showing the term-to-term percentage-point differences in Early College course offerings and student enrollment from Fall 2019 through Spring 2021. Overall, from Fall 2019 to Spring 2020, course offerings increased by 19 percentage points, and student enrollment increased by 14 percentage points. However, in the term after the onset of COVID-19 (Fall 2020), Early College course offerings declined by 21 percentage points, and enrollment declined by 18 percentage points. By Spring 2021, offerings had rebounded by 16 percentage points, and enrollment increased by 12 percentage points. In Spring 2021, 2,331 students were enrolled in Early College courses, a higher number than were enrolled in Spring 2019 (2,268) (Appendix A, Table A.1.)

Fewer Early College courses are offered in the Summer terms as compared to the Fall and Spring terms: in Summer 2018 and Summer 2019, 45 courses were offered, and in Summer 2020, 48 courses were offered. Because course offerings and enrollment in the Summer terms are much lower than the Fall and Spring terms, RTI reported summer activities separately. Here, enrollment increased each summer, including after the extensive COVID-19 restrictions were in place (Exhibit 2-4). In Summer 2020, 662 students enrolled in Early College courses, compared with 584 in Summer 2019 (Appendix A, Table A.2.)

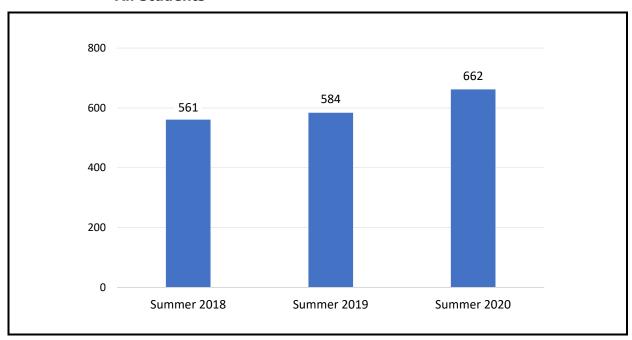


Exhibit 2-4. Enrollment in Early College Courses, Summer 2018 to Summer 2020, All Students

Pre-pandemic, the majority of Early College courses were held face-to-face; students and their instructors met in the same room at the same time for course sessions. After courses transitioned to an online format, decisions related to course modality (i.e., online synchronous, online asynchronous, and hybrid) were made based on a variety of factors including but not limited to the modality requested by the high school, whether it would be possible to offer the course in that modality, and whether the UH instructor would be able to support that modality. Synchronous online courses were conducted virtually, but students and their instructors gathered together at the same time for class. Asynchronous online courses were conducted virtually, but students and their instructors did not meet on a routine schedule, though synchronous online meetings could have occurred. Students generally worked independently and could choose when to spend time on the course. For example, an instructor may have assigned students to comment virtually each week on that week's course readings, and the students decided when during that week they would post their comments. Hybrid courses blended face-to-face and online learning. In these arrangements, the course met face-to-face sometimes, with the rest of the course conducted online.

Prior to the pandemic, almost all of the Early College courses (97%) were offered face-to face. In Spring 2020, regardless of the course modality at the beginning of the term, all of the courses had to switch to some form of online instruction, and in the following two terms,

most courses continued meeting online (Exhibit 2-5). In Fall 2020, 8% of Early College courses met face-to-face, and in Spring 2021, 16% did. In Fall 2020, 9% of courses used a hybrid format, with some face-to-face meetings; no Early College courses used a hybrid format in Spring 2021. In the two terms immediately after the transition to online learning (Fall 2020 and Spring 2021), about half of all Early College courses met in an online synchronous format and about one-third of courses met in an online asynchronous format.

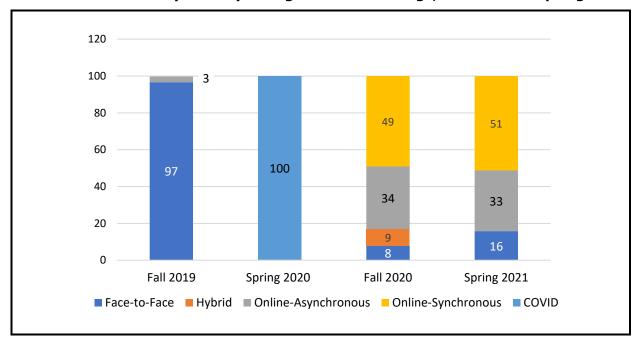


Exhibit 2-5. Modality of Early College Course Offerings, Fall 2019 to Spring 2021

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761)

2.1 Enrollment by Student Characteristics

RTI examined enrollment trends before and during the COVID-19 pandemic for different subgroups of students: by gender, race/ethnicity, and economic status to determine whether the COVID-19 pandemic had a differential impact on enrollment by subgroup. ¹⁰ (Appendix A, Tables A.1 to A.2 present results for all groups of students in each term.) All groups of students had the same pattern of Fall–Spring enrollment, with fairly stable numbers before the COVID-19 pandemic, an increase in Spring 2020, followed by a decline in Fall 2020 after the transition to online learning, and then a return to the higher numbers by Spring 2021. In 2021, the enrollment numbers were similar to those in Spring and Fall 2019.

¹⁰ Tables A.1 to A.2 in Appendix A present the results for all groups of students in each term.

Looking at Early College enrollment by student group shows that some groups of students were more actively involved in taking Early College courses than others, and this pattern persisted during the COVID-19 pandemic. Appendix A, Tables A.1, A.1a, and A.1b show the percentage of Early College courses taken by each group in each term and the percentage-point change in enrollment from one term to the next.

In every term (i.e., pre-pandemic and pandemic-impacted terms), female students have consistently made up approximately two-thirds of Early College participants. Male students seemed to face more enrollment challenges during the COVID-19 pandemic. Exhibit 2-6 presents the percentage-point changes in enrollment from one term to the next. Both male and female enrollment increased from Fall 2019 to Spring 2020, and male enrollment increased more than female enrollment (16 percentage points for males compared with 12 for females). From Spring 2020 to Fall 2020, both group's enrollment declined, but female enrollment declined 16 percentage points compared with a 23 percentage-point difference for males. Between Fall 2020 and Spring 2021, enrollment increased for both groups, but females' enrollment increased by 15 percentage points compared with only 7 percentage points for males. Thus, in Spring 2021, female Early College enrollment was 1,604, which is higher than the 1,548 enrollment in Spring 2019. Yet, for males, Spring 2021 enrollment was 727, compared with 720 in Spring 2019. Although it had a larger decline and rebound than female enrollment, the Spring 2021 male enrollment number was about the same as it had been in Spring 2019 before the COVID-19 pandemic began.

16% F 2019 - S 2020 12% -23% S 2020 - F 2020 -16% 7% F 2020 - S 2021 15% -30 -20 -10 10 20 Male Female

Exhibit 2-6. Percentage-Point Changes in Early College Enrollment Counts, Fall 2019–Spring 2021, by Gender

Note: Appendix A has summer enrollment.

Grouping by ethnicity reveals the same pattern. From term to term, about 35% of participants were Filipinos, and about 24% of the participants were Native Hawaiians. About 18% of participants were Asians, and about 14% of participants were White. Pacific Islanders and "Other" race/ethnic groups each comprised about 4% of participants. This rate of participation by race/ethnicity largely persisted throughout this time, with a decline by all race/ethnicity groups in Fall 2020 and a recovery in enrollment numbers for all groups by Spring 2021. Exhibit 2-7 shows the percentage-point differences from term to term. Native Hawaiians had the greatest decline in Fall 2020 (-21 percentage points). Although Asians had the smallest decline (-11 percentage points), they also had the smallest recovery (+1 percentage-point increase). Native Hawaiian and Pacific Islander students had lower enrollment numbers in Spring 2021 than in Spring 2019, but Asian, Filipino, and White students had higher enrollment numbers in Spring 2021 than they had previously (Appendix A, Table A.1).

When considering economic status, RTI found that about one-third of Early College participants were eligible for free or reduced-price lunch, which is the criteria for being considered "economically disadvantaged," and that percentage persisted in each term over this time. For both groups of students, enrollment declined from Spring 2020 to Fall 2020 and increased from Fall 2020 to Spring 2021. However, this decline was smaller for economically disadvantaged student (-15 percentage points for economically disadvantaged students compared with -20 percentage points) and the increase was greater for economically disadvantaged students (15 percentage points for economically disadvantaged students versus 11 percentage points). For both groups, enrollment numbers were higher in Spring 2021 than they had been in Spring 2019 (Appendix A, Tables A.1 to A.1b).

 $^{^{11}}$ The Pacific Islanders and Other students appear to have the greatest change, but these are the smallest two groups, so percentages change greatly when just a few group members change. Results are shared in the Appendix.

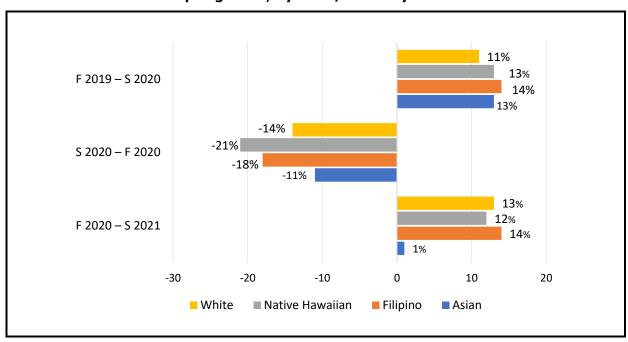


Exhibit 2-7. Percentage-Point Changes in Early College Enrollment Counts, Fall 2019 to Spring 2021, by Race/Ethnicity

Note: Appendix A has summer enrollment.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Finally, RTI examined enrollment over time by grade and found that 11th and 12th grade students enrolled in Early College courses more often than 9th and 10th grade students. Before the COVID-19 pandemic, about 42% of those enrolled in Early College courses were 12th grade students, about 30% were 11th grade students, about 20% were 10th grade students, and fewer than 10% were 9th grade students (Appendix A, Table A.1). This finding is likely attributed to students taking necessary prerequisite courses for Early College classes as they progressed through high school.

Looking at the term-to-term percentage-point change in enrollment shows that 12th graders' enrollment had the smallest percentage-point change during this period¹² (Exhibit 2-8). As more experienced students, they may have had more academic experiences and resources to prepare them for the mandated transition to online learning. In fact, the pattern of change for 12th grade students differs from that of any other grade. Their enrollment declined from Fall 2019 to Spring 2020, increased from Spring 2020 to Fall 2020, and decreased again in Spring 2021.

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 $^{^{12}}$ The 9^{th} grade students had the greatest percentage-point change in Early College course enrollment; however, because relatively few 9^{th} grade students enrolled in Early College courses, a small numeric change yields a large percentage-point change. Therefore, these results are presented in Appendix A, Tables 1A to 1B.

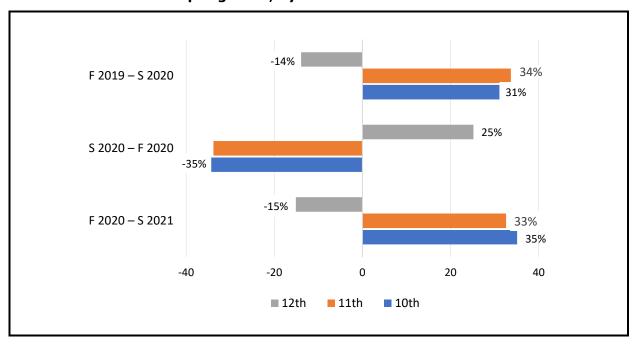


Exhibit 2-8. Percentage-Point Changes in Early College Enrollment Counts, Fall 2019 to Spring 2021, by Grade

Note: Appendix A has summer enrollment by grade.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

2.2 Enrollment by School Type

Next, RTI examined enrollment categorized by different types of schools: Title I schools compared with non-Title I schools, HIDOE schools compared with charter schools, and rural schools compared with schools in town, suburban, and city locales. RTI determined that it was important to look at enrollment by school type, since there are some key distinctions for certain types of school (outlined in more detail below). The Hawai'i DXP provided these indicators for each school that had students taking Early College courses during this period. ¹³

Title I schools receive federal financial assistance under the Elementary and Secondary Education Act. These funds go to schools with concentrations of children from low-income families to help ensure that all children meet educational standards.

HIDOE schools receive state legislative funding to support their Early College courses; charter schools are not eligible to receive Early College legislative funding.

¹³ The location codes are National Center for Education Statistics (NCES) school locale codes, provided to DXP by Data Governance and Analysis/HIDOE. Definitions of the various locale code categories are here: https://nces.ed.gov/programs/handbook/data/pdf/appendix_d.pdf.

Rural schools may have faced greater challenges with Internet access when courses switched to online learning.

Complete enrollment results for all types of schools are in Appendix A, Tables A.3 to A.4.

Consistent with the overall enrollment patterns noted earlier, Early College course enrollment in Title I and non-Title I schools decreased in Fall 2020 and rebounded in Spring 2021. However, students in Title I schools had a smaller decline and a greater rebound than their peers in non-Title I schools (Exhibit 2-9). From Spring 2020 to Fall 2020, enrollment declined 9 percentage points for students in the Title I schools compared with 26 percentage points in the non-Title I schools. Additionally, students in the Title I schools had a stronger rebound by Spring 2021. The Title I students' enrollment increased by 16 percentage points, which is twice that of the non-Title I schools (8 percentage points). Due to these transitions, by Spring 2021, Title I students had a greater share of the Early College course enrollment slots (1,223 versus 1,108). Yet, the enrollment numbers of both groups were about the same in Spring 2021 as they had been in Spring 2019. For Title I schools, the enrollment changed from 1,243 in Spring 2019 to 1,223 in Spring 2021; for non-Title I schools, enrollment changed from 1,025 in Spring 2019 to 1,108 in Spring 2021 (Appendix A, Table A.3).

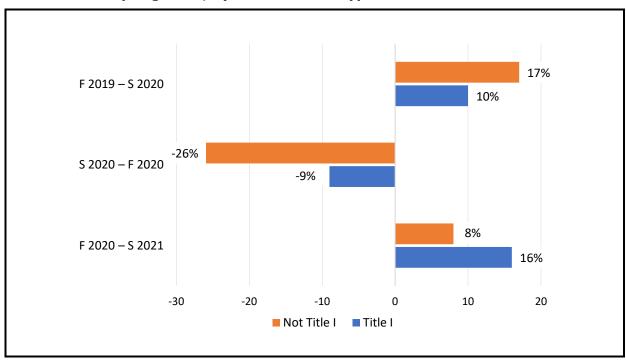


Exhibit 2-9. Percentage-Point Changes in Early College Enrollment, Fall 2019 to Spring 2021, by Title I School Type Status

Note: Appendix A has summer enrollment by Title I status. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange. Each term, only about 5% of Early College participants come from charter schools, so a small change in this group leads to a larger percentage-point difference. From Fall 2019 to Spring 2020, both groups increased enrollment by about 12 percentage points. The HIDOE schools experienced a decline in Early College course enrollment from Spring 2020 to Fall 2020 (19%) but recovered from Fall 2020 to Spring 2021. Enrollment in Early College courses by charter school students stayed the same during this time; in fact, their numbers did not decline from Spring 2020 to Fall 2020 (Appendix A, Table A.3).

In each term in this study, only about 10% of Early College participants came from rural schools (Appendix A, Table 3). Historically, rural students have not had the same opportunities to take Early College courses because UH instructors who taught these courses in person may have found it more challenging to visit rural schools. Yet, in the term before the COVID-19 pandemic (Fall 2019-Spring 2020), students in rural schools had the greatest enrollment gain (26 percentage points). Schools in all locales—including rural locales—had an enrollment decline in Fall 2020 (Exhibit 2-10). For rural schools, the enrollment numbers in Spring 2021 were almost the same as they had been in Spring 2019 (243 in Spring 2021 compared with 245 in Spring 2019). Although in every term, suburban schools had the highest number of students enrolled in Early College courses, they also experienced the steepest decline in enrollment numbers from Spring 2020 to Fall 2020. City schools had the smallest decline in enrollment from Spring 2020 to Fall 2020 (-2 percentage points), but their enrollment continued to decline into the next term. However, city school enrollment numbers were higher in Spring 2021 (352) than they had been in Spring 2019 (286) because enrollment numbers had increased so much during Fall 2019 and Spring 2020.

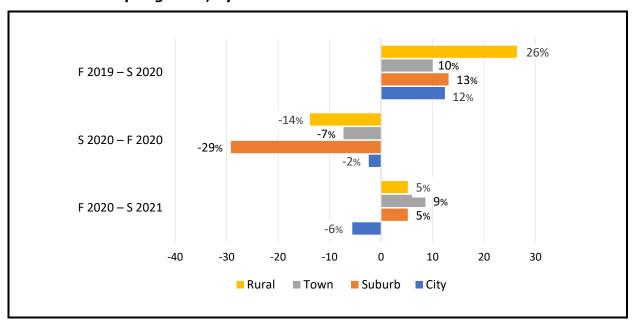


Exhibit 2-10. Percentage-Point Changes in Early College Enrollment, Fall 2019 to Spring 2021, by Locale

Note: Appendix A has summer enrollment by HIDOE/Charter status. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

2.3 Enrollment by Course

In considering how COVID-19 influenced enrollment in different course subjects, it is important to consider course availability each term. As different instructors teach Early College courses, the course offerings by subject area fluctuate from term to term. Exhibit 2-11 presents the overall number of Early College courses offered each term and the percentage of courses offered within each subject area (e.g., Arts & Humanities, Social Sciences). In each term, Early College courses were offered in a range of subject areas, but English tended to have a greater share of course offerings in the Fall terms (18% or higher) than in the Spring terms (13%).

Exhibit 2-11. The Number of Early College Courses Offered Each Term, and the Percentage of Course Offerings in Each Subject Area

	2018 Fall	20:	2019 2020		20		
		Spring	Fall	Spring	Fall	Spring	
All Subjects	168	187	181	216	170	198	
Arts & Humanities	14	16	15	14	12	12	
Career Preparation	10	13	9	9	7	11	
College Preparation	7	5	4	6	3	9	
English	18	13	19	13	23	13	

Hawaiian Studies	7	7	9	9	10	6
Language Arts	12	12	10	12	9	13
Mathematics	8	11	9	8	9	10
Sciences	11	11	12	14	13	9
Social Sciences	13	12	12	16	14	18

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761). Appendix A includes summer enrollment. Appendix B has a list of courses within each subject area.

Although the overall enrollment numbers were relatively consistent in the terms leading up to the COVID-19 pandemic (before Spring 2020), enrollment numbers changed from term to term by course subject area. These changes likely reflect differences in the course offerings in different terms. For example, before the COVID-19 pandemic, English had more course offerings in the Fall terms, and "Career Preparation" courses tended to have more offerings in the Spring terms (Appendix A, Table A.5). These routine shifts in enrollment by term make it difficult to discern the effect of the COVID-19 pandemic on specific course areas. Changes in offerings may have resulted from requests by the participating high schools and instructor availability in different terms. Exhibit 2-12 shows the courses offered and the counts of enrollees in each course subject area from Spring 2020 through Spring 2021. Because course offerings typically change from term to term, it is difficult to discern the influence of the transition to online learning on enrollment in particular subject areas. However, most course subject areas followed the pattern of an enrollment decline in Fall 2020 and a recovery by Spring 2021. Arts & Humanities, "Career Preparation," "College Preparation," Language Arts, and Social Sciences all showed this enrollment trend. For English, the highest enrollment was during Fall 2020, but in the past, English has more Early College course offerings in the Fall terms.

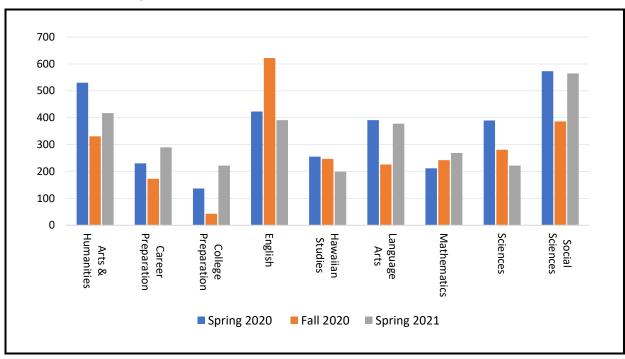


Exhibit 2-12. Enrollment in Early College Courses, Spring 2020 to Spring 2021, by Subject Area

Note: Appendix A includes summer enrollment. Appendix B has a list of courses within each subject area.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

3. Success in Early College Courses During the COVID-19 Pandemic

Key Findings:

- In each term, even during the beginning of the COVID-19 pandemic, at least 87% of students earned a grade of "C" or better in their Early College courses.
- Although this rate declined slightly in Spring 2020, this change was not statistically significant for most groups of students.
- In Fall 2020 and Spring 2021, on average, at least 87% of students in both synchronous and asynchronous courses earned a "C" or better.
- Most groups of students did not experience a statistically significant decline in their Early College course success rates from Spring 2020 to Spring 2021. Males and 9th graders declined in their Early College course success rates, but both groups had statistically significant positive increases from Spring 2020 to Spring 2021. For these groups, the rates of earning a "C" or better was higher in Spring 2021 than it had been in Spring 2019.
- Rural schools had a statistically significant decline in success rates from Spring 2019 to Spring 2020 and did not have a statistically significant recovery from Spring 2020–Spring 2021. Although the rate of earning a "C" or better increased in Spring 2021 relative to Spring 2020, it was lower than it had been in Spring 2019.
- Students in science courses experienced the steepest decline in their success rates during Spring 2020. Only 73% of them earned "C" or better; however, by Fall 2020, 86% of students in science courses earned a "C" or better.

Because the rapid transition to online learning in Spring 2020 influenced Early College enrollment, it was worth examining if it influenced success in Early College courses as well. For the purposes of this evaluation, RTI used a minimum grade of "C" or better and "D" or better to examine student success in earning college credit and high school credit respectively. (Appendix A, Tables A.18 to A.21 have the percentage of credits hours attempted and earned as well.)

Exhibit 3-1 shows the overall percentages of students in Early College courses that earned a "C" or better and that earned a "D" or better in each Fall or Spring term from Fall 2018 through Spring 2021. For students who took more than one Early College class in a term, RTI averaged their outcomes for all courses. Each term, almost all students succeeded in the Early College courses they took. Generally, about 89% of students earned a "C" or better, and about 92% earned a "D" or better. In Spring 2020, when many courses changed format in the middle of the term, there was a slight dip in these outcomes where 87% of students earned a "C" or better and 89% earned a "D" or better. Notably, only during this term did the UH system's emergency grading policy allow selecting Credit/No Credit for grades. ¹⁴ In these analyses, these courses were counted in the number of courses, but not as "course successes," and the lower success rate in Spring 2020 may, in part, reflect this policy. However, about 92% of the students received grades in the A–F range in Spring

¹⁴ News, U. H. (2020, April 9). *Emergency grading policy during COVID-19 public health crisis.* University of Hawai'i System News. https://www.hawaii.edu/news/2020/04/09/emergency-grading-spring-2020/

2020, meaning 8% of students selected the Credit/No Credit grading policy and were not included in the numerators for calculating the "C" or better and "D" or better percentages for Spring 2020 (but they were included in the denominators).

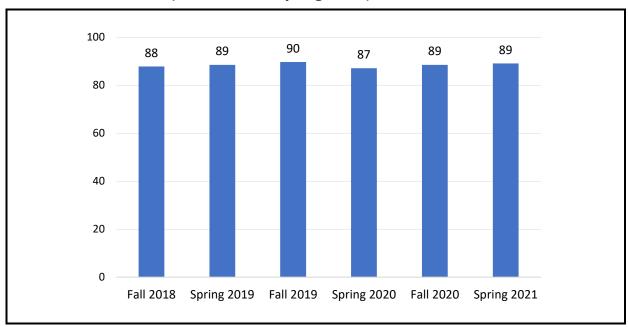


Exhibit 3-1. Percentage of Students Earning a "C" or Better in Early College Courses, Fall 2018 to Spring 2021, Overall

Note: For those who took multiple courses in a term, outcomes were averaged across each student each term. Appendix A includes summer enrollment.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

RTI tested the year-to-year percentage-point changes in earning a "C" or better (Exhibit 3-2). The "C"-or-better comparison showed no statistical difference from Spring 2019 to Spring 2020 nor from Fall 2019 to Fall 2020. In the first two comparisons, the rate of students earning a "C" or better decreased slightly (from 89 to 87 and from 90 to 89 in Exhibit 3-2), but these changes were not statistically significant However, from Spring 2020 to Spring 2021 this rate increased from 87% to 89%, and this increase was statistically significant (Exhibit 3-2). The data used in these analyses are yearly snapshots of Early College students, and not a longitudinal cohort analysis. Different students take different Early College courses each term due, in part, to course availability. Thus, differences in success rates may reflect the fact that different students take these courses. Further, different instructors offer different Early College courses each term, and the available courses may have influenced year-to-year changes in the success rates. (Note that Appendix A, Tables A.9 to A.15 have the percentage of students earning a "D" or better each term and the credits attempted and earned each term.)

Before Spring 2020, almost all Early College courses met face-to-face (Exhibit 2-5), and in Spring 2020, all courses had to switch to online learning mid-term. In Fall 2020 and Spring 2021, most courses were offered online, either synchronously or asynchronously. Exhibit 3-3 shows the percentage of students earning a "C" or better by course modality. In Fall 2020 and Spring 2021, at least 85% of those taking an online Early College course earned a "C" or better, regardless of whether the course was synchronous or asynchronous. Only in the hybrid courses offered in Fall 2020 was this rate lower (81%), In Spring 2021, 87% of asynchronous course takers earned a "C" or better compared with 91% of synchronous course takers and 88% of face-to-face course takers.

Exhibit 3-2. Year-to-Year Percentage-Point Changes in Earning a "C" or Better, Spring 2019 to Spring 2021, Overall

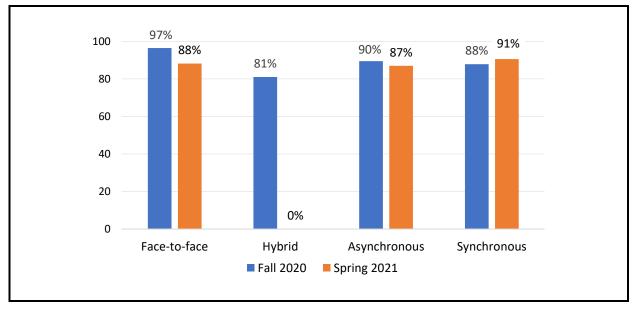
	Spring 2019-	Fall 2019-	Spring 2020-
	Spring 2020	Fall 2020	Spring 2021
"C" or Better	-1.5	-0.9	2.1*

^{* =} p < .05; ** = p < .01; *** = p < .001

Note: For those who took multiple courses in a term, outcomes were averaged across each student each term. Appendix A includes summer enrollment.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Exhibit 3-3. Percentage of Students Earning a "C" or Better in Early College Courses, Fall 2020 to Spring 2021, by Course Modality



Note: For those who took multiple courses in a term, outcomes were averaged across each student each term. Appendix A includes summer enrollment.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

3.1 Course Success by Student Characteristic

Given that the shift to online learning did not have a statistically significant negative effect on the percentage of students earning a "C" or better, this section focuses on identifying the groups of students whose year-to-year changes in earning a "C" or better were statistically significant. These analyses examine students according to sex, race/ethnicity, economic status, and grade level. For some groups, none of these changes were statistically significant. Although the percentage of female, Asian, Filipino, White, and "Other" students earning a "C" or better shifted a little from one year to the next, none of these differences were statistically significant. Similarly, for economically disadvantaged students and for 10th and 11th graders, none of the changes were statistically significant. The transition to online learning did not affect the rate of earning a "C" or better for these groups (Appendix A, Table A.9 includes the rates for each group each term).

Exhibit 3-4 presents the statistically significant year-to-year differences in the rate of earning a "C" or better. From Spring 2019 to Spring 2020, only males and 9th grade students had statistically significant negative changes in this rate. The male rate decreased by four percentage points, and the rate for 9th graders decreased by over six percentage points; however, both groups had a statistically significant increase from Spring 2020–Spring 2021. For males, 88% earned a "C" or better in Spring 2021 compared with 84% in Spring 2020. For 9th grade students, 90% earned a "C" or better in Spring 2021 compared with 82% in Spring 2020.

From Fall 2019 to Fall 2020, this rate for Native Hawaiians declined by 7 percentage points. Data do not permit examining the statistical significance in the change from Fall 2020 to Fall 2021; however, the percentage of Native Hawaiians earning a "C" or better did increase from 78% in Fall 2020 to 84% in Spring 2021. In fact, most of the statistically significant changes were positive, showing an increase in this rate. These changes occurred from Spring 2020 to Spring 2021, where males, Pacific Islanders, non-economically disadvantaged, and 9th and 12th grade students all had a positive increase.

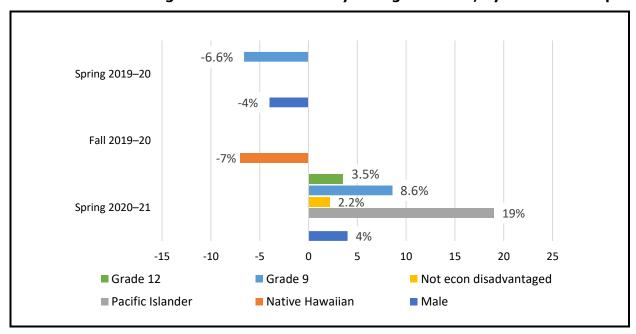


Exhibit 3-4. Statistically Significant Year-to-Year Differences in the Rate of Earning a "C" or Better in Early College Courses, by Student Group

Note: For those who took multiple courses in a term, outcomes were averaged across each student each term. Appendix A includes summer enrollment.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

3.2 Course Success by School Type

The transition to online learning due to the COVID-19 pandemic may have influenced course success outcomes at different types of schools. Here, RTI examined changes in the Early College course success rates (i.e., earning a "C" or better) by high schools' Title I status, HIDOE/charter status, and locale. (Appendix A, tables A.10 and A.20 report the percentage of students earning a "D" or better, the credits attempted and earned, and summer term results.)

Exhibit 3-5 shows the statistically significant year-to-year changes by school type. Non-Title I schools, charter schools, city schools, and town schools did not have statistically significant results in any comparison. Although the percentage of students earning a "C" or better shifted slightly from year to year, these differences were not statistically significant. (Appendix A, Tables A.12a and A.12b present these differences and the success rates by school.) Title I schools had a statistically significant drop from Spring 2019 to Spring 2020, and again from Fall 2019–Fall 2020, but a recovery from Spring 2020–Spring 2021. For this group, 88% earned a "C" or better in Spring 2019, 84% did in Spring 2020, and 88% did in Spring 2021. Rural schools had a sharp drop from 2019–2020, but these schools did not have a statistically significant recovery. For students in rural schools, 90% earned a "C" or better in Spring 2019, but only 84% did so in Spring 2021. HIDOE schools and suburban

schools experienced statistically significant increases from Spring 2020–Spring 2021. For HIDOE schools, this rate increased from 87% in Spring 2020 to 89% in Spring 2021. For suburban schools, this rate increased from 88% in Spring 2020 to 92% in Spring 2021 (Appendix A, table A.12).

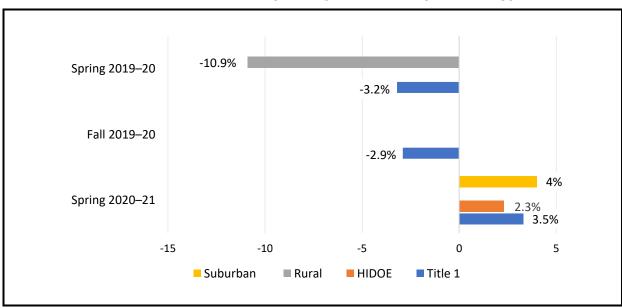


Exhibit 3-5. Statistically Significant Year-to-Year Changes in the Rate of Earning a "C" or Better in Early College Courses, by School Type

Note: For those who took multiple courses in a term, outcomes were averaged across each student each term. Appendix A includes summer enrollment.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

3.3 Course Success by Course Type

In the college curriculum, because subject areas have different learning activities, such as writing, problem solving, and lab work, the transition to online learning during the COVID-19 pandemic may have been more challenging in certain subjects. Exhibit 3-6 presents the statistically significant year-to-year changes in success rate by subject area. (Appendix A, Table A.15 has the rates of earning a "D" or better in each subject area each term; Appendix B lists the courses in each subject area.) Every subject area had some statistically significant changes from one year to the next. These changes may not indicate challenges in transitioning to online learning as much as they reflect different instructors offering different courses from one year to the next.

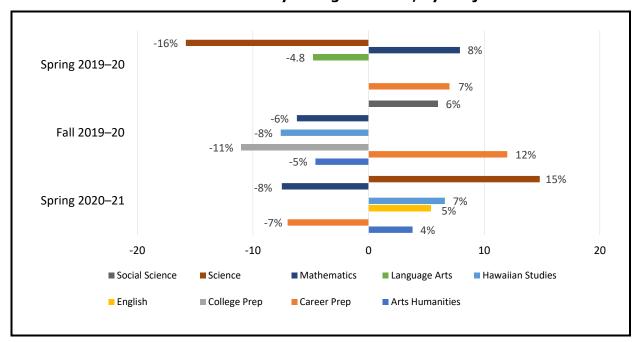


Exhibit 3-6. Statistically Significant Year-to-Year Changes in the Rate of Earning a "C" or Better in Early College Courses, by Subject Area

Note: Percentage of students earning a "D" or better, and credits attempted and earned are included in Appendix A along with results from Summer terms. Appendix B lists courses associated with each subject area.

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Most of these analyses by student characteristics and by school type showed decreases during the periods covering the immediate, rapid transition to online learning: Spring 2019–Spring 2020 and Fall 2019–Fall 2020. Even though most subject areas had a decrease in the number of Early College participants earning a "C" or better during these times, the success rates for "Career Preparation" courses increased in both of these periods, and Mathematics courses showed a statistically significant increase during the Spring 2019–Spring 2020 period as well. These courses were not harmed by the transition to online learning. However, both of these subjects showed a decrease from Spring 2020–Spring 2021, when most other subject areas had an increase. These two subject areas follow the opposite pattern of the other subject areas.

Science courses had the largest decrease in the number of Early College participants earning a "C" or better from Spring 2019 to Spring 2020 (-16 percentage points), but the largest increase from Spring 2020–Spring 2021 (+15 percentage points). This recovery suggests that after Spring 2020, instructors and students adjusted their approach for teaching and learning in this discipline.

Arts & Humanities and Hawaiian Studies courses had similar patterns in that their success rates did not decline in Spring 2019–Spring 2020 but did decline in Fall 2019–Fall 2020. For

both of these subject areas, the success rates increased in Spring 2020–Spring 2021, suggesting that instructors and students faced some struggles in the first year of the transition to online learning, but adjusted their teaching and learning approaches accordingly.

Looking directly at the percentage of students earning a "C" or better each term helps to contextualize these year-to-year differences. Exhibit 3-7 presents these results, and shows that in many subject areas, this success rate changed from term to term even before the COVID-19 pandemic began. For example, Language Arts increased from 83% in Fall 2018 to 93% in Spring 2019. "Career Preparation" decreased from 88% in Fall 2018 to 80% in Spring 2019. Thus, the year-to-year differences in Exhibit 3-6 are not fully attributable to the transition to online learning and may reflect term-to-term changes in which instructors offer what courses and which students take them. Looking directly at these percentages shows that in Spring 2020, during the rapid transition to online learning, 87% of students earned a "C" or better across all subjects. In that term, 84% earned a "C" or better in every subject except science. In science, only 73% did, and this decline does seem attributable to the rapid change to online learning. However, by Fall 2020, 86% of students earned a "C" or better in science.

Exhibit 3-7. Percentages of Students Earning a Grade "C" or Better by Subject Area: Fall and Spring Terms, Fall 2019–Spring 2021

	Percent, %					
	2010	2019		2020		2024
	2018 Fall	Spring	Fall	Spring	Fall	2021 Spring
All Subjects	87.8	88.5	89.7	87.1	88.5	89.1
Arts & Humanities	89.1	92.6	91.6	92.6	87.0	96.4
Career Preparation	88.2	79.9	80.6	87.0	93.1	80.0
College Preparation	96.7	85.6	95.7	89.1	83.7	82.9
English (ENG)	88.6	84.5	91.2	84.2	90.2	89.5
Hawaiian Studies (HWST)	94.4	91.4	89.8	85.9	82.2	92.5
Language Arts	83.0	92.7	88.0	88.0	88.1	89.4
Mathematics	83.8	86.9	87.6	94.8	81.4	87.4
Sciences	86.3	88.3	89.9	72.6	85.8	87.4
Social Sciences	84.6	89.7	90.4	90.8	96.4	90.4

Note: Refer to Appendix B for a full course directory listing.

Examining the success rates by course modality shows that in some subject areas a higher percentage of students earned a "C" or better in asynchronous courses than they did in synchronous courses, but in other subject areas, the reverse was true. *Exhibit 18* presents a flag for the modality in which a higher rate of students earned a "C" or better for each subject area in Fall 2020 and Spring 2021. (For full detail, see Appendix A, Table A.16.) In both terms, Arts & Humanities and Social Science courses offered synchronously yielded higher success rates, but Hawaiian Studies and Science courses offered asynchronously yielded higher success rates. In about half of the subject areas, these flags changed from term to term. As there is no clear correlation between modality and course success, no clear conclusions can be drawn about the effect of modality on success in different course subject areas.

Exhibit 3-8. Flagging Modality with Highest Rate of Students Earning "C" or Better, by Course Subject Area, Fall 2020, Spring 2021

	Fall 2020	Spring 2021
Arts & Humanities	S	S
Career Preparation	А	S
College Preparation	*	E
English	E	S
Hawaiian Studies	А	Α
Language Arts	А	S
Mathematics	А	Е
Sciences	А	Α
Social Sciences	S	S

^{*&}quot;College Preparation" did not offer both modalities in Fall 2020.

Note: Appendix B has the lists of courses associated with each area; A = greater success rate in asynchronous courses; S = greater success rate in synchronous courses; E = success rates are equal (within three percentage points of each other).

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

4. Insights from Surveys

This section summarizes findings from the surveys administered to high school Early College coordinators and UH instructors. The surveys were designed to gain broader insights and were administered to all high school Early College coordinators and all UH instructors who taught one or more Early College courses during the Spring 2020 to Fall 2021 terms. The web-based surveys were primarily composed of multiple choice questions and should have taken participants 10-15 minutes to complete. The overall response rates for the high school Early College coordinator survey and the UH instructor survey were 82% (42 respondents) and 40% (152 respondents), respectively. It is worth noting that of the 683 UH instructors included in the survey sample, approximately 40% (279 instructors) were not teaching in Spring 2022 and may not have seen the email with the survey invitation. This section of the report presents perceptions of challenges and successes related to the transition to online learning, supports provided to students during the transition to online learning. Where applicable, summary responses from the student surveys have been included.

Key findings:

- High school Early College coordinators reported their schools largely maintained Early College class offerings after the transition to online learning.
- UH instructors reported maintaining the same quality of student instruction and student engagement after Early College classes transitioned online.
- High school Early College coordinators and UH instructors struggled to help students figure out how to use virtual platforms and resolve Internet access problems.
- UH instructors found it challenging to ensure that the quality of instruction and student interactions stayed the same.
- High school Early College coordinators thought students underrepresented in higher education (e.g., economically disadvantaged students) faced greater challenges in the switch to online learning.
- UH instructors thought that online education was effective for meeting students' academic needs, but less so for meeting their social-emotional needs.

4.1 Perceptions of Challenges

In the surveys administered, the high school Early College coordinators and the UH instructors responded to a series of questions about the challenges and successes associated with the transition of Early College courses online due to the COVID-19 pandemic. Exhibit 4-1 lists the challenges high school Early College coordinators reported, in order of frequency reported.

The top three greatest challenges for high school Early College coordinators included helping students figure out how to use virtual platforms and software (76%); having limited access to students to provide services like recruitment, registration, and counseling (64%); and setting students up with a reliable Internet connection (52%). For high school Early College coordinators, the least challenging aspects of the transition were maintaining enrollment (29%) and continuing to offer roughly the same number of courses as before (21%). This latter perception is further evidenced by the number of course offerings staying relatively stable throughout COVID-19 with 181 courses offered in Fall 2019, 216 courses offered in Spring 2020, and 170 courses offered in Fall 2020 (Appendix A, Table A.8). These survey findings echo the sentiments in the focus groups (which will be discussed in more detail in the next section of the report); high school staff reported feeling overwhelmed by getting students consistent access to the Internet, but they expressed that they had not noticed a significant decline in enrollment. This perception is consistent with the administrative data analysis result that enrollment declined by about 18% from Spring 2020 to Fall 2020, but by Spring 2021, enrollment numbers were about the same as they had been in Fall 2019.

Exhibit 4-1. General Challenges Experienced by High School Early College Coordinators When Courses Transitioned to an Online Format in 2020, Sorted by Frequency of Response

What general challenges did you experience when Early College classes transitioned to an online format during the pandemic? (Select all that apply.)	Percent ^a
Helping students figure out how to access and use the learning management platform and software programs/tools.	76
I had limited access to students for recruitment, registration, counseling, advising/academic checks, etc.	64
Addressing reliable Internet connection issues for students.	52
Addressing computer access issues for students.	45
Students did not like or were not interested in participating in online Early College classes.	43
It was harder for students to access support services/resources offered by our high school and/or college partner.	38
It was harder to connect with the instructors and/or UH Early College coordinators or counselors regarding student recruitment, registration, course progress, etc.	33

The number of students served by our high school's Early College program decreased.	29
The number of Early College classes offered by our high school decreased.	21

^a Percent is calculated from the total survey respondents (N=42). This question had a "check all that apply" option, so percentages will not sum to 100%.
Source: High School Early College Coordinator Survey, 2022.

UH instructors also identified the greatest challenges they faced during the transition to online learning, presented in Exhibit 4-2 in order of frequency. For UH instructors, the greatest challenges focused on maintaining the quality of instruction: ensuring that the content for their online courses was as engaging as it was in-person (58%) and ensuring that students' interactions with other students and with instructors were comparable to the in-person experience (53%). Only a small percentage of UH instructors reported connecting with Early College staff at high school or on their college campus as challenges (6%). This perception mirrors the findings from the focus groups, and indicates that despite the online format, staff across institutions continued to work together to provide services for students.

Exhibit 4-2. General Challenges Experienced by UH Instructors When Early College Courses Transitioned to an Online Format in 2020, Sorted by Frequency

What general challenges did you experience when Early College classes transitioned to an online format due to the pandemic? (Select all that apply.)	Percent ^a
Ensuring that the content delivery for my online Early College class(es) was as engaging as the content delivery for my face-to-face Early College class(es).	58
Ensuring that student-to-student and student-to-instructor interactions were comparable to my face-to-face Early College class(es).	53
Addressing technology access issues for Early College students.	51
It was harder to provide support and/or resources to Early College students who were struggling in my class.	39
The quality of my Early College students' work and engagement in the course decreased.	34
Transitioning my face-to-face Early College class(es) to an online format.	27
Getting comfortable with teaching in an online setting.	18
It was harder to connect with staff who support the Early College program at the high school.	11
It was harder to connect with staff who support the Early College program at my UH campus (e.g., my campus' Early College coordinator).	6

^a Percent is calculated from the total survey respondents (N=152). This question had a "check all that apply" option, so percentages will not sum to 100%.
Source: UH Early College Instructor Survey, 2022.

The perceived challenges echoed the challenges reported by Early College students in a Spring 2020 survey. Many survey respondents reported that they missed getting real-time responses from their instructors and interacting directly with their peers, and noted having technical problems and feeling distracted from completing work on time.

4.2 Perceptions of Successes

High school Early College coordinators reported via the surveys and in the focus groups that they considered one of the greatest successes in the transition to online learning was that schools did not have to drastically cut the number of Early College courses they were able to offer students (62%) (see Exhibit 4-3). Based on the administrative data, the Early College course offerings declined from 216 in Spring 2020 to 170 in Fall 2020; however, by Spring 2021, offerings increased to 198 (Exhibit 2-1). About one-third of them thought their high school served as many or more students during the transition to online learning. Forty percent cited student engagement with online courses as a success.

Exhibit 4-3. General Successes Experienced by High School Staff when Early College Courses Transitioned to an Online Format in 2020, Sorted by Frequency

What general successes did you experience as a results of Early College classes transitioning to an online format? (Select all that apply.)	Percenta
Our high school continued to offer the same or a comparable number of Early College classes per school year.	62
Students were interested in participating in online Early College classes and enjoyed learning in an online format.	40
Our high school served the same or more students through our Early College program.	36
Figuring out how to help students access and use the learning management platform and the software/tools for synchronous and/or asynchronous classes.	33
Addressing computer access issues for students.	26
It was easier for students to access support services/resources offered by our UH partner(s) in an online environment.	17
My school established processes or improved processes for tracking student progress.	17
Addressing Internet connection issues for students.	14

 $^{^{\}rm a}$ Percent is calculated from the total survey respondents (N=42). This question had a "check all that apply" option, so percentages will not sum to 100%.

Source: High School Early College Coordinator Survey, 2022.

More than half of UH instructors reported getting comfortable with teaching in an online setting (65%) and transitioning to the online format (55%) as successes (Exhibit 4-4). However, fewer than half reported that maintaining the quality of instruction was a success: ensuring the online content delivery was as engaging in online courses (43%), maintaining the quality of student work and engagement (37%), and ensuring that student-instructor and student-student interactions were comparable to face-to-face learning courses (35%). Most students in the Fall 2020 survey reported that their instructors appeared to be comfortable teaching in the online format (79%) and that their instructors provided responses and promptly responded to questions (87%). The Fall 2020 survey reports of success echoed those of students who responded to the Spring 2020 survey. They thought that instructors were approachable in an online setting, and they appreciated being able to rewatch lectures.

Exhibit 4-4. General Successes Experienced by UH Instructors when Early College Courses Transitioned to an Online Format in Spring 2020, Sorted by Frequency

What general successes did you experience as a results of Early College classes transitioning to an online format? (Select all that apply.)	Percent ^a
Getting comfortable with teaching in an online setting.	65
Transitioning my face-to-face Early College class(es) to an online format.	55
Ensuring that the content delivery for my online Early College class(es) was as engaging as the content delivery for my face-to-face Early College class(es).	43
The quality of my Early College students' work and engagement in the course stayed the same or increased.	37
Ensuring that student-to-student and student-to-instructor interactions were comparable to interactions in my face-to-face Early College class(es).	35
Addressing technology access issues for Early College students.	24
It was easier to provide support and/or resources to Early College students who were struggling in my class.	18

^a Percent is calculated from the total survey respondents (N=152). This question had a "check all that apply" option, so percentages will not sum to 100%.
Source: UH Early College Instructor Survey, 2022.

4.3 Supports Provided to Students During the Transition to Online Learning

The surveys to high school Early College coordinators and UH instructors both included questions about the supports available to students before and during the COVID-19 pandemic. Comparing the supports offered during the COVID-19 pandemic to those offered before the pandemic suggests whether there were changes in student supports available as a result of the COVID-19 pandemic. High school coordinators reported that the support staff available for students generally did not change during the COVID-19 pandemic (Exhibit 4-5). Over half of high school Early College staff reported that teachers and/or instructional support staff regularly supported all Early College students both before and during the COVID-19 pandemic. However, about one-third of high school staff reported that they did not have specific teachers and/or instructional support staff for Early College students during or before the COVID-19 pandemic. Only 14% of Early College coordinators reported that their school had teachers or staff who regularly supported Early College students in need academic assistance. This percentage did not change during the COVID-19 pandemic.

Exhibit 4-5. Instructional Support Staff Available to Early College Students Before the COVID-19 Pandemic and Currently

Before the pandemic/currently, does your school have teachers and/or instructional staff assigned to support	D o f o wo 3 0/	C
students participating in Early College classes?	Before ^a %	Current ^a %
Our school did not have specific teachers and/or instructional support staff designated to support Early College students.	31	33
We had teachers and/or instructional support staff who regularly supported all Early College students.	55	52
We had teachers and/or instructional support staff who regularly supported Early College students who needed academic assistance.	14	14

^a Percent is calculated from the total survey respondents (N=42). This question had a "check all that apply" option, so percentages will not sum to 100%.
Source: High School Early College Coordinator Survey, 2022.

High school Early College coordinators were then asked to report on the kinds of support services offered to students taking Early College courses before and during the COVID-19 pandemic (Exhibit 4-6). In many cases, the kinds of support offered to students increased during the COVID-19 pandemic. The biggest change reported was that a higher percentage of high school staff received updates from their UH partner(s) about student progress and contacted struggling students during the COVID-19 pandemic than before the pandemic (98% and 86%, respectively). The next biggest change was that a higher percentage of high school Early College coordinators reported providing emotional support and/or referring students to appropriate services during the COVID-19 pandemic than before the pandemic (55% and 48%, respectively). Although several high school staff who participated in the focus group mentioned providing more tutoring services during the pandemic, the survey findings indicated this remained consistent before and during the COVID-19 pandemic (43%).

UH instructors were asked to indicate the types of support they provided to Early College students before and during the COVID-19 pandemic (Exhibit 4-7). Not surprisingly, UH instructors reported a steep decline in the in-person services they offered during the COVID-19 pandemic. For example, before the COVID-19 pandemic, 34% of UH instructors held office hours at the high school to meet with students in-person and only 13% reported doing so during the COVID-19 pandemic. Similarly, 17% of UH instructors hosted in-person study sessions before the COVID-19 pandemic and only 8% did so during the COVID-19 pandemic. In contrast, more UH instructors responded to student questions via email (as they were received) during the COVID-19 pandemic (84%) than before (75%). In the same vein, a higher percentage of UH instructors (70%) indicated that they alerted the high school Early College coordinator about problematic attendance or low grades during the

COVID-19 pandemic than before the pandemic (63%). These trends clearly indicate that without being able to offer in-person support, UH instructors shifted the way they supported students by being more responsive online and staying in greater communication with high school Early College coordinators to ensure student success.

Exhibit 4-6. Support Services Offered to Students Taking Early College Courses Before the Pandemic and Currently

Before the pandemic/currently, how does your school support students taking Early College classes? (Select all that apply.)	Before ^a %	Current ^a %
Getting updates from the UH partner about student progress and contacting struggling students.	86	98
Holding study sessions that focus on college study habits, planning/time management, etc.	21	26
Providing tutoring services and/or resources.	43	43
Providing emotional support and/or referring students to appropriate emotional support services.	48	55

^a Percent is calculated from the total survey respondents (N=152). This question had a "check all that apply" option, so percentages will not sum to 100%.

Source: High School Early College Coordinator Survey, 2022.

Exhibit 4-7. Support Services Offered by UH Instructors to Students Taking Early College Courses Before the Pandemic and Currently

Before/during the pandemic, how did you support Early College students? (Select all that apply.)	Before %	Current%
I hold office hours at the high school to meet with students in person.	34	13
I hold online office hours to meet with students virtually.	-	68
I host in-person study sessions so students can work together.	17	8
I host virtual study sessions so students can work together.	-	20
I alert the high school Early College coordinator and/or my campus' Early College coordinator if a student's grade is low and/or their attendance is problematic.	63	70
I respond to student questions via email as I receive them.	75	84
None of the above	9	4

^a Percent is calculated from the total survey respondents (N=152). This question had a "check all that apply" option, so percentages will not sum to 100%.
Source: UH Early College Instructor Survey, 2022.

4.4 Meeting Students' Needs During the Transition to Online Learning

All survey respondents noted that the switch to online learning was challenging for students. High school Early College coordinators thought that many of their students experienced academic challenges as a result of the COVID-19 pandemic. Exhibit 4-8 presents their level of agreement with statements about whether Early College students were likely to experience academic challenges overall, and specifically for groups underrepresented in higher education in Hawai'i (i.e., economically disadvantaged, Native Hawaiian and Pacific Islander students). Most respondents indicated that students experienced challenges "to some extent" (52.4% for all students; 45.4% for students underrepresented in college). More respondents thought that groups underrepresented in college faced challenges "to a great extent" or a "to a very great extent" (28.5%) compared with this perception for all Early College students (11.9%).

Exhibit 4-8. High School Early College Coordinators' Perceptions That Students Faced Academic Challenges Due to the Pandemic

To what extent do you agree that a substantial number of your Early College students experienced academic challenges as a result of the pandemic?

	College Students			
	Early College Students in Grou All Early College Students Underrepresented in College			
	Number	Percent ^a	Number	Percent ^a
Not at all	5	11.9	2	4.8
To a small extent	10	23.8	9	21.4
To some extent	22	52.4	19	45.2
To a great extent	4	9.5	9	21.4
To a very great extent	1	2.4	3	7.1

Source: High school Early College Coordinator Survey, 2022.

Similarly, UH instructors reflected on the effectiveness of online Early College courses regarding meeting students' needs - both academic and social/emotional. Exhibit 4-9 shows that more than half of the respondents thought that online Early College courses were "effective" or "very effective" in meeting students' academic needs. However, slightly less than one-third of respondents thought that the online Early College courses were "effective" or "very effective" in meeting students' social/emotional needs.

^a Percentage is calculated from the total survey respondents (N=42).

Exhibit 4-9. UH Instructors' Perceptions of the Effectiveness of Online Early College Courses in Meeting Students' Needs

How effective to you feel online Early College courses have been in terms of meeting your students' needs?

	Needs			
	Academic		Social/en	notional
	Number	Percent ^a	Number	Percent ^a
Not at all effective	4	2.6	24	15.8
Somewhat effective	41	27.0	76	50.0
Effective	68	44.8	36	23.7
Very effective	36	23.7	12	7.9

^a Percentage is calculated from the total survey respondents (N=152). Source: UH Early College Instructor Survey, 2022.

In reflecting on course modality, about half of the UH instructors thought that the synchronous courses were more effective. Only 8% thought that the asynchronous courses were more effective (Appendix C, Table C2). The remaining respondents noted that the effectiveness of the modality would depend on the course content area being taught. In fact, this analysis of modality data found that the success rates for students in synchronous and asynchronous courses were similar. In Fall 2020, the rate of students earning a "C" or better in asynchronous courses was slightly higher than that of synchronous courses, and in Spring 2021, the synchronous courses had a slightly higher rate (Exhibit 3-1). During the focus groups (discussed in Section 5), both UH and HIDOE Early College coordinators agreed that synchronous courses were more similar to in-person learning, and therefore an easier transition for most, but asynchronous options enabled more students with varied schedules and geographic locations an opportunity to take Early College courses.

Although respondents of both surveys identified the challenges students faced during the transition to online learning, they still found ways to expand the reach of Early College programming. The vast majority of high school Early College coordinators—over 85%—indicated that they targeted the same populations as before the COVID-19 pandemic (Appendix C, Table C2). Of those who changed the populations they targeted, in general, they found they could expand their reach to more students. For example, one Early College coordinator wrote that they were offering more career and technical education courses, which enabled them to "expand their student demographics" and another wrote about a "more concerted effort to recruit more Native Hawaiian, low socioeconomic status, and first-generation students". Two others reported expanding their reach to students through shared courses. These results are consistent with responses provided by focus group members (described in Section 5).

5. Insights from Focus Groups

Key Findings

- Although the switch to online learning created educational challenges, which may have exacerbated participation barriers for some students, the online format also makes Early College courses accessible to more students.
- Because UH instructors do not have to travel to the high schools to teach courses, Early College registration and participation have the potential to be opened to students across different schools.
- Many students and instructors have become more comfortable with online learning over the past 2 years.
- For future online offerings, students would benefit from additional supports such as a dedicated point person in their high school to support online learning, including tutoring and occasional in-person support.
- For future online offerings, high school coordinators and UH instructors would benefit from strengthened lines of communication and trust between HIDOE and UH.

In January 2022, RTI conducted focus groups with 22 Early College representatives from 13 HIDOE high schools and 9 UH campuses. The purpose of these focus groups was to collect responses related to two of the evaluation's aims: identifying challenges and successes during the transition to online learning and highlighting considerations for online learning that will inform future offerings. Exhibit 5-1 shows the breakdown of focus group respondents by agency. To provide ample opportunities for all focus group participants to join the discussion, RTI conducted two separate focus groups for each agency: two for high school Early College coordinators and two for UH Early College coordinators. Each focus group session lasted about one hour, and all were conducted virtually. Given that focus groups took place in January 2022, these participants were able to reflect on their experiences transitioning from in-person to online Early College programming at the start of the COVID-19 pandemic and then continuing to offer online Early College courses throughout the COVID-19 pandemic.

Exhibit 5-1. Number of Focus Group Participants

Institution Type	Number of Participants
HIDOE high school Early College Coordinators	13
University of Hawai'i Early College Coordinators	9
TOTAL	22

5.1 Overall Perception of the Influence of the Transition to Online Courses on Student Participation

As noted above, the administrative data show that the transition to online Early College courses did influence student participation in the short term. During the focus group

sessions, participants described their perceptions about the impact of the switch to online Early College courses on student participation. Participants were not able to make datadriven conclusions about any particular subgroup because they either did not have access to this kind of data or had not been able to review it. However, some participants shared anecdotally that participation dropped off most for students who were experiencing the most barriers, including lack of access to reliable Internet or equipment, competing family demands, or other special needs. For these students, having to take courses online presented sometimes insurmountable challenges that could not be easily remedied by school staff. Participants underscored how important in-person interaction and support had been prior to the COVID-19 pandemic. One participant noted that instructors had a hard time handling technological problems when students could not meet with someone in person to troubleshoot; sometimes students fell behind in class when their problems could not be resolved quickly. Another participant acknowledged that the COVID-19 pandemic highlighted the pre-existing barriers among students for whom online learning is not a good fit, specifically for rural students who did not have strong or reliable Internet connections.

According to focus group participants, the transition to online Early College courses highlighted the educational inequities that exist for certain groups of students. In particular, participants felt that the COVID-19 pandemic exacerbated pre-existing barriers for students who live in rural communities, who do not learn well online, or who had family obligations such as needing to work to provide additional family income or providing care for their younger siblings. However, for a small subset of schools, being able to offer courses online expanded the pool of students for whom Early College courses were an option. As mentioned above, students with other family or work obligations may have struggled to take Early College courses before the COVID-19 pandemic. Through asynchronous course offerings, these students were able to enroll in Early College courses and finish them on their own time. Similarly, students living in rural communities found themselves with the option to connect online to courses that were previously unavailable because instructors were unwilling or unable to commute to their high school campus.

5.2 Challenges in the Transition to an Online Format

Early College coordinators at high schools and at UH highlighted several challenges related to the rapid transition to online Early College course offerings in Spring 2020. In general, focus group participants shared similar challenges, particularly regarding limited access to the Internet and technological equipment. A small subset of participants had been offering some online courses before the COVID-19 pandemic, totaling eight courses offered online or hybrid in Fall 2019 (Appendix A, Table A.8). For them, the transition was less of a shock than it was for those who had not offered Early College courses in an online or hybrid format previously.

Other participants whose schools were new to offering Early College courses online reported challenges with equity of access, training, students' home circumstances, mindsets, filling course seats across districts, and engagement in asynchronous courses.

Equity of Access: Respondents in all focus groups reported their overarching challenge was figuring out how to provide high-quality reliable Internet connections and equipment to both students and teachers. In discussing this challenge, focus group participants mentioned concerns about equity of access, particularly for rural students or students with special needs. One participant explained,

We want to get some kind of technology in everybody's hands so that every student who participates in this program has the same opportunities. The inequity is just huge here. I saw some of my smaller charter schools, who were serving the Native Hawaiian population, have to cut down on Early College requests because students were not ready for this kind of modality.

The challenge involved with providing students and faculty with the right equipment for online courses included logistical pieces that needed to be established with record speed. Specifically, staff struggled with understanding

How are we going to mark this down that this person has [this piece of equipment]? How are we going to retrieve the equipment when classes are over? What if it's in bad condition? Or what happens if we don't get it back because it was lost or stolen?

After the first term, Early College coordinators and students began to adapt to these challenges. As another focus group participant said, "It was horrible that first semester, but I like to think we've gotten better since then."

Training: Focus group participants also reported the challenge of providing rapid support and onboarding for online learning for instructors who had little experience with online teaching and for students who had never taken courses online before. As one participant explained,

It gets a little complicated [for some faculty to teach online], and I think sometimes people forget that the faculty needed support as well. [Some] didn't know how to teach online at all, so they didn't know the tools...How do we engage students when you're online? That was a whole different ballgame that they had never encountered before...it was just sheer willpower by everyone involved to get them to the finish line [in Spring 2020]."

Students' Circumstances at Home: Participants discussed the fact that some students faced difficulties as they suddenly found themselves responsible for younger family members, needing to find employment to contribute to their family's financial well-being, or participating in a family business to ease the impact of the COVID-19 pandemic. One participant noted that in some cases, because the families were not accustomed to the nature of online courses, they had a hard time seeing their student in front of a computer,

seemingly "sitting idle." Some college instructors found themselves fielding complaints or commentary from family members/caregivers who were listening to their students' classes because they were now sharing a workspace at home. If students took their online courses in a space used by all family members (such as the kitchen), that meant their family members were now essentially "sitting in" on classes and determining the merit of what they were overhearing.

Mindsets: For one participant, one of the greatest challenges at the start of the COVID-19 pandemic was working with the mindsets of some of their Early College partners. Specifically, this participant related,

The mindsets [varied] at the different [institutions]. There were some that were all in, and willing to, at whatever cost, make it work for the students. There were others that didn't...they would say they were all in, but the behavior was different, so students had a tough time getting the technology they needed, or it wasn't reliable, and there wasn't a whole lot of follow through.

In the survey, one-third of high school respondents reported that they did not have staff designated to support Early College students even after the COVID-19 pandemic began (Exhibit 4-7). Due to the lack of support in these schools, high school and college Early College staff may have had a negative mindset about the switch to online learning. If staff did not buy into online learning, they would have more difficulty following through on necessary steps to ensure that students succeed online.

Filling Course Seats Across Districts: Two UH Early College coordinators cited the emerging practice of "sharing" Early College courses. For some online courses, schools could fill course seats with any high school student, regardless of geographic location or school affiliation. Despite the ability to potentially serve more students and offer more courses this way, one of these two participants explained that

[shared courses are] really a challenge, and I don't think anybody, except for those who are on campus, realize how difficult this is. FERPA rules, privacy, Title IX...if we have one class with five different high schools, we now have five different partners. We have to be able to send grades to each individual school...[so if] they put themselves in financial jeopardy, the schools [and students] have to be notified and we are equipped to just blast one campus, but now we have to do it five times. And when you multiply that by the number of courses that each campus offers, it's really difficult.

Engaging with Asynchronous Courses: On the whole, participants tended to prefer offering synchronous courses, which most closely mimicked the classroom experience. That is, students had a time and a place to be present, real-time interactions with teachers and other students, and a structure of accountability in place. With asynchronous courses, students encountered great challenges setting their own schedules and keeping up with coursework. In particular, students who had not had any prior experience with this type of

instruction struggled adjusting to it. However, some students were able to create the structure needed to succeed in an asynchronous course. Although focus group participants preferred synchronous courses in many cases, they noted that some students could take advantage of the flexibility of asynchronous course offerings, which contributed to their success (see "Increased Course Accessibility through Asynchronous Offerings" below).

Asynchronous courses may have also provided a better learning environment for students in rural areas who struggled to connect to a stable Internet connection in their own homes and could not stay on camera for entire class sessions. In fact, in both the Spring 2020 and Fall 2020 student surveys, a significant number of respondents noted that synchronous courses presented challenges if they had a slow Internet connection and if their family or other commitments interfered with their ability to participate. These students appreciated being able to work at their own pace in asynchronous courses.

5.3 Successes in Addressing the Challenges in the Transition to an Online Format

Participants also described their successes in addressing some of the challenges cited above, including the standardization of courses, increased technology skills, and increased course availability due to asynchronous courses.

Standardization of Courses on Laulima: Participants appreciated the concerted effort by UH campuses to attempt to standardize what courses "look like" on Laulima. One participant commented on the increase in accessibility and navigability, saying,

The students can navigate Laulima much, much easier, whereas before, every single instructor set it up completely differently, so the learning curve was much higher. So I think if they continue to make progress on that, then students...[have a standardized way] of navigating it, so I think that's a huge success.

Increased Technology and Online Course-Taking Skills: At the time of the focus groups, students and faculty had engaged in nearly 2 years of online course-taking, and despite many of the early challenges, both groups have notably increased their ability to navigate online platforms and tools. Given that the COVID-19 pandemic has encouraged schools and companies to continue offering online options, these new technology skills will ensure that many are better prepared for a more "hybrid" world. One participant related,

Prior to COVID[-19], if you were to ask me about the possibility of having Early College online, it would have been [a no] for me. I did not believe in it. I thought it wouldn't be good for the students because...it's so easy to fall behind, and once you're behind...it's difficult to catch up...But this pandemic has proven me wrong—that the students are capable of doing college classes online.

Increased Course Accessibility Through Asynchronous Offerings: In the same vein, students with sports or work schedules were able to take courses they might not have been able to take otherwise because course offerings conflicted with their activities. One participant explained,

We had many students who were unable to previously take Early College classes who are now able to. They were unable to previously because they had full schedules, along with sports and activities after school...Our biggest benefit was that expanding a little bit further out to a small group of students.

Offering asynchronous courses further expanded the pool of students because students were no longer restricted by a course that was only offered on certain days during certain hours. One participant said, "The majority of students do really well [with the asynchronous] format, and I think that's a success right there." These successes with asynchronous courses are further evidenced by the finding that in Fall 2020, 90% of students earned a "C" or better in their Early College asynchronous courses versus the 88% of students that earned a "C" or better in their Early College synchronous courses. However, by Spring 2021, students seemed to better adjust to synchronous courses, as 91% of students in synchronous courses earned a "C" or better versus 87% of students earning a "C" or better in asynchronous courses (Appendix A, Table A.16).

5.4 Considerations in Transitioning to Online Early College Courses

Many focus group participants hoped that online courses would continue to be available to students because they believed that online courses, particularly asynchronous ones, expanded Early College programming for students who were not able to participate before the COVID-19 pandemic due to other family, sports, or work obligations. Additionally, as instructors do not commute to teach these Early College courses, they are able to offer more Early College courses particularly in rural schools. These beliefs are consistent with the results of the Fall 2020 student survey, in which 67% of respondents indicated they were interested in taking online Early College courses in the future based on their experiences with online learning.

Focus group participants then shared the aspects of instruction that they would like to see in future offerings of online Early College courses to assist students and staff.

Focus group participants said that students benefit from having a dedicated high school point of contact for online learning and providing in-person support and additional tutoring when needed.

Give students a clear point of contact at the high school to support online learning: If schools continue to offer online learning (which many said they would), it would be helpful to have someone assigned to help students create a schedule and sending out reminders for students with less experience navigating online platforms. This person could also help with

connecting the student to the UH instructor and work with the student to better understand how to seek help in a college class. In the survey (Exhibit 4-5), only about one-third of Early College coordinators said that they had specific teachers and/or instructional support assigned to help students participating in Early College classes. All Early College students, regardless of course modality, must know whom to contact with different kinds of questions (i.e., their high school Early College coordinator, UH Early College Coordinator, or instructor of the course). Each of these roles has different responsibilities. With online courses, schools might designate a person to help those with technological difficulties; this individual may be someone other than the Early College coordinator.

Offer in-person support for students who need it: Some schools established an in-person meeting site for students who needed extra support. Having a central place where they could meet to take online Early College courses, finish their coursework, or connect with other students in the same course was immensely helpful for those who struggled with self-paced online learning. A participant explained,

Ideally, I really think that if we can get the in-person instruction with Early College classes, even if it's a hybrid, at least once a week. It's much better...I know that one of the positive support strategies is just having a high school teacher in the room with that Early College group.

Offer more tutoring opportunities: One participant mentioned they were able to expand their pool of tutors for students during the COVID-19 pandemic through grant funding. Tutors were provided to help students navigate the course content and the online format.

To assist high school coordinators and UH instructors, some focus group participants believed that additional supports for communication between these staff members would help improve the online Early College offerings.

Create stronger lines of communication and more opportunities to build trust between high school Early College coordinators and UH instructors: For participants who had long-standing relationships with their high school and/or college counterparts, it appeared that it was easier to collectively make decisions and solve problems. Providing more opportunities for high school Early College coordinators and UH instructors to interact and get to know one another may help in improving the experience of Early College courses for both parties. Multiple UH Early College coordinators agreed with a participant who stated,

I think what I saw work best was when there was a personal relationship between our faculty and the people they were working with at that high school. [These relationships] were usually created outside of the institution, and I think that gets to what has been said already, that communication is better when there is a personal relationship – and really what it is, is trust. Trust that people knew each other right, and that trust is what helped allow things to run more smoothly and have problems solved more quickly.

6. Lessons Learned

This evaluation of the transition of Hawai'i's Early College program to online learning during the COVID-19 pandemic identified the challenges associated with the transition online, the successes that occurred during this time, and considerations for continuing online learning in Early College courses.

In Hawai'i the Early College program is not set up as cohorts of students; it is not the case that students are designated as "Early College" in the 9th grade and then progress through selected courses. In Hawai'i, students of all grades have the opportunity to take Early College courses, regardless of their history of Early College course taking. Therefore, this study is not a longitudinal study that followed a cohort of students over time. RTI looked at overall enrollment and success each term. Future research could examine whether the population of students served in Early College courses changed as a result of the COVID-19 pandemic. Did different students participate in Early College courses after the COVID-19 pandemic transition to online learning? Are more economically disadvantaged students able to participate now? If so, through what means?

For the most part, students' enrollment and rate of earning a "C" or better declined when schools quickly switched to online learning in Spring 2020; however, for most groups of students and school types, these numbers and rates rebounded by Spring 2021. In rural schools, students experienced a decline in the percentage earning a "C" or better from Spring 2019 to Spring 2020. Unlike other groups, they did not have a statistically significant recovery later. Additional research could examine the kinds of challenges students in rural schools faced and identify additional supports that would help more of students at rural schools succeed in online Early College courses. This evaluation also found that before the COVID-19 pandemic, males enrolled less often than females, and their rate of enrollment declined more steeply than females. Although their enrollment increased after Fall 2020, it did not increase as dramatically as females' enrollment did. Future research could examine the motivations of males and females to take Early College courses, which could inform recruitment strategies for males.

6.1 Challenges Associated with the Transition to Online Learning

In surveys and focus groups, high school staff, UH instructors and staff, and Early College students reported their experiences related to the mandated, sudden transition to online learning in Spring 2020.

- High school staff had to help students learn how to access and use the learning management platform and software, but the staff needed support in shifting to the new platform.
- UH faculty needed to develop instructional approaches to ensure that instructional quality and interactivity did not decline in an online setting.

 Students missed getting real-time comments from their instructors and interacting with their peers. Additionally, some had family obligations, which made learning remotely more difficult.

Examining the educational administrative data about student enrollment and success shows the challenges faced by high school Early College coordinators, UH Early College coordinators, UH instructors, and students.

- Analyses show a decline in Early College course offerings and enrollment from Spring 2020 to Fall 2020. Prior to COVID-19, the course offerings and enrollment had been increasing, which suggests that the onset of COVID-19 and transition to online learning did pose some early limitations. However, for most groups, enrollment numbers in Spring 2021 were higher than they had been in Spring 2019.
- Male students were more negatively impacted as a result of the transition to online learning during the COVID-19 pandemic than females. Before the COVID-19 pandemic, males enrolled less often than females did. Their enrollment declined more than females, but their rate of recovery was less than females.
- Regarding course success, measured by earning a grade of "C" or better, most groups of students did not experience a statistically significant decline in their Early College success rates from Spring 2020 to Spring 2021. Males and 9th graders experienced a decline in success rates, but both groups had statistically significant positive increases from Spring 2020 to Spring 2021.
- Rural schools had a statistically significant decline in success rates from Spring 2019 to Spring 2020, but they did not have a statistically significant recovery from Spring 2020 to Spring 2021.
- Early College students enrolled in science courses experienced the steepest decline in their success rates during Spring 2020. Only 73% of them earned a "C" or better; however, by Fall 2020, 86% of science students earned a "C" or better.

6.2 Solutions That Were Developed to Address the Challenges Associated with the Transition to Online Learning

Many Early College staff, instructors, and students were willing to adapt to an online format and became more comfortable with it over time.

- In focus groups, participants noted that offering Early College classes in an online format meant that UH instructors did not have to travel to different high schools to teach Early College courses.
- In the survey, UH instructors indicated that they increased collaboration efforts with high school Early College coordinators as a result of the COVID-19 pandemic. A higher percentage of UH faculty indicated they alerted the high school Early College coordinator about problematic attendance or low grades during the COVID-19 pandemic than before.
- High school Early College coordinators felt that they could expand their reach to more students with online learning.

• In Fall 2020, about two-thirds of Early College student survey respondents reported that, based on their experiences with online Early College courses, they would be interested in taking additional online Early College courses.

An examination of the administrative data reflects the willingness for people to adapt their teaching and learning strategies in an online setting.

- By Spring 2021, Early College course offerings and enrollment numbers had rebounded to pre-pandemic levels.
- In Fall 2020 and Spring 2021, on average, 87% of students earned a "C" or better in their Early College courses. This average rate of success held in both synchronous and asynchronous courses.

6.3 Recommendations for Offering Online Early College Courses and Enhancing Student Access to These Courses

Many survey and focus group participants expressed an interest in continuing to offer online Early College classes. They noted some considerations for doing so.

- Continue exploring how to best offer "shared" online courses. During the COVID-19 pandemic, a small number of courses were shared across schools to optimize enrollment. If the administrative challenges to this approach (e.g., FERPA, Title IX, general oversight) can be managed, there could be long-lasting economies of scale that have the potential to connect more students to more courses across the state. To best serve students, it is also important that these courses are intentionally selected to ensure they will help students further their progress to a degree.
- High school Early College coordinators and UH instructors should collaborate to specify the skills that students need to succeed as online learners in synchronous and asynchronous classes. Some students may be less prepared than others for online learning. Early College coordinators and/or instructors could develop a self-assessment tool to screen for prepared online learners. Then, they could devise strategies to assist unprepared students to ready themselves for online instruction. Many college and professional learning courses continue to be delivered in an online format; it is to students' advantage to gain these skills early.
- Both synchronous and asynchronous online Early College classes should continue to be offered. In the survey administered by RTI, about half of UH instructors said that synchronous courses were more effective. Synchronous courses are more like inperson courses with set times to engage with the coursework, the instructor, and other students. Yet, the rate of students earning a "C" or better is about the same in synchronous and asynchronous courses, and some students benefited from the flexibility that this type of instruction allows.
- Strong communication practices between high school Early College coordinators and UH faculty will help all parties work more effectively for students. Ongoing efforts to unify all Early College personnel in services focused on students' success will continually enhance the benefits students receive. Give students a clear person to contact at the high school. Particularly in an online environment, students may need more assistance creating their schedule, connecting to faculty, and seeking help when they encounter difficulties in class. Early College high school coordinators, UH coordinators, and instructors have different roles and responsibilities, and students

must know whom to contact with different questions. In some settings, a high school or college staff person may need to be the point person for questions about online platforms.

 Offer in-person support for those who need it. Students in online courses may benefit from having an established time and place to connect with other students and get assistance from staff. This support may have a particular benefit for those in asynchronous courses.

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Appendix A: Student Enrollment and Success in Early College Courses, Fall 2018 to Spring 2021

Table A.1. Early College Enrollment Counts and Percentage of Early College Courses Taken by Students in Different Demographic Groups: Fall and Spring Terms, Fall 2018-Spring 2021

	20	018		20	19			20	2021			
		all	Sp	ring	F	all	Sp	ring	F	all		ring
	Enroll- ment	Percent										
All Students	2265	100.0	2268	100.0	2240	100.0	2542	100.0	2079	100.0	2331	100.0
Gender												
Female	1532	67.6	1548	68.3	1482	66.2	1660	65.3	1401	67.4	1604	68.8
Male	733	32.4	720	31.7	758	33.8	882	34.7	678	32.6	727	31.2
Ethnicity												
Asian	399	17.6	413	18.2	419	18.7	473	18.6	421	20.3	427	18.3
Filipino	790	34.9	758	33.4	793	35.4	904	35.6	743	35.7	846	36.3
Native Hawaiian	553	24.4	550	24.3	537	24.0	606	23.8	482	23.2	538	23.1
Pacific Islander	103	4.5	96	4.2	81	3.6	104	4.1	51	2.5	78	3.3
White	316	14.0	330	14.6	322	14.4	356	14.0	306	14.7	347	14.9
Other ^a	104	4.6	121	5.3	88	3.9	99	3.9	76	3.7	95	4.1
Economic Disadvantaged Status												
Yes	772	34.1	772	34.0	701	31.3	822	32.3	703	33.8	810	34.7
No	1493	65.9	1496	66.0	1539	68.7	1720	67.7	1376	66.2	1521	65.3
Grade												
9th	196	8.7	327	14.4	198	8.8	280	11.0	100	4.8	194	8.3
10th	463	20.4	489	21.6	369	16.5	484	19.0	313	15.1	423	18.1
11th	639	28.2	654	28.8	710	31.7	949	37.3	628	30.2	833	35.7
12th	967	42.7	798	35.2	963	43.0	829	32.6	1038	49.9	881	37.8

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race.

Table A.1a. Percentage-Point Changes in Early College Enrollment Counts of Early College Courses Taken by Students in Different Demographic Groups—Percent

	Fall 2019– Spring 2020	Spring 2020– Fall 2020	Fall 2020– Spring 2021
All Students	13.5	-18.2	12.1
Gender			
Female	12.0	-15.6	14.5
Male	16.4	-23.1	7.2
Ethnicity			
Asian	12.9	-11.0	1.4
Filipino	14.0	-17.8	13.9
Native Hawaiian	12.8	-20.5	11.6
Pacific Islander	28.4	-51.0	52.9
White	10.6	-14.0	13.4
Other ^a	12.5	-23.2	25.0
Economic Disadvantaged Status			
Yes	17.3	-14.5	15.2
No	11.8	-20.0	10.5
Grade			
9th	41.4	-64.3	94.0
10th	31.2	-35.3	35.1
11th	33.7	-33.8	32.6
12th	-13.9	25.2	-15.1

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.1b. Percentage-Point Changes in Early College Enrollment Counts of Early College Courses Taken by Students in Different Demographic Groups—Percent

	Spring 2019- Spring 2020	Fall 2019– Fall 2020	Spring 2020- Spring 2021
All Students	12.1	-7.2	-8.3
Gender			
Female	7.2	-5.5	-3.4
Male	22.5	-10.6	-17.6
Ethnicity			
Asian	14.5	0.5	-9.7
Filipino	19.3	-6.3	-6.4
Native Hawaiian	10.2	-10.2	-11.2
Pacific Islander	8.3	-37.0	-25.0
White	7.9	-5.0	-2.5
Othera	-18.2	-13.6	-4.0
Economic Disadvantaged Status			
Yes	6.5	0.3	-1.5
No	15.0	-10.6	-11.6
Grade			
9th	-14.4	-49.5	-30.7
10th	-1.0	-15.2	-12.6
11th	45.1	-11.5	-12.2
12th	3.9	7.8	6.3

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.2. Early College Enrollment Counts and Percentage of Early College Courses Taken by Students in Different Demographic Groups: Summer Sessions, 2018–2020

			Sumr	mer				
	201	.8	201	.9	2020			
	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent		
All Students	561	100.0	584	100.0	662	100.0		
Gender								
Female	383	68.3	416	71.2	490	74.0		
Male	178	31.7	168	28.8	172	26.0		
Ethnicity								
Asian	106	18.9	103	17.6	146	22.1		
Filipino	233	41.5	300	51.4	314	47.4		
Native Hawaiian	121	21.6	104	17.8	122	18.4		
Pacific Islander	38	6.8	17	2.9	*	*		
White	41	7.3	46	7.9	50	7.6		
Othera	22	3.9	*	*	17	2.6		
Economic Disadvantaged Status								
Yes	185	33.0	207	35.4	229	34.6		
No	376	67.0	377	64.6	433	65.4		
Grade								
9th	148	26.4	145	24.8	141	21.3		
10th	150	26.7	203	34.8	239	36.1		
11th	263	46.9	236	40.4	282	44.7		
12th								

^{*} Cells with small counts are suppressed.

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.3. Early College Enrollment Counts and Percentage of Early College Courses Taken by School Characteristics: Fall and Spring Terms, Fall 2018–Spring 2021

	20	110		20	19			20	20		20	21
	2018 Fall		Spring		Fall		Spring		Fall		2021 Spring	
	Enroll- ment	Percent										
All Schools	2265	100.0	2268	100.0	2240	100.0	2542	100.0	2079	100.0	2331	100.0
Title I Status												
Title I	1336	59.0	1243	54.8	1050	46.9	1154	45.4	1056	50.8	1223	52.5
Not Title I	929	41.0	1025	45.2	1190	53.1	1388	54.6	1023	49.2	1108	47.5
School Type												
HIDOE	2213	97.7	2149	94.8	2137	95.4	2440	96.0	1970	94.8	2200	94.4
Charter	52	2.3	119	5.2	103	4.6	102	4.0	109	5.2	131	5.6
Location												
City	310	13.7	286	12.6	340	15.2	382	15.0	373	17.9	352	15.1
Rural	253	11.2	245	10.8	212	9.5	268	10.5	231	11.1	243	10.4
Suburb	1042	46.0	1095	48.3	1127	50.3	1275	50.2	903	43.4	1115	47.8
Town	660	29.1	642	28.3	561	25.0	617	24.3	572	27.5	621	26.6

Table A.3a. Percentage-Point Changes in Early College Enrollment Counts of Early College Courses Taken by School Characteristics—Percent

	Fall 2019– Spring 2020	Spring 2020– Fall 2020	Fall 2020- Spring 2021
All Students	13.5	-18.2	12.1
Title I Status			
Title I	9.9	-8.5	15.8
Not Title I	16.6	-26.3	8.3
School Type			
HIDOE	14.2	-19.3	11.7
Charter	-1.0	6.9	20.2
Location			
City	12.4	-2.4	-5.6
Rural	26.4	-13.8	5.2
Suburb	13.1	-29.2	23.5
Town	10.0	-7.3	8.6

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.3b. Percentage-Point Changes in Early College Enrollment Counts of Early College Courses Taken by School Characteristics—Percent

	Spring 2019– Spring 2020	Fall 2019– Fall 2020	Spring 2020– Spring 2021
All Students	12.1	-7.2	-8.3
Title I Status			
Title I	-7.2	0.6	6.0
Not Title I	35.4	-14.0	-20.2
School Type			
HIDOE	13.5	-7.8	-9.8
Charter	-14.3	5.8	28.4
Location			
City	33.6	9.7	-7.9
Rural	9.4	9.0	-9.3
Suburb	16.4	-19.9	-12.5
Town	-3.9	2.0	0.6

Table A.4. Early College Enrollment Counts and Percentage of Early College Courses Taken by School Characteristics: Summer Terms, Summer 2018–Summer 2020

	Summer												
	201	.8	201	.9	2020								
	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent							
All Students	561	100.0	584	100.0	662	100.0							
Title I Status													
Title I	434	77.4	453	77.6	457	69.0							
Not Title I	127 22.6		131	22.4	205	31.0							
School Type													
HIDOE	543	96.8	560	95.9	644	97.3							
Charter	18	3.2	24	4.1	18	2.7							
Location													
City	31	5.5	72	12.3	112	16.9							
Rural	27	4.8	35	6.0	43	6.5							
Suburb	394	70.2	384	384 65.8		54.4							
Town	109	19.4	93	15.9	147	22.2							

Table A.5. Early College Enrollment Counts and Percentage of Early College Courses Taken in Each Subject Area: Fall and Spring Terms, Fall 2018–Spring 2021

		2010		2019						2020							2021	
	2018 Fall			Spring Fall			Fall	Spring				Fall			2021 Spring			
Subject	Enrollment	Percent	# of Courses Offered	Enrollment	Percent	# of Courses Offered	Enrollment	Percent	# of Courses Offered	Enrollment	Percent	# of Courses Offered	Enrollment	Percent	# of Courses Offered	Enrollment	Percent	# of Courses Offered
All subjects	2711	100.0	168	2805	100.0	187	2733	100.0	181	3141	100.0	216	2551	100.0	170	2953	100.0	198
Arts & Humanities	411	15.2	23	557	19.9	30	464	17.0	28	530	16.9	30	331	13.0	20	417	14.1	24
Career Preparation	255	9.4	17	309	11.0	24	186	6.8	17	230	7.3	20	173	6.8	12	290	9.8	22
College Preparation	180	6.6	11	118	4.2	9	115	4.2	8	137	4.4	12	43	1.7	5	222	7.5	18
English (ENG)	545	20.1	31	348	12.4	24	600	22.0	35	423	13.5	27	622	24.4	39	391	13.2	25
Hawaiian Studies (HWST)	180	6.6	12	186	6.6	13	206	7.5	16	255	8.1	19	247	9.7	17	199	6.7	12
Language Arts	311	11.5	20	331	11.8	23	283	10.4	18	391	12.4	25	226	8.9	15	378	12.8	25
Mathematics	222	8.2	14	244	8.7	20	259	9.5	17	212	6.7	17	242	9.5	16	269	9.1	20
Sciences	256	9.4	19	283	10.1	21	278	10.2	21	390	12.4	31	281	11.0	22	222	7.5	17
Social Sciences	351	12.9	21	429	15.3	23	342	12.5	21	573	18.2	35	386	15.1	24	565	19.1	35

Note: Refer to Appendix B for a full course directory listing.

Table A.5a. Percentage-Point Changes in Early College Enrollment Counts of Early College Courses Taken in Each Subject Area—Percent

	Fall 2019– Spring 2020	Spring 2020- Fall 2020	Fall 2020- Spring 2021
All subjects	14.9	-18.8	15.8
Arts & Humanities	14.2	-37.5	26.0
Career Preparation	23.7	-24.8	67.6
College Preparation	19.1	-68.6	416.3
English (ENG)	-29.5	47.0	-37.1
Hawaiian Studies (HWST)	23.8	-3.1	-19.4
Language Arts	38.2	-42.2	67.3
Mathematics	-18.1	14.2	11.2
Sciences	40.3	-27.9	-21.0
Social Sciences	67.5	-32.6	46.4

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.5b. Percentage-Point Changes in Early College Enrollment Counts of Early College Courses Taken in Each Subject Area—Percent

	Fall 2019– Spring 2020	Spring 2020- Fall 2020	Fall 2020– Spring 2021
All subjects	12.0	-6.7	-6.0
Arts & Humanities	-4.8	-28.7	-21.3
Career Preparation	-25.6	-7.0	26.1
College Preparation	16.1	-62.6	62.0
English (ENG)	21.6	3.7	-7.6
Hawaiian Studies (HWST)	37.1	19.9	-22.0
Language Arts	18.1	-20.1	-3.3
Mathematics	-13.1	-6.6	26.9
Sciences	37.8	1.1	-43.1
Social Sciences	33.6	12.9	-1.4

Note: Refer to Appendix B for a full course directory listing.

Table A.6. Early College Enrollment Counts and Percentage of Courses Taken in Each Subject Area by Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021

	20	10		20	19			20	20		2021	
	Fa		Spr	ing	Fa	all	Spr	ing	Fa	ıll	Spr	
Subject	Enrollment	Percent										
All subjects	2711	100.0	2805	100.0	2733	100.0	2141	100.0	2551	100.0	2953	100.0
Face-to-Face	2538	93.6	2607	92.9	2642	96.7	1780	83.1	198	7.8	467	15.8
Hybrid	32	1.2	17	0.6	*	*	*	*	233	9.1	0	0.0
Online - Asynchronous	141	5.2	169	6.0	81	3.0	331	15.5	867	34.0	972	32.9
Online - Synchronous	0	0.0	12	0.4	0	0.0	17	0.8	1253	49.1	1514	51.3
Arts & Humanities	411	100.0	557	100.0	464	100.0	530	100.0	331	100.0	417	100.0
Face-to-Face	373	90.8	557	100.0	449	96.8	498	94.0	48	14.5	78	18.7
Hybrid	0	0.0	0	0.0	0	0.0	0	0.0	55	16.6	0	0.0
Online - Asynchronous	38	9.2	0	0.0	*	*	32	6.0	94	28.4	96	23.0
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	134	40.5	243	58.3
Career Preparation	255	100.0	309	100.0	186	100.0	230	100.0	173	100.0	290	100.0
Face-to-Face	246	96.5	309	100.0	186	100.0	230	100.0	0	0.0	50	17.2
Hybrid	0	0.0	0	0.0	0	0.0	0	0.0	20	11.6	0	0.0
Online - Asynchronous	*	*	0	0.0	0	0.0	0	0.0	37	21.4	68	23.4
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	116	67.1	172	59.3
College Preparation	180	100.0	118	100.0	115	100.0	137	100.0	43	100.0	222	100.0
Face-to-Face	180	100.0	118	100.0	115	100.0	137	100.0	0	0.0	113	50.9
Hybrid	0	0.0	0	0.0	0	0.0	0	0.0	*	*	0	0.0
Online - Asynchronous	0	0.0	0	0.0	0	0.0	0	0.0	*	*	55	24.8
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	29	67.4	54	24.3

Table A.6. Early College Enrollment Counts and Percentage of Courses Taken in Each Subject Area by Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021 (continued)

	20	18		20	19			20	20		20	21
	Fa		Spr	ing	Fa	all	Spr	ring	Fa	all	Spr	
Subject	Enrollment	Percent										
English (ENG)	545	100.0	348	100.0	600	100.0	423	100.0	622	100.0	391	100.0
Face-to-Face	525	96.3	330	94.8	570	95.0	375	88.7	46	7.4	79	20.2
Hybrid	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Online - Asynchronous	20	3.7	18	5.2	30	5.0	48	11.3	278	44.7	142	36.3
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	298	47.9	170	43.5
Hawaiian Studies (HWST)	180	100.0	186	100.0	206	100.0	255	100.0	247	100.0	199	100.0
Face-to-Face	180	100.0	186	100.0	206	100.0	248	97.3	24	9.7	50	25.1
Hybrid	0	0.0	0	0.0	0	0.0	0	0.0	50	20.2	0	0.0
Online - Asynchronous	0	0.0	0	0.0	0	0.0	*	*	66	26.7	55	27.6
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	107	43.3	94	47.2
Language Arts	311	100.0	331	100.0	283	100.0	391	100.0	226	100.0	378	100.0
Face-to-Face	287	92.3	271	81.9	278	98.2	365	93.4	0	0.0	*	*
Hybrid	0	0.0	17	5.1	0	0.0	0	0.0	0	0.0	0	0.0
Online - Asynchronous	24	7.7	43	13.0	*	*	26	6.6	90	39.8	167	44.2
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	136	60.2	197	52.1
Mathematics	222	100.0	244	100.0	259	100.0	212	100.0	242	100.0	269	100.0
Face-to-Face	222	100.0	214	87.7	259	100.0	187	88.2	0	0.0	*	*
Hybrid	0	0.0	0	0.0	0	0.0	0	0.0	22	9.1	0	0.0
Online - Asynchronous	0	0.0	30	12.3	0	0.0	25	11.8	74	30.6	107	39.8
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	146	60.3	155	57.6

Table A.6. Early College Enrollment Counts and Percentage of Courses Taken in Each Subject Area by Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021 (continued)

	2018				19			20	20		20	21
	Fa		Spring		Fall		Spring		Fall		2021 Spring	
Subject	Enrollment	Percent	Enrollment	Percent								
Sciences	256	100.0	283	100.0	278	100.0	390	100.0	281	100.0	222	100.0
Face-to-Face	214	83.6	233	82.3	248	89.2	239	61.3	19	6.8	56	25.2
Hybrid	*	*	0	0.0	*	*	*	*	59	21.0	0	0.0
Online - Asynchronous	39	15.2	38	13.4	20	7.2	121	31.0	138	49.1	67	30.2
Online - Synchronous	0	0.0	*	*	0	0.0	17	4.4	65	23.1	99	44.6
Social Sciences	351	100.0	429	100.0	342	100.0	573	100.0	386	100.0	565	100.0
Face-to-Face	311	88.6	389	90.7	331	96.8	501	87.4	61	15.8	20	3.5
Hybrid	29	8.3	0	0.0	0	0.0	0	0.0	18	4.7	0	0.0
Online - Asynchronous	*	*	40	9.3	*	*	72	12.6	85	22.0	215	38.1
Online - Synchronous	0	0.0	0	0.0	0	0.0	0	0.0	222	57.5	330	58.4

^{*} Cells with small counts are suppressed.

Table A.7. Early College Enrollment Counts and Percentage of Courses Taken in Each Subject Area: Summer Sessions, Summer 2018 - Summer 2020

	Summer										
		2018			2019		2020				
Subject	Enrollm ent	Percent	# of Courses Offered	Enrollm ent	Percent	# of Courses Offered	Enrollm ent	Percent	# of Courses Offered		
All subjects	665	100.0	45	766	100.0	45	829	100.0	48		
Arts & Humanities	120	18.0	8	64	8.4	6	73	8.8	4		
Career Preparation	22	3.3	2	0	0.0	0	0	0.0	0		
College Preparation	50	7.5	5	34	4.4	2	31	3.7	3		
English (ENG)	134	20.2	9	158	20.6	10	215	25.9	13		
Hawaiian Studies (HWST)	37	5.6	3	47	6.1	3	25	3.0	2		
Language Arts	22	3.3	2	37	4.8	2	101	12.2	5		
Mathematics	*	*	1	*	*	1	*	*	1		
Sciences	97	14.6	7	88	11.5	6	121	14.6	8		
Social Sciences	183	27.5	8	338	44.1	15	263	31.7	12		

^{*} Cells with small counts are suppressed.

Table A.8. Number of Early College Classes Offered in Each Subject Area by Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021

	2010	201	.9	202	0	2021	
Subject	2018 Fall	Spring	Fall	Spring	Fall	Spring	
All subjects	168	187	181	216	170	198	
Face-to-Face	157	175	173	192	12	37	
Hybrid	2	1	1	1	18	0	
Online - Asynchronous	9	10	7	22	59	66	
Online - Synchronous	0	1	0	1	81	95	
Arts & Humanities	23	30	28	30	20	24	
Face-to-Face	21	30	27	28	3	6	
Hybrid	0	0	0	0	4	0	
Online - Asynchronous	2	0	1	2	7	6	
Online - Synchronous	0	0	0	0	6	12	
Career Preparation	17	24	17	20	12	22	
Face-to-Face	16	24	17	20	0	6	
Hybrid	0	0	0	0	1	0	
Online - Asynchronous	1	0	0	0	3	5	
Online - Synchronous	0	0	0	0	8	11	
College Preparation	11	9	8	12	5	18	
Face-to-Face	11	9	8	12	0	11	
Hybrid	0	0	0	0	2	0	
Online - Asynchronous	0	0	0	0	1	3	
Online - Synchronous	0	0	0	0	2	4	
English (ENG)	31	24	35	27	39	25	
Face-to-Face	30	23	33	24	3	4	
Hybrid	0	0	0	0	0	0	
Online - Asynchronous	1	1	2	3	17	10	
Online - Synchronous	0	0	0	0	19	11	
Hawaiian Studies (HWST)	12	13	16	19	17	12	
Face-to-Face	12	13	16	18	2	3	
Hybrid	0	0	0	0	4	0	
Online - Asynchronous	0	0	0	1	5	3	
Online - Synchronous	0	0	0	0	6	6	

Table A.8. Number of Early College Classes Offered in Each Subject Area by Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021 (continued)

	2010	201	9	202	0	2024	
Subject	2018 Fall	Spring	Fall	Spring	Fall	2021 Spring	
Language Arts	20	23	18	25	15	25	
Face-to-Face	19	20	17	23	0	1	
Hybrid	0	1	0	0	0	0	
Online - Asynchronous	1	2	1	2	6	12	
Online - Synchronous	0	0	0	0	9	12	
Mathematics	14	20	17	17	16	20	
Face-to-Face	14	18	17	15	0	1	
Hybrid	0	0	0	0	2	0	
Online - Asynchronous	0	2	0	2	5	7	
Online - Synchronous	0	0	0	0	9	12	
Sciences	19	21	21	31	22	17	
Face-to-Face	16	17	18	22	1	4	
Hybrid	1	0	1	1	4	0	
Online - Asynchronous	2	3	2	7	8	5	
Online - Synchronous	0	1	0	1	9	8	
Social Sciences	21	23	21	35	24	35	
Face-to-Face	18	21	20	30	3	1	
Hybrid	1	0	0	0	1	0	
Online - Asynchronous	2	2	1	5	7	15	
Online - Synchronous	0	0	0	0	13	19	

Table A.9. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent)

		Fall 20	18			Spring	2019			Fall 2	019	
·	"C" or l	Better	"D" or B	etter	"C" or l	Better	"D" or l	Better	"C" or l	Better	"D" or I	3etter
All Students	1986.9	87.7%	2081.7	91.9%	2007.3	88.5%	2121.8	93.6%	2001.7	89.4%	2092.5	93.4%
Gender												
Female	1354.6	88.4%	1408.0	91.9%	1373.1	88.7%	1447.0	93.5%	1337.0	90.2%	1385.0	93.5%
Male	632.3	86.3%	674.0	92.0%	634.2	88.1%	674.8	93.7%	664.7	87.7%	707.5	93.3%
Ethnicity												
Asian	370.3	92.8%	380.8	95.4%	379.7	91.9%	400.7	97.0%	384.7	91.8%	396.5	94.6%
Filipino	713.7	90.3%	745.2	94.3%	691.5	91.2%	714.3	94.2%	723.3	91.2%	752.7	94.9%
Native Hawaiian	450.4	81.4%	486.2	87.9%	452.7	82.3%	494.7	89.9%	458.0	85.3%	483.8	90.1%
Pacific Islander	73.0	70.9%	80.5	78.2%	76.7	79.9%	86.7	90.3%	66.0	81.5%	70.5	87.0%
White	289.5	91.6%	295.5	93.5%	303.3	91.9%	316.1	95.8%	290.5	90.2%	306.0	95.0%
Other ^b	90.0	86.5%	93.5	89.9%	103.5	85.5%	109.3	90.4%	79.2	90.0%	83.0	94.3%
Economic Disadvantaged Status												
Yes	645.9	83.7%	692	89.7%	648.6	84.0%	697.7	90.4%	611.00	87.2%	640.3	91.3%
No	1341.0	89.8%	1389.3	93.1%	1358.6	90.8%	1424.1	95.2%	1390.7	90.4%	1452.2	94.4%
Grade												
9th	164.0	83.7%	172.5	88.0%	288.5	88.2%	307.0	93.9%	176.0	88.9%	184.0	92.9%
10th	395.2	85.3%	416.5	90.0%	444.7	90.9%	466.7	95.4%	335.0	90.8%	345.3	93.6%
11th	555.7	87.0%	581.7	91.0%	583.0	89.1%	618.7	94.6%	625.7	88.1%	655.7	92.3%
12th	872.1	90.2%	911.0	94.2%	691.1	86.6%	729.5	91.4%	865.0	89.8%	907.5	94.2%

Table A.9. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent) (continued)

		Spring 2	2020			Fall 2	020		Spring 2021			
-	"C" or E	Better	"D" or Be	etter	"C" or E	Better	"D" or E	Better	"C" or E	Better	"D" or E	Better
All Students	2210.7	87.0%	2285.3	89.9%	1838.9	88.5%	1898.1	91.3%	2077.1	89.1%	2157.9	92.6%
Gender												
Female	1468.9	88.5%	1510.2	91.0%	1252.7	89.4%	1291.6	92.2%	1436.3	89.5%	1483.5	92.5%
Male	741.8	84.1%	775.2	87.9%	586.2	86.5%	606.5	89.5%	640.8	88.1%	674.4	92.8%
Ethnicity												
Asian	442.7	93.6%	448.2	94.7%	391.7	93.0%	402.5	95.6%	396.2	92.8%	407.2	95.4%
Filipino	805.6	89.1%	832.5	92.1%	681.5	91.7%	705.8	95.0%	762.1	90.1%	788.1	93.2%
Native Hawaiian	495.2	81.7%	514.5	84.9%	377.6	78.3%	394.1	81.8%	451.5	83.9%	477.8	88.8%
Pacific Islander	74.5	71.6%	80.5	77.4%	44.0	86.3%	46.5	91.2%	70.7	90.6%	72.0	92.3%
White	312.3	87.7%	322.2	90.5%	278.0	90.8%	281.5	92.0%	310.3	89.4%	324.3	93.5%
Other ^b	80.5	81.3%	87.5	88.4%	66.2	87.1%	67.7	89.0%	86.5	91.1%	88.5	93.2%
Economic Disadvantaged Status												
Yes	680.1	82.7%	704.9	85.8%	603.4	85.8%	626.9	89.2%	690.6	85.3%	728.1	89.9%
No	1530.6	89.0%	1580.4	91.9%	1235.5	89.8%	1271.1	92.4%	1386.6	91.2%	1429.8	94.0%
Grade												
9th	228.4	81.6%	238.3	85.1%	86.5	86.5%	91.5	91.5%	175.0	90.2%	179.3	92.4%
10th	426.3	88.1%	435.5	90.0%	276.7	88.4%	285.3	91.2%	364.3	86.1%	377.0	89.1%
11th	841.0	88.6%	870.8	91.8%	554.4	88.3%	570.1	90.8%	746.8	89.6%	783.8	94.1%
12th	715.0	86.2%	740.8	89.4%	921.3	88.8%	951.2	91.6%	791.1	89.8%	817.8	92.8%

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester and other demographic variables.

^b Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race.

Table A.9a. Significance Testing on Proportion Differences Between Semesters in the Percentage of Students Who Earned a "C" or Better by Student Demographics

	Spring 201 202		Fall 2019 -	· Fall2020	Spring 202 202	
	% Difference	p-value	% Difference	p-value	% Difference	p-value
All Students	-1.5	0.105	-0.9	0.341	2.1	0.022
Gender						
Female	-0.2	0.847	-0.8	0.478	1.1	0.334
Male	-4.0	0.023	-1.2	0.487	4.0	0.020
Ethnicity						
Asian	1.7	0.340	1.2	0.502	-0.8	0.631
Filipino	-2.1	0.150	0.5	0.724	1.0	0.508
Native Hawaiian	-0.6	0.794	-7.0	0.004	2.2	0.323
Pacific Islander	-8.2	0.176	4.8	0.472	19.0	0.002
White	-4.2	0.072	0.6	0.787	1.7	0.485
Othera	-4.2	0.399	-2.9	0.560	9.7	0.050
Economic Disadvantaged Status						
Yes	-1.3	0.491	-1.3	0.467	2.5	0.166
No	-1.8	0.087	-0.6	0.604	2.2	0.040
Grade						
9th	-6.6	0.022	-2.4	0.548	8.6	0.010
10th	-2.9	0.146	-2.4	0.306	-2.0	0.380
11th	-0.5	0.743	0.2	0.930	1.0	0.488
12th	-0.4	0.832	-1.1	0.443	3.5	0.024

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race. Note: Values in red indicate a statistically significant difference (p-value <0.05).

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.9b. Significance Testing On Proportion Differences Between Semesters in the Percentage of Students who Earned a "D" or Better by Student Demographics

	Spring 201 202		Fall 2019 -	Fall2020	Spring 202 202	
	% Difference	p-value	% Difference	p-value	% Difference	p-value
All Students	-3.7%	0.0001	-2.1%	0.0087	2.7%	0.0010
Gender						
Female	-2.5%	0.0084	-1.3%	0.1872	1.5%	0.1173
Male	-5.8%	0.0001	-3.9%	0.0084	4.9%	0.0011
Ethnicity						
Asian	-2.3%	0.0936	1.0%	0.5117	0.6%	0.6763
Filipino	-2.1%	0.0858	0.1%	0.9433	1.1%	0.3974
Native Hawaiian	-5.0%	0.0102	-8.3%	0.0001	3.9%	0.0513
Pacific Islander	-12.9%	0.0141	4.1%	0.4656	14.9%	0.0069
White	-5.3%	0.0064	-3.0%	0.1214	3.0%	0.1474
Othera	-2.0%	0.6351	-5.3%	0.2170	4.8%	0.2519
Economic Disadvantaged Status						
Yes	-4.6%	0.0046	-2.2%	0.1707	4.1%	0.0108
No	-3.3%	0.0002	-2.0%	0.0314	2.1%	0.0192
Grade						
9th	-8.8%	0.0004	-1.4%	0.6592	7.4%	0.0151
10th	-5.5%	0.0011	-2.4%	0.2315	-0.9%	0.6717
11th	-2.8%	0.0292	-1.6%	0.2997	2.3%	0.0566
12th	-2.0%	0.1617	-2.6%	0.0237	3.5%	0.0117

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race. Note: Values in red indicate a statistically significant difference (p-value < 0.05).

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.10. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent)

		Fall 2	2018			Spring	2019			Fall	2019	
	"C" or	Better	"D" or B	etter	"C" or	Better	"D" o	r Better	"C" or	Better	"D" or	Better
All Students	1986.9	87.7%	2081.7	91.9%	2007.3	88.5%	2121.8	93.6%	2001.7	89.4%	2092.5	93.4%
Face-to-Face	1843.4	88.0%	1929.2	92.1%	1857.3	88.4%	1967.8	93.6%	1921.7	89.4%	2011.5	93.6%
Hybrid	29.5	92.2%	31.5	98.4%	17.0	100.0%	17.0	100.0%	*	*	*	*
Online - Asynchronous	114.0	82.0%	121	87.1%	125	91.2%	129.0	94.2%	73.0	90.1%	74.0	91.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Gender												
Female	1354.6	88.4%	1408	91.9%	1373.1	88.7%	1447.0	93.5%	1337.0	90.2%	1385.0	93.5%
Face-to-Face	1258.1	88.8%	1305.2	92.1%	1266.6	88.5%	1337.0	93.4%	1279.0	90.3%	1326.0	93.6%
Hybrid	18.5	88.1%	20.5	97.6%	*	*	*	*	*	*	*	*
Online - Asynchronous	78.0	83.0%	82	87.2%	89.5	92.3%	93.0	95.9%	57.0	90.5%	58.0	92.1%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Male	632.3	86.3%	674.0	92.0%	634.2	88.1%	674.8	93.7%	664.7	87.7%	707.5	93.3%
Face-to-Face	585.3	86.5%	624	92.2%	590.7	88.2%	630.8	94.2%	642.7	87.7%	685.5	93.5%
Hybrid	*	*	*	*	*	*	*	*	*	*	*	*
Online - Asynchronous	36.0	80.0%	39	86.7%	35.5	88.8%	36.0	90.0%	16.0	88.9%	16.0	88.9%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Ethnicity												
Asian	370.3	92.8%	380.8	95.4%	379.7	91.9%	400.7	97.0%	384.7	91.8%	396.5	94.6%
Face-to-Face	359.3	93.1%	368.8	95.6%	359.7	91.5%	380.7	96.9%	378.7	91.7%	390.5	94.6%
Hybrid	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	*	*	*	*
Online - Asynchronous	*	*	*	*	18.0	100.0%	18.0	100.0%	*	*	*	*
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Filipino	713.7	90.3%	745.2	94.3%	691.5	91.2%	714.3	94.2%	723.3	91.2%	752.7	94.9%
Face-to-Face	660.2	90.2%	690.2	94.3%	637.5	91.1%	660.3	94.3%	685.3	91.0%	713.7	94.8%
Hybrid	*	*	*	*	*	*	*	*	*	*	*	*
Online - Asynchronous	52.0	92.9%	53	94.6%	50.0	94.3%	50.0	94.3%	37.0	94.9%	38.0	97.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%

^{*} Cells with small counts are suppressed.

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester and other demographic variables.

^b Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race.

Table A.10. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent) (continued)

		Fall 2	018			Spring	g 2019			Fall	2019	
_	"C" or	Better	"D" or E	Better	"C" or l	Better	"D" oı	Better	"C" or	Better	"D" or	Better
Native Hawaiian	450.4	81.4%	486.2	87.9%	452.7	82.3%	494.7	89.9%	458.0	85.3%	483.8	90.1%
Face-to-Face	423.9	82.3%	455.6	88.5%	419.7	82.1%	460.7	90.2%	444.0	85.7%	469.8	90.7%
Hybrid	*	*	*	*	*	*	*	*	*	*	*	*
Online - Asynchronous	20.0	66.7%	23.0	76.7%	19.0	82.6%	20.0	87.0%	*	*	*	*
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Pacific Islander	73.0	70.9%	80.5	78.2%	76.7	79.9%	86.7	90.3%	66.0	81.5%	70.5	87.0%
Face-to-Face	59.0	67.8%	66.5	76.4%	66.7	77.5%	76.7	89.1%	62.0	80.5%	66.5	86.4%
Hybrid	*	*	*	*	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	*	*	*	*	*	*	*	*	*	*	*	*
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
White	289.5	91.6%	295.5	93.5%	303.3	91.9%	316.1	95.8%	290.5	90.2%	306.0	95.0%
Face-to-Face	272.5	92.7%	277.5	94.4%	283.8	91.8%	296.1	95.8%	277.5	90.4%	293.0	95.4%
Hybrid	*	*	*	*	0.0	0.0%	0.0	0.0%	*	*	*	*
Online - Asynchronous	*	*	*	*	16.5	97.1%	17.0	100.0%	*	*	*	*
Online - Synchronous	0.0	0.0%	0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Other ^b	90.0	86.5%	93.5	89.9%	103.5	85.5%	109.3	90.4%	79.2	90.0%	83.0	94.3%
Face-to-Face	77.0	86.5%	79.5	89.3%	89	87.3%	92.3	90.5%	74.2	90.4%	78.0	95.1%
Hybrid	*	*	*	*	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Asynchronous	*	*	*	*	*	*	*	*	*	*	*	*
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Economic Disadvantaged Status												
Yes	645.9	83.7%	692	89.7%	648.7	84.0%	697.67	90.4%	611.00	87.2%	640.33	91.3%
Face-to-Face	589.4	83.7%	629.8	89.5%	588.7	83.5%	636.7	90.3%	583.0	87.1%	612.3	91.5%
Hybrid	*	*	*	*	*	*	*	*	*	*	*	*
Online - Asynchronous	52.0	83.9%	57	91.9%	48	92.3%	49.0	94.2%	27.0	90.0%	27.0	90.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%

Table A.10. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent) (continued)

		Fall	2018			Sprin	g 2019			Fall	2019	
•	"C" or	Better	"D" or	Better	"C" or I	Better	"D" or	Better	"C" or	Better	"D" or	Better
No	1341.0	89.8%	1389.3	93.1%	1358.6	90.8%	1424.13	95.2%	1390.67	90.4%	1452.17	94.4%
Face-to-Face	1262.5	90.2%	1308.3	93.5%	1267.6	90.8%	1330.1	95.3%	1338.7	90.4%	1399.2	94.5%
Hybrid	15.5	96.9%	16.0	100.0%	*	*	*	*	*	*	*	*
Online - Asynchronous	63.0	80.8%	65.0	83.3%	78.0	90.7%	81.0	94.2%	46.0	90.2%	47.0	92.2%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Grade												
9th	164.0	83.7%	172.5	88.0%	288.5	88.2%	307.0	93.9%	176.0	88.9%	184.0	92.9%
Face-to-Face	164.0	83.7%	172.5	88.0%	288.5	88.2%	307.0	93.9%	176.0	88.9%	184.0	92.9%
Hybrid	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
10th	395.2	85.3%	416.5	90.0%	444.7	90.9%	466.7	95.4%	335.0	90.8%	345.3	93.6%
Face-to-Face	374.2	84.8%	395.5	89.7%	417.7	91.2%	438.7	95.8%	330.0	90.9%	340.3	93.8%
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Asynchronous	21.0	95.5%	21.0	95.5%	22.0	84.6%	23.0	88.5%	*	*	*	*
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11th	555.7	87.0%	581.7	91.0%	583.0	89.1%	618.7	94.6%	625.7	88.1%	655.7	92.3%
Face-to-Face	504.7	88.4%	526.7	92.2%	536	89.0%	570.7	94.8%	588.7	87.9%	618.7	92.3%
Hybrid	*	*	*	*	*	*	*	*	*	*	*	*
Online - Asynchronous	44.0	72.1%	48.0	78.7%	39.0	95.1%	40.0	97.6%	34.0	94.4%	34.0	94.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
12th	872.1	90.2%	911.0	94.2%	691.1	86.6%	729.5	91.4%	865.0	89.8%	907.5	94.2%
Face-to-Face	809.1	90.4%	843.5	94.2%	614.1	86.0%	650.5	91.1%	827.0	90.0%	868.5	94.5%
Hybrid	*	*	*	*	*	*	*	*	*	*	*	*
Online - Asynchronous	50.0	87.7%	53.0	93.0%	65.0	91.5%	67.0	94.4%	34.0	87.2%	35.0	89.7%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%

Table A.10. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent)

		Spring	2020			Fall	2020			Spring	g 2021	
	"C" or	Better	"D" or B	Setter	"C" or I	Better	"D" or	Better	"C" or	Better	"D" or	Better
All Students	2210.7	87.0%	2285.3	89.9%	1838.9	88.5%	1898.1	91.3%	2077.1	89.1%	2157.9	92.6%
Face-to-Face	1959.7	87.9%	2022.3	90.7%	157.7	95.6%	159.5	96.7%	339.2	88.8%	354.0	92.7%
Hybrid	*	*	*	*	161.4	79.5%	165.9	81.7%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	229.0	80.4%	240.0	84.2%	629.5	90.3%	656.8	94.2%	684.6	87.3%	712.6	90.9%
Online - Synchronous Gender	*	*	*	*	890.3	87.8%	915.9	90.3%	1053.4	90.4%	1091.3	93.7%
Female	1468.9	88.5%	1510.2	91.0%	1252.7	89.4%	1291.6	92.2%	1436.3	89.5%	1483.5	92.5%
Face-to-Face	1309.4	89.3%	1343.7	91.6%	105.5	95.0%	106.5	95.9%	193.5	88.8%	199.8	91.7%
Hybrid	*	*	*	*	93.3	79.0%	97.8	82.8%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	151.5	82.3%	158.5	86.1%	442.0	92.1%	456.3	95.1%	507.5	88.1%	527.2	91.5%
Online - Synchronous	*	*	*	*	612.0	88.4%	631.1	91.2%	735.3	90.8%	756.5	93.4%
Male	741.8	84.1%	775.2	87.9%	586.2	86.5%	606.5	89.5%	640.8	88.1%	674.4	92.8%
Face-to-Face	650.3	85.3%	678.7	89.1%	52.2	96.6%	53.0	98.1%	145.7	88.8%	154.2	94.0%
Hybrid	*	*	*	*	68.2	80.2%	68.2	80.2%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	77.5	76.7%	81.5	80.7%	187.5	86.4%	200.5	92.4%	177.1	85.1%	185.4	89.1%
Online - Synchronous	*	*	*	*	278.3	86.4%	284.8	88.5%	318.1	89.6%	334.8	94.3%
Ethnicity												
Asian	442.7	93.6%	448.2	94.7%	391.7	93.0%	402.5	95.6%	396.2	92.8%	407.2	95.4%
Face-to-Face	402.2	93.7%	407.2	94.9%	54.0	98.2%	54.0	98.2%	52.7	90.8%	54.0	93.1%
Hybrid	0.0	0.0%	0.0	0.0%	25.5	91.1%	25.5	91.1%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	34.5	93.2%	35.0	94.6%	126.5	92.3%	133.0	97.1%	128.0	91.4%	131.0	93.6%
Online - Synchronous	*	*	*	*	185.7	92.4%	190.0	94.5%	215.5	94.1%	222.2	97.0%
Filipino	805.6	89.1%	832.5	92.1%	681.5	91.7%	705.8	95.0%	762.1	90.1%	788.1	93.2%
Face-to-Face	704.4	90.1%	727.3	93.0%	*	*	*	*	68.0	91.9%	71.0	95.9%
Hybrid	*	*	*	*	21.0	84.0%	21.8	87.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	96.2	82.9%	100.2	86.4%	277.5	90.7%	287.7	94.0%	264.8	89.2%	273.8	92.2%
Online - Synchronous	*	*	*	*	369.0	92.9%	382.4	96.3%	429.2	90.4%	443.2	93.3%

Table A.10. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent) (continued)

		Fall 2	.018			Spring	g 2019			Fall	2019	
-	"C" or	Better	"D" or E	Better	"C" or I	Better	"D" or	Better	"C" or	Better	"D" or	Better
Native Hawaiian	495.2	81.7%	514.5	84.9%	377.6	78.3%	394.1	81.8%	451.5	83.9%	477.8	88.8%
Face-to-Face	460.7	82.6%	479.0	85.8%	41.5	92.2%	41.5	92.2%	123.0	84.2%	129.5	88.7%
Hybrid	*	*	*	*	70.3	73.2%	73.8	76.8%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	28.5	67.9%	29.5	70.2%	93.3	85.6%	98.8	90.7%	120.0	82.2%	127.5	87.3%
Online - Synchronous	*	*	*	*	172.5	74.4%	180.0	77.6%	208.5	84.8%	220.8	89.8%
Pacific Islander	74.5	71.6%	80.5	77.4%	44.0	86.3%	46.5	91.2%	70.7	90.6%	72.0	92.3%
Face-to-Face	67.5	77.6%	69.5	79.9%	*	*	*	*	*	*	*	*
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Asynchronous	*	*	*	*	*	*	16.5	91.7%	22.5	90.0%	22.5	90.0%
Online - Synchronous	*	*	*	*	19.0	86.4%	19.0	86.4%	33.2	89.6%	34.5	93.2%
White	312.3	87.7%	322.2	90.5%	278.0	90.8%	281.5	92.0%	310.3	89.4%	324.3	93.5%
Face-to-Face	268.8	88.4%	277.2	91.2%	28.0	96.6%	28.0	96.6%	70.0	92.1%	74.0	97.4%
Hybrid	*	*	*	*	31.0	88.6%	32.0	91.4%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	40.5	86.2%	41.0	87.2%	74.0	92.5%	76.0	95.0%	100.5	86.6%	105.5	90.9%
Online - Synchronous	0.0	0.0%	0.0	0.0%	145.0	89.5%	145.5	89.8%	139.8	90.2%	144.8	93.4%
Other ^b	80.5	81.3%	87.5	88.4%	66.2	87.1%	67.7	89.0%	86.5	91.1%	88.5	93.2%
Face-to-Face	70.5	83.9%	76.5	91.1%	*	*	*	*	*	*	*	*
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Asynchronous	*	*	*	*	22.2	88.7%	23.2	92.7%	37.5	87.2%	39.5	91.9%
Online - Synchronous	*	*	*	*	33.5	88.2%	34.0	89.5%	36.0	94.7%	36.0	94.7%
Economic Disadvantaged Status												
Yes	680.13	82.7%	704.92	85.8%	603.42	85.8%	626.92	89.2%	690.58	85.3%	728.08	89.9%
Face-to-Face	616.1	83.9%	637.9	86.9%	37.0	94.9%	37.0	94.9%	121.0	82.3%	129.7	88.2%
Hybrid	*	*	*	*	65.5	77.1%	67.8	79.7%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	58.0	72.5%	61.0	76.3%	207.8	89.6%	217.8	93.9%	228.5	83.7%	242.5	88.8%
Online - Synchronous	*	*	*	*	293.1	84.5%	304.3	87.7%	341.1	87.5%	355.9	91.3%

Table A.10. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent) (continued)

		Fall 2	2018			Spring	2019			Fall	2019	
•	"C" or	Better	"D" or B	Better	"C" or E	Better	"D" or	Better	"C" or	Better	"D" or	Better
No	1530.6	89.0%	1580.42	91.9%	1235.5	89.8%	1271.1	92.4%	1386.6	91.2%	1429.8	94.0%
Face-to-Face	1357.9	89.9%	1398.8	92.6%	108.5	96.0%	108.5	96.0%	220.7	93.1%	226.8	95.7%
Hybrid	*	*	*	*	95.8	83.3%	98.8	85.9%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	156.7	82.5%	164.7	86.7%	399.7	90.2%	417.3	94.2%	444.8	90.0%	457.3	92.6%
Online - Synchronous	*	*	*	*	631.6	89.6%	646.6	91.7%	721.1	91.3%	745.6	94.4%
Grade												
9th	228.4	81.6%	238.3	85.1%	86.5	86.5%	91.5	91.5%	175.0	90.2%	179.3	92.4%
Face-to-Face	219.4	82.5%	229.3	86.2%	*	*	*	*	22.0	71.0%	24.3	78.5%
Hybrid	*	*	*	*	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Asynchronous	*	*	*	*	23.5	94.0%	24.0	96.0%	82.0	91.1%	83.0	92.2%
Online - Synchronous	0.0	0.0%	0.0	0.0%	48.0	90.6%	51.5	97.2%	71.0	97.3%	72.0	98.6%
10th	426.3	88.1%	435.5	90.0%	276.7	88.4%	285.3	91.2%	364.3	86.1%	377.0	89.1%
Face-to-Face	403.3	88.8%	412.5	90.9%	*	*	*	91.7%	50.0	83.3%	51.3	85.6%
Hybrid	*	*	*	*	38.5	75.5%	40.5	79.4%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	18.0	72.0%	18.0	72.0%	80.7	90.6%	84.3	94.8%	114.7	83.7%	119.7	87.3%
Online - Synchronous	*	*	*	*	146.5	91.0%	149.5	92.9%	199.6	88.3%	206.0	91.1%
11th	841.0	88.6%	870.8	91.8%	554.4	88.3%	570.1	90.8%	746.8	89.6%	783.8	94.1%
Face-to-Face	743.0	89.5%	765.8	92.3%	31.0	93.9%	31.0	93.9%	155.0	90.6%	161.3	94.3%
Hybrid	*	*	*	*	56.8	93.0%	58.0	95.1%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	94.0	82.5%	100.0	87.7%	177.3	89.6%	184.8	93.4%	198.5	89.8%	206.5	93.4%
Online - Synchronous	*	*	*	*	289.3	86.1%	296.2	88.2%	393.3	89.2%	415.9	94.3%
12th	715.0	86.2%	740.8	89.4%	921.3	88.8%	951.2	91.6%	791.1	89.8%	817.8	92.8%
Face-to-Face	608.3	87.7%	629.2	90.7%	96.5	96.5%	96.5	96.5%	114.7	94.0%	119.5	98.0%
Hybrid	*	*	*	*	58.0	79.5%	59.0	80.8%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	95.7	80.4%	100.7	84.6%	326.0	89.8%	342.0	94.2%	278.2	87.2%	290.7	91.1%
Online - Synchronous	*	*	*	*	440.8	87.8%	453.7	90.4%	398.3	90.5%	407.7	92.7%

^{*} Cells with small counts are suppressed.

Table A.11. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Student Demographics: Summer Sessions, 2018–2020—(Number^a, Percent)

						Sun	nmer					
		20)18			20)19			20)20	
	"C" or	Better	"D" or	Better	"C" or	Better	"D" or	Better	"C" or	Better	"D" or	Better
All Students	525.0	93.6%	533.0	95.0%	561	96.1%	569.0	97.4%	639.5	96.6%	646.5	97.7%
Gender												
Female	357.5	93.3%	361.0	94.3%	401.5	96.5%	407.0	97.8%	479.0	97.8%	483.5	98.7%
Male	167.5	94.1%	172.0	96.6%	159.5	94.9%	162.0	96.4%	160.5	93.3%	163.0	94.8%
Ethnicity												
Asian	104.5	98.6%	105.0	99.1%	99.0	96.1%	102.0	99.0%	145.5	99.7%	145.5	99.7%
Filipino	223.0	95.7%	228.0	97.9%	295.0	98.3%	296.5	98.8%	307.0	97.8%	308.5	98.2%
Native Hawaiian	107.0	88.4%	107.0	88.4%	91.0	87.5%	93.5	89.9%	113.5	93.0%	115.0	94.3%
Pacific Islander	34.5	90.8%	35.0	92.1%	16.5	97.1%	17.0	100.0 %	*	*	*	*
White	37.0	90.2%	39.0	95.1%	45.5	98.9%	46.0	100.0 %	44.5	89.0%	48.0	96.0%
Other ^b	19.0	86.4%	19.0	86.4%	*	*	*	*	16.0	94.1%	16.5	97.1%
Economic Disadvantaged Status												
Yes	166.00	89.7%	169.50	91.6%	193.50	93.5%	199.00	96.1%	222.50	97.2%	223.00	97.4%
No	359.00	95.5%	363.50	96.7%	367.50	97.5%	370.00	98.1%	417.00	96.3%	423.50	97.8%
Grade												
9th	138.5	93.6%	142.0	95.9%	139.5	96.2%	141.0	97.2%	138.0	97.9%	139.5	98.9%
10th	141.0	94.0%	145.0	96.7%	195.0	96.1%	198.0	97.5%	228.0	95.4%	231.5	96.9%
11th	245.5	93.3%	246.0	93.5%	226.5	96.0%	230.0	97.5%	273.5	97.0%	275.5	97.7%
12th												

^{*} Cells with small counts are suppressed.

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester.

^b Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race.

Table A.12. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by School Characteristics: Fall and Spring Terms, Fall 2018–Spring 2021—(Number^a, Percent)

		Fall 2	018			Sprin	g 2019			Fall 2	2019	
	"C" or	Better	"D" or B	etter	"С" о	Better	"D" or	Better	"C" or	Better	"D" or	Better
All Schools	1986.9	87.7%	2081.7	91.9%	2007.3	88.5%	2121.8	93.6%	2001.7	89.4%	2092.5	93.4%
Title I Status												
Title I	1121.3	83.9%	1196	89.5%	1087.2	87.5%	1149.5	92.5%	933.7	88.9%	969.5	92.3%
Not Title I	865.7	93.2%	885.5	95.3%	920.1	89.8%	972.3	94.9%	1068.0	89.7%	1123.0	94.4%
School Type												
HIDOE	1935.9	87.5%	2029.7	91.7%	1896.6	88.3%	2006.8	93.4%	1907.7	89.3%	1996.5	93.4%
Charter	51.0	98.1%	52.0	100.0%	110.7	93.0%	115.0	96.6%	94.0	91.3%	96.0	93.2%
Location												
City	275.0	88.7%	289.0	93.2%	246.5	86.2%	258.5	90.4%	302.5	89.0%	312.5	91.9%
Rural	198.0	78.3%	213.0	84.2%	219.5	89.6%	230.0	93.9%	184.5	87.0%	195.5	92.2%
Suburb	939.2	90.1%	962.2	92.3%	980.1	89.5%	1031.3	94.2%	1024.2	90.9%	1062.8	94.3%
Town	574.8	87.1%	617.5	93.6%	561.2	87.4%	602.0	93.8%	490.5	87.4%	521.7	93.0%

Table A.12. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by School Characteristics: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent) (continued)

		Spring	2020			Fall	2020			Spring	2021	
	"C" or	Better	"D" or Be	tter	"C" o	r Better	"D" or	Better	"C" or	Better	"D" or	Better
All Schools	2210.7	87.0%	2285.3	89.9%	1838.9	88.5%	1898.1	91.3%	2077.1	89.1%	2157.9	92.6%
Title I Status												
Title I	972.1	84.2%	1012.4	87.7%	944.0	86.1%	979.9	89.3%	1110.5	87.8%	1153.5	91.2%
Not Title I	1238.6	89.2%	1272.9	91.7%	951.6	91.4%	975.2	93.7%	1006.2	89.4%	1049.7	93.2%
School Type												
HIDOE	2122.2	87.0%	2196.8	90.0%	1746.9	88.7%	1803.1	91.5%	1965.1	89.3%	2037.9	92.6%
Charter	88.5	86.8%	88.5	86.8%	92.0	84.4%	95.0	87.2%	112.0	85.5%	120.0	91.6%
Location												
City	336.7	88.1%	343.2	89.8%	333.5	89.4%	345.5	92.6%	310.2	88.1%	317.5	90.2%
Rural	211.0	78.7%	216.0	80.6%	190.0	82.3%	191.0	82.7%	204.0	84.0%	211.0	86.8%
Suburb	1120.1	87.8%	1165.7	91.4%	826.2	91.5%	852.1	94.4%	1023.6	91.8%	1058.9	95.0%
Town	543.0	88.0%	560.5	90.8%	489.2	85.5%	509.5	89.1%	539.4	86.9%	570.5	91.9%

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester.

Table A.12a. Significance Testing on Proportion Differences Between Semesters in the Percentage of Students who Earned a "C" or Better by School Characteristics—(Number^a, Percent)

	Spring 2019 -	Spring 2020	Fall 2019 -	Fall2020	Spring 2020 -	Spring 2021
	% Difference	p-value	% Difference	p-value	% Difference	p-value
All Students	-1.5	0.1051	-0.9	0.3412	2.1	0.0216
Title I Status						
Title I	-3.2	0.0270	-2.9	0.0080	3.5	0.0050
Not Title I	-0.5	0.9214	1.7	0.1360	0.1	0.6917
School Type						
HIDOE	-1.3	0.1895	-0.6	0.5435	2.3	0.0137
Charter	-6.2	0.1216	-6.9	0.1281	-1.3	0.7816
Location						
City	1.9	0.4553	0.4	0.8502	0.0	0.9943
Rural	-10.9	0.0008	-4.8	0.1648	5.2	0.1314
Suburb	-1.7	0.2039	0.6	0.6242	4.0	0.0015
Town	0.6	0.7470	-1.9	0.3463	-1.1	0.5438

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester.

Note: Values in red indicate a statistically significant difference (p-value <0.05).

Table A.12b. Significance Testing on Proportion Differences Between Semesters in the Percentage of Students who Earned a "D" or Better by School Characteristics—(Number^a, Percent)

	Spring 2019 -	Spring 2020	Fall 2019 -	Fall2020	Spring 2020 - 5	Spring 2021
	% Difference	p-value	% Difference	p-value	% Difference	p-value
All Students	-3.7	0.0001	-2.1	0.0087	2.7	0.0010
Title I Status						
Title I	-4.7	0.0000	-3.0	0.0030	3.5	0.0014
Not Title I	-3.1	0.0063	-0.7	0.6200	1.5	0.1482
School Type						
HIDOE	-3.3	0.0001	-1.9	0.0208	2.6	0.0018
Charter	-9.9	0.0067	-6.0	0.1407	4.8	0.2323
Location						
City	-0.6	0.8139	0.7	0.7206	0.4	0.8693
Rural	-13.3	0.0001	-9.5	0.0027	6.2	0.0576
Suburb	-2.8	0.0101	0.1	0.9604	3.5	0.0007
Town	-2.9	0.0510	-3.9	0.0212	1.0	0.5210

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester.

Note: Values in red indicate a statistically significant difference (p-value <0.05).

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.13. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by School Characteristics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent)

		Fall 2	2018			Spring	2019			Fall 2	2019	
·	"C" or l	Better	"D" or	Better	"C" or	Better	"D" or	Better	"C" or l	Better	"D" or	Better
All Schools	1986.9	87.7%	2081.7	91.9%	2007.3	88.5%	2121.8	93.6%	2001.7	89.4%	2092.5	93.4%
Face-to-Face	1843.4	88.0%	1929.2	92.1%	1857.3	88.4%	1967.8	93.6%	1921.7	89.4%	2011.5	93.6%
Hybrid	29.5	92.2%	31.5	98.4%	17.0	100.0%	17.0	100.0%	*	*	*	*
Online - Asynchronous	114.0	82.0%	121.0	87.1%	125.0	91.2%	129.0	94.2%	73.0	90.1%	74.0	91.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Title I Status												
Title I	1121.3	83.9%	1196	89.5%	1087.2	87.5%	1149.5	92.5%	933.7	88.9%	969.5	92.3%
Face-to-Face	987.3	84.0%	1053.7	89.7%	957.12	87.3%	1015.5	92.6%	860.7	88.8%	895.5	92.4%
Hybrid	20.0	90.9%	21.5	97.7%	17.0	100.0%	17.0	100.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	114.0	82.0%	121.0	87.1%	105.0	89.7%	109.0	93.2%	73.0	90.1%	74.0	91.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Not Title I	865.7	93.2%	885.5	95.3%	920.1	89.8%	972.3	94.9%	1068.0	89.7%	1123.0	94.4%
Face-to-Face	864.7	93.2%	884.5	95.3%	899.1	89.6%	951.3	94.8%	1061.0	89.8%	1116.0	94.5%
Hybrid	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	*	*	*	*
Online - Asynchronous	*	*	*	*	21.0	100.0%	21.0	100.0%	0.0	0.0%	0.0	0.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
School Type												
HIDOE	1935.9	87.5%	2029.7	91.7%	1896.6	88.3%	2006.8	93.4%	1907.7	89.3%	1996.5	93.4%
Face-to-Face	1800.9	87.8%	1886.2	92.0%	1762.6	88.2%	1868.8	93.5%	1827.7	89.3%	1915.5	93.6%
Hybrid	20.0	90.9%	21.5	97.7%	0.0	0.0%	0.0	0.0%	*	*	*	*
Online - Asynchronous	115.0	82.1%	122	87.1%	126.0	91.3%	130.0	94.2%	73.0	90.1%	74.0	91.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Charter	51.0	98.1%	52.0	100.0%	110.7	93.0%	115.0	96.6%	94.0	91.3%	96.0	93.2%
Face-to-Face	51.0	98.1%	52.0	100.0%	93.7	91.8%	98.0	96.1%	94.0	91.3%	96.0	93.2%
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Asynchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table A.13. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by School Characteristics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent) (continued)

		Fall	2018			Spring :	2019			Fall 2	2019	
	"C" or	Better	"D" or Be	tter	"C" or Be	tter	"D" o	r Better	"C" or	Better	"D" or	Better
Location												
City	275.0	88.7%	289.0	93.2%	246.5	86.2%	258.5	90.4%	302.5	89.0%	312.5	91.9%
Face-to-Face	275.0	88.7%	289.0	93.2%	246.5	86.2%	258.5	90.4%	302.5	89.0%	312.5	91.9%
Hybrid	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Rural	198.0	78.3%	213.0	84.2%	219.5	89.6%	230.0	93.9%	184.5	87.0%	195.5	92.2%
Face-to-Face	177.0	81.9%	188.0	87.0%	202.5	88.8%	213.0	93.4%	184.5	87.0%	195.5	92.2%
Hybrid	0.0	0.0%	0.0	0.0%	17.0	100.0 %	17.0	100.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	21.0	56.8%	25.0	67.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Suburb	939.2	90.1%	962.2	92.3%	980.1	89.5%	1031.3	94.2%	1024.2	90.9%	1062.8	94.3%
Face-to-Face	852.2	89.9%	874.2	92.2%	860.1	89.3%	907.3	94.2%	944.2	91.0%	981.8	94.7%
Hybrid	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	*	*	*	*
Online - Asynchronous	87.0	92.6%	88.0	93.6%	120.0	90.9%	124.0	93.9%	73.0	90.1%	74.0	91.4%
Online - Synchronous	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Town	574.8	87.1%	617.5	93.6%	561.2	87.4%	602.0	93.8%	490.5	87.4%	521.7	93.0%
Face-to-Face	547.8	87.1%	587	93.3%	547.2	87.7%	588.0	94.2%	490.5	87.4%	521.7	93.0%
Hybrid	20.0	90.9%	21.5	97.7%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Online - Asynchronous	*	*	*	*	*	*	*	*	0.0	0.0%	0.0	0.0%
Online - Synchronous	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0%

Table A.13. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by School Characteristics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent)

		Sprin	g 2020			Fall 20	20			Spring	2021	
	"C" or	Better	"D" or Be	tter	"C" or Be	tter	"D" o	r Better	"C" or	Better	"D" or	Better
All Schools	2210.7	87.0%	2285.3	89.9%	1838.9	88.5%	1898. 1	91.3%	2077.1	89.1%	2157.9	92.6%
Face-to-Face	1959.7	87.9%	2022.3	90.7%	157.7	95.6%	159.5	96.7%	339.2	88.8%	354.0	92.7%
Hybrid	*	*	*	*	161.4	79.5%	165.9	81.7%	0.0	0.0%	0.0	0.09
Online - Asynchronous	229.0	80.4%	240.0	84.2%	629.5	90.3%	656.8	94.2%	684.6	87.3%	712.6	90.99
Online - Synchronous	15.0	88.2%	15.0	88.2%	890.3	87.8%	915.9	90.3%	1053.4	90.4%	1091.3	93.79
Title I Status												
Title I	972.1	84.2%	1012.4	87.7%	944.0	86.1%	979.9	89.3%	1110.5	87.8%	1153.5	91.2
Face-to-Face	860.4	85.4%	889.8	88.3%	44.0	89.8%	44.0	89.8%	168.0	86.2%	177.5	91.09
Hybrid	0.0	0.0%	0.0	0.0%	95.3	76.8%	98.5	79.4%	0.0	0.0%	0.0	0.0
Online - Asynchronous	111.7	76.5%	122.7	84.0%	345.5	88.6%	364.2	93.4%	424.8	86.5%	443.3	90.3
Online - Synchronous	0.0	0.0%	0.0	0.0%	419.5	85.1%	433.4	87.9%	490.0	91.2%	503.1	93.7
Not Title I	1238.6	89.2%	1272.9	91.7%	951.6	91.4%	975.2	93.7%	1006.2	89.4%	1049.7	93.2
Face-to-Face	1113.6	90.1%	1146.9	92.8%	101.5	98.5%	101.5	98.5%	173.7	91.9%	179.0	94.7
Hybrid	*	*	*	*	66.0	86.8%	68.0	89.5%	0.0	0.0%	0.0	0.0
Online - Asynchronous	103.0	83.1%	103.0	83.1%	262.0	91.9%	271.0	95.1%	248.5	90.0%	256.5	92.9
Online - Synchronous	*	*	*	*	505.2	90.4%	517.5	92.6%	572.2	89.0%	598.4	93.19
School Type												
HIDOE	2122.2	87.0%	2196.8	90.0%	1746.9	88.7%	1803. 1	91.5%	1965.1	89.3%	2037.9	92.6
Face-to-Face	1885.6	88.0%	1948.2	91.0%	133.5	96.7%	133.5	96.7%	299.7	88.9%	314.5	93.3
Hybrid	*	*	*	*	148.3	81.5%	153.5	84.3%	0.0	0.0%	0.0	0.0
Online - Asynchronous	214.7	79.5%	225.7	83.6%	580.5	90.1%	607.2	94.3%	627.3	87.7%	651.8	91.29
Online - Synchronous	*	*	*	*	884.6	87.9%	908.9	90.3%	1038.1	90.4%	1071.6	93.3
Charter	88.5	86.8%	88.5	86.8%	92.0	84.4%	95.0	87.2%	112.0	85.5%	120.0	91.6
Face-to-Face	88.5	86.8%	88.5	86.8%	*	*	*	*	42.0	89.4%	42.0	89.4
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0
Online - Asynchronous	0.0	0.0%	0.0	0.0%	27.0	87.1%	28.0	90.3%	46.0	88.5%	48.0	92.3
Online - Synchronous	0.0	0.0%	0.0	0.0%	40.0	87.0%	42.0	91.3%	24.0	75.0%	30.0	93.8

Table A.13. Counts and Percentages of Students Earning a Grade C" or Better and "D" or Better in Early College Courses by School Characteristics and Course Modality: Fall and Spring Terms, Fall 2018–Spring 2021—(Numbera, Percent) (continued)

		Sprin	g 2020			Fall 20	20			Spring	2021	
	"C" or	Better	"D" or Be	tter	"C" or Be	tter	"D" o	r Better	"C" or l	Better	"D" or	Better
Location												
City	336.7	88.1%	343.2	89.8%	333.5	89.4%	345.5	92.6%	310.2	88.1%	317.5	90.2%
Face-to-Face	313.7	88.6%	320.2	90.4%	0.0	0.0%	0.0	0.0%	65.0	94.2%	65.0	94.29
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0
Online - Asynchronous	23.0	82.1%	23.0	82.1%	181.0	91.9%	188.5	95.7%	161.2	82.2%	168.2	85.8
Online - Synchronous	0.0	0.0%	0.0	0.0%	141.5	91.3%	146.0	94.2%	84.0	96.6%	84.3	96.9
Rural	211.0	78.7%	216.0	80.6%	190.0	82.3%	191.0	82.7%	204.0	84.0%	211.0	86.8
Face-to-Face	167.0	79.5%	172.0	81.9%	*	*	*	*	*	*	*	
Hybrid	0.0	0.0%	0.0	0.0%	*	*	*	*	0.0	0.0%	0.0	0.0
Online - Asynchronous	44.0	75.9%	44.0	75.9%	33.0	84.6%	34.0	87.2%	91.5	88.8%	94.0	91.3
Online - Synchronous	0.0	0.0%	0.0	0.0%	151.0	81.6%	151.0	81.6%	100.5	84.5%	103.0	86.6
Suburb	1120.1	87.8%	1165.7	91.4%	826.2	91.5%	852.1	94.4%	1023.6	91.8%	1058.9	95.0
Face-to-Face	981.4	88.9%	1015.0	91.9%	143.5	95.7%	143.5	95.7%	174.7	92.9%	179.0	95.2
Hybrid	*	*	*	*	91.3	83.0%	94.5	85.9%	0.0	0.0%	0.0	0.0
Online - Asynchronous	116.7	81.6%	127.7	89.3%	273.5	89.1%	288.2	93.9%	352.7	90.9%	366.7	94.5
Online - Synchronous	*	*	*	*	318.0	94.6%	325.9	97.0%	496.2	92.1%	513.2	95.2
Town	543.0	88.0%	560.5	90.8%	489.2	85.5%	509.5	89.1%	539.4	86.9%	570.5	91.9
Face-to-Face	512.0	88.9%	529.5	91.9%	0.0	0.0%	0.0	0.0%	90.0	84.9%	98.5	92.9
Hybrid	0.0	0.0%	0.0	0.0%	55.0	85.9%	57.0	89.1%	0.0	0.0%	0.0	0.0
Online - Asynchronous	31.0	75.6%	31.0	75.6%	120.0	90.9%	124.5	94.3%	68.0	85.0%	71.0	88.8
Online - Synchronous	0.0	0.0%	0.0	0.0%	314.2	83.6%	328.0	87.2%	381.4	87.7%	401.0	92.2

^{*} Cells with small counts are suppressed.

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.14. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by School Characteristics: Summer Terms, Summer 2018–Summer 2020—(Number^a, Percent)

	Summer											
-	20	18	20	19	20	20						
-	"C" or Better	"D" or Better	"C" or Better	"D" or Better	"C" or Better	"D" or Better						
All Students	590.7	93.6%	599.7	95.0%	690	95.8%						
Title I Status												
Title I	403.0	92.9%	409.0	94.2%	436.5	96.4%						
Not Title I	122.0	96.1%	124.0	97.6%	124.5	95.0%						
School Type												
HIDOE	507.0	93.4%	515.0	94.8%	537.0	95.9%						
Charter	18.0	100.0%	18.0	100.0%	24.0	100.0%						
Location												
City	31.0	100.0%	31.0	100.0%	72.0	100.0%						
Rural	25.0	92.6%	25.0	92.6%	35.0	100.0%						
Suburb	366.0	92.9%	374.0	94.9%	367.0	95.6%						
Town	103.0	94.5%	103.0	94.5%	87.0	93.5%						

^a Students who took more than one course a semester were assigned an indicator value of 0 or 1 for each class that was a "C" or better/"D" or better. Indicator values were averaged across each student by semester and then summed across all students by semester.

Table A.15. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area: Fall and Spring Terms, Fall 2019 - Spring 2021—(Number, Percent)

		Fall 2	2018			Spring	2019			Fall 2	2019	
Subject	"C" or	Better	"D" or	Better	"C" or	Better	"D" or	Better	"C" or	Better	"D" or	Better
All subjects	2380	87.8%	2493	92.0%	2482	88.5%	2617	93.3%	2452	89.7%	2563	93.8%
Arts & Humanities	366	89.1%	375	91.2%	516	92.6%	539	96.8%	425	91.6%	446	96.1%
Career Preparation	225	88.2%	239	93.7%	247	79.9%	266	86.1%	150	80.6%	158	84.9%
College Preparation	174	96.7%	174	96.7%	101	85.6%	109	92.4%	110	95.7%	114	99.1%
English (ENG)	483	88.6%	505	92.7%	294	84.5%	319	91.7%	547	91.2%	569	94.8%
Hawaiian Studies (HWST)	170	94.4%	175	97.2%	170	91.4%	178	95.7%	185	89.8%	189	91.7%
Language Arts	258	83.0%	274	88.1%	307	92.7%	314	94.9%	249	88.0%	263	92.9%
Mathematics	186	83.8%	199	89.6%	212	86.9%	222	91.0%	227	87.6%	242	93.4%
Sciences	221	86.3%	236	92.2%	250	88.3%	258	91.2%	250	89.9%	264	95.0%
Social Sciences	297	84.6%	316	90.0%	385	89.7%	412	96.0%	309	90.4%	318	93.0%

Table A.15. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area: Fall and Spring Terms, Fall 2019 - Spring 2021—(Number, Percent) (continued)

		Spring	2020			Fall 2	2020			Spring	2021	
Subject	"C" or	Better	"D" or	Better	"C" or	Better	"D" or	Better	"C" or	Better	"D" or	Better
All subjects	2736	87.1%	2830	90.1%	2258	88.5%	2336	91.6%	2630	89.1%	2732	92.5%
Arts & Humanities	491	92.6%	500	94.3%	288	87.0%	302	91.2%	402	96.4%	408	97.8%
Career Preparation	200	87.0%	208	90.4%	161	93.1%	167	96.5%	232	80.0%	252	86.9%
College Preparation	122	89.1%	122	89.1%	36	83.7%	39	90.7%	184	82.9%	196	88.3%
English (ENG)	356	84.2%	378	89.4%	561	90.2%	574	92.3%	350	89.5%	368	94.1%
Hawaiian Studies (HWST)	219	85.9%	229	89.8%	203	82.2%	208	84.2%	184	92.5%	185	93.0%
Language Arts	344	88.0%	360	92.1%	199	88.1%	206	91.2%	338	89.4%	348	92.1%
Mathematics	201	94.8%	206	97.2%	197	81.4%	214	88.4%	235	87.4%	247	91.8%
Sciences	283	72.6%	295	75.6%	241	85.8%	248	88.3%	194	87.4%	198	89.2%
Social Sciences	520	90.8%	532	92.8%	372	96.4%	378	97.9%	511	90.4%	530	93.8%

Table A.16. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area and Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021—
(Number, Percent)

		Fall	2018			Spring	2019			Fall 2	2019	
Subject	"C" or	Better	"D" o	r Better	"C" o	r Better	"D" o	r Better	"C" o	r Better	"D" o	r Better
All subjects	2380	87.8%	2493	92.0%	2482	88.5%	2617	93.3%	2452	89.7%	2563	93.8%
Face-to-Face	2233	88.0%	2338	92.1%	2302	88.3%	2431	93.2%	2371	89.7%	2481	93.9%
Hybrid	31	96.9%	32	100.0%	17	100.0%	17	100.0%	*	*	*	*
Online - Asynchronous	116	82.3%	123	87.2%	155	91.7%	161	95.3%	73	90.1%	74	91.4%
Online - Synchronous	0	0.0%	0	0.0%	*	*	*	*	0	0.0%	0	0.0%
Arts & Humanities	366	89.1%	375	91.2%	516	92.6%	539	96.8%	425	91.6%	446	96.1%
Face-to-Face	344	92.2%	349	93.6%	516	92.6%	539	96.8%	410	91.3%	431	96.0%
Hybrid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Online - Asynchronous	22	57.9%	26	68.4%	0	0.0%	0	0.0%	15	100.0%	15	100.0%
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Career Preparation	225	88.2%	239	93.7%	247	79.9%	266	86.1%	150	80.6%	158	84.9%
Face-to-Face	218	88.6%	230	93.5%	247	79.9%	266	86.1%	150	80.6%	158	84.9%
Hybrid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0	0.0%	0	0.0%
Online - Asynchronous	*	*	*	*	0	0.0%	0	0.0%	0.0	0.0%	0	0.0%
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0	0.0%	0	0.0%
College Preparation	174	96.7%	174	96.7%	101	85.6%	109	92.4%	110	95.7%	114	99.1%
Face-to-Face	174	96.7%	174	96.7%	101	85.6%	109	92.4%	110	95.7%	114	99.1%
Hybrid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Online - Asynchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
English (ENG)	483	88.6%	505	92.7%	294	84.5%	319	91.7%	547	91.2%	569	94.8%
Face-to-Face	464	88.4%	486	92.6%	279	84.5%	304	92.1%	521	91.4%	542	95.1%
Hybrid	0	0	0	0	0	0	0	0	0	0	0	0
Online - Asynchronous	19	95.0%	19	95.0%	*	*	*	*	26	86.7%	27	90.0%
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Table A.16. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area and Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021—
(Number, Percent) (continued)

		Fall 2	018			Spring	2019			Fall 2	019	
Subject	"C" o	r Better	"D" o	r Better	"C" o	r Better	"D" o	r Better	"C" or	Better	"D" or	Better
Hawaiian Studies (HWST)	170	94.4%	175	97.2%	170	91.4%	178	95.7%	185	89.8%	189	91.7%
Face-to-Face	170	94.4%	175	97.2%	170	91.4%	178	95.7%	185	89.8%	189	91.7%
Hybrid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0	0.0%
Online - Asynchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0	0.0%
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0	0.0%
Language Arts	258	83.0%	274	88.1%	307	92.7%	314	94.9%	249	88.0%	263	92.9%
Face-to-Face	234	81.5%	250	87.1%	250	92.3%	257	94.8%	244	87.8%	258	92.8%
Hybrid	0	0.0%	0	0.0%	17	100.0%	17	100.0%	0	0.0%	0	0.0%
Online - Asynchronous	24	100.0%	24	100.0%	40	93.0%	40	93.0%	*	*	*	*
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Mathematics	186	83.8%	199	89.6%	212	86.9%	222	91.0%	227	87.6%	242	93.4%
Face-to-Face	186	83.8%	199	89.6%	183	85.5%	193	90.2%	227	87.6%	242	93.4%
Hybrid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Online - Asynchronous	0	0.0%	0	0.0%	29	96.7%	29	96.7%	0	0.0%	0	0.0%
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Sciences	221	86.3%	236	92.2%	250	88.3%	258	91.2%	250	89.9%	264	95.0%
Face-to-Face	184	86.0%	199	93.0%	207	88.8%	213	91.4%	223	89.9%	237	95.6%
Hybrid	*	*	*	*	0	0.0%	0	0.0%	*	*	*	*
Online - Asynchronous	34	87.2%	34	87.2%	35	92.1%	37	97.4%	19	95.0%	19	95.0%
Online - Synchronous	0	0.0%	0	0.0%	*	*	*	*	0	0.0%	0	0.0%
Social Sciences	297	84.6%	316	90.0%	385	89.7%	412	96.0%	309	90.4%	318	93.0%
Face-to-Face	259	83.3%	276	88.7%	349	89.7%	372	95.6%	301	90.9%	310	93.7%
Hybrid	28	96.6%	29	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Online - Asynchronous	*	*	*	*	36	90.0%	40	100.0%	*	*	*	*
Online - Synchronous	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Table A.16. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area and Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021—
(Number, Percent) (continued)

		Spring	2020			Fall 2	2020			Spring	g 2021	
Subject	"C" or	Better	"D" oı	Better	"C" o	r Better	"D" o	r Better	"C" or	Better	"D" o	r Better
All subjects	2736	87.1%	2830	90.1%	2258	88.5%	2336	91.6%	2630	89.1%	2732	92.5%
Face-to-Face	2448	88.1%	2528	90.9%	191	96.5%	192	97.0%	412	88.2%	433	92.7%
Hybrid	*	*	*	*	189	81.1%	196	84.1%	0	0.0%	0	0.0%
Online - Asynchronous	264	79.8%	277	83.7%	776	89.5%	810	93.4%	846	87.0%	879	90.4%
Online - Synchronous	15	88.2%	15	88.2%	1102	87.9%	1138	90.8%	1372	90.6%	1420	93.8%
Arts & Humanities	491	92.6%	500	94.3%	288	87.0%	302	91.2%	402	96.4%	408	97.8%
Face-to-Face	467	93.8%	474	95.2%	45	93.8%	46	95.8%	76	97.4%	77	98.7%
Hybrid	0	0.0%	0	0.0%	46	83.6%	48	87.3%	0	0.0%	0	0.0%
Online - Asynchronous	24	75.0%	26	81.3%	78	83.0%	85	90.4%	88	91.7%	91	94.8%
Online - Synchronous	0	0.0%	0	0.0%	119	88.8%	123	91.8%	238	97.9%	240	98.8%
Career Preparation	200	87.0%	208	90.4%	161	93.1%	167	96.5%	232	80.0%	252	86.9%
Face-to-Face	200	87.0%	208	90.4%	0	0.0%	0	0.0%	49	98.0%	50	100.0%
Hybrid	0	0.0%	0	0.0%	20	100.0%	20	100.0%	0	0.0%	0	0.0%
Online - Asynchronous	0	0.0%	0	0.0%	36	97.3%	36	97.3%	49	72.1%	55	80.9%
Online - Synchronous	0	0.0%	0	0.0%	105	90.5%	111	95.7%	134	77.9%	147	85.5%
College Preparation	122	89.1%	122	89.1%	36	83.7%	39	90.7%	184	82.9%	196	88.3%
Face-to-Face	122	89.1%	122	89.1%	0	0.0%	0	0.0%	84	74.3%	96	85.0%
Hybrid	0	0.0%	0	0.0%	*	*	*	*	0	0.0%	0	0.0%
Online - Asynchronous	0	0.0%	0	0.0%	*	*	*	*	51	92.7%	51	92.7%
Online - Synchronous	0	0.0%	0	0.0%	26	89.7%	27	93.1%	49	90.7%	49	90.7%
English (ENG)	356	84.2%	378	89.4%	561	90.2%	574	92.3%	350	89.5%	368	94.1%
Face-to-Face	309	82.4%	331	88.3%	45	97.8%	45	97.8%	66	83.5%	71	89.9%
Hybrid	0	0	0	0	0	0	0	0	0	0	0	0
Online - Asynchronous	47	97.9%	47	97.9%	251	90.3%	262	94.2%	126	88.7%	132	93.0%
Online - Synchronous	0	0.0%	0	0.0%	265	88.9%	267	89.6%	158	92.9%	165	97.1%

Table A.16. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area and Course Modality: Fall and Spring Terms, Fall 2019 - Spring 2021—
(Number, Percent) (continued)

		Spring	2020			Fall 2	2020			Spring	2021	
Subject	"C" or	Better	"D" o	r Better	"C" o	r Better	"D" o	r Better	"C" o	r Better	"D" o	r Better
Hawaiian Studies (HWST)	219	85.9%	229	89.8%	203	82.2%	208	84.2%	184	92.5%	185	93.0%
Face-to-Face	212	85.5%	222	89.5%	22	91.7%	22	91.7%	47	94.0%	47	94.0%
Hybrid	0	0.0%	0.0	0.0%	34	68.0%	34	68.0%	0	0.0%	0	0.0%
Online - Asynchronous	*	*	*	*	60	90.9%	61	92.4%	52	94.5%	52	94.5%
Online - Synchronous	0	0.0%	0	0.0%	87	81.3%	91	85.0%	85	90.4%	86	91.5%
Language Arts	344	88.0%	360	92.1%	199	88.1%	206	91.2%	338	89.4%	348	92.1%
Face-to-Face	322	88.2%	335	91.8%	0	0.0%	0	0.0%	*	*	*	*
Hybrid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Online - Asynchronous	22	84.6%	25	96.2%	85	94.4%	88	97.8%	144	86.2%	147	88.0%
Online - Synchronous	0	0.0%	0	0.0%	114	83.8%	118	86.8%	184	93.4%	191	97.0%
Mathematics	201	94.8%	206	97.2%	197	81.4%	214	88.4%	235	87.4%	247	91.8%
Face-to-Face	179	95.7%	182	97.3%	0	0.0%	0	0.0%	*	*	*	*
Hybrid	0	0.0%	0	0.0%	17	77.3%	19	86.4%	0	0.0%	0	0.0%
Online - Asynchronous	22	88.0%	24	96.0%	63	85.1%	70	94.6%	93	86.9%	98	91.6%
Online - Synchronous	0	0.0%	0	0.0%	117	80.1%	125	85.6%	136	87.7%	143	92.3%
Sciences	283	72.6%	295	75.6%	241	85.8%	248	88.3%	194	87.4%	198	89.2%
Face-to-Face	174	72.8%	183	76.6%	18	94.7%	18	94.7%	54	96.4%	56	100.0%
Hybrid	*	*	*	*	48	81.4%	50	84.7%	0	0.0%	0	0.0%
Online - Asynchronous	85	70.2%	87	71.9%	122	88.4%	124	89.9%	59	88.1%	60	89.6%
Online - Synchronous	*	*	*	*	53	81.5%	56	86.2%	81	81.8%	82	82.8%
Social Sciences	520	90.8%	532	92.8%	372	96.4%	378	97.9%	511	90.4%	530	93.8%
Face-to-Face	463	92.4%	471	94.0%	61	100.0%	61	100.0%	20	100.0%	20	100.0%
Hybrid	0	0.0%	0	0.0%	18	100.0%	18	100.0%	0	0.0%	0	0.0%
Online - Asynchronous	57	79.2%	61	84.7%	77	90.6%	79	92.9%	184	85.6%	193	89.8%
Online - Synchronous	0	0.0%	0	0.0%	216	97.3%	220	99.1%	307	93.0%	317	96.1%

^{*} Cells with small counts are suppressed.

Table A.17. Counts and Percentages of Students Earning a Grade "C" or Better and "D" or Better in Early College Courses by Subject Area: Summer Sessions, Summer 2018 - Summer 2020—(Number, Percent)

						Sumi	mer					
•		201	L 8			201	19			202	20	
Subject	"C" o	r Better	"D" o	r Better	"C" o	r Better	"D" o	r Better	"C" o	r Better	"D" o	r Better
All subjects	639	94.1%	649	95.6%	746	96.5%	756	97.8%	810	96.4%	819	97.5%
Arts & Humanities	107	89.2%	110	91.7%	60	93.8%	61	95.3%	73	100.0%	73	100.0%
Career Preparation	21	95.5%	21	95.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
College Preparation	48	96.0%	48	96.0%	32	94.1%	32	94.1%	31	100.0%	31	100.0%
English (ENG)	123	91.8%	124	92.5%	149	94.3%	152	96.2%	205	95.3%	209	97.2%
Hawaiian Studies (HWST)	37	100.0%	37	100.0%	47	100.0%	47	100.0%	23	92.0%	23	92.0%
Language Arts	20	90.9%	20	90.9%	33	89.2%	35	94.6%	96	95.0%	97	96.0%
Mathematics	*	*	*	*	*	*	*	*	*	*	*	*
Sciences	88	90.7%	93	95.9%	84	95.5%	86	97.7%	112	92.6%	115	95.0%
Social Sciences	183	100.0%	183	100.0%	335	99.1%	336	99.4%	259	98.5%	260	98.9%

^{*} Cells with small counts are suppressed.

Table A.18. Average Credits Attempted and Earned in Early College Courses by Student Demographics : Fall and Spring Terms, Fall 2018–Spring 2021—(Number, Percent)

		Fall 2018	3		Spring 20	19		Fall 2019	•
	Attempted	Earned	Rate of Earned/ Attempted, %	Attempte d	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %
All Students	3.6	3.3	91.9	3.7	3.4	93.6	3.6	3.3	93.4
Gender									
Female	3.6	3.3	91.9	3.7	3.5	93.6	3.6	3.4	93.4
Male	3.5	3.2	92.0	3.5	3.3	93.8	3.5	3.3	93.3
Ethnicity									
Asian	3.4	3.2	95.4	3.5	3.4	97.0	3.5	3.3	94.6
Filipino	3.5	3.3	94.3	3.7	3.5	94.3	3.7	3.5	94.9
Native Hawaiian	3.8	3.3	87.9	3.7	3.3	90.0	3.6	3.3	90.1
Pacific Islander	3.4	2.7	78.2	3.8	3.4	90.6	3.3	2.9	86.9
White	3.6	3.4	93.5	3.8	3.6	96.0	3.5	3.3	95.0
Othera	3.5	3.2	89.9	3.6	3.3	90.6	3.3	3.1	94.3
Economic Disadvantaged Status									
Yes	3.6	3.3	89.7	3.7	3.3	90.4	3.6	3.3	91.3
No	3.5	3.3	93.0	3.6	3.5	95.3	3.5	3.3	94.3
Grade									
9th	3.5	3.1	88.0	3.6	3.4	93.8	3.2	3.0	92.9
10th	3.4	3.1	90.0	3.6	3.5	95.4	3.5	3.3	93.5
11th	3.5	3.2	91.0	3.7	3.5	94.6	3.6	3.3	92.3
12th	3.7	3.5	94.2	3.6	3.3	91.7	3.6	3.4	94.2

Table A.18. Average Credits Attempted and Earned in Early College Courses by Student Demographics : Fall and Spring Terms, Fall 2018–Spring 2021—(Number, Percent) (continued)

	Spring 2020			Fall 2020			Spring 2021		
	Attempted	Earned	Rate of Earned/ Attempted, %	Attempte d	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %
All Students	3.6	3.3	90.7	3.7	3.4	91.4	3.8	3.5	92.8
Gender									
Female	3.6	3.4	91.5	3.7	3.4	92.3	3.7	3.5	92.7
Male	3.6	3.3	89.1	3.7	3.3	89.5	3.9	3.6	92.9
Ethnicity									
Asian	3.5	3.4	95.8	3.4	3.3	95.7	3.5	3.3	95.5
Filipino	3.7	3.4	92.5	4.0	3.9	95.0	4.0	3.7	93.5
Native Hawaiian	3.6	3.2	86.3	3.6	3.0	81.8	3.8	3.4	89.0
Pacific Islander	3.6	2.9	77.4	3.5	3.3	91.2	3.9	3.5	92.9
White	3.7	3.4	91.3	3.4	3.2	92.0	3.6	3.4	93.5
Other ^a	3.5	3.2	88.4	3.8	3.4	89.6	3.8	3.6	93.2
Economic Disadvantaged Status									
Yes	3.6	3.1	86.4	3.7	3.3	89.3	3.8	3.4	90.0
No	3.6	3.4	92.7	3.7	3.4	92.4	3.8	3.5	94.3
Grade									
9th	3.7	3.3	85.9	3.7	3.4	91.5	3.8	3.5	92.8
10th	3.7	3.4	90.6	3.6	3.3	91.4	3.8	3.4	89.5
11th	3.6	3.4	92.4	3.7	3.4	90.9	3.7	3.5	94.2
12th	3.6	3.3	90.3	3.8	3.5	91.6	3.9	3.6	93.1

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race.

Table A.19. Average Credits Attempted and Earned in Early College Courses by Student Demographics: Summer Sessions, Summer 2018 - Summer 2020—(Number, Percent)

	Summer 2018			Summer 2019			Summer 2020		
	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %
All Students	3.5	3.3	95.0	3.8	3.7	97.4	3.9	3.8	97.7
Gender									
Female	3.5	3.3	94.3	3.8	3.8	97.8	3.9	3.9	98.7
Male	3.3	3.2	96.6	3.8	3.7	96.3	3.9	3.7	94.8
Ethnicity									
Asian	3.3	3.3	99.1	3.5	3.4	99.0	3.7	3.6	99.7
Filipino	3.6	3.5	97.9	3.9	3.8	98.8	3.8	3.8	98.2
Native Hawaiian	3.4	3.0	88.4	3.8	3.5	89.9	4.3	4.1	94.3
Pacific Islander	3.3	3.0	92.1	4.1	4.1	100.0	4.2	4.2	100.0
White	3.1	3.0	95.1	4.2	4.2	100.0	3.8	3.7	96.0
Othera	3.6	3.2	86.4	4.1	4.1	100.0	4.3	4.1	97.1
Economic Disadvantaged Status									
Yes	3.4	3.2	91.6	3.8	3.7	96.0	3.9	3.8	97.4
No	3.5	3.4	96.7	3.8	3.8	98.1	3.9	3.8	97.8
Grade									
9th	3.2	3.1	95.9	4.1	4.1	97.2	4.0	3.9	98.9
10th	3.2	3.1	96.7	3.8	3.7	97.4	4.2	4.0	96.9
11th	3.7	3.5	93.5	3.7	3.6	97.5	3.6	3.5	97.7
12th									

^a Other includes African American, American Indian, Alaskan Native, Hispanic, and Multi-Race. Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.20. Average Credits Attempted and Earned in Early College Courses by School Characteristics: Fall and Spring terms, Fall 2018–Spring 2021—(Number, Percent)

		Fall 2018			Spring 2019			Fall 2019		
	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	
All Schools	3.6	3.3	91.9	3.7	3.4	93.6	3.6	3.3	93.4	
Title I Status										
Title I	3.6	3.3	89.5	3.8	3.5	92.6	3.9	3.6	92.4	
Not Title I	3.5	3.3	95.3	3.5	3.4	94.9	3.6	3.4	94.6	
School Type										
HIDOE	3.6	3.3	91.7	3.7	3.4	93.5	3.6	3.3	93.4	
Charter	3.5	3.5	100.0	3.4	3.2	96.4	3.4	3.2	93.2	
Location										
City	3.3	3.1	93.2	3.4	3.1	90.4	3.6	3.3	91.9	
Rural	3.1	2.6	84.2	3.1	2.9	93.9	3.4	3.1	92.2	
Suburb	3.5	3.3	92.3	3.8	3.5	94.3	3.6	3.4	94.3	
Town	3.9	3.7	93.6	3.8	3.6	93.8	3.5	3.3	93.0	

Table A.20. Average Credits Attempted and Earned in Early College Courses by School Characteristics: Fall and Spring terms, Fall 2018–Spring 2021—(Number, Percent) (continued)

		Spring 2020			Fall 2020			Spring 2021		
	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	
All Schools	3.6	3.3	90.7	3.7	3.4	91.4	3.8	3.5	92.8	
Title I Status										
Title I	4.1	3.7	88.1	4.2	3.8	89.4	4.3	4.0	91.3	
Not Title I	3.6	3.3	92.4	3.7	3.5	93.7	3.6	3.4	93.6	
School Type										
HIDOE	3.6	3.3	90.7	3.7	3.4	91.6	3.8	3.6	92.9	
Charter	3.5	3.2	89.5	3.3	2.9	87.2	3.1	2.9	91.6	
Location										
City	3.1	2.8	90.1	3.5	3.2	92.6	3.4	3.1	90.3	
Rural	3.9	3.3	82.0	3.2	2.7	82.7	3.8	3.3	87.0	
Suburb	3.8	3.5	92.3	4.0	3.7	94.5	3.9	3.7	95.4	
Town	3.6	3.3	91.4	3.7	3.3	89.1	3.8	3.5	91.9	

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Table A.21. Average Credits Attempted and Earned in Early College Courses by School Characteristics: Summer Terms, Summer 2018–Summer 2020—(Number, Percent)

		Spring 2020			Fall 2020			Spring 2021		
	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	Attempted	Earned	Rate of Earned/ Attempted, %	
All Schools	3.5	3.3	95.0	3.8	3.7	97.4	3.9	3.8	97.7	
Title I Status										
Title I	3.5	3.4	94.2	4.0	3.9	97.3	4.1	4.0	97.0	
Not Title I	3.2	3.1	97.6	3.2	3.1	97.7	3.5	3.5	99.0	
School Type										
HIDOE	3.5	3.3	94.8	3.9	3.8	97.3	3.9	3.8	97.7	
Charter	3.5	3.5	100.0	3.0	3.0	100.0	4.6	4.3	97.2	
Location										
City	3.0	3.0	100.0	3.1	3.1	100.0	3.1	3.0	97.3	
Rural	2.4	2.2	92.6	4.1	4.1	100.0	3.8	3.8	100.0	
Suburb	3.6	3.4	94.9	4.0	3.9	97.3	4.1	4.0	97.6	
Town	3.4	3.2	94.5	3.6	3.4	94.6	4.1	4.0	97.3	

Source: Hawai'i P-20 Partnerships for Education (2021). Data provided by the Hawai'i Data eXchange Partnership (DXP ID 761).

Appendix B: Early College Courses Offered and School Locale Classifications, Fall 2018 through Spring 2021

Table B.1. Early College Classes and Subject Definitions, 2018–2021

			Course
Subject Aggregation	Subject	Number	Title
Arts & Humanities	AMST	150	America and the World
Arts & Humanities	ART	101	Intro Visual Art
Arts & Humanities	ART	101	Intro to Visual Arts
Arts & Humanities	ART	101	Intro to the Visual Arts
Arts & Humanities	ART	101	Introduction to Visual Arts
Arts & Humanities	ART	101W	WI-Intro to Visual Arts
Arts & Humanities	ART	105B	Intro Ceramics-Hand Building
Arts & Humanities	ART	105B	Intro to Ceramics-Handbuilding
Arts & Humanities	ART	105C	Intro Ceramics-Wheelthrowing
Arts & Humanities	ART	107D	Intro Digital Photography
Arts & Humanities	ART	107D	Intro to Digital Photography
Arts & Humanities	ART	111	Intro To Watercolor Painting
Arts & Humanities	ART	112	Intro to Digital Art
Arts & Humanities	ART	112	Intro to Digital Arts
Arts & Humanities	ART	112	Introduction to Digital Arts
Arts & Humanities	ART	113	Intro Drawing
Arts & Humanities	ART	113	Intro to Drawing
Arts & Humanities	ART	113	Introduction to Drawing
Arts & Humanities	ART	113D	Intro to Digital Drawing
Arts & Humanities	ART	116	Intro to 3-D Composition
Arts & Humanities	ART	126	3D Computer Graphics I
Arts & Humanities	ART	166	Digital Printmaking
Arts & Humanities	ART	175	Survey of Global Art
Arts & Humanities	ASAN	107	Intro Filipino Studies
Arts & Humanities	ASAN	120	Japanese Culture I
Arts & Humanities	ASAN	202	Intro to South/Southeast Asia
Arts & Humanities	ASAN	203	Phil Hist Culture
Arts & Humanities	ASAN	205	WI-Contemp Philippine Issues

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course				
Subject Aggregation	Subject	Number	Title		
Arts & Humanities	DNCE	108	Hatha Yoga: Beginning		
Arts & Humanities	DNCE	121	Beginning Ballet		
Arts & Humanities	DNCE	131	Beginning Modern Dance		
Arts & Humanities	DNCE	131	Modern Dance I		
Arts & Humanities	DNCE	213	Modern Hula		
Arts & Humanities	HIST	151	World Civilization to 1500		
Arts & Humanities	HIST	151	World History to 1500		
Arts & Humanities	HIST	152	World Civ since 1500		
Arts & Humanities	HIST	152	World History Since 1500		
Arts & Humanities	HIST	152	World History since 1500		
Arts & Humanities	HIST	284	History of Hawai'i		
Arts & Humanities	HIST	285	Envirnmentl History of Hawai`i		
Arts & Humanities	HUM	295SI	UM Research in Sustainability		
Arts & Humanities	MUS	106	Intro to Music Literature		
Arts & Humanities	MUS	107	Music in World Cultures		
Arts & Humanities	MUS	108	Mus Fundamentals		
Arts & Humanities	MUS	108	Music Fundamentals		
Arts & Humanities	MUS	121C	Piano 1		
Arts & Humanities	MUS	121Z	`Ukulele 1		
Arts & Humanities	MUS	122Z	`Ukulele 2		
Arts & Humanities	MUS	123	Beginning Voice Class		
Arts & Humanities	MUS	202	College Band		
Arts & Humanities	MUS	208	Intro to Songwriting		
Arts & Humanities	PACS	108	Intro Pacific Islands Studies		
Arts & Humanities	PACS	108	Pacific Worlds		
Arts & Humanities	PHIL	100	Intro Philosophy		
Arts & Humanities	PHIL	100	Intro to Philosophy		
Arts & Humanities	PHIL	100	Introduction to Philosophy		
Arts & Humanities	PHIL	100	Survey of Philosophy		
Arts & Humanities	PHIL	101	Intro to Phil: Morals& Society		
Arts & Humanities	PHIL	101	Morals and Society		
Arts & Humanities	PHIL	103	Environmental Ethics		

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Arts & Humanities	PHIL	103	Intro Phil: Environmental Phil	
Arts & Humanities	PHIL	111	Intro to Inductive Logic	
Arts & Humanities	REL	150	Intro World Religions	
Arts & Humanities	REL	150	Intro to World Major Religion	
Arts & Humanities	REL	150	Intro to World's Major Rel	
Arts & Humanities	REL	150	World Major Religions	
Arts & Humanities	REL	151	HCC-E-Religion & Meaning Exist	
Arts & Humanities	REL	151	Religion: Meaning of Existence	
Arts & Humanities	REL	201	Und the New Testament	
Arts & Humanities	REL	207	Understanding Buddhism	
Arts & Humanities	REL	210	Understanding Christianity	
Arts & Humanities	THEA	101	Intro to Drama & Theatre	
Arts & Humanities	THEA	131	Beginning Unarmed Stage Combat	
Arts & Humanities	THEA	200B	Beg Theatre Prac: (Acting)	
Arts & Humanities	THEA	220	Beginning Voice and Movement	
Arts & Humanities	THEA	221	Acting I	
Arts & Humanities	THEA	221	Beginning Acting I	
Arts & Humanities	THEA	222	Acting II	
Arts & Humanities	THEA	223	Intro to Acting for Camera	
Arts & Humanities	THEA	225	Shakespeare Workshop	
Arts & Humanities	THEA	231	Inter Unarmed/Staff Combat	
Arts & Humanities	THEA	260	Dramatic Production	
Arts & Humanities	THEA	296	Special Topics in Theater	
Career Preparation	ABRP	101	Foundation to Auto Body Repair	
Career Preparation	ABRP	102	Intermediate Auto Body Repair	
Career Preparation	ACC	124	Prin Acctg I	
Career Preparation	ACC	125	Prin Acctg II	
Career Preparation	ACC	201	Intro to Financial Accounting	
Career Preparation	ACC	202	Intro to Managerial Accounting	
Career Preparation	ACC	252	Using QuickBooks in Acctg	
Career Preparation	AEC	101	Constr. Graphics & Conventions	
Career Preparation	AEC	110	Basic AutoCAD	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course				
Subject Aggregation	Subject	Number	Title		
Career Preparation	AEC	112	Computer Aided Drafting (CAD)		
Career Preparation	AJ	101	Intro Admin Justice		
Career Preparation	AJ	101	Intro to Admin of Justice		
Career Preparation	AJ	104	Criminalistics		
Career Preparation	AJ	208	Criminology		
Career Preparation	AMT	100	Intro Auto Technology		
Career Preparation	AMT	101	Auto Safety and Measurement		
Career Preparation	AMT	120	Powertrain I		
Career Preparation	AMT	150	Powertrain II		
Career Preparation	AMT	22	Survey of Automotive Tech.		
Career Preparation	AMT	80	Small Engine Repair		
Career Preparation	BLAW	200	Legal Environment of Business		
Career Preparation	BLPR	22	Blueprint Reading		
Career Preparation	BUS	110	Freshmen Business Experience		
Career Preparation	BUS	120	Princ Business		
Career Preparation	BUS	120	Principles of Business		
Career Preparation	BUS	122	Intro to Entrepreneurship		
Career Preparation	BUS	130	Business Comun: Oral		
Career Preparation	BUS	250	Applied Math in Business		
Career Preparation	BUSA	120	Introduction to Business		
Career Preparation	BUSA	300	Principles of Marketing		
Career Preparation	BUSN	121	Intro to Word Processing		
Career Preparation	BUSN	150	Intro to Business Computing		
Career Preparation	BUSN	164	Career Success		
Career Preparation	BUSN	166	Professl Employmt Prep		
Career Preparation	BUSN	188	Business Calculations		
Career Preparation	CM	120	Introduction to Digital Video		
Career Preparation	CM	142	Intro to Video Game Design		
Career Preparation	CM	149	Intro to Video Editing		
Career Preparation	CM	151	Pre-Production: Digital Video		
Career Preparation	CM	152	Principles of Video Editing		
Career Preparation	CM	153	Sound Design for Digital Media		

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course				
Subject Aggregation	Subject	Number	Title		
Career Preparation	CM	155	Introduction to Screenwriting		
Career Preparation	CM	271	Games and Gaming in Society		
Career Preparation	CM	290V	Topic: Creative Media		
Career Preparation	CULN	111	Intro to the Culinary Industry		
Career Preparation	CULN	112	Sanitation & Safety		
Career Preparation	CULN	112	Sanitation and Safety		
Career Preparation	CULN	115	Menu Merchandising		
Career Preparation	DMED	150	Film Analysis & Storytelling		
Career Preparation	ECED	105	Intro to Early Child Ed		
Career Preparation	ECED	110	Developmntl Appr Practices		
Career Preparation	ECED	131	Early Child Dev: Theory/Pract		
Career Preparation	ED	100	Intro to Education & Teaching		
Career Preparation	ED	110	Exploration in Education		
Career Preparation	ED	277	Intro to Multicultural Edu		
Career Preparation	ED	284	Foundations of Inclusion Teach		
Career Preparation	ED	285	Classrm Mgt in Instr Process		
Career Preparation	EDEF	107	Careers in Education		
Career Preparation	EDEF	200	Early Field Experience		
Career Preparation	EDEF	201	Intro to Teaching as a Career		
Career Preparation	EDUC	120	Aina/Place-Based Education		
Career Preparation	EDUC	198B	Sel Topics in Ed: Garden Educ		
Career Preparation	EDUC	210	Hawaiian Ways of Knowing		
Career Preparation	ENT	125	Starting a Business		
Career Preparation	FSHE	185	The Science of Human Nutrition		
Career Preparation	FT	111	Art & Design In Fashion		
Career Preparation	FT	205	Mat & Methods of Clothing		
Career Preparation	FT	215	Flat Patternmaking I		
Career Preparation	HOST	100	Career & Cust Srvce Skills		
Career Preparation	HOST	100	Career & Customer Svc Skills		
Career Preparation	HOST	100	Career and Cust Srvce Skills		
Career Preparation	HOST	100	Career/Customer Service Skills		
Career Preparation	HOST	101	Intro Hospitality & Tourism		

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course				
Subject Aggregation	Subject	Number	Title		
Career Preparation	HOST	101	Intro Hospitality and Tourism		
Career Preparation	HOST	101	Intro to Hospitality & Tourism		
Career Preparation	HOST	101	Introduction to Tourism		
Career Preparation	HOST	152	Front Office Operations		
Career Preparation	LAW	101	The Hawai'i Legal System		
Career Preparation	LAW	105	Law Office Management		
Career Preparation	LAW	176	Criminal Law		
Career Preparation	MGT	120	Principles of Management		
Career Preparation	MGT	124	Human Resource Management		
Career Preparation	MKT	120	Princ Marketing		
Career Preparation	SPED	201	Disb & Diversity in the Media		
Career Preparation	SUBS	132	STDs and Confidentiality		
Career Preparation	WELD	19	Welding for Trades & Industry		
College Preparation	IS	101	Bldg Bridges to Self/Community		
College Preparation	IS	103	Intro to College		
College Preparation	IS	103	Introduction to College		
College Preparation	IS	105B	Career Decision Making		
College Preparation	IS	105C	Professional Employment Prep		
College Preparation	IS	108	Foundation for College Success		
College Preparation	IS	110	Foundations College Success		
College Preparation	IS	201	The Ahupua'a		
College Preparation	LSK	110	College Learning Skills		
College Preparation	SD	100	The University Experience		
College Preparation	SD	102	Identity, Place & Culture		
College Preparation	SD	103	First Year Experience		
College Preparation	SD	199	Directed Reading & Research		
English (ENG)	ENG	100	Composition I		
English (ENG)	ENG	102	College Reading Skills		
English (ENG)	ENG	104	Intro Creative Writing		
English (ENG)	ENG	106	Technical Communication		
English (ENG)	ENG	106	Technical English		
English (ENG)	ENG	200	Composition II		

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
English (ENG)	ENG	200	WI-Composition II	
English (ENG)	ENG	204	WI-Intro to Creative Writing	
English (ENG)	ENG	209	Bus/Mgr Writing	
English (ENG)	ENG	209	Business & Managerial Writing	
English (ENG)	ENG	209	WI-Bus Writing	
English (ENG)	ENG	210	Research Writing	
English (ENG)	ENG	225	Writing for Sci & Tech	
English (ENG)	ENG	255	Short Story & Novel	
English (ENG)	ENG	256W	WI-Poetry and Drama	
English (ENG)	ENG	257	Themes in Literature	
English (ENG)	ENG	257F	Women in Literature	
English (ENG)	ENG	257G	Manga as Literature	
English (ENG)	ENG	270	Intro to Lit: Literary History	
English (ENG)	ENG	270	WI-Intro to Lit: Literary Hist	
English (ENG)	ENG	271	Intro to Lit: Genre	
English (ENG)	ENG	271	WI-Intro to Lit: Genre	
English (ENG)	ENG	272	Intro to Lit: Culture & Lit	
English (ENG)	ENG	272M	Lit of Hawai'i,Oceania&Asia	
English (ENG)	ENG	273C	Creative Writing & Literature	
English (ENG)	ENG	381F	PopularLit: Gothic Horror	
Hawaiian Studies (HWST)	HWST	100	Piko HI: Connecting to HI Isle	
Hawaiian Studies (HWST)	HWST	100	Piko Hawai'i	
Hawaiian Studies (HWST)	HWST	100B	Basic Language	
Hawaiian Studies (HWST)	HWST	100C	Basic Cultural Practices	
Hawaiian Studies (HWST)	HWST	100D	Basic Natural History	
Hawaiian Studies (HWST)	HWST	101	'Aikapu: Hawai'i Culture I	
Hawaiian Studies (HWST)	HWST	101	Hawai'i Culture I: 'Aikapu	
Hawaiian Studies (HWST)	HWST	102	Hawai'i Spirituality	
Hawaiian Studies (HWST)	HWST	103	Hawai'i Art Culture	
Hawaiian Studies (HWST)	HWST	103	Hwn Art Culture	
Hawaiian Studies (HWST)	HWST	104	Hawai'i Myth Culture	
Hawaiian Studies (HWST)	HWST	105	Hawai'i Plant Culture	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Hawaiian Studies (HWST)	HWST	105	Mea Kanu Hawai'i: Hwn Plant	
Hawaiian Studies (HWST)	HWST	107	H-Hawaii:Center of the Pacific	
Hawaiian Studies (HWST)	HWST	107	Hawai'i: Center of the Pacific	
Hawaiian Studies (HWST)	HWST	107	Hawai`i: Center of the Pacific	
Hawaiian Studies (HWST)	HWST	107	Hawaii: Center of the Pacific	
Hawaiian Studies (HWST)	HWST	107	Hawaii: Cntr of Pacific	
Hawaiian Studies (HWST)	HWST	107W	WI-Hawai'i: Center of Pacific	
Hawaiian Studies (HWST)	HWST	111	The Hawn 'Ohana	
Hawaiian Studies (HWST)	HWST	128	Intro to Hula Kahiko	
Hawaiian Studies (HWST)	HWST	130	Hula 'Olapa	
Hawaiian Studies (HWST)	HWST	130	Hula I: 'Aiha'a	
Hawaiian Studies (HWST)	HWST	135	Kalai La'au: Hawaiian Woodwork	
Hawaiian Studies (HWST)	HWST	136	Kalai La'au II	
Hawaiian Studies (HWST)	HWST	140	Mahi'ai I: HWN Taro Culture	
Hawaiian Studies (HWST)	HWST	142	Mahiʻai Kalo II	
Hawaiian Studies (HWST)	HWST	194	Spc Intro Topics Haw Studies	
Hawaiian Studies (HWST)	HWST	196	Special Topic:	
Hawaiian Studies (HWST)	HWST	211	Hawn Ethnobotany	
Hawaiian Studies (HWST)	HWST	215	Oli HÅ?lona: Beginning Chant	
Hawaiian Studies (HWST)	HWST	255	Intro to the Hawaiian Kingdom	
Hawaiian Studies (HWST)	HWST	270	Hawaiian Mythology	
Hawaiian Studies (HWST)	HWST	270	Hawn Mythology	
Hawaiian Studies (HWST)	HWST	281	Ho'okele I:Hawn Astronomy&Nav	
Hawaiian Studies (HWST)	HWST	281	Ho'okeleI:Hi Astronomy&Weather	
Hawaiian Studies (HWST)	HWST	285	La'au Lapa'au: Hwn Med Herbs	
Hawaiian Studies (HWST)	KHWS	381A	Ka Nohona Kaulana Mahina	
Language Arts	CHN	290	Chinese Lang & Culture	
Language Arts	CHNS	100	Intro Chinese Art, Cltr & Lang	
Language Arts	CHNS	101	Elementary Mandarin I	
Language Arts	COM	100	Human Comm in Diverse Society	
Language Arts	COM	130	Business Comun: Oral	
Language Arts	COM	145	Interperson Com	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Language Arts	СОМ	145	Interpersonal Comun I	
Language Arts	COM	270	Intro to Theories of Human Com	
Language Arts	COMG	151	Personal and Public Speech	
Language Arts	FR	101	Elementary French I	
Language Arts	FR	102	Elementary French II	
Language Arts	HAW	101	Elem Hawn I	
Language Arts	HAW	101	Elementary Hawai'i Language I	
Language Arts	HAW	101	Elementary Hawaiian	
Language Arts	HAW	101	Elementary Hawaiian I	
Language Arts	HAW	102	Elem Hawn II	
Language Arts	HAW	102	Elementary Hawai'i Language II	
Language Arts	HAW	102	Elementary Hawaiian II	
Language Arts	HAW	201	Intermediate Hawaiian I	
Language Arts	HAW	201	Intm Hawaiian I	
Language Arts	HAW	202	Intermediate Hawaiian II	
Language Arts	HAW	202	Intm Hawaiian II	
Language Arts	HAW	290	Ma Ka Hana Ka 'Olelo, Ka 'Ike	
Language Arts	ILO	102	Beginning Ilokano II	
Language Arts	JOUR	150	Media and Society	
Language Arts	JOUR	200	Intro Multimedia Journalism	
Language Arts	JPN	101	Elementary Japanese	
Language Arts	JPN	101	Elementary Japanese I	
Language Arts	JPN	102	Elementary Japanese II	
Language Arts	JPN	201	Intermediate Japanese I	
Language Arts	JPN	202	Intermediate Japanese	
Language Arts	JPNS	101	Elementary Japanese I	
Language Arts	JPNS	298C	Japanese for Travel & Tourism	
Language Arts	KHAW	133	First Lvl Hawn for Speakers	
Language Arts	KHAW	233	Second Level Hawn for Speakers	
Language Arts	KOR	101	Elementary Korean I	
Language Arts	KOR	102	Elementary Korean II	
Language Arts	LING	102	Intro to Study of Language	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Language Arts	SP	151	Personal & Public Speech	
Language Arts	SP	151	Personal and Publc Speaking	
Language Arts	SP	151	Personal and Public Speech	
Language Arts	SP	251	Prin of Effective Public Spkng	
Language Arts	SP	251	WI-Prin of Eff Public Spkg	
Language Arts	SP	260	Media and Society	
Language Arts	SPAN	101	Beginning Spanish I	
Language Arts	SPAN	102	Beginning Spanish II	
Language Arts	SPAN	201	Intermediate Spanish I	
Language Arts	SPCO	151	Intro to Speech & Commu	
Language Arts	SPCO	260	Media & Society	
Mathematics	MATH	100	Survey of Math	
Mathematics	MATH	100	Survey of Mathematics	
Mathematics	MATH	103	College Algebra	
Mathematics	MATH	103	Fundamentals of Coll Algebra	
Mathematics	MATH	103	Intro to College Algebra	
Mathematics	MATH	103M	College Algebra with Tutorial	
Mathematics	MATH	110	College Algebra	
Mathematics	MATH	115	Intro Stats & Probability	
Mathematics	MATH	115	Intro to Stats & Prob	
Mathematics	MATH	115	Intro to Stats and Prob	
Mathematics	MATH	115	Intro to Stats and Probability	
Mathematics	MATH	115	Statistics	
Mathematics	MATH	135	Pre-Calculus Elementary Func	
Mathematics	MATH	135	Precalc: Elementary Func	
Mathematics	MATH	135	Precalc: Elementary Functions	
Mathematics	MATH	135	Precalc: Elementary Functions	
Mathematics	MATH	140	PreCalc:Trig/Analytic Geometr	
Mathematics	MATH	140	PreCalc:Trig/Analytic Geometry	
Mathematics	MATH	140	Precalc: Trig/Anal Geomtry	
Mathematics	MATH	140	Precalc:Trig/Analytic Geometry	
Mathematics	MATH	140	Trigonometry/Analytic Geometry	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Mathematics	MATH	140X	Accelerated Pre-Calculus	
Mathematics	MATH	140X	PreCalculus	
Mathematics	MATH	140X	Precalculus	
Mathematics	MATH	241	Calculus I	
Mathematics	MATH	242	Calculus II	
Mathematics	MATH	243	Calculus III	
Mathematics	MATH	244	Calculus IV	
Mathematics	MATH	245	Multivariable Calculus	
Mathematics	MATH	253	Accelerated Calculus III	
Mathematics	QM	120T	QM for Transportation Tech	
Sciences	AG	100	Hawai'i Agriculture Industry	
Sciences	AG	100	Intro to Agricultural Sciences	
Sciences	AG	102	Orientation to HI Ag Ind	
Sciences	AG	102	Orientation to HI Ag Industry	
Sciences	AG	152	Orchid Culture	
Sciences	AG	200	Principles of Horticulture	
Sciences	AG	200L	Principles of Hort Lab	
Sciences	AG	200L	Principles of Horticulture Lab	
Sciences	AG	264	Plant Propagation	
Sciences	AQUA	201	The Hawai`i Fishpond	
Sciences	ASTR	110	General Astronomy	
Sciences	ASTR	110	Survey of Astro	
Sciences	ASTR	110	Survey of Astronomy	
Sciences	ASTR	295	Astronomy Research	
Sciences	ASTR	298	Astronomy Research Project	
Sciences	BIOC	141	Fundamentals of Biochemistry	
Sciences	BIOL	100	Human Biology	
Sciences	BIOL	100L	Human Biology lab	
Sciences	BIOL	101	Biology and Society	
Sciences	BIOL	101	General Biology	
Sciences	BIOL	101L	Biology and Society Lab	
Sciences	BIOL	101L	Gen Biol Lab	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Sciences	BIOL	105	Hawn Field Biology	
Sciences	BIOL	124	Environment & Ecology	
Sciences	BIOL	124	Environment and Ecology	
Sciences	BIOL	124L	Environment & Ecol Lab	
Sciences	BIOL	124L	Environment & Ecology Lab	
Sciences	BIOL	124L	Environment and Ecology Lab	
Sciences	BIOL	130	Anatomy and Physiology	
Sciences	BIOL	130L	Anatomy and Physiology Lab	
Sciences	BIOL	171	Intro to Biology I	
Sciences	BIOL	171	Introduction to Biology I	
Sciences	BIOL	171L	General Biology Lab I	
Sciences	BIOL	171L	Intro to Biology Lab I	
Sciences	BIOL	171L	Introduction to Biology I Lab	
Sciences	BIOL	172	Introduction to Biology II	
Sciences	BIOL	172L	Introduction to Biology II Lab	
Sciences	BIOL	198B	Climate Chg & Sustainability	
Sciences	BIOL	199V	Ind Study:	
Sciences	BIOL	275	Cell and Molecular Biology	
Sciences	BIOL	275L	Cell & Molecular Biology Lab	
Sciences	BIOL	299V	Ind Study:	
Sciences	BOT	101	General Botany	
Sciences	BOT	101L	General Botany Lab	
Sciences	BOT	105	Ethnobotany	
Sciences	ВОТ	130	Plants Hawn Environment	
Sciences	BOT	130	Plants in Hawaiian Environ	
Sciences	ВОТ	130	Plants in Hawaiian Environment	
Sciences	ВОТ	130	Plants in the Hawaiian Environ	
Sciences	ВОТ	130L	Plants Hawn Environ Lab	
Sciences	ВОТ	130L	Plants in Hawaiian Env Lab	
Sciences	ВОТ	130L	Plants in the Hawaiian Env Lab	
Sciences	ВОТ	160	ID of Tropical Plants	
Sciences	ВОТ	192V	Special Topics in Plant Sci	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Sciences	CHEM	100	Chemistry and Society	
Sciences	CHEM	100L	Chemistry & Society Laboratory	
Sciences	CHEM	100L	Chemistry and Society Lab	
Sciences	CHEM	161	Gen Chemistry I	
Sciences	CHEM	161	General Chemistry I	
Sciences	CHEM	161L	Gen Chem Lab I	
Sciences	CHEM	161L	General Chemistry I Lab	
Sciences	CHEM	162	General Chemistry II	
Sciences	CHEM	162L	General Chemistry II Lab	
Sciences	CHEM	272	Organic Chemistry I	
Sciences	CHEM	272L	Organic Chemistry I Lab	
Sciences	CHEM	273	Organic Chemistry II	
Sciences	CHEM	273L	Organic Chemistry Lab II	
Sciences	ERTH	101	Introduction to Geology	
Sciences	ERTH	101L	Introduction Geology Lab	
Sciences	ESS	100	Intro to Wellness & Fitness	
Sciences	FSHN	185	Food Sci-Human Nutrition	
Sciences	FSHN	185	Science of Human Nutrition	
Sciences	FSHN	185	The Science of Human Nutrition	
Sciences	GEOL	122	Intro to Earth Science	
Sciences	GG	101	Intro to Geology	
Sciences	GG	101	Introduction to Geology	
Sciences	GG	101L	Introduction Geology Lab	
Sciences	GG	103	Geology of Hawaiian Islands	
Sciences	GG	211	Big Island Field Geology	
Sciences	HLTH	110	Medical Terminology	
Sciences	HLTH	117	Survey of Health Professions	
Sciences	HLTH	123	Intro Clinical Skills& Pt Care	
Sciences	HLTH	125	Surv of Med Terminology	
Sciences	HLTH	125	Survey of Medical Terminology	
Sciences	HLTH	140	Int Hum Bod Sys/Rel Md Term	
Sciences	HLTH	140	Intro Hum Body Sys/Rel Md Term	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Sciences	HLTH	204	Intro Natv Hawn Indg Hlth/Heal	
Sciences	HPER	152	Weight Training	
Sciences	ICS	101	Digital Tools 4 Info World	
Sciences	ICS	101	Digital Tools Info World	
Sciences	ICS	101	Digital Tools for Info World	
Sciences	ICS	101	Digitl Tools for Info Wrld	
Sciences	ICS	103	Computer Science Principles	
Sciences	ICS	107	Web Site Development	
Sciences	ICS	110P	Intro to Information Systems	
Sciences	ICS	110P	Introduction to Programming	
Sciences	ICS	111	Intro to Comp Sci I	
Sciences	ICS	111	Intro to Computer Science I	
Sciences	ICS	123	Intro to Digital Audio/Video	
Sciences	ICS	141	Disc Math for Comp Sci I	
Sciences	ICS	141	Discrete Math for Comp Sci I	
Sciences	ICS	171	Intro to Computer Security	
Sciences	ICS	184	Introduction to Networking	
Sciences	ICS	207	Building Web Applications	
Sciences	ICS	211	Intro to Computer Science II	
Sciences	ICS	212	Program Structure	
Sciences	ICS	241	Discrete Mathematics II	
Sciences	ICS	281	Ethical Hacking	
Sciences	ICS	282	Computer Forensics	
Sciences	KLS	195	Personal Health & Wellness	
Sciences	KRS	203	Introduction to Kinesiology	
Sciences	MICR	130	Gen Microbiology	
Sciences	MICR	130	Gen'l Microbiology	
Sciences	MICR	130	General Microbiology	
Sciences	MICR	130L	Gen Microbiology Lab	
Sciences	MICR	140	Microbiology Lab	
Sciences	MICR	140L	Microbiology Lab	
Sciences	OCN	101	Intro to Marine Option Program	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Sciences	OCN	102	Intro to Environmental Science	
Sciences	OCN	120	Global Environ Challenges	
Sciences	OCN	196	Res Exp Marine Science	
Sciences	OCN	196	Special Topic:	
Sciences	OCN	199	Intro Dir Res	
Sciences	OCN	201	Sci of the Sea	
Sciences	OCN	201	Science of Sea	
Sciences	OCN	201	Science of the Sea	
Sciences	OCN	201L	Sci of Sea Lab	
Sciences	PHYL	141	Anatomy & Physiology I	
Sciences	PHYL	141	Human Anatomy & Physiology I	
Sciences	PHYL	141	Human Anatomy/Physiology I	
Sciences	PHYL	141L	Human Anatomy & Physiology Lab	
Sciences	PHYL	141L	Human Anatomy/Physiology Lab I	
Sciences	PHYS	100	Survey of Physics	
Sciences	PHYS	100L	Survey of Physics Lab	
Sciences	PHYS	120	Weather & Climate Hawaii	
Sciences	PHYS	151	College Physics I	
Sciences	PHYS	151L	College Physics I Lab	
Sciences	PHYS	151L	College Physics Laboratory I	
Sciences	PHYS	170	General Physics I	
Sciences	PHYS	170L	General Physics I Lab	
Sciences	PHYS	170L	General Physics Lab I	
Sciences	PHYS	399	Indiv Work in Advanced Physics	
Sciences	SCI	114	Intro Scientific Method-Lab	
Sciences	SCI	122	Physical Science	
Sciences	SCI	122L	Intro to Sci: Physical Lab	
Sciences	SCI	190V	Topic: Science	
Sciences	SCI	295V	Introduction to STEM Research	
Sciences	SSM	110	Sustainable Water & Waste Mgt	
Sciences	ZOOL	101	Principles of Zoology	
Sciences	ZOOL	200	Marine Biology	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Sciences	ZOOL	200L	Marine Biology Lab	
Social Sciences	ANTH	122	Intro Sustainability & Travel	
Social Sciences	ANTH	150	Human Adaptations	
Social Sciences	ANTH	151	Emerging Humanity	
Social Sciences	ANTH	152	Culture and Humanity	
Social Sciences	ANTH	175	Polynesian Surf Culture	
Social Sciences	ANTH	175L	Surf Culture Field Lab	
Social Sciences	ANTH	200	Cultural Anthropology	
Social Sciences	ANTH	297	Archaeological Field School HI	
Social Sciences	ECON	120	Intro Economics	
Social Sciences	ECON	120	Introduction to Economics	
Social Sciences	ECON	130	Prin of Economics I - Micro	
Social Sciences	ECON	130	Prin of Microeconomics	
Social Sciences	ECON	130	Principles of Economics-Micro	
Social Sciences	ECON	130	Principles of Economics/Micro	
Social Sciences	ECON	130	Principles of Microeconomics	
Social Sciences	ECON	131	Princ Econ Macro	
Social Sciences	ECON	131	Principles of Macroeconomics	
Social Sciences	ES	101	Intro to Ethnic Studies	
Social Sciences	ES	214	Intro to Race & Ethnic Relatns	
Social Sciences	ES	221	Hawaiians	
Social Sciences	FAMR	230	Human Development	
Social Sciences	FAMR	230W	WI-Human Development	
Social Sciences	FAMR	296	Working With People	
Social Sciences	GEO	101	The Natural Environment	
Social Sciences	GEOG	101	The Natural Environment	
Social Sciences	GEOG	101L	The Natural Environment Lab	
Social Sciences	GEOG	102	World Regional	
Social Sciences	GEOG	102	World Regional Geog	
Social Sciences	GEOG	102	World Regional Geography	
Social Sciences	GEOG	107	Hawaii in the Pacific	
Social Sciences	GEOG	122	Geography of Hawai'i	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Social Sciences	GEOG	151	Geog & Cont Soc	
Social Sciences	GEOG	151	Geog & Contemporary Society	
Social Sciences	HDFS	230	Human Development	
Social Sciences	HSER	100	Self Exploratn	
Social Sciences	HSER	110	Intro to Human Services	
Social Sciences	HSER	193	Human Services Pract I	
Social Sciences	HSER	245	Group Counsel	
Social Sciences	PLAN	101	Sustainable Cities	
Social Sciences	POLS	110	Intro Political Science	
Social Sciences	POLS	110	Intro to Political Science	
Social Sciences	POLS	110	Intro to Polsc	
Social Sciences	POLS	140	Intro to Indigenous Politics	
Social Sciences	POLS	150	Intro to Global Politics	
Social Sciences	POLS	160	Intro to Int & Global Studies	
Social Sciences	POLS	341	The Politics of Media	
Social Sciences	PSY	100	Surv Psychology	
Social Sciences	PSY	100	Survey Of Psy	
Social Sciences	PSY	100	Survey of Psy	
Social Sciences	PSY	100	Survey of Psychology	
Social Sciences	PSY	212	Survey of Research Methods	
Social Sciences	PSY	240	Developmental Psych	
Social Sciences	PSY	240	Developmental Psychology	
Social Sciences	PSY	260	Psy of Personality	
Social Sciences	PSY	260	Psychology of Personality	
Social Sciences	PSY	371	Abnormal Psychology	
Social Sciences	PUBA	100	Intro Public Administration	
Social Sciences	PUBA	101	Intro to Health Care Admin	
Social Sciences	PUBA	103	Intro to JusticeAdministration	
Social Sciences	PUBA	104	Intro Community Hlth	
Social Sciences	SCFS	120	Aina/Place-Based Education	
Social Sciences	SCFS	121	Garden Education	
Social Sciences	SCFS	198B	Intro to Ahupuaa-Hwn NatResMgt	

Table B.1. Early College Classes and Subject Definitions, 2018–2021 (continued)

	Course			
Subject Aggregation	Subject	Number	Title	
Social Sciences	SOC	100	Intro Sociology	
Social Sciences	SOC	100	Intro to the Study of Society	
Social Sciences	SOC	100	Introduction to Sociology	
Social Sciences	SOC	100	Survey Gen'l Sociology	
Social Sciences	SOC	100	Survey of Gen Sociology	
Social Sciences	SOC	100	Survey of General Sociology	
Social Sciences	SOC	100	Survey of Soc	
Social Sciences	SOC	208	Criminology	
Social Sciences	SOC	214	Intro Race & Ethnic Relations	
Social Sciences	SOC	231	Juvenile Delinquency	
Social Sciences	SOC	251	Intro to Soc of Family	
Social Sciences	SOC	251	Intro to Sociology of Family	
Social Sciences	SOC	251	Sociology of the Family	
Social Sciences	SOCS	225	Statistical Analysis	
Social Sciences	WS	151	Intro Women's Studies	
Social Sciences	WS	175	Gend/Sex/Sexuality to 1500 CE	
Social Sciences	WS	176	Gend/Sex/Sexuality 1500 to Now	

Table B.2. Hawai'i High Schools Offering Early College Courses and Their Locale Classifications, 2018–2021

Locale School Name Classification		School Name	Locale Classification	
Admiral Arthur W. Radford High School	Suburb	Kealakehe High School	Rural	
'Aiea High School	Suburb	Kīhei Public Charter School	Rural	
Connections NCPCS	Town	King Kekaulike High School	Town	
Governor Wallace Rider Farrington High	City	Kohala High School	Town	
Hakipuʻu Learning Center PCS	Suburb	Konawaena High School	Rural	
Hālau Kū Māna NCPCS	City	Kula Kaiapuni 'O Ānuenue	City	
Hawaiʻi Technology Academy PCS	Suburb	Lahainaluna High School	Rural	
Henry J. Kaiser High School	Suburb	Lānaʻi High & Elementary School	Town	
Henry Perrine Baldwin High School	City	Laupāhoehoe Community PCS	Rural	
Hilo High School	Town	Leilehua High School	Suburb	
Honoka'a High and Intermediate School	Town	Maui High School	City	
James B. Castle High School	Suburb	Mililani High School	Suburb	
James Campbell High School	Suburb	Moanalua High School	City	
Ka 'Umeke Ka'eo PCS	Town	Molokaʻi High School	Rural	
Kahuku High and Intermediate School	Town	Nānākuli High & Intermediate School	Suburb	
Kailua High School	Suburb	Olomana School	Rural	
Kaimukī High School	City	Pāhoa High & Intermediate School	Town	
Kalaheo High School	Suburb	Pearl City High School	Suburb	
Kalani High School	Suburb	President Theodore Roosevelt High School	City	
Kamaile Academy PCS	Rural	President William McKinley High School	City	
Kanuikapono Learning Center PCS	Town	University Laboratory School	City	
KanuʻokaʻAina NCPCS	Rural	Waiākea High School	Town	
Kapaʻa High School	Town	Waialua High & Intermediate School	Town	
Kapolei Charter	Rural	Waiʻanae High School	Suburb	
Kapolei High School	Suburb	Waimea High School	Town	
Kaʻu High & Pahala Elementary School	Rural	Waipahu High School	Suburb	
Kauaʻi High School	Town	Note: Locale classification was p	rovided by Data	
Ke Kula 'O 'Ehunuikaimalino	Rural	eXchange Partnership.	Totaca by bata	
Ke Kula' Samuel M. Kamakau Laboratory PCS	Suburb			

Town

Keaʻau High School

Appendix C: Results from Surveys of High School Early College Coordinators and UH Early College Instructors, January 2022

Table C.1. High School Early College Coordinator Survey Results

What is the name of your school?		
School	Frequency	Percent
'Aiea High School	1	2.38
Campbell High School	1	2.38
Castle High School	1	2.38
Farrington High School	1	2.38
Hawaiʻi Technology Academy PCS	1	2.38
Hilo High School	1	2.38
Honoka'a High and Intermediate School	1	2.38
Kahuku High & Intermediate School	1	2.38
Kailua High School	1	2.38
Kaimukī High School	1	2.38
Kalaheo High School	1	2.38
Kalani High School	1	2.38
Kamaile Academy PCS	1	2.38
KanuʻokaʻAina NCPCS	1	2.38
Kapaʻa High School	1	2.38
Kapolei High School	1	2.38
Kaʻu High & Pahala Elementary School	1	2.38
Kauaʻi High School	1	2.38
Ke Kula 'O 'Ehunuikaimalino	1	2.38
Ke Kula' Samuel M. Kamakau Laboratory PCS	1	2.38
Keaʻau High School	1	2.38
Kealakehe High School	1	2.38
Kihei PCS	1	2.38
King Kekaulike High School	1	2.38
Konawaena High School	1	2.38
Lahainaluna High School	1	2.38
Lānaʻi High & Elementary School	1	2.38
Leilehua High School	1	2.38

Table C.1. High School Early College Coordinator Survey Results (continued)

School	Frequency	Percent
Maui High School	1	2.38
McKinley High School	1	2.38
Mililani High School	1	2.38
Molokaʻi High School	1	2.38
Nānākuli High & Intermediate School	1	2.38
Olomana School	1	2.38
Pearl City High School	1	2.38
Radford High School	1	2.38
Roosevelt High School	1	2.38
Waiākea High School	1	2.38
Waialua High & Intermediate School	1	2.38
Waiʻanae High School	1	2.38
Waimea High School	1	2.38
Waipahu High School	1	2.38

How long has your school participated in the Early College Program?

Years	Frequency	Percent
1-2 years	3	7.14
3-5 years	11	26.19
6+ years	27	64.29

Approximately how many Early College courses does your school offer to students each school year (i.e., Fall, Spring, and Summer)?

Number Courses Offered	Frequency	Percent
1-3 courses	17	40.48
4-8 courses	13	30.95
8 or more courses	12	28.57

What is your primary role?

Role	Frequency	Percent
Academy Director	3	7.14
Counselor (e.g., College/Career, Grade Level, etc.)	25	59.52
Other (please specify.)	10	23.81
Registrar	2	4.76
Teacher	2	4.76

Table C.1. High School Early College Coordinator Survey Results

When early college classes transitioned to online learning, were most classes held synchronously or asynchronously?

Instruction Type	Frequency	Percent
A mix of both instruction types	16	38.1
Mostly asynchronously	10	23.81
Mostly synchronously	16	38.1

What general challenges did you experience when Early College classes transitioned to an online format due to the pandemic? Select all that apply.

General Challenges	Frequency	Percent
Helping students figure out how to access and use the learning management platform and software programs/tools.	32	76.19
Addressing computer access issues for students.	19	45.24
Addressing reliable Internet connection issues for students.	22	52.38
Students did not like or were not interested in participating in online Early College classes.	18	42.86
The number of Early College classes offered by our high school decreased.	9	21.43
The number of students served by our high school's Early College program decreased.	12	28.57
It was harder for students to access support services/resources offered by our high school and/or college partner.	16	38.1
It was harder to connect with the instructors and/or UH Early College coordinators or counselors regarding student recruitment, registration, course progress, etc.	14	33.33
I had limited access to students for recruitment, registration, counseling, advising/academic checks, etc.	27	64.29

What general successes did you experience as a result of Early College classes transitioning to an online format? Select all that apply.

General Successes	Frequency	Percent
Figuring out how to help students access and use the learning management platform and the software/tools for synchronous and/or asynchronous classes.	14	33.33
Addressing computer access issues for students.	11	26.19
Addressing Internet connection issues for students.	6	14.29
Students were interested in participating in online Early College classes and enjoyed learning in an online format.	17	40.48
Our high school continued to offer the same or a comparable number of Early College classes per school year.	26	61.9

Table C.1. High School Early College Coordinator Survey Results

It was easier for students to access support services/resources offered by our UH partner(s) in an online environment.	7	16.67
Our high school served the same or more students through our Early College program.	15	35.71
My school established processes or improved processes for tracking student progress.	7	16.67

Before the pandemic, did your school have teachers and/or instructional support staff (e.g., success coaches, facilitators, etc.) assigned to support students in their Early College classes?

Instructional Teachers	Frequency	Percent
No. Our school did not have specific teachers and/or instructional support staff designated to support Early College students.	13	30.95
Yes. These teachers and/or instructional support staff regularly supported all Early College students.	23	54.76
Yes. These teachers and/or instructional support staff regularly supported those Early College students who needed academic assistance.	6	14.29

Before the pandemic, how did your school provide support to students taking Early College classes? Select all that apply.

Support Type	Frequency	Percent
By getting updates from the UH partner about student progress and contacting struggling students	36	85.71
By holding study sessions that focused on college study habits, planning/time management, etc.	9	21.43
By providing tutoring services and/or resources.	18	42.86
By providing emotional support and/or referring students to appropriate emotional support. services.	20	47.62

Currently, does your school have teachers and/or instructional support staff (e.g., success coaches, facilitators, etc.) assigned to support students participating in Early College classes?

Support Type	Frequency	Percent
No. Our school does not have specific teachers and/or instructional support staff designated to support Early College students.	14	33.33
Yes. These teachers and instructional support staff regularly support all Early College students.	22	52.38
Yes. These teachers and instructional support staff regularly support those Early College students who need academic assistance.	6	14.29

Table C.1. High School Early College Coordinator Survey Results

Currently, how does your school support students taking Early College classes? Select all that apply.

Support Type	Frequency	Percent
By getting updates from the UH partner about student progress and contacting struggling students.	41	97.62
By holding study sessions that focus on college study habits, planning/time management, etc.	11	26.19
By providing tutoring services and/or resources.	18	42.86
By providing emotional support and/or referring students to appropriate emotional support services.	23	54.76

Before the pandemic, how did you promote the Early College program at your school? Select all that apply.

Promoting Methods	Frequency	Percent
Sending hard copy materials directly to the student's home	11	26.19
Sending information to students and/or parents via email	31	73.81
Placing information on the school's website	29	69.05
Advertising on social media (e.g., Instagram or Twitter)	11	26.19
Describing Early College opportunities in course registration materials	27	64.29
Recognizing or celebrating students who take Early College courses	17	40.48
Relying on teachers to promote the program to their students	24	57.14

Has your school changed the populations targeted for Early College program participation because of the pandemic?

Population Targeting	Frequency	Percent
No, we target the same populations for participation.	37	88.1
Yes, there have been changes to the population targeted for participation.	5	11.9

To what extent do you agree with the following statement: A substantial number of my Early College students are likely to experience academic challenges (e.g., not being prepared for subsequent classes, falling behind in credits, etc.) as a result of the pandemic.

Agreement	Frequency	Percent
Not at all	5	11.9
To a great extent	4	9.52
To a small extent	10	23.81
To a very great extent	1	2.38
To some extent	22	52.38

Table C.1. High School Early College Coordinator Survey Results

To what extent do you agree with the following statement: A substantial number of my schools economically disadvantaged, Native Hawaiian, and/or Pacific Islander Early College students experienced academic challenges (e.g., not being prepared for subsequent classes, falling behind in credits, etc.) as a result of the transition to online learning during the pandemic.

Agreement	Frequency	Percent
Not at all	2	4.76
To a great extent	9	21.43
To a small extent	9	21.43
To a very great extent	3	7.14
To some extent	19	45.24

23

Table C.2. UH Early College Instructors Survey Results

Less than 1 year (i.e., from Spring 2021 term on)

Which UH campus are you primarily affiliated with?			
Campus	Frequency	Percent	
Hawaiʻi Community College (including Pālamanui and Kō	14	9.21	
Education Center)			
Honolulu Community College	14	9.21	
Kapiʻolani Community College	10	6.58	
Kauaʻi Community College	11	7.24	
Leeward Community College	49	32.24	
UH Hilo	1	0.66	
UH Maui College (including Lānaʻi Education Center and Molokaʻi	14	9.21	
Education Center)			
UH Mānoa	4	2.63	
UH West Oʻahu	16	10.53	
Windward Community College	16	10.53	
How long have you been involved in teaching Early College	courses?		
Years	Frequency	Percent	
1-2 years (i.e., from Spring 2020 term on)	33	21.71	
2-3 years (i.e., from Fall 2018 term on)	41	26.97	
3+ years (i.e., prior to Fall 2018 term)	55	36.18	

How many Early College classes do you typically teach in one academic year (i.e., Fall, Spring, and Summer)?

Number of Classes	Frequency	Percent
I do not regularly teach Early College classes	19	12.5
One	60	39.47
Two	51	33.55
Three or more	22	14.47

What general challenges did you experience when Early College classes transitioned to an online format due to the pandemic? Select all that apply.

General Challenges	Frequency	Percent
Transitioning my face-to-face Early College class(es) to an online format.	45	26.91
Getting comfortable with teaching in an online setting.	28	18.42
Ensuring that the content delivery for my online Early College class(es) was as engaging as the content delivery for my face-to-face Early College class(es).	88	57.89
Ensuring that student-to-student and student-to-instructor interactions were comparable to my face-to-face Early College class(es).	80	52.63
Addressing technology access issues for Early College students.	78	51.32

(continued)

15.13

Table C.2. UH Early College Instructors Survey Results (continued)

The quality of my Early College students' work and engagement in the course decreased.	51	33.55
It was harder to provide support and/or resources to Early College students who were struggling in my class.	60	39.47
It was harder to connect with staff who support the Early College program at my UH campus (e.g., my campus' Early College coordinator).	9	5.92
It was harder to connect with staff who support the Early College program at the high school.	17	11.18

What general successes did you experience as a result of Early College classes transitioning to an online format? Select all that apply.

General Successes	Frequency	Percent
Transitioning my face-to-face Early College class(es) to an online format.	83	54.61
Getting comfortable with teaching in an online setting.	99	65.13
Ensuring that the content delivery for my online Early College class(es) was as engaging as the content delivery for my face-to-face Early College class(es).	65	42.76
Ensuring that student-to-student and student-to-instructor interactions were comparable to interactions in my face-to-face Early College class(es).	53	34.87
Addressing technology access issues for Early College students.	37	24.34
The quality of my Early College students' work and engagement in the course stayed the same or increased.	56	36.84
It was easier to provide support and/or resources to Early College students who were struggling in my class.	27	17.76

How would you characterize your experience as an Early College instructor in transitioning to online learning?

Experiences	Frequency	Percent
I am still trying to figure out how to make online learning work.	14	9.21
I am struggling to make online learning work.	3	1.97
None of the above.	5	3.29
Other (Please specify.)	22	14.47
Transitioning to online learning was not too hard.	71	46.71
With a lot of effort, I figured out how to make online learning work.	36	23.68

How effective do you feel online Early College courses have been in terms of meeting your students academic needs?

Effectiveness	Frequency	Percent
Effective	68	44.74
Not at all effective	4	2.63
Somewhat effective	41	26.97
Very effective	36	23.68

Table C.2. UH Early College Instructors Survey Results (continued)

How effective do you feel online Early College courses have been in terms of
meeting your students social-emotional needs?

Effectiveness	Frequency	Percent
Effective	36	23.68
Not at all effective	24	15.79
Somewhat effective	76	50
Very effective	12	7.89

When teaching online Early College classes, do you think synchronous or asynchronous course delivery is more effective?

Effective Status	Frequency	Percent
Asynchronous is more effective	12	7.89
Both are equally effective	17	11.18
It depends on the course and/or content area	47	30.92
Synchronous is more effective	73	48.03

Before the pandemic, how did you support Early College students? Select all that apply.

		<u> </u>
Support Type	Frequency	Percent
I held office hours at the high school to meet with students in-person.	52	34.21
I hosted in-person study sessions so students could work together.	26	17.11
I alerted the high school Early College coordinator and/or my campus Early College coordinator if a student's grade was low and/or their attendance was problematic.	95	62.5
I responded to student questions via email as I received them.	114	75
None of the above.	13	8.55

How do you currently support Early College students? Select all that apply.

Support Type	Frequency	Percent
I hold office hours at the high school to meet with students in-person.	19	12.5
I hold online office hours to meet with students virtually.	103	67.76
I host in-person study sessions so students can work together.	12	7.89
I host virtual study sessions so students can work together.	30	19.74
I alert the high school Early College coordinator and/or my campus Early College coordinator if a student's grade is low and/or their attendance is problematic.	106	69.74
I respond to student questions via email as I receive them.	127	83.55
None of the above	6	3.95