

THE LANDSCAPE OF Dual Enrollment & Dual Credit Programs in Delaware (2013)

Francis J. O'Malley Kelly L. Sherretz

AUGUST 2013







Prepared by

Institute for Public Administration

School of Public Policy & Administration College of Arts & Sciences University of Delaware

Funded by
Delaware Department of Education

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Preface

The Institute for Public Administration (IPA) at the University of Delaware is pleased to present *The Landscape of Dual Enrollment and Dual Credit Programs in Delaware (2013)* report. The report, funded by the Delaware Higher Education Office at the Delaware Department of Education, offers a descriptive overview of dual enrollment and dual credit programming in the state based on responses to a survey of 18 public school districts and charter schools conducted in the spring of 2013.

The Landscape study is part of an ongoing effort to ensure that students graduating from Delaware's high schools are college and career ready. It explores questions such as which districts, charter schools, and colleges offer dual enrollment and dual credit courses, which courses are offered, how are the courses designed, who teaches the courses, under what conditions are credits awarded, how are students from underrepresented groups being recruited into the courses, and what barriers and aids to the development of dual enrollment and dual credit courses exist.

I would like to thank the Department of Education for supporting this project, which was the third component in a series of initiatives to enhance college access and success. I also want to acknowledge and thank the IPA project team members for their contributions to this project. Fran O'Malley, Project Manager, oversaw the development and distribution of the survey and led the team's data collection and analysis. He and Kelly Sherretz deserve special recognition for authoring the report. Lisa Moreland, Principal Investigator, served as the client contact, submitted Human Subjects Protocol, and edited the final report. I would like to recognize Sarah Pragg for her graphic design. Thank you, also, to our Undergraduate Public Administration Fellow (PAF) Taylor Hawk and our Graduate PAFs Alexandra Leach, Rebekah Inman Perry, and Chanel Gaither for their contributions to this report.

Education services at IPA focus on applying public management principles to public education; connecting public education and other governmental functions (such as planning and land use); and utilizing proven processes, such as mediation and conflict resolution, to aid in fostering constructive public participation and involvement in decision making in education. These service areas are supported through the integration of applied research, professional development, and the education of tomorrow's leaders.

Public education is of great significance to the state's development and accounts for one-third of its annual budget. This *Landscape* study reflects IPA's commitment to the well being of Delaware and its citizens through public education research.

Jerome R. Lewis, Ph.D.
Director, Institute for Public Administration

Acknowledgments

The authors of this report thank the Delaware Higher Education Office at the Department of Education for generously supporting this work.

We also wish to express our appreciation to those individuals from the 16 school districts and two charter schools who took time out of their very busy schedules to respond to our survey (noted below), and to the following IPA staff and graduate and undergraduate researchers for their help in crafting the survey; analyzing the data; and drafting, editing, revising, and designing the report.

The 16 districts and two charter schools that completed the survey include:

- Appoquinimink School District
- Brandywine School District
- Caesar Rodney School District
- Cape Henlopen School District
- Capital School District
- Colonial School District
- Delmar School District
- Lake Forest School District
- Milford School District
- New Castle County Vo-Tech School District
- Polytech School District
- Red Clay Consolidated School District
- Seaford School District
- Smyrna School District
- Sussex Tech School District
- Woodbridge School District
- Campus Community School
- Charter School of Wilmington

IPA Staff and Students:

- Lisa Moreland, Associate Policy Scientist
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- Rebekah Inman Perry, Graduate Public Administration Fellow
- Alexandra Leach, Graduate Public Administration Fellow
- Taylor Hawk, Undergraduate Public Administration Fellow

Sincerely,

Fran O'Malley Kelly Sherretz

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Executive Summary

At the request of the Delaware Higher Education Office (DHEO) of the Delaware Department of Education (DDOE), the Institute for Public Administration (IPA) at the University of Delaware conducted a survey of the public school districts and charter schools in Delaware serving high school students in the spring of 2013 to gain snapshots of the state's dual enrollment and dual credit programs.

Dual enrollment (DE) programs include courses for which high school students may receive both high school and postsecondary credit while simultaneously registered at both the high school and postsecondary institution.

Dual credit (DC) programs, on the other hand, include courses for which students may receive both high school and postsecondary credit, but the students are not registered at postsecondary institutions. Examples of dual credit programs are Advanced Placement (AP), International Baccalaureate (IB), and Tech Prep courses.

Eighteen Local Education Agencies (LEAs), including 16 districts and 2 charter schools, completed the survey. The key findings from that study appear below:

- Of the 18 LEAs in Delaware that participated in this survey, 78 percent (14) reported offering dual credit courses at 19 different high schools during the 2012–2013 school year (SY2012–2013) while 67 percent (12) reported simultaneously offering dual enrollment courses at 20 different high schools. The number of dual enrollment courses offered in a high school can range from as many as 16 to as few as 1, while the number of dual credit courses can range from as many as 30 courses to as few as 2.
- Data collected from responding LEAs suggest that Delaware will witness modest growth in the number of dual enrollment and dual credit courses offered in SY2013–2014.
 Federal College Access Challenge Grant (CACG) funds appear to be fueling that growth.
- All five institutions of higher education (IHE) in the state and two out-of-state institutions offer dual enrollment opportunities to students in Delaware. LEAs, however, desire more support from those institutions.
- There is confusion over the distinctions between dual enrollment and dual credit programs. This confusion led to inappropriate survey responses and uncertainties surrounding some findings contained in this report.
- Data gathered from this survey indicate that the typical dual enrollment course in Delaware is a "singleton" taught either by a college professor or high school teacher at a high school. The class is populated almost exclusively by high school students who are admitted on the bases of their grade point averages and staff recommendations.

The syllabi are most often developed by IHE partners. Students must earn a minimum grade in dual enrollment courses to earn college credit, but the minimums vary by IHE partner. Once earned, the portability of the college credit tends to be limited.

- LEAs view costs as the most significant barriers to developing dual enrollment and dual credit programs. Tuition, books, and instructors are listed as the most common expenses. Grants and other forms of funding, then, are seen as the most important aids to developing and sustaining dual enrollment/credit programs.
- Only a handful of LEAs report receiving CACG funds to support dual enrollment or dual credit programs. The funds typically are used to introduce or add new courses.
- While CACG funds have been valuable, they are viewed as tenuous and short-term. LEAs desire a long-term plan to support dual enrollment and dual credit programs.
- Most LEAs that offer dual enrollment courses report the use of strategies geared specifically for the recruitment of students from underrepresented groups. Most also offer support for those students once they enroll. There appears to be less recruitment and support for students from underrepresented groups in dual credit courses.

Introduction: Background to the Study

The State of Delaware's efforts to ensure college and career readiness have been ongoing but gained significant momentum in 2003 with the creation of the Delaware P-20 Council. The P-20 Council formed in 2003 under Executive Order 47 to "coordinate the educational efforts of publicly funded programs from early care through higher education and to foster partnerships among groups concerned with public education." The Order charged the P-20 Council with making "recommendations designed to ensure a more integrated, seamless education system that enables children to enter school ready to learn, receive challenging instruction throughout their school careers, graduate from high school ready for college or work, and continue their education in a way that makes them productive and successful citizens" (Delaware P-20 Council, 2009).

The P-20 Council established a Dual Enrollment Subcommittee four years later "to develop state policy for dual enrollment as part of the National Governors Association grant to redesign Delaware high schools." The Subcommittee issued a report that cited data from a study (Lerner & Brand, 2006) noting that, of the 70 percent of high school students who graduate high school, only 53 percent would enter college and only 35 percent of those would earn a degree. The report posed the overarching question: "Why do students not earn a [college] degree?" and concluded that an important and controllable factor is students' access to quality, rigorous curricula in high school. The Subcommittee then postulated that two important components of such curricula are dual enrollment and dual credit courses (Delaware Dual Enrollment Committee, 2007). The main obstacle to implementing the curricula at the time, however, was finding funds to pay for the more rigorous courses.

Based on the Subcommittee's analysis, the Delaware Higher Education Office (DHEO) of the Delaware Department of Education (DDOE) secured two \$1.5 million College Access Challenge Grants (CACG) awarded in 2011 and 2012 and invited public school districts and charter schools to compete for mini-grants to support the development of dual credit and dual enrollment programs over a two-year period. The mini-grants prioritized proposals aimed at increasing the number of students—"especially underrepresented students such as minorities and first-generation college-goers—who enter and successfully complete a post-secondary program of study." According to an Annual Performance Report submitted to the U.S. Department of Education (USDOE) by DDOE in 2013, ten districts/charters received CACG mini-grants in year one. Five districts (Christina, Delmar, Lake Forest, Polytech, and Sussex Tech) received CACG mini-grants in year two (CACG Annual Performance Report, 2013).

Purpose of the Report

The report provides baseline data—a landscape—of Delaware's dual enrollment and dual credit programs.

The study is descriptive in nature and aims primarily to understand:

- What dual enrollment and dual credit opportunities are currently being offered to Delaware's high school students.
- How the recipients of CACG mini-grants are using the funds.
- Strategies or approaches that districts and charters are using to grow dual credit and dual enrollment opportunities.
- Any barriers to developing dual credit and dual enrollment opportunities.

Methodology

The research team used survey responses and artifacts (e.g., documents, websites, and reports) to gather the information that appears in this report. Data collection occurred between April and May 2013.

The Survey

Responses to the 2013 Delaware Dual Enrollment and Dual Credit Survey served as the main sources of data for this report. The units of study in that survey included Delaware's public school districts and charter schools that served high school students in the spring of 2013.

The research team from the Institute for Public Administration (IPA) developed and internally field-tested a draft of the survey in March 2013 and then sent a draft to two individuals in the field who have had experience with dual enrollment and dual credit programs and to the Delaware Department of Education (DDOE) for feedback. The feedback informed revisions to the final probe. At the same time, the research team asked each school and district to provide the name of the individual(s) in their district or school who oversees dual enrollment/credit programs and who would serve as a point of contact for this study.

The final survey (see Appendix II) consisted of thirty selected and constructed response items. When appropriate, selected response items also provided "other" spaces that invited respondents to describe alternatives not provided in the selected response options. "Other" responses that offer insights into Delaware's dual enrollment/credit programming are included.

Formal invitations to participate in the survey were sent by e-mail on April 10 to the dual enrollment/credit contacts in every Delaware public school district (19) and charter school (5) known to serve high school students. Both the text of the e-mail invitation and the survey protocol highlighted the distinctions between dual credit and dual enrollment programs while offering examples of each in an attempt to reduce confusion. Districts were asked to complete the survey by April 30. A reminder was sent out six days before the response deadline. Fifteen of the 19 school districts plus two charters responded on time. Follow-up e-mails were sent on May 2 to those not meeting the deadline, offering an extension until May 6. In the end, 16 school districts and two charter schools provided complete responses to the survey. (See Appendix III for a list of responding districts/charters.) One other district started the survey, but did not complete it. Its responses are not included in this report.

Data analysis began the week of May 6, just after the final deadline expired.

Artifacts

The research team also relied on a number of artifacts, including documents produced by the Delaware P-20 Council, annual College Access Challenge Grant (CACG) performance reports

submitted by the Delaware Department of Education, the CACG application, school and university websites, and dual enrollment/credit program websites such as Tech Prep Delaware and Academic Challenge.

Terminology

Several groups referenced or responding to the 2013 Delaware Dual Enrollment and Credit Survey are clustered at points throughout the report for purposes of concision and style. Colleges and universities are grouped as "Institutions of Higher Education" or IHEs, while public school districts and charter schools are grouped under "Local Education Agency" or LEAs.

For the sake of consistency and familiarity, the definitions of dual enrollment and dual credit used in this report were drawn from those used by the Delaware P-20 Council's Dual Enrollment Subcommittee in its 2007 final report:

Dual enrollment (DE) programs include courses for which high school students may receive both high school and postsecondary credit while simultaneously registered at both the high school and postsecondary institution.

Dual credit (DC) programs, on the other hand, include courses for which students may receive both high school and postsecondary credit, but the students are not registered at postsecondary institutions. Examples of dual credit programs are Advanced Placement (AP), International Baccalaureate (IB), and Tech Prep courses.

Dual Enrollment Findings

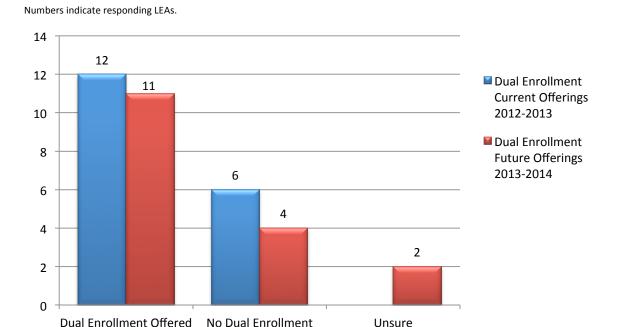
Dual enrollment (DE) programs include courses for which high school students may receive both high school and postsecondary credit while simultaneously registered at both the high school and postsecondary institution.

Twelve of the 18 responding LEAs (75%) reported offering dual enrollment courses in SY2012–2013. Eleven will do so in SY2013–2014. One LEA (Polytech) that reported not offering dual enrollment in SY2012–2013 responded that it will be offering it in SY2013–2014.

Two districts (Colonial and Seaford) were "not sure" if they would be offering dual enrollment courses during SY2013–2014 at the time the survey was conducted. Colonial offered dual enrollment in SY2012–2013, but Seaford did not.

Campus Community closed its 9-12 program at the end of SY2012-2013.

Figure 1: Delaware LEAs Offering Dual Enrollment Courses during the 2012–2014 School Years



Number of Students Currently Enrolled

Ten of the 12 LEAs offering dual enrollment programs reported student enrollment numbers for their SY2012–2013 courses. Enrollment numbers ranged from 5 to 899. The district (Colonial) reporting the highest number in the range included students enrolled in Tech Prep courses. It is not clear whether or not others did the same, or even if they viewed Tech Prep classes as falling under the umbrella of dual enrollment courses.

One district's contact reported an estimate (i.e., "200+"). The number of students enrolled in dual enrollment courses ranged from:

- One to 50 students (5 LEAs)
- 51 to 100 students (3 LEAs)
- 101 to 150 students (0 LEAs)
- 151 to 200 students (2 LEAs)
- 200 or more students (2 LEAs)

Admission Decision-Makers for Dual Enrollment

The survey asked LEAs to identify who decides whether or not a student is admitted into a dual enrollment program. Twelve LEAs responded to this prompt, which allowed for multiple responses as some LEAs were assumed to employ multiple levels of decision-making.

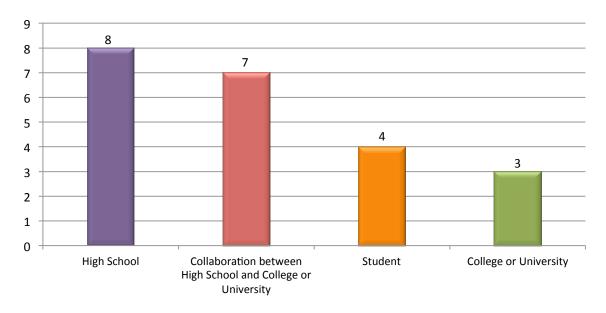
Figure 2 suggests that dual enrollment course-admission decisions are most commonly made either by the individual high schools offering the programs or by the high school in collaboration with the partnering IHE.

Four LEAs (Colonial, Lake Forest, Smyrna, and Campus Community) indicated that the enrollment decision is based solely on the student. However, two of the LEAs (Lake and Campus Community) offered conflicting responses that raise questions about the findings as their districts' respondents checked that enrollment decisions are made "solely" by the students while also checking that the high school, partnering IHE, AND high school work in collaboration to make the decision.

One LEA (Woodbridge) reported that "placement is determined by Accuplacer and SAT Exam Criteria." Accuplacer is a suite of tests offered by the College Board that determines students' knowledge in math, reading, and writing as they prepare to enroll in college-level courses.

Figure 2: Admission Decision-Makers for Dual Enrollment

Numbers indicate responding LEAs



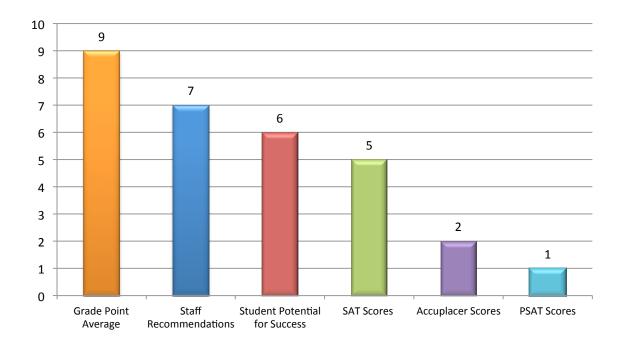
Criteria Used in Dual Enrollment Admission Decisions

Twelve LEAs identified the criteria that they use to admit students into their dual enrollment courses. Three-quarters of those respondents use multiple criteria.

The Delaware P-20 Council's Dual Enrollment Committee established nine "Guiding Principles" (see Appendix I) for dual enrollment/credit programs. The second principle stated that "admission criteria for dual credit and dual enrollment courses should be based on the student's potential for success" and that potential "can be determined by GPA in the content areas of the courses, staff recommendations, student interest and/or test scores" (Dual Enrollment Report and Recommendations, 2007, pp. 2–3). Data collected for this report suggest that Delaware's LEAs are honoring this principle. **Figure 3** shows that the most commonly used criteria are the students' grade point averages and staff recommendations followed closely by students' potential for success and SAT scores.

Figure 3: Criteria Used by Delaware LEAs to Admit Students into Dual Enrollment Courses

Numbers indicate responding LEAs.



New Castle County Vo-Tech (NCCVT) and Woodbridge use Accuplacer for placing students into dual enrollment programs, but not as the sole criterion. NCCVT considers students' grade point averages and SAT scores in addition to Accuplacer while Woodbridge considers Accuplacer and SAT scores.

Sussex Vo-Tech allows every senior to take at least one dual enrollment course. Lake Forest noted that it gives consideration to whether a student is from an underrepresented group or is a "first-time college-goer."

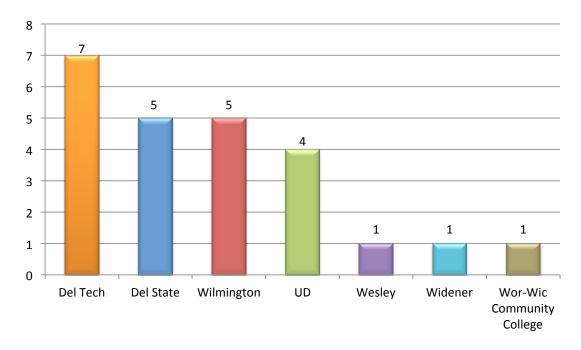
Milford was the only LEA to report that it considers Delaware Comprehensive Assessment System scores, while Smyrna reported that it uses "student or parent request" as its sole criterion for admission into both dual credit and dual enrollment courses.

Articulation Agreements

LEAs reported dual enrollment articulation agreements with seven IHEs. Of those seven, five are within Delaware. Out-of-state partners include Widener University (Pennsylvania) and Wor-Wic Community College (Maryland).

Figure 4: Number of Delaware LEAs Having Dual Enrollment Agreements with Area Institutions of Higher Education

Numbers indicate responding LEAs.



Academic Challenge is a college prep program offered to the nine school districts in Sussex County at Delaware Technical Community College's (Delaware Tech) Georgetown campus. The Academic Challenge website explains, "the program was established in 1987 as a college-school partnership between the nine Sussex County School Districts and the Georgetown Campus of Delaware Tech. The program is open to qualified students in eighth grade, and the five-year program offers them the standard high school curriculum in mathematics and English at an accelerated pace allowing for college course work during the junior and senior years of high school. All college courses are taught at the Georgetown Campus through Delaware Tech and the University of Delaware. It is possible to earn 12 college credits in English and 15 college credits in mathematics" (accessed at https://www.dtcc.edu/admissions-financial-aid/programs-hs-students/academic-challenge).

Academic Challenge appears to account for the large number of dual enrollment partnerships with Delaware Tech. Two of Sussex County's nine school districts did not complete the 2013 Delaware Dual Enrollment and Credit Survey.

Configuration of Courses

Dual Enrollment Models

Singleton Model Prevails

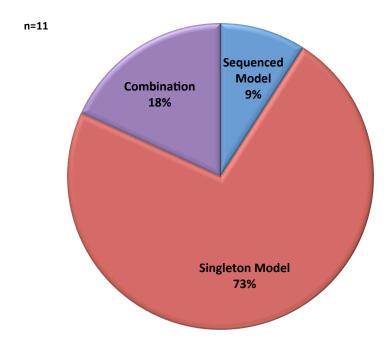
LEAs surveyed for this study were asked if students follow a sequence of courses in their dual enrollment programs or pick and choose individual courses. Nearly three-quarters (8) of the 11 Delaware LEAs reporting to offer dual enrollment programs and responding to this prompt feature what the literature describes as "singleton" courses (Allen, 2010, p. 3).

Sequenced Models Rare

In contrast to disconnected, stand-alone courses, the "best" dual enrollment courses are sequenced logically and progressively (Hoffman, Vargas & Santos, 2008, p. 3). Students in the sequenced programs are guided through a series of courses that incrementally expand understanding of a given subject. Woodbridge was the only district in Delaware to report only using a sequenced dual enrollment model in SY2012–2013. Two other districts (Cape and Colonial) report offering both sequenced and singleton dual enrollment models.

One LEA offered a possible explanation for the prevalence of "singleton" dual enrollment programs when its representative explained that the nature of the dual enrollment program is "based on what is available at the college or university of [sic] the semester."





Class Composition

Sixty-two percent (8) of the LEAs that report offering dual enrollment courses in either SY2012–2013 or SY2013–2014 describe their dual enrollment classes as populated exclusively by students from within their high schools. Five LEAs describe dual enrollment courses in which high school students are mixed in with college students.

High School and College Students 38%

Exclusively High School Students 62%

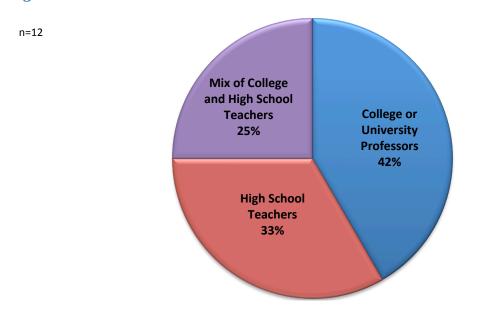
Figure 6: Dual Enrollment Class Population Mix

Types of Instructors

Dual Enrollment Instructors

The data reveals three types of instructors for dual enrollment courses in Delaware: college professors, adjunct professors, or high school teachers/specialists who have been authorized to teach the courses. The three types of instructors appear evenly in LEAs across the state. Five LEAs (42%) report that their dual enrollment courses are taught by college or university instructors, at least some of whom are adjuncts. Four LEAs (33%) report that their dual enrollment courses are taught by their own high school teachers, while three other LEAs indicate that some courses are taught by college or university instructors and others are taught by high school teachers. None of the responding LEAs reported team-teaching configurations that pair university and district/school teachers for dual enrollment courses.

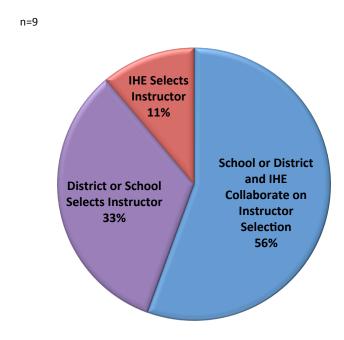
Figure 7: Who Teaches Dual Enrollment Courses in Delaware?



Procedures Used to Select Dual Enrollment Instructors

Just over half (56%) of the LEAs that use their own staff (teachers, specialists, or administrators) to teach dual enrollment courses in Delaware report that they collaborate with their partnering IHEs on the choices of instructors. Only one LEA indicated that its partnering IHE selects the instructor(s). The remaining LEAs (33%) report that their district or school chooses the high school teachers who teach the dual enrollment courses.

Figure 8: How Dual Enrollment Instructors Are Selected in Delaware



Designers of Dual Enrollment Courses

Partnering IHEs play some role in designing every dual enrollment course syllabus in the state of Delaware. In nearly two-thirds (62%) of the LEAs that offer such courses, the dual enrollment syllabi are designed exclusively by the partnering IHE or one of its instructors. In the remaining LEAs that offer dual enrollment (38%), the IHEs collaborate with the high school instructor on the design of syllabi.

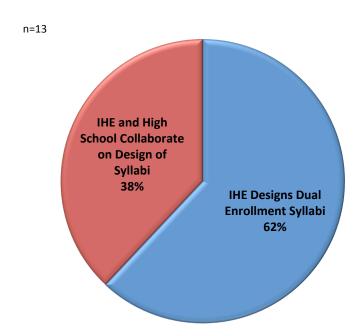


Figure 9: Who Designs Dual Enrollment Courses in Delaware?

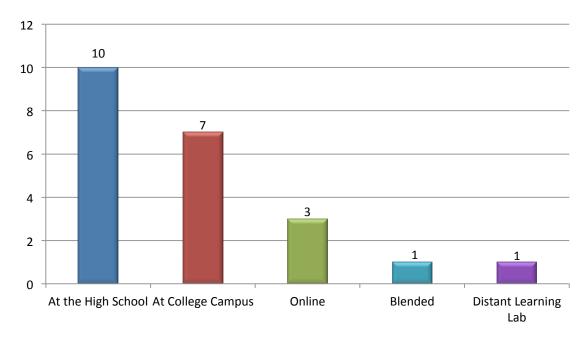
Course Access - Dual Enrollment in Delaware

The P-20 Council's Dual Enrollment Subcommittee encouraged "multiple points of access for dual credit and dual enrollment courses" (Report, 2007, p. 4). This study finds that while dual enrollment courses are most commonly delivered on-site at the high school where the course(s) is offered (10 LEAs), a somewhat surprising number of LEAs (7) report that their students take dual enrollment courses on college campuses. This probably is a result of the Academic Challenge program at Delaware Tech in Georgetown.

Web-based or "blended" approaches also exist, but are less common. Three LEAs reported offering online courses, while one described a blended course that is offered partially online and partially at the *high school*. One other LEA (Red Clay) listed a course that is offered via a distant learning lab.

Figure 10: Access Points for Dual Enrollment Courses in Delaware SY2012-2013

Numbers indicate responding LEAs.



Conditions for Earning College Credit Vis-à-vis Dual Enrollment Courses

The sole condition reported by Delaware LEAs for students in dual enrollment courses to earn college credit is earning a minimum grade in the course. Although course grades are the shared condition, **Table 1** below shows that LEAs report different grade requirements for earning college credit. Only one LEA reported that the partnering IHE establishes the minimum required grade. It remains unclear as to whether IHEs or LEAs establish the minimum grade requirements for the other respondents.

Table 1: Minimum Grade Required to Earn College Credit through Dual Enrollment Course

Minimum Grade Required	Number of LEAs Reporting Each Grade
С	3
"Passing"	2
D	1
70 average	1

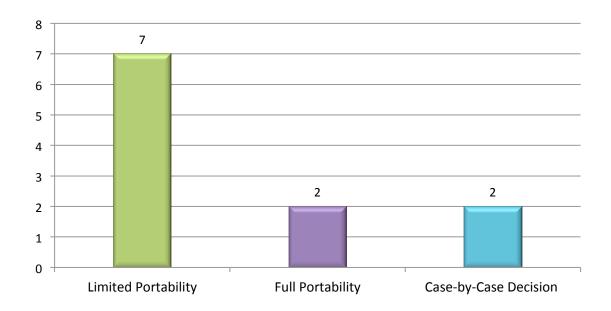
Portability of Dual Enrollment Credits

The survey asked LEAs to describe how widely dual enrollment credits are accepted, or "portable," across IHEs, both in-state and beyond. The survey offered LEAs a brief list of response options as well as an opportunity for them to explain alternatives to the options provided (see Appendix II).

Just over half of the LEAs (7) that reported offering dual enrollment courses indicated that dual enrollment credits are accepted by Delaware IHEs and at some, but not all, IHEs beyond the state ("limited portability"). Only two LEAs (Appoquinimink and NCCVT) reported full portability across the United States. Two other LEAs wrote that the awarding of college credit is done on a case-by-case basis, depending on the "school they [students] wish to enroll in."

Figure 11: Portability of Dual Enrollment Credits

Numbers indicate responding LEAs.



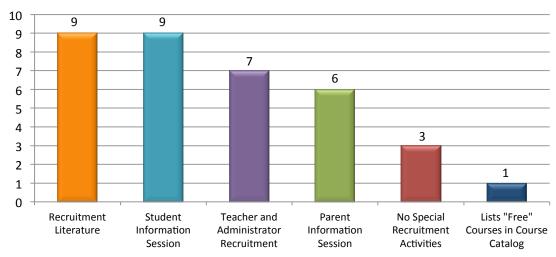
Recruitment of Underrepresented Groups for Dual Enrollment

Most (9) of the 12 LEAs that report offering dual enrollment courses use recruitment literature and information sessions to attract students from underrepresented groups. The next most common strategy (7 LEAs) for recruiting underrepresented groups involves personal contacts by teacher or administrator. Half (6) of the LEAs offer information sessions for parents.

Three LEAs (Capital, NCCVT, and Wilmington Charter) report not having any special dual enrollment recruitment activities that target students from underrepresented groups in place at the time the survey was conducted. Of these three, one LEA (Capital) described its practice of listing "free" dual enrollment/credit courses with the name of the partnering IHEs (Delaware State University and Wesley College) in its "Program of Studies" or course catalog.

Figure 12: How Underrepresented Students Are Recruited for Dual Enrollment Courses

Numbers indicate responding LEAs.

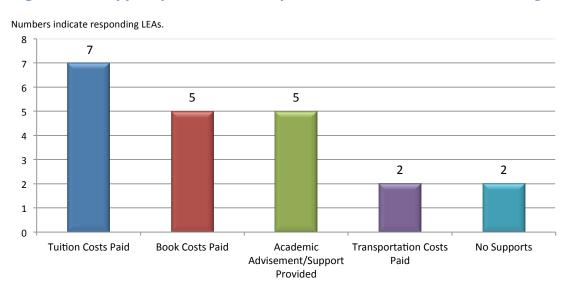


Support for the Underrepresented in Dual Enrollment

LEAs were asked how students from underrepresented groups who take dual enrollment courses are supported. Just over half of the LEAs that report offering dual enrollment courses pay the tuition costs of underrepresented students. Just under half indicate that they pay for the students' books and provide academic advisement/support. Only two LEAs (NCCVT and Sussex Tech) reported paying costs associated with transporting students to sites where dual enrollment courses are offered.

Two LEAs (Colonial and Wilmington Charter) report that they did not offer special supports at the time that the survey was conducted.

Figure 13: Support for the Underrepresented in Dual Enrollment Programs



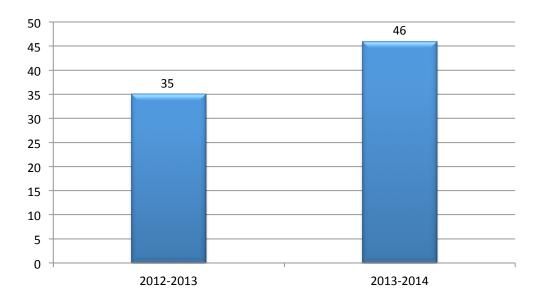
Dual Enrollment Course Offerings

LEAs were asked to list the dual enrollment courses that they offered during SY2012–2013 and to do the same for those they plan on offering during SY2013–2014. Nine LEAs listed 35 dual enrollment courses (including 13 Academic Challenge courses) that they offered in SY2012–2013, with Sussex Tech leading the way in terms of both numbers and variety of dual enrollment courses offered. Four LEAs (NCCVT, Polytech, Sussex Tech, and Woodbridge) indicated that they will expand their dual enrollment offerings with the addition of 11 new courses in SY2013–2014. The remaining LEAs, with the exception of Campus Community, indicated that there will be no change in dual enrollment offerings in SY2013–2014. (The lists of dual enrollment courses that LEAs report to offer in this survey appear in Appendices IV and V.)

Note: Two LEAs (Charter SW and Delmar) wrote "the same" when asked which courses they would offer in SY2013–2014, but did not list the courses.

Figure 14: Dual Enrollment Course Offerings in Delaware as Reported by Survey Respondents





Dual Credit Findings

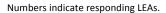
Delaware LEAs Offering Dual Credit (DC) Courses

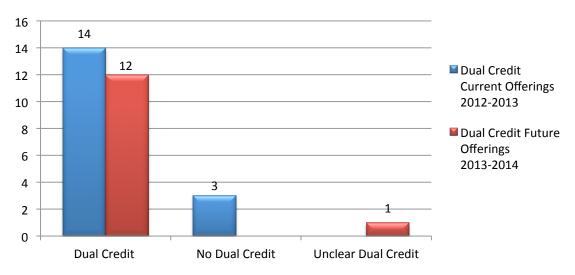
Dual credit (DC) programs include courses for which students may receive both high school and postsecondary credit, but the students are not registered at postsecondary institutions. Examples of dual credit programs are Advanced Placement (AP), International Baccalaureate (IB), and Tech Prep courses.

Fourteen (78%) of the 18 responding LEAs reported that they offered dual credit courses during SY2012–2013. All but one will continue to do so in SY2013–2014. (Campus Community terminated its 9-12 program.)

Three districts (Capital, NCCVT, and Woodbridge) indicated that they did not offer dual credit courses in SY2012–2013.

Figure 15: Delaware LEAs Reporting to Offer Dual Credit Courses for the 2012–2014 School Years





Note: The "skip logic" feature in the survey prevented four districts from reporting whether or not they will offer dual credit in SY2013-2014.

Number of Students Enrolled in Dual Credit Courses

Twelve LEAs provided figures for the number of students enrolled in dual credit courses with an enrollment range of 0-700, although some figures reported by LEAs appear to be estimates. One LEA (Smyrna) wrote that the enrollment number was "too difficult to determine." Three others (Brandywine, Campus Community, and Wilmington Charter) that reported having dual credit programs did not provide enrollment figures. Another LEA (Delmar) that reported offering dual credit courses indicted that no students are enrolled. **Table 2** presents ranges for

numbers of students enrolled in dual credit courses with the number of districts reporting figures within each range.

Table 2: Number of Students Enrolled in Dual Credit Courses per LEAs for SY2012-2013

Students in Dual Credit Courses	Number of Districts/Schools Reporting the Number	
0	3 (Capital, Delmar, and Woodbridge)	
1-50	0	
51-100	1 (Lake Forest)	
101-150	1 (Seaford)	
151-200	1 (Milford)	
200+	00+ 6 (Appoquinimink, *Caesar Rodney, Cape	
	Henlopen, **Colonial, Red Clay, and Sussex Tech)	

^{*}Caesar Rodney submitted its dual credit numbers via e-mail on May 10. The number it submitted as part of the original survey was zero.

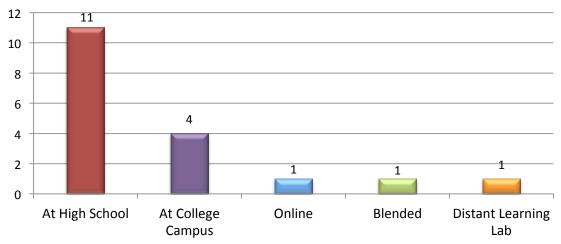
Course Access - Dual Credit Courses

Site-Based Delivery of Dual Credit Courses

Figure 16 illustrates the tendency in Delaware to offer dual credit courses on-site at high schools, a pattern also found with dual enrollment courses. Eleven of the 14 (79%) respondents that report offering dual credit courses in 2012–2013 did so on-site at their high schools. Only four LEAs reported dual credit courses being offered at a college campus.

Figure 16: Access Points for Dual Credit Courses in Delaware for SY2012-2013

 $\label{lem:numbers} \mbox{Numbers indicate responding LEAs.}$



^{**}On May 10 Colonial corrected via e-mail the dual credit and dual enrollment numbers it originally reported in the survey.

Web-Based Delivery of Dual Credit Courses

Only one LEA (Colonial) reported offering dual credit course entirely online. Colonial also offered a blended dual credit course that is delivered partially online and partially at a *college campus*. (Note: This is different from the dual enrollment blended course described earlier that is offered partially at a high school.) As with the dual enrollment courses (see above), one LEA (Red Clay) offers dual credit courses via a distant learning lab.

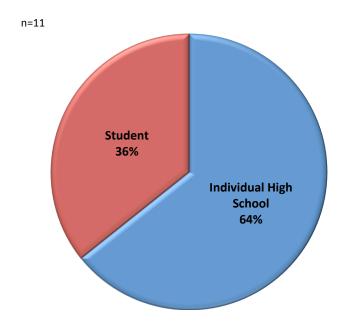
Admission Decision-Makers for Dual Credit

The survey asked LEAs to explain who decides whether or not a student is admitted into a dual credit program. Eleven LEAs responded to this prompt, which also allowed for multiple responses as some LEAs were assumed to employ various levels of decision-making.

Figure 17 suggests that dual credit course admission decisions are made by the individual high schools offering the programs or, as in five LEAs (Colonial, Lake Forest, Seaford, Smyrna, and Sussex Tech), "solely" by the students in those high schools.

Once again, the admission data is somewhat puzzling as three districts (Colonial, Lake Forest, and Sussex Tech) offered what may be conflicting responses. They checked that the dual credit admission decision is made "solely" by the students while also checking that the high school makes the decision. However, the districts simply may have been signaling *where* the decision is made (i.e., at the high school, as opposed to at the IHE level).

Figure 17: Admission Decision-Makers for Dual Credit

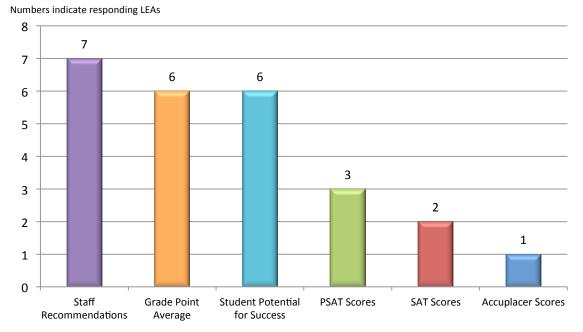


Criteria Used in Dual Credit Admission Decisions

Nine LEAs identified the criteria they use to admit students into their dual credit courses, eight of which use multiple criteria.

As noted earlier under the discussion about dual enrollment, one of the P-20's Dual Enrollment Subcommittee's "Guiding Principles" (see Appendix I) is that "admission criteria for dual credit and dual enrollment courses should be based on the student's potential for success" and that potential "can be determined by GPA in the content areas of the courses, staff recommendations, student interest and/or test scores" (Dual Enrollment Committee Report, 2007). Data collected for this report suggest that Delaware's LEAs are honoring this guiding principle for dual credit as they are for dual enrollment programs. **Figure 18** shows that the most commonly used criteria used for dual credit admissions are only slightly different from those used for dual enrollment programs, with staff recommendation replacing grade point averages as the leading consideration.

Figure 18: Criteria Used by Delaware LEAs to Admit Students into Dual Credit Courses



Lake Forest is the only LEA to report using underrepresented and first-generation college student status as well as Accuplacer as criteria for admission into dual credit courses.

Sussex Vo-Tech has an open access policy for dual credit courses.

Smyrna reported that it uses "student or parent request" as the sole criterion for admission into both dual credit and dual enrollment courses.

Configuration of Courses

Dual Credit Models

Singleton Programs

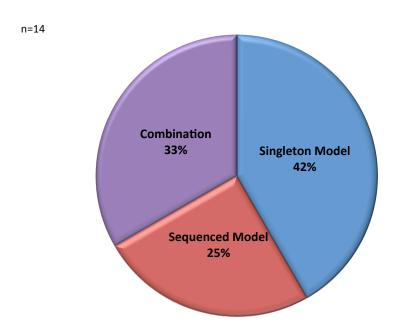
Of the 14 LEAs reporting to have dual credit courses in SY2012–2013 and that responded to this question, five (Cape, Delmar, Polytech, Red Clay, and Seaford) offer "singleton" dual credit courses in which students pick and choose ("cafeteria style") individual, disconnected dual credit courses rather than following a sequence or pathway.

Sequenced Models

Although only three LEAs (Lake Forest, Milford, and Smyrna) reported that their students follow a sequence of courses in their dual credit programs, four others (Appoquinimink, Brandywine, Colonial, and Sussex Tech) indicated that their students can pick and choose some dual credit courses, but are required to follow a sequence in others.

The data suggests that a sequence model is more likely to be found in Delaware's dual credit programs than in its dual enrollment programs.

Figure 19: Dual Credit Program Models



Recruitment of Underrepresented Groups for Dual Credit

Seven of the 14 LEAs in Delaware that report offering dual credit courses described special strategies used to recruit students from underrepresented groups. Three LEAs checked that they "do not have a special recruitment plan in place at this time." The survey allowed LEAs to describe multiple strategies, if applicable.

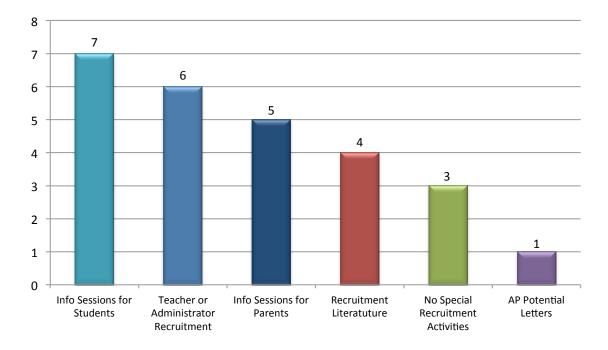
The most commonly used strategy is to offer dual credit information sessions for students from the underrepresented groups. The second most common strategy among LEAs (6) for recruiting underrepresented groups involves personal outreach by teachers or administrators.

Five offer dual credit information sessions for parents.

Responding LEAs described two "other" strategies used uniquely for the purpose of recruiting underrepresented groups into dual credit programs. One LEA (Smyrna) sends home "AP (Advanced Placement) potential letters," while another (Sussex Tech) recruits based on "PSAT potential."

Figure 20: Dual Credit Recruitment Strategies for Underrepresented Groups

Numbers indicate responding LEAs.



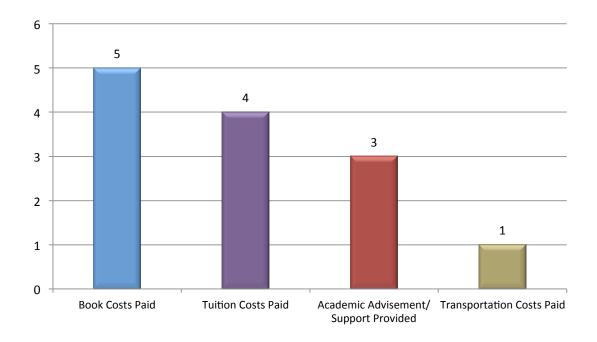
Support for the Underrepresented in Dual Credit

As most dual credit courses bear no tuition or transportation costs, LEAs (5) direct their support for students from underrepresented groups toward book costs. In contrast to the five LEAs that offer special academic advisement/support to students in dual enrollment courses, only three report doing so for dual credit courses.

Only one LEA indicated that it does not offer special supports for students in dual credit courses at this time.

Figure 21: Types of Dual Credit Support for Students from Underrepresented Groups

Numbers indicate responding LEAs.



Dual Credit Course Offerings

LEAs also were asked to list the dual credit courses they offered during SY2012–2013 and to do the same for those they plan to offer during SY2013-2014. Fourteen LEAs listed 81 dual credit courses that they offered in SY2012–2013, with Colonial, Smyrna, and Sussex Tech listing the greatest number and variety. Six LEAs (Seaford, Wilmington Charter, Smyrna, Delmar, Milford, and Lake Forest) indicated that they will expand their dual credit offerings in SY2013-2014 with the addition of five new courses (see Appendix VII). Six other LEAs noted that there will be no changes in their dual credit course offerings in SY2013-2014, while one LEA (Smyrna) reported that it will be dropping a dual credit course.

The lists of dual credit courses that LEAs reported to offer in this survey appear in Appendices VII and VII.

Funding for Dual Enrollment and Dual Credit Programs in Delaware

The survey asked LEAs if they received College Access Challenge Grant (CACG) funds from DDOE to support dual enrollment or dual credit programs in their schools or districts.

CACG Funding for Dual Enrollment

Four of the 18 LEAs (22%) responding to the survey reported receiving CACG funds to support dual enrollment opportunities (Lake Forest, Sussex Tech, Woodbridge, and Campus Community).

Dual Enrollment Opportunities Offered with CACG Funds

The four LEAs that reported receiving CACG funds for dual enrollment programming used the monies to introduce or add new dual enrollment courses.

- Lake Forest used CACG funds to add "four new classes" AND "increase minority participation" in dual enrollment courses.
- Sussex Tech used CACG funds to offer "on-site Dual Enrollment-Academic Challenge."
- Woodbridge indicated that it is using its CACG funds to create "one to two courses over a two-year timeframe."
- Campus Community generally used CACG funds to create opportunities for dual enrollment "coursework" without specifying the nature of the coursework"

CACG Funding for Dual Credit

Only two LEAs reported receiving CACG grant funds for dual credit (Seaford and Campus Community).

Dual Credit Opportunities Offered with CACG Funds

The two LEAs that reported receiving CACG funds to support dual credit opportunities are using the monies for "coursework" (Campus Community) and to fund SAT preparation (Seaford).

Funding in General

The survey asked generally whether or not LEAs have funds (CACG or other) to cover costs associated with dual enrollment/credit programming. Eights LEAs reported an availability of funds to cover costs associated with dual enrollment programs. Six LEAs reported funds for dual credit programs. (Milford and Seaford, however, may be added to the six as they explained that they do pay their students' AP testing fees.)

Three LEAs (Capital, Polytech, and Seaford) indicated that funds are not available to fund costs associated with either dual enrollment or dual credit courses, but one of these LEAs (Seaford) reports that it does "pay for AP tests."

One LEA (Charter School of Wilmington) reported no funding for dual enrollment courses, but did not indicate whether or not it has funds for dual credit.

Use of Funds for Dual Enrollment

Funds available to LEAs for dual enrollment courses are used for a range of purposes, but mostly to pay the costs of tuition and books for students and cover expenses associated with the dual enrollment instructors' salaries. In a few cases (Cape, NCCVT, and Sussex Tech), funds are used to transport students to the sites where dual enrollment instruction occurs.

Table 3: Dual Enrollment Expense Items in Delaware

Expense Item	*Number of LEAs Covering the Dual Enrollment Costs
Tuition	7
Books	6
Instructors	5
Transportation	3

^{*}Some LEAs are funding multiple expenses.

Use of Funds for Dual Credit

Only three LEAs (Capital, Polytech, and Seaford) reported a lack of funds to support dual credit. One district (Seaford) that reported no funds available for dual credit also reported that it does "pay for AP tests" but did not indicate the source of those funds. **Table 4** (below) shows the various dual credit budget items covered by Delaware LEAs. Funds are used primarily to pay for course textbooks and the salaries of course instructors. Funds are used less frequently to pay for AP tests and, in one case, "only when students request it."

Red Clay reported that it provides funds for dual credit costs on a "case-by-case basis."

Smyrna responded that it is unaware of any additional fees associated with dual credit or dual enrollment courses.

Table 4: Dual Credit Expense Items in Delaware

Expense Item	*Number of LEAs Covering Dual Credit Costs	Districts Reporting the Non-CACG Funds
Tuition	3	Colonial, Delmar, Sussex Tech
Books	5	Appoquinimink, Brandywine, Cape Henlopen, Colonial, Sussex Tech
Instructors	5	Brandywine, Cape Henlopen, Colonial, Delmar, Sussex Tech
Transportation	0	
Other (AP Test Fees)	2	Seaford, Milford ("when students request")

^{*}Some LEAs are funding multiple expenses.

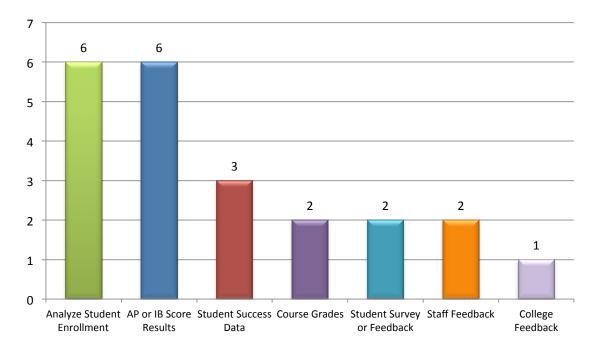
Dual Enrollment and Dual Credit Program Evaluation

Twelve of the 18 LEAs that responded to the survey described a range of methods used to evaluate the strengths and weaknesses of their dual enrollment/credit programs. Eight LEAs use a combination of criteria. Student enrollment numbers and standardized test scores are the most commonly used indicators of programmatic success. Although three LEAs (Sussex Tech, NCCVT, and Lake Forest) reported that they use "student success data" as a component of their dual enrollment/credit program evaluations, they did not specify which data they used.

Figure 22 shows the most commonly used evaluation methods with the number of LEAs using each method.

Figure 22: How LEAs Evaluate Their Dual Enrollment and Dual Credit Programs

Numbers indicate responding LEAs.



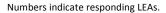
Three districts (Delmar, Polytech, and Woodbridge) reported that they had not conducted evaluations of their dual enrollment/credit programs at the time the survey was conducted because they had not yet completed their first year of program implementation.

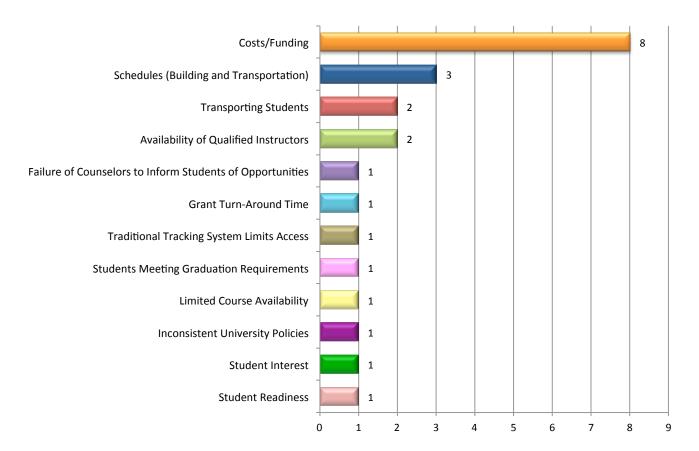
Barriers to Developing Dual Enrollment and Dual Credit Programs

In 2007, the Delaware P-20 Council's Dual Enrollment Subcommittee acknowledged that insufficient funding was a major obstacle to implementing the kinds of rigorous high school curricula that might increase college access and success. Despite the infusion of CACG grant funds, this survey finds continuity across time as costs and funding remain the most frequently cited barriers to developing dual enrollment and dual credit programs in Delaware's public schools. LEA concerns over the possible disappearance of CACG grant funds appear to be weighing heavily on the minds of those overseeing dual enrollment programs.

Fourteen of the 16 LEAs that responded to the question about barriers identified one or more impediments (see **Figure 23**). Eight cited multiple barriers. Only two (Delmar and Red Clay) reported experiencing none "to date."

Figure 23: Frequency with which LEAs Cited Barriers to Developing Dual Enrollment and Dual Credit Programs





Although funding and costs of dual enrollment/credit programs are related and grouped in this analysis, LEAs described a range of specific budget items subsumed under the Cost/Funding category. They included costs for districts (e.g., transporting students to partnering universities, developing curriculum, providing textbooks, and training teachers) as well as costs for students (e.g., dual enrollment tuition). One district (Capital) that reported it does not offer either dual credit or dual enrollment courses responded that "the costs to students was too high with students paying approximately \$300-\$400 in registration and course costs." The same district (Capital) also highlighted issues associated with grants that allow a program to be offered one year with no guarantee that the program can be funded in subsequent years as grant monies run out.

Respondents also raised a number of isolated points relating to barriers that merit consideration. First, one district (Polytech) raised concerns about the risks of not fulfilling high school graduation requirements that dual enrollment students take if they do not perform successfully in their challenging dual enrollment courses.

A third district (Lake Forest) noted the challenges resulting from what it described as a "slow turnaround" in awarding grants and releasing funds.

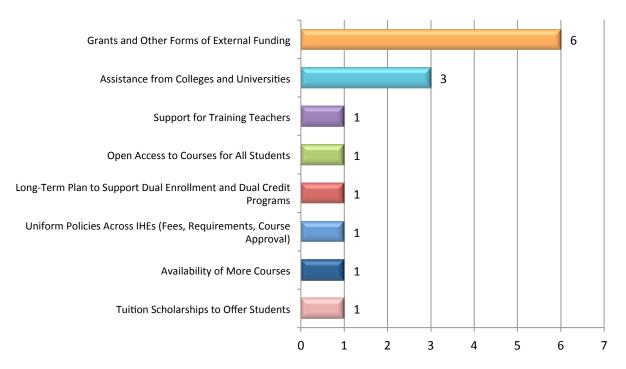
Appoquinimink struggles with what it describes as inconsistent policies in place among partnering IHEs, such as requirements for authorizing teachers to teach dual enrollment/credit courses and conditions for awarding students college credit. The inconsistencies exist both across and within IHEs. Sometimes the inconsistencies result from turnover in IHEs' administrations.

Aids to the Development of Dual Enrollment and Dual Credit Programs

The survey asked what, if anything, has been or might be especially helpful in setting up or implementing dual enrollment/credit programs? Twelve LEAs described such aids. **Figure 24** below illustrates the kinds of aids described as well as the number of LEAs that found, or anticipate finding, each type of aid helpful.

Figure 24: Aids to the Development of Dual Enrollment and Dual Credit Programs

Numbers indicate responding LEAs.



Given the fact that LEAs find the costs associated with dual enrollment/credit programs to be the most significant barrier to their development, it is not surprising that they cite external funding most frequently as a way to introduce or expand them.

LEAs noted the value of assistance from colleges and universities in co-planning and offering dual enrollment and dual credit information sessions for both students and parents.

LEAs also hinted at a desire for more uniform dual enrollment/credit policies among potential IHE partners. One respondent (Appoquinimink) wrote, "Apparently, different tuition deals are cut with different districts." The same district called for consistency among IHEs in both the "instructor approval process" and other "requirements."

Summary and Discussion

The Landscape of Dual Enrollment and Dual Credit in Delaware (2013) report set out to provide the Delaware Higher Education Office (DHEO) with descriptive snapshots of dual enrollment and dual credit programming in the state's public and charter schools as they existed in SY2012–2013 and are planned for SY2013-2014. Sixteen of Delaware's 19 public school districts and two of its six charter schools that provided education for high school students in SY2012–2013 completed the 2013 Delaware Dual Enrollment and Dual Credit Survey. Their responses served as the foundation of this report.

Four principal questions guided this investigation:

 What dual enrollment and dual credit opportunities are being offered currently to Delaware's high school students?

The research team found that 78 percent of the 18 LEAs participating in the survey are offering as many as 30 dual credit courses at 19 different high schools, while 67 percent of the LEAs are offering as many as 16 dual enrollment courses in 20 schools. All five institutions of higher education (IHE) provide dual enrollment opportunities. The scope of this study did not engage the IHEs in the survey. Thus, it did not include the following questions that may add value to the discussion, such as how many courses each IHE offers, to which high schools are they offered, how decisions are made regarding the courses offered, and under what circumstances credit is awarded.

- How are the recipients of College Access Challenge Grants (CACG) using the funds?
 LEAs report that CACG funds are being used primarily to introduce or add new dual enrollment/credit courses and fund SAT preparation efforts.
- What strategies or approaches are districts and charters using to grow dual credit and dual enrollment opportunities?

The strategies for growing dual enrollment/credit programs may be analyzed on two levels. "Level I" growth strategies consider collaborations between LEAs or IHEs. "Level II" growth strategies consider approaches taken within schools to involve more students in dual enrollment/credit programs.

This investigation unearthed one notable Level I strategy in which an LEA (Polytech) that appears to be launching a dual enrollment program is partnering with another (Sussex Tech). This partnership appears to be yielding the most impressive array of dual enrollment courses. The details of this partnership are unclear and probably are in an embryonic stage, but merit investigation and perhaps replication.

The survey probed Level II strategies aimed at recruiting students from traditionally underrepresented groups such as minority students and those who would be the first in their families to attend college. While the range of Level II strategies is considerable and described in greater detail (e.g., recruitment literature, information sessions for students and parents, paying tuition and book subsidies), none appeared to stand out. There is considerable agreement among LEAs, however, that growth in dual enrollment/credit programming hinges considerably upon funding.

What, if any, barriers to developing dual credit and dual enrollment opportunities exist?

While LEAs listed 13 barriers to developing dual enrollment and dual credit courses (see **Figure 23**), the most commonly cited—and the only one to be identified by more than half of the LEAs reporting to offer dual enrollment courses—is lack of funding. Not surprisingly, LEAs also identified funding most often as the key aid in promoting growth in dual enrollment/dual credit programming.

Limits of the Study

Although the report provides the most detailed snapshots to date of dual enrollment/credit programming in Delaware, data analysis revealed issues that readers should keep in mind while processing the findings. Four issues stood out:

- Some responses suggest confusion over the difference between dual enrollment and dual credit. The confusion appears to have manifested itself in the form of inappropriate responses. The research team strove to correct most of these (e.g., LEAs listing dual credit courses as dual enrollment). Despite efforts to uncover and correct inappropriate responses, some findings may have been undermined.
- 2. Some LEAs appear to have been challenged in providing accurate data (e.g., describing how many of their students are taking dual enrollment and dual credit courses and identifying how many courses their schools are actually offering). More than one LEA failed to report courses that appear on their school or district websites. The research team decided not to include any courses that were not identified by LEAs in their survey responses. In another case, three LEAs reported offering no dual credit courses, yet the Tech Prep website suggests otherwise. Again, the research team sensed possible confusion over the distinctions between dual enrollment and dual credit and reported only the information provided in the survey responses.
- 3. Despite field-testing, the survey suffered from at least one mechanical glitch. In an attempt to reduce potential "survey fatigue," a "skip logic" feature was built into the instrument. This "skip logic" feature pushed respondents past certain questions if previous answers suggested they were not applicable (e.g., if an LEA reported not having a certain program or course). The glitch prevented respondents who reported no dual credit courses in SY2012–2013 from reporting their planned SY2013-2014 offerings. The "skip logic" feature assumed that none would be offered in the subsequent year and forwarded respondents to the next applicable question. This glitch affected four LEAs (Caesar Rodney, Capital, NCCVT, and Woodbridge). For this reason, there may be more LEAs offering dual credit courses in SY2013-2014 than suggested in this report.
- 4. Survey question #23 asked, "Are any funds available to help students cover costs associated with your [dual enrollment/credit] courses?" The intent of the question was to investigate whether or not LEAs had additional funds beyond College Access Challenge Grant (CACG) funds to support dual enrollment/credit programming. The open-ended nature of the question, however, resulted in responses that do not reveal whether or not funds described as available were CACG funds or funds from other sources.

Recommendations or Questions for Further Study

The Landscape of Dual Enrollment and Dual Credit Programs in Delaware (2013) report provides baseline information for future investigations. However, three districts (Christina, Indian River, and Laurel)—including two of the largest—did not participate in the survey. Further studies of dual enrollment/credit programs in Delaware (1) should include all LEAs and (2) may benefit from an expanded methodology—beyond survey and artifact analysis—to include interviews or focus groups. Some important and lingering questions that merit future study include:

- Is student enrollment in dual enrollment and dual credit increasing in Delaware? If so, by how much? Survey responses offered tentative answers, but some of the LEAs that provided enrollment numbers appeared to be estimating or seemed unsure of the actual figures.
- What is the nature of the emerging dual enrollment partnership between Sussex Tech and Polytech? How might such partnerships foster the growth of dual enrollment programs in Delaware?
- Which dual enrollment courses do the state's IHEs offer? What are their requirements for setting up dual enrollment partnerships in the state's high schools? Sharing such information will prove useful to schools attempting to introduce or expand their offerings.
- What expenses beyond those covered by College Access Challenge Grant (CACG) funds are being incurred by Delaware's high schools to support dual enrollment and dual credit programs? And, how are LEAs with extensive dual enrollment/credit programs funding these costs? Once again, this information may offer strategies to LEAs struggling to fund such programming.
- How many students from traditionally underrepresented groups are enrolling in dual enrollment/credit programs? And, what accounts for those enrollment numbers?
- Which recruitment strategies appear to yield higher enrollment figures for students from traditionally underrepresented groups?
- To reduce the confusion over which programs are dual credit versus dual enrollment,
 DDOE identify the list of dual credit and dual enrollment programs in the state and categorize them as either dual credit or dual enrollment.

Linking The Landscape of Dual Enrollment and Dual Credit Programs in Delaware (2013) Report to Other Research

In July 2013 the Center for Education Policy Research (CEPR) at Harvard University delivered a Strategic Data Project College-Going Diagnostic presentation to the state of Delaware as the finishing touches were being put on this dual enrollment/credit report. The study examined six years worth of data relating to "students' progression through high school, how well they stay on track for graduation, and whether or not they enroll and persist in postsecondary education" (Center for Education Policy Research, 2013). CEPR reported several findings that dovetail with The Landscape of Dual Enrollment and Dual Credit Programs in Delaware (2013) report and suggest additional areas for further study. The findings are summarized by DDOE at www.doe.k12.de.us/news/2013/0716.shtml and include:

- CEPR Finding: "The highest high school rate shows 81 percent of ninth-graders persist to their second year of college. The lowest high school rate is 4 percent."
- CEPR Finding: "Some schools' success seems especially promising and worthy of further study to see what is working and how that success can be replicated across the state."
 - Questions: Which of the schools with the highest and lowest rates of persistence and "success" offer dual enrollment/credit programs? Might there be a relationship between dual enrollment/credit and persistence/success?
- CEPR Finding: "Of those entering ninth grade in the top quartile of their class, 92
 percent will graduate on time and 66 percent will make a seamless transition to
 college."
 - Question: What percentage of the students who make the seamless transition to college are enrolled in dual enrollment/credit courses? Does there appear to be a relationship between enrollment and seamless transition?
- CEPR Finding: "Twenty-seven percent of highly qualified low-income students are not going to college and 55 percent enroll at selective four-year colleges."
 - Question: Might there be a relationship between those highly qualified lowincome students who are going to college and their enrollment in dual enrollment/credit courses?

DDOE also noted the following in its discussion of the CEPR report:

 "The state is working with the U.S. Department of Education and state Office of Volunteerism to support and expand FAFSA nights, chances for families to get information and support filling out the federal form for student financial aid."

- Question: Might expanded FAFSA nights also offer families information about dual enrollment/credit programming?
- "The state recently launched a program through which schools can receive funding to implement an approved middle school college preparation program that particularly targets high-need and low-achieving students."
 - Questions: What are the middle schools that receive the college preparation funds doing with the monies? How many high-need and low-achieving students are involved in the preparation? And, longitudinally, how are these students faring in high school?

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Appendix I: Guiding Principles for Dual Enrollment and Dual Credit in Delaware

- 1. All students, especially students who may not traditionally pursue post-secondary education, should have access to and information on dual credit and dual enrollment courses.
- 2. Admission criteria to dual credit and dual enrollment courses should be based on the student's potential for success. This can be determined by GPA in the content areas of the courses, staff recommendations, student interest and/or test scores.
- 3. No student should be denied access to dual credit or dual enrollment courses due to the family's inability to pay.
- 4. Multiple points of access for dual credit and dual enrollment courses should be encouraged. Examples of multiple points of access include virtual learning opportunities as well as courses offered by a higher education institution on the high school campus as well as the college campus.
- 5. Institutions of higher education should ensure the quality of dual enrollment courses is equivalent to other instruction offered by the institutions. Any dual enrollment course must be from a regionally accredited higher education institution.
- 6. Credit earned by high school students who successfully complete a course included in the Delaware higher education credit matrix should be valid in any Delaware higher education institution which would accept the credit for college level students.
- 7. AP and IB courses should meet the requirements of their respective program authorizers.
- 8. Teachers in dual credit classes should have the appropriate certification and training to teach the class. They should also be experienced teachers.
- 9. Articulated agreements between institutions of higher education and public school districts and charter schools shall specify the competency of the course and the level of student achievement for Tech Prep courses.

Accessed on 16 July 2013 at 2:53 p.m. at www.doe.k12.de.us/infosuites/ddoe/p20council/default.shtml.

Appendix II: 2013 Delaware Dual Enrollment and Dual Credit Survey

2013 Delaware Dual Enrollment and Credit Survey - Final April 2013

Invitation to Participate: You are being asked to participate in this survey because of your leadership role in a dual enrollment/dual credit program at the school or district level in Delaware.

Dual enrollment (DE) programs include courses for which high school students may receive both high school and postsecondary credit while simultaneously registered at both the high school and postsecondary institution.

Dual credit (DC) programs, on the other hand, include courses for which students may receive both high school and postsecondary credit, but the students are not registered at postsecondary institutions. Examples of dual credit programs are Advanced Placement (AP), International Baccalaureate (IB), and Tech Prep courses.

This survey is part of an effort by the Delaware Department of Education's Higher Education Office (DHEO) to understand the nature and scope of dual enrollment and dual credit opportunities in the state's public and charter schools. DHEO has asked the Institute for Public Administration at the University of Delaware to conduct this survey and report the findings.

Purpose: This survey represents an effort to better understand the nature and scope of dual enrollment and dual credit opportunities in Delaware's public and charter schools.

Procedures: The survey consists of 28 questions that follow two generic questions about your school or district. There are 20 selected response and 8 short-answer questions. Field-testing indicates that the entire survey should take no more than 10 minutes. In some cases you will be asked fewer questions as we have embedded "skip logic" where responses eliminate the need for follow-up. We ask that you complete the survey by April 30th.

Risks and Benefits: Participation in this survey presents little or no risks. The project may yield findings that lead to improvements in Delaware's dual enrollment and dual credit programs.

Confidentiality: The investigators will hold all information collected in this study strictly confidential, except as may be required by court order or law. If any publications or presentations result from this research, you will not be identified by name, nor will your students. Publications and presentations resulting from this study may include information collected about the dual enrollment and dual credit program offerings in individual schools and districts, and the identities of those schools and districts may be reported.

Disclaimer/Withdrawal: By providing responses to the questions that follow, you do so with the understanding that this study is completely voluntary and that you may withdraw at any time without any negative consequences to you. Whether or not you participate in this research study will have no effect on your employment status in your school or your participation in any dual enrollment or dual credit programs.

Subject Rights: If you have questions regarding your rights as a research participant, you may contact the Chair of the University of Delaware's Institutional Review Board at 302-831-2137.

Conclusion: You have read and understand your rights. By entering responses you consent to participate in this survey. If you have any questions regarding this research study, please contact Lisa Moreland at 302-831-4955. It is important to answer each question to the best of your knowledge if the evaluation is to be helpful. Thank you for generously offering your time to improve DHEO's understanding of dual enrollment and dual credit offerings in the state.

If No Is Selected, Then Skip To QUESTIONS ABOUT DUAL CREDIT AND DUAL ENROLLMENT				
	Yes (1)	O	No (2)	
Q6 Does your district or charter school offer DUAL ENROLLMENT courses?				
DUAL ENROLLMENT: The next set of questions focuses exclusively on DUAL ENROLLMENT courses.				
of Biology) during the NEXT 2013–2014 school year? Feel free to write "no chance" if that is the case.				
Q5 Which DUAL CREDIT courses WILL BE offered in your school or district (e.g., American History Survey, Principles				
Q4 Which DUAL CREDIT courses are CURRENTLY offered in your school or district (e.g., American History Survey, Principles of Biology)?				
If N	o Is Selected, Then Skip To DUAL ENROLLMENT:			
	Yes (1)	0	No (2)	
Q3	Does your school or district offer DUAL CREDIT courses?			
	AL CREDIT: The first set of questions deals exclusively with	DUA	AL CREDIT courses.	
		D11/	L CREDIT courses	
	[OPTIONAL] Type your NAME and E-MAIL ADDRESS below rification questions.	if yo	u wish to make yourself available for follow-up,	
0	New Castle County Vocational-Technical (13)		()	
O	Milford (12)	0	Positive Outcomes Charter School (25)	
0	Laurel (11)	0	Maurice J. Moyer Academy (Charter) (24)	
0	Lake Forest (10)	•	Delaware Military Academy (Charter) (23)	
O	Indian River (9)	0	Delaware Academy for Public Safety (Charter) (22)	
O	Delmar (8)	O	Charter School of Wilmington (21)	
O	Colonial (7)	O	Campus Community Charter School (20)	
O	Christina (6)	O	Woodbridge (19)	
O	Capital (5)	O	Sussex Technical (18)	
O	Cape Henlopen (4)	O	Smyrna (17)	
O	Caesar Rodney (3)	O	Seaford (16)	
O	Brandywine (2)	O	Red Clay (15)	
O	Appoquinimink (1)	O	Polytech (14)	
Q1 Please identify the district or charter school that you represent:				

Q7 Which DUAL ENROLLMENT courses are CURRENTLY offered in your school or district (e.g., American History Survey, Principles of Biology)? Q8 Which DUAL ENROLLMENT courses WILL BE offered in your school or district (e.g., American History Survey, Principles of Biology) during the NEXT 2013–2014 school year? Feel free to write "no change" if that is the case. Q9 Do you currently have Articulation Agreements with institutions of higher education for DUAL ENROLLMENT credit in any subject? If yes, which one(s)? ☐ Delaware State University (1) ■ Wesley College (7) ☐ Delaware Technical and Community College (2) ■ Widener University (8) ☐ Salisbury University (3) ☐ Wilmington University (9) ☐ Towson State University (4) Other (please identify below). (10) ☐ University of Delaware (5) ■ Not Applicable (11) ☐ Villanova University (6) Q10 Which of the following best describes the configuration of your school's or district's DUAL ENROLLMENT program? Only students from the high school(s) are in the Other (please describe). (3) class(es). (1) O Both high school and college students are in the O Not applicable (4) class(es). (2) Q11 Who teaches the DUAL ENROLLMENT class(es) in your school or district? O High school teacher. (1) Other (please describe). (4) O College or university instructor. (2) O Not applicable (5) O Course is team taught by a high school teacher and university instructor. (3) If College or university instr... Is Selected, Then Skip To Who designs the syllabus(i) for your ... Q12 How are high school teachers authorized to teach the DUAL ENROLLMENT courses in your school or district? Our school or district selects them. (1) collaborate on the decision. (3) Our partnering college or university selects O Other (please describe). (4) them. (2) Our school/district and college/university O Not applicable (5)

Q13	3 Who designs the syllabus(i) for yo	ur school's or distric	t's DUA	L ENROLLM	ENT course(s)?
O	High school instructor. (1)	l	O		rom administration with a college or nstructor. (5)
0	Instructor from the partnering col university. (2)	lege or	0	-	se describe). (6)
O	High school teacher collaborates or university instructor. (3)	vith a college	O	Not applica	able (7)
O	Someone from administration. (4)				
ENF	4 Are there any conditions attache ROLLMENT course(s)?		f colleg	e credit in yo	our school's or district's DUAL
0	Earn a certain grade. Please identi (1)	fy the grade:	0	Not applica	ıble (3)
0	Other (please describe). (2)				
Q15 Which of the following best characterizes the portability of DUAL ENROLLMENT credits that students in your school or district earn?					
C	Credits are accepted only at the couniversity offering them (they are	=			colleges and universities beyond limited national portability). (3)
•	(1) Credits are accepted at multiple or	olleges or	•		fully portable to colleges and throughout the United States. (4)
	universities in Delaware (portabili Delaware). (2)	=	O		ow, if you wish. (5)
O	Credits are accepted in Delaware	and at some	O	Not applica	able (6)
The next set of questions focuses on DUAL CREDIT AND DUAL ENROLLMENT.					
Q16 How many students currently are enrolled in a dual enrollment/credit course in your school or district? Type "0" if that is the case.					
		Dual Enroll	ment (<u>1</u>)		Dual Credit (2)

	Dual Enrollment (1)	Dual Credit (2)
Number of Students (1)		

Q17 Who decides whether or not a student is admitted into a dual enrollment/credit course in your school or district? You may enter more than one response if appropriate or click "Not Applicable" if your school or district does not have a program in either area.

Individual high school. (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Decision based solely on the student. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Partnering college or university. (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
High school in collaboration with the college or university. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
State. (5)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (6)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Not Applicable (7)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

Q18 Which criterion(ia) is(are) used to admit students into your school's or district's dual enrollment/credit courses? You may enter more than one response if your school or district establishes a combination of criteria or click "Not Applicable" if your school or district does not have a program in either area.

Grade point average (GPA). (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Staff recommendations. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Accuplacer test scores. (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
SAT scores. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
PSAT Scores. (5)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Student's potential for success. (6)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (7)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Not Applicable (8)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

Q19 Which of the following best describes your school's or district's dual enrollment/credit program? Click "Not Applicable" if your school or district does not have a program in either area.

Students follow a sequence of courses. (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Students pick and choose individual courses. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Not Applicable. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

Q20 How are your dual enrollment/credit courses delivered? You may enter more than one response or click "Not Applicable" if your school or district does not have a program in either area.

On-site at a high school. (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
At a college campus. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Online delivery. (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Blended – partially online, partially at the high school. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Blended – partially online, partially at a college campus. (5)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (6)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Not Applicable. (7)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

 ${\tt 5FUNDING}$ and ${\tt OTHER}$ ${\tt SUPPORTS}$ for dual enrollment and dual credit programs.

Q21 Did you receive College Access Challenge Grant (CACG) funds from the Delaware Department of Education's
Higher Education Office (DHEO) to support dual enrollment/dual credit opportunities in your school or district?

	Yes (1)	No (2)
Dual Enrollment (1)	0	0
Dual Credit (2)	0	0

If No Is Equal to 2, Then Skip To Are any funds available to help students...

Q22 What opportunities were you able to offer with the College Access Challenge Grant (CACG) funds?

	Dual Enrollment (1)	Dual Credit (2)
Opportunities (1)		

Q23 Are any funds available to help students cover costs associated with your courses? You may enter more than one response.

NO – funds are not available. (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
YES – our school or district pays TUITION for students. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
YES – our school or district pays for BOOKS for students. (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
YES – our school or district pays for TRANSPORTATION for students. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
YES – our school or district covers costs for INSTRUCTORS. (5)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (6)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

Q24 RECRUITMENT OF UNDERREPRESENTED GROUPS: How are students from underrepresented groups (i.e., first-generation college students, low socio-economic backgrounds, or minorities) who take dual enrollment/credit courses RECRUITED? You may enter more than one response or click "Not Applicable" if your school or district does not recruit uniquely in either area.

Recruitment literature. (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Information sessions for the students. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Information sessions for the parents. (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Teacher or administrator recruitment. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
We do not have a special recruitment plan in place at this time. (5)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (6)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Not Applicable. (7)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

Q25 SUPPORT FOR UNDERREPRESENTED GROUPS: How are students from underrepresented groups (i.e., first-generation college students, low socio-economic backgrounds, or minorities) who take dual enrollment/credit courses SUPPORTED? You may enter more than one response or click "Not Applicable" if your school or district does not offer special support in either area.

Their TUITION costs are paid. (1)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Their BOOK costs are paid. (2)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Their TRANSPORTATION costs are paid. (3)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Academic advisement/support provided. (4)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
We do not offer special supports at this time. (5)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Other (please describe and indicate Dual Enrollment or Dual Credit). (6)	☐ Dual Enrollment (1)	☐ Dual Credit (2)
Not Applicable. (7)	☐ Dual Enrollment (1)	☐ Dual Credit (2)

Q2 Please type in the names of the school(s) in your district, if any, that offer dual enrollment and/or dual credit courses (charter schools can simply type in their school name where appropriate). Type "none" if that is the case.

	Dual Enrollment (1)	Dual Credit (2)
School (1)		

Appendix III: List of Districts and Schools Completing the 2013 Delaware Dual Enrollment and Dual Credit Survey

- 1. Appoquinimink School District
- 2. Brandywine School District
- 3. Caesar Rodney School District
- 4. Cape Henlopen School District
- 5. Capital School District
- 6. Colonial School District
- 7. Delmar School District
- 8. Lake Forest School District
- 9. Milford School District
- 10. New Castle County Vo-Tech School District
- 11. Polytech School District
- 12. Red Clay Consolidated School District
- 13. Seaford School District
- 14. Smyrna School District
- 15. Sussex Tech School District
- 16. Woodbridge School District
- 17. Campus Community School
- 18. Charter School of Wilmington

Appendix IV: 2012-2013 Dual Enrollment Course Offerings Reported

- 1. English 101 English Composition I (Delaware State University) (4 school districts)
- 2. English 102 English Composition II (DSU) (3 school districts)
- 3. General Psychology (3 school districts)
- 4. Anatomy and Phys (1 school district)
- 5. Calculus (1 school district)
- 6. College Math and Statistics (1 school district)
- 7. ED 101 Introduction to Teaching (Widener University) (1 school district)
- 8. English 101 at WU (1 school district)
- 9. English 110 (UD) (1 school district)
- 10. Folklore (Penn campus in fall semester) (1 school district)
- 11. Human Heredity (1 school district)
- 12. Medical Terminology (1 school district)
- 13. Nutrition Concepts (1 school district)
- 14. Personal Computing BCS 206 at WU (1 school district)
- 15. Philosophies of Life (1 school district)
- 16. Psych and Folklore (1 school district)
- 17. Science of Coaching (Penn campus in fall semester) (1 school district)
- 18. Sociology (1 school district)
- 19. Sociology I (1 school district)
- 20. Western Civilization: 1648 to Present (1 school district)
- 21. Reading 120
- 22. Critical Reading and Thinking

Academic Challenge Courses:

- 1. Eng 121 Composition (DTCC) (5 school districts)
- 2. Critical Reading and Writing (UD) (2 school districts)
- 3. Analytic Geometry & Calculus A (UD) (1 school district)
- 4. Analytic Geometry & Calculus B (UD) (1 school district)
- 5. Analytic Geometry and Calculus C (UD) (1 school district)
- 6. Differential Equations (UD) (1 school district)
- 7. Fractals & Chaos (UD) (1 school district)
- 8. Introduction to Drama (UD) (1 school district)
- 9. Introduction to Poetry (UD) (1 school district)
- 10. MAT 263 Principles of Discrete Math (DTCC) (1 school district)
- 11. MAT 281 Calculus I (DTCC) (1 school district)
- 12. MAT 288 Linear Algebra I (DTCC) (1 school district)
- 13. Short Story (UD) (1 school district)

Appendix V: 2013-2014 Dual Enrollment Course Offerings Reported

Same as Appendix A, with the addition of:

- 1. Advanced Composition and Literature (ENGL 102) (WU) (2 school districts)
- 2. English 124 Oral Communications (Hope to offer in SY2013–2014) (2 school districts)
- 3. College Algebra (1 school district)
- 4. Composition and Critical Thought (ENGL 101) (WU) (1 school district)
- 5. ED 1104 Language Development in Early Childhood Education (WU) (1 school district)
- 6. ESSC 108 Introduction to Astronomy (WU) (1 school district)
- 7. ESSC 118 Astronomy Laboratory (WU) (1 school district)
- 8. Growth of American Civilization II (HIST 122) (WU) (1 school district)
- 9. HIST 121 Growth of American Civilization I (WU) (1 school district)
- 10. PSY 105 Introduction to Psychology (WU) (1 school district)
- 11. Psychology (1 school district)

Appendix VI: 2012–2013 Dual Credit Course Offerings

- 1. AP US History (10 school districts)
- 2. AP English Lit and Comp (5 school districts)
- 3. AP Spanish Language (8 school districts)
- 4. AP Calculus AB (7 school districts)
- 5. AP Psychology (5 school districts)
- 6. AP Biology (9 school districts)
- 7. AP Physics (3 school districts)
- 8. AP European History (5 school districts)
- 9. AP World History (5 school districts)
- 10. AP Calculus (3 school districts)
- 11. AP Statistics (8 school districts)
- 12. AP Lang and Comp (5 school districts)
- 13. Heredity & Environment (1 school district)
- 14. Nutrition (1 school district)
- 15. AP Art (1 school district)
- 16. AP Calculus BC (2 school districts)
- 17. AP Chemistry (8 school districts)
- 18. AP English Language (5 school districts)
- 19. AP English Literature (4 school districts)
- 20. AP French (1 school district)
- 21. AP Physics B (4 school districts)
- 22. AP US Government (1 school district)
- 23. Microeconomics (1 school district)
- 24. Government & Politics (4 school districts)
- 25. Comparative Government (1 school district)
- 26. Sociology (1 school district)
- 27. Physics C (1 school district)

- 28. Studio Art (3 school districts)
- 29. Art History (2 school districts)
- 30. Computer Science A (1 school district)
- 31. AP Environmental Science (3 school districts)
- 32. Spanish Lit/Culture (1 school district)
- 33. AP Computer Science (1 school district)
- 34. Drafting and Design CAD (2 school districts)
- 35. English 101 (1 school district)
- 36. English 102 (1 school district)
- 37. Math 103 (1 school district)
- 38. Math 104 (1 school district)
- 39. World Civ 101 (1 school district)
- 40. World Civ 151 (1 school district)
- 41. AP Human Geography (1 school district)
- 42. AP Music Theory (1 school district)
- 43. Horticulture I (1 school district)
- 44. Horticulture II (1 school district)
- 45. Horticulture III (1 school district)
- 46. Accounting II (1 school district)
- 47. Accounting III (1 school district)
- 48. Accounting IV (1 school district)
- 49. Business & Corp Management II (1 school district)
- 50. Business & Corp Management III (1 school district)
- 51. Marketing Communication II (1 school district)
- 52. Marketing Communication III (1 school district)
- 53. Child Development (1 school district)
- 54. Exploring Early Childhood (1 school district)
- 55. Food & Nutrition (1 school district)
- 56. Criminal Justice I (1 school district)

- 57. Criminal Justice II (1 school district)
- 58. CISCO I (1 school district)
- 59. CISCO II (1 school district)
- 60. CTE Business (1 school district)
- 61. CTE Finance & Marketing (1 school district)
- 62. CTE Media Broadcasting & Communications (1 school district)
- 63. CTE Automotive Technologies (1 school district)
- 64. CTE Carpentry/Mill & Cabinet (1 school district)
- 65. CTE Early Education & Services (1 school district)
- 66. CTE Digital Publishing & Design (1 school district)
- 67. CTE Environmental & Landscape Management Technologies (1 school district)
- 68. CTE Electronics & Computer Information Systems Engineering (1 school district)
- 69. CTE Electrical & Green Energy Technologies (1 school district)
- 70. CTE Legal Support Services & Criminal Justice Technologies (1 school district)
- 71. CTE Accounting (1 school district)
- 72. CTE Administrative Services (1 school district)
- 73. CTE Marketing (1 school district)
- 74. CTE Business Information Technology (1 school district)
- 75. CTE Early Childhood Education (1 school district)
- 76. CTE Family & Community Services (1 school district)
- 77. CTE Power & Technical Systems (1 school district)
- 78. CTE Animal Science (1 school district)
- 79. CTE Plant Science (1 school district)
- 80. CTE Structures and Natural Resources (1 school district)
- 81. CTE Environmental Science (1 school district)

Appendix VII: 2013-2014 Dual Credit Course Offerings

Same as Appendix C with the addition of:

- 1. Intro to Anthropology (1 school district)
- 2. CTE Digital Business (1 school district)
- 3. Wilmington Math 310 (1 school district)
- 4. Wilmington Science 232 (1 school district)
- 5. DTCC Calculus (1 school district)

Classes no longer being offered:

1. Business Information Technology (1 school district)

Appendix VIII: 2012-2013 Dual Credit Course Offerings By School

Question 4: Which DUAL CREDIT courses are CURRENTLY (2012–2013) offered in your school or district?

	Sussex Tech	Campus Community	Polytech	Seaford	Charter	Brandywine	NCCVT	Red Clay	Smyrna	Woodbridge	Appoquinimink	Delmar	Capital	Colonial	Caesar Rodney	Milford	Lake Forest	Cape Henlopen	TOTAL
AP US History			<u> </u>				2			>			0				_		9
AP 03 HISTORY	X			Х		X		Х	Х		Х			Х		Х		Х	9
AP European History				Х		X		X	X									Х	5
AP World History				Х		Х			X		Х			X					5
World Civ 101												X							1
World Civ 151												X							1
AP Human Geography														X					1
AP US Government						X													1
Government & Politics								X	X		X					X			4
Comparative								X											1
Government																			
AP Psychology	Х					Х		Х			X			Х					5
DTCC Psychology 121																	X		1
DTCC Sociology 121																	Х		1
AP English Language						X		X			X			X					4
AP English Literature						Χ		X			X			X					4
English 101												х							1
English 102												х							1
DSU English Comp I																	Х		1
DSU English Comp II																	Х		1
DTCC Reading 120																	Х		1
Composition																	Х		1
Critical Reading & Thinking																	x		1

	Sussex Tech	Campus Community	Polytech	Seaford	Charter	Brandywine	NCCVT	Red Clay	Smyrna	Woodbridge	Appoquinimink	Delmar	Capital	Colonial	Caesar Rodney	Milford	Lake Forest	Cape Henlopen	TOTAL
DTCC English 121																	X		1
AD Conside Language	х																		7
AP Spanish Language Spanish Lit/Culture	Х		Х			Х		X	Х		X					Х			1
AP French								X											1
AP French						Х													1
AP Calculus AB	х					х		х			v			x				х	6
AP Calculus AP Calculus	X					Х		Х	.,		X			Х		.,		Х	3
AP Calculus BC				Х		Х		Х	X							X			2
AP Statistics				X		X		X	Х		Х			Х		Х		х	8
Math 103				Α		X		X	X		X	Х		X		X		Α	0
Math 104												X							
IVIALII 104												^							
AP Biology				Х		Х		Х	Х		Х			Х		Х		Х	8
AP Physics				X		^		^	^		^			X		X		^	3
AP Chemistry				^		Х		Х	Х		Х			X		X		Х	7
AP Physics B						X		X	A		X			Α		A		X	4
Physics C						Α		X			^							^	1
AP Environmental Science								x			x							x	3
Horticulture I														Х					1
Horticulture II														X					1
Horticulture III														Х					1
Nutrition					х														1
Food & Nutrition														Х					1
Heredity &					Х														1
Environment																			
Child Development														х					1

	Sussex Tech	Campus Community	Polytech	Seaford	Charter	Brandywine	NCCVT	Red Clay	Smyrna	Woodbridge	Appoquinimink	Delmar	Capital	Colonial	Caesar Rodney	Milford	Lake Forest	Cape Henlopen	TOTAL
Exploring Early Childhood														x					1
AP Art						v													1
Studio Art						Х		Х	х		х								3
Art History								X	X		X								2
Artifistory								^			^								2
AP Music Theory														Х					1
At Wasie Theory														A					_
Criminal Justice I														Х					1
Criminal Justice II														X					1
Criminal Justice II														A					_
Microeconomics								Х											1
Accounting II														х					1
Accounting III														X					1
Accounting IV														X					1
Business & Corp														Х					1
Management II																			
Business & Corp														X					1
Management III																			
Marketing														X					1
Communication II																			
Marketing														X					1
Communication III																			
Computer Science A								X											1
AP Computer Science											X								1
CISCO I														X					1
CISCO II														X					1

	Sussex Tech	Campus Community	Polytech	Seaford	Charter	Brandywine	NCCVT	Red Clay	Smyrna	Woodbridge	Appoquinimink	Delmar	Capital	Colonial	Caesar Rodney	Milford	Lake Forest	Cape Henlopen	TOTAL
Drafting and Design CAD											Х			X					2
CTE Business CTE Finance & Marketing	x x																		1
CTE Media Broadcasting & Communications	X																		1
CTE Automotive Technologies CTE Carpentry/Mill &	x																		1
Cabinet CTE Early Education &	x																		1
Services CTE Digital Publishing & Design	х																		1
CTE Environmental & Landscape Management Technologies	х																		1
CTE Electronics & Computer Information Systems Engineering	X																		1
CTE Electrical & Green Energy Technologies	х																		1
CTE Legal Support Services & Criminal Justice Technologies	X																		1

	Sussex Tech	Campus Community	Polytech	Seaford	Charter	Brandywine	NCCVT	Red Clay	Smyrna	Woodbridge	Appoquinimink	Delmar	Capital	Colonial	Caesar Rodney	Milford	Lake Forest	Cape Henlopen	тотаг
CTE Accounting									х										1
CTE Administrative Services									x										1
CTE Marketing									X										1
CTE Business Information Technology									Х										1
CTE Early Childhood Education									x										1
CTE Family & Community Services									x										1
CTE Power & Technical Systems									x										1
CTE Animal Science									X										1
CTE Plant Science									X										1
CTE Structures and Natural Resources									X										1
CTE Environmental Science									x										1

Appendix IX: 2013-2014 Dual Credit Course Offerings By School

Question 5: Which DUAL CREDIT courses WILL BE offered in your school or district during the NEXT 2013–2014 school year?

	Sussex Tech	Campus Community	Polytech	Seaford	Charter	Brandywine	NCCVT	Red Clay	Smyrna	Woodbridge	Appoquinimink	Delmar	Capital	Colonial	Caesar Rodney	Milford	Lake Forest	Cape Henlopen	TOTAL
No Change	X					Х		X			Х			Х				Х	6
School Will Be Closed		X																	1
AP English Lit				X															1
Wilmington English 101												X							1
AP Calculus				X															1
AP Statistics				Х															1
Wilmington Math 310												Х							1
(Calculus)																			
DTCC Calculus																	X		1
AP Biology				X															1
AP Physics				X															1
AP Environmental Science									X										1
Wilmington Science 232												X							1
(Biology)																			
AP World History				X															1
AP US History				X															1
AP Psychology																Х			1
Heredity & Environment					Χ														1
Intro. Anthropology					Х														1
AP Spanish				X															1
CTE Digital Business									X										1
Minus Business									X										1
Information Technology																			
No Answer			X																1

Appendix X: 2012–2013 Dual Enrollment Course Offerings By School

Question 7: Which DUAL ENROLLMENT courses are CURRENTLY (2012–2013) offered in your school or district?

	Appoquinimink	Brandywine	Campus Community	Cape Henlopen	Capital	Caesar Rodney	Colonial	Delmar	Lake Forest	Milford	NCCVT	Polytech	Red Clay	Seaford	Smyrna	Sussex Tech	Wilmington Charter	Woodbridge	Total
Math Courses																			
*Courses Available through Academic Challenge Program																			
Analytic Geometry & Calculus A (UD)*																x			1
Analytic Geometry & Calculus B (UD)*																Х			1
Analytic Geometry and Calculus C (UD)*																х			1
AP Calculus									х										1
Calculus	X																		1
College Math and Statistics											х								1
Differential Equations (UD)*																х			1
Fractals & Chaos (UD)*																х			1
MAT 263 Principles of Discrete Math (DTCC)*																х			1
MAT 281 Calculus I (DTCC)*																x			1
MAT 288 Linear Algebra I (DTCC)*																Х			1
English Courses																			
AP Composition									х										1
AP English			_						х										1
Critical Reading and Writing (UD)*	X															х			2

	Appoquinimink	Brandywine	Campus Community	Cape Henlopen	Capital	Caesar Rodney	Colonial	Delmar	Lake Forest	Milford	NCCVT	Polytech	Red Clay	Seaford	Smyrna	Sussex Tech	Wilmington Charter	Woodbridge	Total
Eng 121 Composition (DTCC)*				х							X					Х		Х	4
English 101 – English Composition I (Delaware State University)																х			1
English 101 at WU							Х												1
English 102 – English Composition II (DSU)															х	Х			2
English 110 (UD)				х									x						2
English Composition 1 (DSU)															Х				1
Short Story (UD)*																х			1
Introduction to Poetry (UD)*																X			1
History Courses																			
AP US History									Х										1
Western Civilization: 1648 to present	X																		1
Science Courses																			_
Anatomy and Phys AP Biology									х				Х						1
AP Chemistry									Х										1
Human Heredity													X						1
Medical Terminology													Х						1
Nutrition Concepts													Х						1
Sociology Courses																			
AP Sociology									х										1
Sociology													х						1
Sociology I											х								1

	Appoquinimink	Brandywine	Campus Community	Cape Henlopen	Capital	Caesar Rodney	Colonial	Delmar	Lake Forest	Milford	NCCVT	Polytech	Red Clay	Seaford	Smyrna	Sussex Tech	Wilmington Charter	Woodbridge	Total
Psychology Courses																			
General Psychology	x										х								2
Other Courses																			
AP Spanish									х										1
ED 101 – Introduction to Teaching (Widener University)																х			1
Folklore (Penn Campus in Fall Semester)							Х												1
Introduction to Drama (UD)*																х			1
Personal Computing BCS 206 at WU							х												1
Philosophies of Life													х						1
Psych and Folklore													х						1
Science of Coaching (Penn Campus in Fall Semester)							х												1
TOTAL	4	0	Did Not Provide List	2	0	Did Not Provide List	4	0	8	0	4	0	8	0	2	16	Did Not Provide List	1	49

Appendix XI: 2013-2014 Dual Enrollment Course Offerings By School

Question 8: Which DUAL ENROLLMENT courses WILL BE offered in your school or district during the NEXT 2013–2014 school year?

2011 School y carr																			
	Appoquinimink	Brandywine	Capital	Campus Community	Cape Henlopen	Caesar Rodney	Colonial	Delmar	Lake Forest	Milford	NCCVT	Polytech	Red Clay	Seaford	Smyrna	Sussex Tech	Wilmington Charter	Woodbridge	Total
Math Courses																			
Analytic Geometry & Calculus A (UD)*																х			1
Analytic Geometry & Calculus B (UD)*																Х			1
Analytic Geometry and Calculus C (UD)*																х			1
College Algebra											х								1
Differential Equations (UD)*																х			1
MAT 263 Principles of Discrete Math (DTCC)*																х			1
MAT 281 Calculus I (DTCC)*																х			1
MAT 288 Linear Algebra I (DTCC)*																Х			1
Fractals and Chaos (UD)*																х			1
English Courses																			
Advanced Composition and Literature (ENGL 102) (WU)												х				х			2
Composition and Critical Thought (ENGL 101) (WU)												х							1
Critical Reading and Writing (UD)*																Х			1
Eng 121 Composition (DTCC)*											х					Х			2
ENGL 101 – Composition and Critical Thought (WU)																X			1
English 124 Oral Communications (Hope to offer in SY2013–2014)											Х							Х	2
Introduction to Poetry (UD)*																x			1
Short Story (UD)*																х			1

	Appoquinimink	Brandywine	Capital	Campus Community	Cape Henlopen	Caesar Rodney	Colonial	Delmar	Lake Forest	Milford	NCCVT	Polytech	Red Clay	Seaford	Smyrna	Sussex Tech	Wilmington Charter	Woodbridge	Total
History Courses																			
Growth of American Civilization II (HIST 122) (WU)												х							1
HIST 121 – Growth of American Civilization I (WU)																		х	1
Science Courses																			
ESSC 108 – Introduction to Astronomy (WU)																х			1
ESSC 118 – Astronomy Laboratory (WU)																х			1
Sociology Courses																			
Introduction to Sociology (SOC 105) (WU)					х							Х				х			3
Sociology											х								1
Psychology Courses																			
PSY 105 – Introduction to Psychology (WU)																х			1
Psychology											х								1
Other Courses																			
ED 1104 – Language Development in Early Childhood Education (WU)																х			1
Introduction to Drama (UD)*																х			1
Introduction to Teaching (ED101) (WU)												Х				x			2
Total	0	0	0	Closing	1	Did Not Provide List	0	0	0	0	5	5	0	0	0	21	Did Not Provide List	2	34

Additions versus classes already offered can be found in Appendix B above.



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