



Advancing Global Higher Education

Dual Enrollment in the Context of Strategic Enrollment Management

*An insight into practice at
U.S. institutions*

Wendy Kilgore, Ph.D., Director of Research, AACRAO
& Alexander Taylor, Research Intern

2016

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AACRAO: American Association of Collegiate Registrars and Admissions Officers

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Foreword

The American Association of Collegiate Registrars and Admissions Officers (AACRAO) periodically undertakes research projects to keep ourselves, and the higher education community in general, informed about current and emerging institutional level practices. The goals of this survey were to capture a current snapshot of dual enrollment (DE) course and program practices at institutions in the United States and determine if and how DE plays a role in the strategic enrollment management efforts of the institution.

The survey and report were made possible by Hobsons, a leading education technology company that helps K-12 schools, community colleges, and colleges and universities engage in meaningful conversations with students and their families about:

- Self-discovery and interest exploration;
- Academic and career planning;
- College preparation, admissions, and enrollment; and
- Academic advising and holistic student support.

Hobsons reviewed the draft survey, provided feedback on the draft report, and continues to collaborate with AACRAO to share the results of the work.

At the outset, we (AACRAO) wish to acknowledge the survey respondents. Without their willingness to share their time and expertise, this report and the insights garnered from it would not have been possible.

Introduction

In February of 2013, the Institute for Education Sciences (IES), an arm of the National Center for Educational Statistics (NCES), released a “First Look” report on dual enrollment options at postsecondary institutions in the United States (Marken, Gray, & Lewis, 2013). We learned that there are currently no plans to repeat the study. Convinced of such a need, we elected to build our study based on the IES survey because we want to understand if and how the DE landscape has changed in the past several years in the United States. While the Education Commission of the States (Zinth, 2015) maintains a state level DE policy database, our study differs from this database and the study completed by IES in that we examine DE from the perspective of the individual postsecondary institution across institutional types, size, and control. Further, we have added content to gauge how and if institutions use DE as a vehicle for student success and strategic enrollment management (SEM).

This project consisted of two parts:

- Conducting, analyzing, and publishing the survey results, and
- One-on-one conversations with enrollment management leaders to understand how these programs and courses are used, if at all, to support student success and help reach enrollment goals.

Different institutions have different names for DE, such as “dual credit,” “concurrent enrollment,” or “joint enrollment.” For the purpose of this project, DE refers to the following:

- Any course or program offered for high school students to earn college credit through a postsecondary institution.
- Credit for courses or the program may be earned at both the high school and college level simultaneously or only at the college level.
- Credit may be earned immediately upon completion of individual courses, upon completion of the program, or upon enrollment after high school graduation.



- Courses and programs may be taught on a college campus, on a high school campus, at some other location, or through distance education.
- International Baccalaureate (IB) programs and Advanced Placement (AP) courses are considered to be part of the DE portfolio for some institutions, because these are other avenues for high school students to earn college credit. We included a few questions about these options.

Key Findings

- Fifty-nine percent have incorporated dual enrollment as a strategic enrollment initiative.
- Dual enrollment serves multiple purposes for many institutions. For more than 75 percent of the respondents, dual enrollment serves as a recruiting tool, closely following by helping meet the mission of the institution, or as a community service mechanism.
- Dual enrollment is widely available and accepted at higher education institutions in the United States. During the 2015-2016 academic year, most (78 percent) institutions in this sample offered dual enrollment options.
- Eighty-six percent accept dual enrollment credit in transfer.
- Lower division only, and/or large and/or public institutions are more likely to offer dual enrollment programs and courses than institutions with other characteristics.
- Private institutions are less likely than public institutions to accept dual enrollment credit in transfer.
- Nine out of 10 “agree” or “strongly agree” that dual enrollment courses improve access to college courses.
- The percentage of institutions awarding certificates and associate’s degrees to high school students has increased since the IES study.
- One-quarter of participating institutions awarded at least one associate’s degree to high school students during the 2015-2016 academic year.
- Fifty-eight percent discounted tuition for dual enrollment, and two-thirds of those do so by more than 50 percent.
- Among those that do not offer dual enrollment, institutional culture is the most cited reason for not doing so.
- Nearly all (93 percent) accept AP and/or IB credits.

Impetus for the Project

A research associate at the Center for College Affordability and Productivity recently asserted in *Forbes* that DE students “are more likely to attend college, earn higher first-year GPAs, and graduate in less time at a higher frequency than their peers” (Lorenzo, 2016). These statements are supported by a pool of rich and deep literature from other academic, governmental and organizational sources, some of which is highlighted in this report. Dual enrollment participation has increased significantly in popularity in the United States over the last decade, by about 75 percent, from approximately 1.16 million to 2.04 million students from 2002 to 2011 (Marken, Gray, & Lewis, 2013; Waits, Setzer, & Lewis, 2005).

While DE options have traditionally been offered to high-achieving K-12 students, during the past decade, policymakers and school officials have collaborated to broaden access to DE. This is due, in part, to federal and state initiatives to improve college readiness for high school students. In 2009, the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) developed efforts to implement Common Core State Standards (CCSS) to improve college- and career-readiness (Common Core State Standards, 2016). This partnership laid the foundation for greater access to accelerated learning programs, including DE (SHEEO, 2016; Glancy, Fulton, Anderson, Zinth, & Millard, 2014). The introduction of CCSS resulted in a wide range of legislation focused around college readiness, including the creation of DE legislation and the proliferation of articulation agreements between postsecondary institutions and local school districts.

Dual enrollment courses and programs have been found by many to provide students with a wide range of potential benefits (Bailey & Karp, 2003; Webb & Mayka, 2011; Cassidy, Keating & Young, 2011; Karp, 2012; Barnett & Kim, 2014) including:

- Helping prepare students for the academic rigors of college;
- Providing information to students about the skills that they will need to succeed in college;
- Improving students’ motivation through interesting courses and high expectations;

- Promoting relationships between colleges and high schools;
- Providing a college course experience to traditionally underserved populations;
- Contributing to a college-going culture in the school district;
- Providing an accelerated pathway to a college degree;
- Enabling students to become accustomed to the college environment (when the DE course is offered on the college campus);
- Increasing the likelihood of graduating from high school and enrolling in college;
- Increasing the rigor of career and technical programs, thereby better preparing students for the workforce; and
- Building college awareness for those not typically considering college.

Dual enrollment has recently been a topic of interest in the realm of higher education news. Among others, a recent one highlighted a Georgia Department of Education initiative to rename DE as “Move on When Ready” and to provide access to this option for more students statewide at a further reduced, or even eliminated, cost at participating schools (Shortt, 2016). In addition, a new California law, the College and Career Pathway Act, expands access to tuition-free community college courses for high school students. In California almost 50,000 high school students completed at least one college course during the 2015-2016 school year, an increase of 56 percent over 2012-2013. This new law also increases the number of credits a student can earn per semester from 11 to 15 and allows the DE courses to be taught at the high schools (Leal, 2016). Additionally, career and technical DE programs are in the news in Alabama, with educational leaders calling for more enrollment (Singleton-Rickman, 2016). The Richmond Community College Guarantee program is viewed as a way to help boost college enrollment (Bell, 2016). Other reports showcase students who have participated in DE programs graduating high school not only with their high school diploma but also their associate’s degree (Leal, 2016; LeClair, 2015).

These factors—increased popularity/enrollment, improved college-bound success and access, the college completion agenda, and DE as a potential tool for universities and colleges to meet enrollment goals—are the reasons why AACRAO decided to pursue this line of research at this time.

A Review of the Literature

The State of Dual Enrollment Policies and Practices

The Education Commission of the States (ECS) regularly updates its database on the DE practices in the 50 states and the District of Columbia and is an excellent resource for state policy-level information (Zinth, 2015). It is from this database that we gleaned that 47 states, plus the District of Columbia, have common state-wide DE policies with guidelines for access, qualifications, funding, and related issues. Of these, 10 states require “all public high schools and eligible public postsecondary institutions to provide DE”, and 28 states plus the District of Columbia “allow nonpublic, proprietary or tribal colleges, or approved workforce training providers to participate in DE programs.” Three states—New York, New Hampshire and Alaska—leave DE policies up to local districts and postsecondary institutions.

Most states have regulations in place that allow only certain students to enroll in DE options. These qualifications include but are not limited to: minimum class level, minimum grade point average (GPA), postsecondary admissions requirements, and written recommendations from school administrators (Borden, Taylor, Park, & Seiler, 2013; Marken, Gray, & Lewis, 2013; Zinth, 2016). Other institutions limit the total number of students from any one partner high school who can be enrolled at any point in time and limit the number of credits.

Dual enrollment has also increased significantly in popularity in the United States over the last decade, by about 75 percent

Zinth (2016) found that funding methods for DE varied at the state level. Further, while there has been an increase in state-level commitment to expanding access to DE, the same cannot be said for efforts to eliminate costs overall or, in particular, for low-income students. More specifically Zinth found:

- The student or parent is responsible for covering tuition costs in nine states;
- Differing entities are responsible for covering DE tuition costs in 11 states; and
- The local high school or district and the postsecondary partner set the responsibility in 14 states and the District of Columbia.

Obstacles to Access

Although administrators praise the benefits of DE options, Hobsons (2015) and Pour (2016) also pointed to perceived obstacles regarding access. They found that the three biggest obstacles to students and institutions, as noted by practitioners and administrators, are:

- Lack of credentialed instructors;
- Costs associated with DE, and
- Access to post-secondary institutions.

Notwithstanding these potential barriers, administrators, foundations, and legislators continue developing initiatives to improve the access, funding, and quality of these programs. For example, to help address the lack of credentialed instructors, states and organizations are developing grants in order to save instructors money when pursuing their qualifications (Horn, Reinert, Jang, & Zinth, 2016). Such programs include credit voucher systems, professional development funds, and loan forgiveness in order to qualify instructors for DE instruction. A further recommendation is to develop funding mechanisms and incentives for schools. In 2016 alone, several states have enacted legislation along these lines, including Tennessee, Maryland, Illinois, and Florida (Education Commission of the States, 2016).

Another ongoing initiative aimed at improving access is the use of online resources to support DE. It is estimated that 6 to 12 percent of adults live in areas known as “education deserts” – communities where students have few or no postsecondary options from which they can choose (Hillman & Weichman, 2016). These adults, and their school-aged children, predominantly live in rural and moderate-sized communities where it is more challenging to gain access to postsecondary options. The use of online resources – used in at least 35 states (Zinth, 2016) – may be one solution, as it enables more flexibility in student scheduling while decreasing time and costs associated with traditional on-campus DE options (Pour, 2016). Although online options may increase accessibility for some, there are concerns about access to reliable technology and concerns that some students may not thrive with online programs (Pour, 2016).

Dual Enrollment and Student Success

Many administrators have looked to DE to help bridge the gap between academic preparedness and postsecondary expectations, as it has been shown to reduce the likelihood of students needing to enroll in remedial courses in college, which can increase the amount of time it takes to attain a degree and thereby increase the likelihood of dropping or stopping out (Attewell, Lavin, Domina, & Levey, 2006). Research (e.g., Reisberg, 1998; Berger et al., 2013) suggests that students who earn college credits while still in high school may earn college degrees far earlier than typical students. In addition, studies by Hughes, Rodriguez, Edwards, and Belfield (2012) and the Community College Research Center (2012) support this notion by finding that students who take DE courses accumulate more credits over the first two years in college than nonparticipants.

As noted earlier, scholars and practitioners alike extoll the potential and empirically demonstrated benefits DE has for students. Additional research on the topic

Dual Enrollment has been shown to reduce the likelihood of students needing to enroll in remedial courses in college

includes a study based in Florida and New York City by Karp, Calcagno, Hughes, Jeong, & Bailey (2007), which found evidence that there was a positive relationship between DE and a student's likelihood of attending

college when compared to nonparticipants, and that students were more likely to persist in college to a second semester. Wyatt, Patterson, & Di Giacomo (2014) also found that dual credit courses such as the College Board's AP courses and the IB courses can have a positive impact on future student success. The authors concluded that students who received higher AP and IB examination scores had a greater chance of receiving a degree from a two- or four-year institution. From the K-12 perspective, respondents to the Hobsons 2016 survey conducted with the American Association of School Administrators (AASA) agreed that the greatest benefits of DE are improved access to college courses, improved affordability of college courses, and improved access to expanded curriculum.

Despite research supporting DE and student success, the students who could potentially benefit the most – those who are academically at-risk, low-income,

and/or first-generation – have less access to these options than other populations (Adelman, 2006). For example, NCES (2000) pointed out that first-generation students are less likely to be academically prepared to take courses at the college level than high-SES students. Because of these known disparities in preparedness and access, studies have tested whether DE courses directed toward low-SES, first-generation students benefit this population as well, and the results generally affirm this notion. In Hughes, Rodriguez, Edwards, & Belfield (2012), researchers examined Concurrent Course Initiatives (CCI), a career technical education-oriented DE program directed toward underachieving and underrepresented students. In a program evaluation, they found that CCI students were more likely to graduate from high school and matriculate to a four-year institution. CCI students also accumulated more credits in a two-year period than the comparison group. Further, a study by An (2013a) found that DE students whose parents never attended college were four percentage points less likely to take remedial courses after entering college than those who did not participate in DE. An (2013b) also found that first-generation students who participated in DE increased their chances of attaining a postsecondary degree or a bachelor’s degree by 8 percent and 7 percent, respectively.

Dual Enrollment in the Context of SEM

Colleges and universities may participate in DE programs by enrolling high school students in their campus classes, and/or by collaborating with high schools to have college-level classes taught in the high school. Typically, the goals for these programs fit the institution’s desire to serve its community as well as appeal to motivated students who are ready for a head start on their college plans. In some cases, as noted in the literature, DE programs provide an avenue to higher education for younger students who may need a boost in their college preparation. In any case, DE programs are generally seen by students and families as a way to engage higher education without significant costs; in that important sense, DE improves broader access to higher education.

For some institutions experiencing enrollment gaps or funding challenges, DE can serve as a source of tuition income and/or full-time-equivalents. From this study we know that 59 percent of the sample who offered DE reported using it

as a strategic initiative. Others may view DE simply as part of their normal student flow rather than as a population that can help the institution reach its enrollment goals. A web search on “DE and strategic enrollment management” yielded numerous examples of how institutions are focusing on DE in their strategic plans, including: “Increase prospect/Recruitment efforts” and “To increase high school enrollments by ‘x’ percentage.” As part of this project, practitioners commented on DE at their institution within the framework of enrollment management. The following two unattributed comments stood out in particular:

- “We have found that a number of dual enrolled students fall in love with the campus and then matriculate as freshmen so it is a great recruiting tool.”
- “DE is a wonderful opportunity for students to get a taste of college-level classes. It also gives

students an opportunity to experience the rigor. Our school district has a career center adjacent to the City College. Many of these students are involved with CTE (career and technical education) classes and are receiving dual credit or taking classes in math and/or writing to prepare them for pursuing a CTE certificate or associate degree.”



Methodology

Survey invitations were sent electronically to both AACRAO members and non-AACRAO member institutions in the United States that offer undergraduate degrees. After the data was cleaned, 388 viable responses remained, representing 46 states and Puerto Rico. Institutional characteristics varied by size, control, and type.

The survey content consisted of a multi-branch question set differentiated on whether or not an institution offered any DE programs or courses during the 2015-2016 academic year, accepted DE, or accepted AP and/or IB credit. If respondents reported offering DE programs or courses during this timeframe, the remaining survey content included, but was not limited to, the following:

- Type and location of DE offerings;
- Number of students served;
- Instructor characteristics;
- How and when credit was awarded;
- How these students are coded in the student information system;
- Extra support services available to at-risk and underrepresented students;
- Use of DE to support student success and/or reach enrollment goals; and
- IB and AP practices.

Questions for those institutions that did not offer DE in 2015-2016 included the following:

- Barriers to offering DE courses or programs;
- Future plans for offering DE;
- Past experience with offering DE; and
- IB and AP practices.

All participants were asked if they were interested in participating in the interviews with study authors. Those who indicated “yes” were sampled and selected for interviews.

Results

The results of this project are detailed below and grouped by related content area. The institutional stories gathered through interviews with administrators are interspersed throughout and labeled as “Institutional Essays.”

Institution-Level Dual Enrollment Offerings and Practice

Dual enrollment was widely available and accepted during the 2015-2016 academic year. Most (78 percent) of the institutions in this sample either offered DE courses, programs, or both. At first look, this represents a 32 percent increase over the 2010-2011 data findings from IES, but this inference should be viewed with caution given the difference in sample sizes (388 vs. about 1,536). Lower division only, and/or large and/or public institutions were more likely to offer DE programs and courses (Figures 1-3) than institutions with other characteristics.

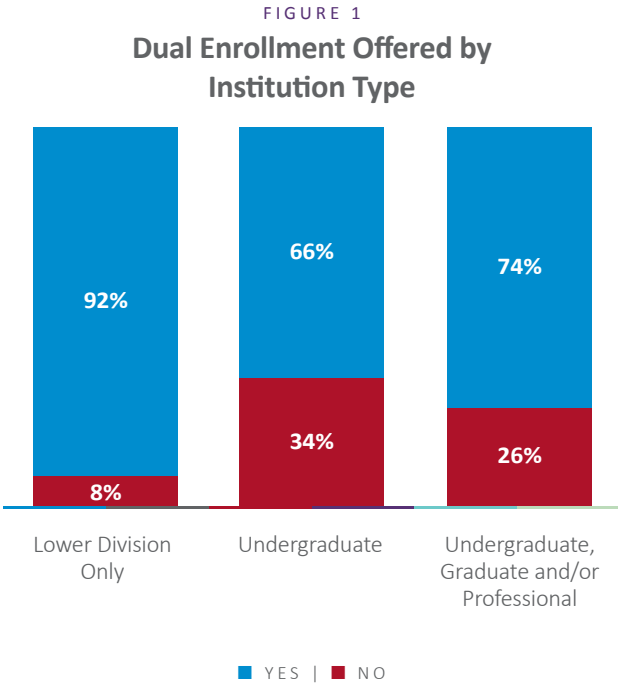


FIGURE 2
Dual Enrollment Offered by Institution Size

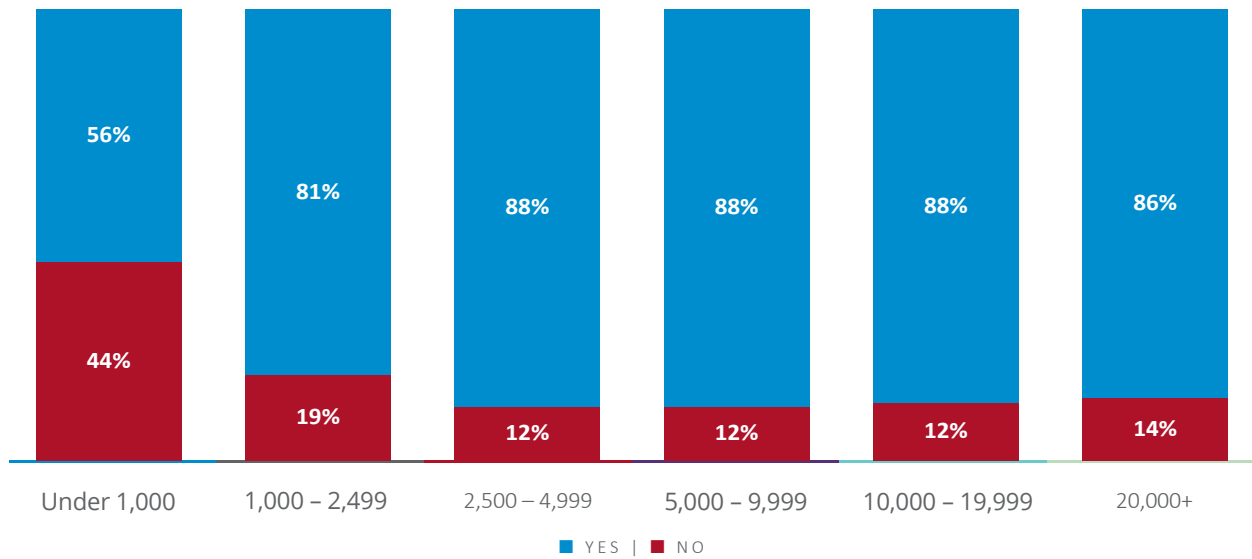
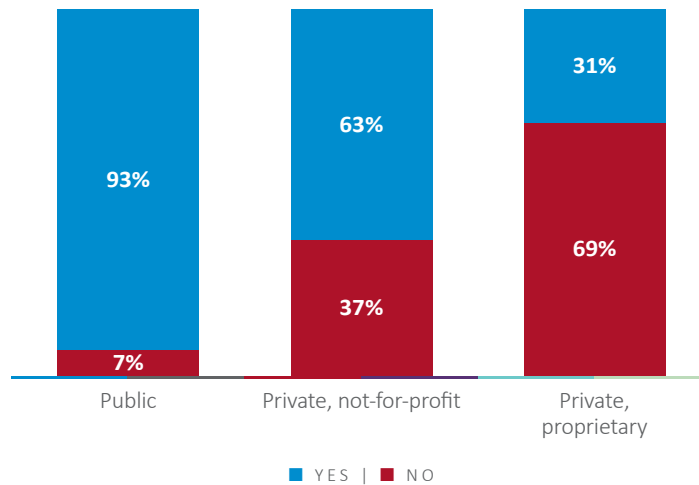
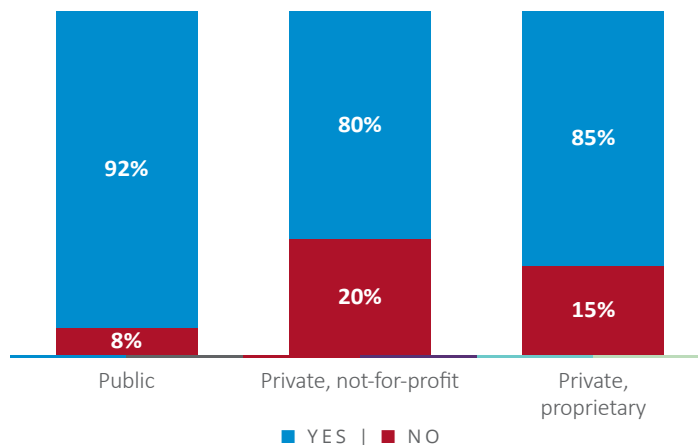


FIGURE 3
Dual Enrollment Offered by Institution Control



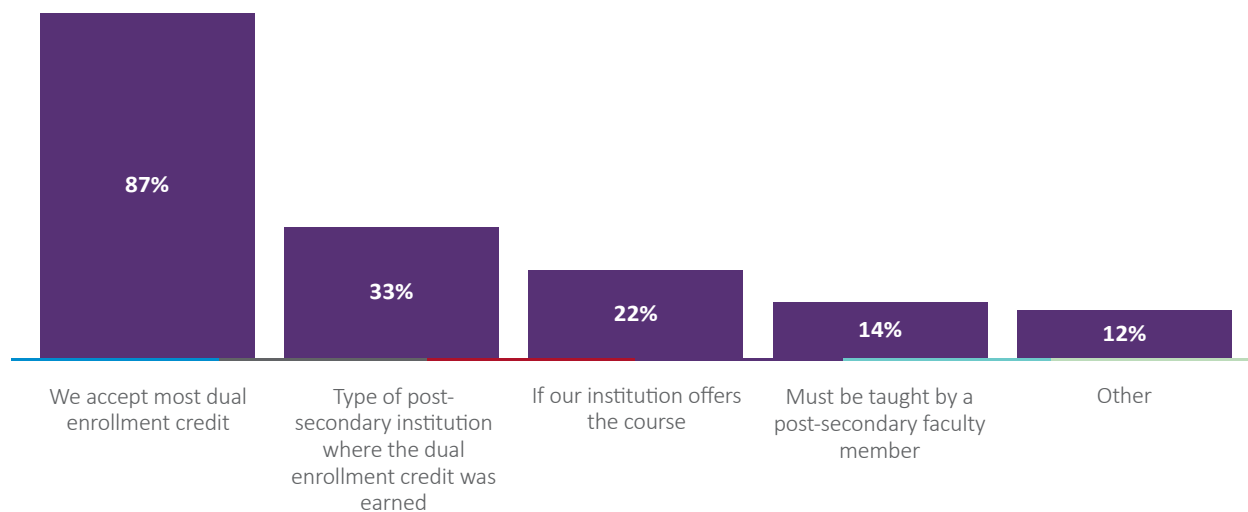
In this sample, 86 percent of institutions accepted DE credit in transfer (13 percent did not; 1 percent did not report). Private institutions were less likely than public institutions to accept DE credit in transfer (Figure 4).

FIGURE 4
Dual Enrollment Credits Accepted in Transfer by Institution Control



While most institutions indicated that their institution “accept(s) most DE credit” in transfer, there tended to be a set of conditions under which those credits were accepted for transfer, including the type of postsecondary institution at which the credit was earned, whether an equivalency existed in the receiving institution’s course catalog, and others (Figure 5). Other conditions shared included a minimum earned grade (typically a C or above), minimum qualifications of high school instructor, the location where the course was taught (i.e., must be on a college campus), and whether or not a student must have completed subsequent non-dual-enrollment credit at the institution before the DE credit was awarded.

FIGURE 5
Factors Influencing Acceptance of Dual Enrollment Credit in Transfer



Among those institutions that offer DE, just about one in four (22 percent) indicates that their institution had experienced difficulty in those credits transferring to other institutions compared to 69 percent who have not experienced difficulty and 9 percent who did not report one way or the other. Difficulties encountered included institutions that did not accept any credit that:

- Also met a high school graduation requirement;
- Was from a course taught on a high school campus;
- Was taught by a high school instructor (regardless of academic qualifications); or
- Did not directly meet a requirement for the student’s chosen major.

From the other perspective—institutions that did not accept dual enrollment credit in transfer—just 15 of the 52 institutions (13 percent) told us why not. The most frequently selected choice among those available in the survey was “other” (60 percent) followed by uncertainty about course rigor and no equivalency at their institution (20 percent) and uncertainty about teaching faculty qualifications (13 percent). In the “other” category, comments included a few that mirrored this one: “There is a clear distinction between high school and college: all transfer work must be completed in a college or university setting, in person, with other degree-seeking college students, with a regular college faculty member instructing, and have no application to the high school curriculum (credit or requirement) to qualify



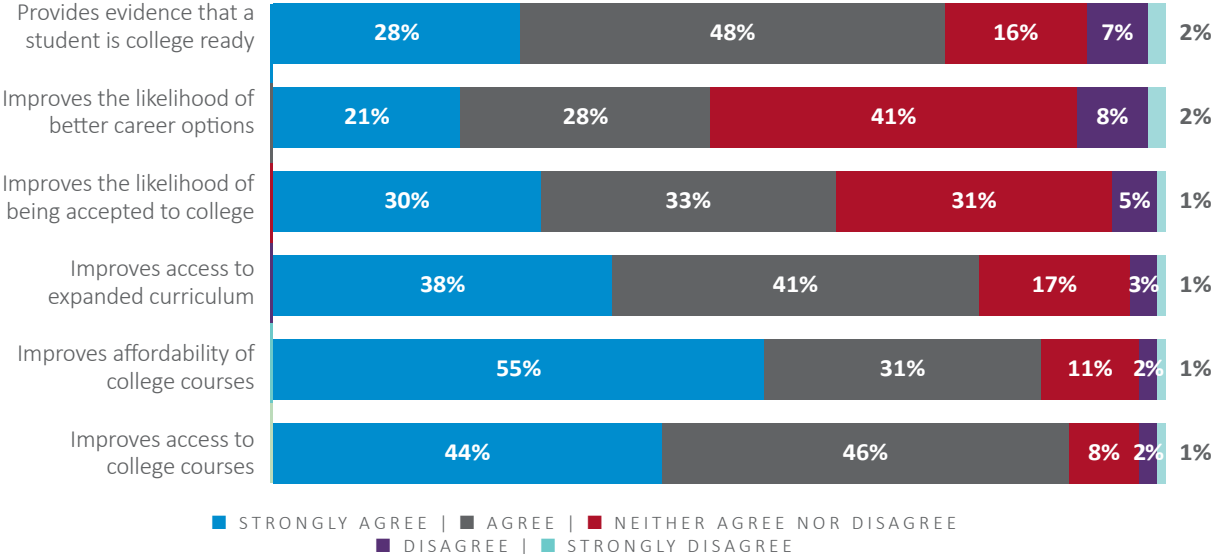


for transfer consideration.” Another stated, “Our first-time freshman student population is less than 2 percent of our total enrolled students.”

All respondents, including those who do not accept DE credit and/or do not offer any DE courses or programs, were asked to share their level of agreement with selected statements about the benefits to students who were DE. With one exception, 60 percent or more either “strongly agreed” or “agreed” with the benefits statements about DE, further supporting what was concluded in related literature (Figure 6).

FIGURE 6

Level of Agreement with Statements about Dual Enrollment



Dual Enrollment Helps Us Serve Our Community

Gretchen Bartelson

Dean of the Center for Teaching and Learning

Northwest Iowa Community College

Public, lower division only

Enrollment: 1,000 – 2,499

North West Iowa Community College (NWICC) is a small rural community college. The College holds the distinction of being rated a couple of years ago as the seventh in the nation for graduation in community colleges and recently third in the nation for graduation for online programs. It has offered dual enrollment courses for decades in-person and more recently, online.

Dual enrollment serves many purposes at NWICC, including as a recruiting tool, community service mechanism, mission objective, meeting a state mandate, and as a strategic enrollment initiative. It is our mission and is so much a part of our mission that it is heavily subsidized by the state, especially at the community college level. Dual enrollment (DE) is viewed by the community college as part of a seamless K-20 pathway. They work hard on articulation agreements with the partner universities so the dual enrollment credits are readily accepted. However they have faced some challenges in this area.

There are two key issues here. First is the misperception by other institutions about the standards and qualities that the College has in place to guarantee the quality of instruction. NWICC obtained accreditation from the National Alliance of Concurrent Enrollment Partnerships (NACEP) in order to help four-year colleges accept dual enrollment credits from NWICC. In the state of Iowa, the Department of Education said NWICC could seek DE accreditation with NACEP, the national alliance of concurrent enrollment programs. This accreditation establishes that the faculty is accredited the same for all institutions and includes other standards of

assessments, such as syllabi reviews, yearly staff development, and classroom visits.

The second challenge is to help students understand that other colleges never have to take credits, or if credits are tied to a major they may be accepted only as electives.

Many of the high schools in the College's service area are quite small and are not always able to offer the breadth and depth of college preparatory courses they would like to offer. NWICC's DE program fills this niche and annually provides more than 750 high students the opportunity to earn both high school and college credit not otherwise available to them in an affordable manner. NWICC is one of the highest providers of dual enrollment in the state with high school graduates earning on average 18 credit hours before graduating from high school. Through this program, some students complete certificate or associate's programs while still in high school.

DE students from 9th to 12th grade are regularly admitted and registered as non-high school graduates, issued a student identification number and added to a regular communication plan. Students in the 9th or 10th grade are generally limited to the Talented and Gifted program and Project Lead the Way courses. Project Lead the Way is a National Science Foundation grant supporting a science-based pre-engineering curriculum. All students are also added to a cohort and tracked over time to see where they choose to enroll after high school. The state of Iowa limits the number of credits a high school student can earn per year to 23.

NWICC would like more of the high school graduates to matriculate to the College after graduation. They struggle with the fact that essentially the students think that they are getting all they need out of DE and want to move on to a four-year institution immediately after high school. The College is trying to counter the perception that it is "just a community college," especially since the college's history is mostly in Career and Technical programs. Students, parents, and high school counselors do not seem to understand the value of attending the first two years at NWICC. A College strategic initiative aims to communicate better with parents and increase the percentage of high school students who take DE to matriculate for the first two years at NWICC. This communication goal is to reach parents and students before their junior year in high school.

All in all, dual enrollment is viewed as an important and highly utilized college course delivery method which helps NWICC meet its mission and strategic initiatives.

More Clarification, Guidance Needed for Dual Enrollment

Patrick McLaughlin

Associate Chancellor and Registrar

Indiana University – Purdue University Ft. Wayne

Public, Undergraduate, Graduate, and/or Professional

Enrollment: 5,000 – 9,999

Indiana University-Purdue University Fort Wayne (IPFW) is a cooperatively managed regional campus operated by Indiana University-Bloomington and Purdue University. IPFW offers over 200 undergraduate and graduate programs to more than 13,000 students. IPFW began providing dual enrollment options to local school districts in the Fall of 2006 and regularly serves more than 3,000 high school students in this program annually with approximately 21-22 percent of students matriculating to IPFW. Students who earn credits through dual enrollment can subsequently enroll at IPFW with upwards of 60 credits, or the equivalent of the first two years of university-level work. Approximately 25 percent of IPFW first-time, full-time high school graduates enter with at least 15 college credits earned through dual enrollment, including Advanced Placement and International Baccalaureate credits. Dual enrollment is a phenomenal opportunity from a student success perspective. However, it can provide financial challenges to the institution because of the difference in funding for dual enrollment versus campus-based general education courses.

IPFW is accredited by the Higher Learning Commission (HLC) and as such, all instructors teaching dual enrollment courses must meet the same qualifications as an adjunct professor – meaning at least a master’s degree and a minimum of 18 graduate credits in the field they are instructing. The State of Indiana has just recently further clarified the instructor qualifications for all two- and four-year institutions.

There are a number of institutions in Indiana offering dual enrollment and the



coordination between institutions regarding transcripts can be a bit challenging. There have been instances observed at IPFW where students had to request up to three different transcripts from different institutions to transfer in their dual enrollment courses. Dual enrollment course offerings also vary by school district in that some are semester-based schedules, which align well with IPFW's academic schedule. However, for those that follow a trimester or other academic schedule, the students' academic records are not updated in a matching timeframe and as such, pose some challenges in transfer. There have been multiple instances when parents and students have tried to send dual enrollment credits for transfer credit evaluations, only to find that students' academic records have not been updated because the courses were still technically in session.

Even with the procedural obstacles, IPFW will continue to offer dual enrollment options because of the benefit to high school students, the community's continued and growing interest in such options, and the strategic enrollment value of dual enrollment.

Institutional Purpose of Dual Enrollment

During the 2015-2016 academic year, DE served multiple institutional purposes for many institutions. For more than three-quarters of those sampled, it served as a recruiting tool, closely followed by helping meet the mission of the institution and by a community service mechanism (Figure 7). Undergraduate institutions are less likely than comprehensive and lower-division-only institutions to count DE as an institutional strategic enrollment initiative (Figure 8). Others commented on how it helped the institution provide access to college courses to underserved and underrepresented populations in addition to a mechanism to help reach enrollment goals.

FIGURE 7

Institutional Purpose Served by Dual Enrollment

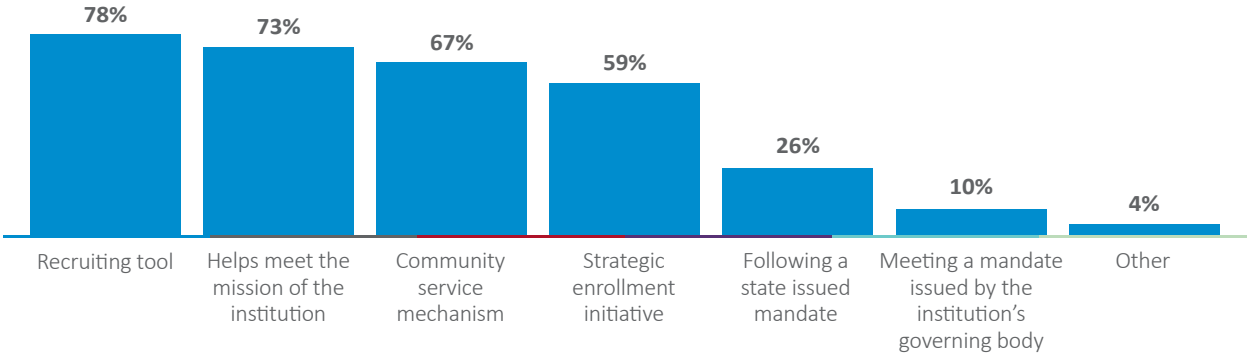
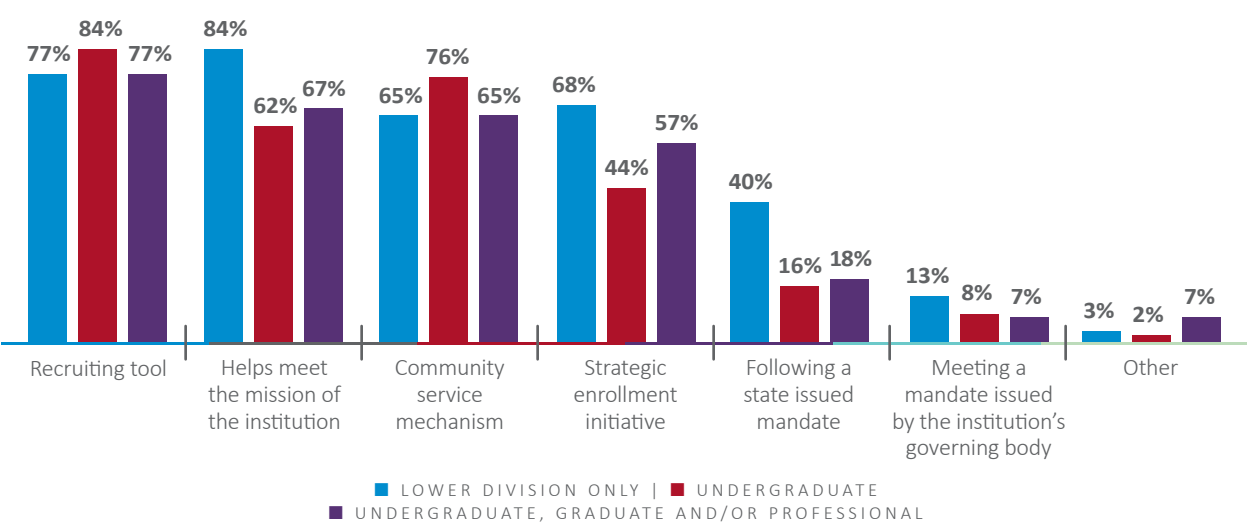


FIGURE 8

Institutional Purpose Served by Dual Enrollment by Institution Type

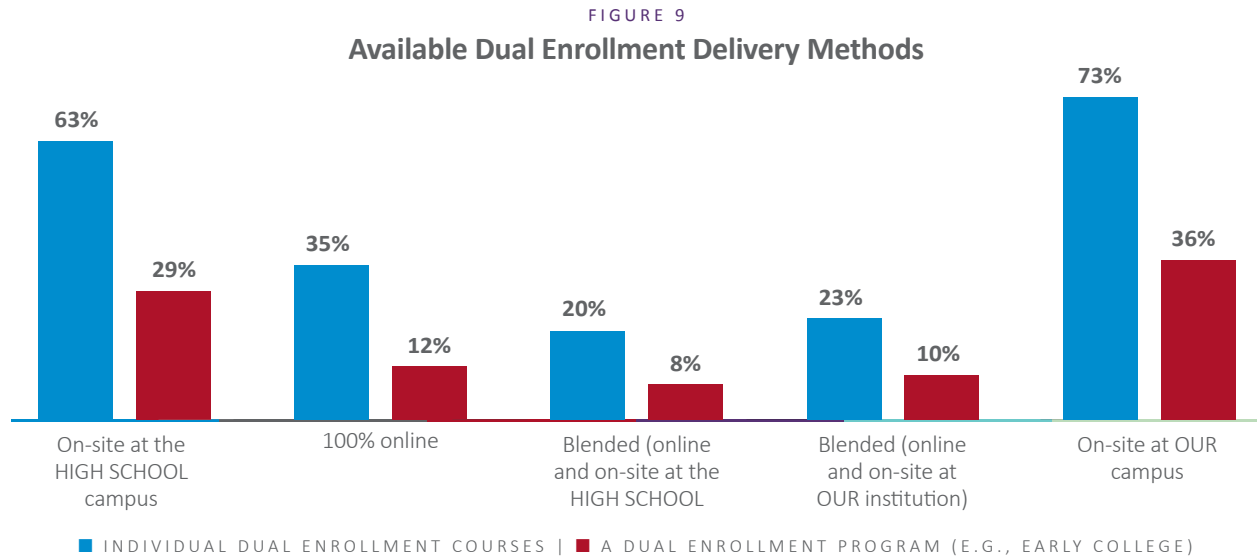


A quarter of the sample reported using DE intentionally as a means to support student success and/or diversity on their campus, compared to two-thirds (67 percent) that do not and 9 percent who opted not to respond to the question. Several commented that DE increased diversity on their campus because the high schools at which students take DE are highly diverse. Others offered DE courses in partnership with alternative high schools to help those students succeed. Several respondents stated details about how their use of DE supported student success and campus diversity including:

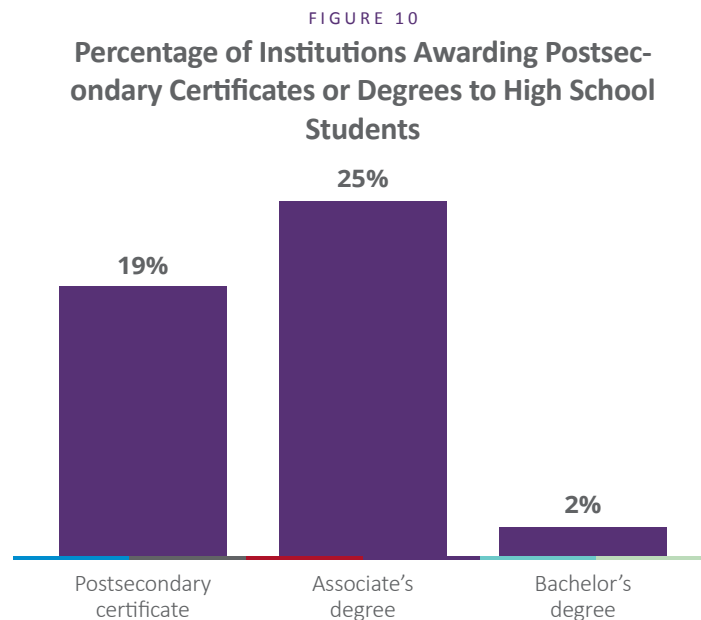
- “We have specific orientations, advising, degree plans and communication plans for dual-enrolled students. We also provide scholarships for students completing specific amounts of dual enrollment to encourage their ongoing enrollment.”
- “As an emerging HSI [Hispanic Serving Institution], a strong dual enrollment program can help both our feeder district with increasing graduation rates and help increase the Latino population on campus to better reflect our surrounding community.”
- “Statistics are provided to students/parents that demonstrate students that participate in dual credit enrollment are more likely to continue to college and more likely to be successful once there.”
- “One of our branch campuses serves a significant population of underserved and first-generation college students. Dual enrollment options give us an opportunity to engage those students in a college-going conversation and allow them to try college work in an environment that is smaller and more structured than our large flagship campus.”

Dual enrollment course and program providers tendered DE through a wide-variety of delivery methods. Our survey added content about online and blended delivery methods that were not included in the earlier IES report; our version also differentiated courses and programs whereas the IES report did not. These differences in methodology eliminated the possibility of making a direct comparison. However, for this sample population, courses and programs offered on the college campus were the most widely available, followed closely by on-site at the high school campuses and then with wholly online offerings a somewhat

distant third (Figure 9). The “On-site at our campus” delivery method was slightly lower for this sample than that reported by IES.



Among those that had DE, a subset awarded a postsecondary degree or certificate to high school students (Figure 10). The percentage of certificate and associate’s degrees awarded increased from the IES report—an increase of 4 percent and 7 percent respectively. The percentages are likely to continue grow due to the level of external governmental and institutional interest in the college completion agenda and the ongoing proliferation of early college high school programs.



Providing College-Level Options to Rural Communities

Angela Hobby

Vice President of Enrollment Management

Wiregrass Georgia Technical College

Public, Lower division only

Enrollment: 2,500 – 4,999 Students

The Technical College System of Georgia consists of 22 technical colleges of which Wiregrass Georgia Technical College (Wiregrass) is one. Similar to other college systems, each institution is assigned a service area. The Wiregrass service area is predominantly rural. The College partners with 20 local high schools providing dual enrollment for about 1,500 high school students from 9th to 12th grade, a 100 percent increase in the last three years. These courses are available at no cost to the students. Due to the rural nature of the College's service area and the limited ability for high school students to travel to the campus for courses, the courses are offered primarily on the high school campuses. Dual enrollment students are also given the same support services as those who attend courses on the campus including: one-on-one guidance and advising, attendance tracking, monthly grade monitoring, among other services. The College's staff and faculty frequently visit high school sites ensuring that students receive the support they need. The majority (85 percent) of participating students earn a passing grade in the courses and many are able to complete a certificate or associate's degree from Wiregrass before they graduate from high school.

Although it is part of the College's mission to provide college-level courses and services to high school students, the dual enrollment program is also viewed as a recruiting tool. Historically, the rate of matriculation following high school graduation has been around 10 percent of those students who participated in dual enrollment. As of Fall 2016, that rate has increased to around 18 percent. The

College hopes the increase in the participation in dual enrollment continues to lead to an increase in the overall number of dual enrollment students who choose to enroll at Wiregrass after graduation. The current student population (excluding dual enrollment) is largely non-traditional with an average age of 27 and most usually enroll to build specific career-related certifications and skills. About half of the college's dual enrollment students are taking degree-level college credits while the other half are focused on occupational courses in areas such as construction, criminal justice, health care certificates, early childcare, and cosmetology.

The state of Georgia implemented Move on When Ready in July of 2015. This program created one funding source for dual enrollment. Institutions receive a refund based directly on their dual enrollment counts. Dual enrollment scholarships have also been streamlined. Under the old legislation, students eligible for the HOPE Grant had to meet residency requirements in the state of Georgia. Students now only need to verify that they are attending a Georgia high school or are home schooled, enabling undocumented and out-of-state students who attend Georgia high schools to be eligible for financial assistance. Finally, under Move On When Ready, students as early as the ninth grade can enter dual enrollment programs, as long as they meet the entrance requirements set by the institution.

Most technical colleges, like Wiregrass Technical College, require students to meet entrance exam standards through the SAT, ACT, or Accuplacer. Wiregrass attributes its increases in enrollment to a combination of factors. The new legislation opened up the age requirement, lifted restrictions on the residency requirement, allowed for more course options, and streamlined the funding. However, Wiregrass had previously sought support from the College Foundation to offset the cost so that students were not charged to attend. The college administration had made dual enrollment a college-wide goal in 2013 and a lot of support was put behind the program. The state funding allowed those resources to be used in other ways to assist student success across all programs offered at the college.

Cooperation Between Institutions and High Schools

Harold Olson

Director of Dual Enrollment

Montana State University – Billings

Public, Undergraduate, Graduate, and/or Professional

Enrollment: 2,500 – 4,999

Montana State University-Billings (MSU Billings) presently has two dual enrollment programs – University Connections, which are courses taught on-site at the institution or online, and High School Connections, which are courses taught at the high schools by high school instructors within the students' schedule. The institution views both programs as providing a number of benefits to high school students, including improved access to college courses and an expanded curriculum, improved affordability of college courses, and a way to improve the likelihood of a participant to consider and/or be accepted to a postsecondary program whether it be a two-year or four-year college program. It is also used as a recruiting tool and in service to the community. For example, the University Connections and High School Connections programs allow the students to experience a college class hoping the students would be aware of the university opportunities, perhaps enroll in the program, or gain meaningful employment in the community. The UC and HS Connections are a statewide initiative supported by the governor, the governing education bodies of the state, (OCHE and OPI) and the MSUB Chancellor and cabinet to increase the number of students pursuing postsecondary education programs.

The number of dual enrollment courses at the high school vary depending on the certification of the high school instructors. All high school instructors must meet the qualifications of an adjunct professor – a master's degree and nine graduate credits in the discipline they are instructing. Currently, the institution is faced with a

deficit of qualified high school dual enrollment instructors. As such, the institution is currently developing new ways of building professional development for high school instructors. The demand for dual enrollment will surpass the number of available instructors, potentially limiting the size of the high school based program. Not all high school instructors are interested in attaining the nine additional credits needed, instead choosing to spend their time and money on building credentials toward other career aspirations such as becoming a principal, counselor, and so on. The puzzle needing to be solved by MSU Billings is how to build incentive structures to encourage more instructors to meet dual enrollment qualifications.

MSU Billings is also partnering with local school districts to analyze the curriculum of high school courses to see if the course(s) may qualify as college level courses. MSU Billings is collaborating with its partner high schools' career centers to build a curriculum that benefits high school students in career readiness, more specifically in career and technical education courses. This collaboration will give high school students an opportunity to receive advanced study options that high schools may not have the resources to offer. One such example is the current ability to offer a six-credit Emergency Medical Technician (EMT) course at the high school. Students are able to enroll in the course for the academic term and eventually take the EMT certification test. The course is also transferable to MSU Billings. This option enables students to earn credits while also introducing them to a possible career path.

Another example of a partnership is the collaboration between high school and college instructors. One of the high school teachers at the career center near City College (part of MSU Billings) is currently teaching an Information Technology (IT) course and wanted to be fully prepared in case students were curious about other aspects related to IT. An MSU Billings instructor met with the high school instructor once a week to expand and share their knowledge about IT instruction. The two instructors came to an agreement for the course and it will be offered as dual credit for the second semester. This is a further example of how MSU Billings wants to support a professional dialogue between the high school and the university to best serve our students.

Student Dual Enrollment Details

A little over one-third of responding institutions reported enrolling fewer than 100 DE students, followed by almost one in four having 1,000 or more in their DE options during the 2015-2016 school year (Figure 11). Although the size of the institution had little relationship with the number of DE students, institution type did. Lower division only institutions (i.e., mostly community and technical colleges) were much more likely to report enrollments of 1,000 or more than undergraduate or comprehensive institutions (Figure 12).

FIGURE 11
Number of Students in Dual Enrollment:
2015–2016

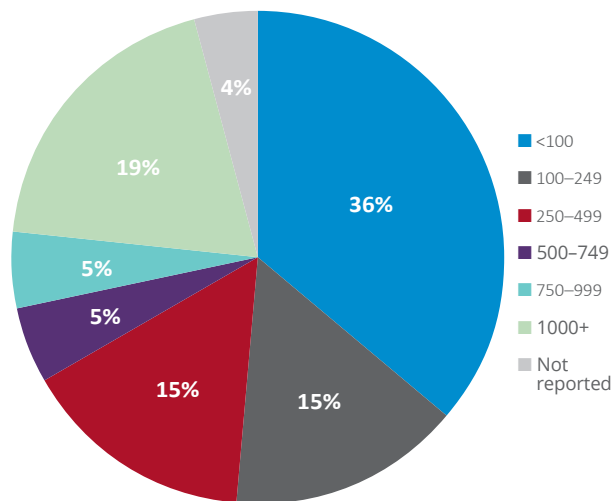
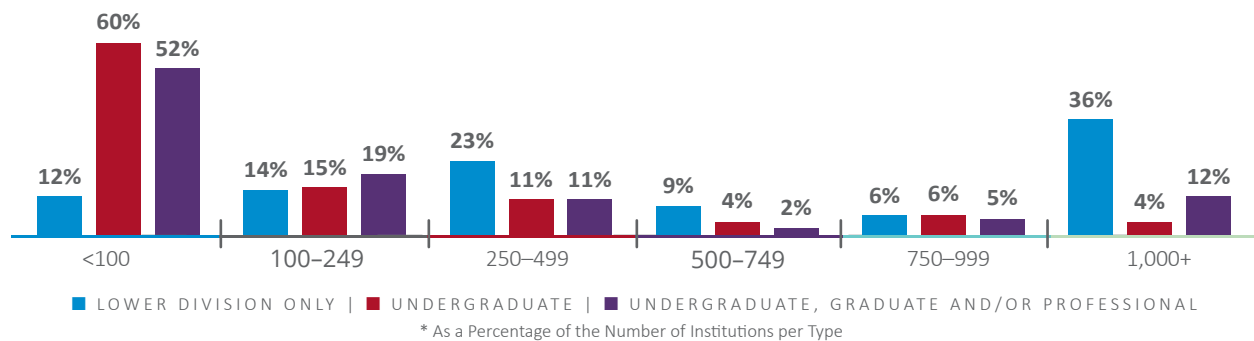
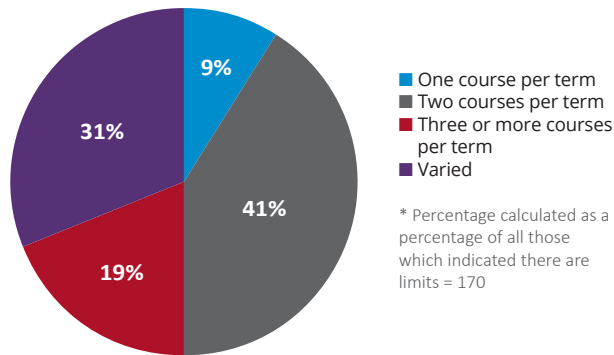


FIGURE 12
Number of Dual Enrollment Students 2015–2016 by Institution Type*



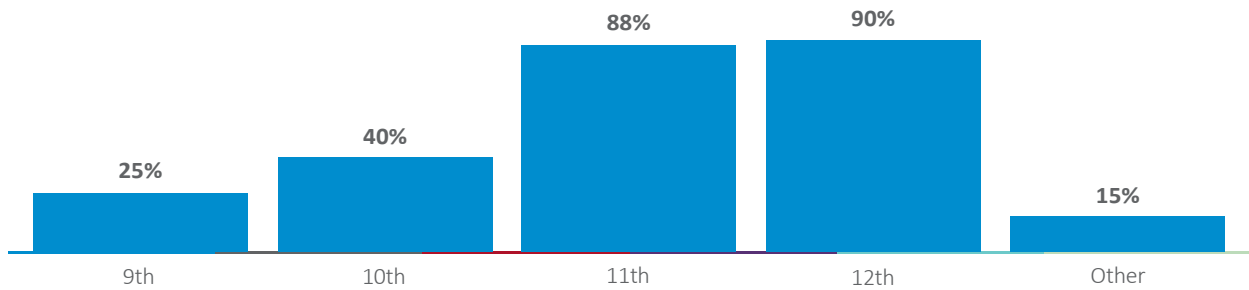
Slightly more than half of those who had DE offerings capped the number of courses (56 percent) a student could enroll in per term (39 percent “no” and 5 percent “not reported”); most often the limit was two courses (Figures 13). While we did not specifically ask about “the typical pattern of enrollment for high school students,” the typical pattern of enrollment in the IES study was one course for 46 percent, two courses for 18 percent, and three or more for 3 percent. This is different from the enrollment caps in our study. It is unclear among those in our study with a cap of two courses whether the enrollment pattern was actually just one course. Some noted that the enrollment cap varied. Some indicated they capped by varied credit hours (as opposed to by course, while others capped by grade level (which, in turn, varied by program), and still others indicated the cap was evaluated on a per-student basis.

FIGURE 13
**Maximum Number of Dual Enrollment Courses
 per Term***



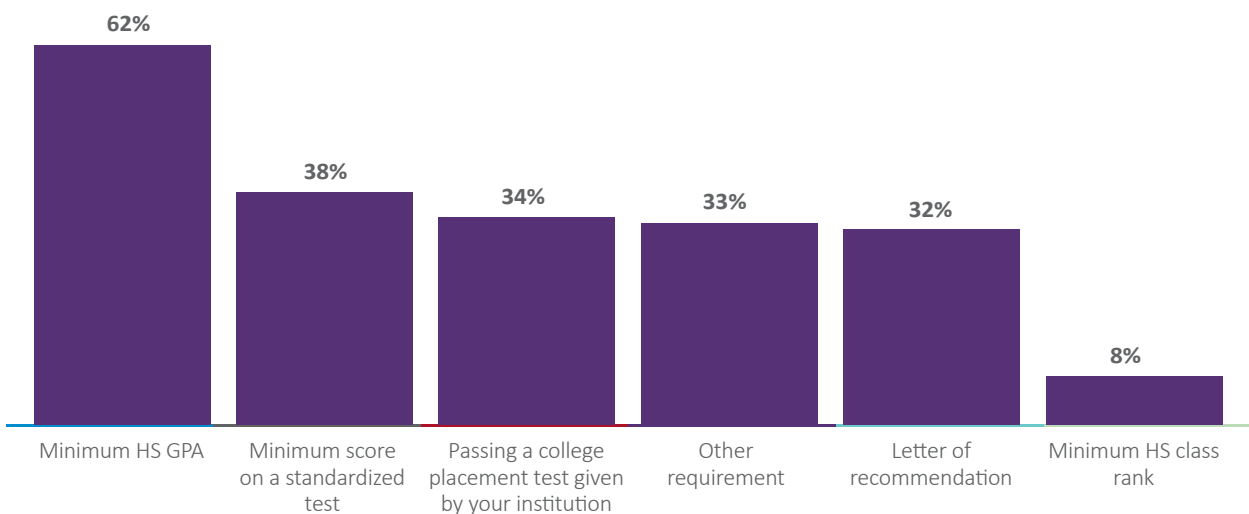
Most (77 percent) had restrictions on the percentage or number of students eligible to enroll by grade level; 17 percent indicated they had no limits; and 6 percent did not respond to the question. Little has changed from the 2010-2011 data in that most institutions reported that 11th and 12th graders were eligible, 40 percent of 10th graders, and 25 percent of 9th graders (Figure 14). Among the 15 percent who reported “other”, there were limits set by the age of the student, with DE offerings as early as 6th grade. Some offered DE to GED/high school equivalent students.

FIGURE 14
Grade Level Eligible for Dual Enrollment



Academic eligibility requirements varied, with more than half of the DE-offering institutions requiring a minimum high school GPA (Figure 15). The percentage of institutions with a minimum GPA requirement is virtually unchanged from the 2010-2011 data. Compared with the IES data, a slightly lower percentage of this sample require a minimum score on a college placement test (38 percent vs. 45 percent), a standardized test (34 percent vs. 43 percent) and/or a letter of recommendation (32 percent vs. 41 percent). Some of the other admissions requirements mentioned included parental approval, having a school counselor recommendation, submission of a satisfactory personal essay, instructor or principal approval, a portfolio of work (for art and music), a statement of faith, and proof that the applicant had exhausted all of their other high school options. One stated that their institution did not have any academic eligibility requirements for DE.

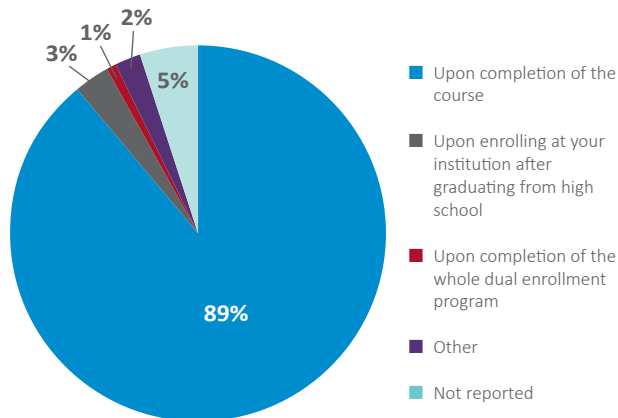
FIGURE 15
Academic Eligibility Requirements for Participation



A percentage similar to the IES study indicated that credit was awarded after course completion, but a lesser percentage than in the IES study recorded credit only if and after the student enrolled at their institution following graduation (Figure 16).

FIGURE 16

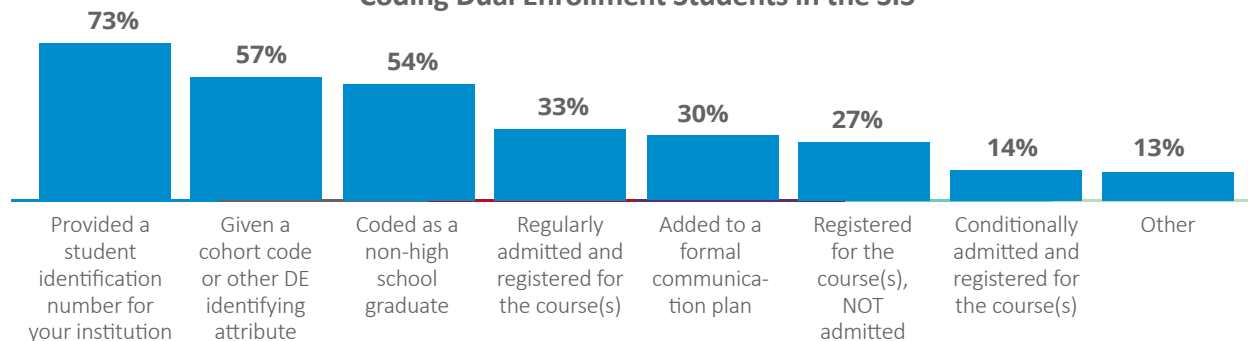
When Students are Awarded Credit



The process of coding DE students in the institution’s student information system (SIS) is a varied, multi-layered process. Most respondents indicated they used a student identification number, and more than half added the students to a cohort code or something similar, to differentiate and identify DE students from other student populations. More than half also coded the individual student as a non-high school graduate (Figure 17). About a third admitted and registered the DE students into their SIS and added them to a formal communication plan. The responses varied for those who selected and provided details for the “other” coding practices answer option. A fair percentage reported coding DE students as “non-degree,” others as “visiting student,” “early entry,” or as only admitted for a single term at a time.

FIGURE 17

Coding Dual Enrollment Students in the SIS



State Goals Lead to Boom in Dual Enrollment

Anna Mays, Associate Vice Chancellor, Educational Policy & Student Success

Nancy Faris, District Director of Academic and Student Records

Dallas County Community College District
Public, Lower division only
Enrollment - 20,000+

The Dallas County Community College District (DCCCD) is a network of seven independently accredited colleges in Dallas County, Texas. Dual credit legal agreements with partner schools are made with DCCCD (the legal entity) on behalf of each DCCCD College. Each College negotiates the courses and programs that they are asked to offer for dual credit students by the Independent School Districts that are pre-approved by the Texas Higher Education Coordinating Board and Texas Education Agency.

Legislative changes over the last decade have dramatically changed how the district has conducted its dual enrollment options. Ms. Mays stated that because of Texas' new higher education strategic plan, "60x30TX" it is expected that by 2030, 60 percent of the Texas workforce aged 25 to 34 will have postsecondary credentials. This plan has resulted in several policies to increase college readiness and accelerate the pace at which students are attaining credentials. Dual enrollment has and will continue to play a key role in preparing students for postsecondary opportunities. In a continued effort to meet this goal, DCCCD introduced eight collegiate academies in Fall 2016 and is currently reaching 13,500 students, as of Fall 2015, through dual enrollment courses and other Early College High School students. This represents an increase of more than 4,000 students since Fall 2014. Ninth to 12th grade students can complete Core Curriculum or Career and Technical Education (CTE) courses in the dual enrollment program. These two pathways can lead to the completion of certificates, degrees, or transfer options to other colleges and universities. Enrollment in CTE courses has increased significantly.

At DCCCD, dual enrollment begins with the assessment process – the Texas Success Initiative (TSI) Assessment, SAT, or ACT – which requires that high school students must meet college-level English, math, and reading requirements to enroll in dual enrollment courses. High school and college staff inform students of the TSI requirements using web-based resources. All prospective students are contacted by the high schools and offered pre-assessment preparation before the tests and all who subsequently qualify are admitted to the dual enrollment program, with their parents' permission. Research conducted by DCCCD found that participating students have excelled; 83 percent of students pass their dual enrollment courses. Consistent with the literature, they are also more likely to attain a postsecondary credential.

In addition to encouraging dual enrollment students to matriculate into one of the DCCCD colleges after high school graduation, the goal is also to expose high school students to college courses and improve college and career readiness. One challenge faced by the District is the need for increased funding as the demand for dual enrollment grows. With increasing demand, the District must have sufficient funds in order to expand and sustain its dual enrollment options. Tuition is free to students and parents, supported through tax revenues and state funding. If the trends in reduced state funding and increased enrollment continue, the District will have to reevaluate its approach, but for 2016-17, the focus is to continue providing quality college-level courses to K-12 partners.

State Legislation and Dual Enrollment Expansion

Jefferson Blackburn-Smith

Vice President of Enrollment

Otterbein University

Private, Not-for-Profit

Undergraduate, Graduate, and/or Professional

Enrollment: 1,000 – 2,499

Otterbein University (Otterbein) is a private, not-for-profit, four-year institution that has maintained dual enrollment courses for five years. The institution has used dual enrollment as a recruiting tool, community service mechanism, and strategic enrollment initiative. For example, Otterbein is able to use existing capacity in the curriculum to generate additional revenue without adding instructional costs. Also, by partnering with Columbus City Schools, the largest urban district in Ohio, to create specialized summer enrollment opportunities, Otterbein is able to increase the racial/ethnic and socioeconomic diversity of the campus. As a result of changes in state mandates and legislation, Otterbein University has been able to expand the scope of its services and curriculum to more districts. The state mandates that the institution can negotiate dual enrollment options with districts that are within 30 miles of its campus. This has given Otterbein the opportunity to build relationships with a larger base of superintendents, counselors, and advisors and therefore a larger potential student population. The legislative changes have also made the market in Ohio for dual enrollment offerings very competitive. The state transfers funding from the school district to the institution of higher education based on where the course is offered (on campus or in the high school) and by whom (college or high school faculty.) Public IHE also receive state share of instruction. The new funding model allows private institutions to negotiate rates above the state ceiling, paid for by the student, which has increased interest from the private sector. Otterbein has seen dual enrollment grow from 10 students in Fall 2010 to 72 in the Fall 2015.

In an effort to build accountability and success in Otterbein's dual enrollment

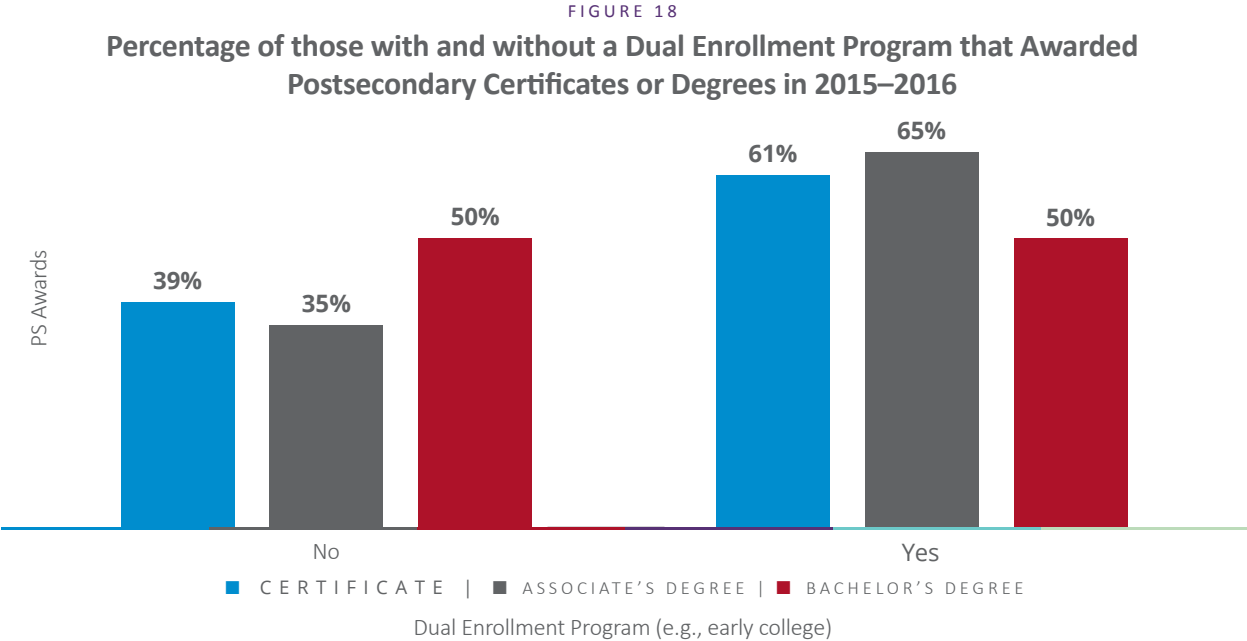


programs, strong relationships are built with the faculty who are teaching in the program. Otterbein's dual enrollment program is overseen by the academic affairs and enrollment management offices. Enrollment management is responsible for duties related to recruitment. The Office of Academic Affairs is responsible for any issues pertaining to the curriculum or faculty. Orientation, registration, and advising duties are shared between the two divisions. This inter-departmental system has been beneficial for Otterbein's administration and allows for interdisciplinary discussion and transformation of the dual enrollment program.

Dual Enrollment Programs (e.g., Early College)

In 2002, eight organizations started the Early College High School Initiative to raise college completion rates among students perceived to be “unlikely to attend or succeed in college” (Webb and Mayka, 2011). Webb and Mayka reported that most of the more than 46,000 students enrolled in these programs during the 2009-2010 academic year were students of color and classified as eligible for free or reduced-price lunches. According to *Jobs for the Future*, early college programs now serve more than 80,000 students (Jobs for the Future, 2016).

In our sample of postsecondary institutions, 27 percent offered a DE program compared to 12 percent in the 2010-2011 report (69 percent “No” and 5 percent “not reported”). Not unexpectedly, the institutions with DE programs awarded a higher percentage of the postsecondary certificates and degrees to high school students during the 2015-2016 academic year than those institutions without an early college program (Figure 18).



Respondents were asked if their institutions offered DE programs that specifically served at-risk and/or underrepresented students. Similar to the IES data, few differentiated programmatically for these two populations. However, among those that did differentiate for at-risk students (n=16 or 20 percent of those that offered

DE programs), the number of students enrolled in these programs was fewer than 100 for three-quarters of respondents. About half of these institutions provided extra support services for these students in the form of tutoring, study skills programming, and academic advising. Less than half provided help with the college application process and financial aid counseling. These responses are similar to those in the IES report, which was based on a much larger sample. Among the 12 institutions that indicated offering a DE program specifically for under-represented students, few offered additional support services for these students.

Dual Enrollment Faculty, Curriculum, and Funding

The Higher Learning Commission (HLC), NACEP and others have set accreditation standards for DE instruction. The HLC, an accrediting body for 19 states, specifically states within its criteria for accreditation, which went into effect in September of 2014, that “The institution maintains and exercises authority over the prerequisites for courses, rigor of courses, expectations for student learning, access to learning resources, and faculty qualifications for all its programs, including dual credit programs. It assures that its dual credit courses or programs for high school students are equivalent in learning outcomes and levels of achievement to its higher education curriculum” (Higher Learning Commission, 2014). A report by the Midwestern Higher Education Compact (MHEC) and the ECS found that there is no consistent state standard regarding DE instructor qualifications (Horn, Reinert, Jang, & Zinth, 2016). Thirty-five states require that DE instructors must meet the same requirements as faculty at the postsecondary institution, and 10 states require DE instructor qualifications meet relevant accreditation agency standards. The HLC also requires that high school instructors “hold a master’s degree” and “complete a minimum of 18 graduate credit hours in the discipline in which they teach.” Comparatively, as reported by Horn, et al., the Southern Association of Colleague and Schools Commission on Colleges (SACSCOC) “...when an institution uses faculty credentials to document qualifications, then faculty teaching general education courses at the undergraduate level [should have a] doctorate or master’s degree in the teaching discipline or master’s degree with a concentration in the teaching discipline (a minimum of 18 graduate semester hours in the teaching discipline).” NACEP on the other hand, states that DE instructors are “approved

by the respective college/university specific academic department and meet the academic department’s requirement for teaching the college/university course” (National Alliance of Concurrent Enrollment Partnerships, 2009). Although these qualifications are necessary as a measure of quality assurance in DE courses, this may leave some high school instructors without the required credentials. In fact, depending the granularity of the “teaching discipline” and on how a transcript is interpreted (e.g., course number and title versus course content), we argue that most high school instructors might not meet the 18 graduate semester hours requirement.

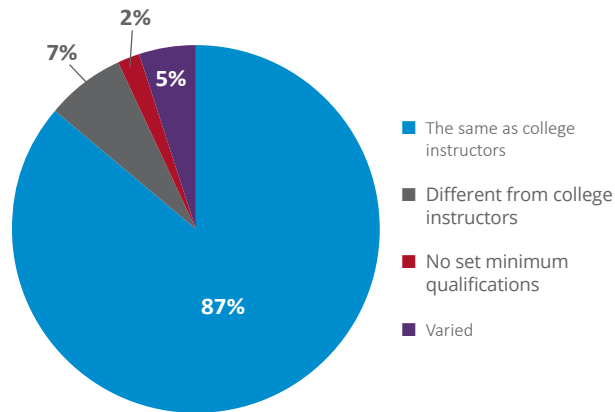
Consequently, and similar to the IES study, we asked the respondents to report, among other queries, on who teaches the DE courses, their

requirements for teaching, curriculum content, and how the courses are funded. Unlike the IES study, a much smaller percentage in this sample indicated that the courses were taught by high school instructors only (9 percent vs. 34 percent), but a higher percentage reported that only college instructors taught the courses (38 percent vs. 21 percent), and about the same percentage indicated that both high school and college instructors taught the courses (50 percent vs. 45 percent).

In both the IES report and this one, the same percentage denoted that the high school instructors and college instructors had the same minimum qualifications (Figure 19). More than half of the institutions that offer DE reported taking steps to monitor or approve the DE instructors.



FIGURE 19
Minimum Qualification for High School Instructors*

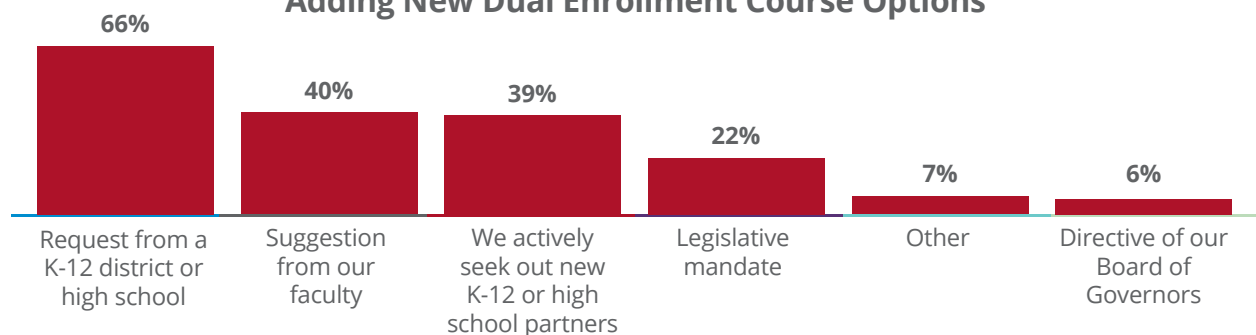


*Minimum Qualification for High School Instruction (n=238)

Almost 8 in 10 align the DE curriculum with the equivalent course on their campus, while just 3 percent use a curriculum designed specifically for high school students (13 percent “it varied”, and 5 percent “not reported”).

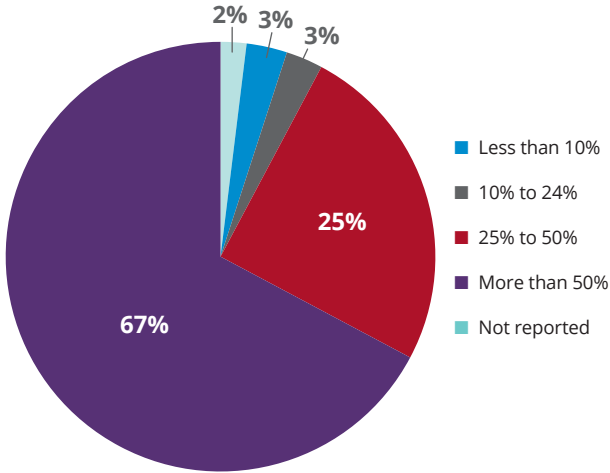
Most institutions with a DE program will add a new DE course upon request from the K-12 partner; others will at the suggestion from the institution’s faculty (Figure 20). About four in 10 actively seek new K-12 or high school partners to expand their DE offerings. Other impetus for adding DE content included availability of a grant, suggestions by parents of high school students, and requests by business and industry members. Some institutions offer a limited DE program, with no intentions of expanding.

FIGURE 20
Adding New Dual Enrollment Course Options



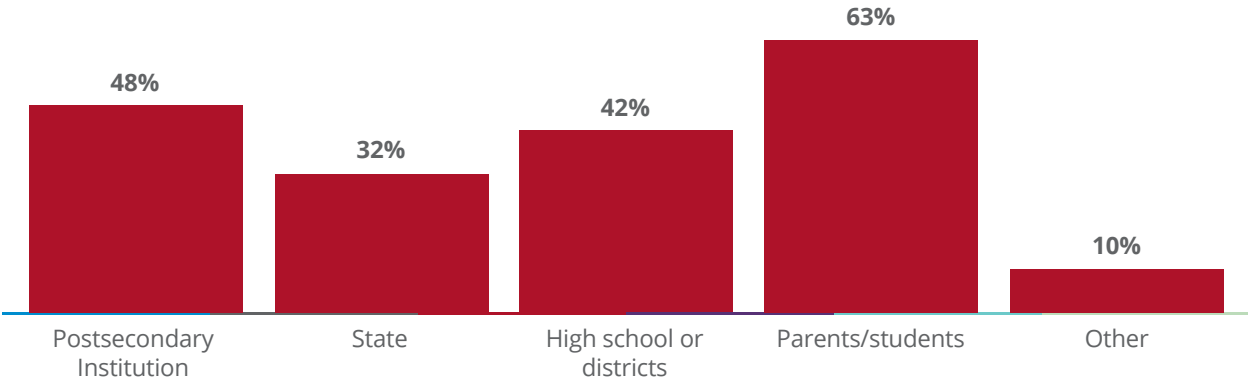
Similar to the IES findings, 58 percent discount tuition for DE students; two-thirds of those that discount do so by more than 50 percent (Figure 21).

FIGURE 21
Rate of Tuition Discount



The most commonly reported funding source for DE for a portion of the tuition was the parent/student, followed by the postsecondary institution, the high school/school districts, and the state. (Figure 22). These contribution percentages differ from the IES findings, which found the postsecondary institution to be the most common source of funding, followed by parents and students. Other sources of funding in this sample included grants, tuition-free courses, private donors, and community partners.

FIGURE 22
Funding Sources for Dual Enrollment Tuition



Reflecting and Supporting the Surrounding Community

Renee Tastad

Dean of Enrollment Management

Holyoke Community College

Public, Lower Division Only

Enrollment: 2,500 – 4,999

Access to education is the central mission of Holyoke Community College (HCC), and the driving force behind HCC's approach to dual enrollment programming. HCC offers dual enrollment not only to students who have achieved high marks and are likely to enroll in postsecondary education—those who use dual enrollment courses to build credits in preparation for enrolling at a four-year institution—but also to at-risk and underrepresented students, as a rigorous alternative to the high school curriculum.

“Although many dual enrollment students expect to go to college, quite a few have never considered college as an option,” said Dean Tastad. “This program enables them to realize that college is a very real possibility.”

One of Holyoke's primary feeder



institutions is Holyoke Public Schools, where graduation rates are lower than the state average and students are less likely to attend college. According to Dean Tastad, “the Massachusetts Board of Elementary and Secondary Education placed Holyoke Public Schools under state receivership in April 2015. HCC has been serving in a rather unique role, working with the receiver and other stakeholders to help meet the goals of the turnaround plan, which include increasing college access and introducing students to a variety of career pathways.” For Holyoke Public Schools, HCC’s dual enrollment program provides students with both exposure to a college environment and the opportunity to identify satisfying career options.

Another central tenet of HCC’s mission is to be responsive to community needs and reflect the diverse ethnic makeup of its community. The growth in the region’s Latino population (Holyoke Public Schools’ student population is over 79 percent Latino) is reflected in HCC’s student population, and the college is now preparing for federal Hispanic Serving Institution (HSI) status. Recognized as a best practice in the recruitment and retention of Latino students, dual enrollment is also part of HCC’s strategic initiative in preparation for this designation.

The College is also fortunate enough to be one of 44 institutions to be selected for the Department of Education’s Dual Enrollment Pell Experiment. The Pell Experiment, announced in May 2016, allows select institutions to provide earlier access to financial aid for low-income students enrolled in dual enrollment options. The goal of this experiment is to promote college access, participation, and success of low-income students. Although students who participate in dual enrollment at HCC have higher pass rates than degree-seeking students, cost to participate is a barrier. The Dual Enrollment Pell Experiment reduces that barrier and expands enrollment options for more students. For students of Holyoke Public Schools, this opportunity is real. The number of students participating in dual enrollment from Holyoke Public Schools has increased from two in the Fall 2015 to 69 in the Fall 2016.

Unique, Specialized Dual Enrollment Option

Barbara Elliott

Director of Enrollment Planning

Pennsylvania College of Art & Design

Public, Undergraduate

Enrollment: Under 1,000

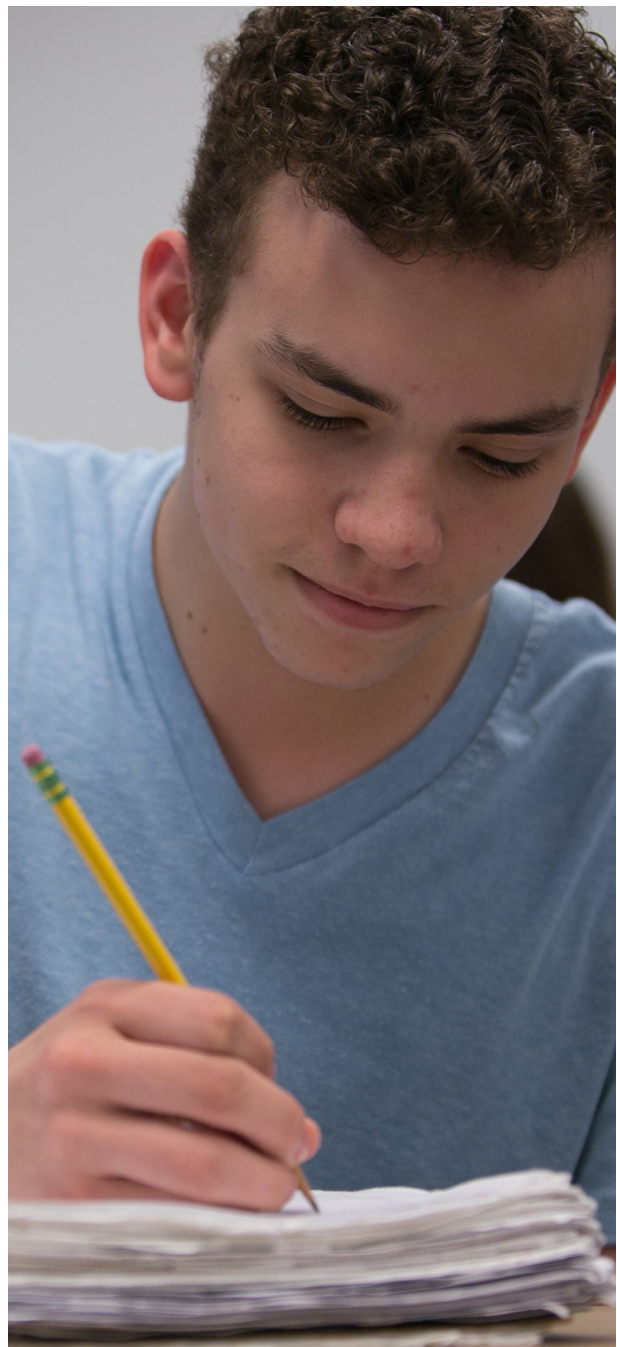
Pennsylvania College of Art & Design (PCAD) is a small, co-educational, undergraduate institution that specializes in the visual arts. Its bachelor of fine arts (BFA) degree programs vary from fine arts to graphic design, digital media to photography. PCAD may be unique among dual enrollment colleges in that it does not dually enroll high school students in more traditional core studies such as English, science, and mathematics, but instead provides college-level core art courses such as drawing and 2-dimensional and 3-dimensional design. A hands-on studio environment ensures frequent interaction with faculty and enables



dual enrollment students to be deeply immersed in their coursework and to become part of a community of artists and designers.

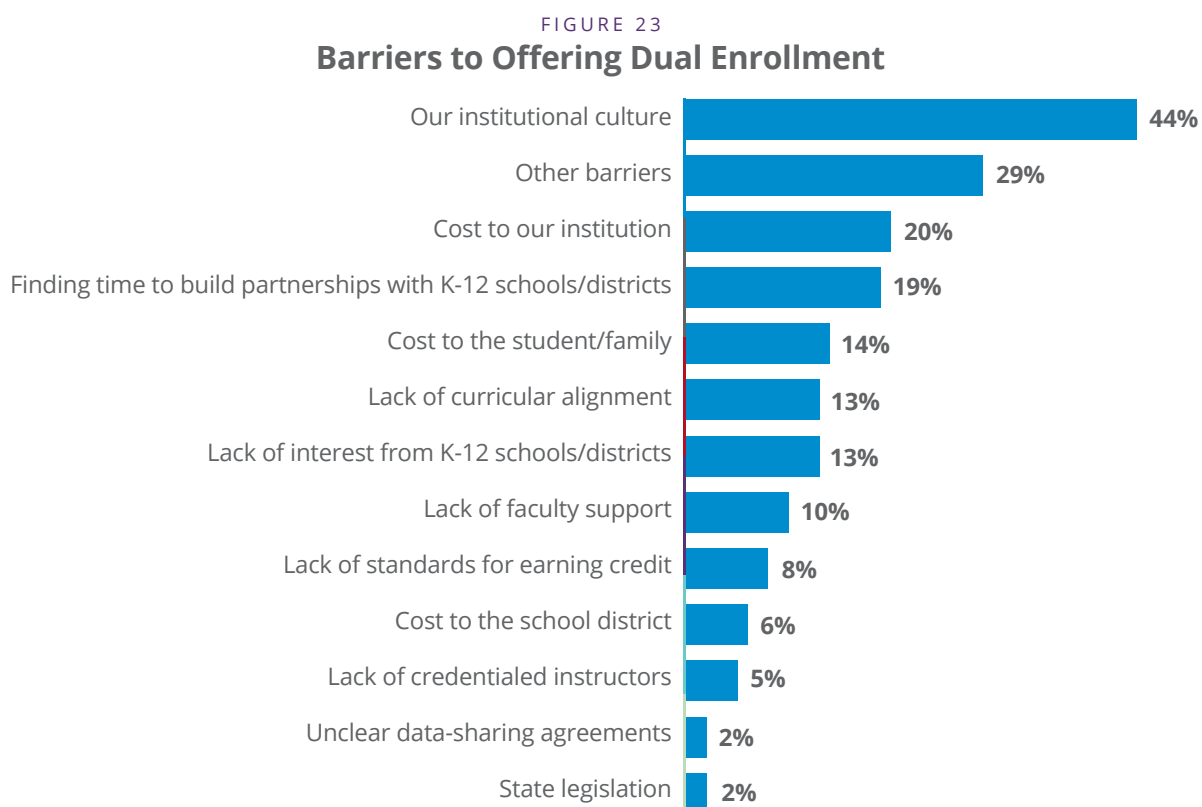
As an undergraduate-only institution with a small student population, PCAD's dual enrollment program usually attracts only one high school student per academic year. However, PCAD maintains regular contact with area schools that contract dual enrollment agreements to ensure that this opportunity is circulated. As a college of art and design, PCAD has found that communicating with art teachers is an effective way of targeting prospective students. Art teachers are frequently mentors to aspiring young artists and will encourage talented students to consider dual enrollment in studio courses. Many times the art teachers are the first point of information to students about PCAD's dual enrollment courses and often help them to complete the steps necessary to enroll.

Because PCAD's dual enrollment program appeals to students interested in pursuing art, the talent and personal interests of the students serve to motivate them to pursue dual enrollment studio work. During the dual enrollment process they learn a lot about the PCAD programs and are provided application fee waivers. Admissions follows up with the guidance offices to ensure that they know the steps for application should the student return and express interest in the BFA. Over the years, several dual enrollment students have gone on to pursue a BFA.



Why Institutions Do Not Offer Dual Enrollment Programs

The 22 percent of this sample not offering any DE programs or courses during the 2015-2016 academic year were asked to select the barriers against offering DE at their institution (Figure 23). Culture was a barrier for 44 percent followed by “other” barriers (29 percent), cost (20 percent), and time to build partnerships (19 percent). “Other” barriers included a perceived lack of preparation by high school students for courses that might be offered, lack of staff to administer the program, not fitting into the institution’s mission, believing that community colleges were already filling the niche, and, finally, constraints imposed by the institution’s current accreditation.



In this non-participant sub-sample, 18 percent (n=15) offered DE prior to the 2015-2016 academic year (Figure 24). About one-third of this sub-sample ended their DE programs because of a lack of interest from K-12 schools/districts (Figure 25).

FIGURE 24
Dual Enrollment Options Prior to 2015–2016

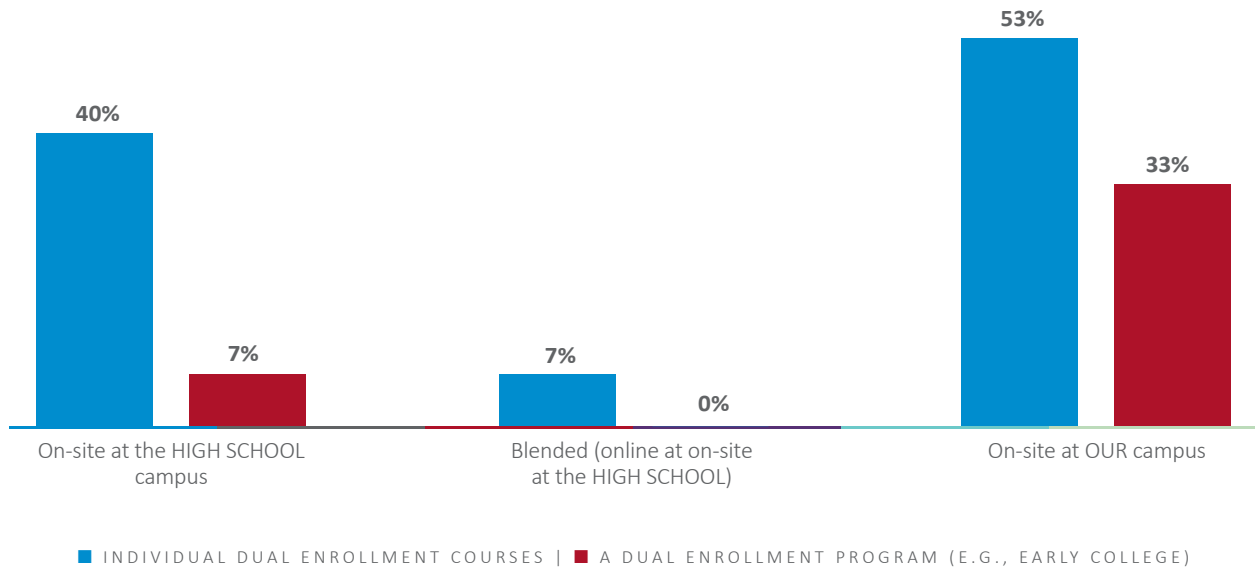
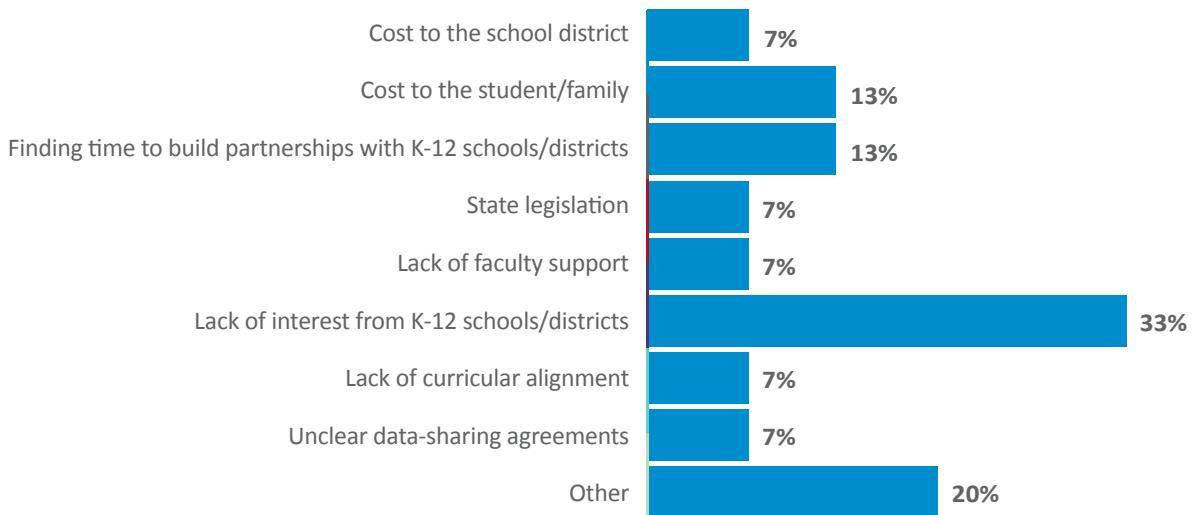


FIGURE 25
Factors Leading to a Decision to End Dual Enrollment

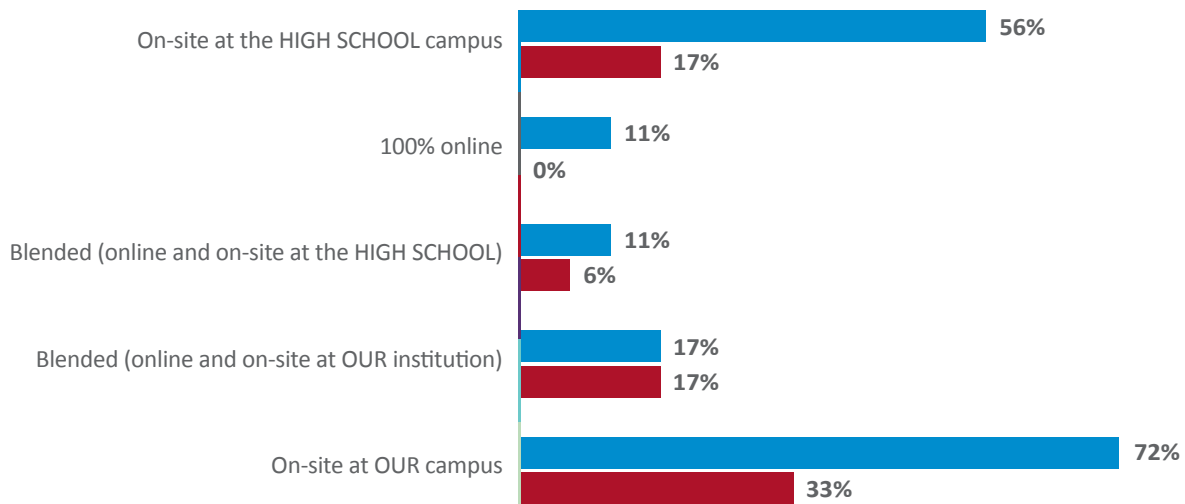


Eighteen (or 21 percent) of the non-participating respondents are considering offering DE within the next 12 months. Of these, almost three-quarters are considering adding DE courses on their campus and slightly more than half on a high school campus (Figure 26). Reasons for those plans include:

- Outreach to high school students as a means to encourage enrollment at their institution after high school (i.e., a strategic enrollment initiative);

- “To give students a leg up prior to starting college and assist with affordability”; and
- Lower division courses are now part of the institution, and DE is a great opportunity for the local high school students and their institution.

FIGURE 26
Dual Enrollment Options Under Consideration



■ INDIVIDUAL DUAL ENROLLMENT COURSES | ■ A DUAL ENROLLMENT PROGRAM (E.G., EARLY COLLEGE)

Acceptance of Advanced Placement and/or International Baccalaureate Credit

Credits earned through AP and IB are another way for high school students to earn college credit while still in high school. In 2013, more than 1 million high school students enrolled in AP courses. Of those, about 60 percent earned a score high enough to meet the threshold at which the College Board recommends postsecondary institutions accept credit (The Center for College Affordability and Productivity, 2016). Enrollment in an AP class is free, but each course test costs \$96. With 40 percent of students paying for and taking the test not earning a high enough score for college credits, this is an expensive proposition for some. Similarly, the IB program has costs associated with taking the completion exams (\$52 registration fee and \$74 per exam, effective September 1, 2016). To date, no research exists that completes a state-by-state cost comparison of IB and AP vs. an average cost for a DE credit hour. Therefore, it is unknown which college credit approach (DE or AP/IB) is most cost effective. However, the AP/IB programs remain

popular as measured by their level of acceptance by postsecondary institutions.

Ninety-three percent of institutions in this sample accept IB and/or AP credit.

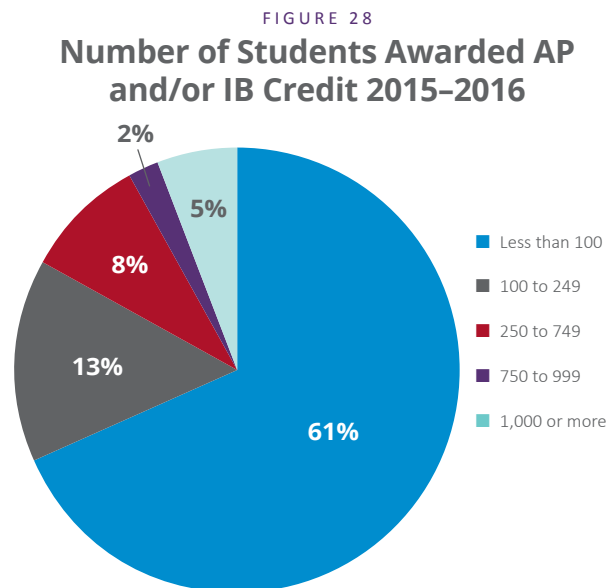
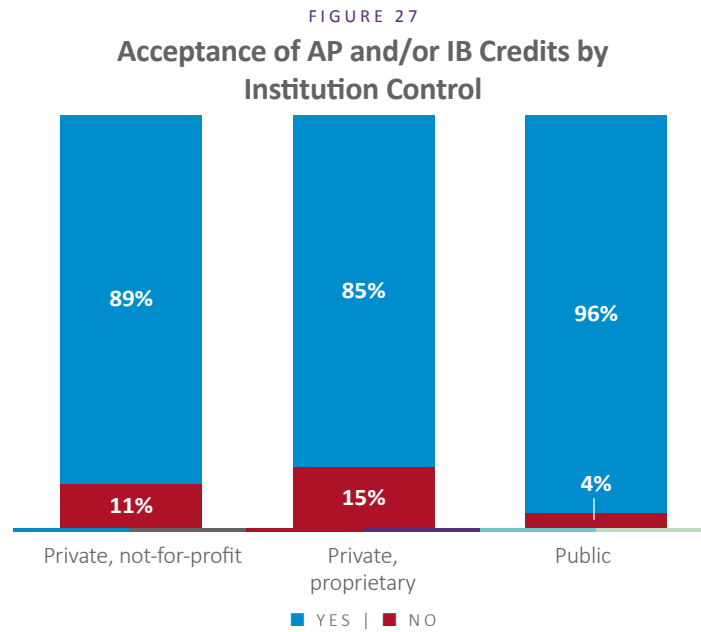
Public institutions are more likely to accept them than are private institutions

(Figure 27). Of the 93 percent, 9 out of 10 accept AP credits and about half (53

percent) accept IB credits. Of those institutions in this sample that accepted

credits, 61 percent awarded 1,000 or more students credit from these programs in

2015-2016 (Figure 28).



Just 16 percent of those that accept AP and IB actively use and promote either option to support student success and/or student diversity on their campus. Most commented on promoting the program(s) to high school students as a means to meet general education requirements or to otherwise earn credit toward a degree at their institution. One institution reported weighting the credits in the admissions process, and another uses participation as a proxy for assessing the academic ability of potential students.

Several respondents provided additional comments related to IB and AP. A selection of those comments is included here:

- “Our preference is for students to enroll in college courses through dual enrollment.”
- “Accepting AP and IB credits remains a somewhat contentious practice on my campus because we find that students aren’t truly completely academically prepared to move on to the next course level as a result of AP and IB coursework, but we lose a competitive recruiting tool if we stop accepting these exams for course equivalency.”
- “Many of our area schools offer significant amounts of AP; however, even with mandatory testing, students are not scoring high enough - despite good grades. Students are often disappointed that AP is not college credit without the passing of the exam.”
- “We encourage dual credit because it is college credit and more easily transfers to four-year institutions. AP is often accepted as a course, but students still have to earn the same number of credits. With dual-credit it generally means they generally save money and graduate early or on-time.”
- “We accept IB and AP in order to remain competitive in the admissions process.”
- “Likely a better gauge of readiness than Dual Credit -- at least for now.”
- “AP and IB work for satisfying general education requirements that are part of my institution’s workforce education programs.”

Skepticism Limits Dual Enrollment's Progress

Brad Barron

Associate Dean & University Registrar

Furman University

Undergraduate, Graduate, and/or Professional, Private, Not-for-Profit

Enrollment: 2,500 – 4,999

At this time, Furman University does not offer any dual enrollment options in conjunction with local school districts. Furman has discussed partnering with K-12 schools in the past, but the relationships did not blossom into agreements. In South Carolina, dual enrollment options are voluntary which means high schools or school districts and postsecondary institutions may enter and exit dual enrollment partnerships on their own volition. Although Furman does not offer any dual enrollment courses now, they are not adamantly opposed to the concept under their control. As institutional enrollment goals evolve, and as dual enrollment practices mature, the institution may likely reconsider attempts to arrange partnerships on this front.

Another significant factor hindering the adoption of dual enrollment courses at Furman is skepticism among faculty about the level of college-preparedness imparted to students who participate in these course from other institutions. The institution regularly matriculates high school graduates who bring with them some college credit earned through dual enrollment. Increased scrutiny is applied to the evaluation of these transfer courses to establish equivalency to one of Furman's courses. This practice was adopted at the advent of dual enrollment's popularity in the 1990s and is still required because the faculty remains skeptical about the rigor of courses completed through these arrangements. Moreover, the state does not currently have a clear course equivalency system established for dual enrollment and college-level courses.

Financial Limitations Threaten Dual Enrollment

Sheila Jarrell, Registrar

Dean Holbrook, Foundation Studies Dean

Heather Mulcaire, Director of Recruitment and Early College Programs

Yavapai College
Public, Lower Division Only
Enrollment: 2,500 – 4,999

Yavapai College (Yavapai) in Prescott, Arizona, has provided dual enrollment options to district partners for 14 years, currently serving around 1,500 students per year. This program has provided local high school students with an opportunity to not only earn credits, but also to earn a certificate through Yavapai before graduating from high school. Yavapai also partners with the Joint Technical Educational Districts, offering career and technical education courses which enable high school students to earn college credits, industry certifications, and state licenses.

Arizona law mandates that all dual enrollment programs offered by postsecondary institutions must be offered on high school campuses. These classes are almost always taught by high school instructors, all of which must be certified by Yavapai College. Yavapai uses this program to provide a service to area high school students and also as a recruitment mechanism to encourage students to continue their education after high school at Yavapai. Administratively, the College's lead outreach person is also the lead for the Early College dual enrollment program. This enables the chief recruiter and recruiting staff to frequently interact with high school students and administrators to discuss opportunities beyond high school. The current matriculation rate for dual enrollment students is 30 percent.

Cost is one barrier that hinders the growth of the dual enrollment program at Yavapai College. For many years, the College was funded by the state based on a

full-time-equivalent (FTE) count, which helped offset the cost to both Yavapai and its partner schools. The state has severely reduced funding to community colleges on a FTE basis, and the College has decided to start charging tuition (at a discounted rate). Whether the burden of these charges will be passed on to the student/family or absorbed by the school is the choice of each school. Yavapai felt the need to implement fees in order to sustain its dual enrollment programs. This is a hot topic now, since some of the partner schools are upset with the change. Despite dual enrollment legislation expanding dramatically in many states, there are some cases, such as Arizona, where a lack of allocated funds to dual enrollment has left many institutions having to resort to charging tuition in order to maintain their services.

Reflections from a College President

Dr. William Serrata, President of the El Paso County Community College District, has a long and successful administrative history with using dual enrollment options in the context of strategic enrollment management. We approached Dr. Serrata to see if he was interested in sharing his expertise and experience on this subject. Included below are his closing thoughts on the subject:

My experience with dual credit began at South Texas Community College in 1997 with a total of 98 dual enrollment students. It was my honor to be a part of one of the fastest growing and largest dual credit programs in the state of Texas and certainly one of the largest in the nation, which upon my departure from South Texas College in 2012 exceeded 12,000 dual credit students participating at over 60 high schools, including 15 Early College High Schools and four Dual Credit Academies. While not as dramatic as South Texas, dual credit enrollment in Texas has grown exponentially over the past 16 years from just under 12,000 in Fall 1999 to over 133,000 students in Fall 2015. Ninety-four percent of the Texas dual credit students are part of the community college system. Dual credit is the only segment of higher education in Texas that actually mirrors the population of Texas. It is 46 percent Latino; 54 percent economically disadvantaged.

My belief in dual credit enrollment and programs, based on student success data, continues today at El Paso Community College where we currently serve more than 7,000 dual credit students with over 2,000 enrolled in our nine Early College High Schools. Student success remains the ‘North Star’ for the myriad initiatives, programs, and services that we implement or tweak at El Paso Community College (EPCC). Dual Credit courses and programs enhance our progress towards that ‘North Star.’ The following data points exhibit this point:

- Eighty percent of prior EPCC dual credit students over the past five years matriculate immediately into higher education.
- Fifty-eight percent of prior dual credit students matriculate directly to EPCC the following fall term versus 33 percent of high school graduates without dual credit.

- Upon enrollment at EPCC, former dual credit students have 90 percent success rates (Grades of A, B, or C) in courses.
- Prior dual credit students outperform every segment of the EPCC student body. Perhaps more importantly, prior dual credit students outperform every segment of the student body at The University of Texas at El Paso (UTEP) as reported by UTEP:
 - Prior EPCC dual credit students are 2.3 times more likely to graduate in four years or less.
 - Prior EPCC dual credit students increase the probability to graduate in six years or less by 60 percent.
 - Prior EPCC dual credit students are 1.4 times more likely to persist.
 - Prior EPCC dual credit students have higher GPAs.
 - 62 percent of prior EPCC dual credit graduates continue their education to post graduate programs.

I often share that while I am aware of parts of Texas and the nation that have more early college high schools than El Paso, I am not aware of any part of the state or nation that have more successful early college high schools than El Paso given the fact that 74 percent of EPCC Early College High School students receive their associate degree prior to graduating from high school while the national average is 30 percent.

Quality and Rigor Debate

How do you ensure the rigor and quality of dual credit courses and programs?

Based on the growth of dual credit enrollment in Texas – a questioning of rigor and quality is at the forefront of some higher education leaders and legislators.

The student success data displayed above is how we at El Paso Community College measure quality and rigor. Matriculation rates, subsequent course grades, persistence rates, retention rates, graduation rates, transfer rates, and success rates at the university all inform and ensure that the EPCC dual credit program maintains quality and rigor.

Faculty Credentials and Student Readiness

Every faculty member who teaches a dual credit course in Texas must meet the Southern Association of Colleges and Schools – Commission on Colleges faculty credentials, namely a master degree with 18 hours in the field/subject for academic transfer courses. In addition SACS-COC has made dual credit courses/programs/sites and faculty credentials an area of focus for accreditation reviews and visits to ensure quality and rigor.

Texas dual credit students must meet college readiness standards based on scores on the Texas Success Initiative Assessment, SAT, or ACT exams in order to participate in dual credit coursework.

The Path Forward – Balancing Access and Success

Spurred by the Lumina Foundation's Big Goal (60 percent of 25 to 34-year-olds will hold a degree or certificate by 2025) as well as other national initiatives, the movement to balance community college access with success has been a focus since 2004. The current national student success initiative is the Gates Foundation funded Guided Pathways Project led by the American Association of Community Colleges. These initiatives have a laser focus on student success. Much like what has become the re-focus of the community college mission—from access to access with success over the past 12 plus years now—so too will a reexamination and ultimately a re-focus of dual credit courses/programs occur. Dual credit with a purpose, i.e. ensuring that the dual credit course is a part of a student's path and a continuous evaluation of the quality of dual credit programs via accreditation process will prove to be staples within the dual credit evolution in higher education.

A final statement regarding dual credit courses/programs as it relates to meeting the larger goals of our respective regions, states, and ultimately, of our nation. I have explained during presentations, panel discussions, and even shared with state legislators, based on my experience with the overwhelming demonstrated success data of students when enrolled in dual credit courses/programs as well as their success when they matriculate as traditional students into colleges and universities, I don't believe in silver bullets in higher education but I can assure you that dual credit is certainly part of the silver buckshot!

Conclusion

A recent article in *Education Week* asked the question in its title “Are Dual-Enrollment Programs Overpromising?” The story reports on the concern that students who earn credits through these programs are facing challenges in transferring those credits. The story notes that “Very little research has been done on the proportion of students’ dual enrollment credits that are accepted by the colleges they attend.” While the latter statement is true for research based on student-level data, our study on institutional practices and policies does not give credence to the idea that a large percentage, or even a fair percentage, of students who earn credits through dual enrollment will have difficulty in transferring those credits to another institution. Although we found that private institutions are less likely than public institutions to accept DE credit in transfer, we found that overall 86 percent of institutions in this sample accept this credit with few restrictions. These results, paired with the fact that in 2014 more than three-quarters of the more than 17 million college-going students in the United States attended a public institution, make it even less likely that dual enrollment credit transfer is an issue affecting a large percentage of students. It is, however, the responsibility of higher education administrators to clearly communicate to participating students how the credits may or may not transfer and how to determine this in advance of the student spending time, and in some instances money, on a course that will not serve the purpose for which they intend.

Even with some possible limitations in the transferability of DE credits, we found that:

- Dual enrollment serves multiple purposes for many institutions. For more than 75 percent of the respondents, dual enrollment serves as a recruiting tool, closely followed by helping meet the mission of the institution, or as a community service mechanism.
- Fifty-nine percent have incorporated dual enrollment as a strategic enrollment initiative.
- Nine out of 10 “agree” or “strongly agree” that DE courses improve access to college courses.

- The percentage of institutions awarding certificates and associate’s degrees to high school students has increased since the IES study.

As such, dual enrollment is, and we believe will continue to be, an important strategy for postsecondary institutions to expand opportunities for student success.



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