



Solving the Dual Enrollment Staffing Puzzle

STRATEGIES FROM THE EARLY COLLEGE EXPANSION PARTNERSHIP



JOBS FOR THE FUTURE



EDUCATE TEXAS

a public-private initiative of Communities Foundation of Texas

By Sarah Hooker • November 2017



Jobs for the Future (JFF) is a national nonprofit that builds educational and economic opportunity for underserved populations in the United States. JFF develops innovative programs and public policies that increase college readiness and career success and build a more highly skilled, competitive workforce. With over 30 years of experience, JFF is a recognized national leader in bridging education and work to increase economic mobility and strengthen our economy. Learn more at www.jff.org.



Educate Texas, an initiative of Communities Foundation of Texas, has established a robust public-private partnership that has aligned key stakeholders within the K-12 public and higher education systems. With the goal of increasing the number of low-income, minority, and first-generation students who will graduate from high school and attain a postsecondary credential (two-year, four-year, or technical postsecondary education), Educate Texas is pursuing the following vision: strengthen the public and higher education systems so that every Texas student is prepared for educational and workforce success. Educate Texas' mission is to increase postsecondary readiness, access, and success for all students by building partnerships, leading innovation, and scaling practices and policies.

With Texas workforce projections suggesting that 60% of adults will need a postsecondary credential by 2030 to be gainfully employed, Educate Texas has identified four areas of focus: college and career readiness, higher education, regional collaboration, and effective teaching. By implementing a collaborative approach with both public and private partners, Educate Texas identifies high potential innovations, pilots the efforts to determine which strategies could benefit the entire education system, and then replicates and scales those found to be most impactful.

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EARLY COLLEGE EXPANSION PROJECT

The ECEP is a five-year initiative funded by an i3 grant from the U.S. Department of Education. The grant, now in its final year, has two main goals: (1) to scale up early college designs as system-wide secondary school improvement and college readiness strategies for all students in three school districts in South Texas and Denver; and (2) to position early college designs for sustainability and further scale-up within South Texas, metropolitan Denver, and beyond.

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INTRODUCTION

A large and growing number of young people are taking college courses in high school, as districts expand dual enrollment in an effort to increase postsecondary readiness and success.¹ The potential benefits are substantial: dual enrollment students are more likely to graduate high school, enter college, and complete a degree than other students.² The courses typically are tuition free, saving money for all families and providing a lifeline to youth who otherwise could not afford a post-high school education. Yet a dilemma looms as demand grows: a shortage of qualified instructors could slow down the spread of this proven strategy.

The problem, if not addressed, will affect the future of dual enrollment across the nation. The challenge is particularly acute for early college high schools, which target underserved populations and provide every high school student the opportunity to earn an associate's degree or substantial college credit along with their diploma.

Instructors need a unique set of skills and knowledge to teach high-quality college courses for students in the "transition zone" between secondary and postsecondary education. College faculty are subject matter experts, but most lack training in pedagogy for teaching adolescent learners. Meanwhile, few high school teachers have the

advanced subject matter training necessary to teach at the postsecondary level. There are no simple solutions, and early college leaders find themselves weighing various staffing options. Every approach involves significant educational and financial tradeoffs.

This brief explores those tradeoffs as it examines the innovations and investments that a select group of forward-thinking school districts and their postsecondary partners have used to address their dual enrollment staffing challenges. The paper is part of a series documenting the work of the Early College Expansion Project, a five-year initiative funded by an Investing in Innovation (i3) grant from the U.S. Department of Education. The grant, now in its final year, has a goal of scaling up early college designs to reach an additional 30,000 students in three school districts in South Texas and Denver. Jobs for the Future (JFF) and Educate Texas are ECEP partners, and have provided strategic advising for district leaders, leadership coaching for principals, and instructional coaching for teachers.³ All three of the districts have seen substantial increases in dual enrollment participation rates since the initiative began in 2012.⁴

To inform this report, JFF interviewed senior district administrators, managers responsible for various

components of early college implementation, a sample of high school administrators, and liaisons from partnering higher education institutions in each of the three sites—Brownsville Independent School District, Pharr-San Juan-Alamo Independent School District (PSJA), and Denver Public Schools. The analysis focuses on courses delivered through partnerships with community colleges, as they provide the majority of college courses in ECEP high schools, though four-year universities also play an important role in each site.

As all three districts have found, expanding early college (and dual enrollment generally) requires a careful balance of instructor quantity, quality, and cost-effectiveness. While the i3 grant provided a temporary catalyst for their efforts, the sites soon will face the challenge of sustaining their human capital strategies

without additional, dedicated federal funding. Lessons learned from their experiences can be instructive for other leaders interested in expanding college course taking in high school.

This paper starts with an overview of the dual enrollment staffing dilemma and the factors contributing to a shortage of qualified instructors. The next section presents a set of lessons drawn from the range of strategies that the three ECEP districts have used thus far to maximize and expand their pool of dual credit faculty. This cross-site summary is followed by case studies that illustrate the approaches used in each of the ECEP districts. The conclusion offers longer-term recommendations for addressing staffing needs as part of a holistic, regional plan for strengthening early college and career pathways.

Qualifications Required for Dual Enrollment Instructors

In order to ensure that courses delivered through dual enrollment meet the same quality standards as other college courses, states and regional higher education accreditation agencies have adopted instructor requirements. In many cases, states' dual enrollment policies include a provision that the qualifications of high school teachers serving as college adjuncts must be equivalent to those of faculty at the partner college.⁵ Accreditors' requirements are often more specific.

The Higher Learning Commission (HLC), which is the accreditation body for postsecondary institutions in 19 states, including Colorado, cast a spotlight on this issue when it reaffirmed its minimum qualifications for adjunct faculty in 2015: All instructors must either (1) hold a master's degree in the discipline of each course they teach, or (2) hold a master's degree in another field, plus a minimum of 18 graduate credit hours in the discipline or subfield in which they teach.⁶

The HLC policy has caused alarm for dual enrollment partnerships in all affected states.⁷ Many K-12 teachers have master's degrees in education, but they seldom have the discipline-specific graduate courses needed to teach math,

chemistry, or other core subjects at a college level.⁸ Denver Public Schools, for example, recently found that fewer than 20 high school math teachers, in a district with 38 high schools, held a master's degree in math.

The accreditation body for postsecondary education institutions in Texas and 10 other states, known as the Commission on Colleges for the Southern Association of Colleges and Schools, has a similar requirement, though it affords institutions more flexibility to justify that an instructor's graduate degree is relevant to the course being taught.⁹ Still, meeting these standards has proven a universal challenge for districts.

While this brief focuses primarily on the supply of dual credit faculty for academic courses, the field of career and technical education (CTE) faces a similar shortage of instructors who are qualified to deliver courses for both high school and college credit. CTE teacher credentialing requirements—which typically include sector-specific work experience as well as a minimum level of education—vary between the K-12 and postsecondary systems, impeding efforts to develop and scale CTE pathways for grades 9 through 14.¹⁰

THE PIECES OF THE DUAL ENROLLMENT STAFFING PUZZLE

In some small, longstanding early college high schools, college courses are taught exclusively by college professors on the postsecondary institution's campus. Many observers consider this the ideal arrangement, as it gives high school students a more authentic higher education experience than the alternatives.¹¹

But in practice, especially for large dual enrollment programs, logistical problems abound. For example, there are limits on the number of high school students who can take classes on a college campus. At some point, as colleges expand their dual enrollment offerings, the increased number of students on campus would require more classroom space and possibly investments in new college facilities. There also would be hefty costs associated with transporting students between the high school and college locations.

In many cases, the logical solution is to offer the vast majority of college courses at participating high schools. In fact, in 16 of the 17 high schools participating in the ECEP i3 grant across Denver, PSJA, and Brownsville, nearly all college course taking occurs at the high schools, delivered by either college faculty or high school teachers who meet the qualifications to serve as college adjuncts. Nationwide, approximately three-quarters of dual enrollment takes place at the high school campus.¹²

However, the question of who should deliver the instruction—either college professors who travel to high schools or high school teachers serving as college adjuncts—remains up for debate, and research findings are mixed on the comparative advantages of either approach.¹³ Some stakeholders maintain that high school teachers typically have a stronger background and training in instructional strategies than their community college counterparts; others argue that college faculty are in a better position to uphold college-level rigor and norms. Either way, ensuring that dual enrollment courses are equivalent to college courses taught on the college campus requires close collaboration between the high school and its postsecondary partners. (See

box, “Instructor Quality: Efforts to Uphold Rigor and Enhance Professional Learning,” on page 13 of this brief.)

Supply Issues on Both Sides

Regardless of whether early college high schools prefer to use college professors or their own teachers to deliver college courses, they often have trouble recruiting enough instructors to meet the demand.

College professors are accustomed to—and often prefer—teaching older students, so postsecondary partners sometimes struggle to recruit faculty willing to offer courses in high schools. This challenge is exacerbated in competitive fields such as science, technology, engineering, and math (known as the STEM disciplines), which face national shortages as individuals with the advanced education needed to teach at the postsecondary level can command much higher salaries in other professions.

At the secondary level, meanwhile, relatively few teachers have the qualifications needed to serve as college adjuncts. (See box: “Qualifications Required for Dual Enrollment Instructors,” on previous page.) Postsecondary institutions must uphold state and regional standards for dual enrollment instructors—which typically require teachers to have completed a minimum number of graduate courses in the specific field being taught—or risk their accreditation status. Districts hoping to sustain and scale their dual enrollment programs must provide opportunities for their teachers to continue their education or find a new source of faculty.

A SET OF LESSONS FROM THE ECEP DISTRICTS

As education leaders and policymakers look to expand dual enrollment, they must pay close attention to staffing strategies. Financial sustainability is a key part of the equation, especially when offering college courses in high school is part of an ambitious, districtwide plan to transform all secondary schools into early college high schools. Other top priorities may include maintaining and upskilling the district's current teaching force and/or attracting new talent, while providing incentives for qualified instructors to take on the challenge of teaching college courses for dual credit.

In South Texas and Denver, the three ECEP districts and their college partners have taken the initiative to implement a variety of solutions to grow and stretch their corps of dual credit instructors. This paper uses select examples from each site to highlight a range of strategies for addressing this common growing pain. In reviewing the districts' approaches, JFF drew the following lessons that appear applicable for other secondary-postsecondary partnerships embarking on similar efforts:

1. Weight the costs and benefits of using high school adjuncts versus college faculty.

The best approach for each site will vary based on contextual factors such as cost-sharing agreements between districts and postsecondary partners, as well as state dual enrollment funding structures. (See Appendix: "Dual Enrollment Funding in Texas and Colorado.") For PSJA, which has implemented early college the longest of the three ECEP districts, the most cost-effective solution has been to use a consistent group of high school adjuncts who deliver as many sections of college courses as possible. (See cost analysis in PSJA case study below.) However, it is important to bear in mind that K-12 teachers may need incentives and supports to take on this challenge, especially if the bulk of their workload shifts to teaching college courses. Making changes in teacher assignments and compensation can

be a long-term process that requires engagement from many stakeholders, particularly in districts with a strong collective bargaining context.

2. Deploy qualified instructors strategically across district high schools.

By looking at staffing challenges and scheduling from a system-wide lens, district leaders may be able to identify opportunities to make better use of teachers who are already qualified to teach dual credit courses as adjuncts. For example, teachers could leave their home campus for a portion of the day to teach a course at another high school. Similarly, students could be transported to another high school to take classes not available at their home school. PSJA district administrators have recently promoted these solutions in an effort to reduce costs. (See PSJA case study below.) In a district with less centralized decision making, however, this type of strategic staffing may be more difficult to achieve, as it requires extensive coordination across schools and commitment to shared goals.

3. Maximize a limited supply of instructors by using innovative approaches to time.

It may be possible to stretch a limited pool of dual credit instructors by offering college courses at a central location after school, on the weekends, or during the summer. Brownsville and its community college partner have been able to implement this approach effectively. (See Brownsville case study below.) High school adjuncts can earn extra hourly pay for the additional responsibilities. However, courses outside the standard school day are more likely to attract highly motivated students and those with fewer out-of-school obligations. Part of the challenge of transforming a traditional high school into an early college will continue to be redesigning the master schedule to ensure that all students have access to the postsecondary courses they need.

4. Expand the ranks of qualified adjuncts by subsidizing the cost of graduate education for veteran teachers.

Districts may be able to widen their pool of dual credit instructors by providing financial assistance for high school teachers to obtain the graduate credits needed to be qualified as college adjuncts. Many districts offer tuition reimbursement programs for teachers who pursue graduate degrees. This paper highlights the unique model that Brownsville is using, in partnership with the University of Texas Rio Grande Valley, to subsidize the graduate education of teachers who commit to delivering college courses for dual credit upon the completion of the program. (See Brownsville case study below.)

5. Design and deliver graduate courses in an accelerated format tailored to current teachers.

Many high school teachers have master's degrees in education or related fields, but lack the 18 discipline-specific credits needed to teach college English, math, or other core subjects. This group is well-positioned for upskilling so that they can become college adjuncts. However, attending classroom-based, semester-long graduate courses can be particularly challenging on top of teachers' already-full schedules. As an innovative solution, Denver Public Schools partnered with Colorado State University's Global Campus to offer a fast-paced, online program that allows a cohort of teachers to finish 18 graduate credits in approximately 12 months. (See Denver case study below.)

The solutions discussed in this section—which are described in detail in the following case studies—represent short- and medium-term strategies being pursued by districts that are on the fast track to early college expansion. All of these strategies require investments but hold the potential for considerable payoff down the road, in terms of student outcomes. The concluding section of this paper explores a longer-term perspective on the type of capacity-building that will be needed to scale dual enrollment opportunities to a much wider group of high school students.

The Benefits of Dual Enrollment and Early College High Schools

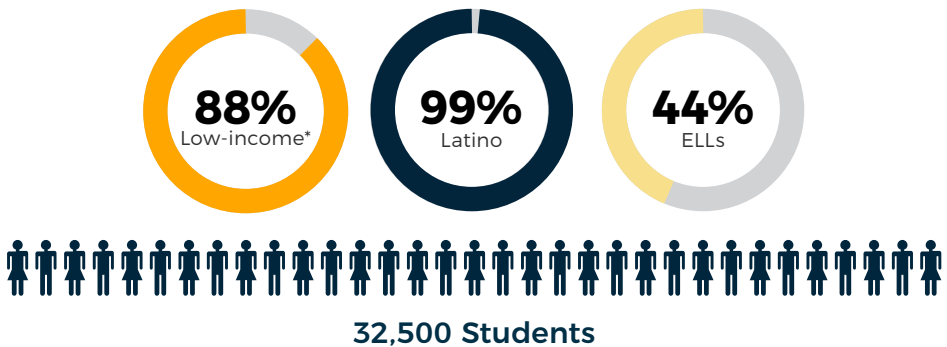
Earning college credit in high school improves postsecondary outcomes, resulting in potential cost savings:

- Dual enrollment participants are more likely than nonparticipants to continue on to college and earn an associate's or bachelor's degree.¹⁴
- Dual enrollment can improve the efficiency of public education systems. Based on JFF's 2013 cost-to-completion modeling, raising high school graduation rates for low-income students and providing 12 college credits by high school graduation results in a public savings of approximately \$3,000 per associate's degree per low-income student in Texas.¹⁵
- In early college high schools, earning substantial college credit by graduation is the norm. Thirty percent of early college students earn an associate's degree or postsecondary certificate by high school graduation, compared to very few nationally.¹⁶

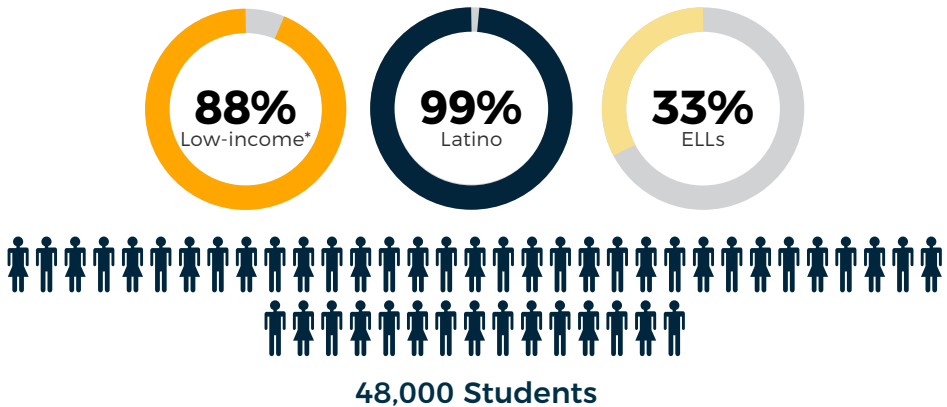
Three School Districts, Three Contexts for Change

All three districts in the ECEP enroll a disproportionately large share of students from low-income backgrounds and other groups that are underrepresented in higher education, including a high share of English language learners (ELLs). Aside from these commonalities, the districts have striking differences:

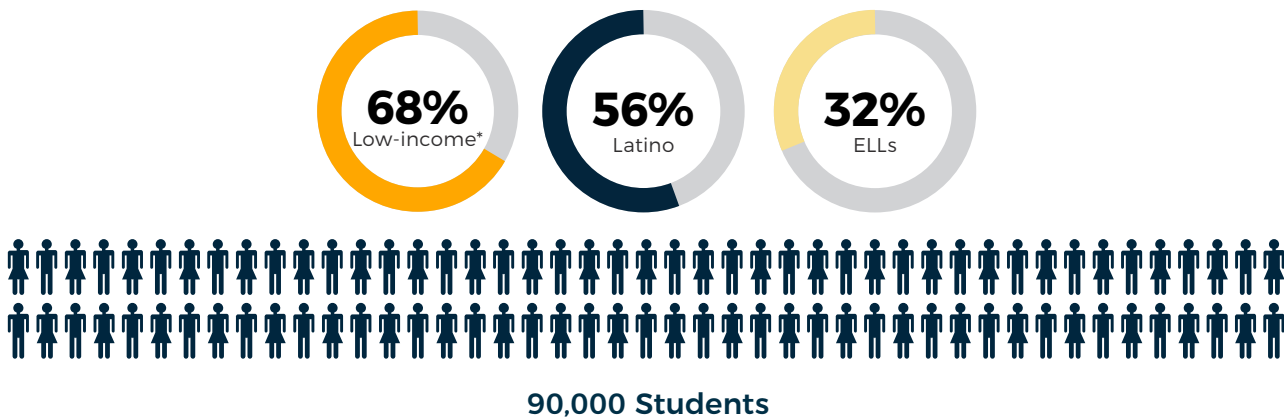
Pharr-San Juan-Alamo Independent School District (TX)¹⁷



Brownsville Independent School District (TX)¹⁸



Denver Public Schools (CO)¹⁹



**Refers to economically disadvantaged students, whose family incomes qualify for the federal free and reduced-price lunch program.*

Case Study

PSJA & SOUTH TEXAS COLLEGE

COST IMPLICATIONS OF SCALING UP STRATEGICALLY

PSJA offers a case study for examining the long-term financial tradeoffs of the two main dual enrollment staffing models. The cost considerations are similar in all of the ECEP districts. But PSJA has been implementing districtwide early college the longest—approximately 10 years—and is in the best position to see increasing returns on its investments because of its robust rate of dual enrollment participation and the growing number of credits earned by students at all high schools.

The district offers dual enrollment primarily through its longstanding partnership with South Texas College (STC). The public two-year institution is one of the largest dual credit providers in the state;²⁰ over 12,000 high school students from 22 districts are enrolled in its college courses.²¹

Dual credit staffing costs vary based on type of instructor

For any school district, the costs associated with dual enrollment typically depend on two factors: (1) the college’s per-credit tuition rate, which can vary based on location (whether the courses are taught on the college or high school campus), and (2) the type of instructor (either a college faculty member or a high school teacher serving as an adjunct instructor).

STC waives tuition for all early college students, whether the course is held at the college or the high school campus. Dual enrollment courses at high school campus can be taught by either an STC professor or a high school adjunct. When the high school brings in an STC professor to teach the class, STC charges the school district an “instructor fee,” which is based on the instructor’s salary, the course’s number of credit hours, and reimbursement for the instructor’s mileage (see box on this page). When a high school teacher delivers the course, the college waives the instructor fee. The box on this page highlights tuition and instructor costs under different models.

PSJA and South Texas College: Dual Credit Staffing Costs (Per Semester)—2016-17 Rates

- Tuition cost for course delivered on the college campus**
 Tuition waived
- Tuition cost for course delivered on high school campus**
 Tuition waived
- Instructor fee for course delivered by college professor on high school campus—paid by district**
 \$2,700 for 3-credit course
 \$3,200 for 4-credit course
 + mileage reimbursement (\$0.54/mile)
- Dual credit teaching stipend for high school teachers—paid by district**
 1-2 dual credit course sections: \$1,000
 3+ dual credit course sections: \$1,500
- Salary incentive for teachers with advanced degrees—paid by district**
 \$1,000 (if master’s is in core content area, including Spanish and criminal justice)²²
 \$500 (if master’s is in another subject)
- Dual credit teaching stipend for high school teachers—paid by college**
 \$350 per course section

Source: JFF Analysis

PSJA and STC Offer Incentives for High School Teachers to Deliver College Courses

PSJA pays a stipend of \$1,000 to \$1,500 per semester for high school faculty who teach college courses for dual credit. Teachers who deliver three or more sections of these courses earn the higher amount. (See box on previous page.) As in many districts, PSJA also gives high school teachers a salary boost for having a master's degree, whether or not they teach dual credit courses. Unlike most districts, however, the salary incentives in PSJA are structured strategically to provide a higher reward for teachers who have a master's degree that allows them to teach high-demand college courses for dual credit. A teacher with a master's in math, for instance, earns an extra \$1,000 per semester, compared to \$500 for a teacher with a master's in education. While these incentives are not strictly a cost of providing dual enrollment, they are part of PSJA's strategy for recruiting and retaining teachers who can serve as college adjuncts.

From the high school teacher's perspective, delivering college courses for dual credit makes financial sense in PSJA. In addition to the stipend paid by the district, teachers also earn a \$350 per course stipend paid by the college. (See box on previous page.)

Increasing Dual Enrollment Districtwide Reduces the Marginal Cost Per Course

Because of PSJA's long history with transforming traditional high schools into early colleges, the district now has a relatively strong supply of high school faculty qualified to deliver college courses as adjuncts. The growth in the dual credit teaching force has been the result of efforts both to recruit new teachers with the required qualifications and to encourage existing staff to earn master's degrees in the appropriate subjects. PSJA has offered a variety of graduate tuition reimbursement opportunities for teachers, including highly selective programs for teachers in STEM fields. The district's focus on early college as its central school reform strategy has translated into a clear message for both teachers and hiring managers about the importance of teaching college courses for dual credit.

Comparing the Hypothetical Costs of Scaling Up: Two Different Staffing Scenarios

Table 1 (on the next page) models the potential cost savings for PSJA when the district scales up dual enrollment by relying primarily on high school teachers who are qualified as college adjuncts. When the district uses college instructors, each four-credit course bears the same staffing cost (\$3,200). Assuming that all courses are four credits and there are 20 students per course, the cost per credit is \$40.

However, if PSJA teachers deliver these college courses, the cost per credit drops sharply, because each individual instructor can provide multiple course sections for the same marginal cost. High school teachers who teach three or more dual credit course sections per semester earn a flat stipend of \$1,500. If a PSJA teacher delivers a full load of five sections per semester, with 20 students per section, the cost per credit plummets to \$6.25.

In this scenario, if the district uses each high school adjunct to teach five course sections of four-credit courses (and fill each section with 20 students), the marginal staffing cost per associate's degree earned by high school students is \$375—a relatively affordable sum, in light of the economic benefits of degree completion.

This model demonstrates the cost-saving potential of scaling and staffing strategically. Nonetheless, there would be non-financial tradeoffs involved if PSJA—or any district—were to exclusively use high school teachers for dual enrollment staffing, as discussed above.

Deploying the Teaching Force Districtwide

Recognizing the financial benefits of staffing dual credit courses with high school adjuncts, PSJA administrators have recently stepped up their efforts to use their qualified teachers more economically. For instance, some high schools lack a teacher with a master's degree in chemistry or computer science and have paid for STC instructors to teach these courses, while other schools have qualified teachers in these subjects but low student demand for these classes, resulting in small course sections. In spring 2017, the district urged high school principals to find opportunities for sharing teachers

Table 1: Hypothetical Comparison of Staffing Costs Based on Delivery Model (District's Perspective)

Delivery method	Sections taught per instructor	Marginal staffing cost (2016-17 rates)	Credits per course	Students reached (assume 20 students per section)		Total cost per semester*	Credits earned	Cost per credit*	Cost per associate's degree (60 credits)*
Using a college instructor (STC)	1 section	\$3,200 avg. instructor fee per course	4	20	=	\$3,200	80	\$40	\$2,400
	5 sections	\$3,200 x 5 = \$16,000	4	100	=	\$16,000	400	\$40	\$2,400
Using a high school teacher (PSJA) as college adjunct	1 section	\$1,000 district stipend for teaching 1-2 dual credit courses + \$1,000 district salary increase for master's degree = \$2,000	4	20	=	\$2,000	80	\$25	\$1,500
	5 sections	\$1,500 district stipend for teaching 3+ dual credit courses + \$1,000 district salary increase for master's degree = \$2,500	4	100	=	\$2,500	400	\$6.25	\$375

Source: JFF Analysis

* Note: These figures only take into account the marginal staffing costs of college instructor fees or teacher stipends and salary incentives. They do not take into account costs such as administration and counseling, nor do they factor in full teacher salaries or benefits.

across schools, or bussing students between schools to take the dual enrollment courses that they need for their intended degree pathway. Still, PSJA will continue to rely on STC professors for certain subjects that are harder to staff internally, such as economics and speech.

PSJA's unwavering focus on early college high school as its primary district reform strategy has put the district

in a strong position in terms of its capacity to offer a wide range of dual enrollment opportunities. Regardless of whether the majority of its dual credit teaching force is made up of high school teachers who serve as adjuncts or college professors in the years ahead, maintaining a strong and collaborative partnership with STC will be critical.

Case Study

BROWNSVILLE & TEXAS SOUTHMOST COLLEGE

STRETCHING & GROWING THE DUAL CREDIT TEACHING FORCE

Brownsville provides an example of more recent and ongoing efforts to expand a dual credit teaching force. The district and its community college partner, Texas Southmost College (TSC), are attempting to expand dual enrollment offerings across the districts' relatively young early college high schools. The last three of Brownsville's six comprehensive high schools were designated as early colleges in 2014-15. Brownsville has recently intensified its efforts to prepare students for the placement test that serves as the gatekeeper for college credit courses (known as the "Texas Success Initiative"). As the number of students passing the test continues to increase, the district will need to offer a growing number of dual enrollment courses so that these students can complete their degree and certificate pathways.

TSC is a relatively new two-year college, which was formed when the University of Texas at Brownsville-TSC split into two separate institutions in 2013. TSC has had some difficulty hiring an adequate number of professors in certain subjects; however, the college leadership has made Brownsville's dual enrollment instructor requests a top priority. Meanwhile, Brownsville has tried to entice more of its high school teachers to deliver college courses by implementing a \$1,500 per semester dual credit teaching stipend—similar to the one offered in PSJA—beginning in 2016-17. According to Assistant Superintendent Berta Peña, the new stipend is intended to build the "allure and the prestige" of teaching these courses during a critical growth period.

Using Innovative Approaches to Time and Alternative Delivery Models

Brownsville has pursued a wide variety of innovative approaches to stretch its current dual credit teaching force. For instance, the district funds the salary of one dual credit music teacher who travels between several schools. For other subjects, qualified high school adjuncts

deliver after-school or Saturday dual enrollment courses that are open to students from any campus across the district. Brownsville has even tapped into the pool of middle school teachers with master's degrees in core subject areas, offering them the opportunity to teach dual credit for high school students after regular school hours. Brownsville pays teachers an hourly rate of \$50 for extra instruction outside of the school day.

Brownsville and TSC have also grown a robust dual credit summer school program. Summer courses are offered on the college campus for students from all Brownsville schools. This brings the added benefit of exposure to the postsecondary environment. These courses are mostly taught by high school adjuncts, who are paid the same "instructor fee" that regular college professors earn for teaching courses on the high school campus during the school year: \$2,550 per course. Depending on their class rank and GPA, higher-performing students also have the opportunity to enroll in summer college courses for dual credit at the University of Texas Rio Grande Valley (UTRGV).

During the regular school year, Brownsville also offers a variety of online dual credit courses through UTRGV. The courses are taught by a college professor, and the high schools assign a teacher or paraprofessional to assist students with the online instruction during a scheduled course period.

Sharing the Cost of Graduate Education for Current Teachers

Brownsville has already made considerable progress in growing the ranks of its teachers who are qualified to teach college courses for dual credit as TSC adjuncts. The district has partnered with UTRGV to offer reduced-cost master's degree programs for cohorts of approximately 30 teachers per year since 2015-16. One-third of the tuition is waived by UTRGV, one-third is covered by

the school district, and one-third is paid by the teacher. Teachers are asked to commit to delivering college courses in Brownsville for three years upon earning their master's degree, or to pay back the portion of tuition covered by the district and the university. This option is attractive to teachers as it allows them to permanently increase their salary. Brownsville provides a \$1,500 per semester salary incentive for teachers with a master's degree in an academic subject area, or \$750 per semester for a master's degree in education or a related field—and teachers also earn the \$1,500 dual credit stipend during each semester that they teach college courses. From the district's perspective, the more students served by each teacher completing this program, the greater the return on investment over time.

During the period of the i3 grant, Brownsville and its postsecondary partners have experimented with myriad approaches to maximizing and growing the dual credit teaching force, and leaders such as Assistant Superintendent Peña have demonstrated a willingness to think outside the box in order to expand course offerings. Nonetheless, maintaining the district's current spending on early college implementation may be challenging, as the district faces financial constraints due to declining enrollment, and the district will need to identify the most cost-effective strategies to sustain the momentum gained.

Case Study

DENVER PUBLIC SCHOOLS & POSTSECONDARY PARTNERS

EVOLVING STRATEGIES TO MEET UNPRECEDENTED DEMAND

Denver Public Schools (DPS) provides an example of a district that is developing unique programs to upskill high school teachers as quickly as possible, while also considering the longer-term implications for human resources as schools adopt early college designs. Over the past few years, dual enrollment has gained prominence as a high school improvement strategy across DPS. In the November 2016 election, Denver voters passed a historic property tax initiative: a comprehensive school funding package that included \$8 million for high schools to expand dual enrollment. DPS also submitted successful applications for five schools to become state-designated early college high schools in spring 2017, increasing the number of state-designated schools in the district from one to six. Superintendent Tom Boasberg recently created a new Early College Division dedicated to supporting the success of these six schools and preparing additional schools to become early colleges.²³

DPS has set an expectation that graduates of state-designated early college high schools will complete a minimum of 12 transferrable college credits, and that the schools should substantially increase the number of students completing associate's degrees. Taken together, the recent developments in Denver have created a climate of enhanced resources and growing esteem for early college and dual enrollment—along with rising alarm about the shortage of instructors who can teach college courses for high school students.

DPS is unique in terms of the number and variety of dual enrollment options: high schools across the large, decentralized district partner with over 23 postsecondary institutions. Each institution has its own instructional delivery model for dual enrollment, and schools are able to compare options among partners that are able to provide the desired courses. The largest dual enrollment provider in the region is the Community College of Denver, which offers both on-campus and high school-based dual enrollment.²⁴

Creating a Fast Track to Teaching Dual Credit: “Mini-Master’s”

Recognizing the district’s urgent need to address the shortage of instructors, DPS has recently piloted a new program to enable current high school teachers to earn the 18 subject-specific graduate credit hours that would qualify them to teach dual credit courses. The new partnership with Colorado State University-Global Campus targets English or math teachers who already have a master’s degree in education or another field, but do not have sufficient graduate credits in the desired dual credit subject area. In collaboration with DPS, CSU-Global has developed a customized set of online graduate courses for this cohort. The intensive program is structured as a series of six back-to-back courses over a 12-month period. The first cohort of 25 teachers began the program in June 2017, and DPS is already planning to launch a second cohort.

The graduate tuition rate is highly discounted by CSU-Global, but still requires a financial commitment on the part of teachers. DPS used i3 grant funds to further reduce the cost for teachers in the high schools participating in the grant, and some schools also contributed additional assistance from the new property tax funds. Teachers can also access DPS’s tuition reimbursement policy to cover some of the costs. Because the mini-master’s is not a full degree program, however, participants are not eligible for federal financial aid—and they will not receive a salary increase upon completion under the district’s current compensation system. The final out-of-pocket cost for each teacher will vary depending on the mix of school-based budgeting decisions and available discounts. Over the longer term, DPS leaders will need to identify additional sources of funding to continue subsidizing this type of program or offer other types of incentives for teachers to complete the required graduate credits.

Strategic Planning with a Subset of Schools

As of fall 2017, the newly formed Early College Division is focused on urgently addressing the adjunct staffing shortage at DPS’s six state-designated early college high schools. Executive Director Antonio Esquibel and his team are leading principals in the process of analyzing their buildings’ staffing needs and developing strategic plans to address them, with an immediate focus on bolstering the capacity of each of these schools to offer at least 12 transferrable credits to each student. The Early College Division is also in the process of revising memoranda of understanding between postsecondary institutions and the new early college high schools, which provides an opportunity to focus on developing collaborative solutions to the dual credit instructor shortage that reflect the staffing priorities of the district as well as the colleges.



Instructor Quality: Efforts to Uphold Rigor and Enhance Professional Learning

While this paper focuses primarily on the supply of instructors for college courses offered for dual credit, issues of quality are equally important. Dual credit faculty need training tailored to their unique role in the secondary-postsecondary transition zone, which requires additional investments from districts and colleges. This topic is so critical that the National Alliance of Concurrent Enrollment Partnerships, which provides the sole accreditation process for concurrent (and dual) enrollment programs, has developed several standards related to faculty qualifications, discipline-specific professional development, and classroom observations by college faculty liaisons.²⁵

The postsecondary institutions partnering with the i3 ECEP districts have all devoted considerable attention to onboarding and monitoring the quality of instruction of their high school adjuncts. Some postsecondary institutions require new high school adjuncts to participate in mentoring programs that pair them with college faculty teaching the same course at the college campus. At STC, for instance, mentor faculty meet with

the high school adjuncts to provide feedback on the development of the course syllabi, homework expectations, exams, and other aspects of instruction during the first semester. TSC has a similar program, and also encourages high school adjuncts to come visit their mentor's class on the TSC campus to get a feel for the instructional style and student participation in the community college environment.

Some professional development activities bring together faculty from K-12 and higher education to build the skills of both groups and support a more successful transition to college. As an example, the Community College of Denver and DPS conduct joint professional development for dual credit faculty twice a year. During part of this session, instructional coaches from DPS's Office of College and Career Readiness lead training on the Common Instructional Framework, a set of research-based, high-engagement instructional strategies developed by JFF and used in early college high schools nationwide.

CONCLUSION

RECOMMENDATIONS FOR LONG-TERM CAPACITY BUILDING

The ECEP districts and their college partners represent a microcosm of the larger early college high school movement and the dual enrollment field generally, and their challenges with dual credit staffing are widely shared. These stresses are exacerbated by constrained budgets. Nonetheless, districts that decide to use early college high schools as a hallmark strategy for school improvement must figure out how to offer college courses within a high school education at minimal cost, in order to reap the demonstrated benefits of dual enrollment.

The case studies in this brief illustrate how local partners can implement creative short-term solutions to stretch their current supply of dual credit instructors, and can assess the cost-effectiveness of various staffing models as demand grows. They also provide examples of strategies that districts can use to upskill their current teaching force, allowing more high school teachers to deliver college classes.

In the long term, scaling and sustaining early college designs across entire districts will require a new way of thinking about human capital in the “transition zone.” K-12 and postsecondary partners have a shared interest in building instructional capacity and overcoming barriers to growth.

Long-Term Recommendations:

Engage postsecondary partners in developing future dual credit instructors

When colleges and universities see clear benefits from expanding dual enrollment—including financial incentives as well as improvements in student outcomes along the entire high school-to-baccalaureate pipeline—they can be motivated to help solve the staffing puzzle. Four-year universities must come to the table to create and deliver graduate courses for prospective dual

enrollment instructors. Solutions are needed for teachers who already have master’s degrees but lack the discipline-specific credits needed to teach college courses, as well as for current and future teachers who do not yet have a master’s degree. At the same time, universities in states and regions that are rapidly expanding dual enrollment should consider modifying graduate programs in the field of education by offering options for candidates to add a specialization consisting of 18 graduate credits in a particular academic subject.

Two-year institutions, meanwhile, have a stake in the preparation of their future corps of adjunct instructors, and their role could include co-designing, validating, and even subsidizing the cost of graduate programs for this purpose.

Uphold a shared commitment to quality

Postsecondary institutions and K-12 districts have a common interest in ensuring that the college courses offered for high school students are equivalent to those offered for “traditional” students at the host institution—and that these courses are challenging and engaging. Both groups stand to benefit from investing in professional development to enhance the quality of instruction in dual enrollment programs, regardless of who teaches the courses.

Both of the recommendations above hinge upon K-12 and postsecondary leaders sharing a commitment to the potential of early college high schools to improve outcomes for low-income students and groups that are traditionally underrepresented in higher education. In the ECEP districts—and in a large and growing share of the country—these students are in the majority, and their success is essential to their regions’ economic future.

A Role for State Policy

All of the local solutions described in this brief could be accelerated and shared through supportive state policies that aim to address the shortage of dual enrollment instructors. Several states have already authorized funding for pilot programs focused on this issue. As described by the Midwestern Higher Education Compact and Education Commission of the States, these approaches typically involve financial assistance, such as loan forgiveness or grants, for teachers who pursue graduate programs to meet the qualifications to teach college courses, as well as funding for universities to design and deliver graduate courses that are easily accessible for teachers.²⁶ Such funding streams are often quite limited in scope and duration, however. As state policymakers continue to incent dual enrollment as a preferred strategy for increasing college enrollment and success, they should bear in mind the critical importance of developing and maintaining a pipeline of highly skilled instructors for these programs, and invest in long-term, scalable solutions.

APPENDIX

DUAL ENROLLMENT FUNDING IN TEXAS & COLORADO

The ideal dual enrollment staffing strategy in any district will depend, in large part, on the state policy context and funding structure for dual enrollment. The innovative solutions explored in South Texas and Denver were facilitated by supportive state policies that make dual enrollment financially viable for both school districts and colleges.

Texas has long been a leader in adopting state policies that promote the development of early college high schools and expansion of dual enrollment. State law allows both K-12 school districts and institutions of higher education to receive funding for dual enrollment students, through average daily attendance funds at the high school and per-pupil “contact hour” funds at the college. The state legislature also provides all districts with a per-student “high school allotment” of \$275 for the purpose of supporting postsecondary readiness, and these funds can be used to support dual enrollment.²⁷ State-designated early college high schools are not

allowed to charge their students for tuition for any dual enrollment courses; the district must cover all costs that are not waived by the postsecondary institution.²⁸

Colorado is also a prominent example of a state that has passed comprehensive dual enrollment legislation—the Concurrent Enrollment Programs Act of 2009—that paved the way for higher levels of dual enrollment participation and investment. Like Texas, Colorado has a “hold harmless” funding structure that allows both a school district and a college to receive state funding for dual enrollment students (through per-pupil revenue at the K-12 level and full-time equivalent, or FTE, funding at the postsecondary level). Districts are required to pay tuition for their dually enrolled students, which is based on a negotiated rate established in their cooperative agreement with the institution of higher education, and which cannot exceed the “resident community college tuition rate” established by the State Board for Community Colleges and Occupational Education.²⁹

ENDNOTES

1. The districts and states highlighted in this brief alternately use the terms “dual enrollment,” “dual credit,” or “concurrent enrollment.” While there are nuances that differentiate these terms in some states, this brief interchangeably uses the terms “dual enrollment” and “dual credit” to refer to courses taken by high school students for both secondary and postsecondary credit.
2. Joni L. Swanson, *An Analysis of the Impact of High School Dual Enrollment Course Participation on Post-Secondary Academic Success, Persistence and Degree Completion* (PhD diss., University of Iowa College of Education, 2008); Kristin Klopfenstein, “Does the Advanced Placement Program Save Taxpayers Money? The Effect of AP Participation on Time to College Graduation. Promise and Impact of the Advanced Placement Program,” in *AP: A Critical Examination of the Advanced Placement Program*, eds. Philip M. Sadler, Gerhard Sonnert, Robert H. Tai, and Kristin Klopfenstein (Cambridge: Harvard Education Press, 2010), 189-218; Ben Struhl and Joel Vargas, *Taking College Courses in High School: A Strategy for College Readiness, The College Outcomes of Dual Enrollment in Texas* (Boston: Jobs for the Future, 2012).
3. Role of Jobs for the Future: JFF has played a leading role in launching and shaping early colleges nationwide since 2002, when it became coordinator of the Early College High School Initiative, funded by the Bill & Melinda Gates Foundation. More recently, JFF and partners have focused on adapting early college designs to new contexts and on informing state and federal policies to bring high-quality dual enrollment and early college opportunities to more students. In the ECEP districts, JFF has provided strategic advising to central office staff along with leadership coaching for principals and instructional coaching for teachers.
4. A third-party evaluation of the ECEP’s implementation and impact is forthcoming. For a snapshot of each district’s progress, see: Sarah Hooker, *Leadership Lessons from the Early College Expansion Partnership* (Boston: Jobs for the Future, 2017).
5. Aaron S. Horn, et al., *Faculty Qualification Policies and Strategies Relevant to Dual Enrollment Programs: An Analysis of States and Regional Accreditation Agencies* (Minneapolis: Midwest Higher Education Compact, 2016); Kimberly Mobley, *Overcoming the Shortage of Qualified Instructors to Teach Concurrent Enrollment Classes* (Chapel Hill: National Alliance of Concurrent Enrollment Partnerships, 2014), accessed July 21, 2017, <http://www.nacep.org/overcoming-instructor-shortage/>.
6. *Assumed Practices: Policy Changes Adopted on Second Reading* (Chicago: Higher Learning Commission, 2016), accessed July 21, 2017, http://download.hlcommission.org/policy/updates/AdoptedPoliciesAssumedPractices_2015_06_POL.pdf; *Determining Qualified Faculty Through HLC’s Criteria for Accreditation and Assumed Practices* (Chicago: Higher Learning Commission, 2016), accessed July 21, 2017, http://download.hlcommission.org/FacultyGuidelines_2016_OPB.pdf.
7. Ashley A. Smith, “Questioning Teaching Qualifications,” *Inside Higher Ed*, October 20, 2015, <https://www.insidehighered.com/news/2015/10/20/colleges-and-states-scramble-meet-higher-learning-commissions-faculty-requirements>.
8. Note that, due to widespread concerns about the shortage of qualified dual enrollment instructors, the HLC allowed institutions to file for implementation extensions until 2022.
9. Horn, et al., *Faculty Qualification Policies*; Mobley, *Overcoming the Shortage of Qualified Instructors*.
10. Valerie Lundy-Wagner, *A Missing Link for California’s Pathways Movement: CTE Instructional Staff* (Boston: Jobs for the Future, 2016).
11. Linsey Edwards, Katherine L. Hughes, and Alan Weisberg, *Different Approaches to Dual Enrollment: Understanding Program Features and Their Implications* (New York: Community College Research Center, 2011); Melinda Karp, *Facing the Future: Identity Development Among College Now Students* (PhD diss., Oregon State University, 2006), accessed September 1, 2017, <https://ir.library.oregonstate.edu/xmlui/handle/1957/37298>.
12. This includes locations specifically for secondary students, such as regional career centers. Nina Thomas, et al., *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2010–11* (Washington, DC: U.S. Department of Education National Center for Education Statistics, 2013), accessed September 1, 2017, <https://nces.ed.gov/pubs2013/2013001.pdf>.

13. Some studies have found that there is no difference in student outcomes if dual credit courses are taught by high school teachers serving as adjuncts, versus college faculty (*Dual Credit in Oregon*); others found an advantage for courses taught by college faculty (Speroni). *Dual Credit in Oregon, 2010 Follow-Up: An Analysis of Students Taking Dual Credit in High School in 2007-08 with Subsequent Performance in College* (Eugene: Oregon University System, Office of Institutional Research, 2010); Cecilia Speroni, *Determinants of Students' Success: The Role of Advanced Placement and Dual Enrollment Programs* (New York: National Center for Postsecondary Research, 2011).
14. Swanson, *An Analysis of the Impact of High School Dual Enrollment*; Klopfenstein, "Does the Advanced Placement Program Save Taxpayers Money?"; Struhl and Vargas, *Taking College Courses in High School*.
15. Joel Vargas, *The Economic Payoff for Closing College-Readiness and Completion Gaps: Why States Should Invest in Accelerating Low-Income Youth to and through Postsecondary Credentials* (Boston: Jobs for the Future, 2013).
16. These data come from the Early College High School Initiative Student Information System, or SIS, which includes data on over 100 early college high schools nationwide. From Michael Webb and Carol Gerwin, *Early College Expansion: Propelling Students to Postsecondary Success, at a School Near You* (Boston: Jobs for the Future, 2014).
17. Data from 2015-16 Texas Academic Performance Report, accessed March 6, 2017, <https://rptsvr1.tea.texas.gov/perfreport/tapr/2016/srch.html?srch=D>.
18. Ibid.
19. 2015-16 data from Colorado Department of Education District Dashboard, accessed March 6, 2017, <http://www2.cde.state.co.us/schoolview/dish/dashboard.asp>.
20. *2017 Texas Public Higher Education Almanac* (Austin: Texas Higher Education Coordinating Board, 2017), accessed October 13, 2017, <http://www.theccb.state.tx.us/reports/PDF/9435.PDF?CFID=68495726&CFTOKEN=30706356>.
21. "Dual Enrollment Resources," South Texas College, accessed October 13, 2017, https://academicaffairs.southtexascollege.edu/highschool/dual_enrollment.html#isd.
22. Master's degree must be in one of the following core subject areas to receive this incentive: English language arts, reading, math, science, social studies, Spanish, or criminal justice. Teachers with a master's degree in the areas not listed above receive a salary incentive of \$1,000 per year, or \$500 per semester.
23. Denver's Career Education Center Early College received state designation in 2015.
24. College courses taken through the CU Succeed program, which is part of the Extended Studies division of University of Colorado Denver, also account for a large share of Denver's dual enrollment. CU Succeed courses do not require placement tests or prerequisites, which makes them an attractive option for providing momentum and college exposure for a wide range of students.
25. *2017 National Concurrent Enrollment Partnership Standards* (Chapel Hill: National Alliance of Concurrent Enrollment Partnerships, n.d.), http://www.nacep.org/docs/accreditation/NACEP_Standards_2017.pdf.
26. Horn, et al., *Faculty Qualification Policies*; Mobley, *Overcoming the Shortage of Qualified Instructors*.
27. "High School Program Allotment," Texas Education Agency, accessed September 1, 2017, http://tea.texas.gov/hs_allotment.html.
28. "Chapter 102. Educational Programs, Subchapter GG," Texas Education Code, Commissioner's Rules Concerning College and Career Readiness School Models, last modified July 19, 2011, <http://ritter.tea.state.tx.us/rules/tac/chapter102/ch102gg.html>.
29. *Concurrent Enrollment Policy & Example Practices* (Denver: Colorado Department of Education, 2016), accessed July 21, 2017, https://www.cde.state.co.us/postsecondary/ce_policypractice.



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