

OCTOBER 2023

Rethinking Dual Enrollment as an Equitable On-Ramp to a Career-Path College Degree Program After High School

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In this report, we present a model for rethinking dual enrollment—through which over 1.5 million high school students take courses for college credit each year—as a more equitable on-ramp to college degree programs that prepare students to secure well-paying, career-path employment in their 20s. We describe emergent efforts by early adopter institutions of whole-college guided pathways reforms to expand access to dual enrollment for students from groups underrepresented in college and to redesign dual enrollment offerings and supports so that students can more readily pursue a postsecondary degree program in a field they are interested in directly after high school. This model, which we call dual enrollment equity pathways (DEEP), reflects a change in mindset from colleges' and high schools' conventional approach to dual enrollment. Conventional dual enrollment programs are sometimes described as "programs of privilege" because of uneven access and barriers to participation or as "random acts" because of insufficient intentionality (and advising) in terms of how the coursework can fit into postsecondary pathways aligned to students' interests.

We present a conceptual model for DEEP and cite research to support its four main areas of practice: (1) outreach to underserved students and schools; (2) alignment to college degrees and careers in fields of interest; (3) early career and academic exploration, advising, and planning; and (4) high-quality college instruction and academic support. It is worth noting that DEEP practices reflect the curricular coherence and holistic supports evident in early college high schools, which research has shown to be effective in increasing college-going and completion among students from underrepresented groups. The DEEP approach applies these elements to the much more common à la carte form of dual enrollment coursetaking, with the potential to benefit hundreds of thousands of students each year. We conclude by pointing to growing incentives and opportunities for colleges, schools, and state systems to implement DEEP practices at scale and by identifying costs associated with DEEP implementation.

The DEEP model expands access to dual enrollment for underserved students and redesigns offerings and supports so that students can pursue a postsecondary degree program directly after high school.

Need For a More Effective and Equitable High-School-to-College Transition

Squandering Talent

A recent report by Georgetown University's Center on Education and the Workforce finds that young people are much more likely to secure a job that pays at least \$38,000 annually (close to the national living wage for an individual [Massachusetts Institute of Technology, n.d.]) by the time they are 30 if they enter an associate or bachelor's degree program by age 22 and even more likely if they complete such a program by age 26 (Carnevale et al., 2023). Over the past decade, compared to earnings among younger workers with no degree, median annual earnings among workers 25–35 with at least an associate degree have been consistently higher (NCES, 2023a) and unemployment rates substantially lower (NCES, 2023b), indicating that demand from employers across industries for workers with college degrees remains strong.

And yet, too many young people who could fill those jobs are lost in the transition from high school to college. For many students, moving from high school to college is a bewildering and poorly supported experience (Venezia & Jaeger, 2013). This compounds the growing gap in the U.S. between higher education haves and have-nots. Among 10th graders in 2002, only 20% of Black and 19% of Hispanic students earned a bachelor's degree within 10 years, compared with 40% of White students. Only 36% of students from families in the lowest income quartile earned any postsecondary credential, compared with 78% in the top quartile (Lauff & Ingels, 2014).

Gaps in college access and attainment are products of a living legacy of race- and class-based tracking into "advanced academic" and "vocational" high school tracks, perpetuated by overreliance on standardized testing as a measure of student potential (Levesque et al., 2008). The growing body of research shows that college placement and other standardized tests both extend a legacy of racial bias and are also of questionable validity as measures of readiness for college (Bickerstaff et al., 2022; Cullinan & Biedzio, 2021; Jencks, 1998). This means that instead of a bridge to opportunity, the high-school-to-college transition becomes for too many a dead end that squanders talent and relegates families to poverty (Hoxby & Avery, 2012).

The Promise of Dual Enrollment to Support More Equitable College Transition

Dual enrollment is widespread. Dual enrollment (DE), in which high school students take college courses and earn both high school and college credit, has great potential to help make the high-school-to-college transition more effective and equitable—and to do so on a large scale. DE is distinguished from other approaches to earning college credit in high school, such as Advanced Placement (AP) and International Baccalaureate (IB), because it requires a partnership between the high school and a postsecondary institution that awards the college credit. Dual enrollment encompasses a wide range

of program designs, from immersive Early College High Schools (ECHSs) to much more common à la carte models in which students take one or more college courses taught either by a faculty member or qualified high school teacher (either online or in person at the college or the high school). Nationally, 82% of public high schools offer DE coursework, enrolling over 1.5 million high school students annually (Taie & Lewis, 2020).

Figure 1 illustrates the level of DE participation in school districts across the country. Districts with the darkest shading have more than one in five students participating in DE.

● Less than 0.1%
● 0.1% to 4.0%
● 4.0% to 11.0%
● 11.0% to 20.3%
● 20.3% or more

Figure 1. Dual Enrollment Participation by Public School District

Source. Fink (2021a).

Most dual enrollment occurs with community colleges. Seventy percent of DE courses nationally are offered in partnership with community colleges. In the fall of 2021, more than one million students under the age of 18—this age group serves as a proxy for dual enrollment students—were enrolled at community colleges across the country (Figure 2). And from 2021 to 2023, community colleges reported a 16% growth in dual enrollment (National Student Clearinghouse Research Center, 2023). The enrollment of DE students in community colleges has increased markedly in nearly every state over the past decade, even as overall community college enrollment has declined. DE now accounts for nearly one in five community college students (Fink, 2023).

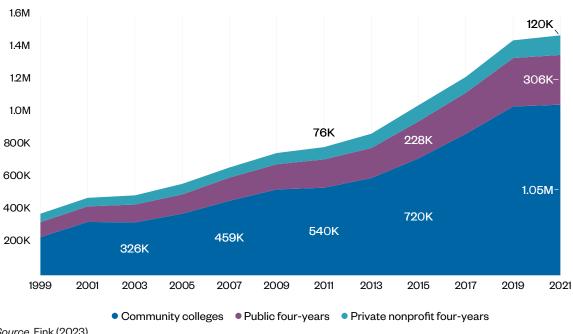


Figure 2. Growth of Dual Enrollment, 1999-2021

Source. Fink (2023).

The benefits of dual enrollment participation. There is strong evidence that DE improves academic outcomes for students, including completing high school, enrolling in college, and completing college degrees (Edmunds et al., 2022; Taylor et al., 2022; What Works Clearinghouse, 2017). Some of the most compelling evidence comes from research on the impact of ECHSs (Song & Zeiser, 2019). ECHSs represent an intensive model of dual enrollment with high expectations for student achievement (e.g., associate degree completion in high school) and extensive supports (cohorts, structured programs, academic interventions, and college advising). Many ECHSs are designed around general education courses to enable students to earn an associate of arts degree in liberal arts or general studies. Similarly, the Pathways in Technology Early College High Schools (P-TECHs) in New York City offer an intensive model with a career or academic field focus (Rosen et al., 2020). Crucially, ECHS and related P-TECH models typically are designed for and focus on serving students from groups underrepresented in higher education and thus tend to prioritize outreach to these groups and are offered at low or no cost to students. Experimental studies demonstrate that participation in ECHS programs increases the likelihood of entering college, persisting, and completing a college degree, with particularly strong effects for Black and Hispanic students and low-income students (Edmunds et al., 2020; Song & Zeiser, 2019).

Yet, compared to less intensive models of à la carte dual enrollment, ECHSs and P-TECHs operate on a smaller scale. Although the beneficial impacts for ECHS students are significant, there has been a lack of investment in scaling early college programs in a way that reaches a large population of students (American Institutes for Research, 2020). A 2019 study estimated that there are more than 280 public ECHSs in the U.S. serving about 80,000 students annually (Song & Zeiser, 2019). While impressive, this is a little more than 5% of the over 1.5 million students enrolled in DE courses nationally. Funding issues aside, the intensive requirements of such programs—for both students and schools—may limit their scale.

The vast majority of high school students who participate in DE take discrete or à la carte courses on a college campus, online, or in the high school. This approach to DE is typically less complicated and less costly to implement than establishing an ECHS. While there have not been experimental studies of à la carte DE, systematic reviews of numerous descriptive and quasi-experimental studies on the effects of DE coursetaking show overall gains on college outcomes (Taylor et al., 2022), including a recent meta-analysis of 162 studies showing that participation in à la carte dual enrollment is positively associated with college enrollment, persistence, performance, and degree attainment (Schaller et al., 2023). And while some research shows mixed outcomes for low-income students and students of color (e.g., null or smaller effects for these groups compared to others) (Hemelt et al., 2020; Struhl & Vargas, 2012), other studies suggest that students of color can disproportionately benefit from DE participation (Liu et al., 2022; Minaya, 2021). For example, a recent study that used propensity score matching finds that among students in Texas high schools with lower prior academic achievement, taking even a couple of DE courses in high school is associated with substantially higher rates of earning a college credential compared to similar students who do not take DE courses (Lee & Villarreal, 2022).

Who's benefiting? Nationally, as shown in Figure 3, American Indian, Black, Hispanic, Multiracial, and Pacific Islander students are underrepresented in DE relative to their enrollment in secondary schools, and White students are overrepresented in DE. English learners and students with disabilities are also underrepresented relative to their share of the student population (Fink, 2021b).

Overrepresented 125x Asian White Equa 10x Representation 5.2% 63.1% DE DE **Multiracial** American 5.2% 50.1% 2.7% School School 0.8% 0.75x3.1% DF 18.9% 0.3% School DE DE 10% Black School 25.2% 0.4% 8.9% School School DE 0.5x 14.9% School **ELL**^b **IDEA**^a 2.0% 3.9% 0.25xUnderrepresented 6.1% 12.7% School

Figure 3. Representation in Dual Enrollment

Source, Fink (2021b).

Note. 2017-18 school year data. Each bar is a ratio showing each demographic group's proportion in DE coursework (the top percentage shown underneath each bar) divided by that group's proportion in secondary school coursework (the bottom percentage shown underneath each bar).

^aIDEA = Students provided with services under the Individuals with Disabilities Education Act

bELL = English language learners

Gaps in access to DE coursework can be traced to exclusionary policies and practices (Taylor et al., 2022). Colleges and high schools typically take a laissez-faire approach to à la carte DE in terms of which students are encouraged to take advantage of DE opportunities, which courses are offered to students, and what support they receive. Students from more privileged backgrounds are overrepresented among DE coursetakers (Shivji & Wilson, 2019), which is why some refer to DE as "programs of privilege." Colleges and schools tend to rely on standardized placement tests for eligibility, even though researchers question their validity as predictors of college readiness and raise concerns that they perpetuate inequities (Scott-Clayton et al., 2014). Students also frequently take courses based on availability, not because those courses align with their future plans (leading to what some practitioners call "random acts" of dual enrollment) (Weissman, 2020). Moreover, DE students are often not helped to explore academic and career interests and to develop an educational plan aligned with their talents and aspirations (Kanny, 2015). This laissez-faire approach to DE exacerbates equity gaps in the high-school-to-college transition (U.S. Government Accountability Office, 2018).

Figure 4 illustrates the variation in racial/ethnic equity gaps for Black and Hispanic students across school districts nationally (Xu et al., 2021). While most districts have some gaps in access (purple), other districts do not have such gaps (darker green). Nationally, about one in five school districts have closed racial equity gaps in access to DE.

White-Black Gap (ppt)

Less than 0.4

0.4 to 3.4

3.4 to 7.0

7.0 to 12.2

12.2 or more

Source. Xu et al. (2021).

Figure 4. Racial/Ethnic Equity Gaps in Access to Dual Enrollment by Public School District

The fact that some colleges and their high school partners have achieved more equitable access to DE and college-going and completion rates for underserved students who take DE courses (Fink et al., 2017; Xu et al., 2021) raises the question as to what practices these colleges and high schools are using to produce such outcomes. It suggests that program strategies matter—especially for students who would be the first in their families to attend college or who do not have the guidance from schools and families enjoyed by their more advantaged peers. The issue is how to provide underrepresented students with the kind of support offered through ECHSs but to do so affordably at a large scale with the many students who take à la carte DE each year.

From "Random Acts" and "Programs of Privilege" to Dual Enrollment Equity Pathways (DEEP)

Extending Guided Pathways Practices to Dual Enrollment Students and Programs

Recent research points to strategies that community colleges and K-12 schools can use to rethink à la carte DE as a more equitable on-ramp to a college program of study that leads to career-path employment for large numbers of students. In *The Dual Enrollment Playbook* (Mehl et al., 2020), the Aspen Institute and CCRC examined the practices of nine community college—high school partnerships in three states that had achieved equitable access and early college outcomes for Black and Latinx students through their DE programs. A key finding was that these partnerships actively reached out to underserved students and their families to educate them about DE opportunities and to encourage and support their participation. The partnerships took steps to connect students to career and college advising and other supports and to ensure high-quality instruction.

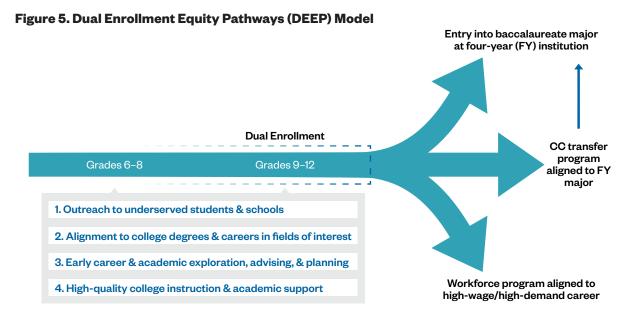
Five of the high-achieving partnerships were anchored by colleges that were early adopters of guided pathways reforms. Guided pathways (GP) is a whole-college redesign model through which colleges "backward map" programs of study to good jobs and baccalaureate transfer by field while redesigning advising, placement, instruction, and technology systems to enable students to explore, choose, plan, and complete programs efficiently and affordably (Bailey et al., 2015). The colleges profiled in *The Dual Enrollment Playbook* were distinguished by their extraordinary efforts to enhance the experience for DE students in and out of the classroom. Rather than passively offering DE courses to students who seek them out, these colleges actively "reach back" to help underserved high school students get on a path to college.

Spurred by chronically low completion rates and increased competition from other higher education sectors, over 400 community colleges are implementing GP reforms as part of formal national efforts or statewide initiatives in 16 states, and other colleges are doing so on their own (CCRC, 2021). In some of these states, we have observed that other GP early-adopter colleges are partnering with K-12 districts and schools to extend GP supports to students taking DE courses to help more underserved students enter a college-level program in a field of interest directly after high school (Jenkins et al., 2020). We call this emerging approach dual enrollment equity pathways (DEEP).

We describe DEEP partnerships as "college led" for two reasons. First, colleges must play a leading role in aligning DE to college programs and degrees as they control their programmatic offerings and degree requirements. Second, the areas of DEEP practice (outlined below) build on GP reforms, which are currently underway and organized by colleges. Nonetheless, while colleges may lead the DEEP partnerships, how dual enrollment courses are offered—in terms of instruction methods, modality, and subjects offered—is often determined by high schools (Matthews, 2020). Consequently, effective implementation of DEEP practices requires significant changes on the part of both colleges and high schools in how they reach out to students and families, align curricula and pedagogy, and teach and advise students.

DEEP Conceptual Model and Supporting Research

Figure 5 presents a conceptual model for how colleges in partnership with K-12 districts and schools can adopt the GP framework to redesign DE offerings and student supports using DEEP practices. We hypothesize four key areas of DEEP practice that research suggests are needed to motivate and prepare students from underrepresented groups to successfully transition to postsecondary education (Hoxby & Turner, 2013; Venezia & Jaeger, 2013). These four areas, which are consistent with areas of practice undertaken by early-adopter guided pathways colleges we have observed in our research, represent complementary sets of practices implemented by college-led partnerships with high schools and K-12 districts.



The DEEP approach involves community colleges and K-12 schools working in partnership to (1) conduct outreach to underserved students and families to encourage and support them to participate in DE; (2) align DE course offerings to college bachelor's and workforce programs in high-opportunity fields; (3) provide support with early career and academic exploration, advising, and planning; and (4) deliver high-quality instruction to build students' confidence as college learners. This contrasts with the conventional laissez-faire approach to DE, which disproportionately benefits privileged high school students who meet the qualifications to access DE and are supported by their schools and families to pursue DE coursework and begin to explore academic interests and develop plans for college and careers. In the sections below, we describe the research foundations of the four areas of DEEP practice.

Practice Area 1: Outreach to underserved students and schools

Efforts to increase participation in DE without focused efforts to expand access for underserved students may exacerbate inequities of access (Xu et al., 2021). Focused outreach to underserved communities, a key component of the ECHS model (Edmunds et

al., 2020), is likely essential for advancing equity in DE more broadly (Barnett, 2018). Mehl et al. (2020) found that DE partnerships with stronger results for low-income students and students of color engaged in active outreach, beginning in middle school, to low-income communities and communities of color to make students and families aware of DE opportunities and other early college coursework in high school. Colleges with more equitable DE outcomes also work with districts and schools to revamp elementary and middle school curricula so that all students are prepared to take college courses in high school. They also broaden eligibility by helping students prepare for placement tests and by using alternative placement measures like high school grades.

Practice Area 2: Alignment to college degrees and careers in fields of interest

Community colleges often advise both DE students and college entrants who are seeking a bachelor's degree to take general education courses on the premise that such courses will apply to any major. In reality, without an idea of which field they want to pursue a degree in, community college students often do not take the right lower-division courses for their intended major, which restricts what degrees they can pursue and leads many students who transfer to take more college credits than they need for their major (Monaghan & Attewell, 2015). Studies in individual states have confirmed that DE coursetakers are sometimes unable to apply their credits toward a degree in their major (Joint Legislative and Audit Review Commission, 2017). A key activity of implementing GP reforms is to "backward map" all programs to ensure that they lead either to an associate degree followed by a good job or to a bachelor's degree program with all credits applied to the student's major (Jenkins et al., 2018). Colleges following DEEP practices extend those maps into high schools so that DE students begin the process of identifying and exploring college programs and careers of interest by taking courses that are relevant to these fields (Mehl et al., 2020).

Practice Area 3: Early career and academic exploration, advising, and planning

While we would not expect most students to choose a major during high school, helping students explore academic and career interests and develop at least a preliminary post-high-school plan has the potential to boost student motivation and college aspirations (Glessner et al., 2017). Although community colleges offer career and academic advising, they usually leave it to students to seek out such guidance themselves, so many students self-advise (Center for Community College Student Engagement, 2018; Schudde et al., 2021). Advising for DE students is often even more limited, with colleges traditionally relying on high school counselors—overburdened and less familiar with college program options and requirements—to do the bulk of advising (Kanny, 2015). High school students who receive help from an adult in developing an education or career plan are more likely to submit a Free Application for Federal Student Aid (FAFSA) and apply to and enroll in college (Torre Gibney & Rauner, 2021). Adopters of DEEP practices provide advising and planning assistance to their DE students, helping them explore career interests and develop a preliminary college educational plan (Mehl et al., 2020).

Practice Area 4: High-quality college instruction and academic support

Unlike AP, in which college-level academic standards are applied to high school courses, DE provides an opportunity for students to take actual college courses, learn about college classroom norms, and meet college-level expectations. However, as is evident in the ECHS model, the additional challenge of meeting college-level expectations must be supported so that students can thrive in a more demanding learning environment (Edmunds et al., 2020). Colleges engaged in DEEP practices work with faculty who are teaching program foundation DE courses to ensure that students are exposed to instructional methods that research indicates help build confidence for learning. These methods include the use of the flipped classroom—wherein lectures are delivered online and class time is used for instruction, lab work, and class projects—and other opportunities for active learning, which numerous studies find are positively associated with mastery of course content, the development of critical-thinking and problem-solving skills, academic performance, college persistence, and degree completion in undergraduate coursework across fields (Theobald et al., 2020). They also include the use of culturally and linguistically responsive pedagogy, which studies in both K-12 and undergraduate settings indicate is associated with such positive outcomes as academic achievement, persistence, improved attendance, and greater interest in school (Aronson & Laughter, 2016; Dee & Penner, 2017).

Approaching Dual Enrollment with a DEEP Mindset

The DEEP model reflects a shift in mindset from conventional thinking (characterized by the notion of "programs of privilege" or "random acts") to a more strategic approach in which dual enrollment serves as an on-ramp to postsecondary programs of study aligned to students' interests. A DEEP mindset recognizes the importance of proactive outreach to underserved schools and communities and of motivating students through high-quality teaching in courses that provide a foundation for further education and career advancement after high school.

CONVENTIONAL MINDSET **DEEP MINDSET** DE courses made available to students who Active outreach and support for underrepresented students and families starting in middle school are already college bound Focus also on building motivation for college by Focus mainly on strengthening students' helping students explore interests and begin to academic preparedness for college develop an education/career plan Offerings also introduce students to Offerings mainly emphasize general high-opportunity postsecondary pathways education courses through program foundation courses Added focus on helping students become Focus on achievement of academic content confident college learners through active standards teaching/learning Students motivated and supported to apply high High school CTE focused mainly on immediate school CTE credits toward college degree post-high-school employment programs in high-opportunity fields

Costs, Incentives, and Opportunities for Scaling DEEP

There are growing opportunities and incentives for colleges, schools, and state systems to scale DEEP practices both to support upward educational and economic mobility for students and families and to expand the supply of talent for local economies. At the same time, there are costs associated with implementing DE using the DEEP framework.

Potential Costs and Incentives for Community Colleges

For community colleges, DEEP offers a strategy for creating a larger supply of students who are motivated and prepared to enroll in their programs after high school, including students who might otherwise not go to college. This is especially important given the sharp enrollment declines community colleges have experienced in the past decade, particularly since the COVID-19 pandemic (Fink, 2023). While it is generally cheaper for colleges to offer DE coursework relative to non-DE coursework (e.g., costs are minimal when DE is taught by a high school instructor), it can be costly for colleges to offer DE when they are not being paid much or at all for these courses. In fact, in many states and localities, community colleges offer DE at a discounted tuition (and in some cases at no charge). Nonetheless, we found that DE can be financially sustainable even where it is offered at a discount if colleges take advantage of economies of scale by increasing the number of students who participate (which many colleges nationally have done over the past decade) and at the same time improve yield surplus, the rate at which students who take DE with the college during high school continue in a program at the college after high school (Belfield et al., 2023). DEEP practices have the potential to increase the yield among recent high school graduates and thus increase the yield necessary for colleges that offer DE at a discount to recoup their costs.

Table 1. Potential Costs and Incentives for Implementing DEEP Practices

	Potential Costs	Potential Incentives
Colleges	 Direct investments in advising, instructor training, outreach/recruitment, program operations Discounted tuition/fee revenue Organization costs: personnel time for planning and management 	 Declining enrollments among older students; open seats Expanding the pool of potential college-going students after high school Downstream benefits to retention, completion, and statewide performance funding by increasing yield of former DE students Reputational benefits
K-12 Schools	 Losing students—and funding—to colleges Added burden on counselors; costs for coordination and outreach Costs for transportation, books, other related expenses Competition with AP, IB, and other advanced curriculum Program competition between high school and college CTE offerings 	 Attracting students and families looking for college acceleration options Can offer new and attractive programs in partnership with colleges Improved student outcomes, particularly for underserved populations and schools Gains in state performance reporting and funding

Potential Costs and Incentives for K-12 Schools

To implement DEEP practices, K-12 districts and schools have several potential costs, including direct payments for tuition/fees (or loss of state subsidy), program-related costs like those for transportation and course materials, additional burden on school counselors and administrators, and complexities with related advanced coursework and career and technical education (CTE) offerings. Despite these costs, K-12 leaders also have strong incentives to partner with colleges in implementing DEEP practices. In Florida and other states, districts and high schools receive state performance scorecard points for enrolling students in college acceleration programs such as dual enrollment, AP, and IB (Florida Department of Education, 2022). Even where there are no such policy incentives in place, schools benefit to the extent that DEEP practices lead to higher rates of high school graduation and college-going among students from underrepresented groups. And in states with "open choice" policies, whereby students and families can choose their high school, the opportunity to attract more families can incentivize K-12 leaders to implement DEEP practices. This is especially true for Title I and other under-resourced schools facing enrollment challenges and seeking to retain more of their "in-boundary" students who might otherwise seek to attend "out-of-boundary" schools. Partnering with a college to offer DE coursework and aligned supports (i.e., DEEP practices) could be marketed as a valued offering that low-resource high schools can use to attract and retain students and families (Glatter, 2020).

Opportunity to Expand Access to Postsecondary CTE Degree Programs

There are strong incentives for both colleges and their K-12 partners to increase DE college coursetaking and postsecondary attainment among the large population of high school CTE students. Three out of four U.S. public high school students take at least one CTE course, and 35% complete at least two courses in a single career field (U.S. Department of Education, 2019). Graduates of high school CTE programs often earn articulated credit that colleges have agreed to accept for credit toward an associate or bachelor's degree program in the same field. However, relatively few students—only 15% according to one national estimate—receive the articulated credit (Hershey et al., 1998), and only one third of K-12 districts report aligning their CTE programs with related postsecondary pathways (Hughes et al., 2021). This is a problem because the industry-based certifications students often earn in high school CTE programs are generally not sufficient to secure a job that pays a living wage and provides opportunities for career advancement (Carnevale et al., 2023). Colleges can start students on a CTE degree pathway that they can continue and complete after high school by embedding relevant DE coursework—through articulated credit or regular CTE dual enrollment courses—into high school career academies and other CTE programs. With millions of high school students taking CTE coursework each year, the potential of expanding college access and enrollments is a strong incentive for colleges to extend DEEP practices to high school CTE programs.

Conclusion

Extending guided pathways reforms to dual enrollment with an equity focus has the potential to transform the high-school-to-college transition from an inequitable and talent-squandering sorting system to an accessible on-ramp to college degree programs in high-opportunity fields after high school. Education leaders in Florida, Ohio, Texas, and other states view extending guided pathways practices to underserved DE students by partnering with high schools as a promising strategy for meeting state goals to close equity gaps in college-going and credential attainment and to build back enrollment. While the promise of dual enrollment for creating a more equitable high-school-to-college transition has yet to be fully realized, the DEEP framework offers a research-based approach for expanding college and career opportunities for hundreds of thousands of high school students every year.

Endnotes

- 1. Guided pathways is a whole-college redesign model designed to help all students explore, choose, plan, and complete programs aligned with their career and education goals efficiently and affordably (CCRC, n.d.).
- 2. Three of the other four partnerships were anchored by colleges that began implementing guided pathways reforms more recently.

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Funding for this report was provided by the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect the positions or policies of the foundation. The dual enrollment equity pathways (DEEP) framework described here was developed by members of the CCRC dual enrollment research team, which includes the authors of this report as well as Maggie Fay, Sarah Griffin, and Lauren Schudde. The authors also recognize the valuable contributions of Thomas Brock, Jessica Steiger, Aurely Garcia Tulloch, and Tatiana Velasco, who provided feedback on earlier drafts of this report, as well as Paul Bisagni and Stacie Long, who edited and designed the report.



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