# High School Principals' Perceptions of Dual Enrollment Policy in Ohio and Texas

NASSP Bulletin 2023, Vol. 107(1) 41–59 © 2023 SAGE Publications Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/01926365231158595 journals.sagepub.com/home/bul



# Dustin Hornbeck<sup>1</sup>, Joel R. Malin<sup>2</sup>, Julia C. Duncheon<sup>3</sup>, and Jing Tan<sup>2</sup>

## Abstract

Dual enrollment policies and programs, where students earn both high school and college credits, have been scaled up across the United States in the last two decades. In this mixed methods study, we survey high school principals in Ohio and Texas, two states with robust dual enrollment policies. The study addressed one broad research question: What are principals' perceptions of dual enrollment access, participation, and governance? Findings revealed three main themes: (1) economic/credential student motivations for dual enrollment; (2) mixed views about rigor; (3) issues surrounding the loss of principal autonomy.

### **Keywords**

dual enrollment, dual credit, equity, educational policy, college transition

# Principal Perceptions of Dual Enrollment in Texas and Ohio

Dual enrollment (DE) coursework, also described as dual credit or concurrent enrollment, allows students to earn both high school and college credit through partnerships between school districts and institutions of higher education (IHEs). DE programs have become increasingly popular in the United States over the last 2 decades (An & Taylor, 2019; Pompelia, 2020). In 2019 alone, 108 bills to expand DE programs were

#### **Corresponding Author:**

Dustin Hornbeck, Educational Leadership and Policy Studies, The University of Memphis, 123 Ball Hall, Memphis, TN 38152-6400, USA. Email: d.hornbeck@memphis.edu

<sup>&</sup>lt;sup>1</sup>The University of Memphis, Memphis, TN, USA

<sup>&</sup>lt;sup>2</sup>Miami University, Oxford, OH, USA

<sup>&</sup>lt;sup>3</sup>The University of Washington, Seattle, WA, USA

introduced in 37 state legislatures (Pompelia, 2020). All states now offer DE in some form (Shivji & Wilson, 2019). Data show that DE participation is linked to increased higher education access, persistence in college courses, graduation, and even improved high school performance and graduation rates (Cowan & Goldhaber, 2015; Haskell, 2016; Ison, 2022; Lee et al., 2022).

DE changes comprehensive high school norms by offering students curricular choices that differ from traditional high school courses. About 80% of students who take DE courses do so at their home high school, making local high school leaders, like school principals, important actors in DE educational policy (Hornbeck, 2023; Shivji & Wilson, 2019). In most DE delivery contexts, high schools and IHEs share governance in various capacities (Hornbeck and Malin, 2019; Pompelia, 2020). Students in suburbs, towns, and rural areas are most likely to take a DE course at their local school. Some states require school districts to form tuition agreements with IHEs. In Texas, for example, districts enter into agreements as to how their DE program will function (Miller et al., 2017). Other states prescribe rules and regulations for IHEs and school districts at the state level, limiting local control.

While a robust field of literature is forming around DE research, most studies are quantitative in design and focus on student outcomes in higher education. Few studies have explored the way DE is playing out in other areas of educational policy, including how it is affecting secondary school governance and culture. Considering the rate of growth of DE and the new curricular options it creates in schools, high school leaders may offer valuable insight into the role DE is playing in secondary schools. For this paper, we seek to better understand the perspective of high school principals about DE. We ask one overarching research question: *What are principals' perceptions of dual enrollment access, participation, and governance?* We survey principals in Ohio and Texas, two large states with robust and comprehensive DE programs. We hope that the collected data will reveal areas for further study about DE policy.

# **Relevant Literature**

In the literature review that follows, we explore DE in its current context, as well as identify how the literature contextualizes DE motivational factors. We also review the literature surrounding the types of studies that surround DE studies and research.

# Dual Enrollment in Context

Early DE programs involved local partnerships between IHEs and school districts, offering academically talented students advanced curricular options (Hornbeck, 2019; Miller et al., 2018). Local districts negotiated lower tuition costs with IHEs and the school districts shared some of the cost with students/families. In the early 2000s, researchers and policymakers identified DE as a potential policy solution for helping underprivileged students access higher education (Bragg et al., 2005). In subsequent years, state and federal educational policy has largely focused on the economic

potential of schooling as reflected in discourse and policy aimed at enhancing students' college and career readiness (CCR) (Conley, 2012). CCR has various definitions and manifestations across states and localities, but the major thrust of CCR is for students to graduate high school prepared to successfully either enter the workforce with an industry credential or an IHE. CCR initiative aims have been tied to federal money, for instance, the 2015 *Every Student Succeeds Act*, which sought to promote an increase in college access and completion (Malin et al., 2017).

# Dual Enrollment for Equity

Some scholars, policymakers, and DE advocates also tout DE as a tool for equity and access that helps underrepresented student populations find success in higher education. Bragg et al. (2005), for example, identified DE as a potential mechanism for equity in an early study examining ways that states used policy to serve underprivileged students. Subsequently, studies have examined how DE policies affect underrepresented student groups. Allen et al. (2019) found that Latinx students who engage in engineering courses through DE utilize the experience as capital and follow a STEM pathway more frequently upon graduation. Ganzert (2012) studied DE students' grade point averages (GPAs) by race and gender. They found significantly better GPAs among female DE students and also found that students of color benefited from DE programming. Haskell (2016) studied a statewide DE program in Utah and found that DE programs help underrepresented students prepare for jobs and work skills. Hughes et al. (2012) tracked the progress of underserved students who took DE courses, focusing on graduation rates, college enrollment, and completion, and found that those who take DE courses do better in all aforementioned categories. Minaya (2021) compared students in Florida who took a DE algebra course with those who did not and found that Black and Hispanic students who took DE algebra persisted more significantly in a college STEM program upon graduation.

While studies demonstrate that DE may help underrepresented student groups access college and persist in college, equity gaps remain a problem. A growing consensus of studies conclude that underrepresented students have less access to DE than their counterparts and that when DE is advertised to all students, privileged students take advantage of the programs at higher rates (Holten & Pierson, 2016; Pierson et al., 2017). For example, Moreno et al. (2021) studied the difference in college access and matriculation between DE and non-DE students in a large city in Texas. The school district had over 7,000 students represented. Findings indicated that low SES students and students of color were underrepresented in matriculation.

# Dual Enrollment for Economic Gain

One of the key benefits of DE for students is cost savings on college tuition, which most programs offer. Some studies have shown that tuition savings is especially attractive to students and parents and therefore a large factor in program growth. Borden et al. (2013) surveyed the chief academic officers of many U.S. states about their

DE programs and found that cost was perceived as an enrollment motivation, albeit an inconsistent one from state to state. Clayton (2021) compared AP and DE enrollments in Colorado, noting that DE tuition is completely covered for students, while AP testing costs families money. They speculate that this may create inequities (i.e., opportunity imbalances based on family resources). Partridge et al. (2020) studied DE in Georgia, where they used economic methods and concluded that, despite rising costs of DE in the state as the program becomes more popular, DE will ultimately benefit the state because households will save more money and generate more economic activity. Other qualitative studies have explored student motivations for taking DE courses and identified finance/tuition as an important incentive (Huntley & Schuh, 2002–2003; Kanny, 2015). Cost savings and credit earnings are part of a broader trend in P-20 education toward credentialing, in which students face increased pressure to earn higher-level credentials to compete in the job market (Labaree, 1997).

# Secondary Staff Perceptions

Compared to other areas in the DE literature, staff perceptions have been given scarce attention. Some of the studies that have looked at the staff perspective have found that DE would benefit from improved communication between stakeholders. In one qualitative study, Charlier and Duggan (2009) studied perceptions of faculty and DE support staff about a single DE program and found that high school DE faculty largely appreciated the opportunity to work with and learn from college staff to ensure they were teaching at the appropriate level. Duncheon and Relles (2020) studied DE in the border region of Texas and found that DE teachers are unsure of their role as both high school teacher and college instructor, finding it difficult to navigate both worlds without specific direction. Gomez (2020) studied communication between high school DE instructors and community college faculty in El Paso, Texas, finding that teachers view communication as essential to student success. Hooker (2018) studied community college and high school DE partnerships in Central Ohio and reported that adding more interaction and regular meetings between high school DE faculty and community college faculty was perceived to be helpful.

Studies of DE faculty and administrators have also shown that staff believe some students lack the maturity needed to take DE courses and that DE courses are less rigorous than traditional college courses (Hornbeck & Malin, 2019 Garcia et al., 2020; Howley et al., 2013; Duncheon & Relles, 2020). Garcia et al. (2020) surveyed high school administrators and staff about DE and found that they perceive DE curriculum to be diluted because of the lack of maturity of high school students. Hornbeck and Malin (2019; Hornbeck, 2019) surveyed school district superintendents in Ohio and found that maturity was one cause for concern of superintendents. Some superintendents also questioned the rigor of DE courses, with several superintendents sharing that they thought some traditional high school courses were more rigorous. Howley et al. (2013), likewise, interviewed students and staff in rural Ohio and found that they perceived DE to be less rigorous than traditional college courses.

Other studies of high school staff perceptions reveal financial concerns related to DE. Hornbeck and Malin (2019; Hornbeck 2019) found that school district superintendents in Ohio were concerned that DE will require them to cut traditional high school courses and staff due to the reallocation of funding to DE tuition and textbook costs. Witkowsky and Clayton (2020) examined the perspectives of high school counselors and found that counselors believed students could benefit from additional advising. Hooker (2018) studied a DE partnership in Central Ohio and also found that more robust advising and direct degree pathways in DE would benefit students.

Considering the broad expansion of DE nationwide, it is important to understand the perspective of local principals who administer many aspects of these programs in their respective school settings. While the literature frame DE as a potential way to bring about increased access and equity in higher education as well as economic benefits, more should be known on the local level. The qualitative literature demonstrates that staff have apprehensions and this paper draws on this literature to further study the way that principals perceive DE.

# Framework, Data, and Methods

In this section we outline our conceptual framework, exploring how the convergence of PK-16 and higher education—as exemplified by DE—may influence principals. As well, we explain where we obtained our data and the methods we used to collect and analyze those data.

# Framing Principals' Perceptions of DE Within PK-16 Convergence

As Loss and McGuinn (2021) observe, U.S. K12 and higher education systemswhich have been historically distinct and separate—are in many ways and for several reasons converging. They note, for instance, markedly increased demand for postsecondary education in the past several decades and observe how the education system has been diagnosed (whether or not fairly) as a chief cause of and potential cure for national economic challenges. These and other forces have pushed policymakers to pursue PK-16 convergence. As they explain, convergence can be engaged "as both a process to be understood and as a set of concrete policies that have created linkages" (p. 9, italics in original) between these systems, the bodies that govern them, and the institutions comprising them. Although such convergence is normatively appealing in several ways-for instance, many assume more aligned curricula, assessments, and expectations across high school and college sectors would serve to improve student transitions-it is also clear these convergence processes can sometimes create new problems (Loss & McGuinn, 2021) and serve to "greatly change both sectors" (Dougherty & Henig, 2016, p. 41). For example, Dougherty and Henig (2016, p. 41) focus on shifting governance, who is making the rules, given P-16 convergence and argue the "onslaught of new issues and actors into each sector can lead to the marginalization of traditional actors who carry important knowledge about how each sector works that the new actors misunderstand or simply do not value." A consequence, they argue, "can be a loss of vital sectoral knowledge and feelings of frustration and disengagement of those 'street-level bureaucrats' on whom successful implementation ultimately rests" (p. 41).

Germane to the present study, we view DE as a policy that—by its nature necessarily begets PK-16 convergence and that may, in the process, fundamentally change both sectors and bring new problems and solutions. Invariably, DE policies must bring high schools and IHEs (specifically, often community colleges) into at least some degree of alignment: Students who enroll in these programs, by definition, are simultaneously gaining course credit in both sectors, and this is to say nothing of the ways these sectors might need to collaborate/coordinate and adjust their educational programs and practices to deliver and govern these programs. Importantly, DE policies differ considerably from state to state, and we presume such details will matter in terms of bringing distinctive benefits and challenges.

Leading into this study, we anticipate the introduction of DE programming into a high school's portfolio of options (and the policy details shaping how these programs are created and adjusted over time) could considerably impact various facets of a high school and its management. Taking the perspective of a principal, for instance, we might expect shifts to their authority relative both to curriculum and curricular supervision. Further, we might even see shifts in the mission and meaning of the high school. Meanwhile, we expect specific policy details to affect both the nature and extent of sector convergence-for instance, provisions regarding curricular oversight and teacher certification presumably will affect program quality, and details regarding who is to bear what costs and who is eligible to dually enroll will affect the composition of students and which students subsequently are better positioned to transition fully into higher education programming. We also assume school principals experiencing these burgeoning programs are well positioned as "street-level bureaucrats" (Lipsky & Hill, 1993, p. 389) to share knowledge and insights to shape the (re)design of DE policies, in ways that could facilitate a more unambiguously positive convergence between the educational sectors.

## Methods

We approached our research question using convergent mixed methods, which "merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem" (Creswell & Creswell, 2018, p. 15). To do so, we developed and administered an electronic survey in an effort to gain insight into principal perceptions on how DE is affecting high schools/districts in these states. We developed a 19-item electronic questionnaire using the Qualtrics survey program and sent it by email to all traditional public high school principals in Ohio and Texas. We obtained a list of public high school principals from the Texas and Ohio Departments of Education. However, we did not send these surveys to charter school principals. It should be noted that in Ohio and Texas all high schools offer DE in some way, so our survey applies to all public schools in both states. We used the QAS-99 Question Appraisal System guide to help design our questionnaire and help account for any bias and assumptions as well as ensure our questions were clear. Our questions came from a review of literature related to administrative issues in DE. We also examined DE enrollment data provided by the Ohio Department of Education and the Texas Education Agency; specifically, we examined student DE enrollment data and compared these to principals' perceptions about enrollment patterns. The qualitative data are from the responses that were collected from the four "open-ended without predetermined responses" questions (Creswell & Creswell, 2018, p. 14). The quantitative data are from responses that were collected from 15 closed-ended questions.

The survey questions were developed from an extensive review of key features, issues, and concerns related to DE policy. Survey items addressed features and challenges related to policy implementation, finance, student motivations for taking courses, demographic questions, and questions related to issues of dual governance between IHEs and local school districts. There were 19 total questions, 15 of which were closed-ended and utilized a Likert format. Four questions were open-ended, giving participants the opportunity to write extended responses about their perceptions related to dual credit.

# Case Context

We chose Ohio and Texas as the research contexts because they feature robust DE programs and their DE policies embody many of the recommendations from studies that advocate broad access for purposes of equity and enrollment (see, for example, Zinth & Barnett, 2018). Ohio features a robust DE program known as College Credit Plus (CCP), which is available to grade 7–12 students with few restrictions. The cost of the program is paid for primarily by local school monies, covering all tuition and textbook costs (Zinth & Taylor, 2019). Texas also has a policy enabling students statewide to earn college credit in what is called dual credit (Miller et al., 2017). In Texas, both school districts and IHE can apply for foundational monies to cover the cost of college courses for high school students. Students in both states may earn credit by attending classes at an IHE or by taking a course offered at their school that provides college credit (NCES, 2017). Students in both states are more likely to earn college credits from community colleges than other IHEs. Given the expansiveness of their approaches to DE, Ohio and Texas may be forerunners of what is to come in other states.

Ohio and Texas are also ideal DE research settings on account of their demographics. Both states are large and populous, with Texas second and Ohio as the seventh most populous (U.S. Census, 2021). With respect to K-12 policy, Ohio is a state with a powerful teachers' union presence, whereas Texas has a law that bans collective bargaining (Hornbeck, 2023). In both states, high school principals are the senior leaders at the school building, making many curricular decisions while also delegating some decision-making to others (Houchens et al., 2018). Some school districts in Ohio and Texas are small, with under 1,000 students, while the largest district in Texas is Houston Independent School District with nearly 200,000 students, and in Ohio, Columbus City Schools with an enrollment of over 50,000 students (Ohio Department of Education, 2017). In all cases, principals are directly responsible to superintendents and elected boards of education and must act as stewards for their districts as a whole, which makes them key agents of knowledge for gathering information about how DE is impacting public-school districts and students.

# Data Collection

An IRB application for the survey of Ohio principals was approved in May of 2020. Data were collected from May 2020 to July 2020 via a Qualtrics link sent through email. An IRB application for the survey in Texas was approved in May of 2021. Data were collected from May to July in 2021, also through Qualtrics. In both cases, we sent three emails to principals inviting and/or reminding them to complete the survey.

# Data Analysis

In total, 195 principals responded to the survey, with 74 principals in Ohio (11.6% response rate) and 121 in Texas (11.9% response rate). While these response rates are low considering that they were sent to all public-school principals in each state, our study does not aim to speak for all principals, but rather provides some insight into principal perceptions. We do not claim to use this survey as a representative statistical sample of all principals, but we do believe that 195 principals from two states offer valuable insight. For four open-ended survey questions, we used qualitative data analysis techniques including reviewing, coding, and categorizing data, identifying common themes and possible contradictions, and drawing conclusions (Miles & Huberman, 1994). Researchers reviewed all survey responses independently prior to coding and then worked together to develop a list of codes, which included codes created inductively based on the patterns that emerged in the data. After developing codes based on themes that emerged from survey data, we triangulated data and compared outcomes from each state to ensure that we were able to sense and document differences and similarities that were apparent in the data.

For the 16 questions that gave participants response options, we used quantitative data analysis, which included descriptive statistics and inferential statistics. To better analyze and compare how high school principals perceive DE in their schools in Ohio and Texas, this paper used independent-samples *t*-tests, chi-square tests of independence, and analyses of variance (ANOVAs). The objective of the independent-samples *t*-test is to "test whether the means of two groups differ significantly on a dependent variable of interest" (Yockey, 2017, p. 71). Both the qualitative and quantitative data were converged to gain a more comprehensive understanding of the research questions (Mackey & Bryfonski, 2018).

# Findings

Analysis of principal surveys from Texas and Ohio revealed three response patterns: (1) Principals' perceived that economic or credential-oriented benefits motivated

students to take DE and IHEs to offer it; (2) Principals had mixed views about the rigor of DE courses; and (3) Principals described challenges surrounding dual governance related to curriculum, pedagogy, and/or finance. In the following, we present both qualitative and quantitative data to unpack the three response patterns.

## Economic/Credentialing Motivations

Principals perceived that economic motivations were driving both students' choices to enroll in DE, and IHE commitments to offering coursework. Broadly speaking, a vast majority of responding principals—86% of Ohio principals and 91% of Texas principals—agreed or strongly agreed that DE is a popular option for their students. Most perceived that the primary reason students take DE courses pertained to cost savings. When ranking the reasons why students at their school take DE courses, principals chose among the following options: (1) the opportunity to earn college credit at low or no cost, (2) the opportunity to earn college credit while in high school, (3) the ability to leave the high school campus, (4) the opportunity to take more challenging coursework, or (5) the opportunity to pursue courses that students found interesting. Ninety-one percent of Texas respondents and 90% of Ohio respondents placed one of the first two options, earning college credit at low or no cost and earning college credit, in the top-ranked category. By contrast, principals ranked curricular motivations, including the opportunity to take challenging or interesting coursework, at the bottom of reasons why students enrolled in DE.

In their written responses, principals elaborated on why they perceived economic and credential aspirations motivated students to enroll in DE coursework. Many principals reported that DE provided a way for students to earn college credit without the burden of cost. One principal from Ohio shared, "it provides access to college without cost," while another from Texas wrote, "it gives students free college, and who would pass that up?" Another Texas principal explained, "It gives the student an inexpensive head start to college." Overall, principals in both states overwhelmingly perceived that students are motivated to save money by taking DE courses. Some principals implied that the desire to save money was coming from students' parents. One Texas principal responded, "Parents understand and see the value of early college in terms of costbenefit," and another from Ohio wrote, "Parents cannot pass up free tuition." Another Ohio principal claimed, "parents buy into the free college statement put out by legislative personnel and the department of education." These responses, which were common across the survey data in both states, indicated that principals perceive parents both as those who bear the cost of their child's college attendance and the key decision-makers in choosing DE for their child.

In addition to framing students' DE motivations in terms of cost savings and credentials, some principals from Ohio also perceived that IHEs were motivated by economic gain, with implications for administrative decision-making. One Ohio principal shared that IHEs are "so eager to get our students," implying that IHEs encourage DE enrollment to benefit from the tuition dollars collected. Another Ohio principal shared that they believed DE to "be reckless and nothing more than a money grab for local small colleges and junior colleges especially." A similar sentiment was expressed in responses from principals who wrote that DE seemed like a "money game" or "transfer of money from one school to another." Concerns centered around their perception that money was a driver for DE expansion and that IHEs were willing to "water down" the level of rigor in their curriculum. These data suggest principals in Ohio had some concerns as to the aims and purpose of DE. However, Texas principals did not share the same concerns, which is possibly due to the differences in the way that DE is funded between the two states. As noted, in Ohio each school district uses their existing funds to cover DE cost, while in Texas, the state covers this cost, making it have less impact on the individual school district budget.

Quantitative data analysis related to survey questions about how principals perceived student motivations revealed that both Ohio and Texas principals see DE as a popular option, but the program was perceived as more popular among principals in Texas. These data are presented in Table 1, revealing significant differences in the ways that principals in Ohio and Texas viewed motivational factors that influence DE participation. Specifically, the Chi-square results indicated that there was a statistically significant (p = .003) association between state (Ohio vs. Texas) and whether CCP/Dual credit is a popular option. Specifically, Texas has a higher percentage that is strongly agreeing that CCP/Dual credit is a popular option compared with Ohio. In addition, our t-test results indicated a statistically significant difference between Ohio (M=4.69, SD=1.111) and Texas (M=3.60, SD=1.094) principals' perceptions on the attractiveness of the CCP/Dual credit feature, working toward a certificate to students, t (6.029) = 153, p = .000. These results suggest that states have an effect on their principals' perceptions on the DE policies. The Mean of Group Statistics shows that Ohio's mean is higher than Texas's mean, suggesting that principals in Texas have the perception that DE feature-working toward a certificate is more popular to students compared with Ohio principals' perceptions.

## Mixed Views on Rigor

Data analysis also revealed that principals hold mixed views on the rigor of DE coursework—and that these views vary somewhat by state. Ohio principals shared more concern about rigor than Texas principals. Specifically, some principals

	Strongly disagree		Disagree		Agree		Strongly agree			
	n	%	n	%	n	%	n	%	X <sup>2</sup>	Þ
Ohio Texas	2 0	2.9 0	8 8	.6 8.8	31 21	44.9 23.1	28 62	40.6 68.1	14.007	.003**

Table I. Chi-Square Results for Whether CCP/Dual Credit is a Popular Option.

\*p < .05, \*\*p < .01, \*\*\*p < .001.

perceived that students preferred to take presumably easier DE courses, rather than more challenging college preparatory high school courses. One Ohio principal wrote, "[DE] classes off our campus are easier and students feel they have more free time." This principal perceived some students are motivated to take DE courses offcampus because the courses are "easier." Another Ohio principal explained that students take DE courses to "avoid rigor of our college prep curriculum." Another principal shared, "our students score higher on the ACT if they take HS courses vs DE," reflecting their perception that regular high school courses were more rigorous than DE offered through the IHEs.

Principals in both states shared that DE courses require fewer meeting times per week, which might be perceived as more desirable and thus influence students' decisions to enroll. While college classes might be fully online or meet twice per week, high school courses often meet every day at the high school and principals perceived students preferred the DE schedule. One Texas principal shared, "overwhelmingly, the comments we hear from students is that they wish to attend class fewer hours than at a traditional high school, no classes on Fridays and at times a lower level of rigor in coursework." An Ohio principal shared, "Students cannot pass up having every Friday off." These responses suggest that principals see the DE schedule as less demanding on students' time, and perhaps less rigorous than other courses.

Nearly 70% of principals in Texas and Ohio responded that DE coursework competes with other courses offered at local high schools, including Advanced Placement, International Baccalaureate, and other honors and traditional high school curricula. Principals expressed concern about course and instructional quality of DE courses taken by their students. One Texas principal explained that DE is "easier [than AP courses] and you're more likely to get the credit." Principals responded that DE courses are replacing AP, honors, and traditional high school courses and that they are less rigorous, expressing frustration that they have little control over what is offered at their schools because of the growth of DE. One principal in Ohio explained:

I was not pleased with the rigor of some of the online offerings in the past. We did away with those courses and had one of our teachers become the CCP [DE] teacher. We could see the lack of assignments and engagement. It was horrible and a joke.

This statement was representative of several other comments from principals who were concerned about the rigor of courses, without having many tools to control for quality. The one option some principals had, as reflected in the quote above, was to use high school teachers employed by the school district to teach DE, rather than rely on instruction provided through the IHE.

Our quantitative analysis confirmed the trend we saw in the qualitative open-ended responses, with Ohio principals expressing more concerns about rigor. Our *t*-test results reveal a statistically significant difference in the way principals perceive the motivational factor of students taking CCP/Dual credit as a way to challenge them academically, with Ohio principals' perceptions (M=4.77, SD=1.282) and Texas

principals' perceptions (M = 4.15, SD = 1.084); t(3.206) = 153, p = .002. These results suggest states have an effect on principals' perceptions of DE policies generally and the quality and rigor of DE courses specifically. The Mean of Group Statistics shows that Ohio's mean is higher than Texas's mean, suggesting that principals in Texas have the perception that students are motivated to take DE to be academically challenged more frequently than students in Ohio.

# Dual Governance and the Loss of Principal Autonomy

The final response pattern centered around issues of governance between local school districts and IHEs. Principal responses related to dual governance revealed that most perceived the IHE to have more control over DE coursework. Seventy-nine percent of principals in Ohio and 67% in Texas marked that the IHE was primarily responsible for the governance of curriculum/planning/pedagogy for DE courses, and a majority (60%) of principals across both states agreed that there had been some conflict in governance. Principal perceptions that they lacked power over DE programming fell into two sub-categories: control over curriculum and control over administrative timelines.

Related to the concerns about rigor cited above, many respondents perceived they lacked control over who teaches DE and whether instruction is high-quality. One principal from Ohio shared that they were "not happy with the number of poor instructors [who taught DE] and there is nothing I can do about it as principal." Explaining further, another Ohio principal wrote they were "having at least one to two really weak educators and the deans are very unlikely to do anything regarding these poor professors." Yet another principal shared, "I wish there was a manner we could address poor instruction from the professors because it hurts really good students." A Texas principal shared that "lack of communication with professors" was problematic, explaining that recently they had 90% of freshman students taking an online communications course, where students completed work with a staff facilitator at the high school, fail because of lack of communication. These data indicate that principals were frustrated they could not influence teacher quality when professors were provided by the IHE.

Principals in both Ohio and Texas also had difficulty navigating administrative timelines with their IHE partner. Several principals in Texas shared that grading timelines create issues in many contexts. One principal wrote, "grading timelines [between high schools and IHEs] are different, affecting athletic eligibility" [Athletic eligibility is determined prior to the time that grades were reported by the IHE.] An Ohio principal wrote about how "timelines are challenging with end-of-grading periods and end-of-year grade reporting [not coming prior to graduation dates] which could affect graduation." A principal from Texas wrote that "arbitrary [admissions] deadlines hurt our military students who don't arrive in the district until after June." According to this principal, enrollment deadlines set by the IHE created access barriers for some student groups. Several principals also shared that "adapting to traveling professor" schedules can be problematic and require manpower. [Explain what it means to adapt to professor schedules.] Collectively, these data suggest that principals often felt a lack of control over the DE programs in which their students participated, especially related to instructional quality and administrative timelines. One principal's comment sums up the problem overall, that principals felt their side of the partnership was not given the same consideration as the IHEs: "Dual credit [DE] also includes high school credit and the high school perspective is important."

Quantitative analysis confirms what qualitative data showed. Chi-square results (see Table 2) indicated a statistically significant (p = .006) association between state (Ohio vs. Texas) and to what extent there have been conflicts/tensions between the colleges and high schools regarding CCP/Dual credits programming/delivery. Texas principals' perceptions on the dual governance conflicts/tensions are lower compared with Ohio principals' perceptions. One reason could perhaps be due to the way each state funds DE, with Texas providing additional funding from the state and in Ohio the local district uses their existing budget to cover the cost of DE.

# Discussion

This study sheds light on the ways that high school principals in two states perceive the rapidly expanding educational policy of DE and how the secondary and the higher education systems are converging through the DE programs in their states. Principals are important actors and influencers in the individual school setting and most DE courses are taught in local high schools, which means their perceptions and actions are significant (Houchens et al., 2018; Shivji & Wilson, 2019). These data reveal insights related to economic motivations, rigor of coursework, and governance that may be of interest to policymakers and that might help to frame future policy and research. Our finding that principals perceive economic value as the most pervasive motivation for taking DE courses, for instance, demonstrates the need for additional understanding of how secondary education is becoming a new avenue to provide affordable higher education, thus blending the two systems. The finding that principals are skeptical about the level of rigor of DE coursework also raises questions about differences between curriculum and pedagogy in both high schools and IHEs. Finally, issues related to dual governance-in particular, that principals see higher education playing a larger role in the governance of DE-raise questions about who makes decisions in the DE space, adding to the existing literature about the convergence of K-12 and higher

	Not at All		Somewhat		Often			
	n	%	n	%	n	%	X <sup>2</sup>	Þ
Ohio Texas	21 55	35.0 59.8	36 31	60.0 33.7	3 6	5.0 6.5	10.303	.006**

Table 2. Chi-Square Results for Dual Governance Conflicts/Tensions Perception.

\*p < .05, \*\*p < .01, \*\*\*p < .001.

education (see Dougherty & Henig, 2016; Loss & McGuinn, 2021). Below, we explore these topics further, drawing connections to theory and prior literature and highlighting implications for policy. We first discuss the common trends across the dataset, and then consider differences in principal responses between Ohio and Texas.

# Motivations for DE

Our findings revealed principals perceived economic motivations as driving DE coursework and student enrollment. Considering this, questions about motivations for offering DE surface, as do questions regarding how secondary and higher education are funded. Dougherty and Henig (2016) note that the rules and rule-makers of the K-12 and higher education space have been converging in recent decades. The perception that economic motivations drive DE also raises questions about access and participation. Are DE courses simply replacing high school courses? If high school students had access to free college when they graduated, would they be taking DE courses, or do they take them because they feel compelled to do so because it is free? Are policymakers incentivizing the bypassing of secondary school curriculum? Similarly, how and what are students learning about the value of higher education participation? Other benefits of higher education, such as the opportunity to pursue new and interesting disciplinary knowledge, also hold value, but principals did not perceive that curriculum or learning were major incentives for students enrolling in DE. Nationally, policymakers have emphasized the importance of postsecondary education for economic benefits, and our findings suggest DE programs may be reinforcing this model (Dougherty & Henig, 2016). While this study does not answer these important questions, it does provide insight from principals about overall motivations which should be studied further.

# **Concerns About Rigor**

Principals, especially Ohio principals, expressed concern about rigor in DE courses, where some said that the courses were less rigorous than traditional high school courses or other advanced courses offered in their school. Rigor is a subjective term and our study does not inquire into the definition and how the participants defined rigor. However, the convergence of K-12 and higher education is relevant to this finding. Secondary school teachers and college professors go through different preparation programs, with secondary teachers required to be certified by their state, take exams about content and pedagogy beyond college, and engage in internships/ student teaching (Goldhaber, 2019). Conversely, in most cases, professors who teach DE courses are required to have master's degrees in their content area and be approved by the institution in which they are employed (Pompelia, 2020). DE enrollment course quality is an issue that needs further study as well as a better understanding of the differences between secondary and higher education level teaching and expectations. Additionally, examining why Ohio principals were more concerned about rigor

than Texas principals may help reveal key differences in DE policy that could be helpful to policymakers.

# DE Governance

Governance was another issue of concern, with principals-especially principals in Ohio-perceiving that DE courses were mostly controlled by the IHE that grants college credit. As noted earlier, governance simply means who is making the rules, and in the case of this study, principals expressed that in the context of DE, it is the IHE who is making the rules, even when the courses are taught by high school faculty. This perspective further demonstrates that the K-12 and higher education systems are converging, but in this case, it shows ways that while the systems are merging: The higher education system seems to be making the rules and controlling the educational policies at the local level. While it is no surprise that the IHE makes the rules that govern their courses, the perspective of the principal is important for a couple of reasons. First, DE courses give both high school and college credit, so there is a K-12 component to the course and students are often replacing courses that are required for high school graduation, like history, government, or algebra. Second, principals are in their buildings and familiar with the teachers who are teaching, making their voices valuable and knowledge potentially helpful in improving DE overall.

# State Differences

For several survey responses, our quantitative analysis revealed a significant statistical difference between Texas and Ohio principals' perceptions, with Ohio responses indicating more skepticism toward DE. While our data do not explain these differences, one speculation is that in Ohio, money for DE/CCP comes directly from school budgets, with each school district responsible for covering the cost of individual student tuition and textbook costs. In Texas, however, individual school districts are not responsible for DE. Rather, students sign up for the course and the state reimburses the community college through which the school district offers DE. Thus, in Texas school principals might not feel the same financial pressure of Ohio principals. Additionally, Ohio school districts may partner with multiple IHEs to offer DE, and students can choose any IHE in the state, including online options, through which to take DE. In Texas, dual credit courses are offered through the community college in the taxation district of the local school district. Students have other options to earn college credit, but the policy is arguably more streamlined, leaving fewer policy actors and giving districts more of a voice in what courses are offered. While we cannot say definitively whether and how state policy choices influence principals perceptions, our findings suggest the need for further inquiry into how DE policy environments create different levels of buy-in from principals, with implications for students' choices and experiences in DE programs

# Conclusion

While DE continues to scale nationwide, this study reveals the perceptions of some high school principals who are in schools where DE courses are taken (Shivji & Wilson, 2019). Principals are responsible for administering DE policy and bringing policy conception to reality, making their perspective important. Our research question attended toward access, participation, and governance and findings showed principals in states with robust DE programs have mixed views about DE policy and have concerns about rigor and how much power IHEs have in governance. Also, our study reveals that principals are conflicted about the convergence of K-12 and higher education and see the main motivation for students to take DE courses as economic, and they confirmed some inequities that exist in the DE space. The data story told by Ohio and Texas principals reveal that they prefer to have a say in the governance and rulemaking of DE and that their opinion can perhaps control for quality and issues of rigor within schools. Additionally, the question of how DE is funded told a story about principal satisfaction, where Ohio principals, who must use local funds to pay for DE, were less satisfied than Texas principals, who are given additional funds from the state. This issue needs additional study in the DE space. While policymakers continue to expand DE policies in states, they should seek the perspective of secondary school stakeholders to better understand what is happening within schools, especially given that DE education is being executed primarily in high schools.

## **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Spencer Foundation (grant number 202000144).

# ORCID iD

Dustin Hornbeck (D) https://orcid.org/0000-0002-2108-1220

## References

- Allen, T. O., Thompson, M. L., & Martinez-Cosio, M. (2019). Message, hope, and reality: How do latinx students access dual credit and leverage their experiences in engineering programs? *The High School Journal*, 103(1), 38–52. https://doi.org/10.1353/hsj.2020.0002
- An, B. P., & Taylor, J. L. (2019). A review of empirical studies on dual enrollment: Assessing educational outcomes. In M. B. Paulsen & L. W. Perna (Eds.), Higher education: Handbook of theory and research. Springer.
- Borden, V. M. H., Taylor, J. L., Park, E., & Seiler, D. J. (2013). Dual credit in U.S. higher education: A study of state policy and quality assurance practices. Higher Learning Commission.

- Bragg, D. D., Kim, E., & Rubin, M. B. (2005). Academic pathways to college: Policies and practices of the fifty states to reach underserved students. Office of Community College Research and Leadership.
- Charlier, H. D., & Duggan, M. H. (2009). Community college dual enrollment faculty orientation: A utilization-focused approach. *Community College Journal of Research and Practice*, 34(1–2), 92–110. https://doi.org/10.1080/10668920903385863
- Clayton, G. (2021). Advanced placement and concurrent enrollment substitution effects. Journal of Advanced Academics, 34(3), 380–396. https://doi.org/10.1177/1932202X211004901.
- Conley, D. T. (2012). A Complete Definition of College and Career Readiness. *Educational Policy Improvement Center (NJ1).*
- Cowan, J., & Goldhaber, D. (2015). How much of a "running start" do dual enrollment programs provide students?. *The Review of Higher Education*, 38(3), 425–460.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Method Research Approaches* (5th ed.). Sage.
- Dougherty, K. J., & Henig, J. (2016). Governance as a source of sector convergence in a changing sociopolitical landscape. *Convergence: US education policy fifty years after the ESEA* and the HEA of, 21–41.
- Duncheon, J. C., & Relles, S. R. (2020). "We're caught in between two systems": Exploring the complexity of dual credit implementation. *The Review of Higher Education*, 43(4), 989–1016. https://doi.org/10.1353/rhe.2020.0028
- Ganzert, B. (2012). The effects of dual enrollment credit on gender and race. *Current Issues in Education*, 15(3), 1–8.
- Garcia, H. A., Eicke, D., McNaughtan, J., & Harwood, Y. (2020). Understanding dual credit programs: Perspectives from faculty, staff, and administrators. *Community College Journal of Research and Practice*, 44(8), 584–594. https://doi.org/10.1080/10668926. 2019.1626301
- Goldhaber, D. (2019). Evidence-based teacher preparation: Policy context and what we know. *Journal of Teacher Education*, 70(2), 90–101. https://doi.org/10.1177/0022487118800712
- Gomez, A. A. (2020). Communication and collaboration among dual-credit instructors: A case study of el paso community college in partnership with selective public school districts [Doctoral dissertation, National American University].
- Haskell, R. E. (2016). Effects of dual-credit enrollment on underrepresented students: The Utah case. Applied Economics and Finance, 3, 54–72. https://doi.org/10.11114/aef.v3i2.1323
- Holten, B., & Pierson, A. (2016). Getting Ahead with Dual Credit: Dual-Credit Participation, Outcomes, and Opportunities in Idaho. *Regional Educational Laboratory Northwest*.
- Hooker, S. (2018). Forging Regional Connections: The Role of a Community College in High School Transformation. The Central Ohio Partnership for College and Career Readiness Expansion. *Jobs for the Future*.
- Hornbeck, D. (2019). Outsourcing the twelfth-grade year of high school: A case study (Doctoral dissertation, Miami University).
- Hornbeck, D. (2023). Teachers Unions and Dual Enrollment Policy in Collective Bargaining Agreements. *Educational Policy*, 37(2), 339–358.
- Hornbeck, D. & Malin, J. R. (2019). Superintendents' perceptions of the influence of a statewide *dual* enrollment policy on local educational programming. International Journal of Educational Reform, 28(3), 253–277.
- Houchens, G., Niu, C., Zhang, J., Miller, S. K., & Norman, A. D. (2018). Do differences in high school principal and assistant principal perceptions predict student achievement outcomes? *NASSP Bulletin*, 102(1), 38–57. https://doi.org/10.1177/0192636518763105

- Howley, A., Howley, M. D., Howley, C. B., & Duncan, T. (2013). Early college and dual enrollment challenges inroads and impediments to access. *Journal of Advanced Academics*, 24(2), 77–107. https://doi.org/10.1177/1932202X13476289
- Hughes, K. L., Rodriguez, O., Edwards, L., & Belfield, C. (2012). Broadening the benefits of dual enrollment: Reaching underachieving and underrepresented students with careerfocused programs. James Irvine Foundation.
- Huntley, H. J., & Schuh, J. H. (2002–2003). Post-secondary enrollment: A new frontier in recruitment and retention. *Journal of College Student Retention*, 4, 83–94. https://doi.org/ 10.2190/4XQF-P3CB-LQM8-BQQL
- Ison, M. P. (2022). Dual enrollment, performance-based funding, and the completion agenda: An analysis of post-secondary credential outcomes of dual enrollment students by credential type. *Community College Review*, 50(1), 51–70. https://doi.org/10.1177/ 00915521211047673
- Kanny, M. A. (2015). Dual enrollment participation from the student perspective. New Directions in Higher Education, 169(1), 59–70.
- Labaree, D. F. (1997). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal*, 34(1), 39–81. https://doi.org/10.3102/ 00028312034001039
- Lee, J., Fernandez, F., Ro, H. K., & Suh, H. (2022). Does dual enrollment influence high school graduation, college enrollment, choice, and persistence? *Research in Higher Education*, 63(1), 825–828.
- Lipsky, M.(1993). Street-level bureaucracy: An introduction. In M. Hill (Ed.), *The policy process: A reader* (pp. 381–385) Routledge.
- Loss, C. P., & McGuinn, P. J. (2021). The convergence of K-12 and higher education: policies and programs in a changing era. Harvard Education Press.
- Mackey, A., & Bryfonski, L. (2018). Mixed methodology. In P. Aek, P. De Costa, L. Plonsky & S. Starfield (Eds.), *The Palgrave handbook of applied linguistics research methodology* (pp. 103–121). Palgrave Macmillan.
- Malin, J.R., Bragg, D.D., & Hackmann, D. G. (2017). College and career readiness and the Every Student Succeeds Act. Educational Administration Quarterly, 53(5), 809-838.
- Miller, T., Kosiewicz, H., Tanenbaum, C., Atchison, D., Knight, D., Ratway, B., Delhommer, S., & Levin, J. (2018). *Dual-credit education programs in Texas: Phase II*. American Institutes for Research.
- Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. sage.
- Miller, T., Kosiewicz, H., Wang, E. L., Marwah, E. V. P., Delhommer, S., & Daugherty, L. (2017). *Dual credit education in Texas: Interim report*. RAND.
- Minaya, V. (2021). Can Dual Enrollment Algebra Reduce Racial/Ethnic Gaps in Early STEM Outcomes? Evidence from Florida. Summary Research Report. Community College Research Center, Teachers College, Columbia University.
- Moreno, M., McKinney, L., Burridge, A., Rangel, V. S., & Carales, V. D. (2021). Access for whom? The impact of dual enrollment on college matriculation among underserved student populations in texas. *Community College Journal of Research and Practice*, 45(4), 255–272. https://doi.org/10.1080/10668926.2019.1688734
- National Center for Education Statistics (2017). The condition of education 2017 (NCES 2017-144). U.S. Department of Education. https://nces.ed.gov/pubsearch/pubsinfo.asp? pubid=2017144
- Ohio Department of Education (2017). Enrollment date. http://education.ohio.gov/Topics/Data/ Frequently-Requested-Data/Enrollment-Data

- Partridge, M. A., Schaller, T. K., Berry, R. L., & Routon, P. W. (2020). The economic benefit from tuition savings for dual enrollment students in Georgia. *Journal of School Choice*, 15(4) 655–667.
- Pierson, A., Hodara, M., & Luke, J. (2017). Earning College Credits in High School: Options, Participation, and Outcomes for Oregon Students. REL 2017-216. *Regional Educational Laboratory Northwest*.
- Pompelia, S. (2020). Dual Enrollment Access: What Is the Issue, and Why Does It Matter? Policy Snapshot. Education Commission of the States.
- Shivji, A., & Wilson, S. (2019). Dual Enrollment: Participation and Characteristics. Data Point. NCES 2019-176. National Center for Education Statistics.
- U.S. Census Bureau (2021). Education attainment data.
- Witkowsky, P., & Clayton, G. (2020). What makes dual enrollment work? High school counselor perspectives. *Community College Journal of Research and Practice*, 44(6), 427–444. https://doi.org/10.1080/10668926.2019.1610676
- Yockey, R. D. (2017). SPSS demystified. [electronic resource]: A simple guide and reference (3rd ed.). Taylor and Francis.
- Zinth, J., & Barnett, E. (2018). Rethinking dual enrollment to reach more students. Promising Practices. *Education Commission of the States*.
- Zinth, J., & Taylor, J. L. (2019). Leveraging state data systems to address policy-relevant research: The case of dual enrollment. *New Directions for Institutional Research*, 2019(181), 103–116. https://doi.org/10.1002/ir.20301

## **Author Biographies**

**Dustin Hornbeck** is an assistant professor at the University of Memphis where he studies how dual enrollment and early college policies impact students, teachers, and the public school system. His broader research interests include policy shifts in secondary education, LGBTQ student experiences, democracy in education, college transition, and equity in dual enrollment.

**Joel R. Malin** is an associate professor and serves as Director of Graduate Studies in the Department of Educational Leadership at Miami University. He is broadly interested in understanding and enhancing the links between research, policy, and practice. He is the coeditor, with Chris Brown, of *The Role of Knowledge Brokers in Education* (Routledge, 2020) and The Emerald Handbook of Evidence-Informed Practice in Education (Emerald, 2022).

**Julia C. Duncheon** is an associate professor at the University of Washington in Seattle. Her research broadly focuses on college access, preparation, and transition for underrepresented student populations. Recent projects have focused on reforms such as early college high schools and dual enrollment/dual credit coursework.

**Jing Tan** is a PhD candidate in the Educational Leadership program at Miami University. She works as a teaching assistant for Sociocultural Studies in Education class at Miami. Her research interests are language education, social justice oriented curriculum and instruction, and educational policy analysis.