

Promises and Realities: Academic Advisors' Perspectives of Dual Enrollment Credit

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Dual enrollment (DE) is a common method for high schools to offer postsecondary preparation, exposure to college-level expectations, and, potentially, college credit. Some dual-enrollment students enter college with 24 semester hours. Upon matriculation, these high-credit DE (HCDE) students present unique challenges to college academic advisors. This study examined the experiences of these advisors by utilizing semi-structured interviews with academic advisors from Colorado who work with HCDE students. Advisors frequently had to address implications of DE credits on time to graduation, degree planning, potential costs savings, and tradeoffs with on-campus experiences. Implications include the need for four-year institutions to better communicate with high school students and counselors and to improve planning for the complexities of HCDE students.

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The number of students enrolling in college directly from high school with college credits from concurrent and dual enrollment (DE) courses, “college courses that high school students take and for which they receive college credit upon successful completion” (An & Taylor, 2015, p. 2), continues to increase (National Alliance of Concurrent Enrollment Partnerships [NACEP], 2020). Across the United States, approximately 1.4 million students participate in some form of DE (NACEP, 2020). Participation in these credit-bearing courses contributes to postsecondary enrollment, achievement, and attainment (An, 2013; Karp et al., 2007). Stated benefits of DE that are marketed to students and their families include reduced time to degree and decreased college costs (Thomson, 2017). Prior research identified the need to help DE students and higher education faculty members set appropriate expectations

regarding the use of DE credits (Kanny, 2015; Karp, 2012), but the role of academic advisors in this issue remains relatively underexplored (Witkowski et al., 2020). Some students earn such a high number of credits—24 credit hours, in this case—that they enter the university with sophomore standing. For the purposes of this study, these students are hereafter referred to as high credit dual enrollment (HCDE) students. The role of higher education academic advisors working with this unique subset of DE students has not been previously investigated.

As students transition into college, academic advisors are typically the initial point of contact to provide continual support related to academic progress for incoming students (Kramer & Associates, 2007), as advisors help students develop their academic plans (Braxton et al., 2014). HCDE students often come to their initial advising appointments with goals, expectations, and plans based on how DE was marketed in high school without fully understanding college curriculum or the rigor of courses at four-year institutions. Research exploring the ways colleges are responding to HCDE students’ needs and expectations is lacking. Research related to academic advisors’ perspectives of HCDE students is equally sparse.

Purpose and Research Question

The purpose of this qualitative study is to explore the perspectives of academic advisors in higher education who work with HCDE students regarding DE. The study was guided by the following research question:

RQ1. What are academic advisors’ perspectives of DE coursework based on their work with HCDE students entering college full-time?

Review of the Literature

Only recently have the perceptions of those closest to the operation of DE (e.g., DE course instructors, enrollment managers, and college

academic advisors) been explored and documented (Troutman et al., 2018). Researchers raised concerns about the perceived rigor of DE coursework to ensure students were prepared for the transition to college (An & Taylor, 2015; Ferguson et al., 2015; Tinberg & Nadeau, 2011). Another group of professionals recently interviewed about their perspectives of DE were the high school counselors who work closely with high school students completing DE coursework (Shaw, 2019; Witkowski & Clayton, 2019). In both studies, counselors noted benefits of DE, such as students earning college course credit and access to higher education. High school counselors also cautioned about the increased advisement needs for DE students and the additional communication required between high school counselors and college academic advisors to bridge students' understanding of DE credits' application to college curriculum requirements.

As DE credit-bearing students enter college, they are assigned an academic advisor to guide them through a degree plan based on their goals. For students with DE credits, advisors face a more complicated scenario regarding course availability, transferability of credits, and constraints of degree plans (Troutman et al., 2018). In previous studies related to DE, academic advisors noticed that incoming college students sometimes lacked the maturity and soft skills necessary to be successful in higher-level courses (Bennett, 2018). Advisors also had concerns about the rigor of DE coursework (Troutman, et al., 2018). However, these studies lacked detail on the nature of advising encounters with students. Thus, the current body of literature is limited for DE students and nonexistent for HCDE students.

Dual Enrollment in Colorado

Dual enrollment is a growing educational choice for high school students. U.S. sample data traced the rapid expansion of DE offerings. For the 2003 academic year, the National Center for Education Statistics (NCES) simultaneously reported on DE credit and exam-based credit (e.g., Advanced Placement [AP], International Baccalaureate) in large part due to the low number of schools offering DE relative to AP (Waits et al., 2005). When reported separately in 2005, DE was available in 71% of U.S. public high schools, with lower participation in schools with smaller graduating classes (Waits et al., 2005). By 2019, DE was so sufficiently widespread that statistics were reported separately, with DE available to

greater than 90% of the graduates of public high schools that year (NCES, 2019, p. 23).

Colorado has followed a similar trend as the U.S. at large, with large increases in enrollment and availability of DE to most school districts in the state. Prior to the 2009 passage of the Concurrent Enrollment Programs Act, DE participation was relatively modest, with limited financial support from statewide funding. The passage of state legislation in the late 2000s marked a shift from smaller, limited participation programs to widespread DE open to all high school students supported by a dedicated funding model. Increased funding, coupled with legislative support and a well-defined credit articulation policy, built the foundation on which DE participation grew from 15,000 students in 2010 to nearly 46,000 in 2018 (Colorado Department of Higher Education [CDHE], 2011; CDHE, 2018).

Methods

The tenets of constructivism guided this research due to the limited exploration of the experiences of the HCDE student population and the advisors who guide them through their collegiate experience (Creswell & Creswell, 2018; Crotty, 1998). Researchers have used constructivism to understand complex human phenomenon (Broido & Manning, 2002; Creswell & Creswell, 2018), such as the experiences of unique, under-explored populations. Thus, this study employed a basic qualitative research design as defined by Merriam and Tisdell (2015) to understand how academic advisors make sense of DE and how their perceptions inform their work with HCDE students.

Sampling and Participants

Upon receiving institutional review board approval to conduct this study, academic advisors were recruited through a statewide network (NACADA regional listserv) and direct emails to advisors in the state. Criterion-based purposeful sampling (LeCompte & Schensul, 2010; Patton, 2014) was employed; we invited academic advisors from four-year institutions in the state with experience advising HCDE students, operationalized as those who earned 24 or more DE credits during high school prior to entering college, to participate in the study in exchange for a \$25 gift card incentive.

Table 1. Participants' demographic information

Pseudonym	Advising Experience	Institution Type	Academic Area Serving
Alice	2 years	Comprehensive public	Art, music, theatre
Bailey	10 years	Comprehensive public	General
Eleanor	4 months	Public research	STEM
Hilary	6 years	Comprehensive public	Business/Health sciences
Jim	12 years	Regional comprehensive	Nursing
Lacey	22 years	Public research	Psychology/Neuroscience
Leticia	6 years	Public research	Nutrition
Lucy	2 years	Regional comprehensive	General
Nick	6 years	Comprehensive public	Engineering/Business
Sophie	7 years	Public research	Engineering/Biomedical sciences

Note. STEM = science, technology, engineering, or mathematics

All academic advisors who expressed interest were able to participate based on the methodological and practical parameters of the number of study participants. The sample yielded 11 participants from seven 4-year, public higher education institutions in Colorado. The participants' demographic information is described in Table 1. Participant recruitment ended with the initial 11 interested participants, as the data reached saturation (Lincoln & Guba, 1985) when similar perspectives emerged from the participants' interviews.

Data Collection

Constructivists focus on the participants' perspective and seek to understand how the participants' interactions with others developed their views (Creswell & Creswell, 2018). Therefore, this study employed semi-structured interviews lasting 30 to 45 minutes to gather data from participants to ensure focus on participants' perspectives (Crotty, 1998; Fontana & Frey, 2005; Mertens, 1997; Salmons, 2015). Fontana and Frey (2005) supported the use of a semi-structured interview approach, as it allows for the structure needed to achieve the goal of the research and provides opportunities for conversation and exploration of the phenomenon under investigation. Due to the geographic distribution of participants across the state, interviews were conducted and recorded via a computer-mediated platform. The structure of the 19-question protocol encouraged participants to make meaning of their experiences and perspectives working with HCDE students. Sample interview questions included:

- What has been your experience advising/working with students directly from high school who enter college with at least 24

credit hours (typically sophomore standing)?

- What do you see as the academic and developmental benefits and challenges of students participating in DE classes before coming to college?

Lastly, interviews were transcribed and provided to the research team for analysis.

Data Analysis

Informed by inductive analysis approaches (Hatch, 2002; Thomas, 2006), our data analysis began after the first interview and continued throughout data collection as themes emerged based on various participants' perspectives of DE. Following transcription of the interviews, we independently reviewed the data and utilized an inductive, two-cycle coding process to initially code the data. Each researcher employed open coding (Glaser & Strauss, 1967) in their initial round of analysis and then further refined their codes during a second independent reading of the data, which resulted in 100 independent codes combined across all researchers. The researchers included those with and without hands-on experience with DE students, which contributed to the quality of the findings through the use of multiple coders as a form of peer debriefing (Polit & Beck, 2016).

During the code refinement process, we discussed the meanings of the codes, which allowed us to reach consensus when differences in terminology from the independent coding process occurred. With the research question at the forefront of our analysis, we determined themes from the combined coding process by organizing the codes into thematic categories. We agreed on the overarching themes presented in

Table 2. Codes by frequency of occurrence

Name of Code	Instances (<i>n</i>)
Advising Strategy	31
Developmental Concerns	30
Maturity	29
Saving Time with DE	26
Rigor	19
DE Provides Varying Levels of Preparation	19
Saving Money with DE	18
Value of College Experience	17
DE Student Characteristics	16
Degree Plan	16
Career-Readiness Concerns	15
Missed Opportunities	13
Students Completed Unneeded DE Credits	13

Note. DE = dual enrollment

this study, and each researcher then contributed their perspective on which quotes best represented the essence of each theme.

Trustworthiness

The trustworthiness procedures of credibility, transferability, and confirmability were applied in congruence with this study's basic qualitative research design (Lincoln & Guba, 1985). Prior to data collection, a member of the research team with five years of experience similar to that of the participants reviewed the interview questions to ensure clarity and the questions' ability to generate rich descriptions of participants' perspectives. Credibility of the findings was supported through the use of multiple researchers to triangulate the coding of the data and consensus of the themes (Denzin, 1978). Transferability of the findings were supported by a detailed overview of the data collection contexts and participants' backgrounds, including years of experience, institution type, and academic area of advising, to allow readers to determine if the study findings were useful in their specific contexts. Finally, member checks of the final themes supported the study's confirmability, as participants provided feedback that was incorporated into the final presentation of the themes.

Findings

The participants shared various perspectives of DE based on their experiences advising this population. Table 2 provides the most commonly

occurring codes organized by frequency of occurrence. The higher occurring codes were combined to focus the themes presented here.

Advisors shared common experiences of educating HCDE students about their DE credits during initial advising meetings. While seeking to affirm the preparation students received in DE, advisors often provided a new perspective inclusive of college academics related to inapplicability of DE credits to college degree plans, the importance and purpose of buffer classes, and the rigor of college coursework at four-year institutions.

Degree Plans and Saving Time with DE

Academic advisors shared that students who pursued DE coursework often assumed all earned credits would directly advance their post-secondary education trajectory. This is not necessarily the case. Advisors recounted many instances in which they met with students who took DE classes that were essentially inapplicable to their college degree attainment because they did not have an academic major identified when enrolling in DE courses. Because of a lack of understanding of the structure of college curriculum and sequencing, the DE credits accrued did not necessarily foster faster degree completion. Students often found themselves having taken DE classes that did not fulfill degree plan requirements for their chosen academic major in college. Sophie mentioned the challenges students experienced as they learned how DE coursework influenced their degree plans, oftentimes in ways they had not considered:

I think the challenging ones are like, 'Okay, I have 64 credits coming in, which is the max that [the institution] allows. So, I am going to take exactly two years to get through here.' Those are a lot more challenging because often they're not taking the right [DE] classes. Often the classes they're left with are not great paired together. We are running into prerequisite issues with those types of things.

Other issues advisors encountered included degree programs with mandatory four-year sequences students did not consider until they became full-time college students. Degree plans contain prerequisites and courses have sequencing, especially in many of the STEM fields. For these reasons, advisors often worked with

students who were unable to graduate as quickly as they expected.

Saving Money with DE

Students who viewed DE courses as a path to save money can end up disappointed, as noted by Nick:

Oftentimes students coming in with more of these credits are from a lower socioeconomic status. They saw great value in only paying a couple hundred dollars for a multi-credit course. And for them especially, it can be a rather devastating revelation that the courses they take, while they transfer, don't apply [to their degree].

Sophie also noted that "[DE] is not really a great way to save money unless you know what classes to take, what's going to transfer, and what's going to go into the program that you're trying to go into." Eleanor likewise viewed the lack of understanding of how college curriculum works and the connection to DE coursework in high school as an area in which students and their families needed more information. She summarized:

I think that when working with underrepresented students, they need to know what they're doing. I feel like their families and the way it's sold is: this is just a way where you don't have to pay for two years of college. They're not really informed as what is this, what does this look like? What is this going to look like once these credits transfer? I feel that it needs to be better explained to families who don't know at all what it is except, 'Oh, they're going to get to go to college for free.'

Students Completing Unneeded DE Credits

Whether students were selecting inappropriate classes due to ineffective or absent advising or because they were required to choose classes that fit with their high school schedules, advisors often found that students could end up with extra elective credits that did not apply to their degree plans.

Advisors believed there was a lack of understanding for students in some DE programs. They experienced students failing to recognize

the complexities of how credits transfer and apply to their desired degree paths. Advisors shared that some students took classes in high school that were labeled as receiving college credit, but these students did not know that their credits were affiliated with a different college, nor did they realize they needed to have transcripts sent to the four-year institution in order to receive credit. In addition, other advisors spoke about students not understanding they had DE credits from multiple colleges and therefore needed transcripts from each institution before those credits would count toward their four-year degrees. Students choosing to attend an out-of-state institution may have DE credits that cannot transfer at all. These examples demonstrate that students have a lack of understanding of their journey towards college degree attainment.

Not only can some DE credits not be as useful for the student's degree plan, but advisors also shared that students found themselves with more difficult schedules because they had fewer options for buffer classes to help lighten the academic loads of their course schedules. As Leticia reported:

I think that puts them in a difficult position, depending how many credits they bring in and the major they select. They may not have a lot of flexibility in their curriculum or courses for that first year. As an advisor, I have had to maybe force students to take more electives to balance out some of the sciences they would have to be in. Because they might not have a whole lot of general courses they could take. Or buffer courses since they brought a lot of those courses in.

Advisors noted that the need for buffer classes is especially important in majors with complicated or time-intensive curricula. Sophie explained:

Most people just don't understand enough about the curriculum to be able to appropriately make those decisions and look at those courses. It's not necessarily a great idea to have an associate's degree before you get here. Then you're running into all sorts of other issues—now all of your semesters are so heavy [with] sciences [and] heavy labs that you're putting yourself into a position where you're struggling in your classes

because you don't have anything to balance [them] out.

Once they entered college, DE students were encouraged by advisors to take additional, unnecessary classes because they had taken their less rigorous electives through DE and only had the challenging, in-major classes remaining to complete their degrees. As advisors realized, to remain a full-time student for financial aid eligibility, students had to pay for additional courses that were not required for their degree plan.

Rigor

In addition to the lack of buffer classes, advisors questioned the rigor of DE classes. More often the case with STEM majors, advisors found that the rigor associated with DE credits, particularly those where the class was taken at the high school, was insufficient to prepare students for further coursework. Several advisors, particularly in STEM programs, mentioned a difference in the rigor of classes taught at the high school versus in college. Eleanor shared:

I think that whenever you're teaching the college class in the high school, it's just high school. I feel like they're not really getting anything out of it. It's not as rigorous. You're in the same setting at the high school so their mind's still in that same 'I'm in high school.' Again, I've seen where it works and I've seen where it doesn't work, and where it doesn't work, I feel it's a huge disservice to students.

Advisors shared that when students took DE classes at their high school, the experience seemed like an extension of high school. Students already had relationships and expectations of their teacher based on non-DE classes in the past. The learner-led (college) versus teacher-led (high school) educational approach may not be as clear in high school DE courses compared to college-level courses taken on college campuses.

DE Providing Varying Levels of Preparation

Students pursuing STEM degrees often did not have a thorough foundation of the important basic math and science classes. Nick noted:

One thing I probably haven't addressed enough is specifically the math and science preparation of incoming engineering students. The reality of, I don't want to say grade inflation, but rigor and expectation, is pronounced. Working with engineers for the past four years, students coming in, even having credit for Calculus 1, I got to the point that I recommend they re-take it, if for nothing else [but] to level the expectations set at to their specific institution.

STEM fields like engineering require a strong foundation in math and science courses, as a weak foundation can lead to poor grades and hurt the student's academic achievement (Crisp et al., 2009). Additionally, the focus of engineering curriculum can vary by institution. Advisors found it worthwhile for students to take their foundational classes at the institutions where they were enrolled full-time.

Ultimately, if a student had not received the necessary preparation in DE coursework to be successful, the advisor felt it worthwhile to retake the class. As was the case for Lacey, students were grateful for the advice to retake those classes. She noted that students "come back to me the next semester and they say they're so thankful that they took the general psychology [during their college career] because they learned so much more than they learned in that high school college course."

Value of College Experience

Taking DE college courses while living at home and attending high school can be a fundamentally different experience than balancing a full college load while managing roommates, a new environment, and social pressures. Therefore, advisors perceived the experience provided in DE coursework to be limited. Advisors stated that some students may also be generally unprepared for their journey through college based on the type of DE courses taken. Advisors frequently included a conversation about the differences between high school and four-year college to ensure DE students understood the robust expectations. Jim mentioned:

I think it's very important that we set those expectations for those students to let them know that this is not high school and that

you're going to have to work at this. It might start off slow, but it'll catch up really quick.

Advisors reported that even when students took DE credits at the college campus, they were not necessarily getting the full college experience, which is demonstrative of a lack of understanding of the holistic nature of the college experience both inside and outside the classroom.

Maturity

When students begin DE coursework, they are typically between 14 and 18 years old. Once students graduate high school, they can, at times, skip multiple years of college with DE credit, making them among the youngest in their college classes. As Hilary mentioned:

Even though at this age, if they're 18 taking classes with 21-year-olds, there's going to be some different conversations happening. There's also, though, a higher level of expectation from instructors. And can they, maturity-wise, live up to that?

Other advisors mentioned students' inability to handle setbacks or disappointments, particularly if they were not doing well in their coursework. As Trey noted when telling a student that she had to retake a math class:

It wasn't just a, 'Really? Do I have to?' kind of thing like you see most of my students do. It was more of a serious developmental [issue], like she didn't know how to handle that setback or that disappointment.

While some advisors described students encountering developmental issues, other advisors perceived DE students as more mature in terms of their academics. Alice would tell students, "Let's talk with the faculty, let's talk with the chair and kind of normalize that process of working with faculty for them." She was able to form relationships between students and faculty members early in the advising process because she perceived the students' advanced academic maturity. Another important characteristic evident throughout the interviews was the notion of students being overconfident, which was also a product of their maturity level and age. When discussing a conversation with a student, Alice noted "the attitude of coming to college with all

these credits, and sort of feeling like 'I know what I'm doing, and I don't really need any help.'" Advisors discussed how some students simply did not understand the rigor of being a full-time college student versus being a DE student. Advisors found students may have a false sense of security, which can lead to poor academic performance. The students' maturity and overconfidence are important facets for advisors to consider as they work with this population.

Career Readiness

Advisors are an integral component in helping students think about their next step in life. Do students plan to enter the workforce, obtain an internship, or attend graduate school? Because of the accelerated timeline for HCDE students, advisors worry about these students entering the workforce or graduate and professional schooling so early. Two themes emerged throughout the interviews: students' maturity and competitiveness in the field after graduation.

As noted by the advisors, a student's maturity level during their first year as a full-time college student could be a hindrance in making long-term career decisions at a young age. Alice mentioned her concern for students going into the workforce too early:

But students are graduating early and going into the workforce really early and that's kind of maybe where I become a little more concerned too. If you're graduating at 20 or 21, and then going out into the workforce and expecting to work in a professional environment, trying to make sure that the maturity, growth, and the skill set is there.

Advisors believed that some students simply lacked the time to develop those skills in college and that this lack of skills harmed their competitiveness. Sophie recounted the necessity of maturity as well as the growth needed to be prepared for challenging experiences in the field:

A student that is pre-med that comes in with 45 credits and wants to graduate a year early, they're not as competitive when they go to apply to medical school. They think that they're going to be competitive because they're graduating in three years, but medical schools are also seeing that they don't have any life experience. . . Again, knowing that I

work with so many students going into health professions, that's the biggest thing that I think about ... just whether or not they're developmentally ready to handle some of those big conversations that take place.

Advisors found that while many HCDE students were competitive medical school candidates, when their DE credits facilitated quicker graduation, they may have missed valuable experiences needed to demonstrate they are well-rounded candidates. They noted that students may also miss out on opportunities such as internships and full-time industry positions. Ultimately, more credits may lead to difficult tradeoffs, and advisors used their interactions with students to explain unintended outcomes of DE credit completion.

Discussion

As the advisors in this study described their experiences working with HCDE students, they identified a frequent gap between the expectations of DE created in high schools and the reality of the ways DE credit affects both academic and cocurricular experiences in higher education (Barron, 2014). High school students typically receive information about DE opportunities and the benefits of participating in DE courses from their high school counselors. While high school counselors see benefits associated with DE (Witkowsky & Clayton, 2019), they may not be prepared to address the intricacies of academic credit transfers and curricular sequences across multiple degree programs and four-year institutions. Four-year institutions are governed by a complex series of statutes and policies which may affect transfer values, graduation timelines, and degree pathways (Taylor et al., 2015). Thus, a strong knowledge base of the various policies involved with credit transfers is required to effectively advise HCDE students.

Advisors recounted the expectations students had regarding their DE credits and the differing realities they encountered in their initial advising appointments. While there are clearly benefits to DE programs (An, 2013), advisors found they had to help students rethink their college timelines and experiences to better adapt after having taken incorrect prerequisites or unnecessary electives. Although students ostensibly saved money at the

time of their DE courses, taking unnecessary courses could cost more over time.

The implications of DE are especially acute for HCDE students. College advisors should be prepared to have more frequent and in-depth conversations with incoming first-year HCDE students regarding DE courses and students' undergraduate plans, career readiness, four-year opportunities available, graduate school aspirations, and, potentially, emotional maturity. Advisors can help incoming students locate opportunities to augment their DE coursework with the unique experiences available at four-year institutions that will contribute to future success (Barron, 2014). Advisors want students to have access to a college experience that not only fits the students' needs but that also adequately prepares them for their futures.

Recommendations for Practice

Improved communication is needed between high school counselors and academic advisors in higher education (Witkowsky & Clayton, 2019), including transparent discussions about the impact of DE credit on the overall college experience. First, advisors or other university professionals should be working with school districts from the onset of a student's DE credit journey, which can ameliorate some of the concerns advisors witness during the advising process when students fully matriculate. Next, the continued relationship between high school counselors and academic advisors can incorporate a developmental philosophy of advising that helps increase awareness of these issues (Barron, 2014; Shaw, 2019), which can benefit both high school students and full-time college students. Additionally, advisors should connect students to faculty members sooner in the advising process to foster those important relationships that can help students succeed (Rosenthal et al., 2000).

The competing motivations of costs savings and potentially shorter time to graduation, which are primary reasons for students' participation in DE (Thomson, 2017), must be weighed against the possibilities of integration into specific degree sequences and missed opportunities such as internships or undergraduate research at four-year institutions. This confirms previous findings in the literature, as students need to be informed of the appropriate expectations of DE credits for their own situation (Kanny, 2015; Karp, 2012). By implementing an orientation on DE in high schools for both students and their families,

schools can help students make better informed decisions about their DE participation and better understand the connection between DE, college curriculum structure, and possible financial benefits (Witkowski et al., 2020). Students can then better plan to pursue various opportunities, like studying abroad or taking an internship, that could potentially be impacted by their quickened graduation timeline.

Academic advisors will likely need to identify and explain the potential benefits of cocurricular opportunities and student engagement to both academic and career success (Astin, 1993). Highly motivated students, such as those this study's participants worked with, may not initially see the value in participation in student organizations, wellness center opportunities, and undergraduate research compared to reduced time to graduation and potential costs savings. There are fewer years to take advantage of those types of opportunities when HCDE college students are on an abbreviated graduation timeline.

Recommendations for Future Research

This study was one of the first empirical studies to explore academic advisors' perspectives of HCDE students, which provides several opportunities for future research. The strength of the qualitative approach applied here allowed for in-depth responses from participants. A statewide survey of academic advisors related to DE perceptions could provide additional support for the findings or new perspectives not captured through the methods applied here. Adding observations of academic advisors' meetings with HCDE students to the data collection process would allow researchers to interpret the perspectives and approaches of academic advisors working HCDE students, which, combined with follow-up interviews, could strengthen our understanding of the phenomenon explored in this study.

Limitations

The key limitation to this study is its confinement to a single Mountain West state. However, the state of Colorado has diverse institutional types, and this study sought representation of advisors from a variety of different types of institutions. Another limitation includes the voluntary sample of participants. Those advisors who chose to respond to the call to participate in the study could

have particularly strong feelings about DE that prompted their involvement.

Conclusion

The findings of this study provide guidance to academic advisors as the number of HCDE students continues to increase across the U.S. The potential to save money and shorten time to degree through DE participation involves important trade-offs at four-year institutions. Academic advisors are often tasked with these complex discussions in areas HCDE students may not have previously considered, including buffer classes, untransferable credits, degree plan constraints, and cocurricular involvement (Troutman et al., 2018). Through appropriate expectation-setting about DE credits with students and their families and improved communication between high schools and four-year institutions, many of the challenges related to HCDE students can be mitigated.

References

- An, B. P. (2013). The influence of dual enrollment on academic performance and college readiness: Differences by socioeconomic status. *Research in Higher Education*, 54(4), 407–432. <http://doi.org/10.1007/s11162-012-9278-z>
- An, B. P., & Taylor, J. L. (2015). Are dual enrollment students college ready? Evidence from the Wabash National Study of Liberal Arts Education. *Education Policy Analysis Archives*, 23(58), 1–30.
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. Jossey-Bass.
- Barron, K. E. (2014). Advising first year students. In R. L. Miller & J. G. Irons (Eds.), *Academic advising: A handbook for advisors and students, volume 1: models, students, topics, and issues* (pp. 44–53). Society for the Teaching of Psychology.
- Bennett, E. B. (2018). *Exploring the growth of dual credit education in Texas* (Accession No. 2018-04-30T14:16:28Z) [Master's thesis, Texas State University]. <https://digital.library.txstate.edu/handle/10877/7219>
- Braxton, J. M., Doyle, W. R., Hartley, H. V., III, Hirschy, A. S., Jones, W. A., & McLendon, M. K. (2014). *Rethinking college student retention*. Jossey-Bass.
- Broido, E. M., & Manning, K. (2002). Philosophical foundations and current theoretical perspectives in qualitative research. *Journal of College Student Development*, 43(4), 434–445.

- Colorado Department of Higher Education (2011). *All high school concurrent enrollment: Fall term enrollment, 2010*. https://higher.ed.colorado.gov/Publications/Reports/Enrollment/FY2011/201011_Concurrent_Summary.pdf
- Colorado Department of Higher Education (2018). *Annual report on concurrent enrollment: 2017-2018 academic year, executive summary*. https://higher.ed.colorado.gov/sites/highered/files/2020-03/fy2018_concurrent_enrollment_executivesummary.pdf
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Crisp, G., Nora, A., & Taggart, A. (2009). Student characteristics, pre-college, college, and environmental factors as predictors of majoring in and earning a STEM degree: An analysis of students attending a Hispanic serving institution. *American Educational Research Journal*, 46(4), 924–942.
- Crotty, M. J. (1998). *The foundations of social research: Meaning and perspective in the research process*. SAGE Publications.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). McGraw-Hill.
- Ferguson, C., Baker, P., & Burnett, D. (2015). Faculty members' perceptions of rigor in dual enrollment, accelerated programs, and standard community college courses. *New Directions for Community Colleges*, 2015(169), 83–91.
- Fontana, A., & Frey, J. H. (2005). The interview: From neutral stance to political involvement. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 695–728). SAGE Publications.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. State University of New York Press.
- Kanny, M. A. (2015). Dual enrollment participation from the student perspective. *New Directions for Community Colleges*, 2015(169), 59–70.
- Karp, M. M. (2012). "I don't know, I've never been to college!" Dual enrollment as a college readiness strategy. *New Directions for Higher Education*, 2012(158), 21–28.
- Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The postsecondary achievement of participants in dual enrollment: An analysis of student outcomes in two states*. Community College Research Center, Teachers College, Columbia University. <http://ccrc.tc.columbia.edu/media/k2/attachments/dual-enrollment-student-outcomes.pdf>
- Kramer, G. L., & Associates. (2007). *Fostering student success in the campus community*. Jossey-Bass.
- LeCompte, M. D., & Schensul, J. J. (2010). *Designing and conducting ethnographic research: An introduction* (2nd ed.). AltaMira Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Mertens, D. M. (1997). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches*. SAGE Publications.
- National Alliance of Concurrent Enrollment Partnerships (2020). *Fast facts on dual and concurrent enrollment*. <http://www.nacep.org/resource-center/fast-fact-on-dual-and-concurrent-enrollment/>
- National Center for Education Statistics. (2019). *Advanced placement, international baccalaureate, and dual-enrollment courses: Availability, participation, and related outcomes for 2009 ninth-graders* (NCES 2019-176). <https://nces.ed.gov/pubs2019/2019430.pdf>
- Patton, M. Q. (2014). *Qualitative research and evaluation methods* (4th ed.). SAGE Publications.
- Polit, D. F., & Beck, C. T. (2016). *Nursing research: Generating and assessing evidence for nursing practice*. Wolters Kluwers.
- Rosenthal, G. T., Folse, E. J., Alleman, N. W., Boudreaux, D., Soper, B., & Von Bergen, C. W. (2000). The one-to-one survey: Traditional versus non-traditional student satisfaction with professors during one-to-one contacts. *College Student Journal*, 34(2), 315–320.
- Salmons, J. (2015). *Qualitative online interviews* (2nd ed.). SAGE Publications.
- Shaw, A. L. (2019). *Tennessee high school counselors' and dual enrollment advisors' perceptions of student readiness for dual enrollment* (Paper No. 3554) [Doctoral

- dissertation, East Tennessee State University]. <https://dc.etsu.edu/etd/3554/>
- Taylor, J. L., Borden, V. H., & Park, E. (2015). State dual credit policy: A national perspective. *New Directions for Community Colleges*, 2015(169), 9–19.
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237–246. <https://doi.org/10.1177/1098214005283748>
- Thomson, A. (2017). Dual enrollment's expansion: Cause for concern. *Thought and Action*, 33(2), 51–62. <https://eric.ed.gov/?id=EJ1156162>
- Tinberg, H., & Nadeau, J.-P. (2011). Contesting the space between high school and college in the era of dual-enrollment. *College Composition and Communication*, 62(4), 704–725.
- Troutman, D. R., Hendrix-Soto, A., Creusere, M., & Mayer, E. (2018). *Dual credit and success in college*. The University of Texas System. <https://www.utsystem.edu/sites/default/files/documents/ut-system-reports/2018/dual-credit-and-success-college/utsystem-dualcreditstudy.pdf>
- Waits, T., Setzer, J. C., & Lewis, L. (2005). *Dual credit and exam-based courses in U.S. public high schools: 2002-03* (NCES 2005-009). National Center for Education Statistics. <https://nces.ed.gov/pubs/2005/2005009.pdf>
- Witkowski, P., & Clayton, G. (2019). 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>
- Witkowski, P., Garnar, M., Starkey, K., Andersen, A., & Clayton, G. (2020). Approaches to advising incoming college students with dual enrollment credit. *Journal of Orientation, Transition, and Retention*, 27(1), 1–28.
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