

## **College students' perceptions of the impact of dual credit classes on their college experience**

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### **ABSTRACT**

Dual credit courses have become widely available to high school students. Unknown is the impact of dual credit classes taken during high school on college students' university experience. This qualitative study aimed to explore upper-level college students' perspectives about how high school dual enrollment courses shaped their college experience. Interview data from upper-level college student participants was analyzed for themes to answer the research questions. Results of this study provide dual credit education administrators with knowledge about student success beyond high school, including those components of dual credit that were helpful or otherwise, and how dual credit courses prepared college students for their educational career while pursuing a degree at a university. Implications as a call to action in practice and recommendations for future research are discussed.

Keywords: dual credit, dual enrollment, college experience

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## INTRODUCTION

Dual credit courses have become a topic of interest among high school students within the last decade due in large part because of increased availability and enrollment as a result of state and national initiatives. Dual credit enrollment enables high school students to earn college credits prior to high school graduation. Unknown however is the impact that early completion of college courses translates to preparation for the on-campus college experience. In Texas, school accountability measures and policies such as the Closing the Gaps initiative, Texas Pathway Initiative, Every Student Succeeds Act, and 60x30TX, continue to propel interest and pursuit of dual credit opportunities. The Texas Education Agency (2024) reported that in the 2022-2023 academic year alone, 949,419 high school students were enrolled in dual credit course, each averaging about 4 semester credit hours of coursework with a total of just over 4 million total college hours earned through dual enrollment programs.

While high school students are provided an abundance of opportunities for dual enrollment courses, student supports are limited in order to ensure success after they leave the high school environment (Witkowsky, Starkey, et al., 2020). Specifically, unknown is the impact of dual credit courses participation during high school on the college experience. Research was conducted to better understand the perspectives of students who have participated in dual credit courses and have persisted on to the university environment. With such insight, high school campuses that offer dual credit have been additionally informed to best meet the needs of the students they aim to equip with college readiness.

## RESEARCH QUESTIONS

RQ<sub>1</sub>. What are upper-level college students' perceptions about how participation in high school dual credit courses influenced their college experience?

RQ<sub>2</sub>: What are upper-level college students' perceptions about how participation in high school dual credit courses influenced their college experience based on dual credit course modality?

## THEORETICAL FRAMEWORK

The theoretical framework used to ground this study is Nancy Schlossberg's (1981) transition theory. High school students enrolled in dual credit courses are experiencing multiple transitions. Schlossberg's (1981) transitional theory addresses transitions that happen in life through the 4 S framework (Evans et al., 2010). The 4 S's framework in Schlossberg's transitional theory are *situation*, *self*, *support*, and *strategies* (Moran, 2017).

Dr. Schlossberg's (1981) transitional theory states that a person understanding the situational aspect of the change that is occurring will analyze why the change is happening, the timing, a person's ability to control the change, their role after the transition, and any previous experience with a change of this type (Schlossberg, 2008). *Self* in the framework is built on two parts. The first part is personal and demographic characteristics, which can be related to gender, socioeconomic status, age, etc. The second part concerns psychological resources that facilitate coping with the transitions (Schlossberg, 2008). The third "s," *support*, refers to the support the individual will have through the transition period. The three functions of support that Schlossberg (2008) identifies are affection, affirmation, and aid. Schlossberg (2008) identified

four strategy types that help understand how people deal with transitions. The four *strategies* are those that change the situation, those that change its meaning, those that help you relax, and knowing when to do nothing or take deliberate inaction (Schlossberg, 2008).

Informed by transition theory, this study sought to understand the perspectives of college juniors and seniors who during their high school years, took dual credit courses. Dual credit courses can be offered in multiple formats (modalities): online, on a high school campus, or on a college campus (Texas Education Agency, 2020a; Texas Higher Education Coordinating Board, 2018). Qualitative interviews facilitated discussion about how those dual credit course experiences impacted the college experience as an imperative point of transition: what is happening, to whom it is happening, what help is available, and how students cope (Moran, 2017). Schlossberg's transition theory paired well with the study because it framed the effort to understand how students handled their transitions, which can inform practice to ensure dual credit programs maximize the intended benefits for students.

## LITERATURE REVIEW

High school students who wish to take part in dual credit courses must meet dual credit eligibility or criteria (Texas Education Agency, 2020a). In addition to that baseline criteria, the students may have additional prerequisite requirements imposed by the partnering higher education institution (Texas Higher Education Coordinating Board, 2018). Likewise, requirements are set for teachers teaching dual credit courses. Instructors of dual credit classes must meet the criteria set by the Southern Association of Colleges and School Commission on Colleges. This criterion is a master's or doctoral degree with 18 graduate hours in the subject the teacher is teaching (Troutman et al., 2018).

### Funding and Expenses

State funding is given to school districts and higher education institutions for dual credit courses. For school districts, funding is calculated based on students' average daily attendance (ADA); student attendance in a dual credit course, regardless of location, also counts for ADA purposes (Texas Education Agency, 2020a; Texas Higher Education Coordinating Board, 2018). Higher education institutions also receive state funding from a formula that includes the semester credit hours of instruction provided (Texas Higher Education Coordinating Board, 2018).

Fees associated dual credit courses including tuition and associated fees such as transportation, textbooks, and various other costs, are handled at a school district level using local funds, Foundation School Program (FSP), State Compensatory Education funds, High School Allotment funds, and funds allocated through state discretionary and formula-funded grants (Friedman et al., 2011). Under Texas Education Code, Section 54.216, public higher education institutions have the autonomy to waive "...all, part, or none of the mandatory tuition and fees for dual credit courses".

### House Bill 8

Texas passed House Bill 8 in June 2023, which indicates that community colleges shall offer students dual credit courses at no additional cost (Texas Higher Education Coordinating Board, 2023). According to Soto (2023), HB 8 can be sectioned off into three categories: formula

changes in the funding for colleges, improving the capacity of colleges, and student affordability investments. The section of HB 8 that impacts the availability of dual credit courses for high school students is the changes in funding that were made. Prior to 2023, funding for colleges was directly aligned with enrollment. Now however, community colleges receive funding for the number of postsecondary credentials that students complete (Soto, 2023). Specifically, for dual credit completion, community colleges will be rewarded when a high school student completes at least 15 hours of dual credit. The 15 hours of dual credit have to be in a specific program that leads to a degree or other type of credential (Soto, 2023). This is significant as a potential cause for a boost for dual credit enrollment.

### **Variations in Dual Credit**

Dual credit courses can be offered in various locations and formats recognized as modalities. Based on the preferences and capacity of the institutions of education involved (i.e., program logistics, instructor qualifications, etc.) in dual credit agreements, students can choose between high school campus-based, college campus-based, or online dual credit offerings.

#### ***High School Campus- Based***

High schools offering dual credit to its students can provide those courses in the high school setting with specialized teachers (Duncheon & Relles, 2020). An advantage of this modality is eliminating the need for transportation from the high school campus to any other setting which can be seen as a positive for students and school districts alike (Alsup & Depenhart, 2023). However, Lile et al. (2018) found that students taking dual credit courses in a high school setting report a lower feeling of being college students. When students take dual credit courses in a high school setting, their classmates are still other high school students who are also enrolled in the dual credit course (Troutman et al., 2018). Further, questions have emerged about how rigor differs when students take dual credit courses through a high school-based modality compared to dual credit courses taken based at a higher education institution (Field, 2021).

#### ***University/Community College-Based***

According to Adkins and García (2023) a majority of the estimated one million high school students in the United States who are participating in dual credit courses participate in these courses through a high school-community college partnership. This is a growing model in the United States offering dual credit courses. Other locations for dual credit courses are at community colleges and/or 4-year Universities (Adkins & García, 2023; Troutman et al., 2018). When students take dual credit courses at higher education institutions, students must find their own transportation, or in some cases, the school district provides transportation to students to and from the higher education institutions.

Taking classes in higher education institutions allows students a more realistic college experience (Speroni, 2011). In addition to providing a different experience for students taking dual credit courses, high school counselors perceived physically taking these courses at a higher education campus to be a great benefit for students (Witkowsky & Clayton, 2020). According to Duncheon and Relles (2020), when students take dual credit courses at a higher education

campus, students are benefiting by being immersed into the college environment. Students may benefit from this modality of dual credit course availability by being exposed to college professors, college classrooms, other college students and their rigor of the content areas (Speroni, 2011; Troutman et al., 2018).

### ***Online-Based***

Another form of dual credit instruction is synchronously or asynchronously through an online platform (Adkins & García, 2023; Troutman et al., 2018). According to Alsup and Depenhardt (2023), online delivery of dual credit courses is the most common way for instruction delivery for dual credit courses. Depending on the courses being offered virtually, students may experience synchronous or asynchronous delivery. In a synchronous delivery of instruction, students are receiving instruction in real-time with their professors and classmates. The asynchronous format allows students to access their instruction and assignments at different hours, not necessarily having a set meeting time with the professor and/or classmates. Class composition for online classes can vary, some courses can be made up of only high school students or they can also be made up of a mix between dual credit students and traditional college students (Troutman et al., 2018).

### **Benefits of Dual Enrollment Programs**

In general, research finds that dual credit students are more likely to enroll at a higher education institution after they graduate from high school continuing work towards a degree (Alsup & Depenhardt, 2023; Field, 2021; Moore & Williams, 2022). Student GPA is a factor in the appeal of taking dual credit classes (Field, 2021; Garcia et al., 2020; Troutman et al., 2018). Jones (2014) found that students taking dual credit courses earn higher GPAs at both institutions. Some students take these advanced courses because they weigh more toward their high school GPA and want to be competitive for class rankings, scholarships, and college acceptances (Sadler & Tai, 2007). The number of dual credit courses students have completed by high school graduation can indicate how many fewer classes students have to take once they have transitioned to their higher education institution. For some students, this can mean saving two years' worth of college courses during high school degree (Henneberger et al., 2022; V. Liu & Xu, 2022; Moore & Williams, 2022). Adkins and García (2023) found that the majority of students who took dual credit courses felt better prepared for college courses. Students who are exposed to college-level material and expectations felt like they were at an advantage when they entered college (Garcia et al., 2020) and felt better prepared for college coursework (Liu & Xu, 2022).

### **Disadvantages of Dual Enrollment Programs**

Witkowsky, Starkey, et al. (2020) explained that 18-year-old college juniors are finding barriers when classes, completed with the illusion of counting towards a particular degree, are unneeded or are applied as extra electives towards their degree. Traditional college students tend to add "buffer courses" to their first few semesters because they are aware they are entering a new environment, balancing a full college load of courses, living away from home, and having roommates for the first time. According to Witkowsky, Garnar, et al. (2020), college advisors



have noted that the experience for dual credit students is that they find themselves with no “buffer courses” left to take. Therefore, they are forced to take a full load of content heavy courses while still navigating through the “firsts” that come with being a freshman in college. Additionally, Day et al. (2020) concluded that many dual enrollment students lack the understanding that performing academically poor can be reflected on a student’s transcript permanently.

### ***Developmental Concerns***

Dual enrollment programs are known to be offered to students at little to no cost, and although the financial help might seem like a good enough reason to embark on the journey, “... families must also understand the importance of involvement, exploration, and development of their student to fully promote the student’s ability to be successful after college” (Witkowsky, Garnar, et al., 2020, p. 25). Through extensive research, various concerns have emerged about the lack of development in non-cognitive situations that dual enrollment students experience (V. Liu & Xu, 2022).

Traditional college students are able to engage in a holistic college experience because of the amount of time and the age frame that is spent in that setting. However, students who have participated in dual enrollment programs are on a different timeline, many times having advanced a year or two into a traditional 4- year degree plan due to the cognitive work completed in high school. Y. Liu and Yin (2010) state that traditional college students experience situations that enhance their noncognitive abilities, such as, decision-making, civic engagements, teamwork encounters, increased cultural competence, and many others, but due to the shortened college timeframe, these students are likely to miss out on the development of these non-cognitive skills. Witkowsky, Garnar, et al. (2020) mention that the length of time spent in a college setting has a correlation to non-cognitive outcomes; therefore, a student who shortens the time spent in a traditional college timeline is subject to experience less non-cognitive situational growth than the average university student. Knowing that dual enrollment students shorten their time in a traditional college setting means the student’s development and maturity at the completion of their degrees is a concern.

## **METHOD**

This study was a basic qualitative design using semi-structured interviews with the participants of dual credit courses in high school to collect data about their perspectives on the impact these courses had on their academic journey as an upper-level college student at a university.

### **Sampling Procedure**

Purposeful sampling was used to ensure that the students that are selected to participate in the semi-structured interviews meet the criteria set (Guest et al., 2013). The criteria for participation required that participants (1) be classified as a junior or senior in college and (2) have completed at least 18 dual credit hours while a student in high school. Interested students completed a demographic survey to confirm eligibility to participate, then scheduled a Zoom interview.

**Data Analysis**

Interview data was transcribed using the Zoom transcription feature, and member checked for accuracy. The researchers used reflexive journaling during interviews to make annotations and reflections about participants responses. Interview transcriptions were analyzed using Braun and Clark’s (2006) approach for thematic analysis. Repeated and thorough reviews of the transcripts gleaned identification of significant responses to help guide the organization of the data into broad themes.

**RESULTS**

The purpose of this basic qualitative study was to understand college students’ perspectives about influence of dual credit courses taken in high school on their college experience. A total of 12 participants were interviewed for this study.

**Results for Research Question 1 Themes**

Research question one asked: *What are upper-level college students’ perceptions about how participation in high school dual credit courses influenced their college experience?* Table 1 depicts the themes that were found in respondent data.

**Table 1**

*Themes that emerged from the data that was collected to address RQ<sub>1</sub>*

Theme	Subtheme	Description	Quotes
Acquired Soft Skills		This theme addresses how students acknowledged acquiring soft skill through their participation in dual credit.	<i>“Lessons I learned was like self-discipline and like self-improvement”</i>
Time to Degree Shortened		This theme came through the data as students confirmed that their time to degree was shortened through the participation in dual credit.	<i>“Personally, it encouraged me more to pursue a bachelor's degree because it made me just think like, ‘hey, 2 more years and then, you know, I'm done with my degree.”</i>
Financial Help		Students stated that dual credit participation yielded in financial help.	<i>“I thought that it helped a lot financially. It helped my family a lot financially, especially since we were coming from like a low-income place.”</i>
Sets you Apart		Students confirmed that by taking dual credit	<i>“So I feel like that really helped me to stand out, the fact that I was dual credit and</i>

		courses they were able to stand out.	<i>I was putting in the effort to get a good grade.”</i>
Wish I had Known...	<ul style="list-style-type: none"> <li>• Financial Transparency</li> <li>• Too Many Credits is a ‘thing’</li> <li>• The Basics</li> <li>• Missed HS Experience</li> <li>• No Buffer</li> <li>• GPA Impact</li> </ul>	This theme encompasses the information that dual credit students could have benefited from knowing prior, throughout, and after participation in dual credit.	<i>“My first class I ever took though, nobody taught me how to use blackboard. So I missed like 2 assignments and ended up getting a C....”</i>
College Experience	<ul style="list-style-type: none"> <li>• Transitions</li> </ul>	This theme identifies how prepared participants were to start dual credit courses and college.	<i>“...there’s a pretty big difference between like, online classes and those in person ones. I just feel like the learning environment in the in person ones is a lot better and you can learn a lot more from that environment.”</i>

**Acquired Soft Skills**

Participants revealed a set of soft skills such as learning time management, self-discipline, and self-motivation acquired through participation in dual credit courses while a high school student. They acknowledge that these soft skills helped them be successful and allowed them to complete their dual credit courses as well as continue their journey into post-secondary education. Self-motivation and time management were two of the most important skills that Vern learned in order to be successful in dual credit and become her high school valedictorian. He/she stated, *“I just had to learn time management... to stay on track with the content because it was very hard to cover that stuff by yourself. You have to have a lot of self-motivation to keep up here.”*

Another set of soft skills that the participants revealed were work ethic, self-discipline and time-management. Coral stated that having a dual credit experience allowed her to improve her *“... work ethic and [her] self-discipline. I got to learn those skills very early on, and I’m really grateful for it.”* Jordan also touched on time management when he discussed that setting time apart for studying was necessary by stating, *“...you just have to know how to study, and I feel like I learned that at a very young age. I was 16 years old learning how to study for college, which I think was a great thing.”* Jordan showed perseverance by challenging himself to be competitive in college, which was possible due to taking dual credit courses. He said

*I mean, you’re challenging yourself. Everybody who is a junior or senior works hard. Everybody that’s a junior or senior or in your major is looking for the same jobs as you and looking for the same internships, so you’re challenging yourself at an early age to be competitive with your peers and to take more challenging courses because, in the real world, you’re gonna be competitive with other interviewers for the same internship or other interviewers for the same jobs.*



### Time to Degree Shortened

An emerging theme in the data collection was acknowledgment that their time to degree was shortened due to their participation in dual credit. When asked about an academic benefit, Coral responded, *“I have an associates degree so I don’t have to stay nearly as long as most to complete a 4-year degree.”* Eri added to this by saying,

*Personally, it encouraged me more to pursue a bachelor's degree because it made me think like, ‘hey, 2 more years and then, you know, I'm done with my degree’. It really encouraged me to think that way and to get through high school that way cause it's just like always gonna save me time.*

Participants liked the fact that they were able to advance two years of college courses through their high school years. Vern added to the conversation,

*I do like that I'm ahead of the game because since I'm a junior if I really wanted to I could take all these hard classes together and graduate in about a year or 2. Which I do like because I want to go to some kind of school after college like maybe medical school or pharmacy school and I know that those definitely take a lot of years of your life, so I'm definitely on board with starting as fast as I can.*

### Financial Help

The literature review revealed that dual credit usually comes with little to no cost to the students taking these courses. This was validated as study participants recognized that the financial help was one of the greatest benefits of dual credit. Adam stated, *“My high school paid for the dual enrollment courses. So thankfully, I was able to get those courses out of the way and not have to worry about paying them in college.”* Eri also confirmed stating,

*the economic benefits are great because you are saving yourselves basically two years of paying for college. Books, everything in between and it's so accessible because they literally bring college to you. So yeah, I think that's the best thing out of it.*

Vern commented,

*I saved a lot of money with dual credit. I remember one semester I launched my Blackboard, and it said tuition that I owed for that semester was, in terms of dual credit money, cause it's not the same cost, it was about a thousand dollars. And I was like, ‘Oh my goodness gracious, I didn't realize I was taking that much’, which of course, if you're in college, that's about like 6,000 per semester, but definitely helped save a ton of money.*

Steven added,

*Oh, it's very beneficial. At the end of high school, they gave us a document that had our estimated costs and how much we saved. You know, I was only at [redacted institution name] about a year, but my estimated cost was still like 8,000.*

Jaz voiced,

*I thought that it helped a lot financially. It helped my family a lot financially, especially since we were coming from a low-income place. So now that I am here, all the money that we would have had to spend before we could spend it now evenly.*

## Sets You Apart

Another theme that emerged through the semi-structured interviews was that students who participated in dual credit were more easily ‘seen’ and set apart from their peers. On the topic, Vern clamored, *“I know a lot of professors already, so it's very helpful because I know I'm going to need letters of recommendation as I get older, so I've had the chance to create those bonds with lots of teachers.”* Dual credit provided her with the opportunity to know her professors since she was in high school, therefore building those relationships since the start of her dual credit career, *“I feel like that really helped me to stand out, the fact that I was dual credit and I was putting in the effort to get a good grade”.*

Jaz explained how having dual credit hours put her in a better position to secure an internship and a tutoring job on campus,

*I was offered internships during the summer. I was offered a tutoring position at a school, which I'm doing now, just because of the credits that I gained from high school. Whenever people see that on my resume they automatically know I'm a junior.*

## Wish I had Known...

During the interviews, another theme that came forward is best described as “wish I had known...” This theme was derived from the various comments participants made about they wish they had known about the college experience or wish had been revealed or made more transparent during their time in dual credit classes.

## Financial Transparency

Students knew that they were saving money as they completed their dual credit courses. However, many of them stated that they didn't know how much it actually amounted to once said and done. Robert stated,

*I wish I understood that. I mean, I knew intuitively based on what every adult said that it was definitely worth it but no one ran through the numbers and really I want to find just how important it was to get it done. So, I wish I wish that had happened, so that I could have a better understanding of why it was important for me to get it done.*

Jorden echoed the same idea by saying,

*You don't know how expensive college is and you take it for granted. I guess I would say it's because you're not paying it. It's a lot of money compared to when you're in high school you don't even know that you're paying for college some people don't even know that.*

Jaz also said,

*My high school didn't really make it clear. When it came to like the actual processing of the dual credit classes because when we would take them, they would tell us if you fail, you gotta pay back the money or your parents have to pay back the money.*

The essence here is that participants only know what adults tell them about the financial aspects of dual credit-- the benefits of saving money, the differences in cost otherwise, and perhaps the financial obligations tied to the experience. Participants made it known that it would be more

beneficial for them to have a concrete example or even some understanding about how much they saved by participating in dual credit in high school.

### ***Too Many Credits is a 'Thing'***

Participants revealed that they took as many college courses as they could though dual credit opportunities afforded to them, but then found when they transitioned to the university of their choice that those courses couldn't be applied towards their degree plan. Jorden explained, *One of the negatives I would say is I think you could take too much, dual credit. I think that's a thing. I graduated with an associates in high school, and I don't know if I would recommend graduating with an associates to my kids or others. Just because I think I took classes that I didn't need to take just to get the title. So, I would say that there's a negative in a way that you could drain yourself in high school. You can try to put so much on yourself when you really don't have to. Yes, I'm glad I graduated with an associates, but whenever I got into college and realized I didn't really need those classes and I'm gonna graduate with my bachelors and eventually my masters that associates isn't really gonna mean anything. So, in my mind, I didn't really see the point in taking it.*

Robert had a similar experience stating

*And even then a lot of my classes didn't end up going to my degree at all. For example, just because we don't know what we're gonna major in at all. So, you know, we get as many of the basics out of the way and a few electives, and you know inevitably depending on your degree and the college of your choice only so many of [the credits] are going to transfer. So, I wish I could have known that as well, and have a better understanding of how that worked from the college aspect, but I just didn't have that experience at the time.*

Participants primary piece of advice to other students was to be cautious of taking too many courses. Robert advised, *"don't take too many classes. I think it could take a burden on you like now I feel like I've been in college like 4 or 5 years already when in reality I've only been in college for two."*

### ***The Basics***

Participants expressed concern about not knowing many of "the basics" that students experience when they first start college-- things like learning management systems, processes, and some of the other more technical or procedural aspects of just getting through college. Taylor shared an instance where she was not taught how to use Blackboard when she first started dual credit, and that result has stayed on her college transcript as her lowest grade,

*My first class I ever took, nobody taught me how to use Blackboard. So, I missed like 2 assignments and ended up getting a C, but like all my grades after I learned how to use it were like perfect. So that class is like my only C in college right now.*

In a similar matter, Vern was not shown how to use her school email address when she first started her dual credit experience:

*I remember I didn't know how to log into my college email until like finals and so every time a class was canceled there I was in the classroom. Every time we have an online assignment, I wouldn't know about it until [the professor] posted it on Blackboard because if he sent an email, I didn't know how to operate my email. I don't know any of*

*the basics that most college kids get taught when they first come into college. But once I figured it out, I definitely felt ahead of the game compared to most people.”*

Half of the participants stated that they did not know how to register for classes or even how to order their own textbooks. Vern also added about ordering books,

*For me, this first semester of college, it was actually very difficult for me to manage to get all my books because one, you're seeing the price and you're like, 'oh, do I really need this book?' And the professors like, 'yep, you really need it' and then you have to figure out how to order it or go to the bookstore and it's a very tedious process while you're still trying to get accustomed to your classes. So I did not realize I guess what goes into getting your textbook because it's always just done it for us....*

Eri had a similar experience when she shared she watch videos to help her figure out how to get affordable books. *“That was kinda hard. I had to watch videos, on ‘how do I get the best prices or deals on books’ because it's so expensive.”*

Although seemingly minor in comparison to the various other challenges or obstacles students may face in higher education (homework, midterms, finals, etc.), the fact that all participants raised concerns about the things they wish they knew means something significant is still lacking in the dual credit experience. Participants noted a number of benefits to participating in dual credit as influential to their college experience, but that experience is evidently hampered by the details that are left out of the conversation or orientation process.

### ***Missed High School Experience***

Among the participants expression of dual credit aspects that were daunting was missing out on some of the ‘normal’ high school experience. Robert expressed that dual credit did not always allow for him to join his high school classmates in extracurricular events. He stated, *“[Dual credit] maybe took away at sometimes from like other opportunities that I may have had. Participating in sports or other extracurricular activities so for one I'd say it was challenging.”* Eri was another participant who voiced that she was unable to participate in extracurricular activities at her high school due to the demand of dual credit. She shared,

*I feel like [dual credit] was a great experience, but I feel like if I had the option, I wouldn't do [dual credit again], it took away from things.... Cause it took away a lot of things from my high school experience, you know? I saw a lot of my friends that were being involved in like NHS and other honor societies and other clubs. I knew a girl, she did it. She was like in band and she was in this and in that and like it was amazing. So yeah, I didn't have the same ability to like manage my time like them.*

### ***No Buffer***

Through their interviews, participants noted that they hadn't considered that dual credit meant not having “buffer” classes. To this matter participants expressed disappointment that by having taken all the “easier” classes during the dual credit experience, they were left with courses on a degree plan that have a significantly heavier load. Vern's insight on this topic was,

*I really in a way wish I hadn't done so much because it definitely has impacted my college experience in a way that it's very hard to create a schedule when all of your, what*

*are supposed to be easier buffer classes have already been taken, and with my scholarship, I have to meet 15 hours [per semester], so I'm scrambling to find classes that are compatible with things like chemistry 2 and bio 2 and because I can't take all my hard maths and sciences at once.*

Taylor experienced a similar situation and she explained,

*I was hopping into like junior level classes, all of them, because I had I just taken all my basics. So, I had nothing to take it with. I was taking like chemistry and bio 2 at the same time and 2 labs. It was just really hard.*

Danny described how her “freshman” experience was different than her peers in regards to schedules by stating,

*One thing [dual credit] did kind of make [college] a little difficult because most people that were entering university freshman with you or like first-time students, were starting with basics, so they were [taking] a little bit easier classes, but like I was getting put into major specific already.*

### **GPA Impact**

An additional theme derived from the interview data was participants’ lack of understanding of how dual credit courses would impact their college transcript. Taylor qualified this lack of knowledge as a downfall of taking dual credit courses, and how for her, it meant a career change:

*T*

*he most important part is making sure the kids know how important [GPA] is even if you don't want to be a doctor when you're a freshman in high school like. So much changes and that was like the hardest part because it was like ‘yes, I want to be a doctor’ but anything I do now for my GPA was like ‘there's nothing I could do to take [my GPA] up like to that level.*

She also explained how dual credit courses had a great impact on her college GPA, explaining,

*I was like, ‘oh, pass, pass’ and I never got anything below a C besides that one class I got B's and A's but then I got to college and I wanted to go to medical school at the beginning and I was like ‘my GPA is already shot for that’ I had started so young and like I wasn't thinking about that when I was a freshman in high school.*

Taylor noted in another part of her interview the she got a C in one of her first dual credit classes because no one showed her how to use Blackboard. Thus here, an oversight to properly onboard students into the dual credit experience had much deeper impacts forcing her to look for new career prospects.

### **College Experience**

Students who participated in dual credit voiced that being immersed into the college environment was one of the aspects they valued. Jordan said, “*Definitely going to the college of course, prepared, me the best, you know, that's what you do in colleges. You go and you sit down in the classroom and take classes like that.*” He later made references to preferring the immersive experience (taking dual credit classes on the college campus) because it meant being exposed to the college environment. He expanded on that, revealing that he enjoyed being exposed to the freedoms of college campus life:



*In a way it felt like I was a college student already in the second half of my high school career. Which for me was a good thing I had a little bit more freedom as a high schooler I wasn't period by period like I would be in high school. Because I got transferred from the high school and got dropped off at the college in the morning and then got picked up at the college at a later time. So it was a little freeing, which some kids don't get to experience. So it was great that I got to experience that as a 16, 17, 18 year old. Instead of first experiencing for the first time as a 19-year-old.*

Coral communicated that because she experienced dual credit at a university campus she was able to adjust easier, *"I don't feel so overwhelmed by 'Oh, this is college.' I'm like, 'I've been in college for like 4 years already' because of dual enrollment nothing's really new. The workload, it's something I'm used to."*

### ***Transitions to College***

An area where participants expressed positivity towards dual credit was in their transitions to college. The participants agreed that having the experience of dual credit helped them seamlessly transition to college. Vern shared that, *"...it was definitely easier starting college having had previous experience with college courses."* Later in the interview she also added,

*Starting college is honestly a breeze because like I said, my last semester of high school I was already taking 17 hours.... So I feel like my course load in high school was harder than my course load in college, so coming to college is kind of a breeze.*

Mae shared how she felt in regards to transitioning to college, *"a little more [prepared] than others because I kind of already knew what the professors would be expecting and stuff like that and I already knew some of the professors that I have had in the past."* Coral also reiterated that she felt prepared to start college by adding,

*Really, really prepared. I've been to this university all my high school years, so it wasn't much of a difference coming back... I knew the processes of how the classes worked and what was around campus, obviously. I knew where buildings were way beforehand.*

Taylor shared that she was super prepared and college felt easier than high school. She said, *Oh, I was super prepared... knowing what to do and stuff, it wasn't different at all, especially because I had been going to [dual credit]. It was not even like I was starting like anything new. If anything, it was kind of easier because at the end of high school, I was taking like 12 hours, so it wasn't, it wasn't hard.*

### ***Transitions to DC***

Participants spoke about their lack of preparation to start dual credit in comparison to their feelings about being prepared to start college. This was a surprise revelation and arose to the level of a subtheme in the data because of its prominence and relevance to the college students' experience with dual credit. The resounding concern was that they were grossly underprepared to start dual credit. Vern said,

*Honestly not prepared at all really. They kind of just said, okay, do you want to take college classes and of course, you're like, 'yeah, I'm in high school. I wanna be the kid taking hard stuff and take college courses.' ...So I took art history my freshman semester and they kind of just said literally the day before classes 'let's go find your classroom.'*

*So we went and looked at our classroom and then the next day it was kind of just go off, go to your class and figure it out.*

Robert recalled starting dual credit classes his freshmen year of high school too, and stated he was not prepared for the transition. Robert voiced,

*I started as a freshman in high school, so I'd say I didn't feel actually very well prepared at all. I remember my first semester ... we were a bit all the way through [the semester] and I was thinking like 'I just can't get this class' like I really just felt I definitely felt a little under prepared you know being in the environment of using blackboard or whatever the equivalent was for the university, group discussions, completing large exams, reading extensively through a book. It was very different from what I had ever seen before.*

For participant Eri, being under prepared came from two places: 1) she also started taking dual credit courses freshman year and 2) she had immigrated to the United States with the same year. She shared,

*I think I wasn't prepared at all, like if I'm being super honest with you. My personal experience is that I moved to the US when I was like 15 so that I was like eighth grade so I literally started like learning English when I was in eighth grade. So how prepared can you be to do college when you don't you know how to speak the language, you know?*

On the contrary, two participants shared that they were greatly prepared for dual credit courses and the commonality that they had was that their respective high school campuses had an orientation for students who were enrolling in dual credit. Danny stated, *"I think I was really well prepared because my high school we had to do a 2-week bridge before even starting."* By the same token, Coral added,

*My school provided a summer bridge program, so we were given the basics before we started college courses. So, I would say I was prepared, but a lot of my peers dropped out of dual enrollment because they weren't prepared.*

**Results for Research Question 2 Themes**

Research question two asked: *What are upper-level college students' perceptions about how participation in high school dual credit courses influenced their college experience based on dual credit course modality?* Table 5 illustrates the themes that were derived from interview data about those experiences.

**Table 5**

*Themes that emerged from the data that was collected to address RQ2*

Theme	Description	Quotes
University = Immersion into Campus Life	This theme speaks to the immersion that participants felt while taking dual credit courses at the higher education institution.	<i>"I just feel like the learning environment in the in person [classes] is a lot better and you can learn a lot more from that environment."</i>
Online = Stringent/Discipline required	This theme depicts participants experience	<i>"Online you definitely have to learn how to have some time management"</i>

	taking online dual credit courses.	<i>skills because it's up to you if you want to log on and do your work."</i>
HS= Deceptive to reality	This theme portrays how students viewed their dual credit courses taken at their high school.	<i>"Not as hard as high school teachers would have you assume."</i>

**High School Dual Credit is Deceptive to College Reality**

Students voiced how taking classes in each modality had a different impact on their preparation for transitioning over to a post-secondary institution. Steven jumped on this conversation by stating that his high school dual credit teachers would lecture students about what they should expect in college, almost in intimidating fashion by saying,

*This is gonna happen in college. College is going to be way harder etc, etc.' and then at [redacted institution name] it was a lot more chill. Much more like how these classes are. Not as hard as high school teachers would have you assume.*

Mae informed that she felt her dual credit classes taken in high school were more lenient and at a slower pace when needed.

*"I feel like the high school teachers that were certified they're a little easier or lenient than the professors that were online, and so it was a little different, and they were a little more helpful; they would slow things down more if someone needed it."*

Adam also added to the conversation by pointing out that there is a difference in being taught by high school teachers who are certified to teacher dual credit as opposed to be taught by a college professor. He contributed,

*"Getting taught from the professor and getting taught from a teacher that was teaching dual credit classes was very different because we actually got to see how professors from the actual college conduct their classes. It's very different from high school level teachers."*

In essence, respondents believed that the experience of taking dual credit courses at a high-school campus taught by high school teachers who met qualifications was not on par with the expectations or experience of true college courses.

**Online is Stringent/Self-Discipline Required**

Participants also spoke about the distinguishing realities of taking dual credit courses online. The consensus was that online dual credit courses were the most difficult to manage. Vern mentioned,

*"You really have to log on, check, just be mindful that you're gonna have work and they're gonna be sending emails and it's up to you to know when your work is due when your tests are due because you don't have the professor standing there to remind you we have a test this Friday"*

She also added, *"Online you definitely have to learn how to have some time management skills because it's up to you if you want to log on and do your work."*

Taylor testified that online classes were hard to manage because she had to find time to fit the workload in. She disclosed that it was harder to do online courses because she, *"was trying to do my college stuff in between high school classes, games, and other activities."* Taylor also

added that her preference was in person at an institution, *“I would say I honestly like I learned more in person.”* Danny stated that it was not always ideal to take certain classes online, *“The online class was a little like more difficult because it was, well, it was a chemistry class. So, then you were having to learn online and then put into practice in the lab.”*

### **University Was Best Immersion into Campus Life**

Participants spoke most highly about dual credit courses that were taken on a college campus, immersed in campus life, so much so that this theme is also noted in response to research question 1 about the overall influence on their college experience. There, participants noted that being integrated on the college campus was the best preparation for their subsequent and true college experience. Here, respondents spoke more specifically about how being on the college campus meant a better dual credit experience overall. Robert expressed,

*I remember talking in person with the professor from [redacted institution name], so that [class] I think I learned a lot more by being in the classroom environment with other students and being able to talk about things by being in an in-person lecture for the first time it was very, very useful, very different. Nowadays it's more my preference than taking online classes just for the amount that you can learn in the environment overall. So that experience kind of helped me figuring that out. But yeah, there's a pretty big difference between like, online classes and those in-person ones. I just feel like the learning environment in the in person [classes] is a lot better and you can learn a lot more from that environment.*

Two other participants spoke to campus immersion by sharing how the college lifestyle and environment benefitted them. Abcdy stated, *I was able to understand like a college lifestyle and get used to it. So, it was it was really beneficial to me, too in the end.”* Similarly, Jorden voiced, *“I would say the classes didn't get easier, but the environment and knowing what to do got easier because it just came with experience.”*

## **DISCUSSION**

According to study participants, dual credit classes provided financial help, soft skills, shortened time to degree, and overall advancement. Still, there are ways the dual credit experience can be improved. Participants noted that their participation in dual credit programs meant they would not have ‘buffer classes’ to incorporate into a college enrollment schedule. It also meant they’d miss high school experiences. More concerning, upon their transition from high school students to college students, they didn’t know how to complete college course registration or even how to order books. Accordingly, participants revealed variations in their feelings of preparedness for the college experience in transition from dual credit to college. In order to provide dual credit students with the most accurate and holistic experience in preparation for their college years, the challenges brought forth through this research must be addressed.

Participants acknowledged that one of the benefits of dual credit is their time to degree. Many expressed that their time to complete a bachelor’s degree was shortened by two to four semesters. By comparison to other themes identified in the study, this is one arguably most known about the benefits of dual credit classes. In simplified terms, it is generally understood that participating in dual credit courses may advance students ahead in a degree plan. It is



important then to also consider the ramifications of that advancement, and the continued obligations incumbent on dual credit partner education systems to ensure that students have the supports needed for success (Spencer & Maldonado, 2020). Those supports are not only necessary *within* the education systems themselves, but also beyond completion of the undergraduate degree.

In their research, Collier and Morgan (2008) made reference to students benefiting from having familiarity with their professors, a notion confirmed by the findings of this research. Participants preferred the on-campus, university-based dual credit option as the most beneficial to their preparation for life as a college student. Although not by design, this study involved the participation of current college juniors and seniors, a group of students who would have been high school juniors or seniors during COVID-19 pandemic related school closures and compulsory online learning which may have been their only other experience with online learning prior to taking dual credit classes formally. If a partnership cannot facilitate students taking dual credit course on the college campus, efforts must be made to improve the experience of the modality best available. This includes an experience in the high school dual credit classroom that most accurately reflects the college classroom learning experience, and a more engaging and immersive online experience.

Day et al. (2020) wrote about the detriment of misinformation and misconceptions about GPA, and the impact it can have on their college transcripts and future goals. This was confirmed by participants who, in hindsight, recognized the importance of dedicating time, energy, and attention to college courses. Participants also expressed a wish for more comprehensive orientation to the expectations, process, and logistics of college classes; everything from learning how to check email, use Blackboard, order textbooks, to registering for classes, seeking the assistance of an advisor, and following an established degree plan. The findings suggest that much can be gained from an immersive, on-campus, orientation to the dual credit experience, one which models and accurately depicts what life is like as a student taking college classes.

The findings of this basic qualitative study have implications for higher education institutions, K-12 institutions, and policymakers. The implications directly impact higher education institutions because they are responsible for providing or overseeing the students' dual credit education. This study also implicates K-12 institutions because they are also responsible for monitoring and preparing students through their dual credit experience. Lastly, this study also has implications for policymakers because they have the authority to make the changes participants expressed they need.

## **LIMITATIONS OF THE STUDY**

Although saturation was reached, the results of this study are limited due to the small number of participants in data collection. The results are further limited due to the sample population as concentrated to one regional institution of higher education in South Texas. As such, results may not be applicable to all populations of college students, dual credit students, and/or the related dual credit program partnerships established. Another limitation this study is participants' time elapsed between high school and college. Since the participants were upperclassmen (classified as juniors or seniors) some of them had been out of high school for three or more semesters. It is assumed that all participants answered the interview questions to the best of their recollection and honestly so.



## CONCLUSION

A qualitative data analysis exposed that dual credit participants had positive experiences, but also discussed areas needing improvement in order to make the overall experience more wholesome. The findings revealed that dual credit impacted college students' college experience financially and professionally, but participants needed more comprehensive and immersive onboarding, transparency, and support to maximize the benefits intended. Through the testimonies of the interview participants, high school students considering dual credit classes may also benefit from the results of this research because the information offers insight into the process; clarity to aid in the decision-making process. Moreover, higher education administrators may be able to use the results of this study to inform themselves on what students perceive are areas of weaknesses going into college and hopefully be able to help with a smoother transition from high school to college. The results of this study are intended to help policy makers understand weaknesses and strengths in dual credit programs, and to aid in creating policies that are beneficial to all stakeholders who are involved with dual credit courses.

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