Equity Gaps in Dual Enrollment

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ABSTRACT

This article examined root causes of the equity gaps in dual enrollment through a systematic literature review of peer-reviewed literature, public scholarship, and practitioner perspectives. Root causes identified include access barriers, lack of advising and support, lack of awareness, and financial barriers for underrepresented students, all of which contribute to lower participation rates for Black and Latinx students when compared with White and Asian students. This article serves to provide community college practitioners with a deep understanding of the factors that contribute to this problem so that they can identify interventions that will address these root causes. Suggestions for mitigating equity gaps in dual enrollment for underrepresented students through the use of targeted messaging campaigns are discussed.

__KEYWORDS__
dual enrollment, equity, underrepresented students

Underrepresented Black and Latinx students are not participating in dual enrollment at the same rate as White and Asian students. A recent report from the Community College Research Center (CCRC) where researchers studied about 950 dual enrollment programs suggested that, on average, only 7% of Black and 8% of Latinx students participated in dual enrollment compared with 12% of White students (Lamiell, 2020). In addition, a longitudinal study released in 2019 of 23,000 high school first-year students across the nation found that 38% of White and Asian students participated in dual enrollment compared with only 27% of Black and 30% of Latinx students (Williams & Perry, 2020). Many Black and Latinx students have perceived themselves as incapable of achieving secondary and post-secondary success. They have shied away from post-secondary opportunities due to lack of belief in their ability to be successful in college-level work (Zinth & Barnett, 2018).

Dual enrollment programs allow high school students to take college-level courses to earn high school and college credit. Other commonly used terms are dual credit and concurrent enrollment. Dual enrollment programs exist in many iterations, and research has identified 38 term variations among participating states (Williams & Perry, 2020). Despite many term and program variations, dual enrollment participation with community colleges remains the most prevalent option. Most students participated in dual enrollment through programs that partnered with community colleges. Community college partners offered courses within a traditional high school or college setting, and 86% of students took classes at a high school (Mehl et al., 2020).

Many dual enrollment programs serve as enrichment and advancement opportunities for participants, offering a head start on college requirements and career exploration. Dual enrollment participation has helped students discover their capabilities and gain confidence in their ability to succeed in college (Hughes et al., 2012; Hoffman et al., 2009). Dual enrollment has been positively linked with several student outcomes, notably high school graduation and enrollment in college (Hoffman, 2012). Dual enrollment students were more likely to graduate high school (Zinth & Barnett, 2018), and according to a report from the Community College Research Center (CCRC) 88% of dual enrollment students enrolled in college (Fink et al., 2017). Research has found that dual enrollment participants were more likely to earn a post-secondary degree than non-dual enrollment participants (Ddamulira, 2017). According to the National Center for Education Statistics, underrepresented Black and Latinx students graduated high school at lower rates than White and Asian students (National Center for Education Statistics, 2020). As data has demonstrated that dual enrollment is positively linked with high school graduation and enrollment in college, it is critical for Black and Latinx students to gain equitable access to dual enrollment opportunities that can improve their graduation rates and prepare them for post-secondary success.

Despite proven benefits and participation that has more than doubled in the last ten years (Adcock, 2016), the growth in dual enrollment has been disproportionate, with White and Asian students participating at higher rates. At one time, programs were widely recognized as helping high-achieving, affluent White students thwart "senioritis," a term coined for students who lose motivation during the senior year of high school, but research has shown that dual enrollment can have an even greater impact on low- and middle-achieving Black and Latinx students (An, 2013). Studies have

demonstrated that dual enrollment can help underrepresented Black and Latinx students graduate from high school, enroll in college, and complete a post-secondary program, but efforts to close the equity gap have left them behind (Weissman, 2020). Programs have been developed that appear inclusive on the outside, but internal eligibility requirements, financial commitments, and recruiting methods often exclude underrepresented populations. Dual enrollment participation can open the door to post-secondary opportunities for underrepresented Black and Latinx students but developing programs without exploring the root causes that create equity gaps will likely result in more inequitable programs (Field, 2020).

If developed through an equity-minded lens, dual enrollment programs could serve as a catalyst for inspiring students to look beyond high school and set post-secondary education and career goals (Taylor, 2015). Creating policies and practices that address these equity gaps requires a deep understanding of why equity gaps exist in dual enrollment for underrepresented Black and Latinx students. A literature review was conducted to identify the root causes of this problem so that practitioners can use this data to inform practices aimed at decreasing the equity gaps in dual enrollment.

METHOD

To explore why equity gaps exist in dual enrollment, three strategies were used: a systematic search for peer-reviewed literature using library databases, practitioner perspectives with K-12 and higher education practitioners, and an Internet search for public scholarship. A systematic literature review was used to identify peer-reviewed research articles. Each article's findings were reviewed, and a synthesis matrix was created to track themes related to the research topic. In addition, conversations with K-12 and higher education practitioners were conducted to obtain various perspectives on the research topic from the point of view of practitioners who work with underrepresented student populations and manage dual enrollment programs. Lastly, an Internet search for public scholarship was conducted to identify literature from organizational and higher education websites. The topic of dual enrollment generated a large amount of public scholarship literature that was published on various blogs and academic websites. This type of literature is beneficial when exploring a research topic that has multiple iterations and implementation models. Public scholarship articles were reviewed and findings that illuminated root causes for equity gaps in dual enrollment were included in the results.

Library Databases

In January 2021, an electronic database search was conducted using the following search terms: dual enrollment OR concurrent enrollment OR dual credit AND minority students OR underrepresented students AND "community college." The initial search resulted in 21 articles from five databases: ERIC, Education Source, Academic Search Premier, APA PsychInfo, and Business Source Elite. Each peer-reviewed article was examined for relevance to the established criteria by title review, abstract review, and article review. Criteria for inclusion included: (a) dual enrollment was the program being discussed; (b) underrepresented or minority students were included in the sample group; (c) programs took place in partnership with community colleges; and (d) articles were peer-

reviewed. Articles that referenced dual enrollment as an optional or mandatory program were included in the review.

The 21 articles were reviewed by title and found to be relevant to the topic, equity gaps in dual enrollment. A review of article abstracts was then conducted. Of the 21 articles, 16 were found to be relevant to the topic. Five articles were eliminated for failing to include dual enrollment as the main program of discussion and underrepresented students as part of the sample group.

The remaining 16 articles were reviewed to ensure that the purpose and content aligned with the topic. Of the 16 articles, four were eliminated as the studies focused on dual enrollment student outcomes rather than a lack of equity for underrepresented students in dual enrollment. Three additional articles were eliminated for focusing on state policy rather than underrepresented students in dual enrollment. Nine articles remained and the snowball technique was then used to identify additional relevant articles. Four articles were identified using the technique for a total of 13 peer-reviewed articles.

Practitioner Perspectives

Conversations with one higher education administrator and two K-12 professionals took place to gather practitioner perspectives related to the topic. The first conversation was with a community college administrator involved in managing dual enrollment programs for underrepresented students. The second was with a K-12 administrator from a Hispanic-serving school district who is accountable for student outcomes. The third conversation was with a K-12 administrator from a Hispanic-serving school district accountable for curriculum development and supplemental programs. The discussions involved dual enrollment program design, barriers in eligibility and participation, demographics of local dual enrollment programs, limitations of programs for Hispanic students, and perceived program issues. These conversations helped the researcher gain insight as to how school districts that serve underrepresented populations are working toward equity for their students. There were limitations to the practitioner conversations. Most importantly, the opinions and perspectives shared may not represent the opinions and perspectives of other practitioners in similar roles. In addition, the researcher was unable to determine the student perspective of dual enrollment programs because no conversations with underrepresented students took place.

Public Scholarship

To locate published articles available on organizational websites, academic websites, and blogs, an Internet search was performed using search terms relevant to the topic. Search terms included: dual enrollment, concurrent enrollment, dual credit, and underrepresented students. The criteria for inclusion were: (a) dual enrollment was the program being discussed; (b) underrepresented or minority students were the sample group; (c) programs took place at community colleges; and (d) equity issues were addressed. Articles that referenced equity issues in dual enrollment in relation to early and middle college programs were also included for review. These terms were included because they involved learning models that expand access beyond traditional dual enrollment and serve predominantly underrepresented students. Organizational websites such as the National Alliance for Concurrent Enrollment Partnerships (NACEP) and the Community College Research Center at Teachers College of Columbia University (CCRC) were explored. The search

resulted in 20 additional articles identified as relevant to the topic. Seven articles were eliminated for failing to meet inclusion parameters. The remaining 13 articles were then added to the 13 peer-reviewed articles for a total of 26 articles that were included in this review. See Table 1 for a list of peer-reviewed and public scholarship articles that were included in this literature review.

RESULTS AND DISCUSSION

Each of the 26 articles identified through the peer-reviewed and public scholarship searches were thoroughly reviewed. Twelve articles were studies that examined various policy changes impacting dual enrollment access and participation, as well as student retention and success. Two of the studies (8%) utilized qualitative methods to collect data, including interviews, existing program data, and focus groups. Three studies (11%) utilized quantitative data, including grade point average, enrollment, and completion data. Seven studies (27%) utilized mixed methods to collect data related to access barriers, funding barriers, and transition to college. The remaining 14 articles were discussions of various dual enrollment programs and suggestions for improving access, support, and success for underrepresented students.

The articles and practitioner perspectives were examined for common themes related to the topic and four common themes emerged from the analysis. The major themes included: (a) access barriers due to racially biased eligibility parameters, implicit bias in recruitment and identification of participants, and lack of qualified K-12 faculty; (b) lack of advising and support for underrepresented students; (c) lack of understanding of opportunities and benefits; and (d) financial barriers.

Table 1. Peer-reviewed and Public Scholarship Articles

Author (Year)	Title	Source Type
Abdul-Alim, J. (2014)	Colleges urged to take advising of underrepresented students to deeper level	Public Scholarship, www.diverseeducation.com
An, B. P. (2012)	The influence of dual enrollment on academic performance and college readiness: Differences by socioeconomic status	Peer-Reviewed Article
Barnett, E., Zinth, J. (2018)	Rethinking dual enrollment to reach more students	Public Scholarship, www.ecs.org
Bragg, D., Kim, E., & Barnett, E. (2006)	Creating access and success: Academic pathways reaching underserved students	Peer-Reviewed Article
Boswell, K. (2000)	Building bridges or barriers? Public policies that facilitate or impede linkages between community colleges and local school districts	Peer-Reviewed Article
Community College Research Center (2012)	What we know about dual enrollment	Public Scholarship, www.ccrc.tc.columbia.edu
Duncheon, J. (2020)	What students do early college high schools serve? Unpacking social constructions of the target population	Peer-Reviewed Article
Edmunds, J., Unlu, F., Furey, J., Glennie, E., & Arshavsky, N. (2020)	What happens when you combine high school and college? The impact of the early college model on postsecondary performance and completion	Peer-Reviewed Article
Fink, J. & Jenkins, D. (2021)	Rethinking dual enrollment to advance equitable transfer	Public Scholarship, www.insidehighered.com
Ganzert, B. (2012)	The effects of dual enrollment credit on gender and race	Peer-Reviewed Article
Gilbert, E. (2017)	How dual enrollment contributes to inequality	Public Scholarship, www.chronicle.com
Gleeson, M. (2020)	Equity in higher education requires equal access to dual enrollment in high school	Public Scholarship, www.insightintodiversity.com
Hoffman, N., Vargas, J., Santos, J. (2009)	New directions for dual enrollment: Creating stronger pathways from high school through college	Peer-Reviewed Article
Hughes, K., Rodriguez, O., Edwards, L., & Belfield, C. (2012)	Broadening the benefits of dual enrollment	Public Scholarship, www.ccrc.tc.columbia.edu
Hugo, E. (2001)	Dual enrollment for underrepresented student populations	Peer-Reviewed Article
Karp, M. (2015)	Dual enrollment, structural reform, and the completion agenda	Peer-Reviewed Article
Mangan, K. (2019)	Rise in dual-enrollment courses may help community colleges. But minority students? Not as much.	Public Scholarship, www.chronicle.com
Pretlow, J. & Wathington, H. (2013)	Access to dual enrollment courses and school-level characteristics	Peer-Reviewed Article
Pretlow, J. & Wathington, H. (2014)	Expanding dual enrollment: Increasing postsecondary access for all?	Peer-Reviewed Article
Rivera, L., Kotok, S., Ashby, N. (2019)	Access to dual enrollment in the United States: Implications for equity and stratification	Peer-Reviewed Article
Schwartz, N. (2020)	New dual enrollment data points to unequal access	Public Scholarship, www.highereddive.com
St. Amour, M. (2020)	Report: How to improve equity in dual enrollment	Public Scholarship, www.insidehighered.com
Stout, K., Ballinger, M., Parker, A., Plinske, K., Thomas, D., Mehl, G., & Fink, J.	Leading with equity in dual enrollment	Public Scholarship, www.ccrc.tc.columbia.edu
Taylor, J. L. (2015)	Accelerating pathways to college: The (In)equitable effects of community college dual credit	Peer-Reviewed Article
Weissman, S. (2020)	Dual enrollment works. But who is it working for?	Public Scholarship, www.diverseeducation.com
Williams, A., & Perry, A. (2020)	Prioritizing equity in dual enrollment	Public Scholarship, www.ecs.org

Access Barriers

Access barriers exist that prevent underrepresented students from participating in dual enrollment at the same rate as White and Asian students. Program accessibility is a thematic issue impacted by eligibility, recruitment, and availability of implementation resources. This expansive root cause was broken down into three subcategories that address the depth of accessibility issues for underrepresented students. Eligibility parameters, implicit bias, and faculty pool are explored.

Racially Biased Eligibility Parameters

Dual enrollment eligibility parameters vary by state and by institution within each state. Some states limit participation to juniors and seniors, and many require placement testing, written recommendations from high school teachers or school counselors, and a minimum GPA (Flynn, 2021). Despite recent attempts to shift the focus of recruitment efforts to underrepresented students, numerous dual enrollment programs maintain eligibility requirements that may exclude many students from participating (Mehl et al., 2020). In addition, programs that were created to address the needs of underrepresented students have been impacted by racial disparities in eligibility requirements including GPA requirements, testing pre-requisites, and other academic requirements, hindering access, and success for students they intended to serve (Yuen Ting Liu et al., 2020).

Underrepresented students cannot take advantage of dual enrollment opportunities afforded to other students due to racial disparities in eligibility criteria and a lack of meaningful support (Williams & Perry, 2020). Duncheon (2020) performed a study to determine how recruitment strategies affected participation. Results showed that recruitment efforts may begin with equity in mind, but stringent eligibility parameters and academic requirements ultimately excluded many underrepresented students from participating.

Many programs required placement testing to determine dual enrollment eligibility. Underrepresented students were more likely to be placed in lower-level classes in high school, lessening their chances of accessing dual enrollment opportunities (De Brey et al., 2019 as cited in Duncheon, 2020), and increasing their chances of performing poorly on placement tests due to a lack of content knowledge from slower-paced lower-level classes. A study by Rivera et al. (2019) found that access to dual enrollment was affected by academic performance and socioeconomic status, leaving behind underrepresented students that placed into lower-level classes. As a result, underrepresented students lacked adequate academic preparation for many programs and courses and may not have been aware of the opportunities that existed to help enrich their knowledge. Rivera et al. (2019) suggested that despite crediting dual enrollment for improving college readiness, many programs abided by the original policies associated with early programs of the 70's and 80's where high-performing students were targeted for enrollment. According to Mehl et al. (2020), dual enrollment programs only benefitted students if the students were made aware of opportunities and programs were intentionally developed with a goal of mitigating equity gaps from the start.

Implicit Bias in Recruitment and Identification of Participants

Every person holds a degree of unconscious or implicit bias that impacts how they feel about others based on race, gender, or other characteristics (Stevens, 2017). As people grow and learn, their implicit biases develop based on their surroundings and how they sort information in their brains (Stevens, 2017). Implicit biases can prevent people from treating others equally, but it is difficult to address given the unconscious state of many biases. For example, White students have had a better chance of receiving a lesser consequence for acting out than Black students (Stevens, 2017). The presence of implicit biases can extend beyond behavior and impact how educators assist students with planning for their future education and career goals.

Within K-12 schools, staff may hold implicit biases against underrepresented students, assuming they are not qualified for dual enrollment and cannot meet higher academic expectations (Mehl et al., 2020). School counselors typically work with students to identify and register them for programs like dual enrollment, but 70% of counselors are White and may hold unintentional racial biases that prevent them from recommending underrepresented students for dual enrollment programs (Field, 2020). Underrepresented students need to be surrounded by educators who believe in their ability to achieve success and who can connect them with opportunities that meet their needs and align with their goals.

Not all students have a clear idea of their education and career goals in high school, and school counselors have an important task of helping students realize their potential and explore their options. High-achieving students may be more on track with future plans, where middle-achieving students may need more support and exposure to opportunities that help them define and navigate their educational paths. Zinth and Barnett (2018) suggested dual enrollment should be more accessible to middle-achieving students who are unsure about their post-secondary plans because participation in dual enrollment could help them discover their interests. School counselors are overloaded with students, making time an issue for students who require extra support and may not have their educational goals planned out (Waddle, 2011). School counselors may also lack the necessary training to provide the depth of college counseling support required by middle-achieving students (Waddle, 2011).

Lack of Qualified K-12 Faculty

Williams and Perry (2020) reported that high schools with large numbers of underrepresented students were less likely to offer dual enrollment opportunities because of a lack of qualified high school faculty. Low-income and urban schools with high numbers of underrepresented students were less likely to offer dual enrollment because their low achievement rates discouraged qualified faculty from seeking long-term employment, leading to high turnover and frequent hiring of inexperienced faculty (Ahram et al., n.d.; Field, 2020). Pretlow and Wathington (2013) found that underrepresented low-income students often attend schools with fewer resources and inexperienced teachers. It is critical for high schools to employ qualified faculty who take an interest in accelerating their students' academic progress and have the credentials to teach at a college level.

According to the Higher Learning Commission (HLC), faculty should hold a master's degree in the content area they are teaching or have accumulated 18 graduate credits in the content area (Smith, 2017). In general, the standard for high school teachers is a bachelor's degree in a content area and state certification (Zeiger, 2018). In some states, each institution can elect to substitute field

knowledge and experience for career and technical education dual enrollment courses where industry experience holds great value to the course experience (Horn & Parks, 2018). There was a lack of consistency across regional accrediting commissions concerning dual enrollment credential requirements that led to various interpretations by state and by institution. It is difficult to ascertain how many faculty members were considered unqualified for dual enrollment as little data exists that highlights the areas of need (Smith, 2018).

Gleeson (2020) highlighted the need to hold community colleges accountable for facilitating dual enrollment courses rather than rely on K-12 faculty. According to a K-12 practitioner from an urban, Hispanic-serving school, it is difficult to recruit and retain qualified faculty for all courses, and supplemental programs like dual enrollment fall by the wayside due to larger staffing issues (K. Scussa, personal communication, October 21, 2020). Hooker (2019) suggested examining the addition of content-area knowledge in the coursework required for the master's in education degree that is commonly sought by high school teachers for advancement in their roles, ensuring most teachers graduate with a credential acceptable for dual enrollment.

Lack of Advising and Support

In order to provide programs that are comprehensive in aligning with their needs, dedicated staff and resources must be available to support underrepresented students (CCRC, 2012). There has been a lack of advising and support in the K-12 and higher education sectors for specialized programs like dual enrollment. Due to overextended resources, community colleges were often unable to offer designated advisors or counselors for dual enrollment students and high school counselors were bogged down with administrative tasks and demands (Weissman, 2020). Training was also lacking for staff who worked with underrepresented and first-generation students, populations that may require additional support during important transition periods.

Advising and support services for underrepresented students must be intentional, adequately balanced with student goals, involve high school and college staff, and include guidance for career connection and exploration to help them build and achieve a suitable program experience (Mehl et al., 2020). Dual enrollment can entice underrepresented students to explore college, but if those students were not well-prepared and supported, they may not succeed in their courses or persist to college (Unlu & Edmunds, 2019). Dual enrollment was meant to be a positive experience for students and a means to make the education journey more manageable, affordable, and successful. Programs devoid of adequate support serve to widen the equity gaps by leaving underrepresented participants in unfamiliar territory with unreliable or unavailable support.

School counselors may not be aware that dual enrollment participation can help underrepresented students meet elevated standards and access the tools necessary to plan for post-secondary success. Their implicit bias may also prevent them from seeing beyond a student's unconsciously assigned category. Therefore, it is essential to professionally train staff on the value of dual enrollment and how participation can benefit underrepresented students and institutions alike, as well as how to work through implicit bias and achieve equity for students. In addition, establishing a dual enrollment partnership with a college can open the door for future discussions and cooperative programs that benefit students and

facilitate their transitions to college (Mehl et al., 2020). With appropriate support in place, dual enrollment participation can help underrepresented students achieve their education and career goals.

Lack of Understanding of Opportunities and Benefits

Many families and school counselors are often not aware of dual enrollment programs and benefits (Gleeson, 2020). This may be in part due to dual enrollment changing significantly over the years. Hoffman et al. (2009) highlighted how dual enrollment used to be geared toward high-performing students, but many programs have been repurposed to serve the needs of all levels of students. Nevertheless, dual enrollment programs may still be perceived by many as catering to advanced students (Boswell, 2000). Parents and counselors are often more familiar with College Board Advancement Programs (AP), which were established in the 1950's. AP courses have benefitted from the familiarity of standardized courses and consistent support from each state (Bragg & Barnett., 2006), where dual enrollment programs operated more independently and lacked standardization, making it difficult to devise a universal message.

Clarifying the message around dual enrollment can be complicated. As a result of the disconnect and lack of communication regarding program expectations, high school students and their families may not be fully aware of various dual enrollment options and the long-term benefits of participation as they are left to navigate the unknown with preconceived notions of what dual enrollment can or cannot contribute to their futures (Fink & Jenkins, 2021). In addition, there are often not enough school counselors to offer individualized recommendations for students, resulting in students navigating uncharted territory on their own and, consequentially, making uninformed choices (Weissman, 2020). Where some program's messaging may inform students of opportunities, efforts often fail to highlight the tangible benefits that come from participation. Gleeson (2020) suggested messaging should focus on the value of participation and serve to eliminate misconceptions regarding eligibility. Efforts must involve high-level district leaders that can successfully bridge the K-12 experience with the bigger picture for students (Gleeson, 2020). More attention and involvement with effective messaging is needed to ensure all students and families understand how dual enrollment programs align with their education and career goals.

Financial Barriers

Funding and resources remain a challenge for both high schools and colleges when addressing the growing needs of dual enrollment programs. Low-income underrepresented students typically do not participate in dual enrollment due to financial limitations (Gilbert, 2017; Mangan, 2019). On average, dual enrollment courses cost less than traditional college courses with the majority of states charging reduced tuition and about half offering free programs, but even reduced-cost options can be a barrier for students from low-income backgrounds (Field, 2020; Mangan, 2019). Dual enrollment courses cost anywhere from zero to $400 per course with some costs covered by the state or the high school and some requiring students and their families to cover the cost (Flynn, 2021). Depending on how each institution determined the cost, many students may be excluded based on their income level if their school cannot obtain funding to cover the cost of dual enrollment

participation. An (2013) performed a study that showed income level influences whether students participate in dual enrollment, but other factors also impacted participation, including student characteristics and parental education level. Dual enrollment students were not eligible for traditional financial aid to pay for courses. Some colleges have grants available to pay for students to take courses however, grant-funded programs generally have strict eligibility requirements that may exclude certain students from participating. According to a higher education practitioner who facilitates dual enrollment at a community college, funding for underrepresented high school student participation in dual enrollment is inconsistent amongst local schools, and self-pay students tend to be White and more affluent (C. Conzen, personal communication, October 6, 2020). The lack of financial aid, open-access grant funding, and low-income level serve to keep dual enrollment opportunities out of reach for the students that may benefit most (Reed, 2017).

Underrepresented populations are growing rapidly and account for an inordinately large number of low-income families. According to data from the National Center for Education Statistics (NCES), three-fourths of Black and Latinx students attend low-income schools compared with one-third of White students. Low-income schools are less likely to have access to sufficient funding to support the costs of dual enrollment programs for students (Gilbert, 2017). Low-income schools face many challenges when it comes to offering advanced coursework, but studies show a positive correlation between students who take advanced coursework, like AP or dual enrollment, and the likelihood of those students persisting in college (Coutts & LaFleur, 2011). More funding is needed to support programs at low-income schools and for low-income students and fewer barriers to obtaining and qualifying for funding are necessary to ensure those that need financial support most have easy access to resources.

A study by Roach et al. (2015) found that eliminating the cost of dual enrollment increased participation for underrepresented low-income students, but limitations in sustainability exist due to funding requirements to support all students. Williams and Perry (2020) highlighted that lack of resources and funds negatively impacts dual enrollment opportunities at schools with larger underrepresented student populations. "Inequitable access to dual enrollment by race is clearly predicted by income disparity," (Williams & Perry, 2020, p.3). Underrepresented, low-income students were found to be some of the most highly motivated students, but financial limitations impacted participation (Hugo, 2003 & Mangan, 2019). According to a K-12 practitioner from an urban school district, reducing or eliminating the cost of dual enrollment may further widen the equity gap if underrepresented students are not adequately informed about their options and able to make decisions about participation (K. Scussa, personal communication, October 21, 2020). Financial limitations impacted underrepresented student participation in dual enrollment, creating barriers to post-secondary success and widening the equity gaps for underrepresented students.

CONCLUSIONS

Equity gaps in dual enrollment exist due to access barriers in eligibility, recruitment, and qualified K-12 faculty, as well as financial limitations and a lack of advising and support for underrepresented students. As a result, dual enrollment programs lack equity and may serve to deter students from pursuing post-secondary opportunities and worsen racial disparities. Many programs began with a goal of inclusion but often ended with stringent parameters that excluded underrepresented students from participating. If developed through an equity-minded lens, programs could serve as cost-effective solutions for propelling underrepresented students toward post-secondary education opportunities that may have otherwise been inaccessible.

Dual enrollment is often a student's first look at college expectations and participation can set the stage for them to begin planning their educational futures. Programs must be developed with the needs of students in mind, especially when target populations are underrepresented. Advocating for underrepresented students and announcing initiatives designed to serve them is not enough to increase their desire to participate or their motivation to succeed. Tools must be developed to engage underrepresented students in meaningful experiences that lead to positive outcomes. Resources must be included to ensure students can navigate the process, succeed academically, and feel confident in their abilities to continue in the education pipeline. To mitigate the equity gaps and help underrepresented students reap the benefits of dual enrollment participation, equity must be at the forefront during creation and implementation with an emphasis on access and support to ensure positive outcomes.

With thoughtful program development comes the need for an effective messaging and recruitment campaign designed to inform underrepresented students and their families about the opportunities available to them. To effectively target the population that can benefit most from dual enrollment, it is important first to explore the current methods of dual enrollment messaging, examine the level of knowledge of affiliated staff, and assess the needs of the target population. Mitigating equity gaps begins with aligning the needs of the target population with relevant messaging and following up with knowledgeable staff that help students and families navigate their options.

Dual enrollment programs can help underrepresented Black and Latinx students achieve their education and career goals by providing opportunities to earn college credit, enrich their academic knowledge, connect with college staff to learn about post-secondary opportunities, and prepare for the rigors of college. All programs are not created equal, and more work is needed to explore the root causes of equity gaps and find solutions that help underrepresented students reap the benefits of dual enrollment participation.

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