

CTE Postsecondary Pathways for Student Success—Learn, Earn, Live

Tony Warren

Education Consultant

Counseling Career Development and Career Technical Education

Real-World Project

December 15, 2022

CTE Postsecondary Pathways for Student Success—Learn, Earn, Live

Introduction

Research consistently demonstrates the positive impact of dual enrollment programs on student outcomes, regardless of race or socioeconomic status. Despite these programs' growing popularity, Black students' participation remains stagnant. In Michigan, the Postsecondary Enrollment Options Act (1996 PA 160) and the Career and Technical Preparation Act (2000 PA 258) play pivotal roles in providing information and opportunities to students. Eighth-grade students are mandated to receive information about college course options. At the same time, the Postsecondary Enrollment Options Act enables eligible high school students to enroll in college-level courses, earning credits towards both high school and college degrees simultaneously. This initiative offers advanced academic opportunities while potentially reducing the time and cost of obtaining a college degree.

The Career and Technical Preparation Act also prioritizes providing students with career-oriented education and training. By emphasizing the development of high school career and technical education programs, this legislation supports initiatives that prepare students for success in the workforce. These comprehensive efforts aim to broaden access to higher education and career pathways, ensuring all Black students have the resources and opportunities to achieve their academic and professional goals.

Project Purpose

This project aimed to increase the participation rate of high school students identifying as Black or African American in dual enrollment programs at the Calhoun Area Career Center (CACC) in Battle Creek, Michigan by 30%. Operated by the Calhoun Intermediate School District, the CACC extends the offerings of local constituent schools, primarily providing Career Technical Education (CTE) to 11th- and 12th-grade students. With guidance from sending school counselors, students attend the CACC for half of each school day. In addition to dual enrollment opportunities, students can earn credits through articulation agreements with area colleges and

universities. Presently, the CACC offers 19 programs aligned with the Michigan Career Pathways model.

This project also focused on Battle Creek Central High School (BCCHS), part of Battle Creek Public Schools. BCCHS has a student population of 1,041, with a total minority enrollment of 69%. Of that population, 74% are economically disadvantaged, and 40% identify as Black. Black students from BCCHS are underrepresented in the programs that offer dual enrollment at the CACC, exposing a systemic opportunity gap. Enrollment data from the 2022 school year indicate that 42.5% of BCCHS students enrolled at the CACC identified as Black or African American (37 of the 87 students). However, the proportion of students in this group participating in dual enrollment is below 5%. Based on the BCCHS demographic data, equitable enrollment of Black students would be at least 40%; thus, aiming for a 30% increase moves the student population to equitable representation. This study focused on Black student enrollment in the following seven CACC programs.

21st Century Health Careers

The 21st Century Health Careers Program introduces high school juniors and seniors to potential career paths in the healthcare industry. The program is a partnership of Bronson Battle Creek, Kellogg Community College (KCC), and the CACC.

Automotive Service Technology

The Automotive Service Technology Program prepares students for entry-level positions in the automotive industry. The curriculum emphasizes brakes and electricity/electronics. Students receive instruction on engine repair, automatic transmission/transaxles, steering and suspension, heating and air conditioning, and engine performance.

Aviation Exploration

Designed for students interested in any career in the aviation industry, Aviation Exploration offers students college credit for their work while exposing them to multiple roles in the industry, including that of aircraft mechanic, pilot, air traffic controller, or a position in aviation administration.

Education Academy

The Education Academy Program allows students to explore education as a career field. In addition to coursework at the CACC, student cadets teach at various K–12 education sites within the Calhoun Intermediate School District.

Emergency Medical Technician (EMT) Basic

The EMT Basic Program, offered in collaboration with KCC, is the entry point for individuals interested in becoming a paramedic, working on an ambulance in the prehospital setting, or pursuing a career requiring training as a first responder.

Graphic Communications Technology (GTC)

GTC students explore and develop skills in all aspects of the graphics industry, from design to completion of printed media. Students use professional graphic software programs to design media, such as calendars, posters, and other printed messages.

Welding Technology

The Welding Technology Program is a 2-year program providing students with the technical skills needed in various welding processes, including Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding, and Oxy-Fuel Welding.

The seven programs in this report offer dual enrollment coursework, utilizing curricula and standards that lead to certificates, certifications, and licenses. The education and work-related credentials can verify a student's qualification, competence, or readiness for postsecondary

transition.

Background

Research generally supports that dual enrollment participation remains consistent across racial and economic stratification (Miller et al., 2017; Museus et al., 2007). According to the National Center for Education Statistics High School Longitudinal Study of 2009, students whose parents attained higher levels of education more commonly enrolled in courses providing postsecondary credit during their high school years. Forty-two percent of students whose parents had earned a bachelor's degree or higher took these courses during high school, compared to 26% of students whose parents' highest level of education was lower than a high school diploma. Although BCCHS students voiced postsecondary aspirations, many are considered first-generation college students and have parents who earned a high school diploma without college credits. Students with higher socioeconomic status are more likely to enroll in dual enrollment. Racial disparities also contribute to the low participation of Black students in dual enrollment. Data from the U.S. Census Bureau's 2014 American Community Survey estimated that 21.8% of the Battle Creek population fell below the federal poverty level;

- Among children under 18, the poverty rate increased by nearly a third
- In Battle Creek Public Schools, 27% of the total population of students and families lived below the poverty line, as did 38% of children
- Household incomes for families in Battle Creek Public Schools average \$41,335

This reality, coupled with the fact that 74% of the district's students are considered economically disadvantaged, helps explain why many of the district's students take advantage of the dual enrollment courses offered at BCCHS, where 40% of the student body identifies as Black.

Method of the Evaluation

The evaluation comprised a quantitative analysis of dual enrollment and registration information from BCCHS and the CACC. Baseline data from the 2021–22 academic year was analyzed using the CACC school management and student information system. In September 2022, the CACC consultant performed a data query to determine if Black students’ enrollment in CACC programs increased from the 2021–22 academic year.

A comprehensive review of the 2022–23 dual enrollment data revealed no change in the number of Black students in dual enrollment courses at the CACC from 2021–22 to the 2022–23 academic year. Students and school counselors took surveys to gather perception data on the CACC dual enrollment programs. Data from the surveys revealed the following:

- To make informed career choices, students needed more information about how CTE programs of study support their postsecondary goals.
- CACC 10th-grade visitations did not provide students with adequate information about dual enrollment.
- BCCHS counselors’ job responsibilities hampered their ability to devote the time necessary to advise students about CTE programs of study.

Two evidence-based frameworks guided the evaluation of strategies and policies at BCCHS and the CACC that affect Black students’ access to dual enrollment: the American School Counselor Association ASCA National Model (2012) and the Trish Hatch (2017) Multi-Tiered Multi-Domain System of Support (MTMDSS).

The ASCA National Model outlines a school counseling program’s components that are integral to the school’s academic mission and supports student achievement, attendance, and discipline. The ASCA National Model guides school counselors in the development of school counseling programs that

- use data-informed decision-making,
- are delivered to all students systematically,
- include a developmentally appropriate curriculum focused on the mindsets and behaviors all students need for postsecondary readiness and success and
- close achievement and opportunity gaps.

Trish Hatch (2017) developed the MTMDSS framework for school counseling programs to organize a continuum of core instruction and interventions to address students' needs. This framework sets out three main goals: 1) providing developmentally appropriate instruction for all students, 2) optimizing student achievement, and 3) enhancing students' social, emotional, and behavioral competencies. MTMDSS categorizes school intervention services into three tiers.

Both frameworks played an integral role in evaluating the policies and practices affecting the dual enrollment gap. The ASCA National Model assisted in evaluating the “direct services” BCCHS school counselors provide to students. These services are referred to in the ASCA National Model as *appraisal* and *advisement*. This two-part process requires school counselors to assist students in understanding their abilities, interests, skills, and achievements. It also calls on counselors to make recommendations based on their appraisal of test inventories and other data. The MTMDSS framework supported the evaluation process because it enables school counselors to affect student success better and demonstrate that impact through data.

Summary of the Findings

Interventions used to increase the number of Black students dual enrolled in CACC programs are listed below:

- Students who visited the CACC participated in individual and small-group meetings to

learn more about CTE and the CACC programs.

- Black students met individually with the CACC career development consultant to discuss CACC dual enrollment programs.
- The CACC career development consultant assisted students in selecting appropriate CTE programs that align with students' interests and goals.
- BCCHS counselors and administrators participated in monthly learning sessions on implementing comprehensive school counseling programs using the ASCA National Model and MTMDSS frameworks.
 - BCCHS counselors worked with the CACC career development consultant to identify Black students with Educational Development Plans, interests, and aptitudes for CACC dual enrollment programs.
 - BCCHS counselors worked with the CACC career development consultant to complete a core curriculum action plan detailing the Tier 1 career development lessons Black students participated in regarding CTE and CACC programs of study.
- BCCHS school counselors participated in virtual learning sessions emphasizing career development, Career and Technical Education (CTE), and influential career advising strategies.
 - BCCHS counselors discuss how implementing the ASCA National Model could help them provide data-driven proactive support for students of color.

Enrollment data from BCCHS and the CACC for the 2021–22 and 2022–23 academic years indicate the following:

- During the 2021–22 school year, the CACC enrolled 684 students. BCCHS enrolled 87 students. Black students comprised 37 of the 87. Of those 37 Black students, 13 were dual

enrolled at the CACC. Eight of the 13 were seniors, and five were juniors.

- Of the five juniors, four returned for their senior year.
- For the 2022–23 school year, 859 students were enrolled at the CACC. BCCHS enrolled 105 students, including 46 Black students. Among these Black students, 13 were dually enrolled at the CACC, with nine new first-year students in CACC dual-enrolled courses. Notably, 13 Black students were enrolled in dual enrollment courses at the CACC from the 2021–2022 and 2022–2023 school years. Despite the enrollment of nine new Black students, there was no change in the overall number of Black students from BCCHS enrolled in dual enrollment courses at the CACC from the 2021–2022 to the 2022–2023 school years.
- The data suggests a necessity for more targeted and sustained interventions and strategies to boost participation in dual enrollment. Nevertheless, a promising observation is that all nine new junior students in dual enrollment are Black.

Recommendations

After 12 months of coaching, consultation, and collaboration with stakeholders on this project, several systemic issues have come to light. One notable concern revolves around the visitation process for 10th-grade students at the CACC. The current structure lacks intentional Tier 1 and Tier 2 support for Black students. To address this, students of color must have access to a core curriculum featuring lessons and tailored activities to enhance their understanding of CTE dual enrollment programs. It is recommended that students visit the CACC at least four times a year in small groups that offer targeted interventions tailored to their diverse career development needs. ASCA (2012) emphasizes the crucial role of counselors in designing and delivering programs that foster the success of every student. ASCA (2012) emphasizes the vital

role of counselors in designing and providing programs that foster the success of every student. It underscores the importance of integrating school counseling programs seamlessly into students' daily educational experiences, with counselors as partners in promoting student achievement. However, the project highlights a need for more alignment between the BCCHS counseling program and the evidence-based framework outlined by ASCA. This observation does not reflect the counseling team's competence but underscores the systemic barriers that impede their effectiveness.

Despite the demanding nature of their roles, counselors at BCCHS have commendably addressed their students' diverse and complex needs. However, there is a pressing need to prioritize responsive services more. The counseling team dedicates much of its time to resolving immediate conflicts, managing crisis events, and addressing disruptions to learning. This overreliance on responsive services diminishes their ability to effectively promote equity, accessibility, and academic achievement for all students.

Systemic barriers include

BCCHS school counselor caseloads: The ASCA National Model advocates for a student-to-counselor ratio of 250:1. However, according to 2020–21 data from the National Center for Education Statistics (2021), Michigan's student-to-counselor ratio stands at 638:1. At BCCHS, the school counselor ratio is even higher, at 910:1. These ratios are significant, as evidenced by results from an Indiana study cited by ASCA (2019), which found that school counselor ratios of 250:1 are associated with lower student absenteeism and higher SAT math, verbal, and writing scores. At BCCHS, the burden of increased caseloads often leads to a lack of availability for students of color and those from marginalized families, who are among the most vulnerable. To address this issue and better serve its diverse student population, BCCHS must prioritize recruiting, hiring, training, and retaining appropriately credentialed school counselors

in alignment with the recommended ratios set forth by the ASCA National Model.

Role conflict/ambiguity are prevalent issues for school counselors, as highlighted by Cervoni and DeLucia-Waack (2011). The lack of clarity regarding their professional responsibilities, often due to administrative misunderstanding, leads counselors at BCCHS to occasionally assume roles such as substitute teachers. Moreover, counselors find themselves undertaking tasks such as assisting with the master schedule, coordinating testing programs, and handling duties in the principal's office, which deviate from the recommendations outlined in the ASCA National Model.

This situation significantly impedes the BCCHS counseling team's ability to allocate 80% of their time to providing direct services to students, a goal advocated by the ASCA National Model. Young and Lambie (2007) propose creating school counseling manuals to delineate roles and responsibilities. Additionally, they recommend utilizing the ASCA Annual Administrator Conference as a platform for strategic planning discussions with administrators. By aligning their counseling program with schoolwide student outcome goals and initiatives through participation in the conference, BCCHS counselors can address role conflicts and enhance their effectiveness in supporting student success.

Supportive administrators: Collaboration between counselors and administrators is pivotal in advancing schoolwide objectives. Productive partnerships between principals and counselors involve analyzing data, prioritizing student success, and maintaining consistent and efficient communication. BCCHS counselors and administrators stand to gain valuable insights from utilizing the toolkit jointly developed by the College Board's National Office for School Counselor Advocacy, ASCA, and the National Association of Secondary School Principals. This toolkit equips users with the necessary resources to evaluate the ten key attributes defining an effective principal–counselor relationship. While the administrators at BCCHS are known for

being both demanding and supportive, there is room for enhancing their understanding of the role of school counselors, particularly regarding the significant barriers highlighted in this report that impede counselors' ability to implement a comprehensive equity-focused school program. Strengthening this understanding is essential for fostering a more collaborative and effective partnership between administrators and counselors.

Burnout/compassion fatigue: Scarborough and Culbreth (2008) highlighted that professional school counselors often encounter heightened stress levels due to multiple job demands, ambiguous roles, large caseloads, and inadequate clinical supervision. Experiencing burnout can lead to fatigue, feelings of inadequacy, and detachment from work responsibilities. The extensive range of their job duties significantly impacts the school counselors at BCCHS. Thus, counselors must prioritize their emotional and physical well-being and adopt wellness-promoting practices to sustain optimal professional performance.

Administrative assistant support: The BCCHS counseling team needs more administrative assistance for managing daily tasks and planning. BCCHS should explore hiring an administrative assistant to support the school counseling team. Having an administrative assistant onboard enhances the precision and effectiveness of student services.

Systemic Challenges

The systems, policies, and cultural norms at BCCHS and the CACC are designed to be race-neutral. However, race-neutral policies can impede efforts to achieve racial equity and justice. The disparities experienced by Black students suggest that existing structures and policies may contribute to the gaps observed in dual enrollment outcomes. Transformational change is needed to address Black students' barriers to dual enrollment. The institutional deficiencies, i.e., school counseling team malfunctioning, leadership challenges, structures, and policies, must all

be viewed through adaptive leadership. Adaptive leadership allows new ways of thinking to emerge, enabling district leaders to leverage the diverse perspectives of all stakeholders. Adaptive leadership helps create an accountable school culture committed to equitable outcomes.

This project is crucial as it directly tackles the significant and widespread disparities Black students face at BCCHS regarding equity and access to dual enrollment courses at the CACC. Historically, students of color and those from low-income backgrounds are disproportionately represented in K–12 institutions that inadequately prepare them for college. As a result, access to dual enrollment opportunities tends to be limited in schools serving larger populations of these students. CTE dual enrollment programs offer a valuable opportunity for students to engage in rigorous academic coursework and earn college credits before graduating high school, all without financial burden.

Equity is at the heart of this project, which focuses on implementing strategies that promote fairness and inclusivity. This approach aligns closely with Bragg and McCambly's (2018) concept of equity-minded change leadership. Addressing the disparities in the experiences and outcomes of students of color requires active advocacy and collaboration from stakeholders committed to challenging inequities and fostering a more equitable learning environment for all students.

Establishing a data-driven, equity-focused school counseling program in a large urban district like BCCHS poses significant challenges. However, BCCHS administrators are committed to fostering a collaborative working relationship with the school counseling team. Counselors and administrators collaborate to define goals and establish metrics to promote student achievement. By implementing the evidence-based practices outlined in this report, BCCHS can enhance the effectiveness of its counseling program.

Despite this commitment, several barriers persist at BCCHS, warranting immediate attention. Handling students' responsive needs, which span prevention, remediation, and crisis counseling, is particularly concerning. The current approach significantly hampers the counseling team's ability to implement a comprehensive, preventative, and developmental counseling program. Mismanagement of short-term counseling interventions and crises often results in random acts of school counseling (RAC), exacerbating service delivery and outcomes inequities. Addressing these challenges is paramount to ensuring equitable access to counseling services for all BCCHS students.

References

American School Counselor Association. (2019). Impact of school-counselor-to-student ratios on student outcomes Retrieved from www.schoolcounselor.org/effectiveness

American School Counselor Association. (2012). *The ASCA National Model: A framework for school counseling programs*.

Appleby, J., Ashton, K., Ferrell, J., Gesing, E., Jackson, S., Lindner, T., Mata, S., Shelnutt, A., & Wu, Y. (2011). *A study of dual credit access and effectiveness in the state of Texas*. College Station, TX: Texas A&M University.

Bragg, D., & McCambly, H. (2018). *Equity-minded change leadership*. Career and Technical Preparation Act 2000, Act 258, Eff. April 1, 2001 ;-- Am. 2012, Act 133, Eff. July 1, 2012.

Cervoni, A., & DeLucia-Waack, J. (2011). Role conflict and ambiguity as predictors of job satisfaction in high school counselors. *Journal of School Counseling, 9*(1).

College Board National Office for School Counselor Advocacy. (2011). *Enhancing the principal-school counselor relationship toolkit*.

Hatch, T. (2017). *Multi-Tiered Multi-Domain System of Support (MTMDSS)*.

Measuring the Impact of School Counselor Ratios on Student Outcomes Asca research report Released: Feb.1, 2019.

Miller, T., Kosiewicz, H., Wang, E. L., Marwah, E. V., Delhommer, S., & Daugherty, L. (2017, August 29). *Dual credit education in Texas: Interim report*. Santa Monica, CA: RAND

Corporation. https://www.rand.org/pubs/research_reports/RR2043.html

Museus, S. D., Lutovsky, B. R., & Colbeck, C. L. (2007). Access and equity in dual enrollment programs: Implications for policy formation. *Higher Education in Review, 4*, 1–19.

National Center for Education Statistics. *High School Longitudinal Study, 2009–2013*.

National Center for Education Statistics. (2021). Common Core of Data (CCD), State Nonfiscal Public Elementary/Secondary Education Survey, 2021-22 v.1a [Data file]. Retrieved from <http://nces.ed.gov/ccd/elsi/>

Postsecondary Enrollment Options Act 1996, Act 160, Imd. Eff. April 8, 1996.

Scarborough, J. L., & Culbreth, J. R. (2008). Examining discrepancies between actual and preferred practice of school counselors. *Journal of Counseling and Development, 86*, 446–459.

U.S. Census Bureau. *American Community Survey (ACS) 2014 5-year estimates*.

Young, M. E., & Lambie, G. W. (2007). Wellness in schools and mental health systems: Organizational influences. *Journal of Humanistic Counseling, Education, and Development, 46*, 98–113.