

ACTION RESEARCH BRIEF

Recovery from the COVID-19 pandemic: Enrollments across the Wisconsin Technical College System



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Abstract

The COVID-19 pandemic has had a disproportionate effect on minoritized communities. Early impacts of the pandemic on the Wisconsin Technical College System (WTCS) showed that students who face economic barriers were more likely to withdraw from courses due to the pandemic and were essentially losing access to higher education. This analysis evaluates recovery dynamics to assess which student populations have recovered since the start of the pandemic and which populations are still experiencing heightened challenges in accessing WTCS education. The student populations that have experienced the slowest recovery as of Spring 2021 include Black students, Asian students, male students, students with an economic disadvantage, students with disabilities, older students (55 years or older), students enrolled in adult education or English language learning courses, and justice-involved students. These trends match enrollment patterns at the national level and highlight the need for practices that help close educational equity and access gaps.

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Introduction

The early impacts of the COVID-19 pandemic on the Wisconsin Technical College System (WTCS) revealed a heightened need for strategies to support equity in student access and success (Barker et al. 2021). Students from minoritized backgrounds were overrepresented in COVID-19 related course withdraws in Spring 2020 and underrepresented in Summer and Fall 2020 course enrollments. The pandemic caused a large disruption in adult education and English language learning programs, and a near halt on educational programming for justice-involved populations.

This action research brief evaluates how the COVID-19 pandemic has affected student enrollment and recovery in the WTCS with a focus on the 2020-21 academic year. This analysis includes an assessment of direct enrollment of high school graduates, retention of students who withdrew from a course in Spring 2020 due to COVID-19, and recovery patterns for specific student populations as well as the student body of each Wisconsin Technical College.

A key effect that this brief does not address is the heightened need for mental health support due to the pandemic. The incidence of mental health conditions such as anxiety and depression has increased by 25% worldwide since the start of the COVID-19 pandemic (World Health Organization 2022). Students have been disproportionately impacted by these challenges and are experiencing an unprecedented mental health crisis (U.S. Department of Health and Human Services 2021). The [WTCS Working As One](#) team is providing a professional learning series, '[A Year of Mental Health](#)' to help share best practices for supporting students and college employees. Mental health will also be addressed in an upcoming action research brief that reviews the investment in college mental health programs and supports to identify promising practices.

Enrollment Patterns

Nationally, college enrollments have declined with the COVID-19 pandemic (National Student Clearinghouse 2021a). Student enrollment has declined by 7.8% from Fall 2019 to Fall 2021, and this decline has been much larger (-14.8%) for enrollment in public 2-year colleges. Compared with prior years (2016-17, 2017-18, 2018-19), the WTCS student body, including students enrolled in college, adult education and/or English language learning courses, has shrunk since Spring 2020. As of Spring 2021, the WTCS student body is still just 90% of the pre-pandemic student enrollment levels, with approximately 20,000 fewer students (Fig. 1). Of these students, about half are students who would be enrolled solely in adult education or English language learning courses, about 26% are students who would have been returning to their studies from the 2019-20 year (these could be program enrolled or course taking students), 15% would have been new college students, and 5% would have been 2019-20 high school graduates who directly enrolled in WTCS.

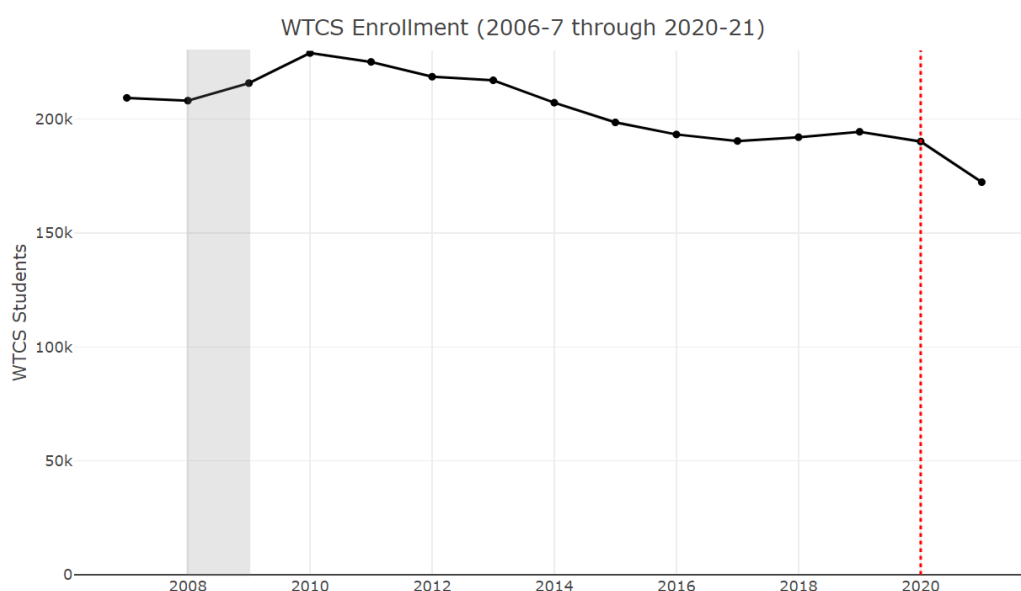


Figure 1. Summary of the WTCS student enrollments from 2006-7 through 2020-21. The student numbers include students enrolled in college, adult education and/or English language learning courses.¹ The Great Recession (2008 and 2009) is shown with a gray rectangle and the COVID-19 Pandemic (2020) is shown with a vertical red dashed line.

Direct enrollment of high school graduates

Systemwide, the direct enrollment of high school graduates decreased by 10.4% in 2020-21 compared with prior years (2017-2019) with 1,130 fewer enrollments. Yet, this varied across colleges and direct high school graduate enrollment decreased by as much as 26.1%, while at other colleges direct enrollment actually increased by as much as 7% compared with prior years. At the national level, direct enrollment of high school graduates decreased by 4-10 percentage points depending upon high school characteristics (e.g., poverty, urban vs. rural, National Student Clearinghouse 2021b). Enrollment trends also indicate that high school graduates who did not directly enroll in college likely joined the workforce, since gap year enrollment rates remained low for 2020 high school graduates (2.0%), which is consistent with prior years (2.2% for 2019 graduates, National Student Clearinghouse 2021b). According to a recent survey of 2021 high school seniors, 52% responded that they were concerned about being able to afford college due to the pandemic, and this concern was most pronounced among women, economically disadvantaged students, and Hispanic students (Carnegie 2020).

Students with COVID-19 related course withdrawals in Spring 2020

In Spring 2020, over 7,700 students withdrew from at least one course due to COVID-19, and these students were disproportionately students of color living below the federal poverty line (Barker et al. 2021). Yet, when assessing the *outcomes* of students with COVID-19 related course withdrawals, the impacts cut across economic status. Of these students, 8% graduated in 2019-20 or 2020-21, 12% enrolled in Summer 2020, 37% enrolled in Fall 2020 and 26% enrolled in Spring 2021 (Fig. 2). For these outcomes, students could be duplicated (e.g., enrolled in both Summer and Fall 2020). Yet, the majority of these students (54%) did not re-enroll in courses in 2020-21 or graduate from a program, and many of these students were living above the poverty line.

¹ The WTCS Student Factbook headcount enrollments include duplication across types of instruction. For this action research brief, students who are solely enrolled in vocational adult and/or community service courses are not included.

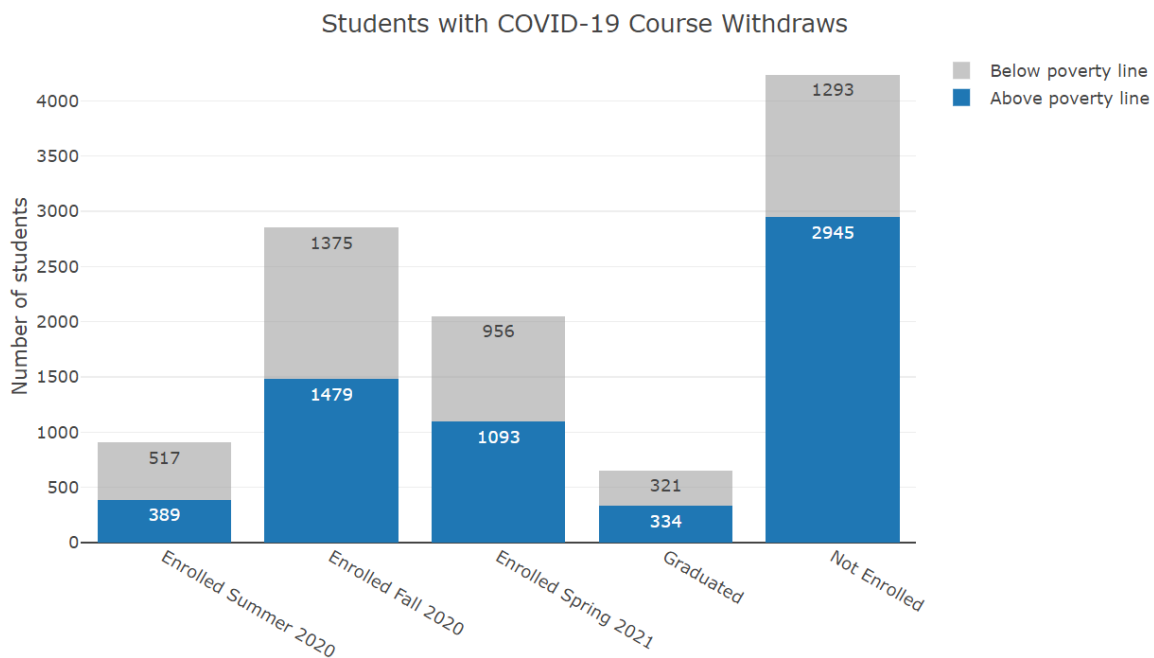


Figure 2. Bar graph of outcomes for students who had to withdraw from at least one course in Spring 2020 due to COVID-19. Bars shown in gray represent students who live below the federal poverty line² while bars in blue represent students who live above the poverty line.

Changes in student population: Assessing time to recovery

Student Groups

As of Spring 2021, the WTCS student body is still just 90% of the pre-pandemic student enrollment levels, yet recovery varies across student subpopulations (Fig. 3). Some populations including female students, multiracial students, Hispanic students and White students have experienced quicker recovery, recovering to 92-98% of pre-pandemic levels. Dual enrollment students have had similar or slightly higher enrollments compared with pre-pandemic levels (just 2018-19), when assessing the data by semester. Yet, when comparing academic years, the dual enrollment student body decreased by 6% from 2019-20 (52,543 students) to 2020-21 (49,422 students, see the [WTCS Dual Credit Report](#)). This difference indicates that in a typical year, the dual credit student body is more variable across terms, while in 2020-21 the dual credit student body was consistent from fall to spring terms.

Several student populations are recovering at a slower rate. Populations that have recovered to 80-90% of their pre-pandemic levels include Black students, Asian students, male students, economically disadvantaged students, and students with disabilities. The populations that have been most negatively impacted and have only recovered to less than 70% of their pre-pandemic levels include students enrolled in adult education or English language courses, justice-involved students, and students who are 55 years old or older.

There are also a few student populations with slower recovery (77-84% as of Spring 2021), yet their drop in enrollment levels started prior to COVID-19 in Fall 2019. These populations include single parents, students transferring in postsecondary credit and out of workforce individuals.

In the beginning of the pandemic, WTCS students with the largest enrollment barriers included students of color living below the poverty line, students in adult education and English language learning programs, justice-involved students, male students, single parents, and older students (Barker et al. 2021). Many of these same

² Students who have self-identified an economic disadvantage in [Client Reporting](#)

student populations have continued to experience decreased access to enrollment in 2020-21 with slower recovery. A few new populations that have emerged with slower recovery and enrollment barriers include Asian students, students with disabilities, and students with an economic disadvantage across all racial groups.

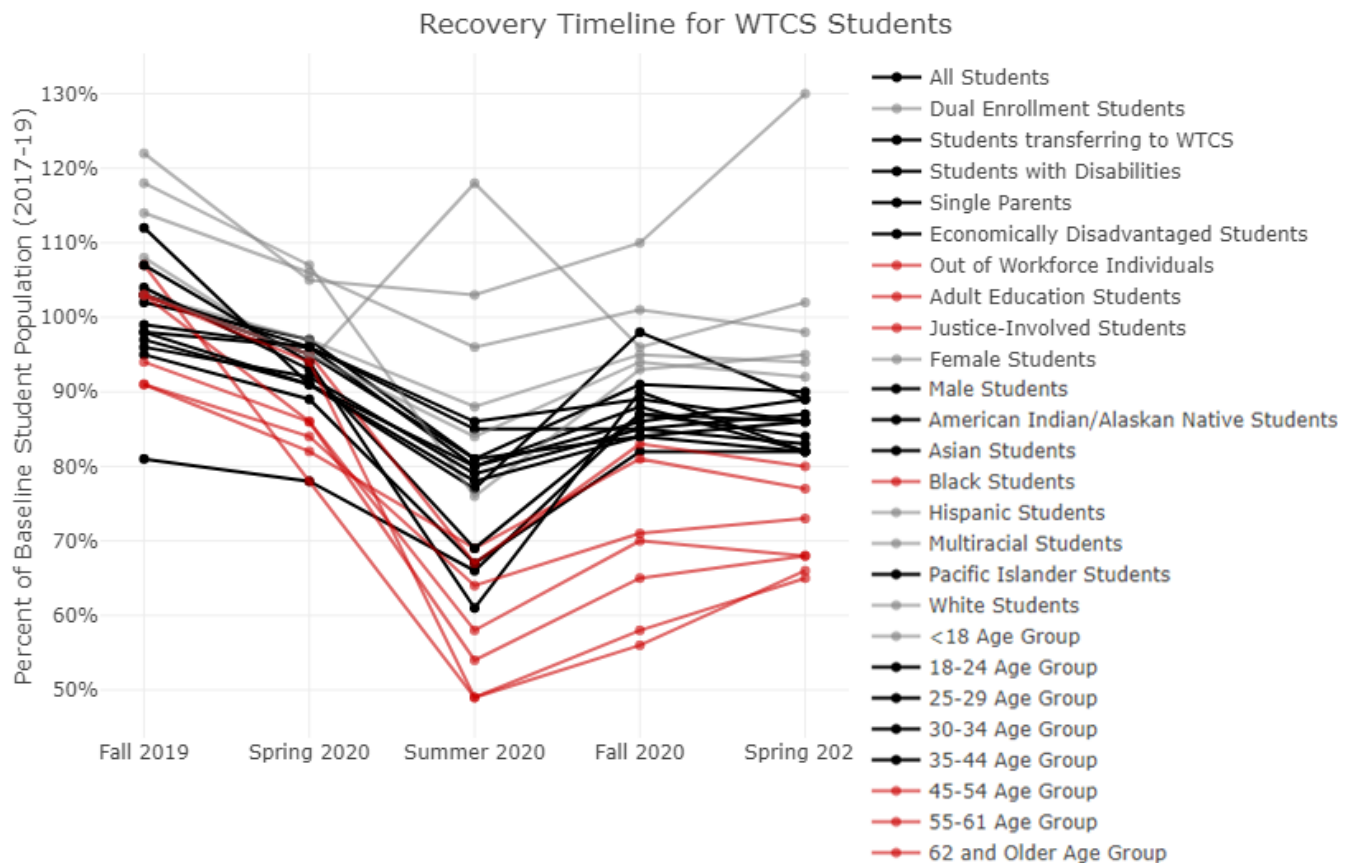


Figure 3. Recovery timeline for WTCS student populations compared with baseline enrollment levels (average of 2016-17, 2017-18, 2018-19) for each term from Fall 2019 to Spring 2021. WTCS student groups recovering to more than 90% of their pre-pandemic student enrollment levels in Spring 2021 are shown in gray, student groups recovering to 81-90% are shown in black, and student groups recovering to 80% or less are shown in red. The baseline for dual enrollment only contains the 2018-19 academic year since dual enrollment has been increasing rapidly over the years. To view the interactive version of this figure, [view this brief online](#).

Many of the student populations that are recovering at slower rates include communities that have been hardest hit by the health and economic impacts of COVID-19, exacerbating equity gaps (Barker et al. 2021). Individuals with an economic disadvantage faced more hardships including struggling to pay bills and other expenses, job loss, and increased physical and mental health challenges due to the pandemic (United Way 2021). When looking at WTCS student populations with slower recovery, several of these populations are also more likely to be economically disadvantaged (United Way 2018). In addition to their increased likelihood of being economically disadvantaged, students with disabilities faced multiple pandemic related challenges that may have slowed their college enrollment recovery. Due to the pandemic, students with disabilities have reported higher levels of feeling isolated, depressed and unsafe (Office for Civil Rights 2021). Students with disabilities were also more likely to lose a job and face economic and food insecurity compared with their peers (Soria et al. 2020).

Decline in Asian student enrollments were most prominent in English Language Learning courses (-57% in 2021 compared with prior years), adult education courses (-45%) and general education courses (-20%). This is

another indication of the disproportionate COVID-19 impacts on populations already facing economic hardship (e.g. individuals lacking a high school diploma, individuals with limited English proficiency). Asian and Pacific Islander populations experienced an increase in harassment and discrimination since the start of the pandemic (Office for Civil Rights 2021), which could negatively impact enrollment and access. According to Pew Research, eight in ten Asian Americans have reported an increase in violence against them in a survey conducted in early 2021 (Ruiz, Edwards, and Lopez 2021). Research has shown that harassment and discrimination harm a student's sense of belonging on campus, their self-efficacy in their college program and their mental health (Jackson, Harvey and Sherman 2020; Tokuyama 2021).

Since the 1970s, female students have outnumbered their male counterparts in higher education (Carey 2021). With the pandemic, female student recovery has significantly outpaced male students both nationally and within the WTCS (Carey 2021, Fig. 3). Across higher education sectors, the decline in male enrollments since the pandemic has been most stark at public 2-year institutions (National Student Clearinghouse 2021a). An analysis across programs at 328 community colleges in the United States showed that this decline was most likely due to the disproportionate impact of COVID-19 safety restrictions on technical programs compared with programs that could more readily move to a virtual format (Weissman 2022). For example, administrative records and interviews with college staff in the study showed that courses in assembly, repair and maintenance programs³ were difficult to move online due to the nature of the content. Thus colleges had to implement these courses in-person or hybrid following safety restrictions (e.g., deep cleaning of labs, social distancing), which were costly to implement leading to a reduction in course sections with fewer students allowed per section. Since men disproportionately enroll in assembly, repair and maintenance programs, men were then the group of students who were most impacted by these effects.

With the pandemic, most educational programming in correctional facilities, which is typically delivered face-to-face, was either put on hold or drastically changed (e.g., correspondence course format, Johnson 2021). Safety restrictions from Department of Corrections banned non-essential personnel, including teachers, from entering correctional facilities. While safety restrictions on instruction for justice-involved students started to relax in May 2021 in Wisconsin, the recovery of educational programming and access is still happening at a much slower rate than educational programming outside of correctional facilities. As of Spring 2021, the WTCS justice-involved student population was just 66% of its typical size with only 2,156 students. This disruption accounted for 59% of the decline in student enrollments at Moraine Park Technical College (MPTC), which serves a large justice-involved student population. In 2021, MPTC had roughly 1,500 fewer enrolled students than prior years, and the decline in justice-involved students accounted for 860 of these missing students.

Differences Across Colleges

Variation in enrollment levels across colleges increased from Fall 2019 to Spring 2021. In Fall 2019, most colleges were close to their baseline enrollment levels (94% to 123%; 29% spread) in 2017-2019. Yet, in Spring 2021, the variation in enrollment levels across colleges increased (76% to 117%; 41% spread). This finding shows the disproportionate impact of COVID-19 on the communities that the different Wisconsin Technical Colleges serve. When looking at the proportion of the student body that identifies as students of color, the top 5 colleges with the most diverse students have the slowest enrollment recovery (MATC, GTC, Madison, WCTC, MPTC).

Conclusion

This analysis shows that in large the exacerbated equity gaps across the WTCS that were found early in the pandemic have persisted through the 2020-21 academic year, leading to disparate recovery dynamics. Student

³ includes programs in Architecture & Construction, STEM, Manufacturing, and Transportation, Distribution & Logistics.

groups with the largest enrollment declines include students with an economic disadvantage, adult education and English learning students, Black students, students with disabilities, and male students. As we enter a new phase of the pandemic of living with COVID-19 (Flaherty 2022) and a tightening labor market (Nadworny 2022), it is difficult to predict what will happen to enrollment at 2-year colleges and across the WTCS. Providing equitable onramps to WTCS career pathways will be crucial for helping to rebuild the communities that have been most negatively impacted by the pandemic.

Take Action

Convene cross-functional teams to discuss the findings from this report, your college context, and strategies to improve student enrollment and retention. Consider the following discussion questions:

- How do the enrollment trends compare with your experience at your college and in your program?
- What strategies has your college or program used to help improve student retention and access challenges with the pandemic? What strategies have been most successful?
- How has your college or program helped to serve students with basic needs insecurity? What resources are still needed to support these populations?
- How have student outreach and recruitment efforts changed since 2019-20?
- How have partnerships with local employers changed since 2019-20?
- How have partnerships with local community-based organizations changed since 2019-20?
- How have partnerships with local K-12 schools changed since 2019-20?

Identify and deliver professional development trainings for faculty and staff that address the heightened needs students are facing due to the pandemic. Both the [Professional Growth State Grant](#) and the [Perkins Capacity Building for Equity and Inclusion Grant](#) could help support this work. A Systemwide group is creating the next [Working As One professional learning series](#) focused on supporting the mental health of students, employees and community members. The Faculty Quality Assurance System (FQAS) team has delivered [WTCS Learning and Teaching Labs](#) on inclusive teaching practices in April 2022 and the recordings are available.

Create or expand programs to support re-enrollment of students. This work should include comprehensive degree audits to identify students who have stopped out of their program and determine what is needed for them to graduate. The college should also assess policies to identify and address any re-enrollment barriers (e.g., waiving tuition debt), and provide holistic supports and career coaching in outreach to potential re-enrollment students. In this outreach, key information needs to be shared with the student, including how many credits they have already earned, how long it will still take them to graduate, how much this will cost and their job outlook and potential earnings after graduation (Sheffer et al. 2020). The WTCS Office is developing a new grant opportunity for 2022-23 to support re-enrollment efforts of students facing barriers. To help colleges in these efforts, the WTCS Office will provide an opportunity for sharing of best practices including the lessons learned from WI technical colleges that have already established these programs.

Appendix: Research Methods

Analyses focused on shifts in various WTCS student populations prior to and during the COVID-19 pandemic. To assess changes in student groups, student enrollment counts in 2019-20 and 2020-21 were compared with the baseline enrollment prior to the pandemic (i.e., the average student enrollment count for 2016-7, 2017-8 and 2018-9). Students who were enrolled in FTE-generating program (aid codes: 10, 20, 30, 31, 32, 50) and/or adult education and English language learning courses (aid code 70) were included in analyses. These students include program-enrolled students, course takers and students solely enrolled in adult education or English language courses. Analyses of dual enrollment students included recognized credit codes 1A, 1B, 8A, 8B, 9B, 9C, 9H and 9K for students enrolled in a public or private high school with their highest grade completed identified as 8th through 12th grade (and unknown highest grade completed). The baseline for dual enrollment students was

only the 2018-19 academic year, not a three-year average (2016-7, 2017-8 and 2018-9) since dual enrollment has been increasing rapidly in this timeframe.

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