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BRIDGE TO FINISH OUTCOME STUDY



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Introduction

Higher education offers many benefits to individuals and society—including increased employment opportunities and higher wages—and can help disrupt cycles of intergenerational poverty by improving economic outcomes for those who earn postsecondary credentials. Research consistently shows that people with postsecondary credentials have lower rates of unemployment and higher lifetime earnings than those without credentials. Public community and technical colleges offer a relatively affordable, open-access option for students seeking higher education. However, the cost of attendance goes well beyond tuition and books. Students must also account for the costs of housing, food, childcare, transportation, healthcare, and other personal necessities while they are in school, and this can be especially challenging for students with low income levels.

In addition to offering an accessible entry point to higher education opportunities for a diverse population of students, community colleges also provide an array of services to support students along their educational journey, and it is increasingly evident that basic needs supports should be among the services offered. Food insecurity, housing insecurity, and other [basic needs insecurities](#) are prevalent among community and technical college students in Washington. These competing priorities can interfere with students' ability to concentrate on their coursework, build social connections, maintain mental and physical health, and feel a sense of belonging, and ultimately, they can inhibit their ability to persist and earn a credential. Basic needs insecurities exist across college campuses but are even more common at community and technical colleges and among students of color, first-generation students, and students who are parents, further compounding inequities in educational outcomes for historically marginalized groups.

In response to these needs, United Way of King County (UWKC) launched the Bridge to Finish campaign to implement a successful basic needs delivery model, provide these services to current students, build evidence to influence policy, and contribute knowledge to the broader conversation on the benefits of a culture of care for community and technical college students.

To understand the extent to which Bridge to Finish students persist through and/or complete their credential programs, UWKC enlisted MDRC's [Center for Data Insights \(CDI\)](#) and the Washington Student Achievement Council (WSAC) to conduct a study of academic outcomes among program participants using data from the Washington State Board for Community and Technical Colleges (SBCTC). The team used human-centered data analytics to assess participants' persistence in and completion of community and technical college programs, with the goal of providing insights on how integrating basic needs supports on community college campuses can be a potential avenue for addressing systemic inequities and increasing educational attainment in Washington State and beyond.

This report shares insights from the collaborative study by providing information on characteristics of Bridge to Finish participants, patterns of service receipt, and rates of successful academic outcomes. **It is important to note that the findings in this report provide associational evidence only, and a more comprehensive research design is needed to establish the causal effects of the program.** Therefore, the report highlights ways to help Bridge to Finish and other similar programs prepare for a rigorous impact evaluation.

Background

Beyond challenging coursework, many community college students juggle competing responsibilities including community, financial, work, and family obligations. Additionally, some students face significant obstacles to remaining enrolled in the form of basic needs insecurities, which can include lack of access to food, housing instability or homelessness, and financial emergencies. Although community colleges provide accessible educational opportunities to students coming from a variety of backgrounds, many students need additional support to make it through to graduation. Unfortunately, many community and technical colleges throughout the country have consistently low rates of [persistence](#) and [completion](#), in part because students do not have access to the critical supports they need to stay enrolled.

A number of programs on college campuses have evolved over time to help support students facing basic needs insecurity and improve educational outcomes. For instance, the ECMC Foundation launched the [Basic Needs Initiative in 2019](#) to support community college students in several states through programs focused on addressing food and housing insecurity. Among these programs are the SNAP outreach program at Arkansas Community College which aims to enroll more students in SNAP and other public benefits programs, Michigan Community College Association’s “Michigan Building Economic Stability Today” initiative which aims to develop strategies to address non-academic barriers to student success, and a partnership between the University of Texas at San Antonio and San Antonio College that is working to advance evidence-based basic needs initiatives among Hispanic-Serving Institutions. ECMC’s Basic Needs Initiative also provided financial support to UWKC, and this funding allowed the organization to reach more students through the Bridge to Finish Program.

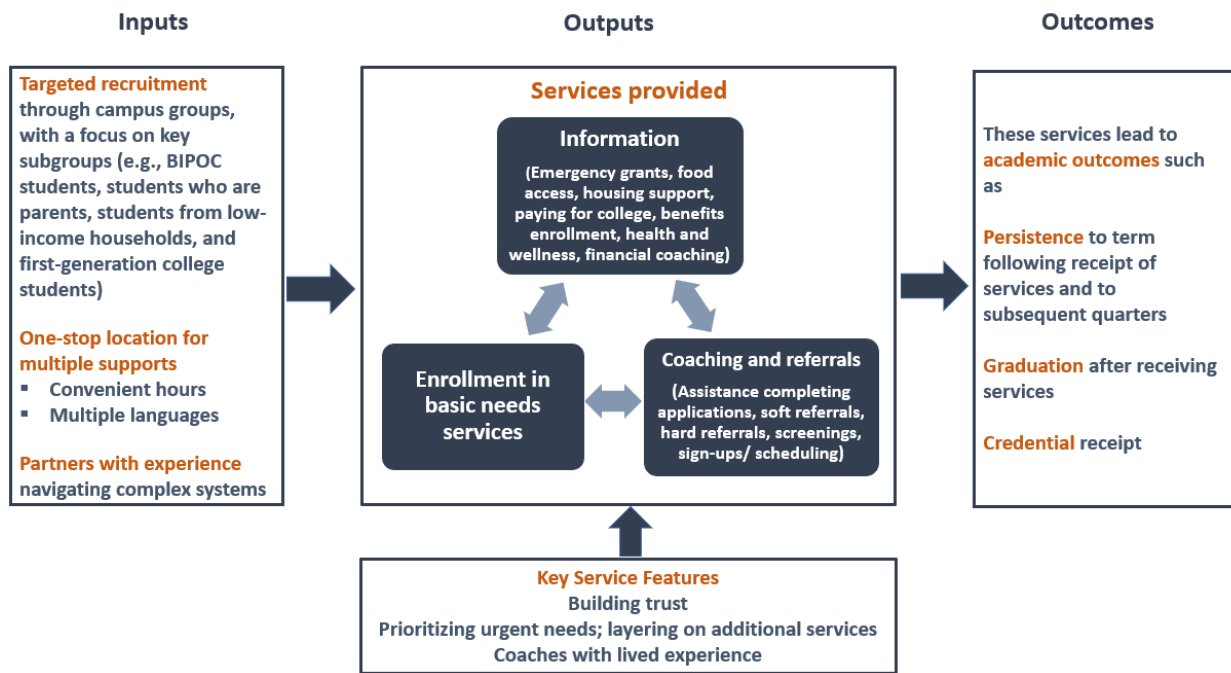
In recent years, Washington State has made initial investments in helping students address costs beyond tuition and fees at public community and technical colleges. For instance, the [Student Emergency Assistance Grant program](#) distributes funding to community and technical colleges to help students cover emergency expenses. In 2021, the state also expanded access to [childcare subsidies](#) for community and technical college students. In 2022, the state expanded a pilot program that supports students experiencing homelessness or who aged out of foster care to include all public community and technical colleges as well as 4-year institutions. The [pilot program](#) provides services to support basic needs security for a specific population of vulnerable students and offers convenings for participating institutions to share effective practices through a learning community. Additionally, most campuses throughout the state offer some services such as food pantries, childcare centers, and mental health supports, that aim to address basic needs insecurity for students. More research is needed to determine the impact of these efforts on student outcomes in Washington. The Bridge to Finish program operates within this context and coordinates access to resources for students at nine community and technical colleges and one university in King County by offering one-stop shops—called Benefits Hubs—for basic needs support.

The Bridge to Finish Campaign

Program Model

UWKC’s Bridge to Finish program began in Summer 2018 with a limited number of participants and was officially launched in July 2019. The program invests \$2.8 million annually and currently operates at 10 partner institutions in King County.¹ Figure 1 presents a simplified student-level logic model for the Bridge to Finish program. Campus-based Benefits Hubs offer a coordinated access point for basic needs support services, and Bridge to Finish staff conduct targeted outreach and recruitment to reach key subgroups. Services offered at Benefits Hubs range from tangible goods like food access to monetary support and coaching. The program aims to increase persistence and completion rates for participants and thereby improve their postsecondary credential attainment and economic opportunities for the future. Beyond offering an array of support services, Bridge to Finish also seeks to cultivate a culture of care on community college campuses and disrupt current prohibitive and oppressive systems that disproportionately disadvantage students of color, first-generation students, low-income students, and parenting students.

Figure 1. Bridge to Finish Student-Level Logic Model

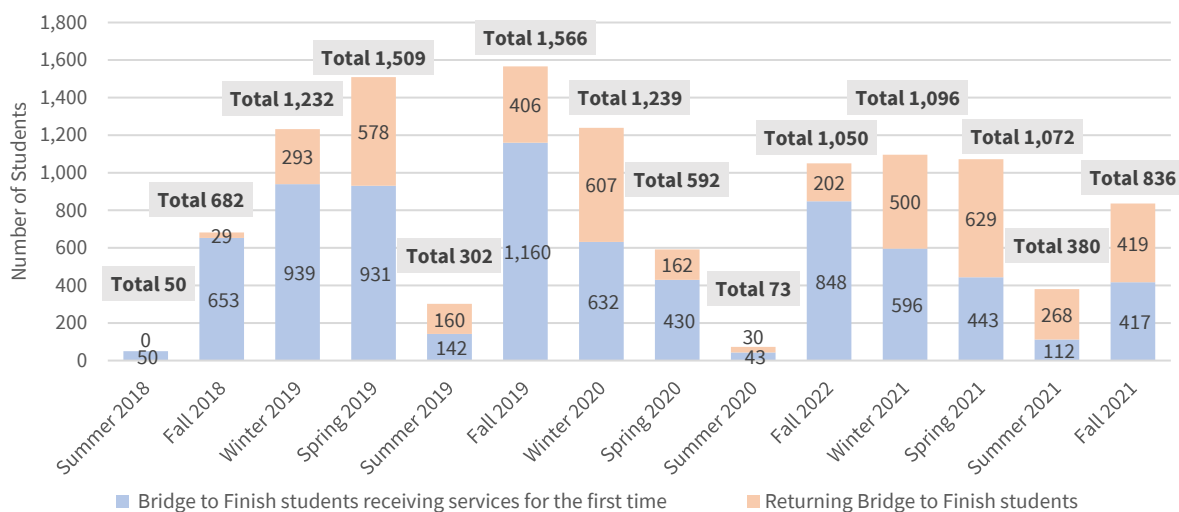


¹ Note that all analyses presented in this report do not include UW Bothell and are limited to the 9 other participating institutions: Shoreline College, North Seattle College, Seattle Central College, South Seattle College, Cascadia College, Bellevue College, Renton Technical College, and Green River College.

Program Participation

Between Summer 2018 and Fall 2021, the program served nearly 12,000 students at the nine schools in the sample.² Figure 2 details the number of new participants and the number of returning Bridge to Finish participants by quarter. The graph shows that across terms, most participants are new as opposed to returning participants, which highlights the program’s ongoing efforts to reach new students each term. The graph also shows some expected seasonality. There were fewer participants during the summer quarters when students are often on summer break, and more new participants in the fall quarters when new students are enrolling in school. Meanwhile, most winter and spring quarters had more returning participants. Finally, there were fewer participants after the onset of the COVID-19 pandemic, during which time many classes were being held remotely and Bridge to Finish support was available through an online portal. This mirrors the statewide decrease in enrollment during the pandemic.

Figure 2. Bridge to Finish Participants by Term



Characteristics of Participants

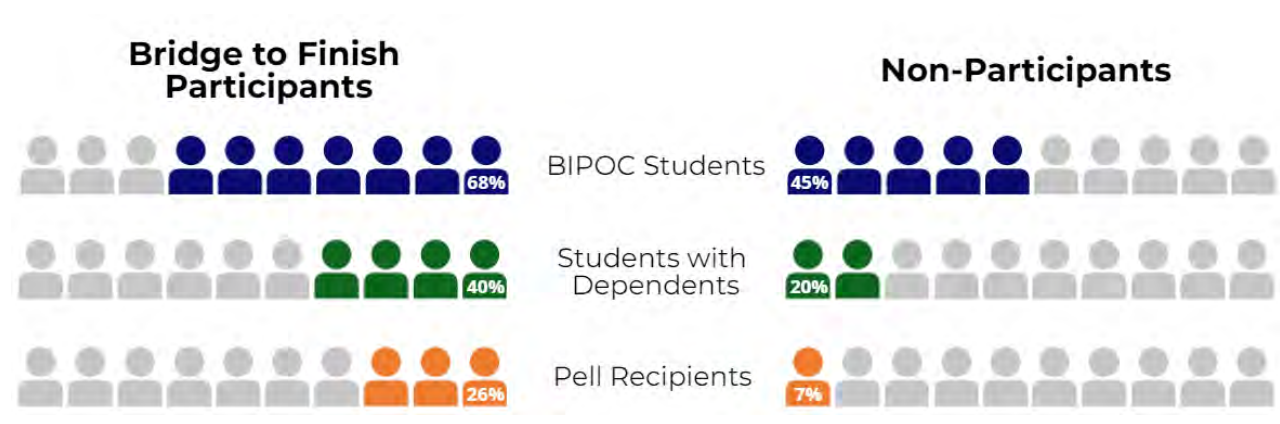
The Bridge to Finish campaign is specifically focused on recruiting and serving students from groups that are disproportionately affected by basic needs insecurity, including students who identify as Black, Indigenous and other people of color (BIPOC), students who are parents, first-generation students, and students with low levels of income. To ensure that these students know that support is available, Bridge to Finish Benefits Hubs have dedicated outreach staff who partner with campus

² Note that this analysis is limited to approximately 7,500 students who were matched to data from the State Board for Community and Technical Colleges (SBCTC).

departments, faculty, and student groups that serve key subgroups (e.g., affinity groups, Black Student Union, Umoja Black Scholars Program, language-based cohorts, etc.).

To assess the extent to which Bridge to Finish is effectively reaching its focal populations, the research team conducted an analysis of participants' demographic characteristics available in the data.³ Figure 3 compares select demographic characteristics of 7,396 Bridge to Finish students in the sample with the much larger sample (265,541 students) of non-participants at the institutions served. BIPOC students, students with dependents, and low-incomes students who receive Pell Grants⁴ make up a larger proportion of Bridge to Finish participants compared to non-participants. The overrepresentation of BIPOC students, students who are parents, and students with low incomes among participants suggests that Bridge to Finish is successfully recruiting and serving students from its focal groups.

Figure 3. Comparison of Select Demographic Characteristics for Bridge to Finish Participants and Non-Participants



Service Receipt

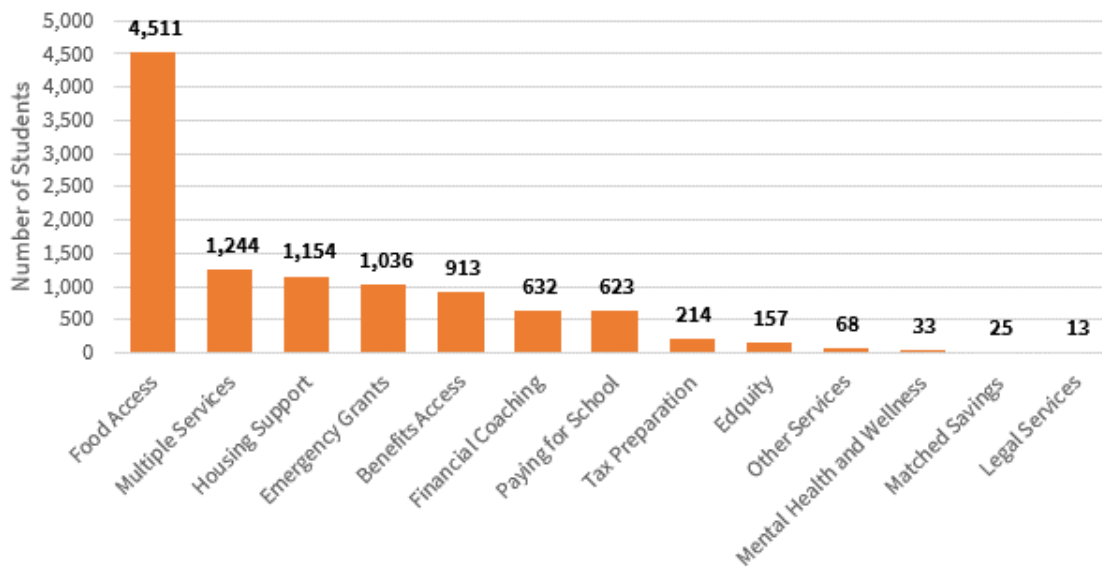
The research team also sought to understand which services participants accessed and in what ways. Figure 4 shows the type of services participants accessed in their *first* term of Bridge to Finish participation. The data highlights that participants overwhelmingly received food access services in their first term of participation. Other services that are often accessed in the first term of participation included housing support, emergency grants, and benefits access. Although most students only

³ The data includes students from UWKC's participant data that could be identified and matched in the data retrieved from the State Board for Community and Technical Colleges.

⁴ See <https://studentaid.gov/understand-aid/types/grants/pell>

accessed one type of service during their first term of participation, 1,244 students accessed multiple services, and the most popular combination was emergency grants paired with housing support.

Figure 4. Services Received in First Term of Bridge to Finish Participation

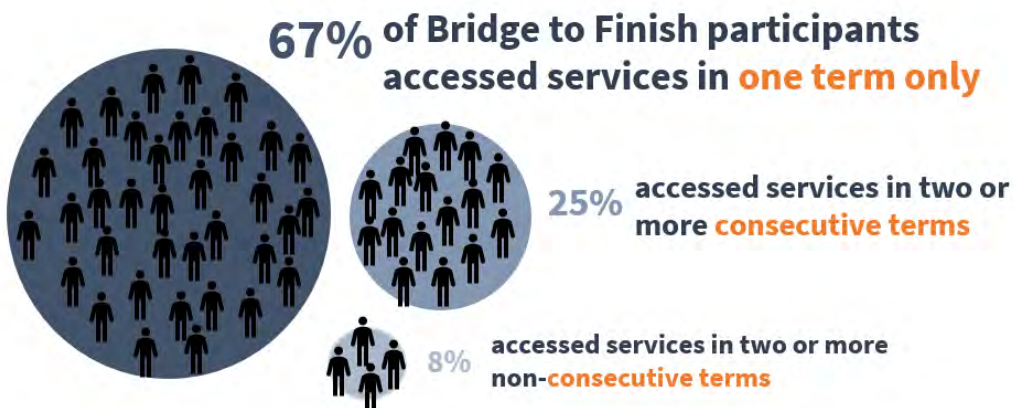


After the onset of COVID-19, UWKC made an intentional shift in the services they promoted in response to the hardship caused by the pandemic. This shift included increased promotion of housing support services and the incorporation of Beam (formerly Edquity), a streamlined platform for distribution of emergency financial grants. An analysis comparing pre- and post-COVID (quarters on and after winter 2020) shows that while food access services were utilized the most in both time periods, the provision of housing support and emergency grant services increased in the post-COVID period. This reflects UWKC’s efforts to help meet students’ needs and address the many challenges that were exacerbated during the pandemic. There was also an increase in participants accessing multiple services, but the majority continued to only access one type of service during their first term of participation.

Participation Patterns

The analyses above describe the services accessed in students’ *first* term of participation in the Bridge to Finish program. However, some participants continue to access services in subsequent terms. Using sequence analysis, the research team identified three pathways that categorize students’ participation patterns across multiple terms: (1) Bridge to Finish participants who only access services in one quarter and then never again (during the period covered in our sample), (2) participants who accessed services in two or more consecutive quarters, and (3) participants who accessed services in two or more non-consecutive quarters.

Figure 5. Bridge to Finish Participation Patterns






The analysis found that a vast majority of Bridge to Finish participants (67%) fell into the first pathway, meaning they only accessed services for one quarter. Another 25% of participants accessed services in two or more consecutive quarters, and the final 8% accessed services in two or more non-consecutive quarters (Figure 5). These results highlight the need for additional qualitative research—such as focus groups, interviews, or surveys—to explore how, when, and why students choose to seek out services, understand how participants view their options for receiving services, and improve programs’ abilities to meet more of their participants’ needs.

Outcomes for Bridge to Finish Participants

In addition to understanding characteristics of the students who participate in the Bridge to Finish program and their different patterns of participation across terms, the study included an assessment of participants’ key academic outcomes, including persistence, degree completion, and credit accumulation.

The outcome analyses begin with a presentation of average quarterly persistence and/or completion for participants and non-participants for each term included in the study, followed by an assessment of the association with program participation and the probability of reaching key outcomes after controlling for several demographic and academic characteristics available in the data. Additionally sub-analyses were used to explore how outcomes differed by specific service types, whether there were differences in credit accumulation, how outcomes changed in pre- and post-COVID periods, and the association between select student characteristics and outcomes.

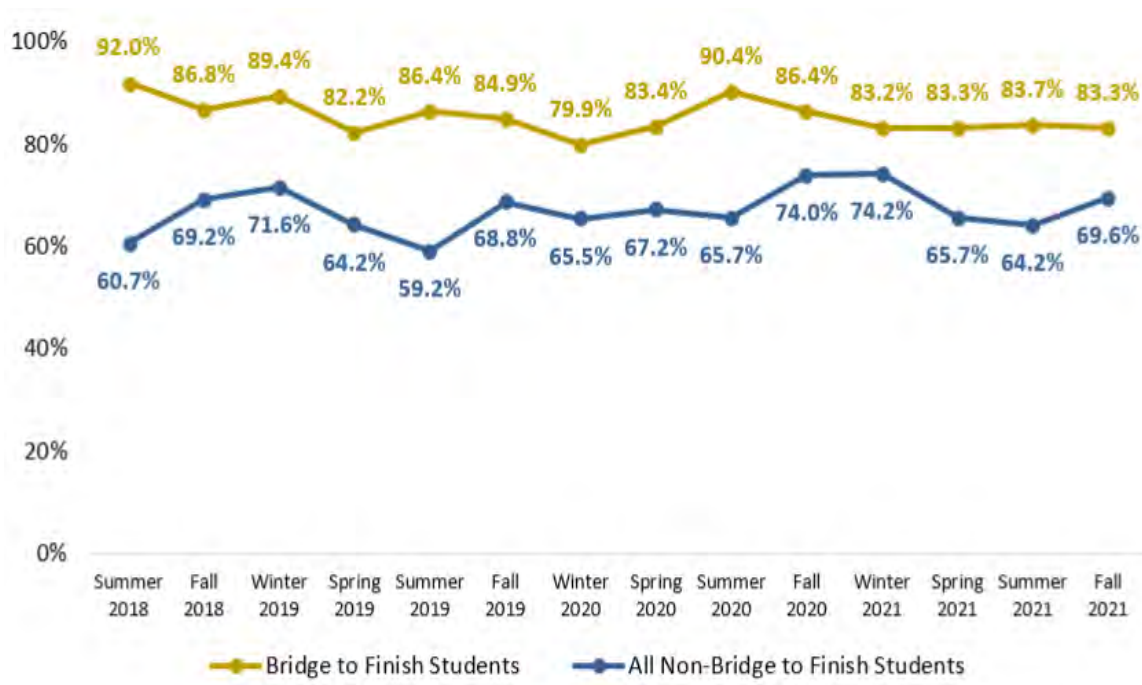
Key Academic Outcomes:

-  **Short Term:** Persistence to the next term (or completion of a credential before then)
-  **Longer Term:** Persistence to the next fall (or completion of a credential before then)
-  **Credits:** Whether students earned any credits or 6+ credits

Average Rates of Persistence and Completion

Figure 6 shows the average outcomes for Bridge to Finish participants and non-participants across all terms in the study. The numbers represent the proportion of students who either persisted to the next term or completed a credential during the current term. Overall, Bridge to Finish participants had higher rates of persistence and/or completion compared to non-participants across all terms in the study, including after the start of the COVID-19 pandemic. Rates of persistence and/or completion among Bridge to Finish participants ranged from about 80 to 92 percent, while rates for non-participants ranged from about 59 to 74 percent. On average across terms, rates were about 16 percentage points higher among Bridge to Finish participants compared to non-participants.

Figure 6. Rates of Persistence and/or Completion for Participants vs. Non-Participants



Association between Participation and Persistence and/or Completion

As a next step in the outcome study, the research team used statistical methods to adjust the rates for both Bridge to Finish participants and non-participants to take into account how differences in composition between the two groups might shift the overall probability of students from each group persisting and/or completing. There are a variety of individual characteristics that could influence a person's chances of persisting through their academic goals and/or completing a degree. Many of these, including traits like motivation, resilience, experience with hardship and adversity in childhood,

and interactions with school personnel, are not commonly captured in large administrative datasets including the one used for this study. However, the data does include factors that can provide insights into past academic achievement (e.g., number of prior credits and prior education status), possible experiences with systemic exclusion, adversity, or oppression (e.g., being a member of a racial/ethnic identity, being non-male, speaking English as a second language), and personal and familial capital and/or burden (e.g., parenting status, veteran status, Pell receipt).

This analysis focuses on outcomes following Bridge to Finish participants' first term of service receipt to understand the association of first service receipt with outcomes and to avoid confounding the association of multiple terms of service receipt.

The analysis includes a sample of non-participants defined by randomly selecting one term for each non-participant to include in the analyses.⁵ The research team used a covariate adjusted logistic regression technique, called variable importance analysis, which provides information on the extent to which a factor of interest (e.g., participation in Bridge to Finish) is associated with an outcome of interest (e.g., persistence and/or completion) after controlling for other factors (e.g., age, education history, etc.). For more information on the methodology, data, analytic sample, and sensitivity tests, please see the [technical appendix](#).

Bridge to Finish participants were **25 percentage points more likely to persist and/or complete a credential** than non-participants.

The analyses suggest that Bridge to Finish students had a greater probability of persisting to the next term (or completing a credential prior to the next term) than non-participants. Bridge to Finish participants' probability of persisting to the next term and/or completing a credential before the next term was 25 percentage points greater than the probability among non-participants, after adjusting for student characteristics available in the data.

Bridge to Finish participants also had a greater probability of persisting to the following fall (or completing a credential prior to then) than non-participants. There was a 23-percentage point difference in the probability of persisting to the next fall and/or completing a credential in the same timeframe for Bridge to Finish participants and non-participants after adjusting for student

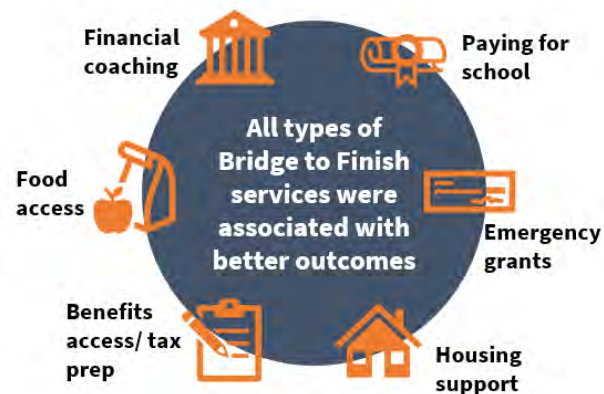
⁵ This step was taken to ensure that each student only had one focal term included in the analysis data set. The focal term for participants is easily identifiable since it is their first term of participation, though not necessarily their first term of school enrollment. However, for non-participants, there is no obvious criteria to select a focal term. For example, selecting non-participants' first term would result in oversampling students who were just starting school. Selecting non-participants' last term would likely result in a non-participant sample with a greater probability of persisting and/or completing, since they would be further along in their academic trajectories. Selecting a random term for each non-participant created more balance across terms and produces a non-participant sample that is more like the participant sample.

characteristics available in the data. Although these analyses do not provide causal evidence of the program’s impact, they do suggest that the probability of both short- and longer-term persistence and/or completion was greater for Bridge to Finish participants than for non-participants in the sample.

Outcomes for Specific Services

Next, the research team assessed the extent to which specific services were associated with differences in outcomes among Bridge to Finish participants. This analysis focused on the primary short-term outcome - persistence through or completion before the next academic term. The service types are grouped into the six main categories that were most frequently used: financial coaching, food access, benefits access and/or tax preparation support, support in paying for school, emergency grants, and housing support. Note the services are categorized based on the type of challenge addressed (e.g., housing or food instability) and not by the specific service type offered (e.g., information provided, grant, referral). The sample for this analysis is limited to participants who only received one type of service during their first term of participation (though they may have received this type of service multiple times) and to non-participants. The analysis suggests that regardless of the service type they received, participants had higher rates of persistence and/or completion compared to non-participants.

However, the extent to which participants had a greater probability of persisting and/or completing varied across service type. For example, students who received only financial coaching had the greatest difference in probability compared to non-participants at 29 percentage points, followed by food access (26 percentage points), benefits access and/or tax prep (24 percentage points), paying for school (21 percentage points), emergency grants (20 percentage points), and housing support (17 percentage points).



The range in results suggests that students who select into receiving specific services may have very different types and levels of need, and their motivations and goals for participating in Bridge to Finish may be very different. For example, financial coaching was associated with the highest probability of persisting and/or completing (29 percentage points). This may be driven by the fact that students who seek out financial coaching already have some familiarity with navigating financial systems and have the stability to pursue this as a goal. On the other hand, the difference in the probability of persisting and/or completing for students who received housing support compared to non-participants was 17 percentage points. This smaller difference could be because students who are seeking out housing support are in a less stable situation and facing a larger set of challenges that make persistence and completion more difficult.

The study also included an analysis comparing participants who received multiple Bridge to Finish services in a given term to non-participants. Participants who received multiple services had a 24-percentage point greater probability of persisting and/or completing compared to non-participants. This suggests that, in general, receiving more than one service type in a given term is not associated with a greater probability of persistence and/or completion than receiving only one type of service.

These analyses do not have sufficient data to measure level of need for Bridge to Finish participants and non-participants. Nor do the data indicate what supports non-participants may be able to access. Isolating the impact of Bridge to Finish services would require more research that explores which students access services and how these students might be different from those who do not.

Credit Accumulation

In addition to assessing the association of participating in Bridge to Finish and the probability of persistence and/or completion, the research team also examined two measures of credit accumulation: a measure of whether a student earns at least one credit in the term and a measure of whether the student earns six or more credits during the term. The one-credit threshold captures whether students are earning any credits at all, and the six-credit outcome captures whether students received a half-time course load worth of credits.⁶ For these two measures of credit accumulation, Bridge to Finish participation was associated with a 6-percentage point greater probability of receiving at least one credit, and a 4-percentage point greater probability of receiving six or more credits. Bridge to Finish participants had a greater probability of earning credits than non-participants, but the difference was smaller in magnitude than the difference in persistence or completion alone. This difference in magnitude may be partly explained by the types of courses Bridge to Finish participants take (i.e., credit bearing vs. non-credit bearing). Further research is needed to understand these nuances.

Bridge to Finish participants were **more likely to earn credits** than non-participants.

Pre- vs. Post-COVID

The association between participation in Bridge to Finish and probability of persisting through and/or completing before the next academic term was greater in the terms preceding the onset of the COVID-19 pandemic. During the pre-COVID period, participants had a 30-percentage point greater probability of persisting and/or completing. However, even after the start of the pandemic, participation was still associated with a 20-percentage point greater probability of persisting through and/or completing by the next term. There could be a variety of different factors driving these differences. For instance, the

⁶ For the purposes of awarding federal and state financial aid, a full-time student is enrolled for 12 or more credits per quarter, so a half-time course load would be 6 credits.



population of students seeking services during the pandemic may have had a higher level of need compared to students who sought out services before the pandemic. These differences could also be driven by shifts in service delivery and/or a period of adjustment to different modes of recruitment, enrollment, and service provision.

Student Characteristics Associated with Persistence and/or Completion

To explore if students with different backgrounds have different levels and types of association between outcomes and participation in the Bridge to Finish program, the research team assessed if any of the available student demographic and/academic characteristics were important predictors of the primary short-term outcome of persistence through and/or completion by the following academic term. This analysis also provides information on whether the association between these student-level characteristics and rates of persistence and/or completion was different for Bridge to Finish participants versus non-participants. The analysis focused on factors that UWKC was especially cognizant of in the program design and recruitment process: students who identify as Black, Indigenous, or other people of color (BIPOC), students who are parents, and students who received Pell Grants. Additional variables include student age, whether the student had earned prior credits before the term in the analysis, and whether the student was a new student versus a continuing or transfer student.

Figure 7. Student Characteristics Associated with Persistence and/or Completion

	Participants	Non-participants
BIPOC	—	—
Single parent	—	—
Younger student	✓	✓
Earned prior credits	✓	✓
Pell recipient	—	✓
New student	✓	✓

 Positive association
  No association

As illustrated in Figure 7, the associations between student characteristics and probability of persisting and/or completing were similar for Bridge to Finish participants and non-participants. Some of the characteristics were not associated with key outcomes. For example, among both participants and non-participants, race/ethnicity was not strongly associated with probability of persisting and/or completing, after controlling for other characteristics in the data. In other words, for

both participants and non-participants, students with different racial/ethnic identities had similar probabilities of persisting and/or completing. Students who were single parents had probabilities of persisting and/or completing that were similar to those of other students, and this was true for both participants and non-participants. This suggests that being a single parent is not strongly associated with the probability of persisting and/or completing.

Other characteristics were positively associated with the probability of successful outcomes, meaning students with the characteristics were more likely to persist or complete. For both participants and non-participants, younger students were more likely to persist and/or complete compared to older students, and students who had earned prior credits were more likely to persist and/or complete compared to students who had not yet earned any credits. Perhaps surprisingly, non-participants who received a Pell Grant had a greater probability of persisting and/or completing compared to non-participants who did not receive Pell. This association was not true of Bridge to Finish participants. Finally, for both participants and non-participants, new students had higher rates of persistence and/or completion compared to continuing and transfer students.

Takeaways

Bridge to Finish participants represent a diverse group of students, from a variety of backgrounds and with different life experiences. In short, the need for the program is evident in the sheer number of students served during the relatively short sample period included in this study.

In addition to the value Bridge to Finish provides by meeting an obvious need for wraparound supports among community and technical college students, there is preliminary evidence that the program could help some students achieve better academic outcomes. The analyses presented in this brief suggest that on average, after controlling for characteristics available in the data, Bridge to Finish students receiving services for the first time persist through and/or complete their degrees before the next academic term at a higher rate than non-participants. This association was true for all types of services, suggesting the value of offering a wide variety of supports to help students persist and complete their credentials.

Because participants can differ from non-participants in a number of ways, and this study did not include a randomized assignment to participation, these results cannot speak to causality nor the impact of participation on academic outcomes. However, they do provide promising evidence of the value of Bridge to Finish and other similar programs in supporting students in their academic journeys.

Preparing for Impact Evaluation

A rigorous impact evaluation is often used to demonstrate a program's effectiveness to policy makers to increase funding and broaden a program. Such evaluations can be time-consuming and expensive and are sometimes conducted before programs are ready for rigorous evaluation. When done too

soon, these evaluations can provide an inaccurate view of a program's success. The goal of this outcome study, instead, was to perform an exploratory assessment to provide information on service delivery and key outcomes, and to identify both strengths and areas to target for improvement in preparation for an impact evaluation that uses more rigorous research methods (e.g., randomized controlled trial).⁷ This section highlights a few examples of strengths and potential improvements from the Bridge to Finish campaign and can be used to help strengthen similar programs in preparation for a more rigorous evaluation.

➤ **Link participation data to academic outcome data**

UWKC forged a partnership with the State Board for Community and Technical Colleges (SBCTC) to link academic enrollment and outcome data with program participation information using the student ID participants provide at enrollment. This step was crucial for assessing rates of key academic outcomes. Importantly, UWKC was intentional about reducing students' level of effort for enrollment and did not require additional verification of student ID. Therefore, there were many participant records which could not be matched to SBCTC's academic data and were omitted from some of the analyses. As a next step, Bridge to Finish and other organizations can consider having students or enrollment staff screenshot or scan student IDs as a relatively low effort verification method. Programs can also explore ways to automate data linkage between program data and academic outcome data to reduce the burden of transferring data files and provide more real-time insights into program performance.

➤ **Assess student need**

While it may be assumed that students who enroll in basic needs insecurities programs have greater needs on average than other students, this is not necessarily the case. It could be that students who have more human and social capital are better connected to campus resources and have a greater ability to navigate the system to seek out the support they need. These students may also be more engaged overall, while students facing the most severe obstacles may not have the time and ability to seek out additional supports. Additional research is needed to gain a more nuanced understanding of how participants' needs compare to those of other students and to find ways of ensuring that the students with the greatest need are being effectively reached. Bridge to Finish and other similar programs can consider conducting qualitative interviews, customer journey mapping, or focus groups to provide some of these answers.

➤ **Formalize recruitment**

It is important for programs to have a formalized recruitment strategy and method for

⁷ The study approach is based on a framework presented by Diana Epstein and Jacob Alex Klerman (2013) in "When is a Program Ready for Rigorous Impact Evaluations? The Role of a Falsifiable Logic Model."

assessing recruitment both within and across individual campuses. This work ensures that the program can meet the needs of a diverse group of students, reach focal groups, and understand differences in student outcomes across participating campuses. Bridge to Finish Benefits Hubs are intentional about recruitment and collaborated with campus groups to facilitate recruitment of students from focal groups (e.g., BIPOC students, parents, first-generation students, and students with low levels of income). Bridge to Finish also asks students how they learn about the program during the intake process and uses dashboards to continuously monitor recruitment implementation.

➤ **Implement a case management system**

Programs can invest in a simple case management system to track all or most interactions and outcomes between staff and participants. This can be an important step in preparing programs for rigorous impact evaluation. This system could determine if different participants are getting different dosages of staff support or if seemingly minor interactions with staff (e.g., short emails, conversations in passing, etc.) could be a very important feature of the program and help build relationships that benefit students during moments of hardship. As an example, Bridge to Finish uses a case management system that tracks participants' engagement, and more recently, outcomes as well. Tracking all engagements with program participants through a case management system can help build a robust dataset which can be used in an impact study.

➤ **Engage participants in program improvement**

In addition to conducting interviews and/or focus groups with participants to better understand their needs and experiences with program recruitment, programs can consider including feedback mechanisms to learn from participants throughout their time in the program. For example, Bridge to Finish sends students a feedback survey after every intervention and hires student ambassadors who inform programmatic decisions. Applied behavioral science research can provide insights into how best to collect this feedback to better understand the participant journey through the program and tailor services to fit participants' unique needs. Additionally, programs can consider establishing a participant advisory group to gain insights and co-create solutions with participants.

Conclusion

The Bridge to Finish program and other similar programs are uniquely positioned to serve and support a diverse group of community and technical college students in their educational journeys by giving them the tools and supports they need to tackle systemic barriers to educational attainment. This case study offers an early indication that programs like Bridge to Finish that provide supports to students through a central benefits hub model may help improve persistence and completion outcomes for students facing systemic challenges. During the period studied, outcomes for Bridge to

Finish participants were significantly better than demographically similar non-participants at the same institutions. These positive findings held regardless of the type of service students received. Furthermore, participants of all backgrounds were more likely than non-participants to persist or complete, suggesting that the program could help address persistent inequities in postsecondary outcomes.

This analysis explored persistence and completion rates and provides a general idea of the extent to which Bridge to Finish participants persist in their education and/or complete their degrees. However, the analyses do not delve into the other individual and societal factors that could contribute to persistence and completion. Future studies should explore factors such as human capital, academic aptitude, and social and family backgrounds. Additional data and research are also needed to evaluate the causal impact of the program through a formalized impact study.