CTE Bridge Programs: Advancing the Success of Students with Educational and Employment Barriers

Insights from a Multiyear Evaluation of Four Bay Area Community College Initiatives

The RP Group conducted a multiyear evaluation (2012-2014) of community college career technical education (CTE) bridge programs implemented with support from the Bay Area Workforce Funding Collaborative (BAWFC). This examination of four Bay Area community college bridge programs (see sidebar, BAWFC Grantees 2012 – 2013) reveals insights in three areas for educators, policy makers and funders interested in applying a CTE bridge approach to preparing students with academic and employment barriers for continued education and the workforce: (1) student outcomes and impact, (2) program design and implementation, and (3) future evaluation.

Student Outcomes and Impact

This evaluation examined three broad areas of data to understand the impact of bridge program participation on students: (1) enrollments, (2) academic outcomes, and (3) employment and earnings. These data and analyses reveal considerations for how to best engage students and design programs.

Enrollments

Overall, these bridge programs served individuals with educational and employment barriers, indicating that community colleges offer an effective mode for connecting this population to directed training opportunities. Key student outcomes include:

- Between fall 2011 and fall 2013, grantees enrolled a total of 490 students across all four bridge programs, thereby achieving 92% of their combined enrollment goals
- Approximately 75% of participants were academically disadvantaged; in three of four programs, a similar percentage was economically disadvantaged (as determined by receipt of need-based financial aid)

BAWFC GRANTEEES 2012 – 2013

Over two years, BAWFC grantees implemented models that engaged participant cohorts in a semester of contextualized basic skills and technical coursework, and integrated student support and career exploration. Completion of the bridge semester prepared participants to pursue additional training leading to a community college credential and ultimately employment in the related CTE pathway. Grantees included:

- Cabrillo College—Accelerated Medical Assisting Program (AMAP)
- City College of San Francisco (CCSF)—Bridge to Biosciences (B2B)
- Laney College—Industrial Maintenance Training Program (IMT)
- Skyline College—Allied Health Career Advancement Academy (CAA)

1 The RP Group collected data dating back to fall 2011 for grantees that launched programs that semester (CCSF, Laney, Skyline), even though they did not receive BAWFC funding until spring 2012, allowing more extensive documentation of outcomes throughout the evaluation period.
Students formed a diverse group, with colleges serving between 45% and 60% underrepresented minorities.

Academic Outcomes

With the two-year timeframe for bridge program implementation and a corresponding three-year evaluation period, most participants were still either moving through the CTE pipeline or had only recently completed the bridge semester. In turn, meaningful longer-term outcomes such as persistence and the attainment of credentials are just beginning to emerge. That said, students achieved the following overall outcomes:

- 80% of program participants successfully passed their bridge semester courses (with a grade of C or higher)
- Nearly 60% completed the bridge semester while 65% persisted to advanced coursework in a related CTE pathway.

Academic outcomes data suggest that programs can promote progress and completion in a handful of simple ways: (1) limit the number of required courses in the bridge semester, (2) invest in meaningful alignment between the bridge program and relevant CTE program(s), and (3) ensure students have a full understanding of the role of certificates and/or degrees in securing employment and achieving advancement in their industry.

Employment and Earnings

The evaluation shows early indications that bridge semester completion and the subsequent achievement of a certificate or degree have the most powerful impact on students’ earning potential, generally indicating programs need to consider encouraging students’ achievement of these critical milestones.

Similar to the long-term academic outcomes of persistence and award completion, employment outcomes were just emerging at the end of the evaluation period. Yet, an examination of Employment Development Department Unemployment Insurance earnings data for four of five cohorts (fall 2011 through spring 2013) revealed that after college:

- Students who completed the bridge semester were the most likely to be earning $20 per hour or more and were likely to have a larger increase in earnings than their peers who had not completed the bridge.
- Students who completed the bridge semester and who also earned a certificate and/or degree generally had higher median earnings (approximately $2,000 higher) than those completers who did not earn an award.

At the same time, a more nuanced look at these data also reveals that the importance of bridge program completion and subsequent certificate/degree achievement to earnings may vary by sector.

WHAT DO EMPLOYERS SAY ABOUT BRIDGE STUDENTS?

Employer partners report that bridge participants are often:

- “More motivated and more focused” than other job applicants
- Committed and demonstrate “a very good attitude” because their field is “something they have chosen”
- “Well prepared” for technical work

In the words of one employer:

“If we have a position open we will try to hold [it] because most of [the college’s] students are amazing.”
Bridge Program Design and Implementation

This evaluation offers additional key considerations for implementation in the areas of recruitment, cohort development, student support, contextualization of basic skills coursework, employer engagement, and sustainability and institutionalization.

Recruiting Students with Educational and Employment Barriers

Successful recruitment requires bridge programs to implement an intentional strategy, based on a comprehensive understanding of the target population—the challenges these students face in and out of the classroom, the goals they are seeking to attain and the best modes for reaching them. Programs should consider talking to representatives from targeted participant groups during the bridge’s feasibility and design phases about what types of approaches would persuade students to enroll and commit to completing. Additionally, continuous reflection on how requirements and services practically align with the needs and capacities of those target populations may help programs to fine-tune both recruitment efforts and bridge design over time for maximum participant success.

Cultivating Participant Cohorts

Organizing students into cohorts during the bridge experience has a high value and impact, facilitating the coherent delivery of coursework, streamlining the provision of services, and allowing for the development of peer networks. At the same time, the cohort structure requires purposeful cultivation and continuous nurturing in order for participants to receive the numerous benefits of this educational approach. To develop these valuable peer connections, program should consider selecting specific strategies that are introduced to participants upon enrollment and maintained both inside and outside the classroom throughout the bridge semester.

Integrating Student Support

Programs can facilitate student success by proactively providing support services to all participants, rather than requiring students to identify their own needs and search for help. Bridge initiatives can expand program capacity for an integrated support delivery through strategic partnerships with their institution’s student services programs, collaborations with other academic initiatives, and arrangements with community-based organizations housed both on and off campus.

Additionally, bridge faculty play a critical and expanded role in providing support for their students and offering academic, career and personal assistance in and out of the classroom. Their role is so central to student success that colleges need to build a corps of faculty committed to innovative approaches including CTE bridge initiatives through deliberate hiring and professional development practices.

Contextualizing Basic Skills Coursework

Contextualizing basic skills English and math courses to participants’ career interests produces a positive impact on student learning. Delivery of contextualized courses depends heavily on a program’s level of collaboration with other departments—chiefly English and math. In the case of this evaluation, two programs worked closely with their English and math peers to deliver contextualized basic skills courses, while the other two programs created offerings “in-house” or in partnership with another CTE program. When developing a bridge initiative, programs might consider (1) which approach to contextualization is most feasible given relationships with English, math and other departments, and (2) the benefits and drawbacks of the available approaches given the target sector/occupation and populations.

Engaging Employers

Recognizing the key role that employers play in preparing students and informing program development, bridge initiatives can strengthen their engagement by (1) approaching employers with an in-depth understanding of their needs and motivations, (2) offering them a variety of opportunities and a range of commitment levels, and (3) maintaining direct and ongoing communication. Distributing responsibility for employer engagement among a team, rather than
leaving it solely to one individual such as a department chair or program director, can also lead to more robust and sustainable industry involvement.

**Employer engagement requires a significant investment of time and funds.** Yet, it can generate a range of benefits including increasing students’ readiness for employment and career advancement and positioning the program for regional partnership and funding opportunities.

**Advancing Sustainability and Institutionalization**

Comprehensive and coherent implementation of all components of a bridge model is required to strengthen the success of students with barriers. Yet bridge programs often struggle to secure institutional investment in non-instructional elements such as integrated support and robust employer engagement, potentially impeding their capacity to sustain their effectiveness for these populations. Colleges already pursuing an institution-wide student success agenda may be more likely to commit other grant dollars and invest general funds to maintain the non-instructional aspects of their bridge models. In turn, programs might assess their overall college culture and determine how to link a bridge initiative to a broader student success effort to promote greater levels of institutionalization.

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### Future Evaluation

This evaluation revealed a range of useful insights, equipping funders and the colleges with an understanding of the power of bridge programs to change students’ lives. At the same time, including certain components in future evaluations could benefit BAWFC, college grantees and related advocacy organizations by providing additional evidence to inform continuous improvement, sustainability and expansion efforts. Potential suggestions include:

- **Identify comparison student groups** that can be used to thoroughly measure, understand and document the impact of bridge programs on student success
- **Allow long-term tracking of student progress** to allow sufficient time for students to complete the bridge program, enter and complete a degree or certificate program, and/or gain employment
- **Develop a common evaluation plan for all grantees that is then complemented by customized components for each college** to create greater consistency while still accounting for the various nuances of each bridge program
- **Expand engagement of post-bridge students** to develop a deeper understanding of the longer-term impact of bridge programs on students’ education and career pathways
- **Conduct a bridge program cost/benefit analysis** to increase college leaders’ and funders’ awareness of the balance between bridge models’ resource-intensive nature and their potential to decrease long-term costs