Efficacy of a College and Career Readiness Program: Bridge to Employment

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An important measure of success for a college and career readiness program is the extent to which its participants achieve their higher education and career goals. We examined one such program, Bridge to Employment (BTE), to determine its influence on participants' educational and career-related decisions and outcomes after they graduated from high school. The BTE program works with 14-to-18-year-old students in disadvantaged communities across the globe to increase their awareness and understanding of health careers and higher education opportunities. We interviewed 23 former BTE participants, representing different countries and BTE participation time frames, to provide critical qualitative insights about their experiences, years after the program. Key recommendations for college and career readiness programs include exposing participants to a wide variety of careers, strengthening soft skills, clarifying practical steps to prepare for college and careers, and providing support for interpersonal relationships.

Keywords: college and career readiness, postsecondary education, soft skills, work-based learning, global career development

Research on college and career readiness programs has primarily focused on outcomes during high school, such as student academic achievement, enrollment in advanced coursework, graduation rates, SAT/ACT scores, and knowledge about colleges and careers (Allensworth & Clark, 2020; Alliance for Excellent Education, 2009; Gheen et al., 2012; Heuer et al., 2016; Hooker & Brand, 2010; Mac Iver et al., 2019). However, research examining how college and career readiness programs benefit students' postsecondary academic and career pursuits is also needed (Bell & O'Reilly, 2008; Brand, 2009; Hooley et al., 2011; Venezia & Jaeger, 2013). Therefore, we sought to add to current research by providing an in-depth, qualitative examination of a college and career program, known as Bridge to Employment (BTE), by examining whether and how it influenced participants' education- and career-related decisions and outcomes.

Since 1992, the BTE college and career readiness program, a Johnson & Johnson initiative, has worked with 14-to-18-year-old students in disadvantaged communities in the United States and across the globe to increase students' awareness and understanding of health careers and educational opportunities beyond secondary school. The BTE program

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has been shown to have a positive effect on students' math and language arts grades (Camasso et al., 2019). However, no qualitative research has been conducted to better understand the reasons for BTE's effects. We used a qualitative approach to gather details and examples of participants' experiences, attitudes, and long-term outcomes. Our aim was to learn from participants' own words how and in which specific ways particular BTE activities might have influenced them after graduating from the program. Because BTE had served students for more than 2 decades at the time of data collection in 2016, we had the unique opportunity to ask alumni to reflect on their experience years after graduation. We gathered feedback from alumni who had graduated between 2006 and 2016 to examine two research questions:

>*Research Question 1*: What components of the BTE program do alumni describe as most beneficial and why?
>*Research Question 2*: How has the BTE college and career readiness program influenced alumni's educational and career decisions and outcomes?

College and Career Readiness

In recent years, researchers have been questioning and expanding definitions of college and career readiness because of the overlap in components that are necessary to succeed in both college and careers. To be college and career ready means having the knowledge and skills necessary to enroll in and complete a postsecondary or high-quality certificate program and qualify for entry-level career opportunities (Common Core State Standards Initiative, n.d.; Conley, 2010; Education First Consulting, 2013; Warren et al., 2017). Therefore, college and career readiness requires (a) integrated education and career planning and preparation; (b) the ability to apply and link academic, technical, and career knowledge and skills; and (c) foundational (soft) skills for postsecondary academic and career success (Warren et al., 2017). These three principles align with the focus areas of the BTE program.

Integrated Education and Career Planning and Preparation

Researchers have examined how best to prepare students for both college and careers and have pointed out that students need practical education and career planning skills and assistance (ACT, 2015; Warren et al., 2017). In so doing, they have suggested realigning courses with professional priorities and creating partnerships between postsecondary institutions and businesses (Conley & McGaughy, 2012). Researchers have also suggested differentiating curricula to support students' interests and talents (Barnes & Slate, 2013; Wang, 2013), thereby assisting in the integration of education and career planning and preparation. Such integration provides youth with a sense of agency through the development and attainment of goals and a sense of values and purpose (Nagaoka et al., 2014).

Ability to Apply and Link Academic, Technical, and Career Knowledge and Skills

A What Works Clearinghouse guide reported strong evidence that programs and curricula connecting school to college and career pathways

lead to improved attendance, higher course pass rates, and a sense of belonging in school (Rumberger et al., 2017). Work-based learning experiences can offer students a means to explore career possibilities and help engage them in seeing the connection between work and the classroom (Alfeld et al., 2013; Bempechat et al., 2014; Kenny et al., 2010; Taylor et al., 2015). Research has also shown that participation in high-quality internships promotes both student engagement in their own learning (Miller et al., 2011) and career exploration (Gamboa et al., 2013). However, a review of 19 work-based learning programs and relevant literature found that student outcomes depend on the quality of work-based learning programs and that more rigor is needed to assess their effectiveness (Alfeld et al., 2013).

Foundational (Soft) Skills for Postsecondary Academic and Career Success

Across the college and career readiness literature, studies have shown that *soft skills* are essential to students' success. A U.S. Agency for International Development study (Lippman et al., 2015) outlined five soft skills as key to postsecondary academic and career success: (a) communication skills, (b) higher order thinking skills, (c) self-awareness, (d) self-management, and (e) social skills. Dymnicki et al. (2013) described *social-emotional learning skills*, including self-management, social awareness, relationship skills, and responsible decision-making, as important to students' readiness for college and careers and asserted that these skills can be taught in schools. A report commissioned by the Aspen Institute explored the social, emotional, and cognitive competencies that lead to students' success in work and life (National Commission on Social, Emotional, & Academic Development, 2018). Students themselves have reported that soft skills and life skills are key to education and employment (Lombardi et al., 2011; Nair & Fahimirad, 2019), as have educators, parents, and employers (MetLife, 2011; Robles, 2012). However, many new graduates enter employment lacking these skills (Maguire Associates, 2012).

The BTE Program

Launched in New Brunswick, New Jersey, in 1992, BTE is a college and career readiness program that has served 4,565 students in more than 90 low-income communities in 22 countries. In each community, the program serves 35 to 50 students during their last 3 years of secondary school and offers activities focusing on academic enrichment, career awareness, higher education readiness, and community engagement. The program was initially established based on a school-to-career framework that combined the principles of (a) school-based learning that draws on real-world application, (b) work-based learning experiences that connect to school curricula, and (c) activities that link school- and work-based learning activities (School-to-Work Opportunities Act, 1994). BTE has evolved over time to focus on positive youth development by engaging youth using a strengths-based approach (Youth.gov, n.d.) and on the science, technology, engineering, mathematics, manufacturing, and design (STEM²D) fields. The goal of BTE is to increase the number of

youth attending and completing higher education and pursuing careers in STEM²D sectors. Although each BTE site is unique in its structure and implementation, programming at each site consists of four primary inputs (summarized in Table 1) that align with the Warren et al. (2017) framework principles. The four primary inputs are as follows:

- *Community partnerships*: Each BTE site capitalizes on the strengths and resources of four cross-sector community partners: a Johnson & Johnson local office, a secondary school, an institution of higher education, and community-based organizations. An intermediary organization, FHI 360, supports each local partnership and connects sites around the globe. The aim of these partnerships is to facilitate the integration of education and career planning and preparation.
- *Academic enrichment*: Academic support/tutoring provide supplemental or remedial instruction in specific academic content areas, such as mathematics, science, or native language/English. BTE aims to help students connect what they learn in school to what they will need in their future—through project-based learning and service learning—creating a link between academics and careers.

TABLE 1

Simplified Bridge to Employment (BTE) Logic Model

Inputs and Activities	Outcomes
Academic enrichment • Academic counseling and support/tutoring • Applied learning projects and science laboratories • Camps and out-of-school programming • Teacher externships/professional development Higher education exploration and preparation • Higher education entrance/application support • College visits • Exam preparation support	Increase in the number of youth enrolling in, attending, and completing higher education
Career readiness and explorations • Career coaching/mentoring • Guest lectures • Company tours • Job shadowing • Internships • Skills workshops • Youth leadership and global youth leadership council	Increase in the number of youth pursuing careers in the STEM²D sectors
Community partnerships • Service learning/community service • Strategic planning and team building • Engagement and leadership of local Johnson & Johnson employees (BTE volunteers) • Participation by secondary school students and teachers in BTE activities • Community-based organization program management and coordination • Institution of higher education implementation support	Increased collaboration among business, education, and community organizations

Note. STEM²D = science, technology, engineering, mathematics, manufacturing, and design.

- *Career exploration and readiness*: Activities are designed to provide participants with real-world career readiness and exploration of various higher education and career options. Local Johnson & Johnson volunteers commit to frequent, ongoing interactions to coach specific students or teams of students. Work-based learning opportunities such as job shadowing, internships, and interactive company tours provide firsthand exposure to the work inside the Johnson & Johnson local office. Skills workshops are designed to build and improve foundational skills, such as communication, time management, problem-solving, critical thinking, and teamwork—the soft skills for postsecondary academic and career success.
- *Higher education awareness and preparation*: BTE helps students apply to institutions of higher education. Entrance/application support activities, such as college tours or "student-for-a-day" programs, help students learn about various institutions. Many sites support entrance exam/qualifying exam preparation. Guiding students through the consideration of institutions and majors includes discussions of potential career pathways, which provide another opportunity to integrate education and career preparation.

Each BTE site determines the criteria it uses to recruit students on the basis of local community needs. However, the majority of BTE students are low-income, minority, first-generation college students.

Method

Participants

In April 2016, we identified our sample by sending an online information request to all 522 alumni for whom we had contact information, asking for basic demographic data (e.g., graduation year, gender, location of BTE program in which they participated, highest level of education completed). We also asked if they would be willing to participate in interviews. Additionally, we asked BTE program coordinators for help reaching graduates for whom we may not have had contact information. Because our aim was to collect detailed descriptions of alumni experiences, we identified alumni in four main categories to interview for their rich perspectives over varying spans of time: (a) BTE cohorts (i.e., alumni who graduated pre-2009, 2009–2012, or 2013–2016), (b) domestic BTE programs, (c) international BTE programs, and (d) BTE alumni who had become Johnson & Johnson employees. We interviewed 14 alumni who were identified with help from the program coordinators. We then contacted nine of the 12 alumni who had indicated on the information request that they were willing to take part in interviews, excluding three 2016 graduates from Kenya because we had hit saturation points for that year and country. The final list included 23 alumni from nine countries that took part in the program and who graduated from high school from 2006 to 2016. Tables 2 through 4 summarize participants' demographic characteristics. More than half of our sample (57%) were alumni from the United States. Almost half (48%) completed the program between 2013 and 2016, and almost half (48%) were female. The majority were attending or had graduated from university/college (73%) at the time of our study.

TABLE 2

Participants by Country and Gender

Country	Interview Participants		Women *n*	Men *n*
	n	%		
United States	13	57	8	5
Kenya	2	9	1	1
Scotland	1	4	0	1
South Africa	2	9	1	1
Italy	1	4	0	1
Romania	1	4	0	1
Spain	1	4	1	0
Panama	1	4	0	1
Colombia	1	4	0	1
Total	23	100	11	12

Note. Percentages do not total 100 because of rounding.

Semistructured Interviews

We conducted semistructured phone interviews to gather international perspectives on BTE. Drawing on the responses from the initial information request, our questions were designed to gather detailed information about how and in what ways the BTE program influenced participants' subsequent decisions and outcomes regarding education and careers. All participants were asked the following questions:

- Please think back to your time in BTE and tell me about some activities or experiences that stand out to you as being most beneficial. How did these experiences help you when you were in school and after graduation?

TABLE 3

Demographic Characteristics of Participants

Demographic	*n*	%	Women *n*	Men *n*
Graduation year				
Pre-2009	4	17	2	2
2009–2012	8	35	5	3
2013–2016	11	48	4	7
Site location				
United States	13	57	8	5
Non-United States	10	43	3	7
Johnson & Johnson employee	3	13	0	3
Graduated high school or secondary school only	1	4	0	1
Planning to attend university	2	9	1	1
Attending university	7	30	1	6
Graduated university	10	43	8	2
Attending graduate school	2	9	0	2
Graduated graduate school	1	4	1	0

Note. N = 23. Percentages may not total 100 because of rounding.

TABLE 4

**High School or Secondary School Graduation Year
of Participants**

Graduation Year	Interview Participants	
	n	%
2006	1	4
2007	2	9
2008	1	4
2009	1	4
2010	3	13
2011	3	13
2012	1	4
2013	5	22
2014	1	4
2015	1	4
2016	4	17

Note. N = 23. Percentages do not total 100 because of rounding.

- Please describe any influence BTE may have had on the decisions you made about your education after high school/secondary school and about your career decisions.
- Aside from what we have talked about so far, are there other ways BTE had an influence on you?
- How is your life different today as a result of participating in BTE?
- Is there anything else you would like to share about your BTE experience?

The interview protocol allowed flexibility in question order and in tailoring questions to individuals based on their responses. Although 1 hour was allotted for the phone interviews, most discussions took approximately 20–30 minutes to complete (DiCicco-Bloom & Crabtree, 2006). This may have been because interview questions were shared in advance. We chose to conduct interviews by phone in order to facilitate their completion within the project budget and timeline. All participants spoke English. Translation was not necessary.

Data Analysis

All phone calls were recorded and transcribed. Data were organized and analyzed using NVivo 11 software. A reflexive thematic analysis (Clarke et al., 2019; Nowell et al., 2017) was conducted, using a deductive approach. We first coded to a preexisting framework based on the interview questions and then conducted a second cycle of coding to examine the data for common themes and experiences as well as notable distinctive comments (Saldaña, 2016). The unit of analysis was a sentence or a paragraph, depending on what was sufficient to capture participants' complete thoughts. Quotations were selected to highlight themes and describe unique ideas (King, 2004). Emerging subthemes and new themes were also coded. All codes and themes were reviewed through peer debriefing (Lincoln & Guba, 1985), commonalities were grouped and recorded within each theme, and codes were refined (Clarke et al., 2019). During

this time, we held multiple team meetings to discuss coding decisions and revisions. Although the interviewer (first author) served as a cross-site evaluator for the BTE program, the other coders (second and fifth authors) did not work for BTE.

To bolster the trustworthiness of our findings, we incorporated steps to enhance credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). We strengthened credibility through triangulation across sources (seeing consistency in our responses and themes) and across researchers (peer debriefing). To enhance transferability and dependability, we prepared detailed descriptions of our research design, our recruitment strategies, the setting and demographics of our participants, and our interview questions so that others could replicate the study or determine its generalizability. For confirmability, BTE program staff reviewed and cross-validated our preliminary interpretations and findings.

Results

We found no specific differences in the data by country, graduation year, or gender. We identified four main benefits alumni attributed to the program: (a) being exposed to a variety of careers, (b) gaining and increasing soft skills, (c) learning the steps to prepare for postsecondary education and careers, and (d) receiving support through relationships.

Exposure to a Variety of Careers

Exposure of BTE participants to a variety of career paths enabled them to make more informed choices not only about careers but also about the higher education pathways they would travel to reach some of them. Of the 22 alumni interviewed who planned to go on to higher education, 10 reported that the BTE program helped them decide what to study. Becoming familiar with potential career paths made them more aware of their options, which then enabled them to make better choices about their majors and college/university courses. This was especially important for those who did not know what they wanted to do prior to the program. One alumnus said,

> BTE really helped me solidify my choice of what I wanted to major in. Of course, I wanted to apply to college and go to college . . . but [BTE] helped me realize that business is really what I want to do.

This finding was particularly true in the health/science career fields. Eight interviewees (more than one third) reported learning of new career options in health/science organizations. One alumna discussed the common assumption that biology majors will go on to either medical school or research. She said,

> My BTE internship at a biotech company really helped me think outside of the box and adopt a broader approach to my career goals. When I was graduating from college, I was thinking about consulting- and finance-type roles that would include biology, but with an interdisciplinary approach. The internship helped me realize that this was an opportunity, something more "nonconventional" that my peers weren't really recognizing.

Another alumnus commented that he had thought most employees at a science organization conducted research in a lab, but BTE "opened

the door to how many careers there were." Being part of BTE boosted one alumna's interest in STEM²D and innovation; after taking a physics course in high school, she realized she wanted to become an engineer. Another alumnus was considering journalism or law, but he decided on social work after participating in BTE's community service.

Interviewees reported that the opportunity to talk to professionals about their work and observe them in their roles was integral to their own decision-making. Ten of the 22 interviewees who pursued or planned to pursue higher education said these interactions helped them make education decisions. One said interactions with Johnson & Johnson employees led her to attend medical school. Another selected a different college on the basis of conversations with people during her internship. Yet another discussed how she drew on these connections years afterward; when she considered changing her major in college, she reached out to the employees and her fellow interns, who gave her "really good advice" and helped her with the transition. For 13 of the 23 alumni interviewed, observing professionals helped to clarify their career interests. One alumnus described how visiting a Johnson & Johnson laboratory gave him a better idea of the types of jobs available and what might be possible for him. Another said seeing a pharmacy in operation and observing the use of surgical tools made him realize "where [he] wanted to be." During job-shadowing days, BTE participants accompanied Johnson & Johnson employees to learn about their tasks and roles. One alumnus explained that these experiences helped him learn "how an engineer's work can be applied," and he went on to choose engineering as a career. Another stated,

> It helped me make sure that's what I wanted. Knowing how I felt about nursing before college was a big help for me, [so] I didn't go into college not knowing. It solidified what I wanted to do. I went from getting my feet wet to jumping in headfirst.

Internships offered BTE alumni opportunities to build relationships. One alumna mentioned that she interviewed people in various positions to learn about their daily tasks. Those interviews enabled her to see how much she loved data analysis. She said, "I was very fortunate to talk to all those people and learn a little bit more about myself." Another said she would stay in people's offices to "pick their brains" about their jobs and ask how they chose their careers. On-the-job training helped BTE alumni make decisions about what to study and pursue. One alumna described the internship opportunity as "prestigious" because it gave her insights in how to make the most out of college—an advantage many of her peers did not have:

> It definitely opened up my perspective in figuring out what I needed to get out of college. . . . I needed to work more on public speaking and on teamwork. [This] drove what I would study and prioritize during college.

The professional experiences instilled confidence. Knowing their strengths and weaknesses helped alumni make better decisions. Three alumni mentioned how helpful it was to learn one's career could change over time. This allowed them to think more freely about their interests

and took pressure off of college decisions. They learned that selecting a college major does not mean being "stuck" in a field; it can open a range of opportunities. One said,

> One of the things that I learned the most from was talking to people about the jobs that they did prior to the job that they were in. Knowing that what you study in college or even the jobs that you do for the first 10 years of your life, you can change it.

Gaining and Increasing Soft Skills Key to Education and Careers

Much has been written about the importance of soft skills, and our findings confirmed this. Alumni described how acquiring and strengthening team building, time management, organization, study skills, interpersonal skills, and communication skills through BTE helped them in their education and career paths. They described obtaining these skills through classes/workshops, work experiences, group exercises, and one-on-one sessions with BTE volunteers. Ten of the 23 interviewed considered these skills as essential to meeting their educational goals, and 13 of the 23 reported them key to becoming career ready.

Seven of the 23 interviewees mentioned interpersonal communication. They reported learning how to speak to professionals and authority figures. One alumnus talked about how BTE team-building work taught him communication skills, saying this was "the type of knowledge I could not gain from ordinary school." Another alumnus expressed gratitude to BTE for helping him overcome his fear of talking to authority figures—a "significant triumph" that enabled him to converse with university professors.

Time management skills gained through BTE helped alumni while they were still in high school, during college, and in the working world. One alumnus emphasized developing a "work ethic" through BTE, noting that he understood better how to work "from the initiation of an idea, or a project, to actually completing it, [and] seeing it through."

Alumni described how other soft skills, such as leadership, perseverance, discipline, and public speaking, increased their confidence, built their self-esteem, and enabled them to be more aware of their own strengths. Four of the 23 alumni interviewed discussed how their self-esteem improved due to experiences such as completing a presentation or being encouraged by a caring adult in the program. One alumnus explained that BTE "just rounded me out as a person."

Learning Steps to Prepare for Postsecondary Education and Careers

Alumni considered the practical guidance provided through BTE as being essential to navigating the pathways to higher education and to jobs/careers. Seven of the 23 alumni described how BTE volunteers walked them through the necessary steps to meet their educational goals. One alumnus described this as the "play-by-play of how to get where I wanted to get," including what grades were required, how to format essays, and suggestions for extracurricular activities or internships to pursue. A first-generation college student said a BTE volunteer was

"like an angel" to her; whereas her own family did not know how to provide guidance on applying for college or financial aid, the volunteer was "always someone I could go to with questions."

Another alumnus spoke about how meaningful it was that BTE volunteers took the time to explain these steps to students individually, check in on their grades, and provide them with encouragement. He was encouraged to run for school office and became vice president of his senior class; he appreciated being "held to a higher caliber." Alumni spoke about the practical information and resources they obtained, preparing them for successful job searches. They described creating LinkedIn profiles, gaining tips for interviews, and learning how to present themselves. An alumnus explained how critical it was for BTE to teach these fundamental steps, because so many high school/secondary school students are not familiar with them.

Importance of Interpersonal Relationships

Interviewees emphasized how important their relationships with volunteers/career coaches and their BTE peers were while in the program and long afterward. This support helped connect them to careers, led to increased confidence, and motivated them to achieve their goals.

Fourteen of the 23 alumni interviewed identified volunteers as supportive in terms of their future careers. Volunteers provided advice, served as mentors, helped introduce alumni to different career paths, and offered connections to obtaining internships and jobs. One alumnus said, "We could always call and reach out, speak to one of the BTE volunteers who knows someone who knew someone." Another alumnus described the key role a volunteer played in helping him choose a career in which he felt comfortable. A college graduate talked about a low period in his life when he was unemployed. He reached out to a BTE volunteer who had been his coach/mentor—and who ultimately created a position for him:

> I was able to finally get my lucky break to go back into medical devices and learn from [my coach/mentor], [to] actually become the quality engineer that I am today. And again, I couldn't have done it if I did not have the Bridge to Employment program.

Seven of the 23 alumni interviewed indicated that BTE volunteers helped them get a foot in the door at internships or jobs after college. These positions were important to alumni, not only because of the pay but also because the experience could be included on résumés. One noted the importance of BTE helping people obtain professional jobs:

> Working at McDonald's doesn't necessarily coincide with your goals but working at a place like Johnson & Johnson or some other corporation, you can meet people who can help you with your résumé and teach you important concepts that'll carry with you through to college.

Another alumna remarked that she felt lucky when she got her "dream job" 6 months after graduation because a BTE volunteer connected her to people at a hospital. She emphasized, "Contacts are everything."

Alumni frequently talked about the strong bonds they developed with BTE volunteers—20 of the 23 mentioned the importance of bonding

with BTE volunteers during their interviews. The volunteers served as mentors, cared about them, and continued to reach out and stay in touch, years after graduation. Alumni noted that the continuous, regular support from BTE volunteers helped increase their confidence.

Peers were also an important source of support, and alumni mentioned the close, "lifelong" friendships they formed. Relationships were strengthened by sharing experiences and the same outlook on the importance of education. Students inspired each other, learned from each other, and studied together. Three of the 23 alumni described their fellow participants as being like a support group because they could talk candidly with each other and ask each other for advice. One alumnus said,

> I used to be very introverted. I was shy, and ever since being part of the BTE group, I have become more outgoing. I've started to love myself more. I've started to believe in myself, in my possibilities, and if I want to do something, I will be able to do it.

An alumna referred to this group support as a "driving force" in her motivation to pursue her education and career goals. She and others mentioned keeping in touch via Facebook and noted that they are all proud of and inspired by each other's accomplishments. One alumnus said BTE taught him the value of relationships. Eleven of the 23 said a significant benefit of these relationships was increased self-confidence, which helped in their education, job positions, and life in general.

Discussion

We sought to add to the college and career readiness program efficacy research literature by conducting a qualitative, in-depth exploration of insights and perspectives of alumni up to 10 years postgraduation. Specifically, we wanted to better understand the ways in which the BTE program influenced graduates' education- and career-related decisions and outcomes.

Our results confirm prior research showing that exposing students to a variety of careers helps them make more informed choices about their futures and see the connection between school and their career (Alfeld et al., 2013; Bempechat et al., 2014; Kenny et al., 2010; Taylor et al., 2015). Our findings show how this exposure helped alumni with both education and career outcomes. The college and career readiness literature also emphasizes the importance of strengthening soft skills (Dymnicki et al., 2013; Lippman et al., 2015; Lombardi et al., 2011) for both college and career success. Our findings bolster this research, showing that soft skills are important to alumni as they reflect back postgraduation. Although our finding about the importance of clarifying practical steps needed to prepare for college may seem self-evident, it confirms research indicating such information is critical (ACT, 2015; Warren et al., 2017). This is particularly true for first-generation students who may not otherwise receive such advice (Lane et al., 2020). Our study showed that alumni appreciation for having received this information continued over time and was present across countries. These three findings reflect the Warren et al. (2017) framework elements of integrating education and career planning, linking academic and career

knowledge and skills, and developing soft skills. Our study strengthens this framework by adding qualitative examples and details of how the elements influenced participant outcomes, and by adding long-term perspectives postgraduation.

Our study also underscores the importance of adult relationships in college and career preparation. Such relationships were not included in the Warren et al. (2017) framework; however, our study indicates that relationships are essential to both education and career preparation. Positive relationships have been shown to help students build self-esteem, benefit their academic performance (Osher et al., 2020; Pekel, 2019; Rumberger et al., 2017), and help them feel more confident seeking services in college (Kniess et al., 2020; LeGree, 2019). Our study documents myriad ways relationships with adults have benefited alumni, such as connecting them to careers/jobs, motivating them to succeed, helping boost their confidence, providing them with mentors, providing support, and developing long-term friendships and bonds. Our results also highlight the importance of peer relationships. This finding relates to all three of the Warren et al. (2017) framework elements in that relationships play a significant role in conducting activities that connect education and careers, link academic and career skills, and develop soft skills.

Recommendations

Our study findings point to some overall recommendations for BTE and other college and career readiness programs.

Provide exposure to a variety of careers. Exposing participants to a variety of potential career paths will enable them to make more informed choices, not only about careers but also about the higher education paths toward them. When students know more about the fields and careers that best suit them, they are more successful and may ultimately save money by reducing the probability of transferring, changing majors, or dropping out of college. The BTE program promotes this exposure through activities such as job shadowing, on-site tours, guest lecture series, and internships. Some BTE sites have asked participating professionals to map their own careers—offering students examples of how individuals reached their goals, what combination of education and job experience they had, and how certain jobs fed into others.

Strengthen soft skills as a key to education and careers. Increasing soft skills (such as team building, time management, organization, interpersonal skills, and communication skills) benefits students in their education and career paths. Many employers seek employees who have such skills (MetLife, 2011; Robles, 2012; Rosen et al., 2018). Our study showed that BTE alumni, in addition to employers, see the importance of these skills and appreciated acquiring them through the program. Workshops can help students learn and practice skills such as time management or communications skills, whereas one-on-one conversations and relationships with volunteers/career coaches/mentors help foster self-esteem and interpersonal skills (Osher et al., 2020; Pekel, 2019). Work experience, through internships and related projects, enables participants to gain confidence and a better awareness of their own priorities and competencies. Because BTE works with students in impoverished areas,

simple life-skills workshops have proved to be enormously helpful for participants. Teaching students about different cultural norms, etiquette, and how to address others helps them navigate new social situations.

Clarify practical steps to prepare for college and careers. Alumni considered the practical guidance provided through BTE essential to navigating the pathways to higher education, jobs, and careers. One-on-one meetings between students and volunteers/career coaches can ensure students know what classes to take and what grades are required for acceptance into specific colleges and universities. BTE mentors in the United States often help students use online college search tools to explore options, and in non-U.S. sites, BTE programs may offer remedial test support or assistance preparing for university entrance exams. Dual-enrollment programs enable students to experience campus classes and earn college credit. Similarly, summer or winter "camps" held on college campuses allow exposure to higher education. Workshops or classes can guide students and parents through the often-confusing process of completing financial aid and college applications. Similarly, equipping participants with tips on how to search for a job—including résumé development and preparation for interviews—offers them tools and confidence for entering the working world.

Promote relationships and networks. Programs should consider the importance of building strong relationships with participants when selecting staff, volunteers, and career coaches, and provide training with this in mind—both introductory and ongoing. Peer relationships among students can be supported by providing time and opportunities for social interaction. Structured events (e.g., annual kickoff or team-building meeting, overnight weekend events) promote bonding. Student activities, whether fun or informational, can involve problem-solving and critical thinking as a group, to allow learning while building relationships. Peer networks can be beneficial to students, not only during their high school/secondary experiences but also across institutional and even national borders. Social media and online tools provide various ways for students to connect.

Limitations and Future Research Directions

Our data provided perspectives from some BTE alumni several years after they left the program. Such data can be difficult for programs to gather due to the challenges of locating participants after high school/secondary school. Our retrospective analysis enabled BTE alumni to report on their experiences after high school/secondary school and reflect on the impact of BTE on their lives in intervening years. The sampling of alumni, many of whom were contacted through former BTE site coordinators, may have skewed findings to those who had positive BTE experiences and/or those who maintained relationships with their BTE contacts. Participants willing to take part in interviews may also have been more likely to have been those with positive experiences. Most participants represented U.S. BTE sites (57%) and recent graduates (2013–2016; 48%) giving more weight to those perspectives. The 23 alumni interviewed represented a small percentage of the approximately 1,200 people who participated in the BTE program between 2007 and 2016. A larger sample would enable examination by site or country, graduation year, or participant major/career field, and so forth, and would allow a more meaningful understanding of variations by gender.

Conclusion

Our study offers perspectives from alumni several years after they completed BTE, a college and career readiness program. Because of the time that elapsed between alumni participation in BTE and the interviews we conducted with them about the program (from 1 to 10 years), insights were shared that might not have been available immediately after program completion. Study findings emphasize the importance of certain straightforward program practices. These practices include (a) exposing participants to a wide variety of careers, (b) offering activities and experiences to strengthen soft skills, (c) ensuring participants understand practical steps in preparing for college and careers, and (d) promoting and strengthening relationships. Incorporating these four practices into training for school counselors and program volunteers can better prepare them to support students and also help staff focus on the key practices that will benefit students. Doing so can also assist career professionals in designing effective college and career readiness programs.

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