

**ARTICLE**

# The Impact of a Comprehensive Program on College Success of Academically and Socioeconomically Disadvantaged Students

Corliss Brown Thompson<sup>1\*</sup> Yufeng Qian<sup>2</sup>

1. Northeastern University, Boston, USA

2. Louisiana State University, Baton Rouge, USA

---

ARTICLE INFO

*Article history*

Received: 30 August 2019

Accepted: 2 September 2019

Published: 30 September 2019

---

*Keywords:*

Bridge Program

Persistence

Retention

Graduation

Racial Disparity

Gender Disparity

---

ABSTRACT

Low rates in college graduation and persistence have been a significant and persistent issue among urban high school graduates in the United States of America, especially for the academically and socioeconomically disadvantaged student population. In response to a college completion initiative, higher education institutions in one large city have joined forces to battle this issue. The purpose of this mixed-methods study was to examine the effects of one such university's comprehensive support program on public high school graduates' success in college graduation and persistence, and identifies a set of unique high impact practices that have contributed to the success of the program.

## 1. Introduction

The school district of focus, referred to as District Public Schools (DPS), for the purpose of this study serves more than 54,300 students, with 74% of them living in the city proper. Like other large, urban school districts across the country, DPS consists of a highly diverse student population, with 42% Hispanic, 34% Black, 14% White, 9% Asian, and 1% Other/multiracial. Moreover, DPS serves an increasingly growing high-need population, with 71% of students in the category of economically disadvantaged, 21% identified in need of Special Education services, and 32%

classified as English language learners.

While DPS students' postsecondary enrollment has steadily increased from 62% for the Class of 1993 (Sum et al., 2010)<sup>[20]</sup> to 71% for the Class of 2017, exceeding the 2017 national average of 62%, suburbs included (NCES, 2019),<sup>[15]</sup> DPS graduates' college graduation and persistence rates remain troubling. For example, of the 1,904 DPS Class of 2000 graduates who had enrolled in a two- or four-year college, only 675 (35.5%) had graduated from a two- or four-year college by June 2007, 8% below the national average of 43.6% in six-year college graduation rate.

---

*\*Corresponding Author:*

Corliss Brown Thompson,

Associate Teaching Professor, Northeastern University, Boston, USA;

Email: [co.brown@northeastern.edu](mailto:co.brown@northeastern.edu).

The racial disparity in college graduation and retention is alarmingly stark among DPS graduates. Take DPS Class of 2003 for example, gaps between the degree attainment rates varied widely across the four race-ethnic groups, ranging from 30.3% Hispanic and 33.4% Black to 60.6% White and 62.3% Asian. Disparity in college success is also evident among the academically disadvantaged DPS graduates who largely attend two-year colleges with an open enrollment policy. For instance, the Class of 2000 DPS graduates attending two-year public colleges obtained college degrees at a rate barely half as high as their national peers (12% vs. 26%)

## **Background**

Academically and socioeconomically disadvantaged students face a myriad of barriers in college success due to the lack of familiarity, guidance and support in academic, financial, and social-emotional areas. Specifically, this group of students are less prepared for college in terms of college work, system, and culture, in addition to the financial challenge which is enormous. Exacerbated by both academic and financial challenges, academic low achievers from low income families and minority groups are more vulnerable to the social-emotional stress.

College readiness is identified as a key factor that affects college success (Pitre & Pitre, 2009).<sup>[18]</sup> Previous research attributes the low rates of college enrollment and graduation of academically and socioeconomically disadvantaged students in part to their low level of academic and practical knowledge needed to be successful in higher education. The majority of this group are first-generation college students, and a high percentage of first-generation college students attend low performing K-12 schools, which consequently affects their college readiness (Hudley et al., 2009).<sup>[8]</sup> The low level of college readiness typically leads to low levels of college success. A 2009 Pell Institute study found that only 11% of first-generation college students will have a college degree within 6 years, compared to 55% of their peers whose parents had college experience and education (The Pell Institute, 2009).<sup>[23]</sup>

In addition to the academic barrier, lack of financial resources and support is a paramount challenge that impedes this group from successfully attaining a degree. According to a Pell Institute's report (2004),<sup>[22]</sup> 54% of first-generation students were financially independent, compared to only 27% of their counterparts. In addition, 30% of first-generation college students are financially responsible for others, while only 14% of non-first-generation students have dependents. It is thus not uncommon that first-generation students must work full time and attend college part time, which contributes to their lower graduation rates (Bers & Schuetz, 2014).<sup>[3]</sup> A

2018 report by National Center for Education Statistics found that 54% of first-generation college students dropped out without a degree because of financial difficulty, compared to 45% of their non-first-generation counterparts (Redford, Hoyer, & Ralph, 2018).<sup>[19]</sup>

While social-emotional stress is a universal issue that many college students may need to deal with, underrepresented college students are more vulnerable to the stress of adjustment and adaption to college system, environment, and culture. Many studies have found that social-emotional development can impact academic-related outcomes (Bavarian et al., 2013)<sup>[21]</sup> and students' overall college experience (Walton & Cohen, 2011).<sup>[27]</sup> Furthermore, a 2016 report published by the World Economic Forum<sup>[28]</sup> found that the social and emotional proficiencies, also known as soft skills, are required to succeed in the fast-changing knowledge economy. It is thus imperative that universities guide students who academically, economically, socially and emotionally to develop and acquire soft skills through social-emotional learning.

As seen in the above discussion, academic, financial, social and emotional barriers impede the success of college students in the disadvantaged group. Higher education institutions in the U.S. have been exploring and experimenting various models to assist this group to enroll, persist and graduate from college. Building upon Tinto's student departure theory (1975, 85)<sup>[24][25]</sup> and student learning community model (1997),<sup>[26]</sup> the use of remedial courses and learning community has been an established approach that is widely used on U.S. campuses to address retention and graduation issues. To reach out and prepare students who have been labeled "at-risk" before their start of college study, summer bridge programs have been adopted in several large state university systems (e.g., the California State University System, the City University of New York System). Since the early 2000s, new models of comprehensive support, pathway programs to support student success have emerged; such programs are distinct in extended length (which is normally at least one year beyond the first year), and one-on-one relationship building (Linkow et al., 2017).<sup>[10]</sup> Boston Coaching for Completion (BosC4C) is one such exemplary program.

Following the release of a landmark study that revealed the Class of 2000 Boston Public School (BPS) graduates' seven-year graduation rate of 35% (Sum et al., 2010),<sup>[20]</sup> "Success Boston College Completion," a city-wide collaborative initiative, was launched, aiming to improve college completion rates for Boston's public school graduates. In response to the initiative, Boston

Coaching for Completion (BosC4C, formerly Success Boston Coaching program that was launched in 2008) is designed to provide coaching and support to BPS students, particularly students who are academically at risk and are from low income family and minority groups. BosC4C coaches help students “navigate and manage the academical, financial, logistical, and social-emotional challenges” (Linkow et al., 2017, p.13)<sup>[10]</sup> through one-on-one, high touch interaction. The most recent 2018 report on the impact of this coaching program shows that the six-year college graduation rate of BPS Class of 2011 reached 52%, a 17% increase from Class 2000’s 35% (McLaughlin & Eaton, 2018).<sup>[11]</sup>

Many universities have similar comprehensive support programs including Excel University (EU, pseudo name). Located in a large city, EU is a large, non-profit, highly ranked, private university with a tradition in promoting social equity and social mobility. Because BosC4C is a similar program and because the demographics of Boston and BPS are comparable to District and DPS, the Success Boston College Completion information is used as a comparison for the Bridge to Success (B2S) program at Excel. Beginning with the Class of DPS 2009, the B2S program at EU recruits high school students from the greater region, who do not meet traditional college entry requirements, to attend an initial year of college at EU in preparation for enrollment in a 2- or 4-year college upon completion. The overall intention for the program is to enable at-promise high school students, from the metropolitan area, to access the university and be successful in the first year of college and beyond.

The purpose of this study, therefore, was to examine the impact of the B2S program on DPS graduates’ college success in graduation and persistence and identify the promising practices of the program that have contributed to the success of the students. Specifically, the study examined the following questions:

1. What are the effects of the B2S program on students’ success in graduation and persistence?
2. How does the B2S program model help students succeed in their first year of college and beyond?
3. How do B2S program student support services help students succeed in their first year of college and beyond?

## Research Design

To answer the above questions, the study adopted mixed-methods approach (Morgan, 2014)<sup>[13]</sup> to examine both the outcome and the process (O’Sullivan, 2004)<sup>[17]</sup> of the B2S program. Specifically, a quantitative descriptive design and descriptive data analysis were conducted to examine the outcomes of the comprehensive support program; a qualitative focus group approach

(in combination with other qualitative data collection techniques) was used to explore the process of the program.

The purpose of the quantitative descriptive analysis was to provide an analysis of the college graduation and persistence status of the comprehensive support program students. College graduation (as measured by degree, diploma, and credential attainment) and persistence (as measured by college enrollment status) are two key measures of college success in two-year and four-year colleges. Given the ethical and practical constraints, experimental design was not feasible to be used to examine the causal effect of the comprehensive support program on persistence and graduation rates. Following the common practice adopted by studies on the same topic (see for example, Sum et al., 2010; McLaughlin & Eaton, 2018),<sup>[20][11]</sup> descriptive statistics were used to show the increase or decrease in students’ graduation and persistence rates across years or across similar groups. The quantitative analysis started with a general description of the demographic characteristics of the 2009-2016 participants of the comprehensive support program. Next, it looked into comprehensive support program students’ college graduation rates and persistence rates, in general and by cohort, year, gender, race/ethnicity, college type and major of study. Comparison analysis with BPS graduates and Success Boston Coaching students was provided whenever the comparison data is available.

The qualitative aspect of the comprehensive support program analysis was designed to describe program activities, in terms of how the academic model helps students succeed in their first year of college and beyond as well as how the program’s student support services help students succeed in their first year of college and persist in enrollment and to graduation. In order to achieve these goals, the focus group approach is most suited, thus adopted for identifying the themes of the program model. Originated in sociology research, the focus group approach is an in-depth interview data collection technique that is accomplished in a group, with a focus on the discussion and interaction inside the group (Liamputtong, 2011).<sup>[9]</sup> The focus group method is a particularly useful approach when the purpose of a study is “to understand better how people consider an experience, idea, or event, because the discussion in the focus group meetings is effective in supplying information about what people think, or how they feel, or on the way they act” (p. 3). Interview data were collected from (1) alumni, (2) focus group with current 1st year cohort, (3) focus group with writing center, (4) focus group with leadership team, (5) focus group with faculty, and (6) focus group with advisors, as

well as document analysis, including course syllabi and other documents that emerged from the interviews. The interview questions were developed around the research questions in a semi-structured format (Doody & Noonan, 2013).<sup>[6]</sup> The interview data was transcribed and emergent themes were summarized (Liamputtong, 2011).<sup>[9]</sup> Each summary was sent back to the focus group participants for member validation (Boeije, 2010).<sup>[4]</sup>

## 2. Outcome Analysis: Results and Discussion

Since its inception in Fall 2009, EU's B2S program enrolled a total of 475 students who successfully completed the program by the end of Spring 2017. There is a highly balanced gender composition across the eight cohorts. Of the 475 students, 236 (49.7%) are females, compared to 239 (50.3%) males. In contrast, the race/ethnicity composition of B2S students is unbalanced in general; Black students represents the largest racial group (53.3%), followed by Hispanic/Latino (25.9%). Asian and White together make up about 12.5% of the B2S student population.

As discussed previously, this study examined two measures of college success of B2S program students: graduation from a two-year or a four-year college, and persistence in college enrollment. The following section will report B2S program students' college graduation, disaggregated by student demographic group, college type, and field of study.

### 2.1 College Graduation Rate in General, and by Gender and Four Major Race/Ethnicity Groups

As Table 1 below shows, B2S students' six-year graduation rates significantly exceed their comparable peers from Boston Public Schools. For example, the first cohort of B2S students surpass their comparable peers from Boston Public Schools Class of 2009's first year enrollees of two-year college by nearly 19% points in six-year college graduation rate. Similarly, the 2nd cohort of B2S students exceed their peers by 10% points.

**Table 1. A Comparison of Six-year College Graduation Rates of B2S Cohorts of 2009 & 2010 and Boston Public School Classes of 2009's and 2011's First Year Enrollees of Two-year College**

	B2S Cohort of 2009	BPS Class of 2009's 1 <sup>st</sup> -Year Enrollees of 2-Year College, Immediate Fall Enrollees
6-Yr Graduation Rate	44.0%	25.3%*
	B2S Cohort of 2010	BPS Class of 2011's 1 <sup>st</sup> -Year Enrollees of 2-Year College
6-Yr Graduation Rate	34.0%	24.0%**

\*Data source for BPS Class of 2009's 1st-year enrollees of 2-year college: See McLaughlin et al. (2016).<sup>[12]</sup> Reaching for the cap and

gown: Progress toward Success Boston's college completion goals for graduates of the Boston Public Schools. Table 1.14, page 34. Available online at <https://www.tbf.org/-/media/tbforg/files/reports/success-boston-capgown-2016-report.pdf>

\*\*Data source for BPS Class of 2011's 1st-year enrollees of 2-year college: See McLaughlin, & Van Eaton (2018).<sup>[11]</sup> Staying the course: Six-year college enrollment and completion experiences of BPS class of 2011 graduates. Chart 6, page 25. Available online at <https://www.tbf.org/-/media/tbf/reports-and-covers/2018/success-boston-april3.pdf>

Table 2 provides a gender and race/ethnicity breakdown of college graduates from B2S program Cohort 1 (2009-2010) to Cohort 5 (2013-2014). Similar to their Boston Public School peers, female college graduates outnumbered male among B2S program students by 22%, that is, for every 100 male college graduates from B2S program, there would be 122 female graduates. While the gender composition is highly balanced among B2S program students in general, 49.7% female vs. 50.3% male, as discussed previously, the gender-based disparity is identified among college graduates, with females exceeding their male peers in the B2S program by 22% in college graduation.

**Table 2. B2S Program Completers' College Graduation by Number and Percentage of Gender, Race/Ethnicity, and Gender & Race/Ethnicity (as of the end of Fall 2017)**

Gender	Number	Percentage
Female	57	61%
Male	36	39%
Total	93	100%
Race/Ethnic	Number	Percentage
Black or African American	43	46%
Hispanic or Latino	26	28%
Asian	11	12%
White	3	3%
Other	10	11%
Total	93	100%
Gender & Race/Ethnic	Number	Percentage
Black or African American Females	24	26%
Black or African American Males	19	20%
Hispanic or Latino Females	18	19%
Hispanic or Latino Males	8	9%
Asian Females	7	8%
Asian Males	4	4%
White Females	2	2%
White Males	1	1%
Others Females	5	5.5%
Others Males	5	5.5%
Total	93	100%

Note. "Other" includes Unknown: 4; Two or more Races: 5; Non-Resident Alien: 1.

With the availability of six-year college graduation rates for Boston Public School Class of 2009, and Success Boston Coaching cohort of 2009, this study took a closer look into B2S cohort of 2009's six-year college graduation rates with these two comparison groups. Similar to EU's B2S program, Success Boston Coaching program targets low socio-economic status Boston Public Schools graduates who are normally first-generation or minority bound for public two-year and four-year institutions. As Table 3 displays, while B2S's cohort 2009 students' six-year graduation rate of 44% is 7.3% lower than Boston Public School class of 2009's 51.3%, it should be noted that the participants of B2S program are District Public Schools graduates who are academically at risk and most likely to leave before college completion, and their 44% six-year college graduation rate is in fact comparable to Success Boston Coaching class 2009's 44.3% rate of six-year college graduation.

All females in the three comparison groups have reached the goal of 52% for six-year college graduation rate – a goal set in 2008 by former Boston Mayor Thomas M. Menino for Boston Public School Class of 2009. Both Boston Public Schools class of 2009 and Success Boston Coaching class of 2009 female's six-year graduation rates reach 58%. B2S program females reach the highest rate of 75% among the three groups, 23% points higher than the city's goal and 17% higher than the peers in Boston Public Schools and Success Boston Coaching program. In contrast, none of the males' six-year college graduation rates among the three comparison groups reaches the goal of 52%. While B2S cohort of 2009's male college graduation rate of 37% trails behind Boston Public Schools peers' 42.2%, it leads Success Boston Coaching peers by 1.8% points. For Boston Public Schools class of 2009, the six-year college graduation rate disparity between female (58%) and male (42.4%) is close to 16%; for Success Boston Coaching class of 2009, the gender disparity is 22.8%. The gender disparity is most substantial in B2S cohort of 2009, with females (75%) exceeding males (37%) by 38% in 6-year college graduation rate.

Among the four major racial/ethnic groups, the six-year college graduation rates from B2S cohort of 2009 varied substantially between Black and other three groups, with Black having the lowest college graduation rate (28%), trailing 72% points behind White and Asian and 47% points behind Hispanic/Latino. In addition, B2S's Black students have the lowest college graduation rate among the three comparison groups (SBC's 53.2%, BPS's 42.1%).

The gender and race/ethnicity disparities in college

graduation rates presented above reveal that male students and Black students have the lowest college graduation rates among the B2S cohort of 2009 students. It is imperative that further research look into these two groups of students in the B2S program to examine if such a pattern has presented and persisted in other cohorts when the 6-year college graduation rates become available.

**Table 3. Six-year College Graduation Rates of B2S Cohort of 2009, by Gender and the Four Major Racial/Ethnic Groups**

	B2S Cohort of 2009 (Completers of B2S)	BPS Class of 2009 (First-Year Enrollees) *	SBC Class of 2009 (First-Year Enrollees) *
<b>Total</b>	44%	51.3%	44.3%
<b>Gender</b>			
Male	37%	42.4%	35.2%
Female	75%	58%	58%
<b>Race/Ethnicity</b>			
Black	28%	42.1%	53.2%
Hispanic	75%	45%	45.1%
Asian	100%	75.3%	65%
White	100%	64.1%	40.9%

*Note.* Fifty-two out of the 475 B2S program completers whose records are not found in NSC are excluded from the percentage calculation for graduation rates.

\*Data source for BPS Class of 2009 and SBC Class of 2009: See McLaughlin et al. (2016).<sup>[12]</sup> Reaching for the cap and gown: Progress toward Success Boston's college completion goals for graduates of the Boston Public Schools. Available online at <https://www.tbf.org/-/media/tbforng/files/reports/success-boston-capgown-2016-report.pdf>

## 2.2 College Graduation by College Types and Majors of Study

This section analyzed the college types that the 93 B2S program participants graduated from as of the end of Fall 2017. As Table 4 shows, the majority of the B2S students (81%) graduated from four-year colleges (including both public and private types). There is a pretty fair share between private (53%) and public (47%) colleges that the 93 B2S students graduated from.

**Table 4. Types of College that B2S Students Graduated from, Cohorts 1-6 (2009-2014)**

2-Year		4-Year		Public		Private	
Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
18	19%	75	81%	44	47%	49	53%

In the absence of comparison data from Boston Public School and Success Boston program in terms of the types

of college that students have graduated from, this section will compare the gender and race/ethnicity compositions and percentages of two-year vs. four-year college attendance among B2S cohort of 2009, Boston Public Schools class of 2009, and Success Boston Coaching cohort of 2009. As Table 5 shows, B2S cohort of 2009 has the most balanced gender share of male (51%) and female (49%), as compared with Boston Public School class of 2009 (42.8% male vs. 57.2% female) and Success Boston Coaching class of 2009 which has a disproportionately high percentage of female (62.4%) (as compared to 37.6% male). When combining the Black and Hispanic/Latinos (two groups that are normally underrepresented in college), B2S cohort 2009 has the highest number of Black and Hispanic students (75.6%), as compared to Boston Public Schools class of 2009's 65.2% and Success Boston Coaching class of 2009's 71%. B2S cohort of 2009 has disproportionately low share of White (4.9%), as compared to Boston Public Schools class of 2009 (19.7%), but is similar to Success Boston Coaching class of 2009's 4% of White.

The B2S's 41 completers from cohort of 2009 started matriculation into 2-year and 4-year colleges in Fall 2010. It is notable that B2S cohort 2009 has the highest number of students (33 out of 41, 80%) attending 4-year colleges after completing the B2S program, as compared to Boston Public Schools class of 2009's 73.3% and Success Boston Coaching class of 2009's 58% of students attending 4-year colleges. This number is even higher than Boston Public Schools 2003's exam school graduates' 74.3% 4-year college enrollment rate.

**Table 5. Types of College Attended: A Comparison of B2S Cohort of 2009, Boston Public Schools Class of 2008, and Success Boston Cohort Class of 2009**

	B2S Cohort of 2009		BPS Class of 2009 Fall Enrollees *		SBC Cohort Class of 2009 Enrollees *	
	41	100%	2183	100%	250	100%
<b>Gender</b>						
Female	20	49%	1248	57.2%	156	62.4%
Male	21	51%	935	42.8%	94	37.6%
<b>Race/Ethnic</b>						
Asian	6	14.6%	308	14.1%	21	8%
Black	22	53.7%	872	40.0%	72	29%
Hispanic	9	21.9%	551	25.2%	105	42%
White	2	4.9%	430	19.7%	10	4%
Other	2	4.9%	22	1.0%	42	17%
<b>College Type</b>						
Two-Year	8	20%	576	26.4%	105	42%
Four-Year	33	80%	1601	73.3%	145	58%

Note. "Other" includes American Indian or Alaska Native, Non-resident Alien, Two or more races, and Races unknown.

\* Data Source for the gender, race, and college types attended

by BPS Class of 2008 Fall Enrollees and SBC Cohort Class of 2009 Enrollees: See Sum et al. (2010).<sup>[20]</sup> The college success of Boston Public School graduates from the classes of 2000-2008: Findings from a post-secondary longitudinal tracking study and the early outcomes of the Success Boston college completion initiative. Available online at [https://www.bostonpic.org/assets/resources/Research\\_Postsecondary\\_College-Success-Findings-CLMS.pdf](https://www.bostonpic.org/assets/resources/Research_Postsecondary_College-Success-Findings-CLMS.pdf)

Regarding the majors of study pursued by B2S graduates (as of the end of Fall 2017), as Table 6 displays, the top three majors (24%) pursued by graduates of B2S include Business Administration, Criminal Justice, and Psychology; 15% in General Concentration, Management, and Political Science. Fifteen percent (15%) pursued STEM majors, including Biology, Electrical Engineering, Automotive Technology, Chemistry, Computer Engineering, Health Sciences, Information Technology, Marine Biology, and Mechanical Engineering.

**Table 6. Majors Pursued by B2S Students (as of the end of Fall 2017)**

Percentages	Majors
8%	Business Administration
8%	Criminal Justice
8%	Psychology
5%	General Concentration
5%	Management
5%	Political Science
3% / each	Biology Communications & Journalism Liberal Arts
2% / each	Accounting, Communication Studies, Electrical Engineering, Health Management, Human Services, Sociology
1% / each	AA General Studies, Architecture, Automotive Technology, Business, Chemistry, Child Development Non Licensure, Computer Engineering, Economics, Economics/Mathematics, Education, Education Administration, Environmental Geology/Chemistry, Exercise And Health Science, Fine Art, Food And Nutrition, French, General Psychology, Government Major, Graphic Arts &, Visual Communication, Health Sciences, Healthcare Management, History, Human Services/Intl Affairs, Illustration, Information Technology, Lib Arts - Psych/Soc (Aa), Marine Biology, Mechanical Engineering, Pharmacy Technician, Philosophy

### 2.3 College Persistence by Cohorts and Years for Persistence

Since the data collected and used in this report is through the end of Fall 2017, the one-year persistence rate can be tracked up to Cohort 8 (2016-2017). If a student in cohort 8 persists into Fall 2017 enrollment, he/she is considered one-year persistence in college enrollment. Out

of a total of 475 completers of B2S program from Cohorts 2009 to 2016, 423 have persisted into the following academic year enrollment after completing the B2S program, which makes an overall one-year persistence rate of 89.1% for B2S students across the eight cohorts.

Two-year persistence rate is calculated for Cohorts 1-7. A total of 330 out of 334 Cohorts 1-7 students persist into the third academic year enrollment, which makes an extremely high 98.8% two-year persistence rate for B2S program students. Future research needs to monitor closely this finding to determine if this is just an incidental finding or a persistent trend when more cohorts' two-year persistence data become available.

As shown in Table 7 below, B2S program students' persistence rates in college enrollment drop steadily over years. The biggest decrement in persistence rate is from 4-year (65.9%) to 5-year (29.8%), with a 37% huge drop in persistence into the fifth-year college enrollment. This finding is important to college administration, student support services, and parents – additional attention and extra supports should be put in place to push students who have persisted for four years in college to the fifth year of college enrollment.

**Table 7. B2S Students Persistence Rates in College Enrollment, By Years**

	1-year	2-year	3-year	4-year	5-year	6-year	7-year	8-year
Cohorts 1-8 2010-2017	89.1% 423/475							
Cohorts 1-7 2010-2016		98.8% 330/334						
Cohorts 1-6 2010-2015			83.6% 240/287					
Cohorts 1-5 2010-2014				65.9% 151/229				
Cohorts 1-4 2010-2013					29.8% 61/205			
Cohorts 1-3 2010-2012						17.8% 27/152		
Cohorts 1-2 2010-2011							9.6% 9/94	
Cohorts 1 2010								4.9% 2/41

In addition to the impressive 1-year and 2-year persistence rates in college enrollment achieved by B2S students across all cohorts, B2S students' overall six-year persistence rate of 17.8% is also worth mentioning. With the availability of six-year college enrollment status of B2S comparable peers - BPS class of 2011's first year enrollees of two-year college, the following table displays and compares B2S cohort of 2011 and BPS class of 2011's first year enrollees of two-year college in six-year

persistent rate in college enrollment. As Table 8 shows, B2S students exceed their peers by 6.6% points in six-year persistence rate in college enrollment.

**Table 8. A Comparison of Six-Year College Persistence Rates for B2S Cohort of 2011 and BPS Class of 2011's First Year Enrollees of Two-Year College**

	B2S Cohort of 2011	BPS Class of 2011's 1 <sup>st</sup> -Year Enrollees of 2-Year College *
6-year Persistence Rate	19.4%	12.8%

\* Data source for BPS Class of 2011's 1st-year enrollees of 2-year college: See McLaughlin, & Van Eaton (2018).<sup>[11]</sup> Staying the course: Six-year college enrollment and completion experiences of BPS class of 2011 graduates. Chart 6, page 25. Available online at <https://www.tbf.org/-/media/tbf/reports-and-covers/2018/success-boston-april3.pdf>

### 2.4 College Persistence by Gender, Race/Ethnicity, and College Type

This section will analyze B2S students' persistence outcomes in comparison with students from Boston Public Schools and Success Boston Coaching program. The persistence analysis in this section is, therefore, purposively limited to one-year and two-year so as to compare with the persistence rates of Boston Public Schools and Success Boston Coaching program currently available for the year of 2008 and 2009.

As Table 9 displays, the B2S cohort 1 (2009) students' one-year persistence rate is significantly high (90%), with only four (out of 41) B2S program completers who stopped out of their second-year college enrollment. In comparison with other two groups, B2S program was nearly 10% points higher than Boston Public Schools and 3% points higher than Success Boston Coaching program. Similarly, B2S Cohort 1 (2009) students' two-year persistence rate ranks the highest among the three comparison groups, exceeding Success Boston Coaching program by 4% points, and exceeding Boston Public Schools by 3% points.

Among gender and racial-ethnic groups, the one-year college persistence rates of B2S program male participants were 3% points lower than Success Boston Coaching peers, but 11% points higher than their female peers in Success Boston Coaching program. B2S Black students trail 5% points behind their Success Boston Coaching peers in one-year persistence, but its Hispanic/Latino students exceed Success Boston Coaching peers by 6% points. B2S cohort of 2009's two-year persistence rate exceeds Success Boston Coaching 2009's in all subgroups of gender and race/ethnicity groups.

Similar to the finding on college graduation of B2S program students' gender groups, the gender disparity between male and female B2S program students is also evidenced in college persistence rates. For example, female students in B2S cohort of 2009 exceed their male

peers by 9% points in one-year persistence rate and nearly 14% points in two-year persistence rate.

**Table 9. Comparisons of One-Year and Two-Year College Persistence Rates for B2S Cohort of 2009, Boston Public Schools Class of 2009, and Success Boston Class of 2009**

Group Persistence	B2S Cohort 2009	BPS Class 2009 *	SBC Class 2009 **
<b>One-Year Persistence</b>			
All	90%	80.5%	86.7%
Male	81%	Not available	84.0%
Female	100%	Not available	88.5%
Black	86.4%	Not available	91.4%
Hispanic/Latino	88.9%	Not available	83.2%
Total	41	Not available	211
<b>Two-Year Persistence</b>			
All	78%	74.8%	73.9%
Male	71.4%	Not available	67.9%
Female	85%	Not available	77.7%
Black	77.3%	Not available	77.1%
Hispanic/Latino	77.8%	Not available	68.3%
Total	41	Not available	211

\* BPS Class of 2009 Data Source: See McLaughlin, & Eaton (2018).

<sup>[11]</sup> Staying the Course: Six-year college enrollment and completion experiences of BPS class of 2011 graduates (pp. 43-44). Available online at <https://www.tbf.org/-/media/tbf/reports-and-covers/2018/success-boston-april3.pdf>

\*\* SBC Class 2009 Data Source: See Sum et al. (2013).<sup>[21]</sup> Getting closer to the finish line: The college enrollment and completion experiences of graduates of the Boston Public Schools (p. 83, Table 23). Available online at [https://www.bostonpic.org/assets/resources/Research\\_Postsecondary\\_Getting-Closer-to-the-Finish-Line.pdf](https://www.bostonpic.org/assets/resources/Research_Postsecondary_Getting-Closer-to-the-Finish-Line.pdf)

Table 10 compares B2S cohort of 2009 students' one-year and two-year persistence rates by college type (two-year vs. four-year) with their peers from Boston Public School class of 2009 and Success Boston Coaching class of 2009. As Table 13 shows, B2S cohort of 2009 students exceed peers from Boston Public Schools in both one-year and two-year persistence rates at two-year colleges, but trail behind Success Boston Coaching peers in one-year persistence rates at both two-year and four-year colleges. In general, B2S cohort of 2009 students attending four-year colleges exceed their peers attending two-year colleges in one-year persistence by 5.5% points and two-year persistence by 5.1% points.

**Table 10. Comparison of One-year and Two-year College Persistence Rates for B2S Cohort of 2009, BPS Class of 2009, and Success Boston Class of 2009, by Type of College**

Types of College	B2S Cohort 2009	BPS Class 2009*	SBC Class 2009**
<b>One-Year Persistence</b>			
Two-Year	74.6%	62.8%	77.1%
Four-Year	80.3%	85.9%	91%

<b>Two-Year Persistence</b>			
Two-Year	68.3%	44.0%	Not available
Four-Year	73.4%	77.8%	Not available

\*Data Source for BPS Class 2009's one-year and two-year persistence rates by college type (two-year vs. four-year): See Sum et al. (2013).<sup>[21]</sup> Getting closer to the finish line: The college enrollment and completion experiences of graduates of the Boston Public Schools (p. 79, Table 18). Available online at [https://www.bostonpic.org/assets/resources/Research\\_Postsecondary\\_Getting-Closer-to-the-Finish-Line.pdf](https://www.bostonpic.org/assets/resources/Research_Postsecondary_Getting-Closer-to-the-Finish-Line.pdf)

\*\*Data Source for SBC Class 2009's one-year persistence rates by college type (two-year vs. four-year): See Sum et al. (2010).<sup>[20]</sup> The college success of Boston Public School graduates from the classes of 2000-2008: Findings from a post-secondary longitudinal tracking study and the early outcomes of the Success Boston college completion initiative (pp. 19-20, Chart 9 and Chart 10). Available online at [https://www.bostonpic.org/assets/resources/Research\\_Postsecondary\\_College-Success-Findings-CLMS.pdf](https://www.bostonpic.org/assets/resources/Research_Postsecondary_College-Success-Findings-CLMS.pdf)

### 2.5 Summary of Outcome Analysis

Since launching its first cohort in Fall 2009, EU University's B2S program has enrolled 475 students who have successfully completed the B2S program. These B2S students are predominantly Black and Latino/Hispanic students from Boston public traditional schools who are at risk academically and are less likely to access, persist, and graduate from college. The quantitative analysis of B2S program students' graduation and persistence rates reveals encouraging positive results and indicate that Excel University's B2S Program is working effectively to help this group of District Public School graduates to succeed in college.

As the analysis and comparison of the 6-year college graduation rates reveal, B2S program's very first cohort, cohort of 2009, achieves 44% of 6-year college graduation rate, which closely matches with Success Boston Coaching program's 6-year college graduation rate of 44.3% with its very first class of 2009. B2S program female students' 6-year college graduation rate of 75% has surpassed the goal of 52% for 6-year college graduation rate, set in 2008 by the city of Boston for Boston Public School class of 2009. However, it should be noted that the gender and race/ethnicity disparities in college graduation among B2S cohort of 2009 students are substantial, with B2S program having the largest disparity gaps among the three comparison groups. Future research efforts are needed to look into if the widening gender and race/ethnicity disparities are a persistent pattern in the B2S program in other cohorts.

Similarly, the analysis of persistence rates in college enrollment of B2S program students and comparison



with Boston Public Schools 2009 graduates and Success Boston Coaching program's 2009 peers have also shown encouraging results, with B2S cohort of 2009 students' one-year and two-year persistence rates exceed both Boston Public Schools and Success Boston Coaching program, and B2S program's one-year and two-year persistence rates are higher than Boston Public Schools at both two-year and four-year colleges. It should be noted that gender disparity, again, has been evidenced in the college persistence rates, with male students in the B2S program trailing behind their female peers in both one-year and two-year persistence rates. It should also be noted that, as discussed in the persistence analysis as well, the biggest decrement in persistence rate is from 4-year (65.9%) to 5-year (29.8%). Future research and efforts are needed to help B2S students to persist into the fifth year of college enrollment so as to reach the finish line of their college completion.

### 3. Process Analysis: Results and Discussion

Process analysis results will be presented from the data from focus group interview, including faculty, administration team, advisors, writing center, students, and alumni.

#### 3.1 Findings from Focus Group Interview with Faculty

The four B2S program faculty members in attendance at the focus group were asked to describe how students were supported academically and with student support services in order to be successful in the first year of college and beyond. Three themes emerged from the conversation, which will be discussed in detail below.

**B2S Students: Resilient with high personal expectations but challenged by college content, skills, and environment.** Faculty described B2S students as resilient with personal challenges and academic challenges in the college environment. The faculty also believed that many students in the program had a strong desire to be an EU Day student, which is feasible for some, but not all B2S students, creating an additional challenge.

**"Holistic" faculty role: Going beyond content delivery.** The faculty described their role as "holistic": going beyond the bounds of what is traditionally required for a faculty member. They described unique approaches that they incorporated into their classroom such as integration of technology, more regular and intensive communication with students and increased use of formative assessment. Faculty identified an increased responsiveness to student interest as a useful technique. More specifically, faculty tried to make content relevant and interesting to students' lives. In order to make content interesting and useful to

students, at times they had to go outside of the traditional classroom to get experiences with potential majors and professions.

Faculty described the balance, between meeting students' needs and holding them to high expectations so they would be prepared for the next year of college and beyond, as creating tension within their roles. One particular concern faculty had was about student performance in mathematics and they suggested extra efforts be put in to improve B2S students' math achievement.

Faculty recognized the critical role of collaboration with advisors and services outside of the classroom in ensuring that students had basic needs met so that they could focus on academics. Finally, faculty described how their relationship with each other was different than traditional faculty collaboration. B2S faculty met with each other regularly and with the advisors to discuss student performance and how to best support their learning, similar to a professional learning community model (DuFour, 2004).<sup>[7]</sup>

**Isolation of B2S students.** Faculty described B2S students as isolated or segregated within the university. The segregation is visible to faculty and students because the B2S courses are predominantly students of color and the rest of the university courses are typically predominantly white. Some faculty seemed to think this mattered for student success because students were not always aware of the academic and cultural expectations of the broader university. For example, some B2S students have been known to have their heads on the desk in class and to play with technology. However, another faculty member disagreed and pointed out that students in other programs are also distracted with technology and not perfect students.

#### 3.2 Findings from Focus Group with Administrative Team

The Director and Interim Director of B2S as well as the Assistant Director participated in the Administrative Team Focus Group. They described how the program was designed to support students academically and with other support services in the original planning of the program as well as in the current iteration of the program, throughout the comprehensive support year and even as students matriculate at other schools. The following four themes emerged from the focus group.

**Inception of program.** When the program director was hired, a basic structure of B2S had already been planned; however, she led the design of the curriculum and faculty role. She also hired all of the faculty. Advising, including The College Experience class, individual advising of

students related to academics and socio-emotional issues, and support with the transfer process also was part of the initial program design.

**Student challenges and the need for additional support.** B2S Students have major personal challenges. As the Director put it, B2S students face “significant traumas.” Students also have academic challenges. The advisors strategize about balancing the need for student success in courses, maintaining an acceptable GPA, and earning enough credits for transfer as they manage student schedules.

**Key parts of the model throughout the program.** There are several aspects of B2S that occur throughout the program including small group and individual intervention in academic subjects, getting social and academic support from B2S alumni, and support from faculty and advisors. Support from advisors include guiding students; having high expectations while helping students navigate challenges; and having a holistic, collaborative approach to teaching and advising.

**Transfer period.** The B2S program helps students with the transfer process to a 2 or 4-year degree program and after the students begin their new degree programs even though it is beyond the scope of their work responsibilities. For example, B2S advisors help students troubleshoot problems as they come up in their new schools and programs. The B2S advisors have formed relationships at schools where many B2S students attend to help students find the resources they need.

### **3.3 Findings from Focus Group with Advisors**

Two B2S advisors, in attendance at the focus group, were asked to describe how were students supported academically and with student support services in order to be successful in the first year of college and beyond. The advisors summed up their work as supporting students based on their needs. More specifically, an advisor said,

It's a wide-ranging role in that we can do different things depending on the student's need. I would say that I take my cue from where the student is. It is definitely academic support plans and social support and emotional support, and sometimes thinking through 'life stuff', which is stuff that comes up for students outside of their education. It could be a number of different things on any given day depending on what the student needs at that given moment, and just working with them to put stuff in place that would benefit them and their goals.

Two themes emerged from the focus group with advisors: A description of B2S students' needs and methods the advisors use to support those needs.

**B2S student needs.** The advisors described the

B2S students as entering into the program with several needs, including academic, social/emotional, “life stuff” and financial, that the advisors help meet in order to support student success the program and beyond. Related to “life stuff,” students struggle with getting access to food, medical care, and mental health supports. Students are challenged academically, by not fully understanding the system of college and how to negotiate relationships with faculty and others. Many students also come in with gaps in their academic content knowledge which creates challenges. Students also largely come from low-income backgrounds and have to work long hours to make ends meet for themselves and family members. Students also struggle with personal and family pressures to be successful in college and to get into Excel or a different university after completion of B2S. Advisors work to help students manage these needs so they can be successful in college.

**Methods of meeting B2S student needs.** The advisors have multiple methods of working to help students manage their diverse array of needs so they can be successful academically in B2S and beyond B2S. More specifically, each student has a personalized learning plan and regularly scheduled, as well as impromptu meetings with their advisor. All students are required to attend orientation and a class about the college experience. Advisors also intentionally build community, encourage social supports for students and explicitly teach students to advocate for themselves. Because of the high-levels of interaction with B2S students, advisors have relationships with students and use their knowledge of students in regular meetings with faculty to help support student academic progress.

### **3.4 Findings from Focus Group with Writing Center**

During the focus group, writing specialists were asked to describe how they support the academic success of B2S students. The writing specialists described the structure of the Writing Center, the purpose of writing support, the structure of tutoring sessions, integration with the B2S program, writing assessment, and building rapport with students. The focus group summarized these ideas, supported with comments from the writing specialists.

**Structure of the Writing Center.** One of the writing specialists described the structure of the B2S Writing Center:

Currently, the Writing Center acts as a lab that is attached to the English class. [Students have] two required 30 minute meeting with us [per term]... As the lead writing specialist, I get all of... the student schedules at the start of the semester. And then [I] find

space in their schedules for two, half-hour meetings. And so they are paired with that writing tutor for the entire year, typically.

**Purpose of writing support.** The writing specialists described writing as being linked to thinking and the process of thinking. Writing is important for college students because it helps them understand their own ideas, other people's ideas, and writing is used in all subject areas and different professions, in multiple ways. The writing specialists described their work as helping to support "far learning." B2S students can't learn everything that they need to learn in one year, but they can learn habits and skills that will help them as they continue in their learning journey.

**Structure of tutoring.** The writing specialists also described how they support students with their writing beginning with helping the students reflect and complete a self-assessment. During the tutoring session they also help the students with writing strategies.

**Integration with the B2S program.** The writing specialists indicated that the Writing Center's work is integrated with the B2S program through participating in B2S team meetings and through the writing specialists using the B2S curriculum throughout their tutoring sessions.

**Rapport with students.** The writing specialists both indicated that they develop "a rapport" with students during the year which they use to further support and help the students. More specifically, one writing specialist said, "We definitely develop a rapport with all of our students over the course of the semester or the course of a year." The rapport with students, helps writing specialists work with students in a more intimate way on their writing. The trust that the writing specialists build with students also enables them to support the students and the advisors with topics beyond writing such as helping to manage student crises.

**Writing assessment (pre- & post-test).** One of the writing specialists described the pre- and post-writing assessment that B2S and the Writing Center uses. The students write a blue book essay before entering the B2S program and at the end of the program. This assessment is used to measure growth.

### 3.5 Findings from Focus Group with Students

During the focus group, current B2S students were asked to describe how the B2S program supports their success in college. The students described their own background and college plans, support within B2S, and

challenges they experienced. The following summarizes these ideas, supported with comments from the students.

**Student background information.** Student One is interested in sociology, racial discrimination, and sexism. At the time of the focus group, she was unsure of an exact major. Student Two was interested in the following as possible majors: Electrical engineering, micro-technology engineering, economics or American Sign Language. Student Three wanted to go to law school after college. As he put it, "I want to make a more positive change in my own community. Especially for my home, coming from a lower-class family living in the hood. You don't realize how day to day life is and just the struggles people in my community constantly face. I'm just tired of seeing that negative path kind of like repeating itself with people over and over and over again. Just want to fight against that." Student Four planned to major in cultural anthropology and wants to minor in education and possibly become a teacher. She also wants to go to law school "to make a difference in the Boston area because there's a lot that can be improved." Student Five planned to major in finance or business management and has plans to go to graduate school to pursue an MBA. Student Six planned to major in theatre or performing arts and is not sure of her plans after college. Four of the six students want to continue at Excel for their sophomore year. The other two were undecided.

**Support within B2S.** All focus group participants agreed that the program supports were really helpful for them. Supports included in the program as a whole and the program in its entirety as being a support. All of the students described the faculty as supportive. For example, faculty in the B2S program help students by building relationships with students, close and frequent communication with students, and being accommodating with coursework. Participants also agreed that faculty were holding them to high expectations and preparing them for the next year of college; however, students felt like faculty could be even more accommodating regarding late work and excused absences.

The students also described the advisors as being a great support system by helping them get through the current academic year while at the same time preparing them for the next academic year. More specifically the advisors helped three of the students wake up in the morning. One student said that the advisor let them borrow some money. Another student indicated that the advisor helped students with getting connected to the Disability Resource Center. Students also described the advisors as motivating and encouraging.

**Student challenges.** Students indicated that one of their challenges within the program are course scheduling

and course choices. Two students said that they wanted more flexibility regarding the time of day courses are taking because they interfere with other aspects of their lives including helping at home, work, and childcare. Two students indicated that they wanted more choice in selecting classes. More specifically, they wanted to be able to have a broader choice of electives so that they could have more exposure to potential majors.

Five of the six students agreed that they wanted to be more integrated with the broader campus, but the level of integration depended on student needs. For examples two students wanted to live on campus, but the others didn't feel like living on campus was feasible based on their other responsibilities. Even if students didn't live on campus, they still wanted to be able to be aware of and take advantage of on-campus events.

Four of six students, the same students that didn't want to live on campus, believed that transportation was a challenge. Barriers included the time it takes to get to campus, limited transportation options, and the cost of transportation.

The students also described challenges that they had with their classes. All of the challenges they described were with academic habits such as turning in coursework on time, motivation, or procrastination. No one mentioned challenges with academic skills or content.

### ***3.6 Findings from the Interview with Program Alum at University of Massachusetts - Boston***

At the time of the interview, the participant, an alum of B2S(B2S), was a junior at a local public university, majoring in exercise science. The alum described getting connected with the program and his personal interest, support from advisors, transitioning to his new university, tutoring support, personal, peer, family, and university support as well as program faculty.

***Getting connected with B2S and interests.*** The alum decided to apply for the B2S program because of financial reasons and because of the resources offered by the program. The alum always had an interest in the human body and athletics, although he wasn't sure when he began B2S about his specific major and career. After college, the alum would like to go to graduate school and eventually become a chiropractor.

***Support from advisors.*** The alum described the advisors as being instrumental in his success. He described them as being multipurpose helpers. More specifically, he said they could help with life, academics, financial aid, and they were persistent in following up. He also believed they were "loving and open." The advisors also helped with the transfer process including deciding, applying, and helping to navigate the school once admitted.

***Transition to a local public university.*** The alum believed that he was well prepared for the transition to a local public university from B2S for his sophomore year. More specifically, he believed that learning how to advocate for yourself, feel comfortable sharing his opinion, and finding resources were key to his success. He believed that B2S helped him become more professional. His biggest challenge was adjusting to the science classes because he didn't take any science classes during B2S.

***Tutoring support.*** The alum believed that his writing tutor was a big key to his success in B2S and now at his present university. His tutor has helped him express his idea in multiple formats including writing. He also indicated that being in conversation with her helps to reduce his stress levels. During the B2S program, he was scheduled to meet with her once a week, but he usually met with her at least twice a week. His writing tutor also helped him with sentence structure and grammar.

***Personal, peer, family, and university support.*** The alum said that support from himself, peers, family, and others outside of the B2S program have helped him be successful. He believed that in order to be successful you have to be motivated as an individual. He indicated that friends are helpful because they're going through the same thing and they can relate to each other. He was also able to get support through a mentoring relationship with a man of color at Excel University that he met through B2S. Finally, he believed family, specifically, his mother was helpful. More specifically, his mom went to the same university, graduating in 1999 and had a health-related major. Even though, he is a second-generation college student, the alum believed that going to college wasn't a given for him especially because his dad and older brother didn't go.

***Faculty.*** The alum contrasted the faculty in the B2S program with the faculty in more traditional settings. He believed that the faculty in B2S were more interactive and encouraged students to share their voice. He also seemed to indicate that the content of the courses was different, specifically mentioning studying racism. He also indicated that he was able to learn in B2S because the professors were "very good" instructors.

### ***3.7 Findings from Interview with Program Alum at Excel University***

At the time of the interview, the participant, an alum of B2S, was a sophomore at EU majoring in business administration. The alum described his experiences at EU during B2S and his sophomore year, and the academic support he received as an B2S student. The focus interview identifies the following themes.

***Getting connected with college and B2S.*** This alum

learned about B2S through guidance counselor. The alum decided to apply for B2S because it was, as he said, “the best opportunity, and financially, it was the cheapest option.” The alum’s second option, if he didn’t get into B2S was to go to a different local university. The alum decided to major in business administration because of his desire to be in corporate law

**Experiences at EU as a student: Building on a strong foundation.** The alum’s favorite thing about B2S was the faculty support. Regarding faculty support, the alum felt like the classes were interesting and relevant to alum interest. The alum described his current EU classes, as a sophomore, as being less engaging and relevant. The least favorite part of B2S was the commute to and from campus. He said,

It was really inconvenient to have to wake up earlier than most students and have to get to early morning classes, when I had to take the bus and the train. [Now,] I don't live on campus, but I have an off-campus apartment, which is like a 15-minute walk, so it's a lot better.

The alum works as a student employee at EU beginning during the comprehensive support program. He applied for a job at career fair and made a personal connection with a department that was hiring.

**Academic support at EU as a B2S student.** At the time of the interview, the alum was doing well as an Excel student; however, he did have to make adjustments after being an B2S student. The alum indicated that he was doing well and that B2S had prepared him for his sophomore year at EU. The alum also believed advising had enabled him to be successful with personal matters and academics. Also, as a former B2S student at EU, he has access to another advisor from the African-American Institute who is helpful, especially in preparing for next steps after graduation. Tutoring during the B2S program helped enable his success and he still continues to utilize B2S tutors even though he is now out of the program. Finally, he described peers as being an important support system for him during B2S and now.

### 3.8 Summary of Process Analysis

1. **Academic and student support services are integrated throughout the program.** This study began with the assumption that there were two distinct components, (academic support and other student support services) of the program that helped students finish the program, enroll in a two or four-year degree program and graduate. However, it became evident that the distinction between academic support and student support services is artificial. With the collaborative work between the advisors, tutors, and faculty, the learning opportunities

for students, whether academic, personal, social, and emotional are integrated throughout the program.

2. **Advising allows students to be known so that their personal, academic, and socio-emotional needs can be supported.** From the time that students are accepted into the program, advisors begin learning about what the students’ academic, personal, and socio-emotional needs. Based on that understanding of where students are coming from, advisors put a personalized learning plan in place for students. The personalized learning plan includes academics, but it also includes ensuring that students have the resources needed so that they can attend to their academics. As such, the advisors address and find resources for issues such as food insecurity, housing, transportation, and healthcare. The students and alumni all indicated that advising was key to their success throughout the B2S program. The alumni indicated that contact with advisors continued to help them be successful in college even once they finished the program.

3. **Supportive faculty and relevant coursework helps students stay engaged.** Faculty described themselves as being responsive to students’ academic needs. Faculty also indicated that they tried to make their courses relevant, interactive, and engaging for students. They also said that they tried to be communicative with students and hold them to high expectations while helping to support students through challenges. The students indicated that faculty were responsive and courses were relevant. The students were also aware that in their next year of college faculty would not be as engaging, relevant, or supportive. Both alumni indicated that it was a transition, taking classes with faculty who were not as supportive; however, they had been able to make that transition by using skills they learned in B2S such as getting tutoring or asking for help.

4. **Recruitment and application begin the support structures needed for student success.** Information collected in the recruitment and application process is used once students begin to begin getting students the resources needed to be successful. The B2S administrative team indicated that they had a “good” sense of what characteristics are needed in order to succeed in the program.

5. **Advisors and tutors continue to support students through challenges even though they are no longer a part of B2S.** The original design of B2S included MOUs to help ensure that students would have the resources and supports needed to be successful upon transfer to a two or four-year degree program. However, the MOUs are not in place and there are no formal relationships with any two or four-year programs. As such, the advisors help support

former B2S students as they reach out, on an individual basis. Both alumni interviewed said that they were still utilizing the services of B2S advisors and/or tutors. However, with the program's current student body, plus the growing number of alumni, this is beyond the scope of their responsibilities. Nonetheless, it is important to them. Both alumni indicated that they had reached out to their advisors from the B2S program for support.

**6. The B2S program prioritizes community building and relationships amongst the B2S students and alumni indicated that peer relationships are an important part of their success.** Community build activities are built into B2S programming. Alumni indicated that they have maintained relationships from the B2S program and that this was an important part of their success. Literature on college-success supports the importance of students' peer group during the first year (Astin, 1993)<sup>[1]</sup> and beyond.

**7. Alumni indicated that B2S had prepared them to get help and find resources needed to be successful, and they described human-support (i.e. friends, family, mentors, advisors, tutors) as being one of those key resources.** Both alumni talked about the importance of other people in helping them to be successful. They both mentioned friends, advising, and tutoring connected with B2S that they were still utilizing. Beyond B2S, both of the alumni mentioned their mothers as being important to their success.

**8. The program has three distinct phases of support for students: Recruitment and Application, Support during the "B2S Year," and Application, Enrollment, Transition, and Graduation.** There are several activities and benchmarks within the B2S program that can be monitored and assessed to have a better understanding of student success while in the B2S program and beyond.

#### **4. Implications of the Results from Outcome and Process Analyses**

The outcome analysis of the B2S program has revealed positive, promising results and identified a few concerns at the same time. Both promises and challenges identified in the college graduation and persistence analysis shed light on directions for B2S program improvement and future research studies.

As discussed in the outcome evaluation analysis section, while the 6-year college graduation rate of 44% for B2S's first cohort is very encouraging, signaling a promising start of the B2S program, the second cohort of 2010-2011's 6-year graduation rate drops significantly to 34%, 10% points decrease across the two cohorts. Such a huge variation across cohorts warrants further research investigation of the B2S program at the cohort level. Future studies could look into each cohort participants'

demographics composition, the ratio of GED and high school diploma, modification in curriculum and course design or support services, along with the effectiveness of course instructors, advisors, and supporting staff; a statistical testing of a model involving all these factors could help identify B2S the significant factors that may have contributed to the variation in college graduation and persistence rates across cohorts. Similar to the variation in graduation rates across cohorts, B2S program students' persistence rates in college enrollment also vary over the years. As identified in the overall trend of persistence rates of B2S students, the biggest decrement in persistence rate is from 4-year (65.9%) to 5-year (29.8%), with a 37% huge drop in persistence into the five-year college enrollment. This finding has important implications to stakeholders of higher education, including college administration, student support services, and parents – when a college student is not able to achieve the four-year completion goal, extra attention and supports are needed in this critical time to push the college student to persist into the fifth year of college enrollment so as to reach the finish line of college graduation.

The gender and race/ethnicity disparities in college graduation and persistence rates are alarming. More specifically, male students and Black students have the lowest 6-year college graduation rates among the B2S cohort of 2009 students. It is imperative that further research look into these two groups of students in B2S program to examine if such a pattern has presented and persisted in other cohorts when the 6-year college graduation rates become available. In addition to gender and race/ethnicity disparities in college graduation and persistence measures, it is important to point out that only fifteen percent (15%) of the college graduates from the B2S program have pursued STEM majors. Given the huge demand for college graduates from STEM-related job market, the B2S program may want to update the foundation course offerings and advising in student's potential field of study so as to better prepare the students for a fruitful career.

The process evaluation helped reveal the logic of the program and how programmatic activities currently support or could be modified to further support outcomes. Given that B2S academics and student support services are integrated throughout the program, a more accurate description of the program logic, than what was determined at the outset of this study, would be linear, describing the phases of support that students get throughout the program: Recruitment and admissions, time in the program, and then the transfer period. Each of these periods of time have potential benchmarks that

could be monitored and short-term outcomes that could be measured. This information could help the program understand the extent to which students are moving through the phases and what additional supports, if any, are needed. Creating an updated logic model and theory of change are recommended next steps. This type of document would detail the key activities, outcomes, and data that are already being collected or could be collected to monitor progress and measure outcomes. B2S could then determine what are priority areas for ongoing, internal monitoring and assessment of the program and/or determine needs for external evaluation. For example, are the students with the lowest persistence and graduation rates struggling throughout the comprehensive support year or do they begin to struggle only after transfer into a 2 or 4-year degree program? In order to facilitate further program evaluation, it will be important to have continued programmatic conversations about FERPA and what data usage is allowable for the purposes of research and evaluation and how to ensure protection of that data.

The process evaluation in this report, described how the program supports students from the beginning of the program throughout their time in two or four-year programs. However, it is evident that most of the support for students, comes during their comprehensive support year and that formal support quickly diminishes after students complete the program. Initially in the program design, MOUs (memorandum of understanding) with local universities and colleges were intended to ensure that B2S students had the support needed, but this has not been a part of the program. As such, advisors do provide support if students reach out. However, the ability to persist and graduate seems to be largely dependent on the student using what they learned in B2S and finding as well as using their own resources (including people) in order to be successful. The two alumni that the evaluators spoke with indicated that they were doing well in college and on track for graduation. However, the evaluators only interviewed two alumni out of 475. Additional interviews with alumni who haven't persisted or graduated would be important in order to understand what were the issues that led to dropping out of college. Also, additional interviews with alumni or an alumni survey would be helpful in order to understand a more holistic perspective of B2S alumni experiences.

In many ways, the study has raised more questions than it has answered. Future research can be designed to investigate the questions and address the concerns as discussed above. Furthermore, the study is not without limitations and delimitations. As discussed previously, experimental design was impossible due to the ethical

and practical constraints; the comparison data used for the outcome analysis thus was from comparable groups, instead of comparison groups. Caution is needed when interpreting the results.

## **5. Conclusion**

American higher education is lagging behind its international peers in the proportion of college graduated population. In 1992, the U.S. ranked "No. 1" in the percentage of population with a college degree; its ranking dropped to "No. 6" in 2017 (OECD, 2018).<sup>[16]</sup> At the same time, the percentage of minority students on U.S. campuses has been increasing (National Center for Education Statistics, 2016).<sup>[14]</sup> However, the graduation and persistence rates of minority students, especially male Latino and Black, remain problematic. The traditional retention models and strategies, based on Tinto's theories of college student development, do not seem sufficient in addressing the changing demographics of college students and supporting the success of students who are academically and socio-economically disadvantaged. To address this challenge and respond to the city of Boston's College Completion initiative, universities in this area have joined forces to explore new, innovative academic models aiming to level the playing field for disadvantaged students and support them to reach the finish line of college graduation.

While the traditional learning community and remedial courses have positive effects on retention and academic success of students in general, it should be noted that underrepresented students have higher need for one-to-one relationship, coaching and mentoring in both academic and non-academic areas, and the intensity and length of coaching are important. Consistently intensive coaching plays a significant role in helping students acquire good habits and gradually develop the competencies needed to succeed and to be an independent learner. Also, continued connection and extended mentoring from faculty and staff that go beyond the comprehensive support year is equally important to this group of students. The process analysis of the study, once again, confirms that "faculty rigor" matters - a finding that concurs with the literature on this topic (see for example, Astin, 1993; Chickering & Gamson, 1987).<sup>[1][5]</sup> Faculty's behaviors, attitudes, and quality of interaction and instruction affect students profoundly. High expectations typically result in high performances. The quality of the classroom experience (real or virtual) can make or break students' overall college experience, particularly to this set of students who cannot afford on-campus living, and need to work full time and learn part time.

The battle fighting against the racial disparity in

college graduation and persistence has come a long way and still has a long way to go. It is an obligation, an imperative for the nation to achieve equity and equality in education for all. This should be done and can be done.

## References

- [1] Astin, A. W. (1993). *What matters in college: Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- [2] Bavarian, N., Lewis, K.M., DuBois, D.L., Acock, A., Vuchinich, S., Silverthorn, N., Snyder, F.J., Day, J., Ji, P., Flay, B.R. (2013). Using social-emotional and character development to improve academic outcomes: A matched-pair, cluster-randomized controlled trial in low-income, urban schools. *Journal of School Health*, 83(11), 771-779.
- [3] Bers, T., & Schuetz, P. (2014). Nearbies: A missing piece of the college completion conundrum. *Community College Review*, 42(3), 167-183.
- [4] Boeije, H. (2010). *Analysis in qualitative research*. Thousand Oaks, CA: Sage.
- [5] Chickering, A. W., & Gamson, Z.F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3-7.
- [6] Doody, O., & Noonan, M. (2013) Preparing and conducting interviews to collect data. *Nurse Researcher*, 20(5), 28-32.
- [7] DuFour, R. (2004). What is a “professional learning community”? *Educational Leadership*, 61(8), 6-11.
- [8] Hudley, C., Moschetti, R., Gonzalez, A., Su-Je, C., Barry, L., & Kelly, M. (2009). College freshmen’s perceptions of their high school experiences. *Journal of Advanced Academics*, 438-471.
- [9] Liamputtong, P. (2011). *Focus group methodology: Principles and practice*. Thousand Oaks, CA: Sage.
- [10] Linkow, T., Didriksen, H., Gamse, B., Bumgarner, E., Velez, M., Dastrup, S., Ballinger, S., Burke, S., Meneses, M., & Cruz, R. (2017). Success Boston Coaching for Completion 2015-16 implementation report. Retrieved from [https://www.nationalservice.gov/sites/default/files/evidenceexchange/FR\\_Success%20Boston%20Implementation%20Report\\_2017.pdf](https://www.nationalservice.gov/sites/default/files/evidenceexchange/FR_Success%20Boston%20Implementation%20Report_2017.pdf)
- [11] McLaughlin, J., & Eaton, A. (2018). Staying the course six-year college enrollment and completion experiences of BPS Class of 2011 Graduates. Retrieved from <https://www.successboston.org/-/media/tbf/reports-and-covers/2018/success-boston-april3.pdf?la=en>
- [12] McLaughlin, J., Sullivan, N., Eaton, A., Linkow, T., Didriksen, H., Gamse, B., & Furey, J. (2016). Reaching for the cap and gown: Progress toward Success Boston’s college completion goals for graduates of the Boston Public Schools. Retrieved from <https://www.tbf.org/-/media/tbforg/files/reports/success-boston-capgown-2016-report.pdf>
- [13] Morgan, D. L. (2014). *Integrating qualitative and quantitative methods: A pragmatic approach*. Thousand Oaks, CA: Sage.
- [14] National Center for Education Statistics. (2016). First-time postsecondary students in 2011–12: A profile. Retrieved from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016136>
- [15] NCES (National Center for Education Statistics). (2019). Immediate college enrollment rate. Retrieved from [https://nces.ed.gov/programs/coe/indicator\\_cpa.asp](https://nces.ed.gov/programs/coe/indicator_cpa.asp)
- [16] OECD. (2018). Adult education level. Retrieved from <https://data.oecd.org/eduatt/adult-education-level.htm#indicator-chart>
- [17] O’Sullivan, R. (2004). *Practicing evaluation: A collaborative approach*. Thousand Oaks, CA: Sage.
- [18] Pitre, C. C., & Pitre, P. (2009). Increasing underrepresented high school students’ college transitions and achievements. *NASSP Bulletin*, 93(2), 96-110.
- [19] Redford, J., Hoyer, K., & Ralph, J. (2018). Continuing-generation college students: A comparison of high school and postsecondary experiences. Retrieved from <https://nces.ed.gov/pubs2018/2018009.pdf>
- [20] Sum, A., Khatiwada, I., McLaughlin, J., Palma, S., Motroni, J., Sullivan, A., & Torres, N. (2010). The college success of Boston Public School graduates from the classes of 2000-2008: Findings from a post-secondary longitudinal tracking study and the early outcomes of the Success Boston college completion initiative. Retrieved from [https://www.bostonpic.org/assets/resources/Research\\_Postsecondary\\_College-Success-Findings-CLMS.pdf](https://www.bostonpic.org/assets/resources/Research_Postsecondary_College-Success-Findings-CLMS.pdf)
- [21] Sum, A., Khatiwada I., McLaughlin, J., & Palma, S. (2013). Getting closer to the finish line: The college enrollment and completion experiences of graduates of the Boston Public Schools. Retrieved from [https://www.bostonpic.org/assets/resources/Research\\_Postsecondary\\_Getting-Closer-to-the-Finish-Line.pdf](https://www.bostonpic.org/assets/resources/Research_Postsecondary_Getting-Closer-to-the-Finish-Line.pdf)
- [22] The Pell Institute. (2004). Raising the graduation rates of low-income college students. Retrieved from [http://www.pellinstitute.org/downloads/publications-Raising\\_the\\_Graduation\\_Rates\\_December\\_2004.pdf](http://www.pellinstitute.org/downloads/publications-Raising_the_Graduation_Rates_December_2004.pdf)
- [23] The Pell Institute. (2009). Bridging the gaps to success. Retrieved from [http://www.coenet.org/files/publications-Bridging\\_the\\_Gaps\\_to\\_Success\\_2009.pdf](http://www.coenet.org/files/publications-Bridging_the_Gaps_to_Success_2009.pdf)
- [24] Tinto, V. (1975). Dropout from higher education: A



- theoretical synthesis of recent research. *Review of Educational Research*, 45, 89–125.
- [25] Tinto, V. (1985). Dropping out and other forms of withdrawal from college. In L. Noel, R. Levitz, & D. Saluri (Eds.), *Increasing student retention* (pp. 28-43). San Francisco, CA: Jossey-Bass.
- [26] Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68(6), 599-623.
- [27] Walton, G., & Cohen, G. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451.
- [28] World Economic Forum. (2016). *New Vision for Education: Fostering Social and Emotional Learning through Technology*. Retrieved from [http://www3.weforum.org/docs/WEF\\_New\\_Vision\\_for\\_Education.pdf](http://www3.weforum.org/docs/WEF_New_Vision_for_Education.pdf)