

### **Success Boston Coaching**

Intervention Report | Supporting Postsecondary Success

WHAT WORKS CLEARINGHOUSE<sup>TM</sup>

October 2020

WWC 2021-001 U.S. DEPARTMENT OF EDUCATION

A Publication of the National Center for Education Evaluation at IES

Enrolling in college and earning a degree or certificate is one of the primary pathways to economic success; however, many students who begin a college education fail to complete it. In 2017, median weekly earnings of full-time workers with an associate degree was 17 percent higher than full-time workers with a high school diploma only. Despite the economic advantages of educational attainment, only 32 percent of students enrolled in two-year institutions complete their programs within three years, while 60 percent of students enrolled in four-year institutions complete their programs within six years. The first year of college is critical, as 38 percent and 19 percent of first-time, full-time students in two-year and four-year institutions, respectively, fail to return to the same institution for their second year.2 As a result, several interventions have been designed to support student retention and degree completion among college students. One example is Success Boston Coaching.

Success Boston Coaching is a coaching intervention for students who are traditionally underrepresented in college to help them transition from high school to college and progress in college. Students are paired with a dedicated coach

starting as early as the spring of their senior year of high school and receive coaching through their first two years in college. As Boston's citywide college completion initiative, Success Boston partners with existing nonprofit organizations focused on coaching and mentoring to deliver these one-on-one coaching services. Nonprofit coaching partners may also provide students with other direct services such as tutoring and career readiness support, and financial support that includes scholarships, transportation subsidies, and funding for school-related materials and supplies.<sup>3</sup>

This What Works Clearinghouse (WWC) report, part of the WWC's Supporting Postsecondary Success topic area, explores the effects of *Success Boston Coaching* on progressing in college and academic achievement. The WWC identified seven studies of *Success Boston Coaching*. Two of these studies meet WWC standards. The evidence presented in this report is from studies of the impact of *Success Boston Coaching* on high school and postsecondary students—including Asian, African-American, Hispanic, and White students—in a variety of school settings, including urban and suburban areas.

### What Happens When Students Participate in Success Boston Coaching?<sup>5</sup>

The evidence indicates that implementing *Success Boston Coaching*:

- may increase progression in college
- may increase academic achievement

Findings on *Success Boston Coaching* from two studies that meet WWC standards are shown in Table 1. The table

reports an effectiveness rating, the improvement index, and the number of studies that contributed to the findings. The improvement index is a measure of the intervention's effect on an outcome. It can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention.

Table 1. Summary of findings on Success Boston Coaching from studies that meet WWC Standards

		Study findings	Evidence meeting WWC standards (version		
Outcome domain	Effectiveness rating	Improvement index (percentile points)	Number of studies	Number of students	
Progressing in college	Potentially positive effects	+9	2	8,375	
Academic achievement	Potentially positive effects	+4	2	5,543	

Note: The improvement index can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention. For example, an improvement index of +4 means that the expected percentile rank of the average comparison group student would increase by 4 points if the student received *Success Boston Coaching*. The improvement index values are generated by averaging findings from the outcome analyses that meet WWC standards, as reported by Linkow et al. (2017) and Linkow et al. (2019). A positive improvement index does not necessarily mean the estimated effect is statistically significant. Progressing in college outcomes reported in these studies include college persistence to the second year of higher education. Academic achievement outcomes reported in these studies include cumulative grade point average. The effects of *Success Boston Coaching* are not known for other outcomes within the Supporting Postsecondary Success topic area, including college enrollment, college attendance, postsecondary degree attainment, credential attainment, employment, and earnings.

### **BOX 1. HOW THE WWC REVIEWS AND DESCRIBES EVIDENCE**

The WWC evaluates evidence based on the quality and results of reviewed studies. The criteria the WWC uses for evaluating evidence are defined in the <u>Procedures and Standards Handbooks</u> and the <u>Review Protocols</u>. The studies summarized in this report were reviewed under WWC Standards (version 4.0) and the Supporting Postsecondary Success topic area protocol (version 4.0).

To determine the effectiveness rating, the WWC considers what methods each study used, the direction of the effects, and the number of studies that tested the intervention. The higher the effectiveness rating, the more certain the WWC is about the reported results and about what will happen if the same intervention is implemented again. The following key explains the relationship between effectiveness ratings and the statements used in this report:

Effectiveness rating	Rating interpretation	Description of the evidence
Positive (or negative) effects	The intervention is <i>likely</i> to change an outcome	Strong evidence of a positive effect, with no overriding contrary evidence
Potentially positive (or negative) effects	The intervention <i>may</i> change an outcome	Evidence of a positive effect with no overriding contrary evidence
No discernible effects	The intervention <i>may result in little to no change</i> in an outcome	No affirmative evidence of effects
Mixed effects	The intervention <i>has inconsistent effects</i> on an outcome	Evidence includes studies in at least two of these categories: studies with positive effects, studies with negative effects, or more studies with indeterminate effects than with positive or negative effects

### How is Success Boston Coaching Implemented?

The following section provides details of how *Success Boston Coaching* was implemented. This information can help educators identify the requirements for implementing *Success Boston Coaching* and determine whether implementing this intervention would be feasible in their districts or schools. Information on *Success Boston Coaching* presented in this section comes from the studies that meet WWC standards (Linkow et al., 2017; Linkow et al., 2019), Success Boston's website, and from correspondence with the developer.

- Goal: Success Boston Coaching aims to improve the college completion rates of Boston-area high school graduates by providing one-on-one transition coaching to students starting as early as their senior year in high school through their first two years in college.
- Target population: Success Boston Coaching is designed for high school seniors in transition to attending two-and four-year colleges in the Greater Boston area who are traditionally underrepresented in college, such as low-income students, first-generation students, and students of color. Students are eligible to participate in Success Boston Coaching as early as the spring of their senior year of high school.
- Method of delivery: Success Boston Coaching provides one-on-one transition coaching through nonprofit coaching partners that have included the Boston Private Industry Council, Bottom Line, College Bound Dorchester, Freedom House, Hyde Square Task Force,

Sociedad Latina, The Steppingstone Foundation, West End House Boys & Girls Club, and uAspire. These partners range from national college access and success organizations to local community-based organizations that serve populations traditionally underrepresented in college. Through in-person, phone, email, social media, and text communications, students receive sustained and proactive support from coaches staffed by the partner organizations.

- Frequency and duration of service: Students can receive coaching as early as the spring of their senior year of high school and coaching can continue through their first two years in college. Students' one-on-one interactions with their coaches may range from three to 15 times per year and last between 25 and 40 minutes.
- Intervention components: Success Boston Coaching is comprised of the following key components: one-on-one transition coaching, financial aid information and nudges, other direct services, financial support, and professional development for coaches. Refer to Table 2 for additional details.

**Comparison group:** In the two studies that contribute to this intervention report, students in the comparison group received traditional counseling supports provided by their high school and college.

Table 2. Components of Success Boston Coaching

Key component	Description
One-on-one transition coaching	Students receive one-on-one transition coaching starting as early as the spring of their senior year in high school and coaching can continue through their first two years in college. Coaching is primarily conducted in-person, but students may reach their coaches via phone, email, text message, or social media. Coaches meet with students as frequently as needed throughout their participation. As of the 2019–20 academic year, students meet with their coaches at least two times per month. Topics addressed during coaching sessions include academics, financial aid, career planning, and managing life responsibilities. Depending on the nonprofit coaching partner, coach caseloads range from 12 to 65 students; in the 2015–16 academic year, students' one-on-one interactions with their coaches ranged from three to 15 per year and lasted between 25 and 40 minutes.
Financial aid information and nudges	Success Boston Coaching partners with uAspire, a national nonprofit organization focused on increasing students' knowledge of financial information and resources available to help make college affordable for students. uAspire supports students in completing financial aid forms. Additionally, uAspire administers a text messaging program for students during their first year of college to remind them of important financial aid deadlines and provide financial aid-related information and resources. Students can text back to the messages to receive help from uAspire staff. Students receive, on average, eight messages during their first year of college through the following summer.
Other direct services	Coaching partners may offer tutoring for students. They may also host special events for students, such as career night presentations or mock job interviews with volunteer professionals from the community.
Financial support	Coaching partners may offer scholarships, transportation subsidies, or financial support for school-related materials, such as supplies.
Professional development for coaches	Coaching partners provide their coaches with training. The content and duration of the trainings vary based on organization. Coaches participate in <i>Success Boston Coaching</i> network-wide monthly meetings for continuing professional development and coaches can request specific training topics for these meetings. Example topics include: financial aid and financial literacy, coaching styles, building relationships with students, and bolstering student engagement. In addition, uAspire provides professional development for coaches on financial aid topics and processes. Some colleges hold ongoing monthly or biweekly meetings for all coaches on their campuses.

### What Does Success Boston Coaching Cost?

The WWC identified a number of cost components from the most recent study reviewed (Linkow et al., 2019) and the Success Boston website. This preliminary list of costs is not designed to be exhaustive; rather, it provides educators an overview of the major resources needed to implement *Success Boston Coaching*. The intervention costs described in Table 3 are based on the information available as of March 2020.

Success Boston Coaching was awarded a Social Innovation Fund (SIF) grant to scale up coaching services in the fall of 2015. For the 2015-16 academic year—the first year in which the intervention was scaled from serving about 300 students to 1,000 students per cohort annually—the estimated total cost was \$5,762 per student, which accounts for both the scale-up expenses and the administrative costs to fulfill Social Innovation Fund (SIF) grant reporting requirements. Without the additional administrative costs associated with program scale-up, in the 2016-17 academic year, the cost per student decreased to \$3,037. Costs may vary depending on the size and type of organization delivering the coaching.

Table 3. Cost ingredients for Success Boston Coaching

Cost ingredients	Description	Source of funding
Personnel	Success Boston Coaching is staffed by coaches from nonprofit coaching organizations who provide direct services to students; program administrators to support the program and conduct recruitment activities; and college liaisons to coordinate campus coaching activities. Success Boston Coaching also contracts with uAspire to provide staff who deliver financial aid training for coaches, FAFSA completion events for students, and a text messaging program for students focused on sharing financial aid-related information and resources.	The Boston Foundation (TBF) with support from a Social Innovation Fund (SIF) grant from the Corporation for National and Community Service (CNCS); coaching partner organizations
Facilities	Facilities costs include space for administrative staff and for providing services. Success Boston Coaching relies on partner organizations to provide space for service delivery. Some partners rely on dedicated campus space such as cubicles, scheduled time in offices, or classrooms provided by the colleges.	Coaching partner organizations; colleges
Equipment and materials	Standard information technology (IT) equipment such as computers, phone, printers, and photocopiers for staff is required.	Coaching partner organizations; colleges
Direct assistance	Students may receive some direct cash or cash-equivalent assistance such as reduced-fare public transportation passes, scholarships, and school supplies.	Coaching partner organizations; transit authority
Other	Depending on the partner organizations, students may also receive additional supports such as tutoring, career night presentations or mock job interviews, and annual events.	Coaching partner organizations; volunteers; AmeriCorps members

Note: The Boston Foundation (TBF) provides approximately \$1 million per year to fund coaching and other activities for transition coaching, such as training and supports for coaches and program management. Between the fall of 2015 and the fall of 2019, Success Boston received funding from a Social Innovation Fund (SIF) grant from the Corporation for National and Community Service (CNCS). The SIF grant required a match from The Boston Foundation and a local match from the nonprofit coaching partners.

#### For More Information:

About Success Boston Coaching
The Boston Foundation
75 Arlington Street, 3rd Floor
Boston, MA 02116

Attn: Antoniya Marínova, Assistant Director, Education to Career

Email: Antoniya.Marinova@tbf.org Web: www.successboston.org Phone: (617) 338-3928

About the cost of the intervention Web: <a href="https://www.successboston.org">www.successboston.org</a>

See also:

Linkow, T., Bumgarner, E., Didriksen, H., Lack, K., Nichols, A., Dastrup, E., Dastrup, S., & Gamse, B. (2019). *The story of scaling up: Interim report on the impact of Success Boston's Coaching for Completion*. Cambridge, MA: Abt Associates. Retrieved from <a href="https://eric.ed.gov/?id=ED602748">https://eric.ed.gov/?id=ED602748</a>

### **Research Summary**

The WWC identified seven studies that investigated the effectiveness of *Success Boston Coaching* (Figure 1):

- 2 studies meet WWC group design standards with reservations
- 1 study does not meet WWC group design standards
- 4 studies are ineligible for review

The WWC reviews findings on the intervention's effects on eligible outcome domains from studies that meet standards, either with or without reservations. Based on this review, the WWC generates an effectiveness rating, which summarizes how the intervention impacts, or changes, a particular outcome domain. The WWC reports additional supplemental findings, such as semesters enrolled full-time for progressing in college (Linkow et al., 2019), on the WWC website (https://whatworks.ed.gov).

These supplemental findings and findings from studies that either do not meet WWC standards or are ineligible for review do not contribute to the effectiveness ratings.

The two studies of *Success Boston Coaching* that meet WWC group design standards with reservations reported findings on progressing in college and academic achievement. No other findings in the studies meet WWC group design standards within any outcome domain included in the Supporting Postsecondary Success topic area.<sup>6</sup> Citations for the three studies reviewed for this report are listed in the References section, which begins on page 10. Citations for the four studies that are ineligible for review and the reasons the WWC determined they were ineligible are also listed in the References section.

Figure 1. Effectiveness ratings for Success Boston Coaching

studies meet WWC standards without reservations

2 studies meet WWC standards with reservations

1 study does not meet WWC standards

4 studies are ineligible for review

Contribute to effectiveness ratings

Do not contribute to effectiveness ratings

### Success Boston Coaching has potentially positive effects on progressing in college

The WWC determined that two studies that meet WWC group design standards with reservations (Linkow et al., 2017; Linkow et al., 2019) showed evidence of a positive and statistically significant effect of *Success Boston Coaching* on progressing in college.

### Success Boston Coaching has potentially positive effects on academic achievement

The WWC determined that one study that meets WWC group design standards with reservations showed evidence of a positive and statistically significant effect of *Success Boston Coaching* on academic achievement (Linkow et al., 2017), and one study that meets WWC group design standards with reservations showed evidence of an indeterminate effect of *Success Boston Coaching* on academic achievement (Linkow et al., 2019).

### **Main Findings**

Table 4 shows the findings from the two *Success Boston Coaching* studies that meet WWC standards. The table includes WWC calculations of the mean difference, effect size, and performance of the intervention group relative to the comparison group. Based on findings from the two studies that meet WWC standards, the effectiveness rating for progressing in college is *potentially positive effects*, indicating

evidence of a positive effect with no overriding contrary evidence. These findings are based on 8,375 students. The effectiveness rating for academic achievement is *potentially positive effects*, indicating evidence of a positive effect with no overriding contrary evidence. These findings are based on 5,543 students.

Table 4. Findings by outcome domain from studies of *Success Boston Coaching* that meet WWC Standards

			Mean (standard deviation)		WWC calculations			
Measure (study)		Sample size	Intervention group	Comparison group	Mean difference	Effect size	Improvement index	<i>p</i> -value
College persistence – enrolled in a second year of higher education (%) (Linkow et al., 2017) <sup>a</sup>	Full Sample	2,512	83.00	75.00	8.00	0.30	+12	< .05
College persistence – enrolled in a second year of higher education (%) (Linkow et al., 2019) <sup>b</sup>	Full Sample	5,863	82.60	78.30	4.30	0.17	+7	<.01
Outcome average for p	rogressing in colle	ge across a	II studies			0.23	+9	
Cumulative grade point average (Linkow et al., 2017) <sup>a</sup>	Full Sample	1,990	2.45 (0.92)	2.26 (1.08)	0.19	0.18	+7	< .01
Cumulative grade point average (Linkow et al., 2019) <sup>b</sup>	Full Sample	3,553	2.37 (1.03)	2.36 (1.10)	0.01	0.01	0	0.82
Outcome average for a	cademic achievem	ent				0.10	+4	

Notes: For mean difference and effect size values reported in the table, a positive number favors the intervention group and a negative number favors the comparison group. The effect size is a standardized measure of the effect of an intervention on outcomes, representing the average change expected for all individuals who are given the intervention (measured in standard deviations of the outcome measure). An indicator of the effect of the intervention, the improvement index can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention. For example, an improvement index of +4 means that the expected percentile rank of the average comparison group student would increase by 4 points if the student received Success Boston Coaching. A positive improvement index does not necessarily mean the estimated effect is statistically significant. Some statistics may not sum as expected due to rounding.

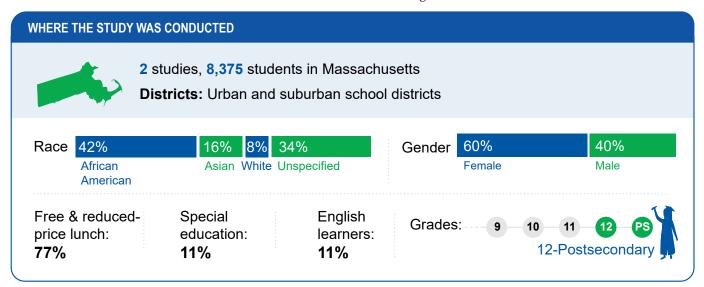
For more information, please refer to the WWC Procedures Handbook, version 4.0, page 22.

<sup>&</sup>lt;sup>a</sup> Linkow et al. (2017) did not require corrections for clustering or multiple comparisons nor difference-in-differences adjustments. Standard deviations reported for the cumulative grade point average outcome were provided by the author in response to a WWC author query. This study is characterized as having a statistically significant positive effect on progressing in college and academic achievement because the estimated effects are positive and statistically significant.

<sup>&</sup>lt;sup>b</sup> Linkow et al. (2019) did not require corrections for clustering or multiple comparisons nor difference-in-differences adjustments. Standard deviations reported for the cumulative grade point average outcome were provided by the author in response to a WWC author query. This study is characterized as having a statistically significant positive effect on progressing in college because the estimated effect is positive and statistically significant. This study is characterized as having an indeterminate effect on academic achievement because the estimated effect is not statistically significant.

### In What Context Was Success Boston Coaching Studied?

The following section provides information on the setting of the two studies of *Success Boston Coaching* that meet WWC standards, and a description of the participants in the research. This information can help educators understand the context in which the studies of *Success Boston Coaching* were conducted, and determine whether the intervention might be suitable for their setting.



### **Details of Each Study that Meets WWC Standards**

This section presents details for the studies of *Success Boston Coaching* that meet WWC standards. These details include the full study reference, findings description, findings summary, and description of study characteristics. A summary of domain findings for each study is presented below, followed by a description of the study characteristics. These study-level details include contextual information about the study setting, methods, sample, intervention group, comparison group, outcomes, and implementation details. For additional information, readers should refer to the original studies.

### Research details for Linkow et al. (2017)

Linkow, T., Gamse, B., Unlu, F., Bumgarner, E., Didriksen, H., Furey, J., Meneses, M., Sami, M., Nichols, A. (2017). *The* 

power of coaching: Interim report on the impact of Success Boston's transition coaching on college success. Cambridge, MA: Abt Associates. Retrieved from <a href="https://www.tbf.org/-/media/tbforg/files/reports/sb-317-interim-outcomes-report-final.pdf">https://www.tbf.org/-/media/tbforg/files/reports/sb-317-interim-outcomes-report-final.pdf</a>

Findings from Linkow et al. (2017) show evidence of a statistically significant positive effect of *Success Boston Coaching* in the progressing in college domain (Table 5). This finding is based on an outcome analysis that includes 2,512 students. The study showed evidence of a statistically significant positive effect in the academic achievement domain. This finding is based on an outcome analysis that includes 1,990 students. The findings and research details summarized for this study come from three related reports, including the primary study listed above. See the References section, which begins on page 10, for a list of all related publications.

Table 5. Summary of findings from Linkow et al. (2017)

		Meets WWC Group Design Standards With Reservations			
		Study findings			
Outcome domain	Sample size	Average effect size	Improvement index	Statistically significant	
Progressing in college	2,512 students	0.30	+12	Yes	
Academic achievement	1,990 students	0.18	+7	Yes	

### Table 6. Description of study characteristics for Linkow et al. (2017)

# WWC evidence rating

**Meets WWC Group Design Standards With Reservations**. This is a quasi-experimental design (QED) with baseline equivalence established on the analytic sample. For more information on how the WWC assigns study ratings, please see the <u>WWC Procedures and Standards Handbooks (version 4.0)</u> and <u>WWC Standards Briefs</u>, available on the WWC website.

### Setting

Success Boston Coaching was implemented in the Boston, Massachusetts metro area. Partners included The Boston Foundation, the City of Boston, Boston Public Schools, the University of Massachusetts Boston, Bunker Hill Community College, other regional colleges and universities, uAspire, the Boston Private Industry Council, and other local nonprofit organizations. During the 2013–14 and 2014–15 academic years, students received coaching from seven nonprofit organizations: American Student Assistance, Boston Private Industry Council, Bottom Line, Freedom House, Hyde Square Task Force, Sociedad Latina, and West End House. A national nonprofit organization, uAspire, delivered financial aid advising to students and professional development for coaches. Students attended nine partner colleges: Benjamin Franklin Institute of Technology, Bridgewater State University, Bunker Hill Community College, Massachusetts Bay Community College, Northeastern University, Roxbury Community College, Salem State University, Suffolk University, and University of Massachusetts Boston.

### **Methods**

Students in *Success Boston Coaching* were statistically matched to students who did not participate in the coaching based on the following characteristics: gender, race/ethnicity, high school academic achievement, and socioeconomic status. The matching process limited the *Success Boston Coaching* students and comparison students to similar locales, high school environments, and college settings.

The study included two cohorts of students who graduated from Boston Public Schools in 2013 and 2014. Students who graduated in 2013 were followed for two years and those who graduated in 2014 were followed for three years to measure the effect of *Success Boston Coaching*. The primary analyses were limited to a two-year follow-up period from high school graduation to standardize the amount of time elapsed for both the 2013 and 2014 high school graduating classes.

Students who met the following three criteria were included in the study sample; students had to: (1) enroll in college in the fall after high school graduation, (2) enroll in a college with at least one *Success Boston Coaching* student and at least one potential comparison student enrolled that year, and (3) have no missing information on key baseline characteristics used in the matching process. The analytic sample for the persistence in college outcome, as measured by enrollment in a second year of college, included 678 students in the intervention group and 1,834 students in the comparison group. The analytic sample for the academic achievement outcome, as measured by cumulative grade point average in college, included 610 students in the intervention group and 1,380 students in the comparison group.

### Study sample

The study sample was comprised of 42 percent African-American students, 37 percent Hispanic students, 12 percent Asian students, and eight percent White students. Sixty-one percent of the study sample was female, 15 percent were English learners, 10 percent had an Individualized Education Plan, and 85 percent received free or reduced price lunch.

## Intervention group

Students in Success Boston Coaching began receiving one-on-one coaching from experienced counselors starting as early as the end of high school and continuing through the first two years of college. Coaching was available on demand to help students navigate the college process while developing their sense of agency, autonomy, and independence. The coaching was designed to develop students' life, study, help-seeking, and academic skills and helped students hone their relationship, goal setting, and networking skills. Job and career mentoring were also provided. Coaching activities began after high school graduation for 92 percent of students.

## Comparison group

Students in the comparison group did not participate in *Success Boston Coaching* but were eligible to receive traditional counseling services while in high school and college.

# Outcomes and measurement

Study authors reported findings on two outcome measures that are eligible for review under the Supporting Postsecondary Success topic area. These findings include enrollment in a second year of higher education (progressing in college domain) and cumulative grade p oint average (academic achievement domain).

The study also reported supplemental findings for a subsample of students in the progressing in college domain, including enrollment in a third year of higher education. Summaries of these findings are available on the WWC website (<a href="https://whatworks.ed.gov">https://whatworks.ed.gov</a>). The supplemental findings do not factor into the intervention's rating of effectiveness.

Other findings were included in the study that do not meet WWC group design standards. These findings include enrolled in a second year of higher education, enrolled in a third year of higher education, and cumulative grade point average, reported separately by underrepresented minority status (i.e., Black, Native American, Hispanic) or not traditionally underrepresented (i.e., Asian, White). These findings do not meet WWC group design standards because the study authors used a quasi-experimental design in which the analytic intervention and comparison groups do not satisfy the baseline equivalence requirement.

# Additional implementation details

The Boston Foundation oversaw the *Success Boston Coaching* network that facilitates communication across the initiative. The network also provided coaches access to specialized training about financial aid from uAspire, a national nonprofit organization, as well as access to training on other topics.

### Research details for Linkow et al. (2019)

Linkow, T., Bumgarner, E., Didriksen, H., Lack, K., Nichols, A., Dastrup, E., Dastrup, S., & Gamse, B. (2019). *The story of scaling up: Interim report on the impact of Success Boston's Coaching for Completion*. Cambridge, MA: Abt Associates. Retrieved from <a href="https://eric.ed.gov/?id=ED602748">https://eric.ed.gov/?id=ED602748</a>

Findings from Linkow et al. (2019) show evidence of a statistically significant positive effect of *Success Boston Coaching* on progressing in college (Table 7). This finding is based

on an outcome analysis that includes 5,863 students. The finding on the academic achievement domain, which shows evidence of an indeterminate effect, is based on an outcome analysis that includes 3,553 students. The findings and research details summarized for this study come from three related reports, including the primary study listed to the left. See the References section, which begins on page 10, for a list of all related publications.

Table 7. Summary of findings from Linkow et al. (2019)

		Meets WWC Group Design Standards With Reservations Study findings			
Outcome domain	Sample size	Average effect size	Improvement index	Statistically significant	
Progressing in college	5,863 students	0.17	+7	Yes	
Academic achievement	3,553 students	0.01	0	No	

### Table 8. Description of study characteristics for Linkow et al. (2019)

WWC evidence rating	Meets WWC Group Design Standards With Reservations. This is a quasi-experimental design (QED) with baseline equivalence established on the analytic sample.8
Setting	Success Boston Coaching was implemented in the Boston, Massachusetts metro area. Partners included The Boston Foundation, the City of Boston, Boston Public Schools, the University of Massachusetts Boston, Bunker Hill Community College, other regional colleges and universities, uAspire, the Boston Private Industry Council, and other local nonprofit organizations. During the 2015–16 and 2016–17 academic year, students included in the study received coaching from eight nonprofit coaching organizations: Boston Private Industry Council, Bottom Line, College Bound Dorchester, Freedom House, Hyde Square Task Force, Sociedad Latina, the Steppingstone Foundation, and West End House. A national nonprofit, uAspire, delivered financial aid advising to students and professional development for coaches. The majority of students (74 percent) attended one of eleven colleges: Benjamin Franklin Institute of Technology, Bridgewater State University, Bunker Hill Community College, Framingham State University, Massachusetts Bay Community College, Northeastern University, Roxbury Community College, Salem State University, Suffolk University, University of Massachusetts Boston, and Wentworth Institute of Technology.
Methods	The study included two cohorts of students who graduated from Boston Public Schools in 2015 and 2016 and entered college in the fall of 2015 and 2016. Outcomes were measured after students in each cohort would have been out of high school for three and two years, respectively. Students participating in <i>Success Boston Coaching</i> were identified using the program's administrative database. Students who met the following three criteria were included in the study sample; students had to: (1) enroll in college in the fall after high school graduation; (2) enroll in a college in which at least one <i>Success Boston Coaching</i> student and at least one potential comparison student were enrolled that year; and (3) have no missing information on key baseline characteristics used in the matching process. The authors used a propensity score matching procedure that blocked the matching process by unique combinations of high school graduating cohorts and the postsecondary institutions they attended. Each <i>Success Boston Coaching</i> student was matched to one or more comparisor students in his or her block who shared similar baseline characteristics, based on a caliper of 0.4 standard deviations of the propensity score.
	The analytic sample for the persistence in college outcome, as measured by enrollment in the second year of higher education, was comprised of 1,234 students in the intervention group and 4,629 students in the comparison group. The analytic sample for the academic achievement outcome, as measured by student's cumulative grade point average in college, included 814 students in the intervention group and 2,739 students in the comparison group.
Study sample	The study sample was comprised of 42 percent African-American students, 31 percent Hispanic students, 17 percent Asian students, and eight percent White students. On average, students were 18 years old at baseline. Sixty percent of the sample were female, 10 percent were English learners, 11 percent had an Individualized Education Plan, and 74 percent received free or reduced-price lunch.

### Table 8. Description of study characteristics for Linkow et al. (2019) (continued)

# Intervention group

Nonprofit coaching organizations recruited Boston Public School graduates who were transitioning to college, and partnered with local colleges to coordinate coaching for students who qualify and enroll in *Success Boston Coaching*. Students and coaches connected in-person both on and off-campus using text messaging, email, or phone. Throughout the academic year, coaches provided students with ongoing, one-on-one support on academic, financial, career, and personal topics. For example, coaches offered on-demand guidance to help prepare students to navigate the college environment and become increasingly independent. Coaches also provided one-on-one support on life skills, study skills, help-seeking strategies, and academic skills. They helped students develop meaningful relationships, clarify goals, access networks, and understand college culture. Coaches also provided job and career mentoring as needed. Throughout the intervention, partner colleges communicated with coaches and helped coordinate coaching services on their campuses. The *Success Boston Coaching* network, which The Boston Foundation oversaw, facilitated communication across organizations and provided coaches access to specialized training about financial aid from uAspire, a national nonprofit organization, as well as access to training on other topics.

# Comparison group

Students in the comparison group had access to traditional college support services but not the coaching and support offered by the eight nonprofit organizations involved in *Success Boston Coaching*.

### Outcomes and measurement

Study authors reported findings on two outcome measures that are eligible for review under the Supporting Postsecondary Success topic area. These findings include enrollment in a second year of higher education (progressing in college domain) and cumulative grade point average (academic achievement domain).

The study also reported supplemental findings in the progressing in college domain for a subsample of students, including semesters enrolled full-time and enrolled in a third year of higher education. Summaries of these findings are available on the WWC website (<a href="https://whatworks.ed.gov">https://whatworks.ed.gov</a>). The supplemental findings do not factor into the intervention's rating of effectiveness.

Other findings were included in the study that do not meet WWC group design standards. These findings include college credits earned, as well as subgroup findings for students who are female, male, African-American, initially enrolled in two-year college, and initially enrolled in four-year college for enrollment into the second and third year of college. These findings do not meet WWC group design standards because the study authors used a quasi-experimental design in which the analytic intervention and comparison groups do not satisfy the baseline equivalence requirement.

# Additional implementation details

The Boston Foundation oversaw the *Success Boston Coaching* network that facilitates communication across the initiative. The network also provided coaches access to specialized training about financial aid from uAspire, a national nonprofit organization, as well as access to training on other topics.

### References

# Studies that meet WWC group design standards without reservations

None

# Studies that meet WWC group design standards with reservations

Linkow, T., Gamse, B., Unlu, F., Bumgarner, E., Didriksen, H., Furey, J., Meneses, M., Sami, M., & Nichols, A. (2017). *The power of coaching: Interim report on the impact of Success Boston's transition coaching on college success*. Cambridge, MA: Abt Associates. Retrieved from <a href="https://www.tbf.org/-/media/tbforg/files/reports/sb-317-interim-outcomes-report-final.pdf">https://www.tbf.org/-/media/tbforg/files/reports/sb-317-interim-outcomes-report-final.pdf</a>

#### **Additional sources:**

Linkow, T., Gamse, B., Unlu, F., Bumgarner, E.,
Didriksen, H., Furey, J., Meneses, M., Sami,
M., & Nichols, A. (2017). The power of coaching:
Highlights from the interim report on the impact
of Success Boston's transition coaching on college
success. Cambridge, MA: Abt Associates.
Retrieved from
https://eric.ed.gov/?id=ED582090

Linkow, T., Dadisman, K. Gamse, B., Didriksen, H., Schwartz, G., Hillard, M., & Karuu, M. (2015). Degrees of coaching: Success Boston's transition coaching model - Implementation of Success Boston Coaching 2014-15. Cambridge, MA: Abt Associates.

Linkow, T., Bumgarner, E., Didriksen, H., Lack, K., Nichols, A., Dastrup, E., Dastrup, S., & Gamse, B. (2019). *The story of scaling up: Interim report on the impact of Success Boston's Coaching for Completion*. Cambridge, MA: Abt Associates. Retrieved from <a href="https://eric.ed.gov/?id=ED602748">https://eric.ed.gov/?id=ED602748</a>

### Additional sources:

Linkow, T., Bumgarner, E., Lack, K., & Nichols, A. (2019). The story of scaling up: Highlights from the interim report on the impact of Success Boston's Coaching for Completion. Cambridge, MA: Abt Associates. Retrieved from <a href="https://eric.ed.gov/?id=ED602749">https://eric.ed.gov/?id=ED602749</a>

Linkow, T., Didriksen, H., Gamse, B., Bumgarner, E., Velez, M., Dastrup, S., Ballinger, S., Burke, S., Meneses, M., & de la Cruz, R. J. (2017). Success Boston: Coaching for Completion. 2015-16 implementation report. Cambridge, MA: Abt Associates. Retrieved from https://eric.ed.gov/?id=ED582088

# Study that does not meet WWC group design standards

Sum, A., Khatiwada, I., & Palma, S. (2014). The college persistence and graduation experiences of Success Boston Coaching participants from the BPS graduating class of 2009. Boston, MA: Center for Labor Market Studies, Northeastern University. Retrieved from: https://repository.library.northeastern.edu/downloads/neu:m0407544b?datastream\_id=content The study does not meet WWC group design standards because equivalence of the analytic intervention and comparison groups is necessary and not demonstrated.

### **Additional sources:**

Sum, A., Khatiwada, I., McHugh, W., & Palma, S. (2013). Getting closer to the finish line: The college enrollment and completion experiences of graduates of the Boston Public Schools.

Boston, MA: Center for Labor Market Studies, Northeastern University. Retrieved from https://www.tbf.org/news-and-insights/reports/2013/january/getting-to-the-finish-line-2013

# Studies that are ineligible for review using the Supporting Postsecondary Success Protocol

Levine, E., Capitani, J., & Young, S. (2018). Supporting postsecondary success: Understanding the college access and success landscape in Boston. Hadley, MA: The University of Massachusetts Donahue Institute. Retrieved from <a href="https://eric.ed.gov/?id=ED592562">https://eric.ed.gov/?id=ED592562</a>
The study is ineligible for review because it does not use an eligible design.

McLaughlin, J. & Van Eaton, A. (2018). Staying the course: Six-year college enrollment and completion experiences of BPS class of 2011 graduates. Boston, MA: The Boston Private Industry Council. Retrieved from <a href="https://eric.ed.gov/?id=ED586086">https://eric.ed.gov/?id=ED586086</a>
The study is ineligible for review because it does not use an eligible design.

McLaughlin, J., Sullivan, N., Van 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. Boston, MA: The Boston Private Industry Council and Abt Associates. Retrieved from <a href="https://www.bostonpic.org/assets/resources/Research\_LMI\_Reaching-for-the-Cap-and-Gown.pdf">https://www.bostonpic.org/assets/resources/Research\_LMI\_Reaching-for-the-Cap-and-Gown.pdf</a>
The study is ineligible for review because it does not use an eligible design.

Sum, S., Fogg, N., Khatiwada, I., McLaughlin, J., Palma, S., Motroni, J., Tobar, P., Sullivan, N., & Smith, C. (2008). Getting to the finish line: College enrollment and graduation - A seven year longitudinal study of the Boston Public Schools class of 2000. Boston, MA: Center for Labor Market Studies, Northeastern University. The study is ineligible for review because it does not use an eligible design.

### **Endnotes**

- <sup>1</sup>Bureau of Labor Statistics. (2018). *Measuring the value of education*. Washington, DC: Author. Retrieved from <a href="https://www.bls.gov/careeroutlook/2018/data-on-display/education-pays.htm">https://www.bls.gov/careeroutlook/2018/data-on-display/education-pays.htm</a>
- <sup>2</sup>McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., Diliberti, M., Forrest Cataldi, E., Bullock Mann, F., and Barmer, A. (2019). *The Condition of Education 2019* (NCES 2019-144). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <a href="https://nces.ed.gov/pubsearch/">https://nces.ed.gov/pubsearch/</a> pubsinfo.asp?pubid=2019144
- <sup>3</sup> The descriptive information for this intervention comes from Success Boston's website, as well as from the two studies that meet WWC standards (Linkow et al., 2017; Linkow et al., 2019). The What Works Clearinghouse (WWC) requests developers review the intervention description sections for accuracy from their perspective. The WWC provided the developer with the intervention description in March 2020 and the WWC incorporated feedback from the developer. Further verification of the accuracy of the descriptive information for this intervention is beyond the scope of this review.
- <sup>4</sup> Absence of conflict of interest: This intervention report includes two studies conducted by staff from Abt Associates (Linkow et al., 2017; Linkow et al., 2019). Because Abt Associates is a contractor that administers the WWC, the studies were reviewed by staff members from a different organization. The two publications were reviewed as separate studies because sample members and data collection and analysis procedures differed. There is no overlap in sample members between the two studies: Linkow et al. (2017) includes students who graduated from high school in 2013 or 2014, and Linkow et al. (2019) includes students who graduated from high school in 2015 or 2016. There are also differences in data collection and analysis procedures: Linkow et al. (2019) matches intervention and comparison students on baseline characteristics drawn from administrative data from the Massachusetts Department of Elementary and Secondary Education (MA DESE) only, while Linkow et al. (2017) matches intervention and comparison students on baseline characteristics drawn from a merge of administrative data from Boston Public Schools and MA DESE.
- <sup>5</sup>The literature search reflects documents publicly available by March 2020. Reviews of the studies in this report used the standards from the WWC Procedures and Standards

- Handbook (version 4.0) and the Supporting Postsecondary Success review protocol (version 4.0). The evidence presented in this report is based on available research. Findings and conclusions could change as new research becomes available.
- <sup>6</sup> The effects of *Success Boston Coaching* are not known for other outcome domains within the Supporting Postsecondary Success topic area, including college enrollment, college attendance, postsecondary degree attainment, credential attainment, employment, and earnings.
- <sup>7</sup>The study established baseline equivalence on the analytic sample using data supplied by the author in response to a WWC author query. The author provided baseline high school grade point average and free or reduced price lunch status to establish baseline equivalence on the persistence outcome. The author provided high school grade point average to establish baseline equivalence on the college grade point average outcome. These baseline measures were used as covariates in the analysis. Intervention students were matched to potential comparison students using a radius matching method with replacement. Comparison students who were matched to multiple intervention students were weighted in the analysis to reflect the number of matches.
- <sup>8</sup> The study established baseline equivalence on the analytic sample using data supplied by the author in response to a WWC author query. The author provided baseline high school grade point average and free or reduced-price lunch status to establish baseline equivalence on the persistence outcome. The author provided high school grade point average to establish baseline equivalence on the college grade point average outcome. These baseline measures were used as covariates in the analysis. Intervention students were matched to potential comparison students using a radius matching method with replacement. Comparison students who were matched to multiple intervention students were weighted in the analysis to reflect the number of matches.

### **Recommended Citation**

What Works Clearinghouse, Institute of Education Sciences, U.S. Department of Education. (2020, October). *Success Boston Coaching*. Retrieved from <a href="https://whatworks.ed.gov">https://whatworks.ed.gov</a>.