



ASAP EVALUATION BRIEF: JANUARY 2017

Six-Year Outcomes of ASAP Students: Transfer and Degree Attainment

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SUMMARY

This evaluation brief presents six-year academic outcomes for Accelerated Study in Associate Programs (ASAP) and matched comparison group students. The brief explores whether ASAP's previously demonstrated effect on associate degree attainment remained over time, and whether ASAP students transferred to baccalaureate programs and earned bachelor's degrees at higher rates. Data were analyzed for the first two ASAP cohorts, those who entered in fall 2007 and fall 2009, and effects were estimated only for students who entered ASAP as first-time freshmen. The findings indicate that, six years after entering college, ASAP students continued to perform better than comparison group students across all measures, including associate degree attainment, transfer to baccalaureate programs, bachelor's degree attainment and any undergraduate degree attainment. In addition, when compared to non-ASAP students who earned their associate degrees within six years, ASAP students earned their degrees more quickly.

The following specific findings are detailed in this brief:

Finding #1

ASAP students earned their associate degrees at higher rates than non-ASAP students, even when a longer timeframe was considered.

Finding #2

ASAP students earned their associate degrees more quickly than non-ASAP students within a six-year timeframe.

Finding #3

ASAP students transferred to baccalaureate programs at higher rates than non-ASAP students and earned their bachelor's degrees at higher rates.

Finding #4

Six years after entering, ASAP students were more likely to have earned undergraduate degrees than non-ASAP students.

BACKGROUND

The vast majority of students who begin in community colleges, over 80 percent, aim to earn a bachelor's degree or higher (Horn & Skomsvold, 2011). Unfortunately, completion rates for these students are extremely low. A national study found that six years after beginning in community colleges, only 15 percent of students had earned an associate degree and only 35 percent of students had earned any credential from any institution (Snyder, Brey, & Dillow, 2016). Recent research by the Community College Research Center found that only 33 percent of community college students had transferred to a baccalaureate program and only 14 percent had earned a bachelor's degree within six years (Jenkins & Fink, 2016).

Studies consistently find that initially enrolling at a community college in an associate degree program decreases the likelihood of bachelor's degree completion, even for students who were academically similar at the time of enrollment to students who begin in baccalaureate programs (Monaghan & Attewell, 2015). The biggest obstacle appears to be that students never successfully transfer (Xu, Jaggars, & Fletcher, 2016). For students who do transfer, they are often not able to use all credits earned at the community college toward the bachelor's degree. One study found that the more credits a student loses when transferring, the less likely they are to complete the degree (Monaghan & Attewell, 2015). In addition, remediation is a barrier, as students are more likely to be placed in remedial courses, which slow academic momentum, if they begin in community colleges.

Despite these obstacles, with open admission policies and lower academic requirements, community colleges are the only viable path to a degree for many students (Ma & Baum, 2016). They are also a less expensive option. Encouraging students who enroll at community colleges to earn an associate degree prior to transferring helps ensure that they obtain a postsecondary credential. This credential will likely lead to higher earnings and may improve the students' chances of successfully earning a bachelor's degree (Belfield & Bailey, 2011; Kopko & Crosta, 2016).

National statistics show that six years after entering a community college...

- 35% earned *any degree*
- 33% transferred to a bachelor's program
- 14% earned a bachelor's degree

Sources: Jenkins and Fink (2016). Snyder, Brey, & Dillow (2016)

MOTIVATION & RESEARCH QUESTIONS

CUNY Accelerated Study in Associate Programs (ASAP) was designed to help students earn an associate degree within three years by providing a comprehensive package of services and support (see “What is ASAP?” box for details). ASAP has already been shown in internal and external studies to have a large effect on three-year associate degree attainment. Internal analysis of the fall 2009 to fall 2012 cohorts found a three-year graduation rate of 52.4 percent vs. 26.8 percent for a propensity-score matched comparison group and similar results have been found for the fall 2007 cohort (Strumbos, Kolenovic, & Tavares, 2016; Linderman & Kolenovic, 2012). An external study by MDRC using a random assignment design found that program group members graduated at nearly double the rate of control group members within three years (Scrivener, et al., 2015). However, it is important to consider a longer timeframe to better understand whether these effects persist over time; and whether, without the program, students would likely have earned an associate degree more slowly, earned a different degree, or earned no degree at all.

Furthermore, given that the majority of students who enter associate degree programs aim to earn a bachelor's degree, including the majority of ASAP students, it is critical to examine whether ASAP helps students achieve this goal. While not the explicit purpose of the program, ASAP may help students with bachelor's degree attainment by ensuring that they take credits that are broadly applicable, by assisting them in the transfer process, and by equipping them with the skills and tools that help them to be successful in future academic institutions. Additionally, by encouraging students

to earn the associate degree prior to transferring, ASAP may also help students build the self-efficacy and self-confidence needed to overcome challenges on the road to bachelor's degree completion.

This brief focuses on four main research questions about ASAP's long-term effects: (1) Does the effect on associate degree attainment persist over a longer time frame? (2) Among students who earn their associate degrees, do ASAP students do so more quickly? (3) Do ASAP students transfer to baccalaureate programs and earn bachelor's degrees at higher rates? and (4) Do ASAP students earn degrees, considering both associate and bachelor's degrees, at higher rates?

STUDY & DATA

This study uses data from the two earliest ASAP cohorts, those who started the program in fall 2007 (N: 1,132) and fall 2009 (N: 429).¹ To be eligible for the fall 2007 cohort, students were required to be fully proficient in reading, writing, and math at time of entry to ASAP. Over 40 percent of these students had a developmental education need at the time of acceptance to CUNY, which they successfully addressed prior to joining ASAP. For the fall 2009 cohort, students could have up to two developmental course needs at time of entry to ASAP.

In the “Descriptive Results” section of this brief, descriptive data are shown for all ASAP students, broken out by cohort, admission type, and developmental education need at time of entry. Next, in the “Findings” section, the results from a multivariate analysis are shown to estimate ASAP effects for each outcome. For the multivariate analysis, propensity-score matching was used to match ASAP students to similar non-participating students to reduce selection bias.² The analysis of effects was restricted to students who entered ASAP as first-time freshmen.³ In addition, the comparison group pool was limited to students who met ASAP criteria.⁴

Data for this analysis come from the CUNY Institutional Research Database (IRDB) and the National Student Clearinghouse (NSC). Enrollment and degree attainment at both CUNY and non-CUNY institutions were included.

DESCRIPTIVE RESULTS

Over 60 percent of ASAP students had earned an undergraduate degree within six years and more than half of all entering students transferred to a baccalaureate program.

Figure 1 shows the breakdown of students included in this analysis by semester of entry, admission type, and developmental need at entry. Fall 2007 students made up the majority of the students (72.5 percent) and most students entered ASAP fully proficient (78.9 percent), largely because this was an eligibility requirement for the fall 2007 cohort. First-time freshmen made up the highest percentage of students by admission type (73.5 percent), followed by continuing students (17.8 percent), and transfer students (8.7 percent).

Overall, 63.5 percent of ASAP students earned an undergraduate degree within six years. There were some differences in transfer and bachelor’s degree attainment by cohort, while differences in associate degree attainment were smaller. Most notably, 26.2 percent of the fall 2007 cohort had earned a bachelor’s degree within six years vs. 22.6 percent of the fall 2009 cohort. When considering admission type, first-time freshmen had higher bachelor’s degree attainment (26.8 percent) than both transfer (16.2 percent) and continuing students (23.4 percent). When considering developmental need at entry, not surprisingly, students who entered fully proficient did better on all outcomes than students who entered with a developmental need. However, students entering with a developmental need also performed well: 53.2 percent transferred and 21.3 percent earned a bachelor’s degree.

In appendix A, descriptive results by college, gender, and race/ethnicity are shown. While all groups had associate degree attainment of over 50 percent, there were notable differences in bachelor’s degree attainment.

Figure 1
Cohort, Admission Type and Developmental Need at Entry, All ASAP Students, Fall 2007-Fall 2009 Cohorts (Descriptive)

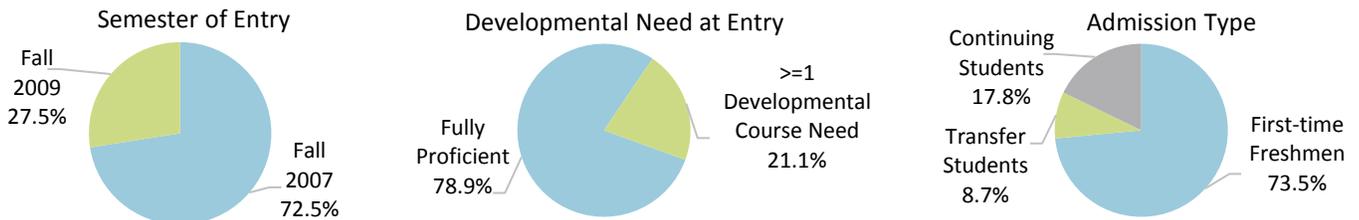


Table 1
Six-Year Transfer and Degree Attainment, All ASAP Students, Fall 2007-Fall 2009 Cohorts (Descriptive)

	N	Earned Associate Degree (%)	Enrolled in Baccalaureate Program (%)	Earned Bachelor's Degree (%)	Earned Any Undergraduate Degree (%)
All Students	1,561	61.3	57.8	25.2	63.5
Semester of Entry					
Fall 2007 Entrants	1,132	61.4	58.9	26.2	63.8
Fall 2009 Entrants	429	61.1	54.8	22.6	62.7
Admission Type					
First-time Freshmen	1,147	60.8	59.6	26.8	63.6
Transfer Students	136	49.3	44.1	16.2	49.3
Continuing Students	278	69.4	56.8	23.4	70.1
Developmental Need at Entry					
Fully Proficient	1,232	62.3	59.0	26.3	64.5
Developmental Course Need	329	57.8	53.2	21.3	59.9

FINDINGS

Finding #1

ASAP students earned their associate degrees at higher rates than non-ASAP students, even when a longer timeframe was considered.

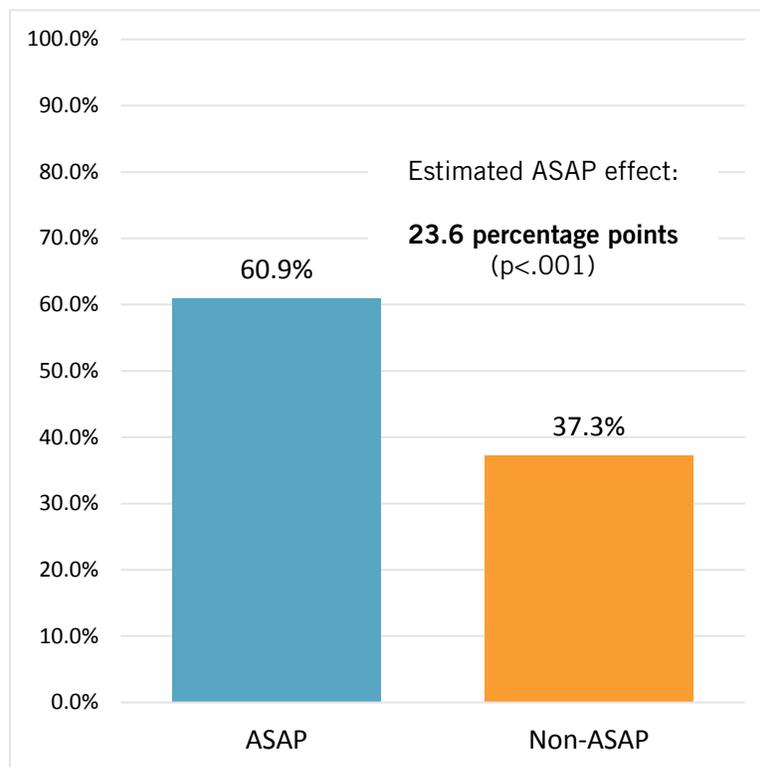
Associate degree attainment is the primary goal of the program and prior research has shown large effects on three-year completion rates (Scrivener, et al., 2015; Linderman & Kolenovic, 2012; Strumbos, Kolenovic, & Tavares, 2016). Given the effect of ASAP on three-year completion, this analysis looks at the question of whether ASAP helps

students get an associate degree who would not have earned one at all or whether it reduces the amount of time it takes to get a degree for students who would have otherwise earned a degree over a longer period.

Figure 2 presents estimated six-year associate degree attainment rates from the propensity-score matching analysis. The estimated six-year associate degree attainment rate for ASAP students was 60.9 percent, compared to the rate of 37.3 percent for non-ASAP students, for an estimated ASAP effect of 23.6 percentage points. These results show that even in double the amount of time, non-ASAP students do not catch up to ASAP students in terms of associate degree attainment. The large effect of ASAP remained, although it decreased slightly, in the longer term.

Figure 2

Associate Degree Attainment, First-Time Freshmen, Fall 2007-Fall 2009 (Propensity Score Analysis)



Source: Authors' calculations using data from the CUNY Institutional Research Database (IRDB) and the National Student Clearinghouse.

Notes: Results shown from the propensity-score analysis of first-time freshmen. Differences were tested using a two-tailed t-test. Total sample size was 2,002 (1,001 ASAP and 1,001 non-ASAP students).

Finding #2

ASAP students earned their associate degrees more quickly than non-ASAP students within a six-year timeframe.

Descriptive data presented in Figure 3 show that just under half of ASAP students who earned the associate degree within six years finished in four semesters or less (47.5 percent). Another quarter of students took five semesters (24.7 percent) and the remainder took six semesters (16.9 percent) or more (10.9 percent).

Compared to matched students who earned their associate degree within six years, ASAP students earned their degrees more quickly. As shown in Figure 4, of first-time freshmen in the propensity-score matched sample, ASAP students who earned their associate degrees took just over five semesters to earn their degree (5.1 semesters), roughly equivalent to two and a half years. Non-ASAP students took an average of 6.7 semesters, or over three years, to complete the associate

degree. This 1.6 semester difference means that ASAP students could more quickly move into the labor market or begin pursuing their bachelor's degrees. This finding provides evidence that ASAP helps students earn their associate degrees more quickly, even when compared to other students who also earned a degree within six years.

Figure 3
Semesters to Associate Degree, All ASAP Six-Year Associate Degree Graduates, Fall 2007-Fall 2009 (Descriptive)

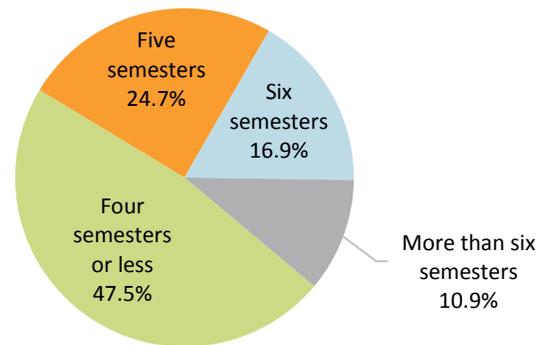
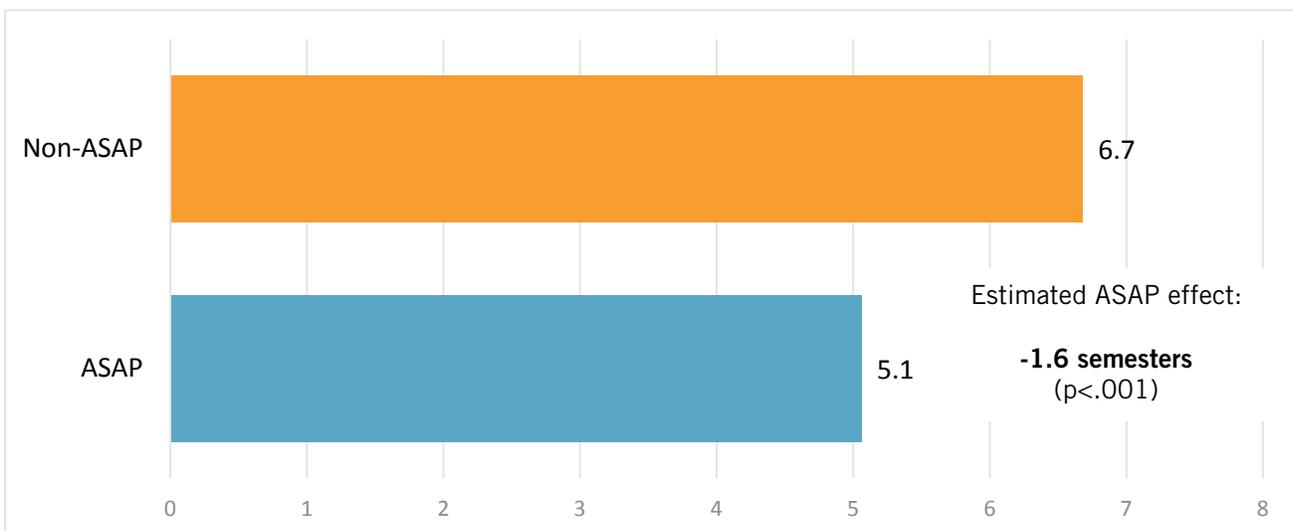


Figure 4
Semesters to Associate Degree, First-Time Freshmen Six-Year Associate Degree Graduates, Fall 2007-Fall 2009 (Propensity Score Analysis)



Source: Authors' calculations using data from the CUNY Institutional Research Database (IRDB) and the National Student Clearinghouse. Notes: Results shown from the propensity-score analysis of first-time freshmen. Differences were tested using a two tailed t-test. Only students who had earned an associate degree within six years were included in this analysis. Total sample size was 984 (611 ASAP and 373 non-ASAP students).

Finding #3

ASAP students transferred to baccalaureate programs at higher rates than non-ASAP students and earned their bachelor's degrees at higher rates.

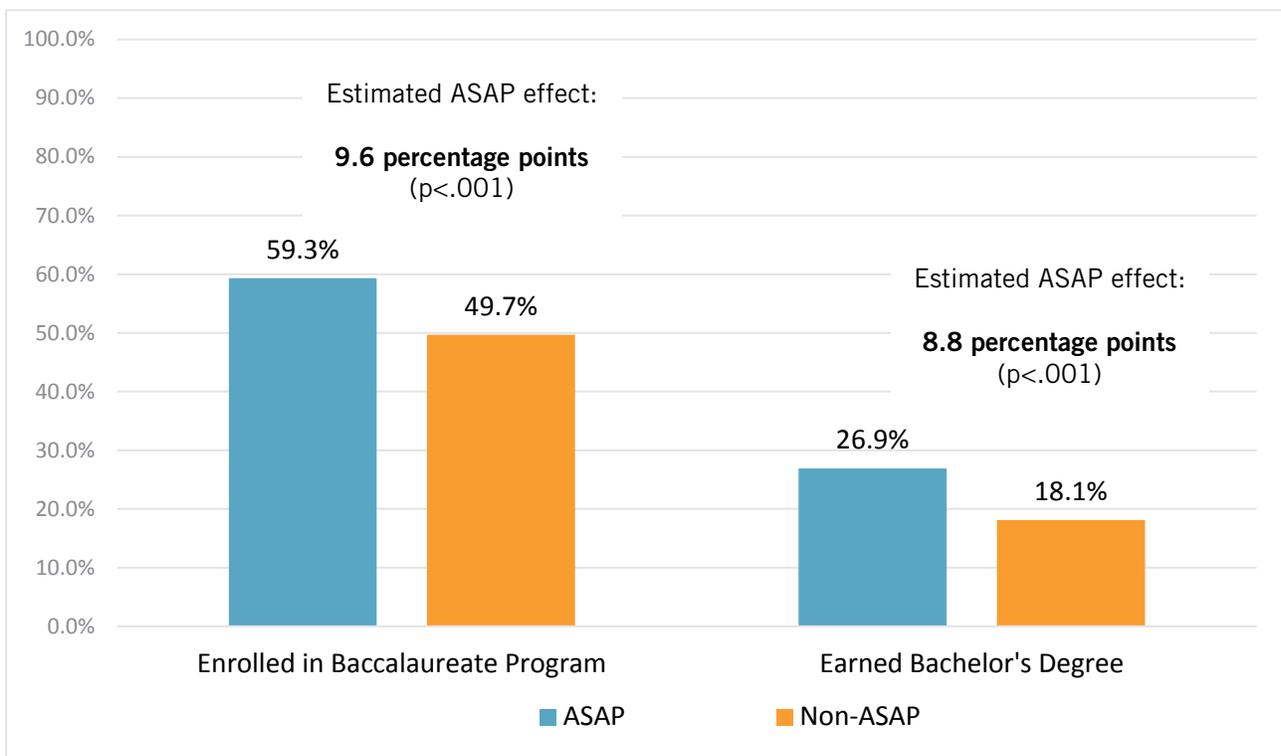
Figure 5 shows that an estimated 59.3 percent of ASAP students enrolled in baccalaureate programs, compared to 49.7 percent of non-ASAP students, for a difference of 9.6 percentage points. In terms of degree attainment within six years, an estimated 26.9 percent of ASAP students earned a bachelor's degree compared to 18.1 percent of non-ASAP students, for a difference of 8.8 percentage points.

In other words, ASAP students graduated with bachelor's degrees at a rate 49 percent higher than the non-ASAP rate.

Interestingly, the effect of ASAP on bachelor's degree attainment is larger than the effect on transfer in terms of a percent change (49 percent vs. 19 percent). This suggests that ASAP not only helps students with the transfer process, but also better prepares them for success once they enter a baccalaureate program. The large size of the estimated ASAP effect on bachelor's degree attainment is particularly notable given that the program does not continue to support students or provide services after they transfer.

Figure 5

Baccalaureate Enrollment and Bachelor's Degree Attainment, First-Time Freshmen, Fall 2007-Fall 2009 (Propensity Score Analysis)



Source: Authors' calculations using data from the CUNY Institutional Research Database (IRDB) and the National Student Clearinghouse.

Notes: Results shown from the propensity-score analysis of first-time freshmen. Differences were tested using a two-tailed t-test. Total sample size was 2,002 (1,001 ASAP and 1,001 non-ASAP students).

Finding #4

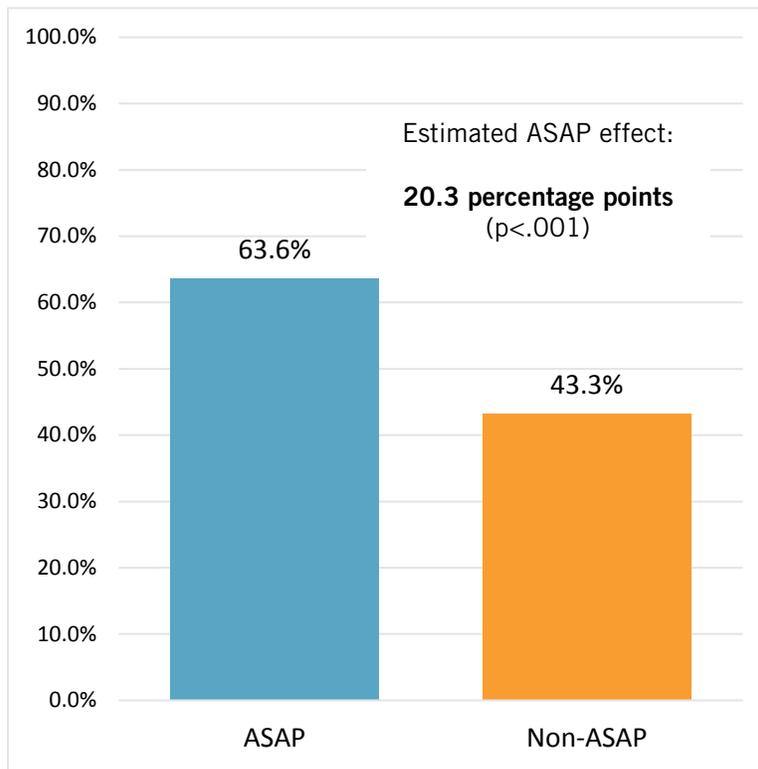
Six years after entering, ASAP students were more likely to have earned undergraduate degrees than non-ASAP students.

The last analysis considered both associate and bachelor's degrees to look at an overall estimated ASAP effect on undergraduate degree attainment. Figure 6 presents this analysis showing that there was a large estimated effect on undergraduate degree attainment: 63.6 percent of ASAP students earned a degree within six years compared to 43.3 percent of non-ASAP students.

Six years after entering college, ASAP students were far more likely to have a postsecondary degree in hand than non-ASAP students. Some may hypothesize that, without ASAP, students may have transferred before earning an associate degree but would have ended up earning a bachelor's degree anyway. The analysis presented here provides evidence to counter that hypothesis. It also highlights the importance of encouraging students to earn an associate degree before transferring. Prior research has shown that many students who begin at community colleges do not earn a bachelor's degree even if they transfer. Given that associate degree holders earn more than those with a high school diploma, students who earn at least an associate degree stand to benefit more than those who spend six years in higher education and leave without a degree (Belfield & Bailey, 2011).

Figure 6

Any Undergraduate Degree Attainment, First-Time Freshmen, Fall 2007-Fall 2009 (Propensity Score Analysis)



Source: Authors' calculations using data from the CUNY Institutional Research Database (IRDB) and the National Student Clearinghouse.

Notes: Results shown from the propensity-score analysis of first-time freshmen. Differences were tested using a two-tailed t-test. Total sample size was 2,002 (1,001 ASAP and 1,001 non-ASAP students).

CONCLUSION

Accelerated Study in Associate Programs (ASAP) was created to support students in earning their associate degrees and in building momentum toward long term academic success. While ASAP has been shown to significantly increase three-year degree attainment rates, this analysis is the first rigorous assessment of ASAP's longer term effects.

Looking six years after community college entry, this analysis shows that ASAP students continued to outperform similar students when a longer timeframe was considered. ASAP's largest effect was found for associate degree attainment, the goal of the program. Even when propensity-score matched comparison students were given double the amount of time to earn a degree, ASAP students had higher completion rates. ASAP students not only earned their associate degrees at a higher rate, they also earned their associate degrees more quickly than other students. Like many students beginning at community colleges, most ASAP students ultimately seek to earn a bachelor's degree. This analysis found that ASAP students transferred to baccalaureate programs at higher rates and earned bachelor's degrees at higher rates. Without ASAP, students were significantly less likely to have earned any undergraduate degree.

While the specific mechanisms were not explored, there are several reasonable hypotheses for why ASAP students would continue to benefit after the program services end. First, ASAP advisors, career and employment specialists, and other staff members provide advice and training for students on a variety of topics, such as study skills, time management, stress reduction, navigating a college environment, accessing available resources, and interacting with faculty. The skills, knowledge, and tools that students develop through ASAP may continue to help students be successful when they move on to a baccalaureate program.

Second, ASAP advisors work with students to create course plans and help students to select and register for the right classes each semester. This careful guidance around planning and registration helps ensure that students take credits that will count toward their associate degree, and can transfer towards their intended bachelor's major.

Third, ASAP staff guide students through the transfer process itself, helping them decide where to apply, assisting with applications, and ensuring that they make a smooth transition to baccalaureate study. This support helps students successfully navigate the transfer process and prepares them for what comes next.

Finally, by strongly encouraging students to earn the associate degree before they transfer, and supporting them in doing so, ASAP advisors help ensure that students do not leave the community college until they have earned a credential. The sense of accomplishment and self-efficacy that comes with earning an associate degree may help students persevere through future challenges they may face in their bachelor's degree programs.

The analyses in this brief present compelling evidence that ASAP has an effect on longer term academic outcomes, including bachelor's degree attainment. However, it is important to keep in mind that the fully proficient fall 2007 cohort makes up the majority of students in this brief, so the effects found for this cohort may be higher than for subsequent cohorts. Outcomes for later cohorts of students will be closely tracked to determine whether the effects hold for students who entered with developmental needs.

As more time passes, students will likely continue to earn degrees. Analysis of eight-year degree attainment for the fall 2007 cohort shows that bachelor's degree completion continues to rise: 33.5 percent of students earned a bachelor's degree in eight years and the ASAP effect remained large and significant. Future research will continue to track degree attainment for subsequent cohorts, as well as look at effects on employment and earnings as the earliest cohorts of students move into the workplace. These analyses will shed more light on the long-term impact of ASAP on students' academic and career trajectories.

WHAT IS ASAP?

Accelerated Study in Associate Programs (ASAP) is a comprehensive program for students pursuing their associate degrees at the City University of New York (CUNY). ASAP is designed to help participating students earn their associate degrees as quickly as possible, with the goal of graduating at least 50 percent of students within three years. The program is able to reach this goal by providing its students with structured and wide-ranging supports, including financial resources (tuition waivers for students in receipt of financial aid with a gap need, textbook assistance, and New York City Transit MetroCards), structured pathways to support academic momentum (full-time enrollment, block scheduled first-year courses, immediate and continuous enrollment in developmental education, winter and summer course-taking), and support services such as comprehensive and personalized advisement, tutoring, career development services, and early engagement opportunities to build a connected community.

WHERE IS ASAP?

CUNY community colleges:

Borough of Manhattan, Bronx, Hostos, Kingsborough, LaGuardia and Queensborough (launched fall 2007)

CUNY senior colleges:

Medgar Evers College (launched fall 2014), College of Staten Island and New York City College of Technology (launched fall 2015)

WHO IS ELIGIBLE?

Full-time, associate degree seeking students with up to two developmental course needs are eligible for ASAP. In addition, ASAP students must be New York City residents or eligible for in-state tuition, and must enroll in an ASAP-approved major (most majors are supported). ASAP students can enter as first-time freshmen or as continuing or transfer students with up to 15 credits.

For more information, please visit: www.cuny.edu/asap

APPENDIX A

Table A1

Six-Year Transfer and Degree Attainment, All ASAP Students, Fall 2007-Fall 2009 Cohorts: By College, Gender and Race/Ethnicity (Descriptive)

	N	Enrolled in Baccalaureate Program (%)	Earned Associate Degree (%)	Earned Bachelor's Degree (%)	Earned Any Undergraduate Degree (%)
College					
BMCC	308	58.1	57.5	24.0	58.8
Bronx	170	47.7	62.4	15.3	62.9
Hostos	140	47.1	58.6	15.0	58.6
Kingsborough	355	67.6	65.6	31.3	71.0
LaGuardia	308	57.1	60.4	25.3	62.7
Queensborough	280	57.1	61.8	30.0	62.9
Gender					
Female	871	63.4	67.1	30.5	69.2
Male	688	50.7	53.9	18.6	56.1
Race/Ethnicity					
Asian/Pacific Islander	158	72.2	73.4	42.4	76.6
Black	508	52.8	55.7	19.5	57.9
Hispanic	581	54.7	62.0	21.9	62.5
White	309	64.4	62.8	32.4	67.6

ENDNOTES

¹ ASAP did not admit a cohort in fall 2008.

² Propensity score analysis, employing one-to-one greedy matching with caliper, was conducted for each ASAP cohort and college separately. Students were matched on the following variables: age; race/ethnicity; gender; admission type; Pell status; skills proficiency test scores in reading, writing and math; and whether student was exempt from testing in reading, writing, and/or math based on a prior indicator of skill proficiency. Matching was successful with balance achieved across all variables. The overall treatment sample loss was 12.7 percent (146 students). For each outcome, estimated effects are shown for the full model, which included fixed effects for college and cohort and background/academic controls. While propensity score matching does not prove causality, it does provide strong evidence of a relationship between treatment and outcomes. Throughout this brief, we refer to the estimated effects as ASAP “effects” or “impacts,” recognizing that quasi-experimental methods do not prove that differences are caused by the intervention.

³ 75.1 percent of the fall 2007 cohort and 69.2 percent of the fall 2009 cohort entered as first-time freshmen.

⁴ ASAP criteria used for the comparison pool included: full-time enrollment, major accepted by ASAP, New York City residency and not enrolled in CUNY College Discovery.

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