What Can a
Multifaceted
Program
Do for
Community
College
Students?



EARLY RESULTS FROM
AN EVALUATION OF
ACCELERATED STUDY IN
ASSOCIATE PROGRAMS (ASAP)
FOR DEVELOPMENTAL
EDUCATION STUDENTS

Susan Scrivener Michael J. Weiss Colleen Sommo

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Early Results from an Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students

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with

Hannah Fresques

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Overview

In recent years, there has been unprecedented national focus on the importance of increasing the stubbornly low graduation rates of community college students. Most reforms that have been tried are short-term and address one or only a few barriers to student success. The City University of New York's (CUNY's) Accelerated Study in Associate Programs (ASAP), launched in 2007 with funding from Mayor Bloomberg's Center for Economic Opportunity (CEO), is an uncommonly multifaceted and long-term program designed to help community college students graduate.

ASAP requires students to attend college full time and provides a rich array of supports and incentives for up to three years, with a goal of graduating at least 50 percent of students within three years. Unlike many programs, ASAP aims to simultaneously address multiple barriers to student success over many semesters. The program model includes some block-scheduled classes for ASAP students for the first year of the program; an ASAP seminar for at least the first year, which covers such topics as goal-setting and academic planning; comprehensive advisement; tutoring; career services; a tuition waiver that covers any gap between a student's financial aid and tuition and fees; free MetroCards for use on public transportation; and free use of textbooks.

This report presents very promising early findings from a random assignment study of ASAP at three CUNY community colleges: Borough of Manhattan, Kingsborough, and LaGuardia. For the study, ASAP targets low-income students who need one or two developmental (remedial) courses to build their reading, writing, or math skills. The study compares ASAP with regular services and classes at the colleges. Key findings include effects on:

- **Full-time enrollment.** During the study's first semester, ASAP increased full-time enrollment by 11 percentage points: 96 percent of the students assigned to ASAP enrolled full time, compared with 85 percent of the comparison group.
- Credits earned and completing developmental coursework. ASAP increased the average number of credits earned during the first semester by 2.1 credits and increased the proportion of students who completed their developmental coursework by the end of that semester by 15 percentage points.
- **Semester-to-semester retention.** ASAP increased the proportion of students who enrolled in college during the second semester by 10 percentage points and increased full-time enrollment that semester by 21 percentage points.

ASAP's early effects are larger than the effects of most of the community college programs MDRC has studied previously. ASAP's comprehensive package of financial aid, services, and supports, together with its full-time attendance requirement, has resulted in students taking and passing more credits than they would have otherwise. Future reports will show whether these effects can be sustained — or even grow — as students continue in this comprehensive, three-year program.

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Preface

Community colleges across the country confront a clear challenge: too many students arrive on campus unprepared, get placed into developmental (or remedial) courses where they stagnate, attend only part time (because of work or other responsibilities), and never complete a credential, graduate, or transfer to a four-year institution. At the same time, community colleges are subject to increasing expectations — and increased scrutiny — about their ability to develop a better-educated and credentialed workforce.

In 2007, The City University of New York (CUNY), with the support of Mayor Bloomberg's Center for Economic Opportunity, launched an ambitious program, Accelerated Study in Associate Programs (ASAP), to encourage and support community college students to attend school full time and graduate. The program provides a rich array of financial support, special seminars and block-scheduled classes, enhanced advising, and other support services for three full years.

This report provides early findings from MDRC's random assignment evaluation of ASAP at three CUNY community colleges, targeted to low-income students who need at least one developmental course in reading, writing, or math to build college-level skills. The results are very encouraging; for instance, after only one semester, ASAP has increased the proportion of students who have completed their developmental education courses by 15 percentage points — meaning that 15 more students out of every 100 are ready to take college-level courses. In addition, ASAP increased the number of credits students earned during the first semester and boosted their rates of full-time enrollment in the first and second semesters. These are some of the largest short-term effects we've seen in an evaluation of a community college program.

Recent research by MDRC and others suggests that comprehensive, intensive, and extended interventions may be necessary to substantially improve achievement among community college students in the long run. These early results from our evaluation of ASAP provide hope that its package of supports and services — and its strong message about full-time attendance — are putting students on the right track. Future reports will document whether that hope is fulfilled.

In the meantime, CUNY is using lessons learned from ASAP to inform the development of a new community college opening in the fall of 2012 — as well as expanding the program in its six existing community colleges to serve more than 4,000 students by 2014.

Gordon L. Berlin President

Acknowledgments

Accelerated Study in Associate Programs (ASAP) was launched by The City University of New York (CUNY) in 2007 with funding from Mayor Bloomberg's Center for Economic Opportunity (CEO), and CEO has continued supporting the program. In 2009, senior university leadership from the CUNY Office of Academic Affairs — Alexandra Logue, Executive Vice Chancellor for Academic Affairs and University Provost; John Mogulescu, Senior University Dean for Academic Affairs and Dean of the School of Professional Studies; and David Crook, University Dean for Institutional Research and Assessment — approached MDRC about the possibility of evaluating ASAP, and we enthusiastically accepted the opportunity. CUNY secured the initial investment for the evaluation from the Leona M. and Harry B. Helmsley Charitable Trust; the Robin Hood Foundation provided additional funds soon after. We greatly appreciate their generous backing and ongoing commitment.

We are very grateful to Donna Linderman, the ASAP University Executive Director, for her invaluable partnership and collaboration on the study. She worked closely with MDRC to launch the evaluation at each college and has continued to play a critical role. We are also grateful to Zineta Kolenovic, ASAP Assistant Director for Research and Evaluation, who provided data for the report from CUNY's Institutional Research Database and has been instrumental in helping us understand the data and key CUNY policies. Donna and Zineta also reviewed an earlier draft of this report and provided valuable feedback.

We greatly appreciate the assistance and support of several administrators and staff at Borough of Manhattan Community College (BMCC), Kingsborough Community College (KCC), and LaGuardia Community College (LGCC). Space does not permit us to name everyone who has played a role in ASAP and the evaluation, but we want to particularly acknowledge some individuals. President Antonio Pérez and Senior Vice President of Academic Affairs Sadie Bragg at BMCC; President Regina Peruggi and Vice President for Academic Affairs Stuart Suss at KCC; and President Gail Mellow, Vice President for Academic Affairs Peter Katopes, and Assistant Dean for Academic Affairs Ann Feibel at LGCC have supported the project and provided important leadership. The colleges' ASAP Directors — Lesley Leppert-McKeever at BMCC, Richard Rivera at KCC, and Bernard Polnariev at LGCC, who recently moved to another position at the college — worked closely with MDRC to begin the study on their campuses and have been terrific partners. We appreciate all that they and the ASAP staff at the three colleges have done to support the evaluation and bring the program model to life for participating students. Several ASAP staff worked hard to recruit and randomly assign students for the study; special thanks go to Denessa Rose at BMCC, Jonelle Gulston at KCC, and Tyleah Castillo at LGCC. Sandra Rumayor, the Director of the Evening/Weekend Program at BMCC, also helped recruit students for the study.

Many MDRC staff members have contributed to the ASAP evaluation and to this report. Robert Ivry, Lashawn Richburg-Hayes, Elizabeth Zachry Rutschow, and Kate Gualtieri worked with CUNY administrators to lay the groundwork for the study. Vanessa Martin worked closely with Donna Linderman and the colleges' ASAP directors and staff to develop and implement the recruitment and sample intake procedures for the study. She was assisted by Herbert Collado and Monica Cuevas. Joel Gordon, Galina Farberova, Jon Heffley, and Shirley James and her staff developed and monitored the random assignment and baseline data collection process. Gordon Berlin, Rob Ivry, Thomas Brock, Lashawn Richburg-Hayes, and John Hutchins reviewed earlier drafts of this report and provided helpful comments. Alyssa Ratledge and Katherine Morriss assisted in the production of the report and Alyssa conducted fact-checking. Shane Crary-Ross advised Alyssa on the report production process. John Hutchins edited the report, and Stephanie Cowell prepared it for publication.

Finally, we would like to thank the hundreds of students who are participating in the evaluation at BMCC, KCC, and LGCC. We hope that the findings from the evaluation will be used to improve college programs and services for them and others in the future.

The Authors

Executive Summary

In recent years, there has been unprecedented national focus on the importance of increasing graduation rates for community college students. Many reforms have been tried, but college completion rates remain stubbornly low: Only one-third of entering students graduate with a degree or certificate within five years. Reforms are often short-term, lasting one or two semesters, and are designed to address one or only a few barriers to student success. Accelerated Study in Associate Programs (ASAP), operated by The City University of New York (CUNY), the nation's largest public urban university system, is an uncommonly multifaceted and long-term program aimed at helping community college students stay in school and graduate. Launched in 2007 with funding from Mayor Bloomberg's Center for Economic Opportunity (CEO), the program was designed to substantially increase the proportion of students who graduate and to help them graduate sooner.

This report presents very promising early findings from a random assignment study of ASAP that is taking place at three CUNY community colleges: Borough of Manhattan Community College (BMCC), Kingsborough Community College (KCC), and LaGuardia Community College (LGCC). For the study, ASAP targets low-income students who need one or two developmental (remedial) courses to build their math, reading, or writing skills and are willing to attend school full time. Compared with regular college services, ASAP increased full-time enrollment and the number of credits earned in the first semester of the study, helped students complete their developmental requirements that semester, and increased enrollment in the second semester. ASAP's early effects are large, compared with the effects of other community college reforms MDRC has studied.

ASAP Model

ASAP requires students to attend college full time and provides a rich array of supports and incentives for up to three years. Unlike many programs, ASAP is designed to simultaneously address multiple potential barriers to student success and to address them over many semesters. ASAP's goal is to graduate at least 50 percent of participating students within three years, far exceeding typical graduation rates for low-income developmental students.

The description below of ASAP's components is of the program as designed. The evaluation's research on how ASAP is operated by the colleges is still in progress, but early data suggest that ASAP has been generally well implemented, with some variation across the components and across the campuses, as is allowed for in the model.

- Messages and requirements. ASAP requires students to enroll full time every fall and spring semester. The program encourages students to take their developmental courses early and to graduate within three years.
- Course enrollment. Cohorts of students organized by major take three or more courses together in a consolidated block schedule during their first year in ASAP. For at least the first year of the program, students are required to take a non-credit ASAP seminar that covers such topics as goal-setting and academic planning.
- Student services. Students receive comprehensive advisement from their ASAP adviser, who has a small caseload (60-80 students). Students are required to meet with their adviser at least twice a month. ASAP tutors provide general support and conduct review sessions for some courses, and some ASAP students are required to attend tutoring frequently. ASAP career and employment specialists help with career planning and, if needed, job placement. Students are required to meet with the career and employment specialist at least once a semester.
- **Financial supports.** Any gap between a student's financial aid and tuition and fees is waived, essentially ensuring that all of each student's tuition and fees are covered. Students also receive free monthly MetroCards for use on public transportation. The MetroCard is tied to fulfilling certain program requirements, such as meeting with an adviser or attending tutoring. Students also receive free textbooks for their classes (which they must return at the end of the semester).

ASAP Evaluation and Research Sample

ASAP originally targeted students at CUNY's six community colleges who were "college-ready" when they entered the program (that is, they did not need any developmental coursework). CUNY's internal evaluation of ASAP found promising effects for participating students, and CUNY decided to expand the program and commission an external evaluation. For the evaluation, ASAP targets exclusively students who need developmental education.

MDRC, a nonprofit, nonpartisan education and social policy research firm, is using a random assignment research design to study the impacts (or effects) of ASAP, compared with standard services and courses at the colleges, on students' academic outcomes over a three-year period. This report examines impacts during students' first and second semesters in the study based on student transcripts and CUNY Assessment Tests.

For the study, ASAP targets students at BMCC, KCC, and LGCC who met the following eligibility criteria at the point of random assignment: had family income below 200 percent of the federal poverty level and/or were eligible for a Pell grant, needed one or two developmental courses based on CUNY Assessment Tests, was a new student or a continuing student who had earned 12 or fewer credits, was a New York City resident, was willing to attend college full time, and was in an ASAP-eligible major (the colleges excluded a few majors that have requirements that make graduating quickly difficult). Each eligible student who agreed to participate was assigned, at random, either to the program group, whose members have the opportunity to participate in ASAP, or to the control group, whose members receive the colleges' standard services. Generally, like at most community colleges, the standard services are far less intensive than ASAP's. The colleges randomly assigned students at two points in time: One group (or cohort) of students was assigned just before the spring 2010 semester and the other just before the fall 2010 semester.

The 896 students in the sample completed a baseline demographic survey just before they were randomly assigned. Roughly two-thirds of the students in the research sample are women and most are relatively young (83 percent were 24 years old or younger when they entered the study). Reflecting the student body at the three colleges, the study sample is racially and ethnically diverse, with no racial or ethnic majority. Virtually all the sample members said they planned to obtain a degree beyond an associate's degree.

Overview of ASAP's Early Impacts

This section summarizes the key impact findings. All of the impacts discussed below are statistically significant, meaning that they are unlikely to have arisen by chance.

 During the first semester, ASAP increased the proportion of students who enrolled full time and increased the average number of credits students earned.

As Table ES.1 shows, during the first semester of the follow-up period, 96 percent of the program group enrolled in college full time (12 or more credits), compared with 85 percent of the control group, yielding an impact of 11 percentage points. As noted above, willingness to enroll full time was an eligibility requirement for the study. However, this willingness does not always translate into actual full-time enrollment; ASAP increased the proportion of students who followed through. The impact on full-time enrollment is important, as past research has found that part-time enrollment is associated with lower rates of persistence and progress in college.

Not surprisingly given the increase in full-time enrollment, program group members attempted more credits during the first semester. They also earned more credits and thus made

Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students

Table ES.1

Early Impacts on Selected Academic Outcomes

Outcome	Program	Control	Difference
Outcome	Group	Group	(Impact)
<u>First semester</u>			
Enrolled ^a (%)	96.4	94.0	2.5 *
Full time	95.8	85.2	10.6 ***
Part time	0.6	8.8	-8.1 ***
Total credits attempted	16.1	13.9	2.2 ***
College-level credits	10.5	10.3	0.2
Developmental credits	5.6	3.6	2.0 ***
Total credits earned	11.4	9.3	2.1 ***
College-level credits	8.5	7.6	0.9 ***
Developmental credits	2.9	1.7	1.1 ***
Completed developmental requirements ^b (%)	46.6	31.9	14.7 ***
Second semester			
Enrolled ^a (%)	90.3	80.4	9.8 ***
Full time	80.5	59.8	20.6 ***
Part time	9.8	20.6	-10.8 ***
Total credits attempted	11.8	9.9	1.9 ***
College-level credits	10.0	8.3	1.7 ***
Developmental credits	1.8	1.6	0.3
Sample size (total = 896)	451	445	

SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent. Estimates are adjusted by site and cohort.

First semester measures include the main session and intersession. Second semester measures do not include intersession data and are subject to change.

"Developmental credits" are credits associated with developmental reading, writing, and math courses; English as a Second Language classes; and a small number of other non-college-level courses. CUNY refers to these credits as "equated credits."

^aEnrollment is based on courses that students are still enrolled in as of the end of the add/drop period. Full-time enrollment is defined as enrollment in 12 or more credits. Part-time enrollment is defined as enrollment in fewer than 12 credits.

^bCompletion of developmental requirements is contingent upon passing CUNY Assessment Tests, passing the highest level of developmental education, and/or passing a college-level class in each subject. This measure includes students who passed CUNY Assessment Tests prior to the first semester.

more progress. Program group members earned an average of 11.4 total credits in the first semester, 2.1 credits more than the control group — 0.9 college-level credits and 1.1 credits in developmental courses. Developmental courses do not provide college-level credits but instead provide what are called "equated credits" at CUNY, which count toward part-time/full-time status and for tuition and financial aid purposes. Earning these credits, referred to as "developmental credits" in this report, is an important indicator of progress through developmental education. As mentioned above, one of the eligibility criteria for the study was being in need of one or two developmental courses. Before students begin classes, they take the CUNY Assessment Tests, designed to measure basic skills proficiency in reading, writing, and math. Typically students at CUNY's community colleges who fail the tests are not required to take developmental courses when they *start* school, but they must complete any developmental courses before they can take certain gatekeeper courses, such as freshman English, college algebra, and most humanities courses, and before they can graduate or transfer to a CUNY four-year school.

 ASAP increased the proportion of students who had completed all of their developmental requirements by the end of the first semester.

As Table ES.1 shows, 47 percent of the program group had completed their developmental requirements, compared with 32 percent of the control group. After only one semester, ASAP helped a substantial number of students reach this important milestone.

 ASAP increased the proportion of students who returned to school in the second semester.

All three colleges have "main sessions" (like traditional fall and spring terms) followed by shorter "intersessions." The data for the second semester that were analyzed for this report include only the main session at each college (data for the first semester includes both the main session and the intersession). As Table ES.1 shows, 90 percent of the program group members enrolled during the main session of the second semester, compared with 80 percent of the control group members, a difference of 10 percentage points. The vast majority of the program group students enrolled full time: 81 percent, compared with only 60 percent of the control group, yielding a substantial impact of 21 percentage points. Since intersession credits count toward full-time status, these percentages will change as more data become available. It is unlikely, though, that the additional data will change the finding that ASAP positively affected second-semester enrollment. During the second semester, the program increased the average number of credits that students attempted. (Data on earned credits in the second semester were not yet available for the full sample when the analysis for the report was completed.)

 For the first cohort of sample members, ASAP increased credits earned during the second semester and increased the proportion of students who enrolled in school in the third semester. An additional semester of follow-up data was available for the first cohort of students in the study, assigned just before the spring 2010 semester, which comprises approximately one-third of the full sample. Results for the first cohort (not shown) suggest that ASAP is likely to continue having positive effects, at least through the start of the third semester.

Conclusions and What's Next

ASAP's early effects on students' academic outcomes are very promising, and it is clear at this juncture that ASAP's package of requirements, messages, services, and financial benefits can improve short-term outcomes. In fact, ASAP's effect on the average number of total credits students earned during the first semester is larger than the effect of any of the other community college programs that MDRC has studied. ASAP's effect on second-semester enrollment rates is the second largest MDRC has found. Based on ASAP's effects for students to date — those in the MDRC random assignment study as well as students in prior entering cohorts — CUNY is expanding the program to serve over 4,000 students by 2014, three times its current size.

Future reports will present findings on longer-term academic outcomes, including two-and three-year graduation rates. MDRC's evaluation will also examine the implementation of ASAP and the key differences between ASAP and standard college services and courses. Although the evaluation is not designed to definitively determine which components of ASAP matter the most — because the entire ASAP package is being compared with services as usual — the implementation research will shed light on that issue. Finally, MDRC will also examine the costs of ASAP. Given that ASAP is multifaceted and lasts three years, it is likely to be more expensive than most other programs studied. It may also, however, generate more substantial effects.

Introduction

In recent years, there has been unprecedented national focus on the importance of increasing graduation rates for community college students to help improve individuals' opportunities and to build the country's workforce. Many reforms have been tried, but college completion rates remain stubbornly low. Policymakers and colleges continue to seek initiatives that can substantially improve student success.

Reforms in community colleges are often short-term, lasting one or two semesters, and are designed to address one or a few barriers to student success. This report presents very promising early findings from a random assignment study of a program that is uncommonly multifaceted and lasts for three years. The City University of New York (CUNY), the nation's largest public urban university system, offers Accelerated Study in Associate Programs (ASAP) at all six of its existing community colleges. Designed to help community college students stay in school and graduate, ASAP is one of the most ambitious efforts in the country to improve the success rates of low-income postsecondary students. Launched in 2007 with funding from Mayor Bloomberg's Center for Economic Opportunity (CEO), the program was designed to substantially increase the proportion of students who graduate and to help them graduate sooner. The sooner an individual attains a degree, the sooner he or she can reap the economic and other benefits of that degree.

ASAP requires students to attend college full time and provides a rich array of supports and incentives for up to three years. Unlike many programs, ASAP is designed to simultaneously address multiple potential barriers to student success and to address them over many semesters. ASAP's goal is to graduate at least 50 percent of participating students within three years, far exceeding typical community college graduation rates. The program model includes the following key components:

- Requirement to attend college full time during the fall and spring semesters and encouragement to complete developmental education early and graduate within three years
- Block-scheduled classes with other ASAP students (for the first year of the program)
- ASAP seminar covering such topics as goal-setting, study skills, and academic planning (for at least two semesters of the program)

¹The ASAP model informed the development of CUNY's New Community College (NCC), which is scheduled to open in fall 2012.

- Free use of textbooks
- Comprehensive advisement from an ASAP adviser with a small caseload
- Tutoring
- Career services
- Tuition waiver that covers any gap between a student's financial aid and tuition and fees
- Free MetroCards for use on public transportation

For the study, ASAP targets low-income students who need one or two developmental (remedial) courses based on CUNY Assessment Tests and are willing to attend school full time.

MDRC, a nonprofit, nonpartisan education and social policy research firm, is conducting an evaluation of ASAP, examining its implementation and its effects on students' academic outcomes, including enrollment, credit accumulation, and graduation, over three years. The evaluation is taking place at three of CUNY's six community colleges: Borough of Manhattan Community College, Kingsborough Community College, and LaGuardia Community College. The study began in 2009 and will continue through 2014.

This report is the first from the study. The following sections present some background on community colleges and information from prior research on initiatives to increase student success; a description of the evaluation, including a discussion of the participating colleges and the sample members; more detail on the ASAP model; the impacts of ASAP on academic outcomes during the first two semesters of the study's follow-up period; and conclusions and next steps. The bottom line? Compared with regular services and classes, ASAP increased full-time enrollment and the number of credits students earned in their first semester. It also increased the proportion of students who returned to college for a second semester.

Community Colleges and Efforts to Increase Student Success

Higher education is becoming increasingly important in the labor market; workers with a college degree earn substantially more, on average, than those without. For example, data from the U.S. Census Bureau show that, in 2010, the average annual earnings for full-time workers over the age of 25 with an associate's degree were \$49,275, compared with average annual earnings of \$40,900 for those who did not advance beyond a high school diploma or General Educational Development (GED) certificate.² Similarly, an adult with a bachelor's degree earns

²U.S. Census Bureau (2010).

about \$2.1 million in his or her lifetime, nearly twice as much as an adult with a high school diploma or the equivalent.³ Higher education is also associated with other benefits, such as better health and increased civic engagement.⁴

Community colleges play a central role in American higher education. Recent data show that the nation's 1,167 community colleges enroll a total of 12.4 million students, or 44 percent of the country's undergraduate population.⁵ Owing in part to their relative affordability and accessibility, community colleges serve disproportionately more disadvantaged students than four-year institutions. For example, low-income, black, and Hispanic college students — groups historically underrepresented in higher education — are disproportionately enrolled in community colleges and make up a considerable fraction of the student population.⁶ Recently, the Obama administration has intensified the focus on community colleges, recognizing their importance in helping increase the nation's college graduation rates.

Unfortunately, completion rates at community colleges are quite low: Only 32 percent of entering students graduate with a degree or certificate within five years. Moreover, many undergraduates take longer to complete their degrees than is considered "normal" — four years for a bachelor's degree and two years for an associate's. In a survey of students who started at public two-year colleges, for example, only 4 percent graduated with an associate's degree in the expected two years. Another 10 percent took three years, and another 9 percent took more than three years. The consequences of this increased time to degree are considerable; the longer a student remains in school without completing, the more likely it is that he or she will encounter issues that will make it necessary to drop courses, take time off, or drop out of college altogether.

While graduation rates are low overall at community colleges, they are even lower for the many students who enter college with some developmental needs. Recent data from CUNY's community colleges, for example, show that only 26 percent of students with developmental needs graduate after six years, compared with 40 percent of students without any remediation needs. Nationwide, nearly 60 percent of community college students enroll in at least one developmental reading, writing, or math course. This lack of preparation sets students up to struggle academically, increasing the likelihood that they will fail and have to

³Day and Newburger (2002).

⁴Baum and Ma (2007); Dee (2004).

⁵American Association of Community Colleges (2011).

⁶Provasnik and Planty (2008).

⁷Horn and Berger (2004).

⁸Berkner, He, and Cataldi (2002).

⁹CUNY Office of Academic Affairs (2011).

¹⁰Bailey (2009).

repeat required courses. Indeed, developmental courses are negatively correlated with student success and persistence.¹¹

Many non-academic factors can also impede students' progress through community college, including the costs of attending college and a general lack of student support services. ¹² Furthermore, for various reasons, many students attend school part time. For example, while most CUNY community college students start out by attending college full time, nearly half drop to part-time status at some point during their college careers. ¹³ This substantially decreases their chances of obtaining a postsecondary degree in a timely fashion. Generally, it has been established that part-time attendance is negatively associated with persistence. ¹⁴

Many reforms have been implemented to increase rates of college persistence and completion for disadvantaged students. MDRC has studied a variety of initiatives over the past decade, including financial aid reforms, enhancements to student services, and instructional reforms. A variety of approaches have been found to help improve students' educational outcomes, but, for the most part, the effects have been modest. MDRC's research to date suggests that reforms that address one or a few barriers to student success and last one or two semesters may not be robust enough to substantially improve long-term outcomes. The evidence points to the need for multifaceted, longer-lasting interventions and broader institutional reforms.¹⁵

CUNY's ASAP initiative builds upon the modest successes of some earlier programs by bringing together multiple strategies into one program and providing services for an extended period — three years — to help students stay in school and graduate quickly. It also requires full-time enrollment.

Although ASAP's rich array of services is not common, other reforms are moving in the same direction. For example, the ASAP design informed the development of a new CUNY community college that is scheduled to open in fall 2012. In addition, the Gates Foundation's new Completion by Design initiative provides funds and technical assistance to groups of colleges to design new pathways for the entire college experience, from entry to graduation. When ASAP was launched in 2007, it was at the forefront of a growing effort of bold reforms that aim to substantially and meaningfully improve students' outcomes.

¹¹Adelman (2004); Attewell, Lavin, Domina, and Levey (2006).

¹²See, for example, Brock and LeBlanc (2005).

¹³Linderman and Kolenovic (2009).

¹⁴Hoachlander, Sikora, and Horn (2003); Choy (2002).

¹⁵See, for example, Scrivener and Coghlan (2011).

¹⁶Linderman and Kolenovic (2012).

¹⁷See http://www.completionbydesign.org/about-us.

The Evaluation

Background and Key Components

In 2007, CUNY received funding from Mayor Bloomberg's Center for Economic Opportunity (CEO) to establish ASAP and launched the program that fall. ASAP originally targeted students at CUNY's six community colleges who were "college-ready" — that is, students who were deemed to be fully proficient in reading, writing, and math when the program began. CUNY's internal evaluation of ASAP found substantial effects on two-year graduation rates for the 2007 cohort of students. In 2009, CUNY decided to expand the program and commission an external evaluation. For the evaluation, ASAP targets exclusively students who need developmental education.

MDRC is using a random assignment research design to study the impacts (or effects) of ASAP, compared with standard services and courses at the colleges, on students' academic outcomes over a three-year period. The impact analysis is examining ASAP's effects on earned credits, progress in developmental education, and degree or certificate attainment. The study is also looking at other outcomes, including enrollment, persistence, and transfer to four-year institutions.

MDRC's evaluation is also exploring how ASAP is implemented at the three colleges and how the planned program services compare with the offered services. The study is also examining participation in various services for program and control group members and the nature of the treatment contrast — that is, the difference between the services received by and experiences of program group and control group students. Although the evaluation is not designed to definitively determine which components of ASAP matter the most — because the entire ASAP package is being compared with services as usual — the implementation research should shed light on that issue.

Finally, MDRC is examining the costs of ASAP. Given that ASAP provides many services and supports for three years, it is likely to be more expensive than most other programs studied. It may also, however, generate more substantial effects.

¹⁸Students' basic skills proficiency is generally determined by the CUNY Assessment Tests. Twenty-eight percent of the fall 2007 cohort had some developmental needs when they were initially recruited for ASAP and took their developmental courses during the summer in order to join the program.

¹⁹Linderman and Kolenovic (2009). CUNY also published a report in early 2012 that describes positive effects on three-year graduation rates: Linderman and Kolenovic (2012).

Data Sources

The evaluation of ASAP relies on several data sources. The key analyses discussed in this report are based primarily on the following data:

- Baseline Information Form (BIF). Just before entering the study, all students completed a short survey, called the Baseline Information Form (BIF). The BIF collected information on demographic and other background characteristics. BIF data are used to describe the sample and to examine the similarity between the two research groups when the study began. Later in the study, BIF data may be used to identify students for subgroup analyses.
- **Student Records from CUNY**. CUNY is providing to MDRC information on students' academic outcomes from their Institutional Research Database (IRDB). These records include transcript data from the three community colleges in the study and the other colleges in the CUNY system, as well as from CUNY Assessment Test data. These data are used to determine the program's effect on students' progress in college and how many developmental courses sample members needed when they entered the study.

The report also uses data from the Integrated Postsecondary Education Data System (IPEDS), which is housed at the U.S. Department of Education's National Center for Education Statistics, and the institutional fact books from Borough of Manhattan, Kingsborough, and LaGuardia Community Colleges to help describe the colleges.

Future reports will also use data from the National Student Clearinghouse, which provides information on enrollment and degree attainment at colleges across the nation; a student survey that asked students in the study questions about their participation in student services, engagement on campus, study habits, employment, and how they financed college; interviews with administrators and staff and observations at the colleges; and various ASAP program documents and data.

The Colleges in the Study

CUNY is the largest urban public university system in the country, comprising 23 institutions, including six community colleges across the five boroughs of New York City. 20 CUNY serves more than 540,000 students each year.²¹

²⁰A seventh community college will open in fall 2012. ²¹See the CUNY website (www.cuny.edu/about.html).

ASAP has operated at all six CUNY community colleges since it was launched in 2007. Three are participating in the evaluation: Borough of Manhattan Community College (BMCC), Kingsborough Community College (KCC) in Brooklyn, and LaGuardia Community College (LGCC) in Queens. The colleges were selected by CUNY and MDRC based on their willingness to participate in an evaluation and work with MDRC to develop and implement random assignment, their capacity to reach the desired sample size goals, and the interest of the ASAP program administrators in serving additional students.

Table 1 shows selected characteristics of degree-seeking undergraduates at BMCC, KCC, and LGCC in fall 2009. The three colleges are the largest of the six CUNY community colleges, enrolling a total of 50,000 students, representing 63 percent of the total enrollment in CUNY's community colleges. The majority of students at the three colleges in fall 2009 attended full time (about two-thirds at BMCC and LGCC and about three-fourths at KCC).

As the table shows, the majority of students at the three colleges were women. Across the colleges, between 31 and 44 percent were younger than 20 years old, between 35 and 39 percent were 20-24, and between 22 and 32 percent were 25 or older. The student body at the three participating colleges, like the study body at other CUNY colleges and like the population of New York City more broadly, is racially and ethnically diverse. There is no racial or ethnic majority at any of the colleges. The plurality of students is Hispanic at two colleges (BMCC and LGCC) and white at one (KCC).

Just over half of the students at BMCC received a Pell grant, the main federal source of need-based financial aid, in the 2008-2009 school year. At the other two colleges, just over one-third of students received a Pell grant.

Finally, as the last row of the table shows, the vast majority (90 percent) of students at BMCC were identified by the college as in need of some developmental education. About three-fourths of students at KCC and LGCC were in this category.

The Random Assignment Process and the Sample Members

ASAP targets students who met the following eligibility criteria when they entered the study:

- Low income: Family income below 200 percent of the federal poverty level and/or eligible for a Pell grant
- In need of one or two developmental courses based on CUNY Assessment Tests
- New student or a continuing student who had earned 12 or fewer credits

Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students

Table 1
Selected Characteristics of Degree-Seeking Students at Colleges
Participating in the ASAP Evaluation

Early Impacts Report

Characteristic	BMCC	KCC	LGCC
Total students	20,871	14,217	14,912
Enrollment (%)			
Full time	67.0	74.3	63.5
Part time	33.0	25.7	36.5
Gender (%)			
Male	40.7	44.6	40.4
Female	59.3	55.4	59.6
Age ^a (%)			
Less than 20 years	30.8	43.6	31.9
20-24 years	39.0	34.5	36.6
25 years and over	30.2	21.9	31.5
Race/ethnicity (%)			
Hispanic	35.5	14.7	35.5
White	13.6	35.3	13.5
Black	31.7	33.9	18.3
Asian or Pacific Islander	11.5	11.2	17.1
Other ^b	7.7	4.9	15.5
Receiving Pell grant ^c (%)	52.6	35.9	35.9
In need of developmental education ^d (%)	89.6	72.6	75.5

SOURCES: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), unless otherwise noted, and institutional fact books. The latest available institutional fact books from BMCC (2009-2010), KCC (2009-2010), and LGCC (2011) community colleges are available on the colleges' websites.

NOTES: BMCC indicates Borough of Manhattan Community College, KCC indicates Kingsborough Community College, and LGCC indicates LaGuardia Community College.

Unless otherwise noted, data are based on undergraduate degree-seeking students from fall 2009.

Missing values are not included in individual variable distributions.

Distributions may not add to 100 percent because of rounding.

^aData on age are based on the entire undergraduate student population.

bIncludes American Indians, Alaska Natives, and nonresident aliens, as tracked by the Integrated

Postsecondary Education Data System (IPEDS), which does not categorize nonresident aliens by race/ethnicity.

^cFinancial aid data are for the 2008-2009 school year and are based on the entire undergraduate student population.

^dData on developmental need are based on institutional fact books. BMCC and KCC data are based on first-time freshmen. LGCC data are based on first-time degree-seeking students.

- New York City resident
- Willing to attend college full time
- In an ASAP-eligible major (the colleges excluded a few majors that have requirements that make graduating quickly difficult)²²

MDRC worked with staff from the CUNY Office of Academic Affairs and the participating colleges to develop procedures to build the research sample. ASAP staff at each college invited eligible students to participate in the evaluation through letters, emails, and phone calls. Students who attended an intake session on campus, during which staff described the ASAP program and evaluation, and agreed to take part in the study completed an Informed Consent Form and Baseline Information Form (BIF) containing questions about students' background characteristics. After completing these forms, each student was assigned, at random, either to the program group, whose members have the opportunity to participate in ASAP, or to the control group, whose members receive the college's standard services. As compensation for their time, students received a one-week MetroCard for use on public transportation.²³ The colleges randomly assigned two groups (or cohorts) of students for the ASAP evaluation: One just before the spring 2010 semester and the other just before the fall 2010 semester. (BMCC and KCC assigned students before both semesters; LGCC assigned students only before the fall 2010 semester.)

Table 2 presents selected characteristics of the 896 individuals in the research sample. Because the sample consists of students who met the program eligibility criteria described above and agreed to participate in the study, it should not be considered representative of the broader body of degree-seeking undergraduates at the three colleges as described in Table 1.

The first column of the table shows characteristics for the full sample. The majority of participants in the study are women (62 percent). This is slightly higher than the proportion of degree-seeking undergraduate women in the student body at each of the colleges. Over half (57 percent) were younger than 20 when they entered the study, and another one-fourth (26 percent) were between 20 and 24. In other words, most sample members were of "traditional" college age. The ASAP sample is younger than the overall college populations; this is not surprising since ASAP targets new and relatively new students. Only a small minority of the students in the study was married or had any children when they entered the study, and most lived with their parents.

²³The "unlimited" card covered subway and bus fares for seven days and cost \$27.

²²The excluded majors are: at BMCC, Allied Health Sciences, Pre-Clinical Nursing, Forensic Science, and Engineering Science; at KCC, Nursing; and at LGCC, Allied Health Sciences and Engineering Science.

Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students

Table 2
Selected Characteristics of Sample Members at Baseline
Early Impacts Report

	Full			
	Sample	BMCC	KCC	LGCC
Gender (%)				
Male	37.9	41.6	37.2	30.6
Female	62.1	58.4	62.8	69.4
Age (%)				
Less than 20 years	57.1	58.6	58.2	51.8
20-24 years	26.0	26.7	23.7	28.8
25 years and over	16.9	14.7	18.2	19.4
Average age (years)	21.5	21.1	21.4	22.5
Marital status (%)				
Married	6.1	3.7	6.5	11.2
Unmarried	78.6	81.3	76.6	75.9
Missing	15.3	15.0	16.9	12.9
Lives with parents (%)	73.7	75.1	75.0	68.1
Parents pay more than half of expenses (%)	41.0	42.9	40.3	37.6
Missing	18.0	15.2	20.3	20.0
Race/Ethnicity ^a (%)				
Hispanic	43.6	48.6	27.8	60.7
White	10.0	4.1	19.3	6.5
Black	34.3	36.0	39.9	20.2
Asian or Pacific Islander	7.5	6.9	8.8	6.5
Other ^b	4.6	4.4	4.2	6.0
Has one or more children (%)	15.3	11.8	17.9	18.5
Currently employed (%)	31.3	28.0	31.3	39.2
Among those currently employed:				
Number of hours worked per week in current job (%)				
1-10 hours	8.1	6.7	8.9	9.4
11-20 hours	34.0	41.9	31.1	25.0
21-30 hours	31.7	33.3	32.2	28.1
31-40 hours	24.7	16.2	27.8	34.4
More than 40 hours	1.5	1.9	0.0	3.1
Highest grade completed (%)				
10th grade or lower	7.3	7.5	7.4	6.5
11th grade	7.8	8.7	6.5	8.2
12th grade ^c	75.9	75.6	74.5	79.4
Missing	9.0	8.2	11.7	5.9

(continued)

Table 2 (continued)

	Full			
	Sample	BMCC	KCC	LGCC
Diplomas/degrees earned ^d (%)				
High school diploma	73.8	77.3	71.3	70.2
General Educational Development (GED) certificate	20.8	19.2	22.3	22.0
Occupational/technical certificate	5.6	5.1	4.8	8.3
Other	1.7	2.3	1.0	1.8
None	6.0	4.3	7.6	7.1
Date of high school graduation/GED receipt (%)				
During the past year	49.4	51.4	48.6	46.5
Between one and two years ago	13.3	15.5	11.7	11.2
Between two and five years ago	13.1	13.0	12.9	13.5
More than five years ago	13.2	12.5	11.7	17.6
Has not earned a diploma/GED ^c	6.0	4.5	7.4	7.1
Missing	5.0	3.2	7.7	4.1
Student's status ^e (%)				
Incoming freshman	60.0	43.1	72.0	77.1
Returning student	33.5	55.4	15.4	16.5
Transfer student	6.5	1.5	12.6	6.5
Highest degree student plans to attain (%)				
Associate's	2.8	2.3	4.6	0.6
Bachelor's	31.4	32.2	28.5	34.7
Master's	41.6	40.9	41.7	43.1
Professional or doctorate	17.8	19.3	16.9	16.2
Beyond an associate's, unspecified	6.4	5.3	8.3	5.4
First person in family to attend college (%)	30.3	31.7	26.2	34.5
Highest degree/diploma earned by mother (%)				
Not a high school graduate	19.5	22.9	15.4	19.4
High school diploma or GED	21.8	18.7	25.5	21.8
Some college, did not complete a degree	16.0	17.0	15.1	15.3
College degree (AA, BA, MA, PhD)	18.6	20.9	15.7	18.8
Missing	24.1	20.4	28.3	24.7
Language other than English spoken regularly in home (%)	44.7	45.7	37.0	57.1
Sample size	896	401	325	170

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: BMCC indicates Borough of Manhattan Community College, KCC indicates Kingsborough Community College, and LGCC indicates LaGuardia Community College.

Missing values are only included in variable distributions for characteristics with more than 5 percent of the sample missing.

Distributions may not add to 100 percent because of rounding.

Characteristics shown in italic type are calculated for a proportion of the full sample.

^aRespondents who said they are Hispanic and chose a race are included only in the Hispanic category.

Respondents who said they are not Hispanic and chose more than one race are included in the Other category.

bOther includes multi-racial, Native American/Alaska Native, and other race/ethnicities.

^cThis includes students who were currently enrolled in high school at study intake.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

^eStudent's status at the start of first semester in the study.

Reflecting the student body at the three colleges, the study sample is racially and ethnically diverse, with no racial or ethnic majority: 44 percent of sample members identified themselves as Hispanic, 10 percent as white, 34 percent as black, and 8 percent as Asian or Pacific Islander. Shown on the second page of the table, a total of 60 percent of the sample members were incoming freshmen at the start of the study. Virtually all of the students (97 percent) reported that they planned to attain a degree beyond an associate's degree and over half planned to obtain a graduate degree.

Although the evaluation's impact analysis pools the sample members from the three colleges, Table 2 shows characteristics separately for BMCC, KCC, and LGCC for informational purposes. There are some differences across the three colleges. For example, the sample at LGCC is slightly older, somewhat more likely to be married, and somewhat less likely to live with their parents.

Appendix Table 1 presents characteristics for the program group and control group students separately. An asterisk indicates that the percentage of program group members with that characteristic is statistically significantly different from the percentage of control group members with that characteristic. As the table shows, the background characteristics of program and control group students were very similar at the start of the study, suggesting that the random assignment process succeeded in creating two similar groups of students.

As mentioned above, one of the eligibility criteria for the evaluation was being in need of one or two developmental courses based on CUNY Assessment Test scores. Students are required to take the CUNY Assessment tests, which are designed to assess basic skills proficiency in reading, writing, and math, before they begin classes.²⁴ Typically students at CUNY's community colleges who fail the tests are not required to take developmental courses when they start school, but they must complete any developmental courses before they can take certain gatekeeper courses, such as freshman English, college algebra, and most humanities courses, and before they can graduate or transfer to a CUNY four-year school.

Table 3 presents the basic skills proficiency levels for the sample members at the point they entered the study.²⁵ The vast majority of students (86 percent) needed one or two developmental courses, reflecting the eligibility criterion. As the table shows, however, some sample members (6 percent) were actually proficient in all subjects — that is, they did not need any developmental courses — and some students (8 percent) needed three or more developmental

²⁴The colleges also accept scores above a certain threshold on New York Regents tests, the SAT, and the ACT as evidence of college-level skills.

²⁵Skills test data were not available for all of the sample members; the calculations in Table 3 are based on the 789 students (out of 896 students in the study) for whom *all* relevant placement data were available.

Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students

Table 3

Developmental Courses Needed at Baseline

Early Impacts Report

Outcome (%)	Full Sample
None	6.1
One	37.1
Two	49.2
Three or more	7.6
Subject of developmental need	
English	18.3
Math	49.6
English and math	26.1
Sample size	789

SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: Students without pre-random assignment CUNY Assessment Test data in all subject areas are excluded from this table.

Rounding may cause slight discrepancies in sums and differences.

Estimates are adjusted by site and cohort.

courses. While the inclusion in the sample of students who did not meet one of the eligibility criteria is not ideal, it would raise more concerns if the proportion of technically ineligible sample members differed by research group because that would suggest that the program and control groups were not comparable. In fact, the percentage who did not meet the criterion is similar in the program and control groups (not shown in the table).

Table 3 also shows the basic skill area(s) in which students needed to remediate. Similar to developmental students across the nation, most sample members needed to build their math skills: 50 percent of the students in the sample needed just developmental math and another 26 percent needed developmental math and English (reading or writing). A total of 18 percent needed just developmental English.²⁶

²⁶These numbers do not sum to 100 percent because, as shown in the table, 6 percent of the sample did not need any remediation.

The ASAP Model in More Detail

Before turning to a discussion of ASAP's early impacts on students' academic outcomes, this section provides additional information on the program model. It is important to note that the description below is of ASAP as designed. The evaluation's implementation research is still in progress, but early data suggest that ASAP has been generally well implemented, with some variation across the components and across the campuses, as is allowed for in the model. Future reports will describe findings from the full implementation research effort.

It is important to emphasize that ASAP requires participating students to attend school full time. This is not only an eligibility requirement for entering the ASAP program (and the evaluation of ASAP), but students must continue to enroll full time in order to remain in ASAP from semester to semester. One novel aspect of ASAP is that not only does it require full-time attendance, but it also provides students with a full range of supports (described below) intended to make such attendance possible. For example, ASAP covers any tuition and fees not covered by financial aid, allowing students to attend full time, rather than part time, without paying for any additional courses. This is important, since full-time enrollment may enable students to complete community college in a more timely fashion.

ASAP bundles together several strategies and takes a holistic approach, addressing multiple barriers to success. Below is a detailed description of the key components of the ASAP program model. Most components are provided for three years (except where noted). It is notable that while ASAP provides a broad array of supports, it also requires and expects a lot from participating students.

Messages

- **Enroll full time.** ASAP requires students to enroll full time in each fall and spring semester they are in the program.
- Take developmental courses early. ASAP encourages students to take any developmental courses they need to early in their time in college.
- Graduate quickly. Finally, ASAP encourages students to graduate with an associate's degree within three years.

Course Enrollment

Block-scheduled classes. Groups of students organized by major take three
to five courses together in a consolidated block schedule during their first
year in the ASAP program. The block includes the ASAP seminar, described
next, and typically a developmental education course. A consolidated course

schedule feature, in which students can take all their classes in the morning or afternoon, is available throughout students' time in the program, but students can take classes outside the consolidated schedule.

• **ASAP seminar.** For at least two semesters, ASAP students are required to take a non-credit seminar that covers such topics as goal-setting, study skills, academic planning, and career-related issues.

Student Services

- Comprehensive advisement. Students are assigned to an ASAP adviser with a small caseload: 60-80 students. (Typical community college advisers can be responsible for 1,000 students or more.) ASAP advisers are expected to provide comprehensive academic, social, and interpersonal support. Students are required to meet with their advisers at least twice a month, allowing issues to be raised and addressed in a timely manner and ensuring that any necessary referrals to tutoring, psychological counseling, or other services can be made.
- Enhanced tutoring. ASAP tutors support students both inside and outside
 the classroom. Tutors provide general support and conduct regular review
 sessions for especially challenging courses. Some ASAP students are required to attend tutoring frequently, such as those taking developmental
 courses or those on academic probation.
- Career services. ASAP career and employment specialists provide help with career planning, job skills, interviewing, and, if needed, job placement. They also coordinate career fairs, guest speakers, and visits to selected worksites. Students are required to meet with a career and employment specialist at least once per semester.

Financial Supports

- **Tuition waiver.** Any gap between a student's financial aid and tuition and fees is waived. (ASAP requires all students to complete a Free Application for Federal Student Aid [FAFSA].)
- **Free MetroCards.** Students receive free monthly MetroCards for use on public transportation. The MetroCard is tied to fulfilling certain program requirements, such as meeting with an adviser or attending tutoring.

• **Free use of textbooks.** ASAP students receive free textbooks for all their classes. (Students must return the textbooks at the end of each semester.)

The program also includes periodic social events for participating students and an ASAP-wide student leadership program in which groups participate in leadership-building workshops. The colleges sometimes have a social work intern from the Hunter College School of Social Work, who is available to meet with students about personal issues and provide counseling.

As noted above, the control group in the evaluation has access to the colleges' standard services and courses. Generally, like at most community colleges, the standard college services are far less intensive than ASAP's. Future reports will describe the key differences between ASAP and the services available to the control group students.

Early Impacts

This section of the report presents findings on ASAP's effects on students' academic progress during the first and second semesters of the program. The focus of these early findings is on whether the opportunity to participate in ASAP improved students' progress through developmental education and enabled students to progress towards earning a degree more quickly than they would have had they been offered their colleges' "regular" programs and services.

As described in more detail in Box 1, the program's impact or effect is estimated by comparing the outcomes of all students who were randomly assigned to the program group with the outcomes of all students who were randomly assigned to the control group.²⁷ Random assignment results in two groups of students that are similar at the outset of the study, both with respect to their observable characteristics (for example, gender, age, and race) as well as unobservable characteristics (for example, tenacity, ability, and motivation). As a result, subsequent substantial differences in outcomes between the two groups can confidently be attributed to the opportunity to participate in ASAP, rather than to preexisting differences between the two groups.

All analyses reflect the effect of the *opportunity* to participate in ASAP, which is not necessarily the same as the effect of participation in ASAP.²⁸ Some individuals assigned to the

²⁷An ordinary least squares regression model is used to obtain estimates. All models include interactions of college and cohort as covariates, reflecting the fact that random assignment occurred within college and cohort.

²⁸That is, the analyses are intent-to-treat (ITT), as described by Bloom (1984) and Angrist, Imbens, and Rubin (1996).

Box 1

How to Read the Impact Tables in This Report

Most tables in this report use the format illustrated in the abbreviated table below, which displays some hypothetical transcript data for the program and control groups. The first row shows that program group students earned an average of 9.1 credits and control group students earned an average of 6.1 credits.

The "Difference" column in the table shows the observed difference between the two research groups on the outcome — that is, the *estimated* average *impact* of the opportunity to participate in the program. For example, the estimated average impact on credits earned can be calculated by subtracting 6.1 from 9.1, yielding an impact estimate of 3.0 credits earned.

Differences marked with one asterisk or more are considered *statistically significant*, meaning that there is a high probability that the opportunity to participate in the program had an impact on that outcome measure. Differences that have no asterisk indicate that the opportunity to participate in the program did not have a discernible effect on that outcome. The number of asterisks indicates the probability that an impact at least as large as the one observed in the study would have occurred even if the *true* average impact had been zero. One asterisk corresponds to a 10 percent probability; two asterisks, a 5 percent probability; and three asterisks, a 1 percent probability. The more asterisks on a positive difference, the more likely the opportunity to participate in the program had a true positive average impact on the outcome. The impact in the table excerpt below has three asterisks indicating that the impact is statistically significant at the 1 percent level — meaning that there is only a 1 percent chance of observing an estimated average impact this large (or larger) if the opportunity to participate in the program actually had *no* average effect on credits earned. In other words, there is a 99 percent level of confidence that the opportunity to participate in the program had a positive impact on the average number of credits earned.

Also shown in the table is the standard error of the impact estimate. The standard error is a measure of uncertainty or variability around the impact estimate. For those familiar with political polling, the standard error is used to calculate the *margin of error*. As an example, when pollsters state that "presidential candidate A has a 3 percentage point lead over presidential candidate B, with a margin of error of \pm 2 percentage points," they use the standard error to determine the margin of error. Conventionally, such a statement implies that pollsters are 95 percent confident that candidate A's "true" lead is between 1 and 5 percentage points (3 \pm 2), with their best estimate being 3 percentage points. A useful rule of thumb is that the margin of error is usually calculated as $1.96 \times$ standard error (for a 95 percent confidence interval). In the example below, the margin of error is $1.6 \times 1.96 \times$

Outcome	Program	Control	Difference	Standard
	Group	Group	(Impact)	Error
Credits earned	9.1	6.1	3.0 ***	0.8

program group did not participate in any part of ASAP; however, they are still included in the program group for the analyses in order to ensure a comparison of two groups that were similar at the outset of the study. Notably, program participation was very high — 95 percent of program group students were identified by the colleges as participating in ASAP during the first semester (not shown in tables); consequently, at the end of the first semester of study, the effect of the opportunity to participate in ASAP is quite similar to the effect of participating in ASAP.²⁹

As Box 2 describes in more detail, at two of the three participating colleges (KCC and LGCC), the fall and spring semesters are each comprised of a longer "main session" followed by a shorter trailing "intersession." The third college (BMCC) follows a more traditional semester arrangement, with a fall semester, a short winter intersession, a spring semester, and summer sessions. In order to discuss comparable time periods across colleges, the analyses in this report combine the fall and winter semesters at BMCC into "fall" and combine the spring and summer into "spring." In the report, BMCC's fall and spring semesters are referred to as main sessions, and the winter and summer as intersessions.

Main Findings

In the short term, students offered the opportunity to participate in ASAP made greater academic progress than students offered the colleges' usual services. Specifically:

- **ASAP had a positive effect on full-time enrollment.** During the first semester of study, 96 percent of the program group students enrolled full time, compared with 85 percent of the control group. The 11-percentage-point difference is ASAP's estimated impact, or value-added.
- **ASAP had a positive effect on credits earned.** During the first semester, students randomly assigned to participate in ASAP earned an average of 11.4 total credits whereas control group students earned an average of 9.3 total credits. The 2.1 credit impact (0.9 college-level credits and 1.1 credits in developmental courses) represents an increase of 22 percent over the control group base.
- ASAP had a positive effect on completing developmental requirements.
 Forty-seven percent of the program group had completed all their develop-

²⁹That is, the ITT is similar to the treatment on the treated (TOT). Since there were no control group "cross-overs" (that is, control group members who ended up participating in ASAP), the TOT is the same as the local average treatment effect (LATE), as described by Imbens and Angrist (1994).

Box 2

Timing of Academic Semesters

Most of the analyses in this report combine outcomes for the study's two cohorts of students, looking at outcomes relative to when students entered the study. For the first cohort, the first semester of the follow-up period refers to spring 2010, the second semester refers to fall 2010, and so on. For the second cohort, the first semester refers to fall 2010, the second semester refers to spring 2011, and so on. Some outcomes in this report are presented only for the first cohort because more follow-up data are available for those students: The first cohort has data available through enrollment in the third semester, whereas the second cohort has data available only through enrollment in the second semester.

At two of the three colleges in the evaluation — KCC and LGCC — the academic calendar includes a fall semester and a spring semester. Both fall and spring are comprised of two sessions: a 12-week session followed by a 6-week session.* In this report, the longer first part of the semester is referred to as the "main session," and the shorter second part is referred to as the "intersession." The 12-week sessions tend to have higher enrollment rates than the 6-week sessions, but, unlike colleges whose winter and summer courses have very low enrollment rates, these colleges' intersessions enroll a fairly large percentage of students.

BMCC follows a more traditional semester arrangement, with a 16-week fall semester, a 3-week winter intersession, a 16-week spring semester, and two 6-week summer sessions. At BMCC, the fall and spring semesters have far higher enrollment rates than winter and summer. In order to discuss comparable time periods across colleges, the analyses in this report combine the fall and winter semesters at BMCC into "fall" and combine the spring and both summer sessions into "spring." (If a student attended any classes at another CUNY college, their semesters are handled the same way.) In the report, BMCC's fall and spring semesters are referred to as main sessions, and the winter and summer as intersessions.

The table below shows how the semesters are defined in the report for each cohort of sample members.

	2010			20	11		
-	Spring	Semester	Fall Semester		Spring Semester		
	Spring Session	Summer Session	Fall Session	Winter Session	Sprin Session	g Summer	
Spring '10	First sea	mester	Second semester		Third semester		
Cohort	Main session	Intersession	Main session	Intersession	Main session	Intersession	
Fall '10 Cohort			First sem	ester	Second se	emester	
Conort			Main session	Intersession	Main session	Intersession	

NOTE: *KCC refers to the longer session as session A and to the shorter trailing session as session B. LGCC refers to the longer session as session I and to the shorter trailing session as session II.

mental requirements by the end of the first semester, compared with 32 percent of the control group, yielding an impact of 15 percentage points.

 ASAP had a positive effect on retention. Compared with control group students, program group students were around 10 percentage points more likely to enroll in any class during the second semester of study and 21 percentage points more likely to enroll full time.

In general, ASAP has had a positive effect on students' short-term academic progress. These early promising results are described in more detail below.

Detailed Findings

During the first semester of study, the ASAP program had a positive effect on students' academic progress with respect to credit accumulation. The details of how these positive effects were obtained are unpacked below. The focus is on the programs' effect on full-time enrollment rates, average credits attempted, and credit pass rates, as these represent three distinct (although not mutually exclusive) mechanisms through which students can earn more credits and thus progress more quickly towards a degree.

First Semester. Table 4 presents several indicators of academic progress during the first semester of study, including enrollment rates, credit attempts, credits earned, credit pass rates, and Grade Point Average (GPA). One of the more striking findings in Table 4 is that, compared with control group students, program group students were 10.6 percentage points more likely to enroll full time during the first semester of study. (In this analysis, the first semester includes the "main session" and the "intersession," as described in Box 2.)³⁰ Full-time enrollment is defined as enrolling in 12 or more credits. Importantly, willingness to enroll full time was an eligibility requirement for joining the study. That is, both program group students and control group students indicated that they were willing to enroll full time just before they were randomly assigned. However, as Table 4 illustrates, willingness to enroll full time does not always translate into actual full-time enrollment. The opportunity to participate in ASAP resulted in an additional 10.6 percentage points of students acting upon their reported willingness to enroll full time.

ASAP's impact on full-time enrollment is notable because of both its magnitude and its implications. In terms of magnitude, a 10.6 percentage point impact on a base of 85.2 percent is remarkable since the largest this impact could be is 14.8 percentage points (had ASAP induced

³⁰KCC and LGCC sum credits from the main session and intersession to determine full-time status. BMCC does not count credits in winter and summer as part of fall and spring; to allow for cross-college analysis, the analysis presented in this report does.

Table 4
Academic Outcomes: First Semester

Early Impacts Report

	Program	Control	Difference	Standard
Outcome	Group	Group	(Impact)	Error
Enrolled ^a (%)	96.4	94.0	2.5 *	1.4
Full time	95.8	85.2	10.6 ***	1.9
Part time	0.6	8.8	-8.1 ***	1.4
Total credits attempted	16.1	13.9	2.2 ***	0.3
College-level credits	10.5	10.3	0.2	0.3
Developmental credits	5.6	3.6	2.0 ***	0.2
Total credits earned	11.4	9.3	2.1 ***	0.4
College-level credits	8.5	7.6	0.9 ***	0.3
Developmental credits	2.9	1.7	1.1 ***	0.2
Credit pass rate (%)	70.6	66.9		
College-level credits	80.8	73.4		
Developmental credits	51.4	48.4		
Term GPA (%)				
2.0 to 4.0	68.8	60.2	8.6 ***	3.2
0.0 to 1.9	26.1	28.4	-2.3	3.0
No GPA ^b	5.1	11.4	-6.3 ***	1.8
Completed developmental requirements ^c (%)	46.6	31.9	14.7 ***	3.2
Sample size (total = 896)	451	445		

SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by site and cohort.

Italic type indicates nonexperimental data. Significance tests are not calculated for nonexperimental data. First semester measures include the main session and intersession.

"Developmental credits" are credits associated with developmental reading, writing, and math courses; English as a Second Language classes; and a small number of other non-college-level courses. CUNY refers to these credits as "equated credits."

^aEnrollment is based on courses that students are still enrolled in as of the end of the add/drop period. Full-time enrollment is defined as enrollment in 12 or more credits. Part-time enrollment is defined as enrollment in fewer than 12 credits.

^bThe "No GPA" category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^cCompletion of developmental requirements is contingent upon passing CUNY Assessment Tests, passing the highest level of developmental education, and/or passing a college-level class in each subject. This measure includes students who passed CUNY Assessment Tests prior to the first semester.

every single program group student to enroll full time). Essentially, ASAP induced seven out of every ten students who otherwise would either (a) not have enrolled or (b) would only have enrolled part time to instead enroll full time.

In terms of implications, it is fairly well-established that part-time attendance is a "risk factor" for community college students, negatively associated with persistence. ASAP's positive effect on full-time enrollment demonstrates that, given the right intervention, a subset of students who otherwise would enroll part time will enroll full time. While this study is not designed to disentangle with certainty which component(s) of ASAP caused this impact, something about ASAP's combination of requirements and supports successfully increased full-time enrollment rates. The impact on full-time enrollment is likely the collective result of requiring students to enroll full time in order to remain in a desirable program and providing multiple sets of supports (financial, counseling, etc.) to enable students to meet this requirement.

Related to ASAP's positive effect on full-time enrollment, the program positively affected the average number of credits students attempted during the first semester.³¹ On average, program group students attempted 2.2 more total credits than their control group counterparts. This is critical because a program that increases the number of credits students attempt can also impact the number of credits students earn even if *credit pass rates* are unaffected. Notably, during the first semester, ASAP primarily impacted the number of "developmental credits" students attempted; the program did not have discernible effects on college-level credits attempted. Developmental courses do not provide college-level credits but instead provide what are called "equated credits" at CUNY, which count towards part-time/full-time status and for tuition and financial aid purposes. Earning these credits, referred to as "developmental credits" in this report, is an important indicator of progress through developmental education.

With respect to credit accumulation, ASAP had a positive impact on total, college-level, and developmental credits earned during the first semester of study. Although ASAP did not have a discernible effect on the average number of college-level credits students attempted, program group students nonetheless earned 0.9 more college-level credits than their control group counterparts. This occurred largely as a result of program group students' pass rate for college-level credits being 81 percent, whereas control group students' pass rate for college-level credits was 74 percent.

With respect to developmental credits, here program group students attempted 2.0 more credits than control group students, and this translated into program group students earning an additional 1.1 developmental credits. Notably, pass rates on developmental credits were fairly

³¹The program's impact on full-time enrollment and credits attempted are highly related since full-time enrollment represents reaching or exceeding a certain threshold of credits attempted (12 credits).

similar between the two groups, hovering around 50 percent. ASAP's 1.1-credit impact on developmental credits earned represents a 65 percent increase over the control groups' baseline average developmental credits earned (1.7).³² This impact is important since developmental education is a stumbling block for so many students. That said, there is still much room for improvement, since even program group students only earned one out of every two developmental credits they attempted.

Summing ASAP's effect on college-level and developmental credits yields the result that program group students earned an average of 2.1 more total credits than their control group counterparts during the first semester of study. This represents a 22 percent increase over the control group's baseline average of total credits earned (9.3 credits).³³ To provide some context for interpreting this effect, most courses that students in this study attempted were worth three or four credits.

Finally, another way to consider ASAP's impact on progress through developmental education is to examine completion of their developmental coursework. By the end of the first semester of study, 46.6 percent of program group students had completed their developmental course requirements compared with 31.9 percent of control group students. The 14.7 percentage point impact represents ASAP's value-added over the colleges' usual services, with respect to helping students achieve this milestone after one semester. This 14.7 percentage point impact represents a 46 percent increase over the control level.

First Semester Separated by "Session." The previous section described the effect of ASAP on academic outcomes during the first semester after students entered the study, including the "main session" and the "intersession," as described above and in Box 2. For a more detailed examination of academic progress, Table 5 breaks the first semester into its two component sessions.

During the main session of the first semester, program group students attempted and earned more credits than their control group counterparts. In the main session, ASAP's positive effect on total credits attempted was a result of students attempting more developmental credits — program and control group students attempted the same number of college-level credits. With

³²In effect size units, this impact is 0.38. Effect size is calculated by dividing the impact estimate (1.1) by the standard deviation of the outcome (2.98). Since "developmental credits earned" has a zero-inflated distribution, it does not have the same properties as a normally distributed outcome. As a result, caution should be used when considering the impact in effect size units.

³³In effect size units, this impact is 0.33. Effect size is calculated by dividing the impact estimate (2.1) by the standard deviation of the outcome (6.19). Since "total credits earned" has a zero-inflated distribution, it does not have the same properties as a normally-distributed outcome. As a result, caution should be used when considering the impact in effect size units.

Table 5

Academic Outcomes: First Semester, by Session
Early Impacts Report

	Program	Control	Difference	Standard
Outcome	Group	Group	(Impact)	Error
Main session				
Enrolled ^a (%)	96.4	93.7	2.7 *	1.4
Total credits attempted	13.0	12.1	0.9 ***	0.2
College-level credits	9.0	8.9	0.1	0.2
Developmental credits	4.0	3.2	0.8 ***	0.2
Total credits earned	9.4	7.9	1.5 ***	0.3
College-level credits	7.2	6.4	0.8 ***	0.3
Developmental credits	2.2	1.5	0.7 ***	0.2
Credit pass rate (%)	72.5	65.7		
College-level credits	80.2	72.0		
Developmental credits	55.3	48.1		
<u>Intersession</u>				
Enrolled ^a (%)	58.4	37.4	21.0 ***	2.8
Total credits attempted	3.1	1.8	1.3 ***	0.2
College-level credits	1.5	1.4	0.1	0.1
Developmental credits	1.6	0.5	1.1 ***	0.1
Total credits earned	2.0	1.4	0.6 ***	0.2
College-level credits	1.3	1.1	0.1	0.1
Developmental credits	0.7	0.2	0.5 ***	0.1
Credit pass rate (%)	63.3	74.8		
College-level credits	84.2	82.9		
Developmental credits	43.4	50.0		
Sample size (total = 896)	451	445		

SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by site and cohort.

Italic type indicates nonexperimental data. Significance tests are not calculated for nonexperimental data.

"Developmental credits" are credits associated with developmental reading, writing, and math courses; English as a Second Language classes; and a small number of other non-college-level courses. CUNY refers to these credits as "equated credits."

^aEnrollment is based on courses that students are still enrolled in as of the end of the add/drop period.

respect to total credits earned, ASAP students earned an average of 1.5 more credits than their control group counterparts. This impact was spread about equally between college-level and developmental credits. The impact on college-level credits earned is a result of higher pass rates on those credits (80 percent for the program group compared with 72 percent for the control group). The impact on developmental credits earned is the result of both program group students attempting more developmental credits and passing their attempted credits at a higher rate.

During the intersession of the first semester, 58.4 percent of program group students enrolled in one or more course, compared with 37.4 percent of control group students. The opportunity to participate in the ASAP program had a 21 percentage point impact on enrollment in the intersession. (Early implementation research suggests that ASAP advisers often encourage students to take courses during the intersessions.) In large part as a result of this increased enrollment, program group students attempted 1.3 more credits than their control group counterparts. Much like during the main session, most of the impact on credits attempted during the intersession was a result of program group students attempting more developmental credits (as opposed to college-level credits). During the intersession, the program had a 0.6 impact on total credits earned, nearly all of which resulted from students taking and earning more credits in developmental courses. Pass rates for developmental credits during the intersession were low for program and control group students, but since program group students attempted more credits, they earned more credits than their control group counterparts.

ASAP had a positive effect on credit accumulation during intersessions, which are often considered optional or secondary at community colleges. Interestingly, MDRC's experimental evaluations of learning communities at KCC and performance-based scholarships at two community colleges in New York City and two in Louisiana provide additional examples of programs that made a difference during intersessions.³⁵ Moreover, broader research on correlates of academic success shows an association between summer credit accumulation and students' probability of completion.³⁶ Improving enrollment rates during intersessions is almost certain to speed up overall progress and may even bridge the gap between main sessions, potentially reducing the dropout rate. Since enrollment rates are relatively low during summer and winter intersessions, they may be an overlooked area for improving success rates at community colleges.

 $^{^{34}}$ Compared with the control group, an additional 21 percentage points of the program group enrolled. If these additional 21 percentage points of students attempted 4.9 credits (the average number of credits that an enrolled control group student attempted, calculated as 1.8 / [37.4 / 100]), then they alone would account for an impact of nearly a full credit attempted (4.9 × 0.21).

³⁵Sommo, Mayer, Rudd, and Cullinan (forthcoming); Richburg-Hayes, Sommo, and Welbeck (2011); Richburg-Hayes et al. (2009).

³⁶Adelman (2006).

Recall that across the entire first semester (including the main session and the intersession), program group students earned an average of 2.1 more total credits than their control group counterparts. This impact was spread across the main session and the intersession, with 71 percent of the impact (1.5/2.1) occurring during the main session and 29 percent occurring during the intersession (0.6/2.1).

Second Semester. Table 6 presents second semester results for enrollment and credits attempted during the main session of the second semester (intersession data were not yet available for the full sample when the analysis for this report was done). ASAP's positive effect continues and grows during the second semester. In the main session of the second semester, 90.3 percent of program group students enrolled, whereas 80.4 percent of control group students enrolled. The 9.8 percentage point difference cut the percentage of non-enrollees in half (from 19.6 to 9.7). Moreover, during the main session of the second semester, 80.5 percent of program students had already enrolled in enough credits to be deemed full time, whereas only 59.8 percent of control group students had done so. This represents an impact of 20.6 percentage points on full-time enrollment. Since intersession credits attempted count towards students' full-time status, these percentages will change as more data become available, but the general finding that ASAP is having a positive effect on students' likelihood of enrolling during the second semester of study will almost undoubtedly hold up.

Much like the first semester findings, the program increased the average number of credits students attempted in the second semester. During the main session, ASAP students, on average, attempted an additional 1.9 total credits compared with their control group counterparts. Without the ASAP program, control group students attempted an average of 9.9 credits. Program group students attempted 11.8 credits, on average. Unlike the first semester findings, the second semester impact on credits attempted is primarily a result of students' attempting more college-level credits — this is likely because almost half of program students had now completed their developmental course sequence. For the full sample, data are not yet available with respect to credits earned during the second semester of study; that information will be presented in future reports. To give a hint at what may be to come, the next section of this report briefly presents the program's effects for the first cohort of students only, for which an additional semester of follow-up data is currently available.

First Cohort Findings. Tables 4 through 6 presented the short-term effects of ASAP for the full study sample of 896 students. Table 7 presents selected findings for an additional semester of follow-up for the first of two cohorts participating in the ASAP study. The first cohort, whose first semester in the program was spring 2010, represents approximately one-third of the full sample (n = 327) and includes students from two of the studies' three colleges (BMCC and KCC). Table 7 provides an indication of ASAP's effectiveness after two complete

Table 6
Academic Outcomes: Second Semester

Early Impacts Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Main session				
Enrolled ^a (%)	90.3	80.4	9.8 ***	2.3
Full time	80.5	59.8	20.6 ***	2.9
Part time	9.8	20.6	-10.8 ***	2.3
Total credits attempted	11.8	9.9	1.9 ***	0.3
College-level credits	10.0	8.3	1.7 ***	0.3
Developmental credits	1.8	1.6	0.3	0.2
Sample size (total = 896)	451	445		

SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by site and cohort.

Second semester measures do not include intersession data and are subject to change.

"Developmental credits" are credits associated with developmental reading, writing, and math courses; English as a Second Language classes; and a small number of other non-college-level courses. CUNY refers to these credits as "equated credits."

^aEnrollment is based on courses that students are still enrolled in as of the end of the add/drop period. Full-time enrollment is defined as enrollment in 12 or more credits. Part-time enrollment is defined as enrollment in fewer than 12 credits.

semesters, as well as on enrollment rates and credit attempts during the main session of the third semester of study. These findings suggest that the early positive effects presented in Tables 4 through 6 for the full sample continue to grow throughout the second semester and on to the beginning of the third semester.

Skipping to the second semester (including the main session and the intersession), ASAP's estimated effect on full-time enrollment is 20.3 percentage points for the first cohort of students.³⁷ In terms of total credits attempted during the second semester, ASAP's estimated

³⁷This effect is very similar to the program's estimated impact on full-time enrollment during the main session of the second semester for the full sample.

Table 7

Academic Outcomes: First, Second, and Third Semesters
First Cohort

Early Impacts Report

	Program	Control	Difference	Standard
Outcome	Group	Group	(Impact)	Error
<u>First semester</u>				
Enrolled ^a (%)	97.6	97.5	0.1	1.7
Full time	97.6	86.8	10.8 ***	2.9
Part time	0.0	10.7	-10.7 ***	2.5
Total credits attempted	16.8	14.4	2.4 ***	0.5
College-level credits	11.5	10.7	0.8 *	0.5
Developmental credits	5.3	3.7	1.6 ***	0.3
Total credits earned	12.0	9.5	2.5 ***	0.7
College-level credits	9.2	7.7	1.6 ***	0.6
Developmental credits	2.7	1.8	0.9 ***	0.3
Completed developmental requirements ^b (%)	44.6	30.8	13.8 ***	5.3
Second semester				
Enrolled ^a (%)	90.5	78.6	11.9 ***	4.0
Full time	86.3	66.0	20.3 ***	4.6
Part time	4.2	12.6	-8.4 ***	3.1
Total credits attempted	14.2	10.8	3.4 ***	0.7
College-level credits	11.4	9.1	2.3 ***	0.6
Developmental credits	2.8	1.7	1.2 ***	0.3
Total credits earned	9.9	7.9	2.0 ***	0.7
College-level credits	8.8	7.3	1.6 **	0.7
Developmental credits	1.1	0.6	0.5 **	0.2
Cumulative first through second semester				
Total credits attempted	31.0	25.2	5.8 ***	1.0
College-level credits	22.9	19.8	3.1 ***	0.9
Developmental credits	8.1	5.4	2.7 ***	0.5
Total credits earned	21.8	17.3	4.5 ***	1.3
College-level credits	18.0	14.9	3.1 ***	1.1
Developmental credits	3.8	2.4	1.4 ***	0.4
Completed developmental requirements ^b (%)	63.1	38.4	24.7 ***	5.4

(continued)

Table 7 (continued)

	Program	Control	Difference	Standard
Outcome	Group	Group	(Impact)	Error
Third semester				
Enrolled ^a (%)	81.5	70.4	11.1 **	4.7
Full time	80.4	57.9	22.5 ***	5.0
Part time	1.2	12.6	-11.4 ***	2.8
Total credits attempted	11.0	8.9	2.2 ***	0.6
College-level credits	10.0	8.0	2.1 ***	0.6
Developmental credits	1.0	0.9	0.1	0.2
Cumulative first through third semester				
Number of semesters enrolled ^a	2.7	2.5	0.2 ***	0.1
Full time	2.6	2.1	0.5 ***	0.1
Part time	0.1	0.4	-0.3 ***	0.1
Number of sessions enrolled ^c	3.7	3.0	0.7 ***	0.1
Sample size (total = 327)	168	159		

SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by site.

First and second semester measures include main sessions and intersessions. Third semester measures only include the main session.

"Developmental credits" are credits associated with developmental reading, writing, and math courses; English as a Second Language classes; and a small number of other non-college-level courses. CUNY refers to these credits as "equated credits."

^aEnrollment is based on courses that students are still enrolled in as of the end of the add/drop period. Full-time enrollment is defined as enrollment in 12 or more credits. Part-time enrollment is defined as enrollment in fewer than 12 credits.

^bCompletion of developmental requirements is contingent upon passing CUNY Assessment Tests, passing the highest level of developmental education, and/or passing a college-level class in each subject. This measure includes students who passed CUNY Assessment Tests prior to the first semester.

^cDuring this period, students could enroll for a maximum of five sessions — three main sessions and two intersessions.

impact is 3.4 credits for the first cohort of students.³⁸ In part as a result of students attempting more credits, ASAP had a positive effect on credits earned in the second semester. During this time period, the first cohort of ASAP students earned 9.9 credits on average. By comparison, their control group counterparts earned a total of 7.9 credits on average — for an

³⁸For the first cohort, the estimated impact on total credits attempted during the main session of the second semester is 2.1 credits. The remaining impact of 1.3 credits occurred during the intersession of the second semester. (Not shown in tables.)

estimated impact of 2.0 credits. Summing the second semester impact with the first semester impact (2.5 credits), ASAP is estimated to have caused students to earn an additional 4.5 total credits over two semesters. Unlike many single-semester programs whose positive effects are at best maintained over time and at worst fade, ASAP's effects continued to grow during the second semester.

Looking to the third semester, the program's estimated impact on enrollment is again over 10 percentage points, and the estimated impact on full-time enrollment is again over 20 percentage points. Given these enrollment numbers, it is unsurprising that program group students again attempted over two credits more than their control group counterparts during the third semester of study, and they are well-positioned to earn more credits.

The findings presented in Table 7 should be considered with caution, since they represent only one-third of the full ASAP sample. With that caveat in mind, they suggest that the early positive effects of ASAP continue to grow through at least three semesters of follow-up. Future MDRC reports will provide detailed findings for the full sample during additional semesters of follow-up, including information on graduation rates.

Summary of Early Impacts

During the first semester of study, ASAP helped students earn significantly more credits than they would have had they received their college's usual services. During the second semester of study, the programs' effects are on track to be even more dramatic than the effects observed in first semester of study. While MDRC's evaluation of ASAP is still in an early stage, the evidence thus far indicates that ASAP has a very positive effect on students' short-term academic progress.

Conclusions and Next Steps

The concluding section of this report puts the favorable short-term impacts for ASAP in the context of other higher education evaluations conducted by MDRC and looks ahead to next steps in this project.

ASAP's Impact Findings in the Context of MDRC's Other Community College Research

In order to provide perspective on ASAP's early impact findings, it might be useful to situate them within the context of several other random assignment evaluations conducted at community colleges. Over the last decade, for example, MDRC has conducted 15 experimental

evaluations of programs intended to increase community college students' academic success.³⁹ These studies measured the impacts of an array of interventions, in a variety of settings, targeting an assortment of different students, with a wide range of costs. Of the programs evaluated, half had positive statistically significant average impacts on total credits earned after the first semester of study, indicating that the programs were improving students' progress towards a degree. Impact estimates (regardless of statistical significance) ranged from 0.0 to 1.4 total credits earned. During the first semester, ASAP's impact on total credits earned was 2.1 credits, 150 percent as large as the next largest impact estimate MDRC has observed to date. Across those same studies, only two had statistically significant impacts on second semester enrollment rates. One had a 15-percentage-point impact on second semester enrollment. Among the other studies, impacts ranged from approximately -1 to 7 percentage points (regardless of statistical significance). The estimated impact of ASAP on second semester enrollment is 10 percentage points. While MDRC's studies are not necessarily representative of all experimental research in community colleges, this comparison suggests that the early effects of ASAP are larger than what has been observed in many other rigorous evaluations of promising programs.

It is also important to emphasize that most of ASAP's supports and services last for three years. To the authors' knowledge, this is longer than any community college program that has been evaluated using a random assignment research design. Will the early impacts be maintained? Might they grow larger? Will early impacts translate into impacts on degree completion, the main goal of ASAP? The answers to these questions are a critical part of the developing story about this program and will be a focus of future MDRC reports.

Looking Ahead

In the future, MDRC will share findings on longer-term academic outcomes, including two- and three-year graduation rates; a full implementation story; and information on ASAP's costs. If ASAP increases graduation rates substantially, MDRC may study the longer-term effects of ASAP on employment and earnings in a second phase of the study.

The ASAP evaluation is not designed to disentangle, with great certainty, which components of the program contribute the most to the estimated impacts. 40 However, the implemen-

³⁹These experiments include some studies of the same type of program. For example, MDRC has conducted experiments of seven variations of "learning communities" and four variations of performance-based scholarships. The results of these studies can be found in the following MDRC publications: Cha and Patel (2010); Miller, Binder, Harris, and Krause (2011); Richburg-Hayes et al. (2009); Richburg-Hayes, Sommo, and Welbeck (2011); Scrivener et al. (2008); Scrivener, Sommo, and Collado (2009); Scrivener and Weiss (2009); Visher, Butcher, and Cerna (2010); Visher and Teres (2011); Weiss, Visher, and Wathington (2010); Weissman et al. (2011); Weissman et al. (2012).

⁴⁰This would have required a much larger sample size and the simultaneous implementation of different versions of the program.

tation research will shed light on that issue. Program group and control group students were surveyed about a year after they entered the study in order to gain a better understanding of the differences between the two groups' experiences. It is these differences in experiences that are likely the cause of the observed positive effects of the program. The survey results will help answer questions like: How much more often, if at all, did program group students visit advisers compared with their control group counterparts? Did the content covered in advisement differ for the two groups of students? Similar questions regarding tutoring and career counseling will also be explored. Understanding how students' experiences differed across the multiple dimensions of the program may begin to suggest which parts of the program made the biggest difference, and what other colleges would need to do if they want to try to replicate CUNY's efforts. If certain elements of the program are essential and others are less important, a pared-down version of the program could be created that might yield similar effects.

In addition to the student survey results, future reports will also present information from interviews with administrators and staff at the colleges — both those in ASAP and those who work with the general college population. Like the survey results, the interview data will help describe the experiences of program group and control group members. In addition, the interviews with the ASAP administrators and staff will also provide insight into how the program is executed by the participating colleges.

Lastly, because ASAP includes multiple components and last for three years, the additional cost of ASAP compared with the colleges' regular services is almost certainly higher than that of other less comprehensive programs. But how much more expensive is ASAP than the colleges' usual services? This information will be important for interpreting the program's positive effects and for considering its replication at other institutions.

It is clear that ASAP's package of requirements, messages, services, and financial benefits can improve short-term academic outcomes for students. If ASAP generates positive changes for students over a longer timeframe, it will provide important lessons for college administrators and policymakers. ASAP's lessons should be especially relevant for other bold, comprehensive reforms, such as the Gates Foundation's Completion by Design initiative, which aims to help groups of community colleges reform the educational experience from entry to graduation. The ASAP evaluation will provide critical information on how much difference a long-lasting, multifaceted intervention can make for community college students. In the meantime, based on ASAP's effects for students to date — those in the MDRC random assignment study as well as students in prior entering cohorts — CUNY is expanding the program to serve over 4,000 students by 2014, three times its current size.

Appendix

Selected Characteristics of Sample Members at Baseline, by Research Group

Appendix Table 1
Selected Characteristics of Sample Members at Baseline, by Research Group
Early Impacts Report

	Full	Program	Control
	Sample	Group	Group
Gender (%)			
Male	37.9	36.1	39.8
Female	62.1	63.9	60.2
Age (%)			
Less than 20 years	57.1	56.8	57.5
20-24 years	26.0	25.3	26.7
25 years and over	16.9	18.0	15.7
Average age (years)	21.5	21.6	21.3
Marital status (%)			
Married	6.1	6.0	6.3
Unmarried	78.6	78.0	79.1
Missing	15.3	16.0	14.6
Lives with parents (%)	73.7	73.9	73.6
Parents pay more than half of expenses (%)	41.0	41.7	40.2
Missing	18.0	17.1	18.9
Race/Ethnicity ^a (%)			
Hispanic	43.6	44.5	42.7
White	10.0	10.4	9.6
Black	34.3	32.7	35.9
Asian or Pacific Islander	7.5	7.1	7.9
Other ^b	4.6	5.3	4.0
Has one or more children (%)	15.3	17.4	13.1
Currently employed (%)	31.3	30.1	32.6
Among those currently employed:			
Number of hours worked per week in current job (%)			
1-10 hours	8.1	9.7	6.7
11-20 hours	34.0	37.1	31.1
21-30 hours	31.7	23.4	39.3
31-40 hours	24.7	29.0	20.7
More than 40 hours	1.5	0.8	2.2
Highest grade completed (%)			
10th grade or lower	7.3	6.7	7.9
11th grade	7.8	8.4	7.2
12th grade ^c	75.9	76.1	75.7
Missing	9.0	8.9	9.2

(continued)

Appendix Table 1 (continued)

	Full	Program	Control
	Sample	Group	Group
Diplomas/degrees earned ^d (%)			
High school diploma	73.8	74.1	73.5
General Educational Development (GED) certificate	20.8	20.6	21.1
Occupational/technical certificate	5.6	4.5	6.6
Occupational/technical certificate Other	1.7	1.6	1.8
None	6.0	5.9	6.2
Notice	0.0	3.9	0.2
Date of high school graduation/GED receipt (%)			
During the past year	49.4	51.4	47.4
Between one and two years ago	13.3	12.6	13.9
Between two and five years ago	13.1	12.6	13.5
More than five years ago	13.2	13.1	13.3
Has not earned a diploma/GED ^c	6.0	5.8	6.3
Missing	5.0	4.4	5.6
-			
Student's status ^e (%)			
Incoming freshman	60.0	62.7	57.3
Returning student	33.5	31.9	35.1
Transfer student	6.5	5.3	7.6
Highest degree student plans to attain (%)			
Associate's	2.8	3.0	2.6
Bachelor's	31.4	32.6	30.2
Master's	41.6	41.3	41.9
Professional or doctorate	17.8	17.4	18.3
Beyond an associate's, unspecified	6.4	5.7	7.0
First person in family to attend college (%)	30.3	28.1	32.5
Highest degree/diploma earned by mother (%)			
Not a high school graduate	19.5	18.6	20.4
High school diploma or GED	21.8	21.5	22.0
Some college, did not complete a degree	16.0	16.0	16.0
College degree (AA, BA, MA, PhD)	18.6	18.4	18.9
Missing	24.1	25.5	22.7
Language other than English spoken regularly in home (%)	44.7	45.3	44.2
Sample size	896	451	445

(continued)

Appendix Table 1 (continued)

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: To analyze whether baseline characteristics jointly predicted research group status, a likelihood ratio test was performed. This yielded a p-value of 0.91. Convention suggests that these probabilities are large enough that these potential differences can be ignored in the analyses.

A two-tailed t-test was applied to differences between the program group and control group for variables that are not mutually exclusive and mutually exhaustive (e.g., diplomas/degrees earned). A chi-squared test was applied to differences between the groups of categorical variables that are mutually exclusive and mutually exhaustive (e.g., race/ethnicity). Levels for statistically significant differences between program and control groups are indicated as: *=10 percent; **=5 percent; and ***=1 percent.

Italic type indicates nonexperimental data. Significance tests are not calculated for nonexperimental data. Missing values are only included in variable distributions for characteristics with more than 5 percent of the sample missing.

Distributions may not add to 100 percent because of rounding.

^aRespondents who said they are Hispanic and chose a race are included only in the Hispanic category. Respondents who said they are not Hispanic and chose more than one race are included in the Other category.

^bOther includes multi-racial, Native American/Alaska Native, and other race/ethnicities.

^cThis includes students who were currently enrolled in high school at study intake.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

eStudent's status at the start of first semester in the study.

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About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for exoffenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.