



Early Outcomes Report for City University of New York (CUNY) Accelerated Study in Associate Programs (ASAP)

November 2009

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### ABOUT THE CENTER FOR ECONOMIC OPPORTUNITY

Mayor Michael R. Bloomberg created the New York City Center for Economic Opportunity (CEO) in December 2006 to implement the City's ambitious and innovative anti-poverty strategy. Since then, CEO has launched a range of new anti-poverty programs, policy proposals, and research projects that represent nationwide best practices and cutting-edge ideas.

The Center's research and development activities focus on several areas including: the design, implementation, and evaluation of innovative programs, the creation of an alternative measure of poverty for New York City, and piloting the nation's first conditional cash transfer program, Opportunity NYC.

CEO's approach includes targeting distinct populations and employing evidence-based strategies. Programs focus on the working poor, young adults, and young children under the age of five, and strategies range from workforce and asset development to interventions for at-risk and disconnected youth.

CEO is committed to evaluating all its programs and policies. The purposes of the evaluations are to collect and report data on program implementation, progress, and outcomes. These findings inform policy and program decision-making within CEO and the agencies that sponsor the programs.

To support this work, CEO manages an Innovation Fund that includes both public and private resources

### **EXECUTIVE SUMMARY**

In January 2007 the City University of New York (CUNY) received funding from the New York City Center for Economic Opportunity (CEO) to establish the Accelerated Study in Associate Programs (ASAP). The ASAP program is designed to help students earn their Associate's degree as quickly as possible, with a target of 50% of students graduating within three years. In fall 2007 ASAP began with a pilot cohort of 1,132 students who were deemed fully skills proficient in reading, writing, and math. The fall 2007 ASAP cohort included 319 students (28%) who had been conditionally accepted in summer 2007 while they completed any required developmental courses in order to join the program.

ASAP students entered into full-time study in Associate's degree programs closely related to future employment prospects and transferability to 4-year colleges. The program is located at all six CUNY community colleges: Borough of Manhattan Community, Bronx, Hostos, Kingsborough, La Guardia, and Queensborough.

The ASAP program brings together a set of comprehensive services and incentives that have been identified as being helpful to improving the retention, performance, and graduation rates of community college students (Bailey and Alfonso, 2005; Kuh, Buckley, Bridges, & Hayek, 2007; Tinto, 1993). Financial incentives include tuition waivers for financial-aid eligible students and free monthly Metrocards and use of textbooks for all students. Key program elements include required full-time study, a consolidated course schedule, cohort grouping by majors, small class size, comprehensive advisement, academic, and career development services delivered by full-time ASAP staff, and a range of special programs.

Community college students often have multiple responsibilities, and face significant barriers to full-time study and degree completion. According to the CUNY Office of Institutional Research and Assessment (OIRA), 18% of CUNY community college students are supporting at least one child, most of whom are under five years of age; 33% of CUNY community college students spend at least six hours per week providing care for other people; 66% of CUNY community college students work at least part time; and 75% are from households with annual incomes below \$40,000. While the vast majority of CUNY community college students begin their studies on a full-time basis (87% for the fall 2002 cohort), nearly half, 45%, drop to part-time status in one or more subsequent semesters, significantly reducing the likelihood of degree completion. Analysis of 6-year CUNY institution graduation rates¹ reveals that for the fall 2002 cohort of first-time, full-time freshmen at the six CUNY community colleges, only 26% of these students graduated six years later.

To determine the impact of the ASAP program, CUNY used a constructed comparison group evaluation method to compare ASAP students' outcomes against a group of similar students. The comparison group from

<sup>1</sup> Institution graduation rates are calculated as the percentage earning a degree at the college of entry any time prior to the start of the subsequent fall term(s). Source: CUNY OIRA.

**EXECUTIVE SUMMARY** 

fall 2006 who met the same criteria that ASAP students were required to meet in fall 2007 in order to join the program (See Table 1). An additional comparison group from fall 2007 who met the same criteria was created for socioeconomic analysis. CUNY and CEO have used this framework to measure the performance of ASAP students over the last two years, along with other administrative data and student surveys. Metis Associates, one of CEO's independent evaluators, provided a review of this method and the criteria for comparison group matching (see Appendix I in the full report). Their comments helped to refine this analysis of early program impacts.

#### **OUTCOMES**

Having just completed its second year ASAP is well on its way to realizing its ambitious goals of graduating at least 50% of its original 2007 cohort within three years. As of August 2009, a total of 341 ASAP students from the original cohort have graduated with an Associate's degree, representing a 30.1% 2-year graduation rate. A comparison group of similar students from fall 2006 had a 2-year graduation rate of 11.4% (see Table 1). An additional 325 students are currently on track to graduate by September 2010, which would result in 3-year graduation rate of nearly 60%.<sup>2</sup> Fall 2006 comparison group students had a 3-year graduation rate of 24%.

<sup>2</sup> Three-year graduation projections are based on analysis of students' current credit accumulation, GPA, academic history of course completion, and CUNY Proficiency Exam (CPE) outcomes; successful completion of the CPE is required for graduation from a CUNY community college.

Table 1

2-Year Graduation Rates for Original ASAP Cohort Compared to Comparison Group Students

College	Total	Sumn 2008 Grad			2008 luation	Spring Gradu	g 2009 ation*	20	nmer 109 uation		2-Year uation
	N	N	%	N	%	N	%	N	%	N	%
Fall 2007 Original	ASAP Cohort	Students									
BMCC	249	0	0.0	2	0.8	26	10.4	31	12.4	59	23.7
Bronx	118	0	0.0	0	0.0	9	7.6	11	9.3	20	16.9
Hostos	82	0	0.0	0	0.0	17	20.7	4	4.9	21	25.6
Kingsborough	247	1	0.4	8	3.2	77	31.2	28	11.3	114	46.2
LaGuardia	208	0	0.0	1	0.5	25	12.0	34	16.3	60	28.8
Queensborough	228	0	0.0	1	0.4	31	13.6	35	15.4	67	29.4
TOTAL	1,132	1	0.1	12	1.1	185	16.3	143	12.6	341	30.1

Fall 2006 Comparison Group\*\*

College	Total	Summer Gradua			2007 uation	Spring Gradu		20	nmer 108 uation		2-Year uation
	N	N	%	N	%	N	%	N	%	N	%
BMCC	496	0	0.0	5	1.0	33	6.7	6	1.2	44	8.9
Bronx	63	1	1.6	0	0.0	1	1.6	1	1.6	3	4.8
Hostos	41	0	0.0	1	2.4	5	12.2	3	7.3	9	22.0
Kingsborough	404	1	0.2	10	2.5	37	9.2	24	5.9	72	17.8
LaGuardia	289	0	0.0	7	2.4	7	2.4	22	7.6	36	12.5
Queensborough	498	0	0.0	3	0.6	25	5.0	13	2.6	41	8.2
TOTAL	1,791	2	0.1	26	1.5	108	6.0	69	3.9	205	11.4

\*Includes spring semester at BMCC, Bronx, Hostos and Queensborough and first 12-week spring session at Kingsborough and LaGuardia.

Date: September 18, 2009

Source: CUNY Office of Institutional Research and Assessment

As of fall 2009, more than 90% of ASAP 2-year graduates indicated plans to transfer to 4-year colleges to work towards a Bachelor's degree. According to an exit survey of graduating students, 75% of ASAP 2-year graduates planned to attend a CUNY senior college and 15% planned to attend other 4-year colleges.<sup>3</sup> The remaining 10% of ASAP 2-year graduates planned to enter the workforce, with the vast majority indicating plans to return to college to continue their education in the near future. On the 2008/09 annual student survey and at end-of-year celebrations, ASAP graduates overwhelmingly credit the financial incentives and comprehensive advisement support as key reasons why they were able to complete their Associate's degrees in record time. One student from LaGuardia, who immigrated to the United States less than four years ago without speaking English, completed his Associate's degree in less than two years with ASAP and transferred to a CUNY senior college. He indicates that "ASAP has given me all the tools I need to work, learn, and achieve my goals. But the most important lesson that they have taught me is the ability to remain focused and to believe in myself."

<sup>\*\*</sup>Fall 2006 full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are not enrolled in College Discovery, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

<sup>3</sup> ASAP graduates' enrollment at CUNY senior colleges will be verified once fall 2009 enrollments are finalized in the CUNY Office of Institutional Research Database (IRDB). A request will be submitted to the National Student Clearinghouse in winter to verify enrollments at non-CUNY colleges.

Based on high 2-year graduation rates for the original cohort, ASAP admitted 431 new students across all six community colleges for fall 2009. In order to determine if the ASAP model could be similarly successful for slightly less academically prepared students and to ensure that students with the greatest financial need were served, new skills proficiency and income thresholds were established. The fall 2009 ASAP cohort is primarily made up of students who require up to two developmental courses in reading, writing, or math<sup>4</sup> and who are Pell eligible or have family income within 200% of the federal poverty guidelines. Entering students are also required to meet existing ASAP selection criteria including New York City residency, no more than 12 credits previously attained, and full-time enrollment in an ASAP-approved major. Fall 2009 ASAP students will receive the same incentives and comprehensive services as the original fall 2007 cohort with the goal of completing an Associate's degree within three years. Adjustments were made to several key program areas to improve student success including standardization of the mandatory ASAP Summer Institute, adoption of a weekly group advisement seminar at all colleges, and program-wide staff training and professional development, among others.

Thanks to successful outcomes, ASAP has received outside funding to increase enrollment, expand evaluation capacity, and support students in continuing their education. In July 2009, ASAP received a 2-year grant for \$190,000 from the Jewish Foundation for the Education of Women (JFEW) to launch the ASAP Transfer Scholarship Program. The program provides scholarships and targeted advisement for high-performing ASAP students with financial need who matriculate to select CUNY senior colleges: Baruch, Hunter, Queens, or Brooklyn in fall 2009.

In August 2009, ASAP also received a 3-year grant for \$3.7 million from the Leona M. and Harry B. Helmsley Charitable Trust to expand the program at Borough of Manhattan and Kingsborough Community Colleges in spring 2010, conduct a 5-year random assignment study of the program at both colleges led by MDRC, and support the Transfer Scholarship Program.

In November MDRC received a grant for \$1.1 million from the Robin Hood Foundation to support the ASAP random assignment study and to expand the study to include LaGuardia Community College in fall 2010. Between the three colleges, a total of 900 students will be recruited to participate in the study, who will all be low-income students who require developmental course work and meet ASAP income criteria (See Next Steps section of the full report for more detailed information).

ASAP has also been identified by New York City Mayor Michael Bloomberg as a key component of his new "Gateway to the Middle Class" community college initiative, announced in August 2009. The \$50-million initiative has a goal of significantly increasing the number of city residents that graduate from CUNY

<sup>4</sup> The fall 2009 ASAP cohort is comprised of 75% students with developmental course needs and 25% of students who completed developmental courses over the summer and were fully skills proficient by the start of the fall semester.

community colleges by 2020. Mayor Bloomberg has indicated an intent to invest up to \$27 million to support ASAP, which would permit the program to serve up to 2,000 students over the next four years.<sup>5</sup>

### PROFILE OF ASAP GRADUATES

The ASAP program began in fall 2007 with 1,132 students across CUNY's six community colleges. The ASAP cohort is generally representative of CUNY community college full-time students by gender and ethnicity, but they are slightly younger and have higher incomes. As seen in Table 2, in all demographic subgroups as well as admission type, ASAP outperforms comparison group students in graduation rates. The overall 2-year graduation rate for ASAP students is 18.7 percentage points higher than that of the comparison group: 30.1% vs. 11.4%.

Analysis of graduation rates by ethnic group reveals that both ASAP and the comparison group are proportionally graduating students across all racial groups, although ASAP is graduating a larger percentage within each race category. Hispanic students, followed closely by Black students, graduated at lower rates than White and Asian students. When examining student graduation rates by age, both ASAP and the comparison group are graduating older students (24 or older) and continuing students (those who began with 12 or fewer college credits) at the highest rate.

Of all ASAP continuing students who entered the program, 39.3% graduated by August 2009 compared to 29.5% of first-time freshmen. For the comparison group, 13.1% of continuing students graduated by August 2008 compared to 9.2% of first-time freshmen. It is very likely that continuing students in both ASAP and comparison group are graduating at the highest rate because they have entered into the ASAP program or into the comparison group with accumulated, although no more than 12 credits.

 $<sup>5\,</sup>Source: Mike\ Bloomberg's\ Gateway\ to\ the\ Middle\ Class.\ http://www.mikebloomberg.com/middleclassgateway.pdf.$ 

	TABLE 2					
Graduatio	On Rates of ASA				aduates	
		SAP (Fall 200	n Original ASA		son Group (F	all 2006) <sup>2</sup>
	Original Cohort	ASAP ( Through A	ASAP Graduates Through August 2009		Comparis Grad Through A	on Group
	N	N	%	N	N	%
Headcount	1,132	341	20.1	1,791	205	11.4
2 Year Graduation Rate	~~	~~	30.1	~~	~~	11.4
College	240	50	22.7	106	4.4	0.0
BMCC	249	59	23.7	496	44	8.9
Bronx	118	20	16.9	63	3	4.8
Hostos	82	21	25.6	41	9	22.0
KBCC	247	114	46.2	404	72	17.8
LaGuardia	208	60	28.8	289	36	12.5
Queensborough	228	67	29.4	498	41	8.2
Gender	516	120	22.2	020	60	0.1
Male	516	120	23.3	838	68	8.1
Female 3	616	221	35.9	953	137	14.4
Race/Ethnicity <sup>3</sup>						
American Indian/Native	2	2	100.0		0	0.0
Alaskan	2	2	100.0	3	0	0.0
Asian/Pacific Islander	116	53	45.7	279	43	15.4
Black	357	90	25.2	481	40	8.3
Hispanic	421 236	114 82	27.1	523	48	9.2
White	230	82	34.7	505	74	14.7
Age <sup>4</sup>	660	210	31.8	628	65	10.4
18 or younger 19 or 20	251	62	31.8 24.7	646	63 74	10.4
21 to 23	251 96	28	24.7 29.2	296	31	11.5
24 or older	96 125	28 41	32.8	296	31 35	10.5
Pell <sup>4</sup>	143	41	32.0	221	33	13.0
Receiving Pell	633	199	31.4	983	130	13.2
Not Receiving Pell	499	142	28.5	808	75	9.3
Admission Type	<del></del>	142	20.3	000	13	2.3
First-Time Freshmen	852	251	29.5	660	61	9.2
Transfer Students	107	22	20.6	400	48	12.0
Continuing Students	173	68	39.3	731	46 96	13.1
Continuing Students	1/3	00	37.3	731	90	13.1

<sup>1</sup>Excludes 37 students who were permitted to join ASAP in spring 2008: 11 at Hostos, 6 at Bronx, 6 at Kingsborough, and 14 at LaGuardia permitted to "shadow" the ASAP cohort in fall 2007.

Date: September 21, 2009

Source: CUNY Office of Institutional Research and Assessment

### ASAP PROGRAM OVERVIEW

The CUNY ASAP program assists students in earning an Associate's degree within three years. Students take most of their classes in a consolidated morning, afternoon, evening, or weekend block schedule to

<sup>&</sup>lt;sup>2</sup>Fall 2006 full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are not in College Discovery, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

<sup>&</sup>lt;sup>3</sup>Ethnicity imputed by the CUNY Office of Institutional Research for students who did not select an ethnicity or selected "other" on their CUNY application.

<sup>&</sup>lt;sup>4</sup>Based on data at time of entry. For ASAP students based on fall 2007 semester and for comparison group students based on fall 2006 semester.

help them balance school, work, and domestic responsibilities. ASAP students take 12 credits each semester, making them eligible for more financial aid, if applicable, and positioning them for graduation within three years. The program also provides comprehensive financial incentives and support services to ensure student success. A graduate of the Hostos ASAP program now at a CUNY senior college shares the following about her ASAP experience: "ASAP gave me the opportunity to pursue my education full time. I was scared, because I also work full time. I thought when I started that it was not going to be easy and that I might drop out and not make it, but ASAP gave me a chance to prove myself. Thanks to ASAP, my dreams are coming to pass."

ASAP graduates are qualified for positions in a range of career fields, including health, hospitality, and education. These areas have been identified by New York State's Department of Labor as having favorable employment prospects in the New York City region with median salaries of at least \$40,000. Liberal Arts and business majors are also offered at all colleges, both of which generally allow ease of transfer to 4-year colleges for completion of a Bachelor of Arts or Science degree.

ASAP provides several incentives to remove financial barriers to full-time college study. Any gap between financial aid award and tuition and fees is waived so there is no cost of attendance for financial-aid eligible students. Nearly 84% of ASAP students received Pell or New York State Tuition Assistance Plan (TAP) for the 2007/08 academic year.<sup>6</sup> All students receive free monthly Metrocards and free use of textbooks for their classes.

ASAP students are grouped in cohorts based on their majors. During the first year of the program, students take 3-5 of their classes in cohort blocks with ASAP students and 2-4 out-of-block courses with the general college population. Class sizes usually do not exceed 25 students, allowing for more regular interaction with classmates and faculty. All students also participate in the ASAP Seminar, a weekly non-credit advisement program facilitated by ASAP staff. In year two, students take required classes with small cohorts of 5-7 ASAP students and the general college population in addition to the weekly ASAP Seminar.

ASAP advisors meet with their assigned caseload of students at least twice a month. Advisors provide comprehensive academic, social, and interpersonal support and are considered one of the most valued elements of the ASAP program by students and college leadership. Frequent contact between faculty and advisors has ensured that every student requiring support is referred to tutoring or counseling in a timely manner. ASAP career and employment specialists<sup>7</sup> on each campus also meet with students and deliver workshops on interviewing, job skills, and career planning. Students who require employment are placed in an appropriate job situation to allow them to take a full-time course load. Advisors and career and employment specialists work together to provide all students with support in transferring to a 4-year college and/or entering the work force as they near graduation.

<sup>6</sup> Analysis is limited to students who are U.S. citizens or permanent residents.

<sup>7</sup> Formerly job developers; at the recommendation of college ASAP staff, job developers now have the working title of career and employment specialists to help students better understand the broad range of career services they provide.

ASAP also provides dedicated tutoring at all sites by qualified undergraduate or graduate students. ASAP tutors provide general subject area support and conduct regular review sessions for particularly challenging courses such as statistics or advanced chemistry. The number of tutors at each college varies based on ASAP enrollment. Struggling students are mandated to attend weekly tutoring for a minimum number of hours to help them improve their grades.

Other program elements include arts and cultural programs, trips to 4-year colleges, a student leadership program, graduate interns through the Hunter College School of Social Work, social events, and celebrations of student success, among others. Close and regular contact between ASAP students, staff and faculty has led to a strong sense of community within the program. A student at Hostos says "the ASAP staff is like a second family to me. I'm more than 'one of their students'. They care for me as a person."

#### **ASAP EVALUATION**

Two comparison groups of students similar to ASAP students were created from similar 2006 and 2007 CUNY community college students. The 2006 constructed comparison group (N=1,791) is used to evaluate performance, retention, and graduation. Because socioeconomic data are not available for CUNY students who were enrolled in 2006, a 2007 comparison group (N=1,692) was constructed to evaluate socioeconomic status. Both comparison groups are restricted to non-ASAP students who met the same criteria that ASAP students were required to meet at the beginning of the program. Comparison group students were full-time Associate students who started the fall semester with 12 or fewer credits, were proficient in reading, writing and math, were not enrolled in developmental courses, were residents of NYC, were enrolled in majors offered to ASAP students in fall 2007, and were not enrolled in College Discovery, a special opportunity program with similar services to ASAP.8

The initial analyses between ASAP students and the 2006 comparison group revealed that the two groups differed on important demographic variables, such as age, admission type, and Pell receipt (see Table 2 in the full report). In spring 2009 ASAP initiated propensity score matching (PSM) to ensure an even more rigorous analysis by creating a more comparable subset of students from the current fall 2006 comparison group. PSM is a statistical procedure that allows the prediction that a subject in the treatment or comparison group will be assigned to the treatment group based on matching variables, such as demographic variables, that are measured prior to the participants' joining the treatment group. Through this procedure a subset of 625 matched pairs was obtained.

Although the PSM analysis was deemed successful in terms of eliminating differences between ASAP and comparison group students, the method significantly reduced the number of students in the matched sample. This raised obvious concerns regarding generalizability of the findings. Based on conversations with

 $<sup>8\ \</sup>mathrm{ASAP}$  students were not permitted to join both ASAP and College Discovery.

CEO and Metis Associates, CEO's external evaluator, a decision was reached to attempt optimal full matching, which allows for most students to remain in the analysis using a one-to-many matching approach. Optimal full matching successfully improved the matching results over PSM, where fewer than 2.5% of the ASAP students were lost. With the more robust matched samples CUNY ASAP was able to confirm that most of the results obtained in all prior analysis, including PSM, held after optimal full matching was employed.

The results in Table 3 summarize the results of optimal full matching and indicate that ASAP students had an average 19.9 percentage point higher 2-year graduation rate than the comparison group. In the final matched sample the ASAP students' 2-year graduation rate was approximately two and-a-half times higher than that of the comparison group. In other words, for every one comparison group student who graduated within two years, 2.5 ASAP students graduated. ASAP students are also retained at a significantly higher rate than the comparison group, with statistical mean difference of 11.9 percentage points between the two groups when looking at retention at college of entry, and a statistical mean difference of 6.4 percentage points in retention in ASAP where ASAP students had re-enrolled in the ASAP program in their third semester. The final significant outcome between the two groups was third-semester cumulative credits where the ASAP students had earned an average of 3.7 more credits than the comparison group students after completion of their third semester.

		,	Table 3			
Outcomes of ASA	AP and Co	omparison ( ASA	_	ents After Op Fall 2 Compariso	006	Matching
			Observ	ed Means		Statistical Mean Difference
		N*		N*		
2-year Graduation	%	1,104	30.2	1,242	12.1	19.9**
1-year Retention in College	%	1,104	80.0	1,242	65.5	11.9**
1-year Retention in ASAP	%	1,104	75.2	1,242	65.5	6.4**
3 <sup>rd</sup> Semester Cumulative Credits	Mean	889	39.3	880	36.5	3.7**
3 <sup>rd</sup> Semester Cumulative GPA	Mean	894	2.68	888	2.62	0.06
*Sample size is based on stud	lents who a	are included	in the analy	sis after optima	al full match	ing procedure.
**Significant at .05 level						
Date: October 19, 2009						
Source: CUNY Office of Insti	tutional Re	search and A	Assessment			

#### NEXT STEPS

Random Assignment Study with MDRC: CUNY ASAP has commenced recruitment for a five-year random assignment study of the program led by MDRC. The study will begin in spring 2010 at Borough of

Manhattan and Kingsborough and is funded by the Leona M. and Harry B. Helmsley Charitable Trust. A recent award from the Robin Hood Foundation through MDRC will allow inclusion of LaGuardia, where students will be recruited for fall 2010. The study will provide further analysis of program impact on low-income students who require developmental course work.

Additional New Cohorts: Spring and Fall 2010: The four colleges not participating in the random assignment study are also recruiting for spring 2010 with a continued focus on low-income students with developmental needs. Hostos, Bronx, La Guardia and Queensborough Community are currently recruiting 150-170 students to return the cohort to its original 1,000-student enrollment. All colleges will continue recruiting through spring semester with the goal of admitting 350-400 new students for fall 2010.

Annual Student and Exit Surveys: CUNY ASAP is preparing its annual student and exit surveys for a December administration at all colleges. Survey findings, including aggregate and subgroup analysis, will be presented to colleges, University leadership and CEO in early February. Survey findings will also serve as a key discussion topic for the annual ASAP staff retreat, which will be held in February 2010.

Tracking of Students at Four-year Colleges: Because of high 2-year graduation and transfer rates, ASAP will initiate tracking of students at four-year colleges. ASAP students attending CUNY senior colleges will be tracked using outcomes measures that are consistent with current retention, performance and graduation analysis. ASAP students will be compared against similar CUNY community college transfer students at CUNY senior colleges. ASAP will also submit a request to the National Student Clearinghouse, which will provide retention and graduation data on ASAP graduates attending non-CUNY 4-year colleges. Initial requests will be submitted in early 2010.

*Wage and Income Analysis*: ASAP is working with CEO to initiate collection of wage and employment data for ASAP students and graduates through the New York State Department of Labor (DOL). CUNY will secure student consents and submit the request to the DOL. De-identified student data would then be provided to CEO for evaluation purposes. Consent forms and a data sharing agreement are currently being drafted with plans to seek student consents by January 2010.

### REFERENCES

- Bailey, Thomas R.; Alfonso, Mariana (2005). "Paths to Persistence: An Analysis of Research on Program Effectiveness at Community Colleges." New Agenda Series. Volume 6, Number 1. Indianapolis: Lumina Foundation for Education.
- Kuh, George D., Ed.; Kinzie, Jillian, Ed.; Buckley, Jennifer A., Ed.; Bridges, Brian K., Ed.; Hayek, John C., Ed. (2007). Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations. ASHE Higher Education Report, Volume 32, Number 5. Hoboken: Jossey Bass.
- Tinto, Vincent (1993). <u>Leaving College: Rethinking the Causes and Cures of Student Attrition</u>. Chicago: University of Chicago Press.

### INTRODUCTION

In January 2007 the City University of New York (CUNY) received funding from the Office of the Mayor's Center for Economic Opportunity (CEO) to establish the Accelerated Study in Associate Programs (ASAP). ASAP is designed to help students earn their Associate's degree as quickly as possible, with a target of 50% of students graduating within three years. In fall 2007 ASAP began with a pilot cohort of 1,132 students who were deemed fully skills proficient in reading, writing, and math<sup>9</sup>. The fall 2007 ASAP cohort included 319 students (28%) who had been conditionally accepted in summer 2007 while they completed any required developmental courses in order to join the program.

ASAP students entered into full-time study in Associate's degree programs closely related to future employment prospects and transferability to 4-year colleges. See Appendix A for a complete list of ASAP majors. The program is found at all six CUNY community colleges: Borough of Manhattan Community, Bronx, Hostos, Kingsborough, LaGuardia, and Queensborough.

The ASAP program brings together a set of comprehensive services and incentives that have been identified as being helpful to improving the retention, performance, and graduation rates of community college students (Bailey and Alfonso, 2005; Kuh, Buckley, Bridges, & Hayek, 2007; Tinto, 1993). Financial incentives include tuition waivers for financial aid eligible students and free monthly Metrocards and use of textbooks for all students. Key program elements include required full-time study, a consolidated course schedule, cohort group by majors, small class size, comprehensive advisement, academic, and career development services delivered by full-time ASAP staff, and a range of special programs.

Because community college students often have multiple responsibilities, without this level of support, there are often significant barriers to full-time study and degree completion. According to the CUNY Office of Institutional Research and Assessment (OIRA), 18% of CUNY community college students are supporting at least one child, most of whom are under five years of age; 33% of CUNY community college students spend at least six hours per week providing care for other people; 66% of CUNY community college students work at least part-time; and 75% are from households with annual incomes below \$40,000. While the vast majority of CUNY community college students begin their studies on a full-time basis (87% for the fall 2002 cohort), nearly half, 45%, drop to part-time status in one or more subsequent semesters, significantly reducing the likelihood of

<sup>9</sup> Students can demonstrate basic skills proficiency at CUNY based on their SAT, ACT, or New York State (NYS) Regents exam scores or by taking the CUNY Skills Assessment Test. Reading and writing proficiency can be demonstrated by an SAT I verbal score of 480 or higher or a critical reading score of 480 or higher, ACT English score of 20 or higher, an NYS English Regents score of 75 or higher, or the following CUNY Skills Assessment Test scores: Reading: 70 or higher and Writing Test: 7 or higher. Math proficiency requirements differ from college to college.

degree completion. Analysis of 6-year CUNY institution graduation rates<sup>10</sup> reveals that for the fall 2002 cohort of first-time, full-time freshmen at the six CUNY community colleges, only 26% of these students graduated six years later.

To determine the impact of the program, ASAP used a constructed comparison group evaluation method to compare ASAP students' outcomes against a group of similar students. The comparison group is comprised of students from fall 2006 who met the same criteria that ASAP students were required to meet in fall 2007 in order to join the program: full-time Associate students who started the term with 12 or fewer credits, proficient in reading, writing and math, not enrolled in developmental courses, not enrolled in College Discovery<sup>11</sup>, residents of NYC, and enrolled in majors offered to ASAP students in fall 2007. An additional comparison group from fall 2007 who met the same criteria was created for socioeconomic analysis. CUNY and CEO have used this framework to measure the performance of ASAP students over the last two years, along with other administrative data and student surveys. Metis Associates, one of CEO's independent evaluators, provided a review of this method and the criteria for comparison group matching. Their comments helped to refine this analysis of early program impacts.

Having just completed its second year ASAP is well on its way to realizing its ambitious goals of graduating at least 50% of its original 2007 cohort of 1,132 students within three years. As of August 2009, a total of 341 students from the original cohort have graduated with an Associate's degree, representing a 30.1% 2-year graduation rate. Thirteen ASAP students graduated by January 2009, and an additional 328 students graduated by August 2009<sup>12</sup>. A comparison group of similar students from fall 2006 had a 2-year graduation rate of 11.4% (see Table 1). An additional 325 students are currently on track to graduate by September 2010, which would result in 3-year graduation rate of nearly 60%<sup>13</sup>. Comparison group students had a 3-year graduation rate of 24%.

<sup>10</sup> Institution graduation rates are calculated as the percentage earning a degree at the college of entry any time prior to the start of the subsequent fall term(s). Source: CUNY OIRA.

<sup>11</sup> College Discovery is a special opportunity program with similar services to ASAP. Students were not permitted to join both ASAP and College Discovery.

<sup>12</sup> An additional nine students who were permitted to join ASAP in spring 2008 after "shadowing" the ASAP cohort in fall 2007 also graduated by September 2009.

<sup>13</sup> Three-year graduation projections are based on analysis of students' current credit accumulation, GPA, academic history of course completion, and CUNY Proficiency Exam (CPE) outcomes; successful completion of the CPE is required for graduation from a CUNY community college.

				Table	1						
2-Year Graduat	ion Rates for	Original A				w Stude	nts Com	pared to C	Comparis	on Grou	ир
				Studen	ts					_ Tota	al 2-
			nmer	Fall			ıg 2009	Summe		Ye	ear
College	Total		aduation	Gradi			ıation*	Gradı			uation
	N	N	%	N	%	N	%	N	%	N	%
Fall 2007 Original A	SAP Cohort	Students									
BMCC	249	0	0.0	2	0.8	26	10.4	31	12.4	59	23.7
Bronx	118	0	0.0	0	0.0	9	7.6	11	9.3	20	16.9
Hostos	82	0	0.0	0	0.0	17	20.7	4	4.9	21	25.6
Kingsborough	247	1	0.4	8	3.2	77	31.2	28	11.3	114	46.2
LaGuardia	208	0	0.0	1	0.5	25	12.0	34	16.3	60	28.8
Queensborough	228	0	0.0	1	0.4	31	13.6	35	15.4	67	29.4
TOTAL	1,132	1	0.1	12	1.1	185	16.3	143	12.6	341	30.1
Spring 2008 ASAP Si	hadow Studen	uts**									
TOTAL	37	0	0.0	0	0.0	5	13.5	4	10.8	9	24.3
Fall 2006 Compariso	n Group***										
						~ .		51			al 2-
College	Total		er 2007 uation	Fall : Gradı			g 2008 uation	Summe Gradi			ear uation
Conege	N	N Grau	<u>uation</u> %	N	1811011 %	N	<u>uation</u> %	N	%	N	11at1011 %
BMCC	496	0	0.0	5	1.0	33	6.7	6	1.2	44	8.9
Bronx	63	1	1.6	0	0.0	1	1.6	1	1.6	3	4.8
Hostos	41	0	0.0	1	2.4	5	12.2	3	7.3	9	22.0
Kingsborough	404	1	0.2	10	2.5	37	9.2	24	5.9	72	17.8
LaGuardia	289	0	0.0	7	2.4	7	2.4	22	7.6	36	12.5
Queensborough	498	0	0.0	3	0.6	25	5.0	13	2.6	41	8.2
TOTAL	1,791	2	0.1	26	1.5	108	6.0	69	3.9	205	11.4
101112								٠,			

<sup>\*</sup>Includes spring semester at BMCC, Bronx, Hostos and Queensborough and first 12-week spring session at Kingsborough and LaGuardia.

Date: September 18, 2009

Source: CUNY Office of Institutional Research and Assessment

Once the observed 2-year graduation rates of the ASAP and comparison group students were obtained, the next step was to evaluate whether there was a statistically significant difference between the two groups. Due to observed group differences on important demographic variables, various forms of propensity score matching (PSM) were conducted to ensure that ASAP and comparison group students were as equivalent as possible on multiple variables before attempting to estimate statistical differences. Once PSM was successfully accomplished, the analysis revealed that ASAP students continue to have significantly stronger 2-year

<sup>\*\*</sup>Students who were permitted to join ASAP in spring 2008: 11 students at Hostos, 6 students at Bronx, 6 students at Kingsborough, and 14 students at LaGuardia permitted to "shadow" the ASAP cohort in fall 2007.

<sup>\*\*\*</sup>Fall 2006 full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are not enrolled in College Discovery, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

graduation rates than comparison group students. After matching, ASAP students had an unadjusted 2-year graduation rate of 30.2% vs. 12.1% for the comparison group. Based on these results, the ASAP program is two and half times more likely to graduate a student than the comparison group. See the Evaluation section for complete graduation data analysis, including PSM results.

As of fall 2009, more than 90% of ASAP 2-year graduates indicated plans to transfer to 4-year colleges to work towards a bachelor's degree. According to an exit survey of graduating students, 75% of ASAP 2-year graduates planned to attend a CUNY senior college and 15% planned to attend other 4-year colleges.<sup>14</sup> The

remaining 10% of ASAP 2-year graduates planned to enter the workforce, with the vast majority indicating plans to return to college to continue their education in the near future. On the 2008/09 annual student survey and at end-of-year celebrations, ASAP graduates overwhelmingly credit the financial incentives and comprehensive advisement support as key

"ASAP has given me all the tools I need to work, learn, and achieve my goals."

-ASAP Graduate LaGuardia Community College

reasons why they were able to complete their Associate's degrees in record time. One student from LaGuardia, who immigrated to the United States less than four years ago without speaking English, completed his Associate's degree in less than two years with ASAP and transferred to a CUNY senior college. He indicates that "ASAP has given me all the tools I need to work, learn, and achieve my goals. But the most important lesson that they have taught me is the ability to remain focused and to believe in myself."

Based on high 2-year graduation rates for the original cohort, ASAP admitted 431 new students across all six community colleges in fall 2009. In order to determine if the ASAP model could be similarly successful for slightly less prepared students and to ensure that students with the greatest financial need were served, new skills proficiency and income thresholds were established. The fall 2009 ASAP cohort is primarily made up of students who require up to two developmental courses in reading, writing or math<sup>15</sup> and who are Pell eligible or have family income within 200% of the federal poverty guidelines. Students are also required to meet existing ASAP selection criteria including New York City residency, no more than 12 credits attained, and full-time status in an ASAP-approved major. See Appendix B for a chart of fall 2007 and 2009 Selection Criteria. Fall 2009 ASAP students will receive the same comprehensive incentives and program services as the original fall 2007 cohort with the goal of completing an Associate's degree within three years.

Thanks to successful outcomes, ASAP has received outside funding from two foundation sources and pledges for additional City resources, pending budget availability, to increase enrollment, expand evaluation capacity, and support students in continuing their education

In July 2009, ASAP received a 2-year grant for \$190,000 from the Jewish Foundation for the Education of Women (JFEW) to launch the ASAP Transfer Scholarship Program. The program provides scholarships and

<sup>14</sup> ASAP graduates' enrollment at CUNY senior colleges will be verified once fall 2009 enrollments are finalized in the CUNY Office of Institutional Research database (IRDB). A request will be submitted to the National Student Clearinghouse in winter to verify enrollments at non-CUNY colleges.

<sup>15</sup> The Fall 2009 ASAP cohort is comprised of 75% students with developmental course needs and 25% of students who are fully skills proficient by the start of the fall semester.

targeted advisement for high-performing ASAP students with financial need who matriculate to select CUNY senior colleges: Baruch, Hunter, Queens, or Brooklyn in fall 2009.

In August 2009, ASAP also received a 3-year grant for \$3.7 million from the Leona M. and Harry B. Helmsley Charitable Trust to expand the program at Borough of Manhattan and Kingsborough Community Colleges in spring 2010, conduct a 5-year random assignment study of the program at both colleges led by MDRC, and support the Transfer Scholarship Program.

In November MDRC received a grant for \$1.1 million from the Robin Hood Foundation to support the ASAP random assignment study and to expand the study to include LaGuardia Community College in fall 2010. Between the three colleges, a total of 900 students will be recruited to participate in the study, all of whom will be low-income students who require developmental course work and meet ASAP income criteria (See Next Steps section of the report for more detailed information).

ASAP has also been identified by New York City Mayor Michael Bloomberg as a key component of his new "Gateway to the Middle Class" community college initiative, announced in August 2009. The \$50-million initiative has a goal of significantly increasing the number of city residents that graduate from CUNY community colleges by 2020. Mayor Bloomberg has indicated an intent to invest up to \$27 million to support ASAP, which would permit the program to serve up to 2,000 students over the next four years.<sup>16</sup>

<sup>16</sup> Source: Mike Bloomberg's Gateway to the Middle Class. http://www.mikebloomberg.com/middleclassgateway.pdf.

### ASAP IMPLEMENTATION AND OUTCOMES

January-July 2007: Upon receipt of funding from CEO in January 2007, CUNY initiated planning, recruitment and staffing with a goal of enrolling 1,000 students across its six community campuses to begin full-time study in select majors in fall 2007. Students were required to be fully skills proficient in the areas of reading, writing, and math by the start of the fall semester. Targeted, intensive recruitment efforts were coordinated between the CUNY Office of Academic Affairs (CUNY Central), community college admissions, testing and enrollment offices and designated ASAP staff to identify eligible students. CUNY ASAP approached recruitment over the winter, spring and summer of 2007 making efforts to attract both students who may not have planned on going to college in the fall and students who had already applied to a CUNY community college. An overview of fall 2007 ASAP recruitment can be found in C.

Final fall 2007 ASAP enrollments by college exceeded the original 1,000-student target with a total of 1,132 fully skills proficient students recruited across all six colleges. Of these, 319 students (28%) became skills proficient over the summer by successfully completing any required developmental courses in order to be eligible for the program. Final fall enrollments by college were: Borough of Manhattan: 249, Bronx: 118, Hostos: 82, Kingsborough: 247, LaGuardia: 208, and Queensborough: 228.

Summer 2007: In addition to any required developmental course taking in order to become eligible for the program, all colleges conducted late summer orientation programs that ranged in length from 3-7 days to introduce students to ASAP and college expectations, and to build rapport among students and staff. All colleges also conducted orientations or professional development workshops for cooperating faculty to familiarize cooperating faculty with the goals and design of ASAP. All colleges utilized interactive workshops that involved students working in teams to heighten engagement, establish a sense of community, and build self-confidence. At Kingsborough Community College, EKOarts, an affiliated arts education provider delivered a range of multi-disciplinary arts workshops that explored themes from The Kite Runner by Khaled Hosseini, which was assigned reading for all incoming Kingsborough students.

Fall 2007: In fall 2007 the ASAP cohort began full-time study in a range of majors selected for their relevance to future employment prospects and transferability to baccalaureate programs (see Appendix A). CUNY ASAP students attended classes during convenient morning, afternoon, or evening block schedules to allow them to balance school and work. Block scheduling allowed students to establish connections with fellow classmates and faculty. Students formed informal study groups and engaged in frequent social interaction. A powerful sense of community developed at each campus, which has helped students avoid feelings of isolation or disconnection, which can be frequent reasons students drop out of college in their first year of study. A student at Hostos, who graduated in two years while working full time says this about her classmates: "We

have known each other since the summer program and we are there for each other. I go to them when I have a problem in a subject, just as one of them comes to me when they need help."

Every student was assigned to a specific advisor who met with them twice per month. Advisors had usual case loads of 60-80 students and provided comprehensive academic, social, and interpersonal support. Advisors and students formed extremely close personal relationships and are considered one of the most

important components of the ASAP program by students, staff, and CUNY leadership. ASAP students overwhelmingly feel that their advisors support them both academically and personally, as seen by the high satisfaction ratings on the ASAP annual survey (see Evaluation section of the report) and consistent citation by students at award and graduation events. Describing her feelings for her advisor, a student at Hostos says "The ASAP staff is like a

"The ASAP staff is like a second family to me. They care for me as a person."

-ASAP Student Hostos Community College

second family to me. I'm more than 'one of their students.' They care for me as a person." Frequent contact between faculty and advisors also ensured that every student requiring support was referred to tutoring or counseling in a timely manner.

Career and Employment Specialists<sup>17</sup> on each campus also met regularly with students. Any ASAP students who required employment were placed in an appropriate job situation to allow them to take a full-time course load. ASAP career and employment specialists also delivered workshops on interviewing, job skills, and career planning and organized career fairs, guest speaker series, and job shadowing opportunities. A Borough of Manhattan ASAP graduate now attending Brooklyn College shared the following praise for ASAP career development services as part of his testimony at the CUNY Board of Trustees Annual Manhattan Borough Hearing: "Through ASAP I not only have the opportunity to advance scholastically, but I also gained personally. It was at an ASAP-sponsored career fair that I acquired my current position, which now allows me to work in my field of study."

The vast majority of ASAP students did well in their first semester, earning 11.5 mean credits in fall 2007 with a GPA of 2.5 vs. 9.6 credits and a GPA of 2.3 for a comparison group of similar students<sup>18</sup>. A total of 133 ASAP students were recognized on the dean's list and 80 students were inducted into Phi Theta Kappa, the international honor society for 2-year colleges. Additional ASAP student honors included three Kaplan Education Foundation Scholars, four Peter Vallone Scholars, two Serrano Scholars, two Out-in-Two Scholarships, one Grainger Scholarship, and one New York City Department of Housing Scholarship.

<sup>17</sup> Formerly called job developers; at the recommendation of college ASAP staff, job developers now have the working title of career and employment specialists to better capture the broad range of services they provide.

<sup>18</sup> Source: CUNY Office of Institutional Research and Assessment.

*Spring* 2008: A total of 1,024 ASAP students reenrolled at their college of entry in spring 2008, representing a 90.5% retention rate. The comparison group had a one-semester retention rate of 78.2%. Students completed the spring semester having earned an average of 25.8 cumulative credits with an average GPA of 2.61. The comparison group had earned an average of 24.7 cumulative credits with a GPA of 2.43.

Thirty-seven new students joined the ASAP cohort in spring 2008, and were named ASAP "shadow" students. "Shadow" students participated in the summer 2007 pre-semester programs but were unable to join ASAP in fall 2007 because they did not pass required summer developmental courses. While retaking a developmental course in the fall, shadow students were allowed to participate in ASAP block scheduled courses, advising, and all other ASAP activities without the financial incentives such as tuition waivers, textbooks and Metrocards. Once they passed the Skills Assessment Test, they were formally welcomed into the ASAP cohort. "Shadow" students are excluded from retention and graduation analysis. ASAP shadow student breakdowns by college are: 6 students at Hostos, 11 at Bronx, 14 at LaGuardia, and 6 at Kingsborough. Nine "shadow" students graduated by September 2009, which represents a 2-year graduation rate of 24.3%.

All college ASAP programs hosted celebrations of student success and held frequent social gatherings. Students also attended theater, dance, and music events, visited museums, and toured CUNY 4-year college campuses. The CUNY Central Office organized an ASAP-wide event in April 2008 at Hunter College, attended by the CUNY Chancellor Matthew Goldstein and Deputy Mayor Linda Gibbs, to celebrate students' successful completion of their first year in ASAP.

Summer 2008: Following the appointment of a new ASAP University Director in July 2008, several new program features and an expanded evaluation agenda were introduced. New program features included the inauguration of a partnership program with the Hunter College School of Social Work, a professional development series for advisors and career and employment specialists, redesign of the ASAP website, an annual retreat, and an ASAP-wide student leadership program. These program elements are described in greater detail in the Description of Program Elements section of the report.

New evaluation components included the hiring of a full-time evaluation specialist, who significantly increased the rigor and frequency of quantitative and qualitative data analysis. Other new elements include the introduction of a standardized data management system used by all ASAP college programs to document contact with students, creation and administration of identified annual student and exit surveys, and focus groups for graduating students. Evaluation elements are described in the Evaluation section of the report.

All six campuses offered courses to ASAP students between June and August 2008. A total of 561 students, or 55% of ASAP students who were enrolled in spring 2008 took courses between June and August 2008. This includes students enrolled in summer sessions at Borough of Manhattan, Bronx, Hostos, and Queensborough and the 6-week "spring 2" session at Kingsborough and LaGuardia, which runs from June to

August.<sup>19</sup> Of those enrolled in summer courses, colleges report that 68% of ASAP students did so to accelerate credit accumulation and 32% were making up a class they had failed. By comparison, 406 students, or 29%, of the fall 2006 comparison group who were enrolled in spring 2007 took courses in summer 2007.

*Fall 2008:* In fall 2008, 906 ASAP students reenrolled at their college of entry, representing an 80.3% one-year retention rate. The comparison group of similar students had a fall-to-fall retention rate of 59.7%. Of fall reenrollments, 851 students reenrolled in ASAP, representing a 75.2% program retention rate. By the end of the fall 2008 semester, ASAP students had a mean of 39.3 cumulative credits with a cumulative GPA of 2.6. Comparison group students had a mean of 36.5 cumulative credits with a GPA of 2.5. More detailed retention and performance findings can be found in the Evaluation section of the report.

A total of 80 ASAP students or 15% of students who were enrolled in fall 2008 at Borough of Manhattan, Bronx, Hostos, and Queensborough took optional winter intercession courses in January 2009. By comparison, 49 students or 7% of the fall 2006 comparison group who were enrolled in fall 2007 at these four colleges took winter intercession courses in January 2008. A total of 299 ASAP students, or 83% of students who were enrolled in the fall 2008 semester at Kingsborough and LaGuardia took classes during the 6-week "fall 2" session<sup>20</sup> that runs from December 2008 to February 2009. By comparison, 245 or 60% of fall 2006 comparison group students who were enrolled in fall 2007 took classes during the 6-week "fall 2" session.

*Spring* 2009: A total of 827 ASAP students reenrolled at their college of entry in spring 2009, realizing a fourth-semester retention rate of 73.1%. The comparison group had a fourth-semester retention rate of 48.5%. Although final spring grades are not yet available because of the extended academic calendars at Kingsborough and LaGuardia,<sup>21</sup> a large number of ASAP students passed the CUNY Proficiency Exam (CPE) exam, which is required in order to earn a CUNY Associate's degree. A total of 513 students had taken and passed the CPE as of the March administration with an overall pass rate of 83%.

Based on strong 2-year graduation projections, ASAP began to recruit for a new fall 2009 cohort with a target of 350-400 students across all six community colleges. Based on success with fully skills-proficient students and a commitment to serve students with significant financial need, ASAP shifted its focus to students with some basic skills needs and established income thresholds. Colleges recruited students who required one or two developmental courses in one basic skills area.<sup>22</sup> All students were required to be Pell eligible or have an adjusted gross family income within 200% of the federal poverty guidelines. Colleges and CUNY Central ASAP staff worked closely to create common recruitment and admission materials and protocols for the fall 2009

<sup>19</sup> Kingsborough and LaGuardia have extended fall and spring semesters, with a 12-week and a 6-week session during each semester. Financial aid covers both sessions.

<sup>20</sup> Kingsborough and LaGuardia do not have winter intercession courses, but instead offer a 6-week "fall 2" session in which the majority of students enroll.

<sup>21</sup> Kingsborough and LaGuardia "spring 2" session grades are not considered final and available to ASAP through the CUNY Institutional Research Database (IRDB) until mid-late November.

<sup>22</sup>Colleges were permitted to admit some fully skills proficient students as long as these students met income and all other selection criteria and their total did not exceed 25% of their college's fall 2009 ASAP enrollment target.

cohort. Colleges focused on recruitment of students who had already applied to CUNY. CUNY Central focused on citywide outreach to organizations, schools, and agencies serving low-income constituents that had not yet applied to CUNY. See Appendix D for an overview of ASAP fall 2009 recruitment.

*Summer* 2009: All six campuses offered summer courses to ASAP students between June and August 2009 with a total of 372 students, or 49% of students who were enrolled in spring 2009 taking courses between June and August as reported by ASAP college directors. While final 2009 summer enrollment and course grades are not yet available, ASAP college staff report that students generally did well, with course completion rates of nearly 90%. By comparison, 296 students or 34% of the fall 2006 comparison group who were still enrolled in spring 2008 took courses in summer 2008.

*New Program Components for Fall 2009*: Based on lessons learned from the first two years of the program, feedback from staff and students, and extended dialogue among Central Office and college ASAP directors, the following adjustments were made to key program areas to improve student success: 1—selection of majors, 2—block scheduling, 3—mandatory summer institute, and 4—program-wide adoption of the ASAP Seminar.

<u>1-Selection of Majors</u>: Over the first two years, CUNY ASAP staff learned that many students had selected their majors with a very limited understanding of the required course of study and transferability to a 4-year college. With this in mind, for the fall 2009 cohort, ASAP staff advised incoming students who did not have fixed career goals in mind to begin their full-time course work with ASAP as liberal arts majors. This would ensure that students could explore a range of subjects with the greatest freedom to change majors, which is permitted as long as it does not extend time to graduation beyond three years.

<u>2-Adjusted Block Scheduling</u>: Based on extended dialogue with staff and students, ASAP adjusted its definition of "block scheduling" to better serve the needs of students and to be respectful of record enrollment rates that have stretched college facility and faculty resources. The program also wished to ensure that students were well integrated into both the ASAP program and the larger college community. While the fall 2007 cohort took most of their classes together throughout their first year, fall 2009 ASAP students will take 2-3 block-scheduled courses, 1-2 out-of-block courses, and a required noncredit ASAP Seminar facilitated by ASAP staff in the fall semester. In spring 2010 semester, students will take 1-2 blocked courses, 1-2 out-of-block courses, and the ASAP Seminar. Moving into year two, students will be scheduled in cohorts of 5-7 students by major for required courses whenever possible and continue to participate in the ASAP Seminar.

<u>3-ASAP Seminar</u>: Based on successful pilots at Kingsborough and LaGuardia, all ASAP programs agreed to implement a weekly group advisement program to be delivered by ASAP advisors and career and employment specialists in academic year 2009/10. The ASAP Seminar is offered weekly at several

optional times and utilizes a common curriculum selected in collaboration by all ASAP college and Central office staff members, entitled, On Course: Strategies for Creating Success in College and in Life by Skip Downing. The curriculum was developed by Dr. Downing during his tenure at Baltimore City Community College and is widely used at community colleges across the country. All ASAP staff participated in a 2-day training on use of On Course in July 2009 at the CUNY Graduate Center led by an experienced staff developer who works closely with Dr. Downing.

4-Summer Institute 2009: While the fall 2007 cohort participated in summer programs of varying length and content, all new fall 2009 ASAP students were required to participate in a standardized 3-day advisement and orientation program in late summer at their home college. In spring 2009, ASAP staff members identified core competencies that would improve student success and integration into life as a full-time student in the ASAP program. Summer institute activities led by ASAP advisors, career and employment specialists and cooperating faculty addressed issues that impact first-time college students such as time management, study habits, self advocacy, navigation of college systems, and the importance of utilizing campus resources. Who Moved My Cheese by Dr. Spencer Johnson was required reading. Teaching artists from EKOarts and the CUNY Creative Arts Team (CAT) delivered interactive workshops using a variety of performing arts approaches that addressed effective communication and openness to change, key themes from the assigned reading.<sup>23</sup>

Fall 2009: As of September 2009, ASAP enrollment is 834 students, which includes 431 new students and 403 continuing students<sup>24</sup>. Services are being delivered in all program areas, and new and continuing students have formed strong connections with one another and ASAP staff. Students with basic skills needs are receiving additional academic support through to ensure that they do well in their developmental courses, with the goal of completing them by spring 2010. A total of 48 of the 341 ASAP 2-year graduates received the ASAP Transfer Scholarship and are working closely with a new team of ASAP advisors at Baruch, Hunter, Queens, and Brooklyn Colleges, who report that students are well prepared for baccalaureate study. The program has also initiated recruitment of new students at all colleges for spring and fall 2010, with random assignment in place at Borough of Manhattan and Kingsborough for spring 2010.

<sup>23</sup> EKOarts served summer institutes at Kingsborough, LaGuardia, and Queensborough. CAT served Bronx, Hostos, and Borough of Manhattan.

<sup>24</sup> Preliminary enrollment figures; actual fall 2009 enrollment will be verified once final enrollment data is available from the CUNY Office of Institutional Research and Assessment.

# PROFILE OF ASAP STUDENTS

The ASAP program began in fall 2007 with 1,132 students across CUNY's six community colleges. The ASAP cohort is generally representative of CUNY community college full-time students by gender and ethnicity, but they are however, slightly younger and have higher incomes. Based on fall 2007 data and detailed in Table 2, the ASAP cohort was comprised of 54% female and 46% male students. Ethnic breakdowns indicate that 37% were Hispanic, followed by 32% Black, 21% White, and 10% Asian students. The average age of ASAP students at the time of admission was 20 years of age, and the median 19, with 58% of the students being 18 years of age or younger at the time of entry into the program. Seventy five percent of ASAP students were admitted as first-time freshmen, 15% were continuing CUNY students, and 10% were transfer students from other colleges or universities. Fifty-eight percent of ASAP students received federal Pell grants. ASAP students' median family income was \$35,008, which is higher than the comparison group (see Table 3).

ASAP demographics were compared against both the fall 2006 and fall 2007 comparison groups. In comparison to both groups, the ASAP students have on average 6 percentage points fewer Asian, 7 percentage points fewer White, 5 percentage points more Black and 8 percentage points more Hispanic students when compared to the ethnic breakdown of both comparison groups. An additional difference between the two groups lies in their age; only 35% of comparison group students were 18 or younger when they enrolled in college in fall 2006 and only 37% entered as first-time freshmen compared to 58% and 75%, respectively, of ASAP students.

<b>5 6 6 6 6 6 6 6 6 6 6</b>		Table 2	a	
Profile of ASA	P and Com		Students at Time of En	try Fall 2007
		ASAP Total	Comparison Group <sup>1</sup>	Comparison Group <sup>2</sup>
Total Enrollment	N	1,132	1,791	1,692
Gender				
Male	%	45.6	46.8	46.9
Female	%	54.4	53.2	53.1
Race/Ethnicity				
American Indian/Native Alaskan	%	0.2	0.2	0.2
Asian/Pacific Islander	%	10.2	15.6	15.3
Black	%	31.5	26.8	27.4
Hispanic	%	37.2	29.2	30.6
White	%	20.8	28.2	26.5
Age Group				
18 or younger	%	58.3	35.1	19.1
19 or 20	%	22.2	36.1	42.4
21 to 23	%	8.5	16.5	23.2
24 or older	%	11.0	12.3	15.2
Median Age	median	19	20	20
Mean Age	mean	20	21	21
Receiving a Pell Grant <sup>3</sup>	%	57.9	67.1	67.1
Income <sup>3</sup>	median	\$35,008	4	\$29,231
Admission Type				
First-time Freshmen	%	75.3	36.9	32.9
Transfer Students	%	9.5	22.3	22.9
Continuing Students	%	15.3	40.8	44.2
Borough/County of Residence				
Bronx	%	22.4	9.8	11.1
Brooklyn	%	29.5	33.3	34.9
Manhattan	%	10.0	10.7	10.8
Queens	%	36.4	43.8	39.9
Richmond	%	1.6	2.2	2.8
Westchester	%	0.1	0.0	0.0
Other	%	0.0	0.2	0.5
One Year Retention	%	80.3	59.7	60.5
<sup>1</sup> Used for academic outcome compar				
<sup>2</sup> Used for socioeconomic comparisor	ıs.			
<sup>3</sup> Based on dependent students only.				
<sup>4</sup> Income data for 2006 comparison gr	oup not ava	ailable.		
Date: May 20, 2009	_			
Source: CUNY Office of Institutional	Research o	and Assessment		

In reviewing profiles of ASAP and comparison group 2-year graduates (See Table 3), ASAP outperforms comparison group students in graduation rates. The overall 2-year graduation rate of ASAP students is 18.7 percentage points higher than that of the comparison group: 30.1% vs. 11.4%. Analysis of graduation rates by ethnic group reveals that both ASAP and the comparison group are proportionally graduating students across all racial groups, although ASAP is graduating a larger percentage within each race category. Hispanic students, followed closely by Black students, graduated at lower rates than White and Asian students. When examining student graduation rates by age, both ASAP and the comparison group are

graduating older students (24 or older) and continuing students (those who began with 12 or fewer college credits) at the highest rate. For ASAP, of all continuing students who entered the program, 39.3% graduated by August 2009 compared to 29.5% of first-time freshmen. For the comparison group, 13.1% of continuing students graduated by August 2008 compared to 9.2% of first-time freshmen. It is very likely that the reason why continuing students in both the ASAP and comparison group are graduating at the highest rate is because they have entered into the ASAP program or into the comparison group with accumulated credits; although no more than 12 credits.

TABLE 3
Graduation Rates of ASAP and Fall 2006 Comparison Group Graduates
Graduation Rates based on Original ASAP Cohort

	ASAP (Fall 2007) <sup>1</sup> Comparison Group (Fall 2006)					all 2006) <sup>2</sup>
	Original Cohort	ASAP Graduates Through August 2009		Original Cohort	Comparison Group Graduates Through August 2008	
	N	N	%	N	N	%
Headcount	1,132	341		1,791	205	
2 Year Graduation Rate	~~	~~	30.1	~~	~~	11.4
College						
BMCC	249	59	23.7	496	44	8.9
Bronx	118	20	16.9	63	3	4.8
Hostos	82	21	25.6	41	9	22.0
KBCC	247	114	46.2	404	72	17.8
LaGuardia	208	60	28.8	289	36	12.5
Queensborough	228	67	29.4	498	41	8.2
Gender						
Male	516	120	23.3	838	68	8.1
Female	616	221	35.9	953	137	14.4
Race/Ethnicity <sup>3</sup>						
American Indian/Native						
Alaskan	2	2	100.0	3	0	0.0
Asian/Pacific Islander	116	53	45.7	279	43	15.4
Black	357	90	25.2	481	40	8.3
Hispanic	421	114	27.1	523	48	9.2
White	236	82	34.7	505	74	14.7
$Age^4$						
18 or younger	660	210	31.8	628	65	10.4
19 or 20	251	62	24.7	646	74	11.5
21 to 23	96	28	29.2	296	31	10.5
24 or older	125	41	32.8	221	35	15.8
Pell <sup>4</sup>						
Receiving Pell	633	199	31.4	983	130	13.2
Not Receiving Pell	499	142	28.5	808	75	9.3
Admission Type						
First-time Freshmen	852	251	29.5	660	61	9.2
Transfer Students	107	22	20.6	400	48	12.0
Continuing Students	173	68	39.3	731	96	13.1
<sup>1</sup> Evoludes ASAP shadow student						

<sup>1</sup>Excludes ASAP shadow students.

Date: September 21, 2009

Source: CUNY Office of Institutional Research and Assessment

<sup>&</sup>lt;sup>2</sup>Fall 2006 full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are not in College Discovery, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

<sup>&</sup>lt;sup>3</sup>Ethnicity imputed by the CUNY Office of Institutional Research for students who did not select an ethnicity or selected "other" on their CUNY application.

<sup>&</sup>lt;sup>4</sup>Based on data at time of entry. For ASAP students based on fall 2007 semester and for comparison group students based on fall 2006 semester.

## ASAP STAFFING STRUCTURE

ASAP is administered through a coordinated effort between the CUNY Office of Academic Affairs (CUNY Central) and all six community colleges. The ASAP staff members from CUNY Central and the colleges meet monthly and are in almost daily contact about program and evaluation matters and the University Director visits campuses on a regular basis.

The CUNY Central ASAP staff is led by University Director Donna Linderman who reports to the Senior University Dean for Academic Affairs and Dean of the School of Professional Studies John Mogulescu. Additional ASAP staff members include Evaluation Specialist Zineta Kolenovic, who is embedded at the CUNY Office of Institutional Research and Assessment (OIRA), a program coordinator (effective November 20, 2009), and two half-time program assistants who provide administrative, recruitment/outreach, and data support. Because of recent program expansion, a research associate and additional program coordinator have been hired to support the random assignment study and transfer scholarship program funded by the Leona M. and Harry B. Helmsley Charitable Trust and Jewish Foundation for the Education of Women. The CUNY Central ASAP team is supported by CUNY OIRA staff, specifically Assistant Dean for Institutional Research Cheryl Littman, and works closely with CUNY Academic Affairs fiscal, data, and media staff, and the Office of Admissions Services during recruitment cycles. CUNY Central ASAP provides overall project administration, fiscal and reporting oversight, data management, and program-wide evaluation. The CUNY Central ASAP team also provides a range of special program-wide initiatives such as professional development, special programs for students, and cultivation of outside partnerships.

College ASAP programs are led by directors who report to the Vice Presidents for Academic Affairs/Provost and receive day-day support from college Deans of Academic Affairs. College ASAP staff consist of two to four advisors with an average caseload of 60 students, one career and employment specialist, one to three clerical staff members, and part-time tutors that range in number based on student enrollment. Some colleges also have graduate social work interns through a special partnership with Hunter College School of Social Work (see Special Programs in next section of the report). Cooperating college faculty involvement varies by semester and course taking. ASAP staff work closely with academic departments and have identified numerous opportunities to collaborate with faculty on an ongoing basis. College directors and their staff members are responsible for delivery of all required services to their ASAP cohorts and collaboration with academic departments.

<sup>25</sup> Dean Littman reviews ASAP analyses before dissemination, and provides expert advice on all OIRA data matters.

<sup>26</sup> CUNY Central ASAP maintains an Access database that houses tracking data documenting individual contact with students by advisors and career and employment specialists. Tracking data is submitted monthly by colleges using standardized worksheets and coding procedures.

#### DESCRIPTIONS OF ASAP PROGRAM ELEMENTS

ASAP delivers a comprehensive package of financial incentives and coordinated program services that have been identified as being helpful to improving the retention, performance, and graduation rates of community college students. The following section provides a description of key ASAP program elements.

*Financial incentives:* ASAP provides several financial incentives to students to remove the majority of barriers to full-time college attendance. Any gap between financial aid award and tuition and fees is waived so there is no cost of attendance for financial-aid eligible students. All students receive free monthly Metrocards and free use of textbooks for all their classes.

Required full-time study and select majors: All ASAP students are required to maintain full-time status at all times, taking a minimum 12 credits per semester. Students are strongly encouraged to take classes during optional winter and summer sessions to accelerate movement towards graduation or to make up a class they may have failed. Majors were selected by partner community colleges based on projected job growth within the City of New York and transferability to four-year colleges. All colleges offer an array of programs leading to the Associate in Arts (A.A.), Associate in Science (A.S.), and Associate in Applied Science (A.A.S.). All colleges offer Liberal Arts programs and at least one business major. Students are permitted to switch majors as long as the degree program is supported by ASAP and can be completed within three years.

Cohort design and small class size: ASAP students take the majority of their classes in small, close-knit cohorts of 25 students who move through the program together based on their major. This connected community helps students develop close and supportive relationships with one another and their instructors and feel more connected to campus culture. Students form study groups and regularly socialize outside of class. Students indicated on ASAP annual surveys that they have developed greater confidence and improved their academic skills because they feel well supported by the program (see 2008 Annual Survey Findings in Appendix E).

Consolidated schedule: In the first year of the program, all ASAP students took all of their courses in a convenient block schedule that allowed them to balance school, work, and family obligations. Moving into the second year, students took some, but not all of their required courses in blocked courses based on their degree progress. Those taking courses out of block were programmed into course sections with other ASAP students and continued to participate in mandatory ASAP workshops or seminars to maintain strong connections with fellow students and staff. Beginning in fall 2009, students will take 3-5 blocked classes and 3-4 out-of-block classes over the academic year and will participate in a weekly ASAP Seminar facilitated by ASAP staff.

Advisement Services: All students are assigned to a dedicated ASAP advisor with whom they are required to communicate at least twice monthly to discuss all aspects of their college experience. Advisors support students' academic, social, and interpersonal needs, and have helped them transition effectively to the

rigors of full-time study and college culture. Advisors help students learn how to navigate a college campus, initiate communication with faculty, and build confidence to advocate for themselves. Advisors work with students to plan for transfer to a four-year college or to craft a plan for entering the workforce upon graduation in consultation with the ASAP career and employment specialist. ASAP advisors also communicate with faculty to maintain an awareness of their assigned students' academic progress. Struggling students are immediately referred to tutoring and mandated to meet more regularly with their advisors, which has helped students change a failing grade to a passing grade. Advisors also organize and/or lead special workshops on study skills, time management, and resiliency skills and facilitate the weekly ASAP Seminar.

Students and college leadership at all colleges cite the ASAP advisement program as one of the keys to the program's success. Queensborough Community College has replicated the ASAP comprehensive advisement model in its new campus-wide Freshman Year Academies in fall 2009. The new CUNY community college planning team is also closely studying the ASAP advisement model during its planning phase.

Academic Support Services: ASAP provides dedicated tutoring at all sites by qualified undergraduate or graduate students who are available for weekly tutoring both in and out of class. ASAP tutors also conduct regular review sessions for particularly challenging courses such as statistics or advanced chemistry. Struggling students are mandated to attend weekly tutoring for a minimum number of hours to help them improve their grades. This arrangement is made following advisor/faculty contact to determine need. ASAP programs also provide space for students to conduct their own informal study groups.

Career and Employment Services: ASAP career and employment specialists have helped students begin to think about their career goals from the day they entered college. ASAP career and employment specialists meet with students to ensure that they have appropriate job placements on or off campus while pursuing their Associate's degrees. They have also organized career fairs, guest speakers, internships, and job shadow opportunities. Most ASAP students plan to continue to a four-year college upon completion of their Associate's degree. Career and employment specialists worked in tandem with advisors to help students to think carefully about how course work, part-time work, and internships will help build strong resumes for future employment and/or graduate study. Students who plan to enter the workforce at the completion of their Associate's degree receive comprehensive career placement support to help them identify appropriate employment opportunities in their field of study.

*Special Programs*: ASAP provides special programs offered across ASAP to support student learning and build staff capacity. Examples include:

<u>Hunter College School of Social Work (HSSW) Partnership</u>: ASAP formed a partnership with HSSW in summer 2008. Graduate interns from HSSW are assigned to four colleges that have identified students struggling with personal issues that require referral or counseling services. Interns work 21 hours per week and are supported by a licensed social work faculty member from HSSW.

ASAP Leadership Program: In January 2009, teams of 4-6 students were selected by each ASAP college program to participate in newly inaugurated CUNY ASAP Leadership Program. Students participated in a weekend of interactive leadership and team-building activities led by the CUNY Creative Arts Team (CAT). Following the workshop, students continued to work as teams to plan and implement an event that addressed an issue of importance to their ASAP community at their home campus in spring 2009. They were supported in their work by an ASAP advisor, who served as team facilitator. Student leadership team projects included service learning programs, panel discussions, and film screenings, and are highlighted on the ASAP website, and the program will be repeated in January 2010.

ASAP Transfer Scholarship and Advisement Program: Funded by the Jewish Foundation for the Education of Women (JFEW) and the Leona M. and Harry B. Helmsley Charitable Trust, the ASAP Transfer Scholarship provides tuition waivers and advisement support for high-performing ASAP students with financial need who matriculated to select CUNY senior colleges in fall 2009: Baruch, Hunter, Queens, and Brooklyn Colleges. The program provides tuition waivers covering gaps between financial aid and tuition and targeted advisement support by trained advisors at each senior college. Students may receive the scholarship for up to four semesters to allow for completion of a Bachelor's degree. A total of 48 ASAP 2-year graduates received transfer scholarships for fall 2009 and were honored at a recent awards reception at the CUNY Graduate Center.

ASAP-wide Professional Development and Training: Based on feedback from college directors and strong interest in cross-campus collaboration, the University Director organized a series of professional development offerings for advisors and career and employment specialists to improve their professional practice. The University Director working in dialogue with college directors identified a variety of programs through the National Academic Advising Association (NACADA), National Council on Student Development (NCSD), and the Mid-Atlantic Career Counseling Association (MACCA), which were offered to ASAP staff at all colleges. The full ASAP staff participated in a best practices workshop in August 2008 and attended a training on use of the On Course advisement curriculum in August 2009. A satisfaction survey revealed that more than 95% of participating ASAP staff found these activities useful or very useful and 74% applied strategies or information they had learned into their daily work with students.

Annual Full-Staff Retreat: The ASAP program held its first full-staff retreat in February 2009. The retreat included staff members from all six community colleges and CUNY Central, and ASAP students from three colleges. ASAP staff broke up into cross-functional work groups to discuss a variety of important program areas identified with college directors in the weeks before the retreat. Students participated in a focus group led by the ASAP Evaluation Specialist to ensure that student voices were represented. Recommendations from the retreat were used to redevelop fall 2009 admission materials and procedures and to make adjustments to the summer institute and fall 2009 programming.

# ASAP EVALUATION

The ASAP program was designed with the intent of leading community college students to an Associate's degree within three years by providing them with resources that would enable them to succeed in college and prepare them for further studies or a career. Given the nature of the unprecedented 3-year graduation outcomes that ASAP is trying to accomplish, a rigorous evaluation was implemented to investigate the effect of the program on graduation rates, and other outcomes such as retention and academic performance. To do so, ASAP uses a constructed comparison group model for its evaluation using administrative data from the Office of Institutional Research and Assessment (OIRA). Additionally, surveys, focus groups, and program tracking data are used to evaluate student satisfaction and implementation of the program as a whole.

To date, the ASAP program has exceeded its expectation by graduating 30.1% of students within two years compared to an 11.4% 2-year graduation for the ASAP comparison group. Additional analyses show that although ASAP students are retained at a higher rate and accumulate more credits after three semesters in the program although they do not outperform comparison group students in terms of cumulative GPA.

#### **IMPACTS AND STUDENT PERFORMANCE**

Quantitative Analysis: Two comparison groups of students similar to ASAP students were created from similar 2006 and 2007 CUNY community college students. The 2006 constructed comparison group (N=1,791) is used to evaluate performance, retention, and graduation. Because socioeconomic data are not available for CUNY students who were enrolled in 2006, a 2007 comparison group (N=1,692) was constructed to evaluate socioeconomic status. Both comparison groups are restricted to non-ASAP students who met the same criteria that ASAP students were required to meet at the beginning of the program. Comparison group students were full-time Associate students who started the fall semester with 12 or fewer credits, were proficient in reading, writing and math, were not enrolled in developmental courses, were residents of NYC, were enrolled in majors offered to ASAP students in fall 2007, and were not enrolled in College Discovery. Although College Discovery offers similar services as ASAP, they serve a slightly different group of students who may have academic needs as well as who come from low income families. Based on the latest data reported by OIRA, the 3-year graduation rate of full-time first-time freshmen in College Discovery cohort was 3.5%.

The initial analyses between the ASAP and the 2006 comparison group students revealed that the two groups differed on important demographic variables, such as age, admission type, and Pell receipt. Therefore,

<sup>27</sup> Students were not permitted to join both ASAP and College Discovery.

beginning in spring 2009, ASAP employed propensity score matching to ensure an even more rigorous analysis by creating a more comparable subset of students from the current fall 2006 comparison group.

*Propensity Score Matching*: Propensity score matching<sup>28</sup> is a statistical procedure that allows the prediction that a subject in the treatment or comparison group will be assigned to the treatment group based on matching variables, such as demographic variables, that are measured prior to the participants' joining the treatment group. In this analysis, nearest neighbor matching within caliper, also known as greedy matching, was applied so that a treatment case would only be matched to a comparison case that has the nearest propensity score within a certain caliper size<sup>29</sup> Through this procedure a subset of 625 matched pairs was obtained.

Although the greedy matching analysis was deemed successful in terms of eliminating differences between ASAP and comparison group students, a significant number of students were dropped from the matched sample. This raised obvious concerns regarding generalizability of the findings in two ways: first, because the matched ASAP group was not very representative of the entire ASAP group and, second, because the analysis would only be based on 55% of the ASAP students, one could not generalize the results to the ASAP population as a whole. Based on conversations with CEO and Metis Associates CEO's external evaluator, adjustments were made to the greedy matching analysis, including widening the caliper and also using propensity score stratification. These changes to the statistical model only marginally increased the number in the matched sample. A decision was reached to attempt optimal full matching, which allows for most students to remain in the analysis using a one-to-many matching approach.

Optimal Full Matching: Optimal full matching was carried out and successfully improved the matching results over greedy matching, where fewer than 2.5% of the ASAP students were lost after matching (see Appendix I for detailed results). With the more robust matched samples, CUNY was able to confirm that most of the results obtained in the initial analysis using greedy matching still held after optimal full matching. Table 4 summarizes the results found using optimal full matching. A statistically significant difference between the ASAP and fall 2006 comparison group students was found on four of the five outcomes that were measured: 2-year graduation, 1-year retention at college of entry, 1-year retention in ASAP, and third-semester cumulative credits earned. No statistical significance was detected between the two groups on the third-semester cumulative GPA outcome, suggesting that the two groups of students perform similarly in their courses.

The results in Table 4 indicate that overall the ASAP students had an average 19.9 percentage point higher 2-year graduation rate than their comparison counterparts. In the final matched sample the ASAP

<sup>28</sup> Propensity score matching is accomplished through logistic regression where a probability or propensity score, of being in the treatment group is calculated for each subject in both the treatment and comparison group based on several matching variables that one believes both groups of students should be similar on.

<sup>29</sup> A caliper size of 0.01 was applied in the greedy matching – a comparison student could serve as a match to an ASAP student only if the absolute difference of propensity scores between the two students falls into a hundredth of a standard deviation of the sample estimated propensity scores.

students' 2-year graduation rate was approximately two and-a-half times higher than that of the comparison group. In other words, for every one comparison group student who graduated within two years, 2.5 ASAP students graduated. ASAP students are also retained at a significantly higher rate than the comparison group, with statistical mean difference of 11.9 percentage points between the two groups when looking at retention at college of entry, and a statistical mean difference of 6.4 percentage points in retention in ASAP where ASAP students had re-enrolled in the ASAP program in their third semester. The final significant outcome between the two groups was third-semester cumulative credits where the ASAP students had earned an average of 3.7 more credits than the comparison group students after completion of their third semester.

Table 4 Outcomes of ASAP and Comparison Group Students After Optimal Full Matching										
		ASAP		Fall 2 Compariso						
		Observed Means				Statistical Mean Difference				
		N*		N*						
2-year Graduation	%	1,104	30.2	1,242	12.1	19.9**				
1-year Retention in College	%	1,104	80.0	1,242	65.5	11.9**				
1-year Retention in ASAP	%	1,104	75.2	1,242	65.5	6.4**				
3 <sup>rd</sup> Semester Cumulative Credits	mean	889	39.3	880	36.5	3.7**				
3 <sup>rd</sup> Semester Cumulative GPA	mean	894	2.68	888	2.62	0.06				
*Sample size is based on stud	ents who a	re included	in the analy	sis after optima	al full match	ing procedure.				
**Significant at .05 level										
Date: October 19, 2009										
Source: CUNY Office of Instit	tutional Re	search and I	Assessment							

Constructed Comparison Group Data Analysis Key Findings: The following section provides key findings of ASAP constructed comparison group analysis to date. This data is updated each semester as new performance and enrollment data becomes available through the CUNY Office of Institutional Research and Assessment (OIRA).

Retention Rates of ASAP and Comparison Group Students: Table 5 represents four-semester retention data for ASAP and comparison group students. The table shows that the fall-to-spring retention of ASAP students is 12 percentage points higher than it is for the fall 2006 comparison group. The difference in fall-to-fall retention between these two groups increases to over 20 percentage points, with 80.3% of ASAP students who re-enrolled in college of entry retained vs. 59.7% of the fall 2006 comparison students. Fourth-semester retention between the two groups differ by 24.5 percentage points for a fourth-semester retention rate of 73.1% for ASAP and 48.5% for comparison group students.

Table 5
Fourth-semester Retention of ASAP and Comparison Group Students: Re-enrolled in College of Entry
PRELIMINARY DATA

ASAP (Fall 2007)*							Comparison Group (Fall 2006)**							
College	Total	Re-enro		i	irolled in 2008	in S	rolled pring )09	Total	Re-en i Sprin	n	Re-enro		in S <sub>l</sub>	rolled pring 008
	N	N	%	N	%	N	%	N	N	%	N	%	N	%
BMCC	249	228	91.6	203	81.5	178	71.5	496	398	80.2	290	58.5	236	47.6
Bronx	118	106	89.8	90	76.3	87	73.7	63	41	65.1	28	44.4	25	39.7
Hostos	82	69	84.1	59	72.0	58	70.7	41	34	82.9	26	63.4	22	53.7
KCC	247	226	91.5	201	81.4	175	70.9	404	312	77.2	222	55.0	178	44.1
LGCC	208	183	88.0	159	76.4	153	73.6	289	224	77.5	189	65.4	139	48.1
QCC	228	212	93.0	197	86.4	176	77.2	498	392	78.7	315	63.3	269	54.0
Total	1,132	1,024	90.5	909	80.3	827	73.1	1,791	1,401	78.2	1,070	59.7	869	48.5

\*Original 2007 ASAP cohort students who re-enrolled in college of entry. Excludes students who joined ASAP in spring 2008: 11 students at Hostos, 6 students at Bronx, 3 students at Kingsborough, and 14 students at LaGuardia permitted to "shadow" the ASAP cohort in fall 2007 while taking one developmental course; 2 original cohort students who withdrew immediately before the fall semester and rejoined the program in spring 2008 and one registration correction from fall 2007 at Kingsborough.

\*\*Fall 2006 full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

Date: May 20, 2009

Source: CUNY Office of Institutional Research and Assessment

Semester Performance: Table 6 summarizes fall 2008 academic performance, cumulative credit accumulation, and cumulative GPA of ASAP and comparison group students. Fall 2008 data is the most current performance data available. These data show that ASAP students have on average attempted to complete and have earned one and a half more credits at the end of the fall 2008 semester, both when taking all students into account and when excluding students who have not completed any course with a grade that contributes to the student's grade point average (GPA). The semester GPA of ASAP and comparison group students are very similar. However, looking at cumulative credits earned and cumulative GPA, ASAP students earned an average of three more credits.

Table 6
Semester Performance of ASAP Students Re-enrolled in College of Entry\*: Fall 2008

College	Total		edits npted		Earned		s Earned leters)**		ester PA	Cum. Credits Earned	Cum. GPA
	N	N	Mean	N	Mean	N	Mean	N	Mean	Mean	Mean
Fall 2007 Original ASAP Cohort Without Shadow											
Students***											
BMCC	203	203	12.5	203	9.5	195	9.9	195	2.24	35.1	2.55
Bronx	90	90	12.5	90	10.7	88	10.9	88	2.50	37.6	2.58
Hostos	59	59	12.3	59	10.0	56	10.5	56	2.43	38.8	2.56
Kingsborough	201	201	16.6	201	14.6	199	14.7	199	2.75	46.4	2.84
LaGuardia	159	159	15.0	159	11.8	155	12.1	155	2.62	40.0	2.79
Queensborough	197	197	12.8	197	10.7	194	10.8	194	2.37	36.6	2.63
Total	909	909	13.9	909	11.4	887	11.7	887	2.49	39.3	2.68
Fall 2006 Comparison G	roup****										
BMCC	290	290	11.8	290	9.3	284	9.5	284	2.43	36.1	2.61
Bronx	28	28	9.7	28	7.5	28	7.5	28	2.33	33.3	2.29
Hostos	26	26	12.7	26	8.7	25	9.1	25	2.52	39.3	2.70
Kingsborough	222	222	14.8	222	12.2	217	12.5	217	2.63	41.8	2.73
LaGuardia	189	189	12.9	189	10.0	176	10.8	176	2.49	36.3	2.49
Queensborough	315	315	11.5	315	9.1	302	9.5	302	2.48	33.1	2.55
Total	1,070	1,070	12.5	1,070	9.9	1,032	10.3	1,032	2.50	36.5	2.59

\*Original ASAP cohort students who enrolled in ASAP in fall 2007 and re-enrolled in college of entry and not necessarily ASAP in fall 2008.

Date: May 20, 2009

Source: CUNY Office of Institutional Research and Assessment

Socioeconomic and Financial Aid Analysis: Table 7 presents a breakdown of the number of ASAP and fall 2007 comparison group students who received Pell during the 2007-2008 academic year. Receipt of a Pell grant is a proxy for low- to moderate-income levels and takes household income, household size, and number of household members enrolled in college, among other factors, into account when determining an award. The data indicates that 56.3% of the ASAP students and 51.6% of the fall 2007 comparison group students have received Pell.

This analysis is based on students who were eligible to file FAFSA and is not necessarily a reflection of financial need. ASAP students were required to file a financial aid application and received assistance with the application process, and therefore most ASAP students who qualified for Pell received it. It could very well be that fall 2007 comparison group students did not receive assistance in filing their financial aid application and

<sup>\*\*</sup>Students who officially withdrew from all courses or did not complete any courses with a grade that contributes to the GPA are excluded from the base.

<sup>\*\*\*</sup>Excludes students who joined ASAP in spring 2008: 11 students at Hostos, 6 students at Bronx, 3 students at Kingsborough, and 14 students at LaGuardia permitted to "shadow" the ASAP cohort in fall 2007 while taking one developmental course; 2 original cohort students who withdrew immediately before the fall semester and rejoined the program in spring 2008 and one registration correction from fall 2007 at Kingsborough.

<sup>\*\*\*\*</sup>Fall 2006 full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

were not required to file. Therefore, because they did not apply for it, a number of students who may have been eligible did not receive Pell.

Table 7 Percentage of ASAP and Fall 2007 Comparison Group Students Receiving Pell <sup>1</sup>										
	Fall 2007 Comparison Group <sup>2</sup>									
College	Total	Receive Pell		Total	Rece	eive Pell				
	N	N	%	N	N	%				
BMCC	247	158	64.0	504	304	60.3				
Bronx	106	77	72.6	70	47	67.1				
Hostos	79	65	82.3	41	33	80.5				
Kingsborough	228	112	49.1	414	179	43.2				
LaGuardia	194	108	55.7	287	138	48.1				
Queensborough	212	80	37.7	357	163	45.7				
Total	1,066	600	56.3	1,673	864	51.6				

<sup>1</sup> For both groups, this analysis is limited to students who are U.S. citizens or permanent residents (i.e., students who meet non-income eligibility requirements for financial aid).

Date: May 20, 2009

Source: CUNY Office of Institutional Research and Assessment

Table 8 shows that ASAP students have a mean family income of \$41,445, \$7,966 more than the fall 2007 comparison group, and an average per capita of \$12,964, \$2,376 more than the fall 2007 comparison group. Because of this substantial income difference between the two groups, in fall 2009, ASAP targeted students who were low-income, high needs students with the establishment of an income and skills proficiency thresholds that required students to have a maximum adjusted gross family income within 200% of the federal poverty guidelines or be Pell eligible and have at least one outstanding developmental course need at the start of the program.

<sup>&</sup>lt;sup>2</sup>Fall 2007 non-ASAP full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

Table 8 Family Income of Dependent Students in ASAP and Fall 2007 Comparison Group <sup>1</sup>										
			SAP	Fal	1 2007 Ison Group <sup>2</sup>					
College		Total	Per Capita	Total	Per Capita					
BMCC	N	180	180	313	313					
	Mean (\$)	32,393	11,104	32,088	10,374					
	Median (\$)	30,455	9,488	28,839	8,951					
Bronx	N	80	80	42	42					
	Mean (\$)	35,640	11,980	27,294	9,870					
	Median (\$)	31,416	10,833	24,083	9,262					
Hostos	N	47	47	24	24					
	Mean (\$)	27,812	9,287	28,491	8,270					
	Median (\$)	23,481	8,301	24,758	8,188					
Kingsborough	N	195	195	221	221					
	Mean (\$)	46,659	14,899	36,981	11,765					
	Median (\$)	38,040	12,904	31,541	10,280					
LaGuardia	N	129	129	143	143					
	Mean (\$)	40,631	12,036	28,099	8,970					
	Median (\$)	34,805	10,504	24,481	8,160					
Queensborough	N	163	163	190	190					
	Mean (\$)	52,627	14,983	37,742	11,244					
	Median (\$)	48,116	13,461	30,684	9,690					
Total	N	794	794	933	933					
	Mean (\$)	41,445	12,964	33,479	10,588					
In	Median (\$)	35,008	11,030	29,231	9,261					

<sup>1</sup>Based on financial aid data available in fiscal year 2008.

<sup>2</sup>Fall 2007 non-ASAP full-time Associate students who started the term with 12 or fewer credits, are proficient in reading, writing and math, are not enrolled in developmental courses, are residents of NYC, and are enrolled in majors offered to ASAP students in fall 2007.

Date: May 20, 2009

Source: CUNY Office of Institutional Research and Assessment

#### SERVICE UTILIZATION/HOW SERVICES CONTRIBUTED TO OUTCOMES

Tracking Data: ASAP also collects tracking data that documents individual advisor and career and employment specialist contact with students. All types of contact with student are documented and coded by meeting nature using a standardized data management system. Colleges submit data to CUNY Central monthly and service data reports are generated each semester and analyzed by CUNY Central and colleges to determine whether there is sufficient intensity of service. Analysis of advisor tracking data was conducted for fall 2008 and spring 2009 examining frequency and possible correlations between frequency of meetings and race, gender, and student performance. Key findings are that 75% of ASAP students meet individually with their advisors at

least six times each semester in addition to any required seminars and workshops.<sup>30</sup> Academic issues are the most common reason for meetings. There were no significant differences across the program on frequency of meetings based on gender or race. Students with lower GPA meet with their advisors more often than students with higher GPA. A summary of ASAP fall 2008 tracking data analysis can be found in Appendix G.

### STUDENT SATISFACTION / ASPIRATIONS

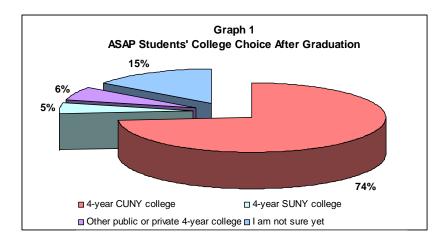
2008/09 Annual Student Survey Findings: ASAP administers an annual student survey to gather information about students' experiences, their satisfaction with the ASAP program and its services, and their future plans. The most recent student survey, administered in December 2008, had a 94% response rate. Key findings include the fact that almost all students, 98%, report that they were either very satisfied or satisfied with the services provided by their advisor. More than 90% of students strongly agreed or agreed that participating in the ASAP program has helped them to do their best academic work, feel comfortable communicating with their instructors, and realize that they can complete their degree in three years. More than 95% of students indicated that free books and Metrocards are very useful or useful resources to them in completing their degree.

Annual survey results were also analyzed by gender and race. In terms of gender, results indicate that more females work for pay, however, of all students who work for pay, males tend to work more hours per week. In terms of future plans and educational aspirations, more female than male students anticipate graduating before fall 2009 and more female students plan to obtain a higher degree within the next 10 years.

When applying to the ASAP program, more White and Asian students had already applied to a four-year CUNY college when compared to Black and Hispanic students. On average more Black students work for pay than any other group, and of those who do work for pay, Black students work the most hours. In terms of graduating from the ASAP program and future educational aspirations, we have found that Asian and White students anticipate graduating from the ASAP program before fall 2009 at higher rates than Black and Hispanic students and that the percentage of Black students who plan to attain a graduate/professional degree within the next ten years is the highest among all ethnicity groups. An overview of key annual 2008/09 student survey findings and response rates can be found in Appendix E.

ASAP 2009 Exit Survey: ASAP administered an exit survey to 426 students who were on track to graduate by September 2009. The survey was designed to gather information about students' experiences, satisfaction with the ASAP program, and to learn about their future plans. It had a 92.3% response rate. Key findings show that the majority of ASAP students plan to continue with their education after graduating from ASAP and that most will work full or part time (see Graph 1). A total of 91.6% of students plan to attend a 4-year college after graduating from ASAP.

<sup>30</sup> Over the 2008/09 academic year, Kingsborough ASAP advisors and career and employment specialists delivered a mandatory weekly ASAP Seminar, which was permitted to count as one monthly contact. LaGuardia piloted this model in spring 2009, and all colleges have adopted the ASAP Seminar in fall 2009.



Twenty eight percent of the students responded that they will work full-time, 51.3% will work 15-34 hours per week, 8.7% will work less than 15 hours per week, and only 12% indicate that they will not work at all. When asked about ASAP Program service/resource that have led to the student's success, the majority, 70%, chose financial resources to be the most important to their success in college, followed by 20% who chose the ASAP advisor as the most important resource for their success. The vast majority of ASAP students had high praise for the program, with 96.9% of the students agreeing that they would definitely recommend ASAP to their friends and family. An overview of key exit survey findings can be found in Appendix F.

**2009** Focus Groups: ASAP also held focus groups with graduating students from various colleges. Focus group findings reveal that students found ASAP financial resources and advisement services to be the most important aspects of the program. There was a general consensus that not having tuition waivers, free use of textbooks, and Metrocards would have made going to college very difficult for most students and for some students, impossible. ASAP advisors were highly regarded and deemed to be essential to keep students focused and help them navigate college life. A summary of the ASAP focus groups can be found in Appendix G.

CEO works with Westat and Metis Associates as external evaluators for the ASAP program and other funded initiatives. Between December 2007 and May 2008, Westat/Metis conducted interviews with key ASAP and University staff and site visits and reviewed ASAP institutional research data that led to a program review report of ASAP released in fall 2008. Among key findings of the report were that CUNY ASAP had "good program infrastructure, management, agency oversight in place, and services are being implemented with enthusiasm, commitment, and a high degree of fidelity." Recommendations from the report including expansion of summer course-taking opportunities and inclusion of a social work services were incorporated into the ASAP program design in year two. Westat/Metis interviewed senior ASAP and University leadership on their collaboration with CEO. Metis Associates also contributed a peer review of the ASAP comparison group study and use of Optimal Matching to this report, which can be found in Appendix I.

<sup>31</sup> Source: Westat/Metis (2008). "CUNY ASAP Program Review Report."

### **NEXT STEPS**

Random Assignment Study with MDRC: CUNY ASAP has commenced recruitment for a for five-year random assignment study of the program led by MDRC. The study will begin in spring 2010 at Borough of Manhattan and Kingsborough and is funded by the Leona M. and Harry B. Helmsley Charitable Trust. A recent award from the Robin Hood Foundation through MDRC will allow inclusion of LaGuardia Community College, where students will be recruited for fall 2010. The study will provide further analysis of program impact for low-income students who require developmental course work.

A total sample of 900 students will be recruited for the study at two entry points. Three hundred students will be recruited in fall 2009 to begin in spring 2010 at Borough of Manhattan and Kingsborough. All students will be required to have one or two outstanding developmental course needs in reading, writing, or math and be Pell eligible or have family income within 200% of federal poverty guidelines in addition to all other ASAP selection criteria (residency, full-time status, credits, approved majors, etc.). Once recruited, students will be randomly assigned into either the treatment group who will receive all ASAP services or the control group who will be regularly admitted students that will not participate in ASAP. An additional 600 students will be recruited for fall 2010 at Borough of Manhattan, Kingsborough, and LaGuardia and will be randomly assigned into the treatment or control group.

The Helmsley Charitable Trust award will support the spring 2010 treatment group, and CEO and the Robin Hood Foundation funds will support the fall 2010 treatment group. Both groups will be tracked for three years with the study expected to take five years to complete in order to collect final data on graduation rates and post-graduation outcomes such as transfer to 4-year colleges and/or workforce entry. MDRC deliverables will include two research briefs and a final report.

Additional New Cohorts: Spring and Fall 2010: The four colleges not participating in the MDRC random assignment study are also recruiting for spring with a continued focus on low-income students with developmental needs. Bronx, Hostos, LaGuardia, and Queensborough are currently recruiting 150-170 students who meet fall 2009 selection criteria for spring 2010 to return the cohort to its original 1,000-student enrollment. All colleges will continue recruiting through spring semester with the goal of admitting 350-400 new students for fall 2010.

Colleges and CUNY Central are working in concert to ensure that target populations know about ASAP openings. College ASAP staff are collaborating with their admissions and testing offices and precollege programs to spread the word about ASAP openings to eligible students. CUNY Central ASAP staff members are working closely with the CUNY Office of Admissions Services (OAS) to promote ASAP to citywide audiences. ASAP is a featured program on the OAS website and at all CUNY OAS counselor workshops, which take place at CUNY locations across the city and are attended by hundreds of high school and GED counselors.

OAS counselors will also highlight ASAP in their visits to high schools across the city, which begin in fall and continue into spring 2010. CUNY Central ASAP staff are also presenting at college and career fairs taking place at schools, organizations, and agencies serving low-income communities such as Harlem Children's Zone, Manhattan Comprehensive Night and Day School, and Good Shepherd Services.

Annual Student and Exit Surveys: CUNY ASAP is preparing its annual student and exit surveys for a December administration at all colleges. Survey findings, including aggregate and subgroup analysis, will be presented to colleges, University leadership and CEO in early February. Survey findings will also serve as a key discussion topic for the annual ASAP staff retreat, which will be held in February 2010.

Tracking of Students at Four-year Colleges: Because of high 2-year graduation and transfer rates, ASAP will initiate tracking of students at four-year colleges. ASAP students attending CUNY senior colleges will be tracked using outcomes measures that are consistent with current retention, performance, and graduation analysis. ASAP students will be compared against similar CUNY community college transfer students at CUNY senior colleges. ASAP will also submit a request to the National Student Clearinghouse, which will provide retention and graduation data on ASAP graduates attending non-CUNY 4-year colleges. Initial requests will be submitted in early 2010.

Wage and Income Analysis: ASAP is working with CEO to initiate collection of wage and employment data for ASAP students and graduates through the New York State Department of Labor (DOL). CUNY will secure student consents and submit the request to the DOL, and de-identified student data will then be provided to CEO for evaluation purposes. Consent forms and a data sharing agreement are currently being drafted with plans to seek student consents by January 2010.

### REFERENCES

- Bailey, Thomas R.; Alfonso, Mariana (2005). "Paths to Persistence: An Analysis of Research on Program Effectiveness at Community Colleges." New Agenda Series. Volume 6, Number 1. Indianapolis: Lumina Foundation for Education.
- Kuh, George D., Ed.; Kinzie, Jillian, Ed.; Buckley, Jennifer A., Ed.; Bridges, Brian K., Ed.; Hayek, John C., Ed. (2007). Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations. ASHE Higher Education Report, Volume 32, Number 5. Hoboken: Jossey Bass.
- Tinto, Vincent (1993). <u>Leaving College: Rethinking the Causes and Cures of Student Attrition</u>. Chicago: University of Chicago Press.

# APPENDIX A: ASAP MAJORS 2007 AND 2009

2007 Cohort	2009 Cohort
Borough of Manhattan Community  Business / Accounting (A.A.S.)  Business Management (A.A.S.)  Early Childhood Education (A.S.)  Human Services (A.S.)  Liberal Arts (A.A.)	Borough of Manhattan Community  Business / Accounting (A.A.S.)  Liberal Arts (A.A./A.S.)  Bronx
Bronx  Business Administration (A.S.) Liberal Arts (A.A.) Radiologic Technology (A.A.S.)  Hostos	<ul> <li>Business Administration (A.S.)</li> <li>Criminal Justice (A.A.)</li> <li>Community/School Health Education (A.S.)</li> <li>Dietetics and Nutrition Science (A.S.)</li> <li>Education Associate (A.A.S.)</li> <li>Human Services (A.A.S.)</li> <li>Liberal Arts and Sciences (A.A.)</li> <li>Therapeutic Recreation (A.A.S.)</li> </ul>
<ul> <li>Business Management (A.S.)</li> <li>Community Health (A.S.)</li> <li>Early Childhood Education (A.A.S.)</li> <li>Liberal Arts (A.A.)</li> </ul>	<ul> <li>Hostos</li> <li>Early Childhood Education (A.A.S.)</li> <li>Liberal Arts (A.A.)</li> <li>Community Health Education (A.S.)</li> <li>Business Management (A.S.)</li> </ul>
Kingsborough	Wheel and
<ul> <li>Business Administration (A.A.S.)</li> <li>Accounting (A.A.S.)</li> <li>Liberal Arts (A.A.)</li> <li>Mental Health and Human Services (A.S.)</li> <li>Tourism and Hospitality (A.A.S.)</li> </ul>	Kingsborough  Kingsborough ASAP serves most majors that can be completed within three years. Students planning on transferring to a CUNY senior college are strongly encouraged to consider Liberal Arts (A.A.), which satisfie the core curriculum requirements of all CUNY senior colleges.
LaGuardia	LaGuardia
<ul> <li>Business Administration (A.S.)</li> <li>Business Management (A.A.S.)</li> <li>Emergency Medical Technician / Paramedic (A.A.S.)</li> <li>Liberal Arts (A.A.)</li> <li>Paralegal Studies (A.A.S.)</li> </ul>	<ul> <li>Business Administration (A.S.)</li> <li>Business Management (A.A.S.)</li> <li>Emergency Medical Technician / Paramedic (A.A.S.)</li> <li>Liberal Arts and Sciences (A.A.)</li> <li>Paralegal Studies (A.A.)</li> </ul>
Queensborough	Queensborough
<ul> <li>Accounting (A.A.S.)</li> <li>Business Management (A.A.S.)</li> <li>Computer Engineering Technology (A.A.S.)</li> <li>Electronic Engineering Technology (A.A.S.)</li> <li>Liberal Arts and Sciences (A.A.)</li> <li>Liberal Arts (A.A.)</li> </ul>	<ul> <li>Accounting (A.A.S.)</li> <li>Business Administration (A.S.)</li> <li>Business Management (A.A.S.)</li> <li>Liberal Arts and Sciences (A.A.)</li> <li>Office Administration &amp; Technology (A.A.S.)</li> </ul>

# APPENDIX B: ASAP 2007 AND 2009 SELECTION CRITERIA

Fall 2007 ASAP Selection Criteria	Fall 2009 ASAP Selection Criteria
	■ NEW: Be Pell eligible or have a family income within 200% of the federal poverty guidelines, as established by the United States Department of Health and Human Services.
■ Be fully proficient in basic skills areas of reading, writing and math by the start of the fall 2007 semester-*.	■ NEW: Need at least one but no more than two developmental courses based on scores on the CUNY Skills Assessment Test.
■ Be a New York City resident.	■ Be a New York City resident.
■ Enroll in and maintain full-time status in an ASAP-approved major.	■ Enroll in and maintain full-time status in an ASAP-approved major.
■ If a continuing or transfer student, have 12 or fewer college credits at the time of entry and be in good academic standing (GPA of 2.0 or above).	■ If a continuing or transfer student, have 12 or fewer college credits at the time of entry and be in good academic standing (GPA of 2.0 or above).
■ Can not be enrolled in College Discovery.	■ Can not be in College Discovery.
■ To receive the ASAP tuition waiver, must receive at least some financial aid and have a gap between tuition and fees, and award.	■ To receive the ASAP tuition waiver, must receive at least some financial aid and have a gap between tuition and fees, and award.

<sup>\*</sup>Students can demonstrate basic skills proficiency at CUNY based on their SAT, ACT, or New York State (NYS) Regents exam scores or by taking the CUNY Skills Assessment Test.

#### APPENDIX C: 2007 ASAP RECRUITMENT OVERVIEW

CUNY ASAP approached recruitment over the winter, spring and early summer of 2007 using a two-pronged approach, making efforts to attract both those who (1) may not have planned on going to college in the fall, and (2) students who have *already applied* to CUNY and for whom a community college is one of the top colleges to which they were accepted.

ASAP Central Office staff, in cooperation with the Office of University Relations, designed and published an ASAP brochure and created a website. A total of 50,000 brochures were distributed. An advertising campaign ran in print outlets such as *Daily News*, *AM/Metro*, and *El Diario* that had a track record of reaching potential CUNY students was run from April –June 2007.

To reach working adults and out of school youth, presentations were made by Central Office ASAP to staff and 8,000 brochures were distributed to participants in all CUNY GED programs, language immersion programs, and College Now programs. Brochures were also distributed to the New York City Administration for Children's Services (ACS) education coordinators, the Center for Alternative Sentencing and Employment Services (Cases), Fortune Society, CUNY Prep, Young Adult Learning Academy, Fund for the City, Neighborhood Family Services Coalition and the Department of Small Business Services. Brochures were also provided to employees of the New York City Department of Youth and Community Development (DYCD) for distribution to participants in after-school program and funded community programs.

To reach *graduating high school seniors*, CUNY OAS mailed 2,500 brochures to public high school seniors living in the ZIP codes of New York City Center for Economic Opportunity (CEO) target neighborhoods. Presentations were made and brochures mailed to all New York City Department of Education (NYCDOE) high school college and guidance counselors. CUNY OAS and community college staff also made visits to 75 high schools (public and private) and promoted ASAP to graduating seniors. NYCDOE Chancellor Joel Klein featured ASAP in one of his weekly emails to principals.

Each participating community college also conducted a campus-specific recruitment plan for recruitment during the same period. College ASAP staff made visits to feeder high schools and cooperating faculty contacted their secondary school colleagues to inform them about ASAP. In late March, all the campuses began holding open houses for interested students and their parents. These events continued through the summer.

To reach those who were already considering attending a CUNY community college and have submitted a CUNY application, each community college sent a letter from its President and an ASAP brochure to each student who has been accepted at one or more community colleges (but not to a 4-year college) and whose application indicated he/she would able to be college ready by the fall. Over 4,000 potential ASAP students received these letters and follow up contacts between April and July. Follow-up phone calls were made, inviting these students to open houses. One-on-one and group enrollment meetings were held to help students understand the program requirements and answer questions.

### APPENDIX D: 2009 ASAP RECRUITMENT OVERVIEW

Using feedback from ASAP staff, college and CUNY Central directors met regularly as a group in late winter to redevelop recruitment and application procedures for the fall 2009 cohort. CUNY Central drafted selection criteria, application materials, coding procedures for students, meeting rubrics, and acceptance letters that were then provided to colleges for response. College staff members' comments were incorporated and a set of common procedures and documents were finalized. Web and print versions were provided to all colleges.

A promotional brochure was also updated by CUNY Central, which was delivered to all colleges and distributed citywide to schools, organizations, and agencies serving target low-income populations that could benefit from the ASAP program. While colleges led their local recruitment efforts on their campuses, CUNY Central conducted broad citywide outreach and promotion of ASAP and updated the ASAP website. CUNY Central part-time staff also helped colleges as requested with targeted recruitment and follow-up calls to students to encourage attendance at scheduled information sessions.

Beginning in March 2009, college ASAP college staff began to collect test scores for all incoming students in target majors from their testing office weekly following each administration of the CUNY Skills Assessment Test. Program staff then sorted lists to identify students who met initial ASAP selection criteria. A similar screening process was also conducted for all currently enrolled students. ASAP staff also worked with their Summer Immersion Offices to recruit students who were in the process of completing one or more developmental courses over the summer and might be eligible for the program.

All incoming and continuing students who met initial selection criteria (residency, skills proficiency, and majors) received an email and a letter telling them about ASAP and inviting them to an information session. Every student also received a follow-up phone call from an ASAP staff member several days after the mailing to ensure receipt and to encourage attendance at an information session. ASAP information sessions were offered weekly and all college program staff also met with students by appointment or on a walk-in basis. Information session dates and times were posted on college ASAP websites. Colleges also had broad placement of promotional materials in high-traffic areas of their campus and regularly presented at college-wide open houses and admissions events.

Students were encouraged to bring in their required income and residency documentation, if available, to the information sessions or would be scheduled to for a follow-up appointment. Once students had all necessary documents including a simple application form, an ASAP staff member would meet with students individually to review documents, discuss ASAP program requirements and expectations, and answer any questions. All accepted students received an acceptance letter and an "Intent to Enroll" form. Students who were enrolled in summer immersion developmental courses to meet skills proficiency eligibility but deemed eligible in all other respects received a conditional acceptance letter. As soon as summer grades and test scores

were confirmed, final acceptance letters were distributed. All colleges used a standardized coding system developed with CUNY Central to document students from application to actual enrollment in the fall semester.

# Partial list of Organizations and Agencies Contacted by CUNY Central for Fall 2009 Recruitment

- 1. CUNY Office of Admission Services (OAS)
- 2. CUNY XPRESS-Washington Heights
- 3. CUNY College Now
- 4. CUNY Preparatory Transitional High School
- 5. CUNY At Home in College
- 6. CUNY School Support Organization/Early College Initiative
- 7. CUNY On Wheels
- 8. CUNY College Opportunity to Prepare for Employment (COPE)
- 9. John Jay College Prisoner Reentry Institute
- 10. Lehman College Admissions
- 11. NYCDOE Learning to Work
- 12. NYCDOE District 79 College Fair
- 13. Far Rockaway High School Job Fair
- 14. NYCDOE Re-Start Queens Treatment Court
- 15. NYCDOE Empowerment School Support Organization
- 16. NYCDOE Community Learning Support Organization
- 17. Fordham University School Support Organization
- 18. New Visions for Public Schools
- 19. Manhattan Educational Opportunity Center
- 20. Mid Manhattan Adult Learning Center
- 21. 7th Annual TASC College & Career Fair
- 22. New York City Justice Corps College Fair
- 23. New York Junior Tennis League
- 24. Queens Public Library (all branches)
- 25. Queens Adult Learning Center
- 26. Women In Need, Inc.
- 27. Queens Educational Opportunity Center
- 28. Queens Community House, Inc.
- 29. Queens Referral Center for High School Alternatives
- 30. YWCA of Queens
- 31. YMCA Flushing, NY
- 32. Dress For Success
- 33. Jamaica Learning Center
- 34. Elmcor Youth & Adult Activities
- 35. Stanley M. Isaacs Neighborhood Center
- 36. Department of Youth and Community Development (DYCD)
- 37. The After-School Corporation (TASC)
- 38. City Year
- 39. Tenzer GED Plus
- 40. Daytop / GED Program, Brooklyn
- 41. Bedford-Stuyvesant Restoration Corporation
- 42. Academy for Educational Development
- 43. Center for Educational Innovation-Public Education Association
- 44. New York State Department of Labor

# APPENDIX E: ASAP 2008/09 ANNUAL STUDENT SURVEY KEY FINDINGS

### Survey Response Rate

• 93.8% of a total of 896 enrolled original ASAP and ASAP shadow students in fall 2008 have responded to the survey.

### **Educational Aspirations and ASAP Services**

- 56.7% of all respondents indicated that it would have been difficult for them to attend college full-time without the ASAP program.
- 30% of students indicate that they were accepted to a 4-year CUNY college (N=237), the majority, 73% 76% indicated that they choose to join ASAP because of free books, tuition waiver, and Metro Cards. 50% selected personal advisement as their reason for joining ASAP, while 42% choose small classes. <sup>32</sup>
- 68.8% of students responded to aspiring to a graduate or professional degree, 28.8% to a 4-year degree, and the remaining 2.4% to a 2-year degree.
- 82.6% indicated that the ASAP program contributed to their educational aspirations.

### Importance of and Satisfaction with ASAP Services

- Greater than 95% of students indicated that free books and Metro Cards are very useful or useful resources to them in completing their degree. This was followed by 80.8% who indicated that they found the tuition waiver to be very useful or useful. The remaining resources such as condensed scheduling was rated to be very useful or useful by 77.7% of students, small classes were rated to be very useful or useful by 73.8% students, and block programming by 50.6% students.
- Greater than 90% of students strongly agreed or agreed that participating in the ASAP program has helped them to do their best academic work, feel comfortable communicating with their instructor, and realize that they can complete their degree in 3 years.
- Nearly 88% of students strongly agreed or agreed that their course work has made them more confident in both their speaking and writing abilities.

#### ASAP Advisor Services

• Almost all students, 99%, indicated that they have met with their ASAP advisor at least once during the fall 2008 semester. Most, 98% indicated that they were either very satisfied or satisfied with the services provided by their advisor, and 99% found those services to be very or somewhat useful.

### ASAP Job Developer Services

• 48.9% of students indicated that they met with the ASAP job developer at least once during the fall 2008 semester. Of those who met with the Job Developer, 85% were either very satisfied or satisfied with the services provided by the job developer and 82% found the services to be very or somewhat useful.

Analysis of OIRA data reveals that only 16% of ASAP students were in fact accepted to a CUNY senior or comprehensive college for fall 2007.

### **ASAP Tutoring Services**

- Approximately half of the students, 44.5%, indicated that they received some form of ASAP tutoring, individual or group tutoring, during the fall 2008 semester.
- Of students who responded that they received some form of ASAP tutoring, 85% indicate that they are very satisfied or satisfied with the tutoring services.

### College Staff/Faculty Interactions

- 80.5% of students indicated that they approach their professor if they have questions about the class material. Similarly, 84.3% responded that they have interacted with a faculty member outside of class during the fall 2008 semester.
- 76.6% of students who indicated that they have met with a faculty member outside of class said that the interaction has helped them perform better in class.

## **Employment**

- 65.9% of ASAP students have indicated that they have been working for pay during the fall 2008 semester, with 63.3% working more than 20 hours per week and 30.4% working more than 30 hours per week.
- 78.4% of those who are working for pay indicated that they do so to earn spending money, followed by 43.2% who work to support their family.
- Of those who work for pay, 86.7% said that <u>not working</u> at all would affect their ability to support themselves, while 73.5% felt the same way about <u>reducing</u> their workload at work. 44.2% off all students indicated that they plan on beginning to work or, if they are currently working, increasing the number of hours they work for pay.
- 54.6% of students currently working for pay indicated that they had their job before enrolling in college this semester, and 16.5% said that they found their job through the ASAP job developer.
- When asked about their estimated total yearly gross household income, 35.9% said that they didn't know what their yearly household income is. Of those who knew, 50% fall below an annual income of \$50,000, 36.5% fall below \$30,000, and 28.4% fall below \$20,000.

#### Future Plans

- The majority of students, 86%, indicated that they will graduate by winter 2009; 2.3% said that they will graduate in winter 2008, 39.2% in spring 2009, 20.2% in summer 2009, and 24.3% in winter 2009.
- 91.1% of students responded that they will attend a 4-year college after graduation; 10.5% indicated that they will not work during that time, 59.1% will work part-time, and 21.5% will work full-time.
- Of a total of 44 students (5%) who indicated that they will not attend a 4-year college and will work full time after graduation, 20.5% have started looking for employment in their area of study, 6.8% already have a position that is closely related to their field of study, 61.4% have not yet started to look for employment, and the remaining 11.4% will not look for employment at this time.

### High School, Family, and Personal Background

- 40.4% of students indicated that they had applied to at least one non-CUNY college. Of the 40.4% who applied, 72.5% were accepted to at least one non-CUNY college.
- 82.8% of students indicated that that they have completed three or more years of high school in New York City.
- 25.5% of students either said that they disagreed or strongly disagreed with a statement saying that their high school coursework prepared them for college. However, 81.6% agreed or strongly agreed that overall, they had a positive high school experience.
- 78.8% of students said that they live with their parents/guardians. 34.2% indicated that their family/relatives own and they do not help with the mortgage, while 25.6% said that they rent with others and do contribute to the rent.
- Race/ethnicity of respondents:

0	Asian or Pacific Islander	10.0%
0	Black or African American	25.7%
0	Native American or Alaskan Native	0.7%
0	Hispanic or Latina/o	34.2%
0	White	16.4%
0	Other	12.9%

### APPENDIX F: ASAP 2009 EXIT SURVEY KEY FINDINGS

This Executive Summary reports findings of the ASAP Exit Student Survey administered at the six ASAP colleges in April and May 2009. The survey was administered to projected June and August 2009 graduates and was designed to gather information about students' experiences and satisfaction with the ASAP program, and to learn about students' future plans.

#### **SURVEY RESPONSE RATE:**

• 92.3% of the projected June and August 2009 graduates have completed a survey. The projected graduates were identified by the colleges in April 2009 based on students' academic progress. Surveys were prepared based on the projected number of graduates.

#### **POST-GRADUATION PLANS**

• The majority of the students, 77.4%, indicated that the unstable economy did not have an impact on their post-graduation plans and that they have the same post-graduation plans as they did when they first joined the ASAP program.

### Four-year College

- The overwhelming majority, 91.6%, indicated that they will be attending a 4-yr college after graduating from ASAP. Overall, 83.6% responded that they have started the process of identifying and applying to 4 year colleges. Of those students, 72.9% indicated that they will attend a 4-year CUNY college, 5.2% will attend a 4-year SUNY college, 6.5% will attend a public or private university other than CUNY or SUNY, and 15.5% were still unsure of which college/university they will attend. Of the students who indicated that they will attend a 4-year college after graduation, 34.4% said that they will major in Business followed by 17.4% who will major in Education.
- The majority of the students, 71.9%, agreed that their advisor has assisted them with the 4-year college application process. Of those, 83.1% found the advisor's services to be very helpful, while 16.5% found the services to be somewhat helpful. For those who indicated that the ASAP advisor did not assist them with the 4-year college application process (N=81), 42% indicated that their received assistance from their family members, 17.3% were assisted by other non-ASAP college administrators, and 7.4% by other ASAP staff member.

#### **Employment**

- After graduation, 28% of the students responded that they will work full-time, 51.3% will work 15-34 hours per week, 8.7% will work less than 15 hours per week, and 12% will not work at all. In comparison, during the spring 2009 semester 11.2% worked full-time, 43.7% worked 15-34 hours per week, 12.5 worked less than 15 hours per week, and the remaining 32.5% did not work.
- Of those who were employed during the spring 2009 semester, 79.3% will continue working in their position after graduation; 59.5% will continue working on a part-time basis, and 19.8% on a full-time basis. Nearly the majority, 48.3%, indicated that their post-graduation position is slightly related to their field of study.
- Of the students who were searching for post-graduation employment, 89% found the ASAP Job Developer and 94% found the ASAP Advisor to be very or somewhat helpful in that process. Over 84% of the students found the workshops offered by the ASAP Job Developer, the Career Fairs offered by the ASAP Job Developer, and the visits to the Career Center to be very or somewhat helpful.

#### Other Post-Graduation Plans

• A small number of students (N=5) will enroll in a certificate program, 4 students will enroll in the police/fire academy, and 3 will enroll in the military/navy. A handful of students will take some time after graduation to start a family, travel, and, among other things, train for the 2010 Olympics.

#### ASAP PROGRAM SERVICES

- When asked to choose only one ASAP program service/resource that has led to the student's success, the majority, 70%, chose financial resources to be the most important to their success in college, followed by 20% who chose the ASAP advisor as the most important resource to their success. When asked about the least important service/resource, the largest group of students who chose the same resource was 27.9% of students who indicated that they found "none" of the services/resources to be least important. This was followed by 27.1% of the students who found block programming to be the least important to their success.
- When asked whether it would have been difficult to graduate in two years without the ASAP Program, 57.3% of the students agreed that it would have been difficult, however that they would have managed to complete their degree requirements in two years.
- 96.9% of the students agreed that they would definitely recommend the ASAP program to their friends and family.
- On average, at least 90% of the students agreed that as a result of having been in the ASAP program they have discovered new interests through their coursework, have been inspired by at least one professor, have learned to manage their time more efficiently, and have learned to ask for help. 73% of the students agreed that they have found a good mentor and have begun to read more often as a result of being in the ASAP program.
- 45% of the students indicated that they are the first person in their family to graduate from college.

### APPENDIX G: ADVISOR TRACKING DATA ANALYSIS SUMMARY: FALL 2008

#### Table 1

Data in Table 1 indicates that over the course of the fall 2008 semester approximately 76% of the students met with their advisor in person at least six times, while the remaining 24% meet with their advisor five or fewer times. In instances where colleges had a large percentage of students who did not meet with their advisor at least six times during the semester, the colleges were notified and were asked to improve their advisor-student contact in spring 2009. It should be noted that Kingsborough runs a weekly ASAP Seminar led by ASAP advisors and the career and employment specialist, which counts as one advisor-student contact per month. Since ASAP Seminar data is not collected as part of the tracking data, it is not reflected in this analysis.

TOTAL Fall 2008 Student-Advisor Meetings (Excluding Advisor-Faculty Contact) by College TABLE 1										
	ВМСС	Bronx	Hostos	KBCC	LGCC	QCC	Total			
Number of Meetings Attended	%	%	%	%	%	%	%			
5 or fewer meeting	18.0	46.1	6.1	58.8	8.1	6.3	24.5			
6 to 8 meetings	48.1	32.9	93.9	26.6	57.5	35.4	44.4			
More than 8 meetings	33.9	21.1	0.0	14.6	34.4	58.2	31.2			
Date: February 20, 2009										

*Tables 2 - 3* 

Tables 2 and 3 summarize the number of advisor-student contacts by meeting type. Table 2, which includes advisor-faculty contacts as a meeting type, shows that the most frequent reason that advisors meet with students are regarding "Academic Issues" and to make "Contact with Faculty" regarding the students' progress. When advisor-faculty contact is removed from the analysis, see table 3, we see that "Academic Issues" becomes the most frequent meeting type between advisor and student in the fall 2008 semester.

Fall 200	Fall 2008 Advisor-Student Meetings by Focus Code*									
		TABLE 2								
	BMCC	Bronx	Hostos	KBCC**	LaGuardia	QCC	TOTAL			
	%	%	%	%	%	%	%			
<b>Advisor Meeting Focus Code</b>	N=1,513	N=1,384	N=613	N=1,699	N=1,671	N=3,465	N=10,345			
<b>Average Number of Contacts Per Student</b>	8.0	18.2	9.1	8.5	10.4	18.4	11.8			
Academic Issues	42.5	14.2	38.8	41.4	34.5	26.1	31.5			
Advisor/Faculty Contact	3.8	63.3	22.7	34.5	22.3	47.8	35.7			
ASAP Requirements	38.3	4.2	12.6	11.3	32.5	9.4	17.2			
Attendance/Punctuality	7.2	5.9	1.8	0.2	1.2	2.5	3.0			
Domestic Issues	0.0	0.4	4.6	0.3	0.5	0.2	0.5			
Financial Issues	0.1	0.1	0.0	0.0	0.1	0.1	0.1			
Grad/Transfer Requirements	0.7	1.1	7.7	8.9	1.9	6.7	4.7			
Institutional Navigation	0.0	7.9	2.6	1.1	3.8	1.4	2.5			
Other	6.9	1.5	3.3	1.4	2.0	4.9	3.6			
Social/ Personal Issues	0.5	1.4	6.0	0.9	1.4	0.8	1.3			
Foll 2009 Advisor: 54Jon-4	Mootings b-	Foons Cad	o Evoludi	aa Adriaa- 1	Faculty Canta	ota*				
Fall 2008 Advisor-Student	ivieetings by	rocus Cod	e Excludii	ig Aavisor-	racuity Conta	CIST				

TABLE 3											
	BMCC	Bronx	Hostos	KBCC**	LaGuardia	QCC	TOTAL				
	%	%	%	%	%	%	%				
<b>Advisor Meeting Focus Code</b>	N=1,456	N=508	N=474	N=1,112	N=1,299	N=1,808	N=6,657				
Average Number of Contacts Per Student	7.7	6.7	7.1	5.6	8.1	9.6	7.6				
Academic Issues	44.2	38.6	50.2	63.3	44.3	50.0	49.0				
ASAP Requirements	39.8	11.4	16.2	17.3	41.8	18.1	26.7				
Attendance/Punctuality	7.5	15.9	2.3	0.3	1.5	4.8	4.7				
Domestic Issues	0.0	1.2	5.9	0.4	0.6	0.4	0.8				
Financial Issues	0.1	0.4	0.0	0.0	0.1	0.2	0.1				
Grad/Transfer Requirements	0.7	3.0	9.9	13.7	2.5	12.9	7.3				
Institutional Navigation	0.0	21.7	3.4	1.6	4.8	2.7	3.8				
Other	7.2	4.1	4.2	2.1	2.5	9.3	5.6				
Date: February 20, 2009											

### Table 4

Table 4 is a breakdown of meeting frequency by gender throughout the fall 2008 semester by college. Using a Chi-square test, we found a significant difference in meeting pattern between male and female students only at LaGuardia Community College,  $X^2$  (2, N=160) = 7.75, p<.05, where a larger proportion of female students are seeing their advisor more frequently than male students. We did not find any other significant differences. However, by reviewing table 4, some small, not statistically significant, differences are visible at Bronx and Queensborough Community College where males have met with their advisor more often than females.

	Fall 2008 Student-Advisor Meetings by Gender (Excluding Advisor-Faculty Contacts)													
						T	ABLE 4							
	BN	1CC	Bro	Bronx		Hostos		CC	LaGu	ardia*	Q	CC	То	tal
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
# of Meetings Attended	N=63	N=126	N=40	N=36	N=22	N=45	N=90	N=109	N=77	N=83	N=96	N=92	N=388	N=491
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
5 or fewer meetings	15.9	19.0	42.5	50.0	4.5	8.9	61.1	56.9	14.3	2.4	2.1	9.8	24.7	24.2
6 to 8 meetings	46.0	49.2	30.0	36.1	95.5	91.1	23.3	29.4	51.9	62.7	34.4	37.0	40.2	47.7
More than 8 meetings	38.1	31.7	27.5	13.9	0.0	0.0	15.6	13.8	33.8	34.9	63.5	53.3	35.1	28.1
*significant														

Date: February 20, 2009

Table 5 reflects pattern of meetings across the colleges by ethnicity. A Chi-square test was used to test the differences between ethnic groups' meeting patterns at the different colleges as well as program wide. We did not detect any significant differences in meeting patterns across the racial groups when looking at the program as a whole across the six colleges. However, when we tested each college individually, we found a significant difference at Kingsborough Community College,  $X^2$  (6, N=199) = 13.45, p < .05, where Black students meet with their advisors more than other racial groups do. Although not significant, we have found the same pattern at Queensborough Community College.

At Borough of Manhattan we did not detect any significant differences either. However, judging from the data in table 5, the pattern of meetings at these two colleges indicates that Black students meet with their advisors less than other racial groups. When looking at the program overall, Hispanic students meet with their advisors most often, closely followed by Asian and Black students, and then by White students.

Fall 2008 Studen	t-Advisor Meetings b	y Ethnicity (Ex	cluding Advis	or-Faculty Cont	tacts)
		TABLE 5			

	TABLE 5															
		W	hite			В	lack			Hisp	panic			A	sian	
<b>Number of Meetings</b>		1-5	6-8	>8		1-5	6-8	>8		1-5	6-8	>8		1-5	6-8	>8
	N	%	%	%	N	%	%	%	N	%	%	%	N	%	%	%
BMCC	19	10.5	42.1	47.4	85	22.4	48.2	29.4	75	16.0	48.0	36.0	9	11.1	55.6	33.3
Bronx	3	66.7	33.3	0.0	33	57.6	21.2	21.2	36	38.9	38.9	22.2	4	0.0	75.0	25.0
Hostos	0	0.0	0.0	0.0	16	0.0	100.0	0.0	49	10.2	89.8	0.0	2	0.0	100.0	0.0
KBCC*	87	60.9	29.9	9.2	62	48.4	24.2	27.4	28	64.3	28.6	7.1	22	72.7	18.2	9.1
LaGuardia	13	7.7	69.2	23.1	44	6.8	54.5	38.6	73	8.2	56.2	35.6	30	10.0	60.0	30.0
Queensborough	63	6.3	36.5	57.1	28	0.0	46.4	53.6	64	9.4	29.7	60.9	32	3.1	34.4	62.5
TOTAL	185	33.5	36.2	30.3	268	26.5	43.3	30.2	325	18.8	49.8	31.4	99	21.2	43.4	35.4

American Indian/Alaskan Native students have been removed from the analysis because they make up a very small proportion of the group, 0.3%.

\*significant at the .05 level

Date: February 20, 2009

Table 6 looks at number of meetings attended by students broken down into GPA ranges from 0.00 to 4.00 across the colleges. Using a Pearson Correlation we investigated the relationship between the number of student-advisor contacts throughout the fall 2008 semester and the students' fall 2008 semester GPA. When looking at the program across all six colleges, we found a significant but fairly weak negative relationship (r = -.094, p = .006, n = 858) suggesting that the more meetings students attended, the lower their GPAs and vice versa. It is important to note that this finding does not suggest that one variable causes the other.

When we looked at colleges individually, we found similar results as above at Bronx and Queensborough Community College, however with a stronger relationship. At Bronx Community College we found a significant and moderate relationship (r = -.518, p=.000, n = 74), as well as at Queensborough Community College (r = -.201, p = .000, n = 185) indicating, as above, that the more meetings students attended, the lower their GPAs and vice versa. At Borough of Manhattan Community College we found a significant, although not very strong, positive relationship (r = .262, p = .000, n = 181) indicating that the more meetings students attended with their advisors, the better their GPAs were and vice versa. We did no find any significant results at Hostos, Kingsborough and LaGuardia Community College.

0.00 - 1.99 GPA				2	2.00 - 2	.50 GP	A		<b>2.51 -</b> 3	.00 GP	1	3	3.01 <b>-</b> 4.	.00 GP	A	
Number of Meetings		1-5	6-8	>8		1-5	6-8	>8		1-5	6-8	>8		1-5	6-8	>8
	N	%	%	%	N	%	%	%	N	%	%	%	N	%	%	%
BMCC**	60	26.7	58.3	15.0	32	9.4	40.6	50.0	45	6.7	46.7	46.7	44	15.9	43.2	40.9
Bronx**	16	25.0	25.0	50.0	17	35.3	41.2	23.5	14	28.6	64.3	7.1	27	74.1	18.5	7.4
Hostos	16	0.0	100.0	0.0	14	7.1	92.9	0.0	17	0.0	100.0	0.0	17	5.9	94.1	0.0
KBCC	30	56.7	33.3	10.0	32	62.5	28.1	9.4	38	52.6	18.4	28.9	97	60.8	26.8	12.4
LaGuardia	38	21.1	44.7	34.2	22	9.1	36.4	54.5	29	3.4	72.4	24.1	68	1.5	64.7	33.8
Queensborough**	50	4.0	24.0	72.0	45	4.4	33.3	62.2	41	7.3	39.0	53.7	49	8.2	42.9	49.0
TOTAL**	210	22.4	44.8	32.9	162	21.0	40.1	38.9	184	16.8	49.5	33.7	302	30.5	43.4	26.2

### APPENDIX H: ASAP STUDENT FOCUS GROUP SUMMARY

Two student focus groups were held in late April 2009 to learn about ASAP students' perspectives and experiences with the ASAP program. The focus groups were held on two separate days at two convenient locations: one at Hostos Community College and the other at CUNY Office of Academic Affairs West 31st Street location in midtown Manhattan. All ASAP students on track to graduate in spring/summer 2009 were invited to participate in the focus group via email and campus staff outreach. Four Hostos Community College students attended the Hostos Focus Group, and a more diverse group of students, representing Borough of Manhattan, LaGuardia, and Queensborough Community Colleges, participated in the 31st Street focus group, for a total of nine students attending the Spring 2009 ASAP Student Focus Group. The focus group summary below is comprised of data collected during both student focus groups.

#### 1) Introductions - staff and students

Zineta Kolenovic, ASAP Evaluation Specialist, lead the student focus group. Kelvin Wallace, Assistant to the ASAP University Director, was present during the Hostos Community College focus group to take notes, and Donna Cole, ASAP Data Administrative Assistant, was the note taker at the 31st Street focus group. A total of nine students representing four of the six ASAP colleges participated in the focus groups.

### 2) Focus Group Description and Ground Rules

After the introductions, the purpose of the focus group was discussed with students. It was made clear that open-ended questions would be asked to engage students in a discussion about their experiences with the ASAP program and that they could choose not to answer any questions that they didn't feel comfortable answering. The students were told that everything that was discussed during our session would be kept confidential and that the data would be reported as a summary and no one would be identified by name. All students agreed to take part in the focus group.

#### 3) Questions

A) If you had to choose one aspects of the ASAP program, which aspect would you say is the most important to your success in college and why? (advisement, block scheduling, early registration, financial resources, etc.) Which is the least important?

Overall, students agreed that the financial resources, namely the tuition waiver, book vouchers and Metrocards were the most important aspect of the ASAP program. There was a general consensus that not having these resources available would have made going to college very difficult and for some students even impossible. The second most important aspect of the ASAP program, according to the students, are their advisors because they are there to help keep students focused and help them navigate through their college careers.

In terms of the least important aspect of the ASAP program, the answers varied. Some students said that there aren't any aspect of the ASAP program that aren't helpful. A few said that if they had to choose one least important aspect it would be ASAP tutoring because there were times when tutors weren't available for

the subject the student needed assistance with and because there weren't enough qualified tutors. The other aspect that another couple of students said was the least important to them is block scheduling. (Block Scheduling is described in more detail in question 3.)

B) What role do the ASAP advisors play in your education? Do you think that your education would be the same if the advisors weren't there?

Every single student agreed that the advisors are very helpful, a great resource, and that having their support is an absolute benefit. Students found the advisors to be very helpful in assisting students with navigating the college and assuring that the students are on the right track and are progressing in their academic career. Students indicated that they are overall very satisfied with the work of their advisors. Most students acknowledged the importance of having someone at the college who knows them well and can keep them on track and indicated that navigating the college and staying on track to graduate would have been more difficult without the advisors.

C) What are you thoughts about block scheduling? Was it useful?

The responses to this question were mixed depending on the block that students were in. Students who were in blocks with "very young" students, mostly students who entered college straight out of high school, found them to be very disruptive in class which made it difficult to concentrate. On the other hand, those who were in blocks with "more mature" students, actually enjoyed the blocks and found them to be a great resource for making friends and forming study groups.

When asked whether ASAP should continue using block scheduling, most students agreed that we should but with a few changes to the current block scheduling practice. Students suggested that we might want to think about combining different majors into a block so that students would get to meet and work with ASAP students in different majors. Others suggested that a block should consist of no more than two classes so that students wouldn't have to spend their entire time with the same students in almost every one of their classes. Another suggestion was to leave it up to individual student to make a decision whether he/she wants to be in a block or not.

D) Resolving issues in college can be difficult. Talk about your experience having to take care of an issue at your campus and having to deal with various college administrative offices (ex. Taking care of a billing issue). Has the ASAP program contributed to your ability to navigate your college?

The students seemed to agree that having a dedicated advisor played a large role in their ability to navigate their college. Most said that they approached their advisor first whenever they had a campus issue to resolve, who would then point them in right direction. They agreed that the presence of their advisors made it much easier for them to get things accomplished. However, they also seemed to agree that the advisors didn't necessarily spoon feed them but that they tried to empower them and teach them how to resolve campus issues. As a result, most students feel confident that they will be able to successfully navigate a 4-yr college on their own.

E) Where would you be today if you had not joined the ASAP program? Would you recommend the program to your friends?

The students split into two groups on this question. One group of students agreed that although the ASAP program has been very helpful and valuable to them, they said that they would have been able to obtain their Associate's degree in a timely manner on their own because they had a clear goal when they entered college and were determined to accomplish that goal. Others, however, the majority of the group, agreed that without the ASAP program they wouldn't have been able to attend college nor to complete their degree on time because of financial constraints. Most would have had to take on more work to be able to pay for college, and they are all very thankful to have been part of a program that allowed them to focus on their education without having to worry about financing it. They also acknowledged the importance of having dedicated advisors who guided students and are another reason why the students are graduating on time.

When asked whether they would recommend the ASAP program to their friends, every single student agreed that he/she would, and some in fact have already recommended the program to their siblings and friends.

#### APPENDIX I



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Independent peer review of the recent comparison group study of interim graduation rates and other outcomes associated with the *CUNY Accelerated Study in Associate Programs (CUNY ASAP)* program.

After considering a number of alternatives for establishing a reasonable comparison group for the most important outcome analyses,  $CUNY^{33}$  settled on a comparison group derived from students who were similar to those served by ASAP (i.e., NYC residents, triple exempt, twelve or fewer credits at entry, etc.), but who were enrolled during the fall 2006 semester. In describing their rationale for selecting this comparison group (12/8/08) CUNY states:

The main comparison group to be used for most analyses, including performance and retention, is the fall 2006 comparison group (N=1,791) which has been restricted to students who met the criteria that ASAP students were required to meet at the beginning of the program. The current fall 2006 comparison group consists of full-time associate students who started the fall 2006 semester with 12 or fewer credits, who are proficient in reading, writing and math, are not enrolled in developmental courses, are residents of NYC, are enrolled in majors offered to ASAP students in fall 2007, and are not enrolled in College Discovery, a special opportunity program with similar services to ASAP.

Additionally, the fall 2006 comparison group is the best possible comparison group because it minimizes selection bias. If we compared ASAP students to students in the same year that ASAP started [2007], our comparison group would consist of those who were eligible for ASAP but who chose not to enroll. Students in this group are likely to be different from those who were eligible and chose to enroll in the ASAP program in ways that affect performance and would therefore not be an ideal comparison group.

Metis carefully reviewed and agreed with CUNY's rationale for selecting students from among the fall 2006 enrollees in order to best constitute the comparison group. However, we were concerned that the groups may not be comparable on several key variables that were not used for selecting the comparison group. For example, we noted from the early data that the participants (N=1,132) and the comparison group (N=1,791) differed substantially on such important indicators as age, admission type and household income – all factors that could account for substantial variations in outcomes between the groups. These data appear in Table 1.

<sup>2</sup> 

<sup>&</sup>lt;sup>33</sup> CUNY ASAP's evaluation and data analyses are conducted by Evaluation Specialist Zineta Kolenovic, using data extracted from the CUNY Institutional Research Database (IRDB). Cheryl Littman, CUNY Assistant Dean for Institutional Research and Assessment, reviews ASAP's analyses before dissemination, and provides expert advice on all data matters.

Table 1. Profile of ASAP and Comparison Group Students at Entry

VARIABLE	FALL 2007 ASAP (N=1,132)	FALL 2006 COMPARISON (N=1,791)
Age Group		
18 or younger	58.3%	35.1%
19 or 20	22.2%	36.1%
Older than 20	19.5%	28.8%
Admission Type		
First-time Freshmen	75.3%	36.9%
Transfer Students	9.5%	22.3%
Continuing Students	15.3%	40.8%
Mean Household Income*	\$38,725	\$26,266

<sup>\*</sup> Income from the 2007-2008 academic year was used for the fall 2006 comparison group. Means were based on data available for 1,040 (91.87%) of the ASAP students and 999 (55.78%) of the comparison group students. Source: CUNY

It can be seen in Table 1 that, compared with the fall 2006 comparison group, the fall 2007 ASAP students were far younger, substantially more of them were first-time freshmen, and they reported far greater mean household incomes. As a result, we recommended that CUNY consider expanding the match criteria for subsequent comparisons by using rigorous propensity score matching (PSM) techniques. A rigorous PSM approach would be expected to balance the ASAP students and the matched comparison group on observed covariates so that the evaluation could more confidently attribute any net differences in outcomes to ASAP implementation. The approach would therefore enable CUNY to better discern and defend the relative impact of the ASAP experience on participating students with a high level of internal validity.

CUNY followed our recommendation by using PSM to create a matched comparison group for the ASAP students. After reviewing the student profiles before and after matching, it was found that PSM greatly reduced differences in various covariates between ASAP students and the comparison students. However, out of 1,132 ASAP students and 1,791 comparison students, a matched sample of 625 ASAP students and 625 comparison students was obtained, so the matching lead to a reduction of 44.79% (i.e., (1132-625)/1132) of ASAP students. The loss of so many ASAP students made the matched sample less representative of the original population of students. The major differences are summarized in Table 2.

Table 2. Profile of ASAP Population and Matched ASAP Students

VARIABLE	ASAP Population (N=1,132)	Matched ASAP Students (N=625)
Receiving a Pell Grant	57.9%	70.8%
Admission Type		
First-time Freshmen	75.3%	62.7%
Transfer Students	9.5%	13.8%
Continuing Students	15.3%	23.5%
Mean Household Income	\$38,725	\$31,070

As shown in Table 2, students receiving a Pell Grant, admission type, and household income displayed large differences between the original ASAP population and the matched ASAP sample. This raised serious concerns

about whether the results of the analysis based on this matched sample could be generalized to the ASAP population as a whole.

We learned that, in their initial PSM analysis, CUNY used the nearest neighbor pair matching within caliper technique (also known as "greedy matching" algorithm) with a caliper size of a hundredth of a standard deviation of the sample estimated propensity scores (i.e., caliper set at 0.01). This caliper seemed far too stringent to us since the literature typically recommends employing a caliper size of a quarter of a standard deviation of the estimated propensity scores (i.e., caliper set at 0.25, Rosenbaum & Rubin, 1985). While choosing a wider caliper may create larger (but acceptable) differences between the matched ASAP and comparison groups, it should also increase the size of the ASAP sample. We suggested that CUNY first try to revise their matching by setting the caliper at 0.25 in greedy matching. However, given that the comparison population did not greatly outnumber the ASAP population, chances were that the matched treatment sample size might not increase substantially, even with a wider caliper. Therefore, we further recommended two other options (other than greedy matching) that might help to solve the observed problem of large treatment sample loss. One option was to stratify on estimated propensity scores (D'Agostino, 1998), and the other was to adopt a recently developed PSM method of optimal full matching (Rosenbaum, 2002).

CUNY then proceeded with first using a caliper of 0.25 for greedy matching, but as anticipated, the use of a less stringent caliper did not greatly increase the size of the matched ASAP sample – only 37 additional ASAP students were retained after matching. In addition, CUNY produced some new PSM results by dropping some matching variables from the initial list included in the original PSM to increase the matched sample size, with a total of 777 ASAP students paired with their comparison students after greedy matching with fewer variables. Several key matching variables were removed (e.g., admission type, household income), which led to a substantial increase in matched cases, but also to more disparity between the groups (as well as potentially sacrificing validity). In fact, the practice of removing major matching variables is strongly discouraged in PSM, which emphasizes the collection of relatively comprehensive matching variables to effectively account for differences between the treatment and control groups.

We were also informed that stratification was carried out by CUNY with little success in producing comparable groups, since covariate balance was not achieved within each stratum. Given this fact, we strongly recommended trying optimal full matching before conducting any outcome analysis for the ASAP program. From our experience, we have found that optimal full matching is an efficient and robust method to address the limitations of greedy matching. The recently developed method of optimal matching does not require a sizable common support region, and therefore is likely to address the limitation associated with greedy-matching. In sharp contrast to greedy matching, this technique identifies matched sets in such a way that the process aims to minimize the total distance of estimated propensity scores between treated subjects and comparisons, and decisions (i.e., matches) made later take into consideration those made earlier. With technical assistance provided by Metis statistician Jing Zhu, optimal full matching techniques were applied.

It was found that, as suspected, the large sample loss in greedy matching happened because the distributions of the estimated propensity scores between the ASAP and comparison groups did not overlap sufficiently. It was also known that initially there were 47 variables used for greedy matching, some of which had a substantial proportion of missing data substituted by group means. We were concerned about the group mean imputation as the data were not missing at random. Needless to say, the technique introduced considerable bias into the results. After further investigation of the data, variables that accounted little for the differences/selection bias between the ASAP students and the comparisons were removed, and these variables turned out to be those having substantial missing data.

The final list included 18 matching variables<sup>34</sup> with no missing data. Thus we successfully avoided dealing with missing data imputation while retaining all of the key matching variables needed for differentiating the two groups.

<sup>&</sup>lt;sup>34</sup> The 18 variables included the following: age, gender, PELL grant, TAP flag, colleges including BMCC, QCC, LaGuardia, Hostos, and Bronx (KBCC as reference), race/ethnicity including Black, Hispanic, and other (White as

It is worth mentioning that the income variable was not retained in the final list for matching for several reasons:

- While only 92 ASAP students were missing income data, 792 comparison students did not have income
  information. Therefore, the mean reported for the comparison students was inaccurately based on only
  999 students from the group.
- A reasonable proxy was found for the income variable, namely, financial aid application and student
  dependency status. It was known that those who did not apply for financial aid were missing data for
  their income, while those who did apply were classified into dependent and independent students
  (using the parental income for the former group and student income for the latter). Thus we created
  two dummy variables for this proxy (individuals who did not apply for financial aid & financially
  independent students), using the dependent students as the reference group.
- After the proxy was included in the model, the income variable (included in the model first with listwise deletion, then with group mean imputation) accounted for little in the group differences (i.e., little additional variance in group differences was explained by income).

The optimal matching was conducted based on the total of 1,132 ASAP students and 1,791 comparison students,. The structure of the matched sample is shown as a count of matched sets in terms of the ratio of the number of treated subjects to the number of comparisons. Note that the matching ratio was bounded by 1:10 and 10:1 in the actual optimal matching to control for potential inflation of standard error. Only 28 ASAP students were not matched, although 549 comparison students were lost after matching. Among the matched sets, 13 sets had 10 treated subjects and 1 comparison, 4 sets had 9 treated subjects and 1 comparison, and so forth. Thus optimal matching turned out to greatly improve the matching results over greedy matching – now the matched evaluation samples included 1,104 ASAP students and 1,242 comparison students.

With matched samples, one wants to know how well matching has reduced bias. The level of bias reduction can be shown by a comparison between absolute standardized differences in covariate means before and after matching (i.e., a comparison between  $d_x$  and  $d_{xm}$  as defined in equations (2) and (4)). Table 3 presents this information. Taking the covariate "individuals who did not apply for financial aid" as an example, before matching, the treated and comparison groups differed on this variable by 80.6% of a standard deviation; whereas after full matching, the standard bias was only 3.3% of a standard deviation. Therefore, optimal matching reduced sample imbalance on this variable to a great extent. Table 3 shows that any substantial differences in covariates between the two groups were successfully removed after optimal matching. Thus outcome analyses based on the matched sample were free of overt selection bias.

**Table 3**. Covariate Imbalance before and after Optimal Matching for Two-Year Graduation, Retention in College, and Retention in ASAP

Covariate		rdized Difference
	d <sub>X</sub> (before matching)	d <sub>Xm</sub> (after matching)
Age	0.100	0.092
Gender (Female)	0.019	0.001
PELL	0.044	0.038
TAP	0.234	0.007
College		
BMCC	0.126	0.004
QCC	0.159	0.019
LAGUARDIA	0.047	0.037
HOSTOS	0.236	0.008
BRONX	0.270	0.038
Race/Ethnicity		
Black	0.095	0.073
Hispanic	0.157	0.020
Other	0.140	0.049
Reading Exempt	0.016	0.038
Math Exempt	0.003	0.041
Financial Aid		
Independent	0.011	0.033
Individuals who did not		
apply for financial aid	0.806	0.033
Admission type		
Transfer	0.332	0.004
Continuing	0.554	0.007

Table 4 presents the results for the post-matching outcome analyses of graduation and retention. It can be seen that, overall, the ASAP students had an average 19.94 percentage point (i.e., adjusted mean difference, p = 0.000) higher two-year graduation rate than the comparison students. In addition, ASAP students had an average 11.88 percentage point higher retention rate in college than the comparison students (p = 0.000), and a mean 6.35 percentage point higher retention rate (p = 0.001).

**Table 4**. Results for Outcome Analyses of Two-Year Graduation, Retention in College, and Retention in ASAP after Optimal Matching

Outcomes	Obs	erved Means	Adjusted I	Mean Diffe	rence
	ASAP	Comparison	Estimate	t	p
Two-Year Graduation	30.2%	12.1%	19.94%	10.123	0.000
Retention in College	80.0%	65.5%	11.88%	5.836	0.000
Retention in ASAP	75.2%	65.5%	6.35%	2.998	0.001

**APPENDICES** 

The analyses of cumulative GPA and cumulative credits necessitated separate optimal matching due to the patterns of missing data -- cumulative GPA (available for only 908 of the ASAP students and 1,045 of the comparison students) and credit accumulation (available for only 909 ASAP students and 1,053 comparison students)<sup>35</sup>. The originally matched samples for the graduation and retention analyses based on all 2,923 students could not be used for the outcome analyses of cumulative GPA and cumulative credits because the balance in various covariates between the ASAP students and their comparisons no longer existed with the loss of some students in many original matches. Therefore, new optimal full matching was conducted respectively for cumulative GPA and cumulative credits based on the new subgroups of ASAP and comparison students. The matching results are presented in Tables 5 and 7, and the results for the outcome analyses are shown in Tables 6 and 8.

In general, optimal matching substantially removed sample imbalances on many observed covariates. For cumulative GPA, a total of 894 ASAP students and 888 comparisons were retained after optimal full matching, and the outcome analysis showed no statistically significant mean difference between the two groups (adjusted mean difference = 0.064, p = 0.071). For cumulative credits, a total of 889 ASAP students and 880 comparisons were matched successfully, and the outcome analysis indicated that the ASAP students on average gained 3.67 more credits within three semesters than their comparison counterparts. This mean difference was statistically significant (p = 0.000).

<sup>&</sup>lt;sup>35</sup> It is our understanding that some students were no longer enrolled in college in fall 2008 and as a result were missing the information for cumulative GPA and cumulative credits.

Table 5. Covariate Imbalance before and after Optimal Matching for Cumulative GPA

Covariate		rdized Difference
	d <sub>x</sub> (before matching)	d <sub>Xm</sub> (after matching)
Age	0.144	0.008
Gender (Female)	0.005	0.060
PELL	0.047	0.037
TAP	0.135	0.037
College		
BMCC	0.117	0.016
QCC	0.157	0.035
LAGUARDIA	0.012	0.014
HOSTOS	0.190	0.011
BRONX	0.274	0.012
Race/Ethnicity		
Black	0.092	0.037
Hispanic	0.170	0.081
Other	0.170	0.063
Reading Exempt	0.020	0.068
Math Exempt	0.028	0.024
Financial Aid		
Independent Individuals who did not	0.144	0.033
apply for financial aid	0.515	0.021
Admission type		
Transfer	0.337	0.032
Continuing	0.528	0.033

Table 6. Results for Outcome Analysis of Cumulative GPA after Optimal Matching

Outcomes	Observed M	leans	Adjusted Mean Difference			
	ASAP	Comparison	Estimate	t	p	
Cumulative GPA	2.676	2.618	0.064	1.474	0.071	

Table 7. Covariate Imbalance before and after Optimal Matching for Cumulative Credits

Commists	Absolute Standa	rdized Difference
Covariate	d <sub>X</sub> (before matching)	d <sub>xm</sub> (after matching)
Age	0.142	0.015
Gender (Female)	0.007	0.122
PELL	0.045	0.051
TAP	0.135	0.074
College		
BMCC	0.113	0.055
QCC	0.165	0.049
LAGUARDIA	0.013	0.085
HOSTOS	0.191	0.065
BRONX	0.275	0.021
Race/Ethnicity		
Black	0.091	0.070
Hispanic	0.170	0.038
Other	0.171	0.062
Reading Exempt	0.014	0.042
Math Exempt	0.031	0.019
Financial Aid		
Independent	0.141	0.021
Individuals who did not	-	
apply for financial aid	0.523	0.015
Admission type		
Transfer	0.336	0.059
Continuing	0.522	0.017

Table 8. Results for Outcome Analysis of Cumulative Credits after Optimal Matching

Outcomes	Obs	served Means	Adjusted Mean Difference				
	ASAP	Comparison	Estimate	t	p		
Cumulative Credits	39.31	36.52	3.67	5.625	0.000		

### Conclusion

We believe that the above-described application of optimal matching techniques is the most appropriate available method for estimating the impact of the CUNY ASAP program. As a result of the analyses we are confident that the estimated impacts of CUNY ASAP on graduation, retention and credit accumulation rates, significantly exceed the results that would have been obtained in the absence of the intervention. And while participating ASAP students did obtain slightly higher average GPAs than comparison group students, this mean difference did not attain statistical significance.

Note: A copy of the ASAP optimal matching technical report is available on the CEO website.