Abstract Title Page

Title:

The Platinum Bullet: An Experimental Evaluation of CUNY's Accelerated Study in Associate Program (ASAP) – New Three-year Impacts, Cost Analyses, and Implementation Findings

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Abstract Body

Background / Context: Community colleges play a vital role in American postsecondary education. They enroll nearly half of all college students nationwide and, because of their open admissions policies and low cost relative to most four-year institutions, are accessible to millions of adults who might otherwise lack the preparation or financial means to pursue higher education. Unfortunately, this open access does not always translate into academic success. A national study found that only a third of students who began at community colleges had obtained a degree within six years (Berkner, He, & Cataldi, 2002). Many community college students want to earn a degree, but are stymied by the competing demands of work, family, and school. Institutional barriers, such as poorly tailored instruction, insufficient financial aid, or inadequate counseling, can also impede students' academic progress (Brock, LeBlanc, & MacGregor, 2005). As a result many community colleges are searching for innovative programs to improve the likelihood of academic success among their students.

Many reforms have been implemented to increase rates of college persistence and completion for disadvantaged students. In the past decade, some have been studied in a way that examines the causal relationship between the reforms and students' educational progress and attainment — using a random assignment design. Most of the higher education initiatives studied rigorously fall into three categories — financial aid reforms, enhancements to student services, and instructional reforms. A variety of approaches have been found to help improve students' educational outcomes (for examples, see: Bettinger, Long, Oreopoulos, & Sanbonmatsu, 2009; Goldrick-Rab, Harris, Benson, & Kelchen, 2011; Richburg-Hayes et al., 2009; Richburg-Hayes, Visher, & Bloom, 2008; Scrivener & Weiss, 2009). Overall, the rigorous research has shown that, encouragingly, something can be done to improve success rates for postsecondary students. However, the evidence to date suggests that single-focus, light-touch interventions may not be robust enough to substantially improve outcomes, and short-term enhancements are likely to lead to only short-term gains (for example, see: Scrivener & Coghlan, 2011). The growing body of research evidence points to the need for multi-faceted, longer-lasting interventions. This presentation will present three-year findings from a program designed with this more comprehensive, long-lasting approach in mind.

The City University of New York's (CUNY's) Accelerated Study in Associate Programs (ASAP) combines many of the ideas from a range of programs into a comprehensive model that requires students to attend school full-time, and provides supports and incentives for three years. ASAP's financial aid reforms, enhanced student services, and scheduling reforms are designed to increase the proportion of students who graduate with an associate's degree.

Purpose / Objective / Research Question / Focus of Study: Broadly speaking, the primary objective of the study is to determine:

- What is the effect of the ASAP program on students' academic outcomes?

This question examines whether ASAP is effective compared with the business-as-usual services offered at the participating colleges. This is the question at the heart of the evaluation.

In addition, research questions focusing on the implementation of the ASAP program are considered — questions that are critical for understanding and interpreting the program's effects. For the implementation analysis, the study is designed to address the following questions:

- How is ASAP put into practical effect (that is, how is it implemented)?

Understanding how ASAP is implemented will provide important information for other colleges and college systems interested in implementing ASAP or a similar program.

- How do the *planned* program services compare with the *offered* program services (that is, to what degree is there fidelity to the program model)?

ASAP is an ambitious intervention, comprised of many components. It is anticipated that some of these services will be offered as they were conceived, whereas others may fall short of initial plans or be changed over time in order to better meet the needs of students. Understanding program fidelity is vital for interpreting the program's effects.

- How are the services *received* by program group students different from those services *received* by the control group members (to what degree is there a treatment contrast)?

In an experimental evaluation it is absolutely critical to understand the treatment contrast, as it represents the likely cause(s) of any program impacts on student outcomes. If program group members visited academic counselors three times per semester and control group members visited academic counselors one time per semester, then these two additional visits may be partially responsible for observed program effects on outcomes such as credit accumulation and degree receipt. Should ASAP have positive effects, this information may shed light on which program components made the difference (the ones with a treatment contrast) and which did not (those without a treatment contrast).

- What does ASAP cost? What is ASAP's net cost? Is ASAP cost-effective?

ASAP's services are substantially more expensive than business-as-usual. Estimating how much more expensive provides important context when interpreting this studies' findings.

Setting: CUNY, the site of this project, is the largest urban public universities in the country, comprising 24 colleges and other institutions, serving approximately one-half million students each year. In the fall of 2010, CUNY's six community colleges enrolled a total of 91,264 students, 65 percent of whom were Pell eligible, and 48 percent of whom were first generation college students (CUNY Office of Institutional Research and Assessment, 2011). Although most CUNY community college students start out by attending college full time, nearly half drop to part-time status at some point during their college careers, dramatically decreasing their chances of obtaining a postsecondary degree in a timely fashion (Linderman & Kolenovic, 2009). In fact, only 24 percent of students who started as first-time, full-time freshmen in 2001 earned an associate's degree within six years (CUNY Office of Institutional Research and Assessment, 2008). This study includes the three largest of CUNY's six community colleges.

Population / Participants / Subjects: This study had several eligibility criteria – students had to be: low-income, in need of one or two developmental courses, a new or continuing student who had earned 12 or fewer credits, and willing to attend college full time. Table 1 presents selected characteristics of the 897 individuals in the research sample. The first column shows the data for the full sample, which provides a descriptive profile of the students in the study.

Similar to community college students nationwide, the majority of study participants are women (62.0 percent). 39 percent of participants were between 16 and 18 years old when they enrolled in the study, and 26.1 percent were 19 or 20 years old; that is, most sample members were of traditional college age. The study sample is racially diverse, with no racial majority — 43.5 percent of sample members identified themselves as Hispanic, 10.0 percent as White, 34.4

percent as Black, and the rest as Asian, Pacific Islander, or other. Just over 60 percent of sample members were incoming freshmen at the start of the study. Nearly 45 percent spoke a language other than English at home, reflecting the diversity of the population of New York City.

The second and third columns divide the sample into the program and control groups, allowing for the comparison of program and control group members' background characteristics. As the table shows, random assignment resulted in research groups with similar sample members at the start of the study.

Intervention / Program / Practice: The three-year ASAP program bundles together a group of strategies — financial aid reforms, enhanced student services, and schedule reforms — many of which have a research base on their effectiveness.[*] ASAP both provides a wide array of services and supports to help students graduate and includes requirements and messages to students about their schooling. Most ASAP components are provided for three years (except where indicated below). It is notable that although ASAP provides a broad range of supports, it also requires and expects a lot from participating students. Below are the key components of the ASAP model — ASAP as *designed*.

Requirements and Messages

- **Enroll full time**. ASAP requires students to enroll full time (12 or more credits) in the fall and spring semesters.
- **Take developmental courses early**. ASAP encourages students to take any developmental courses they need to early in their time in college.
- **Graduate quickly**. ASAP encourages students to graduate with an associate's degree within three years

Course Enrollment

- **ASAP seminar**. Students are required to take a non-credit ASAP seminar that covers topics such as goal-setting and academic planning for at least their first year in the program.
- **Block-scheduled classes**. Groups of students organized by major take three or more courses in a consolidated block schedule during their first year in ASAP. The block includes the ASAP seminar and typically a developmental education course.

Student Services

- **Comprehensive advisement**. Students are assigned to an ASAP adviser with a small caseload: 60-80 students. (Typical community college advisers can be responsible for 1,000 students or more.) ASAP advisers are expected to provide comprehensive academic and interpersonal support. Students are required to meet with their adviser at least twice a month.
- **Tutoring**. ASAP tutors provide general support both inside and outside the classroom. Some ASAP students are required to attend tutoring frequently, such as those taking developmental courses or those on academic probation.
- **Career services**. ASAP career and employment specialists help with career planning, and, if needed, job placement. Students are required to meet with the career and employment specialist once a semester.

Financial Supports

[*] Please note that ASAP does not directly model itself after the exact reforms that have been a research base on their effectiveness. Rather, the ASAP program borrowed ideas from these three areas.

- **Tuition waiver**. ASAP waives any gap between students' financial aid and their tuition and fees. (ASAP requires students to complete a Free Application for Federal Student Aid)
- **Free MetroCards**. The program provides free monthly MetroCards for use on public transportation. The MetroCard is tied to fulfilling certain program requirements, such as meeting with an adviser or attending tutoring.
- **Free textbooks**. ASAP provides free textbooks for all classes. Students must return them at the end of the semester.

Research Design: This study is a randomized field trial. Participating students were assigned, at random, either to the program group, whose members have the opportunity to participate in ASAP, or to the control group, whose members receive the college's standard services. The random assignment procedure and process was designed and controlled by the researchers.

Data Collection and Analysis: The following data sources are used in the analyses:

- Baseline data: After students agreed to be a part of the study and prior to being randomly assigned, students filled out a Baseline Information Form (BIF) and baseline survey.
- Field Research: The researchers are conducting periodic interviews with ASAP staff members, including directors, advisers, career and employment specialists, and tutors.
- Student 12-month Survey: Covers topics including sample members' (program and control) use of program services, and measures of mediating variables (e.g., reduced hours working and increased time studying). The response rate for the survey was around 80 percent.
- Transcript data: These records include the following from all CUNY colleges: transcript data (e.g. course name, credits and grades); basic skills assessment test data (e.g. test type, score, date, and site for all attempts); and degree data (e.g. type, major, date, and college). This data was provided to us by the CUNY Institutional Research Database (IRDB).
- National Student Clearinghouse: These records include enrollment and degree attainment from over 95 percent of the nation's colleges.

Findings / Results: The findings presented here represent two-year results, which have been presented at SREE in the past. By the time of the Fall SREE conference, three-year graduation impact estimates will be publicly available, as will results from the student survey, cost analyses and significant qualitative research. Within two years, students offered ASAP clearly outperformed their control group counterparts with respect to persistence, credit accumulation, and graduation. Figures 1 and 2, and Table 2 summarize the findings. During each semester, ASAP students enrolled at a higher rate than their control group counterparts. After two years, students offered ASAP earned an average of 37.9 credits and their control group counterparts earned an average of 30.3. Thus, ASAP is estimated to have increased credit accumulation by 7.6 credits. Two-year graduation rates were 8.7 percent for the control group and 14.5 percent for the program group; thus, ASAP is estimated to have increased graduation rates by 5.7 percentage points. Two and a half year graduation effect results are available for a partial sample and suggest dramatic effect estimates in the range of 15 percentage points (not shown in table).

Conclusions: ASAP is one of the most ambitious efforts in the country to improve the success rates of low-income postsecondary students. Services at community colleges are often lacking — particularly when contrasted with services at four-year institutions — and initiatives such as ASAP may be what is needed to help the field see beyond the status quo and achieve the results desired by policymakers. Cost analyses will provide critical context for considering program effects.

Appendices

Appendix A. References

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Appendix B. Tables and Figures

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

Table 1

Selected Characteristics of Sample Members at Baseline, by Research Group

Borough of Manhattan, Kingsborough, and LaGuardia Community Colleges

	Full Sample	Program Group	Control Group	
Gender (%)				
Male	38.0	36.1	39.9	
Female	62.0	63.9	60.1	
Age (%)				
16-18 years old	39.0	39.2	38.8	
19-20 years old	26.1	25.3	26.9	
21-24 years old	17.9	17.5	18.4	
25 years old and up	16.9	18.0	15.9	
Average age (years)	21.5	21.6	21.3	
Marital status (%)				
Married	6.1	6.0	6.3	
Unmarried	78.6	78.0	79.1	
Missing	15.3	16.0	14.6	
Lives with parents (%)	73.7	73.9	73.4	
Parents pay more than half of expenses (%)	40.9	41.7	40.1	
Missing	18.1	17.1	19.1	
Race/Ethnicity[a] (%)				
Hispanic	43.5	44.5	42.6	
White	10.0	10.4	9.5	
Black	34.4	32.7	36.0	
Asian or Pacific Islander	7.5	7.1	7.9	
Other[b]	4.6	5.3	4.0	
Has one or more children (%)	15.3	17.4	13.1	*
Currently employed (%)	31.3	30.1	32.5	
Among those currently employed:				
Number of hours worked per week in current job (%)				
1-10 hours	*8.1*	*9.7*	*6.7*	
11-20 hours	*34.0*	*37.1*	*31.1*	
21-30 hours	*31.7*	*23.4*	*39.3*	
31-40 hours	*24.7*	*29.0*	*20.7*	
More than 40 hours	*1.5*	*0.8*	*2.2*	
Highest grade completed (%)				
10th grade or lower	7.2	6.7	7.8	
11th grade	7.8	8.4	7.2	
12th grade[c]	75.9	76.1	75.8	
Missing	9.0	8.9	9.2	

(continued)

Table 1 (continued)

	Full Sample	Program Group	Control Group
Diplomas/degrees earned[d] (%)			
High school diploma	73.7	74.1	73.3
GED	20.9	20.6	21.2
Occupational/technical certificate	5.6	4.5	6.6
Other	1.7	1.6	1.8
None	6.0	5.9	6.2
Date of high school graduation/GED receipt (%)			
During the past year	52.1	53.8	50.4
Between one and two years ago	14.0	13.2	14.7
Between two and five years ago	13.7	13.2	14.3
More than five years ago	13.8	13.7	14.0
Has not earned a diploma/GED[c]	6.3	6.0	6.7
Student's status at the start of ASAP (%)			
Incoming freshman	60.1	62.7	57.4
Returning student	33.4	31.9	35.0
Transfer student	6.5	5.3	7.6
Highest degree planning to attain (%)			
Associate's	2.8	3.0	2.6
Bachelor's	31.4	32.6	30.1
Master's	41.6	41.3	41.8
Professional or Doctorate	17.9	17.4	18.5
Bachelor's, Master's or PhD (unspecified)	6.4	5.7	7.0
First person in family to attend college (%)	28.9	26.8	30.9
Missing	5.1	5.1	5.2
Highest degree/diploma earned by mother (%)			
Not a high school graduate	19.5	18.6	20.4
High school diploma or GED	21.7	21.5	22.0
Some college, did not complete a degree	15.9	16.0	15.9
College degree (AA, BA, MA, PhD)	18.6	18.4	18.8
Missing	24.2	25.5	22.9
Language other than English spoken regularly in home ('	44.7	45.3	44.1
Sample size	897	451	446

(continued)

Table 1 (continued)

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

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

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

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

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

Distributions may not add to 100 percent because of rounding.

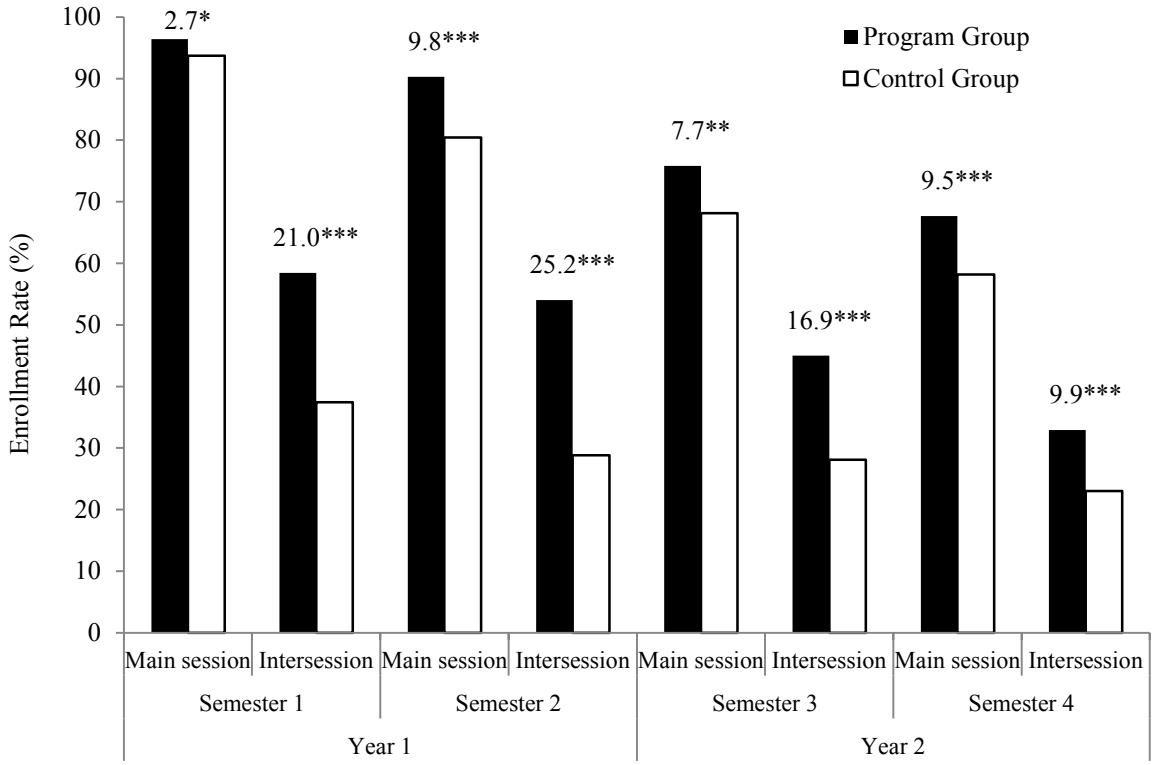
[a]Respondents who said they are Hispanic and chose a race are included only in the Hispanic category. Respondents who said they are not Hispanic and chose more than one race are included in the Other category.

[b]Other includes Multi-racial, Native American/Alaskan Native, and other race/ethnicities.

[c]This includes students who were currently enrolled in high school at study intake.

[d]Distributions may not add to 100 percent because categories are not mutually exclusive.

Figure 1: Enrollment Rates over Two Years



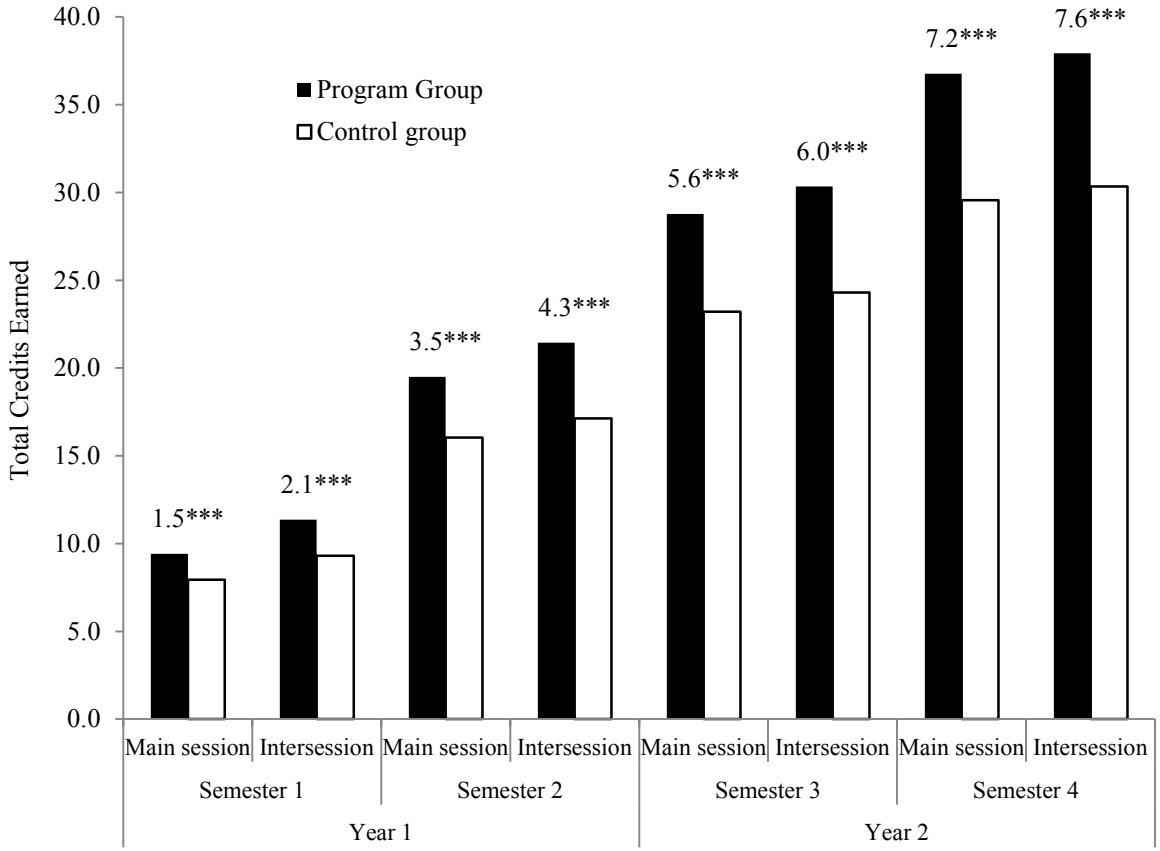
SOURCE: MDRC calculations from CUNY Institutional Research Database (IRDB).

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** $p < .01$; ** $p < .05$; * $p < .10$.

Estimates are adjusted by college and research cohort.

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

Figure 2: Credit Accumulation over Two Years



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

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** $p < .01$; ** $p < .05$; * $p < .10$.

Estimates are adjusted by college and research cohort.

Table 2: Graduation Rates over Two-Years

Outcome (%)	Program Group	Control Group	Difference	P-value
Earned a degree from any college[a]				
Semester 1	0.0	0.0	0.0	
Semester 2	0.2	0.0	0.2	0.318
Semester 3	2.9	1.1	1.7 *	0.064
Semester 4	14.5	8.7	5.7 ***	0.007
Highest degree earned				
Certificate	0.0	0.0	0.0	
Associate's degree	14.5	8.7	5.7 ***	0.007
Bachelor's degree or higher	0.0	0.0	0.0	
Sample size (total = 896)	451	445		

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

NOTES: Rounding may cause slight discrepancies in sums and differences.
A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** p < .01; ** p < .05; * p < .10.
Estimates are adjusted by college and cohort.
[a]Degree receipt is cumulative - those who earned a degree in an earlier semester are counted as having a degree in subsequent semesters.