RESEARCH for *ACTION*

On-Track to Success:
The Fourth Year Evaluation of Congreso's Éxito Program

April 2013

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Prepared for Congreso de Latinos Unidos

Tracey Hartmann, Ph.D.   •   Christine Leow, Ph. D.

About Research for Action

Research for Action (RFA) is a Philadelphia-based nonprofit organization. We seek to use research as the basis for the improvement of educational opportunities and outcomes for traditionally underserved students. Our work is designed to: strengthen public schools and postsecondary institutions; provide research-based recommendations to policymakers, practitioners, and the public at the local, state, and national levels; and enrich the civic and community dialogue about public education. For more information, please visit our website at www.researchforaction.org.

About Congreso de Latinos Unidos

Congreso de Latinos Unidos, Inc. (Congreso) is a 501(c)(3) nonprofit organization founded in Philadelphia, PA in 1977. Its mission is to strengthen Latino communities through social, economic, education and health services; leadership development and advocacy. Today, Congreso is a multiservice organization that served 14,009 unduplicated individuals in FY12, and 59,175 over the last five years. In 2012, Congreso was identified as the 17th largest Hispanic nonprofit in the nation, the largest of any such agency in Pennsylvania, New Jersey and Delaware.

Acknowledgments

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CONGRESO'S ÉXITO™ PROGRAM

Éxito™, a Spanish word meaning "success," is dropout prevention program designed to address the needs of 9th and 10th graders who display early warning indicators (EWIs) for dropping out of high school. Since its inception in 2008, Research for Action has followed the development of the program, tracking the outcomes of Éxito™'s first two cohorts of students.

This report is the fourth in a series of reports on the Éxito™ program. RFA's longitudinal research has followed the first two cohorts of students in the program, which includes all students who entered Edison High School in 9th grade in 2008 (Cohort 1) or 2009 (Cohort 2) and participated in Éxito™ at any point during their freshmen and/or sophomore years. In previous reports, the analysis reflected outcomes for active participants--one or both cohorts were currently participating in the program. In Year Four, both cohorts had completed the program and the analysis examines whether the program had any lasting impact for alumni.[1]

The table below outlines the data analyzed for this report. For more detail on methodology, see the full report and its Appendices.

DATA SOURCES

Éxito™ participation data from 2008-2011	• After-school attendance data • Case Management (PCM™) service data • Data obtained from Congreso
Participant characteristics	• Student demographics, course grades, attendance, and behavior prior to entering the program • Data obtained from the School District of Philadelphia
Participant outcomes	• Student dropout, suspensions, and Cohort 1 high school graduation • Student course grades, attendance and on grade level status as of 2011-12 • Data obtained from the School District of Philadelphia

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[1] Éxito was intended for high school freshman and sophomores. Juniors and seniors were not eligible to participate. Cohort 1 was eligible to participate in Éxito from 2008-2010. Most were seniors in 2011-12. Cohort 2 was eligible to participate in Éxito from 2009-2011. Most were juniors in 2011-12. Participants could have entered the program in either their freshman or sophomore years.

RESEARCH for **ACTION**

On-Track to Success:
The Fourth Year Evaluation of Congreso's Éxito™ Program

Executive Summary
Prepared by Research for Action
April 2013

Introduction

The Éxito™ initiative of Congreso de Latinos Unidos (Congreso) has partnered with Thomas Edison High School since 2008-2009 with the goal of reducing the school's high dropout rate and increasing graduation rates. The program has received support from a variety of funders in its four-year history including Philadelphia's Department of Human Services (DHS), The Pew Charitable Trusts, the Edna McConnell Clark Foundation, the United Way of South Eastern Pennsylvania, the 21st Century Community Learning Centers, and the Comcast Corporation.

The Éxito™ model has three distinguishing characteristics:

1. The program intentionally recruits 9th and 10th grade students who have exhibited one or more of the "Early Warning Indicators" (EWIs) for dropping out of school.[2]

Research-Based EWIs for High School Dropout[3]

- Failing English or math
- Attending school less than 80% of the time
- Acquiring two or more suspensions

2. The program is run by Congreso, a neighborhood-based multi-service organization, and is situated at Congreso's neighborhood high school, Thomas Edison High School.[4] The Éxito™ model requires that Congreso staff work closely with school administrators, teachers and guidance counselors to identify participants and to run the after-school program on school grounds.

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[2] Éxito is open to all students but specifically targets student with EWI's.
[3] Neild, R. & Balfanz, R. (2006). Unfulfilled Promise. Project U-Turn, Philadelphia Youth Network: Philadelphia.
[4] Edison is one of the lowest performing high schools in Philadelphia. In 2011, more than 80% of students were reported as chronically truant and only 46% of students were on-track to graduation. School District of Philadelphia Annual School Report, 2011

3. In addition to the after-school program, which offers project-based learning activities in conjunction with academic support, Éxito™ employs Primary Client Managers (PCM™s) to provide case management supports to students with greater needs.

The Éxito™ program is pioneering; it is one of only a few community-based strategies for addressing the dropout problem that has been documented.

Previous Evaluation Findings: 2008-2011

RFA has followed the development of the program since its inception and has documented student outcomes for the first two cohorts to enter the program in 2008 and 2009. RFA's student outcomes analysis in the first two years of the evaluation found that Éxito™ students were:

- Attending school more frequently than similar students at Edison High School (Years One and Two);
- Less likely to fail math and English classes than similar students at Edison High School (Year Two); and,
- Equally likely to be promoted to the next grade level (Year One).

In Year Three, RFA's analysis focused specifically on Éxito™ participants who entered the program with EWIs. The analysis found that level of participation mattered for Éxito™ participants with EWIs. These students were:

- Attending school more frequently than both non-Éxito™ and non-EWI Éxito™ peers when they participated in Éxito™ at least 34% of program days.
- No more likely to fail math and English than both non-Éxito™ and non-EWI Éxito™ peers if they attended the program frequently—28% of program days for math and 45% of program days for English.
- Less likely to drop out of school than both non-Éxito™ and non-EWI peers when they attended 15% of program days.[5]
- Equally likely to be on credit level as non-Éxito™ and non-EWI Éxito™ peers when they attended at least 30% of the program days.

However, the analysis failed to reveal a decrease in suspensions for Éxito™ participants.[6]

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[5] RFA did not begin to examine dropout rates until Year Three evaluation. The evaluation in previous years looked at school attendance, course passage, and suspensions.

[6] Note: The analysis of suspensions in Year 2 and 3 revealed Éxito™ participants incurred more suspensions than a comparison group. However, this analysis was limited by use of year-end total suspensions as the outcome variable, which did not allow us to account for a students' entry date into the program. We corrected this limitation in Year Four by using monthly suspension data and found no significant differences between the number of suspensions of Éxito™ participants for 11 months prior to entering the program and for 11 months after entering the program.

Year Four Research Methods: 2011-12

This Year Four report continues to follow the first two cohorts of program participants who had completed the Éxito™ program by 2011-12 and examines whether there was any lasting impact of Éxito™ for these students. The report focuses on the program's two long-term outcomes–preventing high school dropout and increasing high school graduation—and also re-examines the early warning indicator outcomes that were the focus of the evaluation in previous years.

Approach to analysis: We compare Éxito™ alumni to a similar group of non-participants who were part of the same cohort, and control for pre-existing differences as well as length of program participation.

Analysis Groups: We divided the cohorts into four analysis groups reflecting both when the students entered Edison High School and when they entered Éxito™.

PCM™ Analysis: We attempted to conduct a separate analysis on the sub-group of students who received PCM™ supports. However, this analysis was limited by small sample size and the lack of a true comparison group. Students are referred to PCM™ supports when they have additional risk factors such as family stress, mental health issues and teen pregnancy. We were unable to match for these additional risk factorings in creating the comparison group therefore, the PCM group is likely to be at higher risk than the comparison group. Results of the PCM™ analysis are available in Appendix D and should be interpreted in light of these limitations.

Summary of Findings

Dropping Out of School

Key for Figures ES-1 and ES-2

	Non- Éxito™		Éxito™
	Period of **Enrollment** in Éxito™		Period **Post Enrollment** in Éxito™

Figure ES-1. Cohort 1A Dropout Rates   Figure ES-2. Cohort 1B Dropout Rates
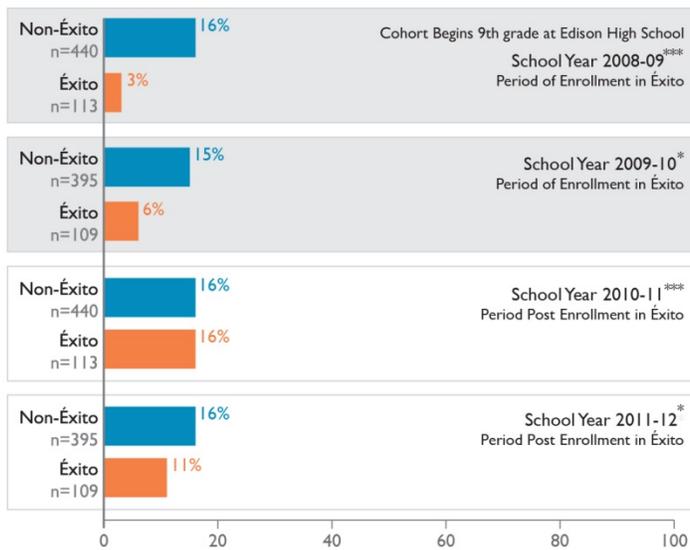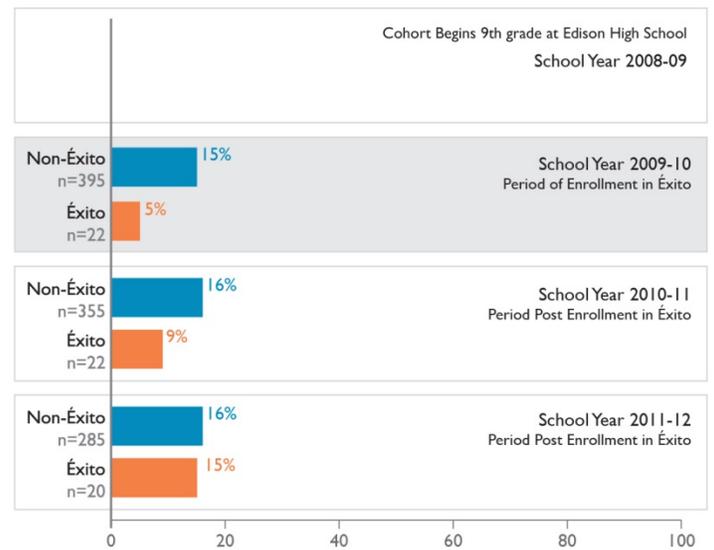
†*p*<0.10; **p*<0.05; ***p*<0.01; ****p*<0.001

- Figures ES-1 and ES-2 show:
    - Éxito™ participants had lower dropout rates than the comparison group during the years they were participating in the Éxito™ program. (Figures ES-1 and ES-2 display outcomes for Cohorts 1A and 1B, but the findings were similar for all analysis groups.)
    - After Éxito™ participants completed the program they dropped out of school at the same rate as non-participants.[7]
- Overall, Éxito™ alumni were found to be consistently (i.e., in three out of the four analysis groups) less likely to drop out by 2011-12 than a similar group of non-participants, after controlling for baseline differences.[8]
- Analysis of all groups reveals that the likelihood of dropping out decreased as program attendance increased.

High School Graduation

- Éxito™ Cohort 1 alumni were more likely to graduate on time than a similar group of non-participants.
- There is a positive relationship between program attendance and graduation; with higher program attendance during 2008-2010, Éxito™ alumni were more likely to graduate on-time in 2011-12.

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[7] Note: This analysis only used "near dropouts", i.e., students who attend school less than 50% of the time. We were not able to use formal dropouts for this outcome because the formal dropout status is often not registered until senior year.
[8] Cohort 1 and Cohort 2 entered Edison at different times, with Cohort 2 entering Edison a year later than Cohort 1. Formal dropout status is cumulative and hence, there would likely be more students in Cohort 1 with a final dropout status than Cohort 2. Suspension outcome examined in this report is also cumulative; hence Cohort 1 will have more suspensions than Cohort 2.

Early Warning Indicators

The Year Four analysis also examined student outcomes in the EWI areas – course passage of math and English, school attendance, and suspensions – as well as students' on-grade level status. In Year 4, the students in Cohorts 1 and 2 were alumni of the program and no longer receiving direct supports in the EWI areas. This analysis tests whether there were any lasting benefits from the supports received while participating in Exito™.

In Year Four, the analysis suggests that Éxito™ alumni do not experience any lasting benefits from program participation in the EWI areas. Éxito™ alumni were not more likely to have better school attendance than their non-Éxito™ peers in 2011-12 and were also not more likely to pass courses than non-Éxito™ peers in 2011-12.

Also Éxito™ Cohort 1 and 2 participants had incurred more cumulative suspensions by 2011-12 than similar students who had never participated in Exito™. However, when controlling for student's level of participation while in Exito™, there was no difference between the cumulative suspensions of Éxito™ students and comparison students.

Recommendations

Program Recommendations

Focus on program participation. The analysis found that Éxito™ was effective when students participated more frequently. Éxito™ is serving a population of students who are disengaged from school. Continuing to find ways to monitor and increase students' levels of program participation is important for ensuring that participants benefit from the program.

Extend supports to students in all grades of high school. The findings in this report suggest that Éxito™ participants need more support in 11th and 12th grades. After students stop participating, dropout rates increase and school attendance and course passage rates of former Éxito™ participants are no longer better than non-participants. Research on dropping out suggests that the phenomenon is driven by a number of factors in the school environment including anonymity and climate issues.[9] Éxito™ students who remain in school will continue to deal with stressful school situations and may need the type of on-going support that Éxito™ provides to successfully navigate these challenges.

Recommendations for Future Research

Replicate and scale-up Éxito™. The evaluation is limited by small sample sizes for each analysis group and particularly for PCM™ clients. Yet, even with a small sample size and lack of power for analysis, we found some positive evidence of program impact. As the program grows and the number of participants increases, a new study could confirm the current findings and provide greater confidence

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[9] Balfanz, R., Letgers, N. (2006). Closing dropout factories: The graduation rate crisis we know and what can be done about it. Education Week, July 12.

in the positive results. Expanding the number of participants receiving PCM™ supports would strengthen any effort to evaluate this component of the program.

Continued attention to program implementation. The Éxito™ program has continued to evolve since the first two cohorts participated and it is important for future research to document the status of implementation. Further, if the program begins to replicate or adds supports for 11th and 12th grade students, implementation research could help to inform the program's development and would be important for understanding student outcomes.

Next Steps

RFA will continue to follow the Éxito™ alumni for another year by continuing to monitor their long-term outcomes. Of particular interest will be the five-year graduation rate for Cohort 1 and the four-year graduation rate for Cohort 2.

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April 2013

The Éxito™ initiative of Congreso de Latinos Unidos (Congreso) has partnered with Edison High School since 2008-2009 with the goal of reducing the school's high dropout rate and increasing graduation rates. The program has received support from a variety of funders in its four-year history, including Philadelphia's Department of Human Services (DHS), The Pew Charitable Trusts, the Edna McConnell Clark Foundation, the Philadelphia Youth Network, the United Way of South Eastern Pennsylvania, the 21st Century Community Learning Centers, and the Comcast Corporation.

The Éxito™ model has three distinguishing characteristics:

1. The program intentionally recruits 9th and 10th grade students who have exhibited one or more of the "Early Warning Indicators" (EWIs) for dropping out of school.[10]

Research-Based EWIs for High School Dropout[11]

- Failing English or math
- Attending school less than 80% of the time
- Acquiring two or more suspensions

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2. The program is run by Congreso, a neighborhood-based multi-service organization, but is situated at Edison High School.[12] The model requires that Congreso staff work closely with school administrators, teachers, and guidance counselors to identify participants and to run the after-school program on school grounds.
3. In addition to the after-school program, which offers project-based learning activities and Homework Help, Éxito™ offers primary client management support (PCM™) provided by case managers to students with higher needs.

The Éxito™ program is pioneering; it is one of only a few community-based strategies for addressing the dropout problem that has been documented.

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[10] Éxito is open to all students in the school but specifically recruits students with EWIs.
[11] Neild, R. & Balfanz, R. (2006). Unfulfilled Promise. Project U-Turn, Philadelphia Youth Network: Philadelphia.
[12] Edison is one of the lowest performing high schools in Philadelphia. In 2011, more than 80% of students were reported as chronically truant and only 46% of students were on-track to graduation. School District of Philadelphia Annual School Report, 2011

Previous Evaluation Findings: 2008-2011

Research for Action (RFA) has followed the development of the program since its inception and has documented student outcomes for the first two cohorts to enter the program in 2008 and 2009 respectively. Over the course of the evaluation, RFA developed a theory of action and examined strengths and challenges of program implementation.[13] See Appendix B for a full summary of these evaluation findings.

RFA's student outcomes analysis in the first two years of the evaluation examined whether Éxito™ students continue to demonstrate EWIs for dropping out of school. The evaluation found promising outcomes for Éxito™ students each year. Éxito™ students were:

- Attending school more frequently than similar students at Edison High School (Years One and Two);
- Less likely to fail math and English classes than similar students at Edison High School (Year Two); and,
- Equally likely to be promoted to the next grade level (Year One).

In Year Three, the analysis focused specifically on Éxito™ participants who entered the program with EWIs. The analysis found that level of participation mattered for Éxito™ participants with EWIs. These students were:

- Attending school more frequently than non-EWI students when they attended Éxito™ at least 34% of the time.
- No more likely to fail math and English than non-EWI students if they attended the program frequently—28% of program days for math and 45% of program days for English.
- Less likely to drop out of school than non-EWI peers when they attended 15% of program days.[14]
- Equally likely to be on credit level as non-EWI peers when they attended at least 30% of the time.

However, the analysis failed to reveal a decrease in student suspensions. In fact, in Years Two and Three, we found that Éxito™ participants were more likely to be suspended than other students. However, our analysis of suspensions was limited because the suspension data used in the analysis was year-end totals which did not allow us to examine the number of suspensions before enrollment in Éxito™ and number of suspensions after enrollment in Exito™. We correct for that limitation in Year 4, using month by month suspension data and examine the number of suspensions before and after enrollment. This analysis found no significant differences in the number of suspensions for Éxito™ and non-Éxito™ students 11 months before enrolling in the program and 11 months after enrolling in the program (See Appendix D).

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[13] The theory of action was developed in Year Two but updated for this report based on findings from Year Three which allowed us to clarify the program inputs and short-term outcomes.

[14] RFA did not begin to examine dropout rates until Year Three evaluation. The evaluations in previous years looked at school attendance, course passage, and suspensions.

Research Methods for Year Four Report

This Year Four report continues to follow the first two cohorts of program participants who had completed the Éxito™ program by 2011-12 and examines whether there was any lasting impact of Éxito™ for these students. The report revisits the EWI outcomes presented in earlier reports. Research has found these factors less predictive of dropping out of school for students who have already made it to their junior and senior year of high school.[15] More important for this year's analysis are the program's two long-term outcomes – preventing high school dropout and increasing high school graduation – in the 2011-12 school year. We focus on these outcomes because the first cohort was expected to graduate in 2011-12.

Analysis Groups

For the purposes of this analysis, we divided the cohorts into four analysis groups reflecting both when they entered Edison High School and when they entered Éxito™. Table 1 describes the cohorts.[16] The Year Four report focuses on the far right column of Table 1 (below), the 2011-12 school year, when program participants were no longer participating in Éxito™. We refer to these past participants as Éxito™ alumni throughout this report.

Table 1. Cohort Groups Examined in This Report

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[15] Other factors such as juvenile justice involvement and teen pregnancy are more likely to predict dropping out for this age group. Neild, R., Balfanz, R. (2011). Unfulfilled promise; Project U-Turn, Philadelphia Youth Network: Philadelphia

[16] For more background about the cohorts, including their EWIs and level of participation in the Éxito after-school program and PCM™™ supports, see Appendix C.

Approach to Analysis

To understand the relationship between participation in the Éxito™ program and outcomes, RFA compared Éxito™ participants in Cohorts 1 and 2 with a similar group of Edison High School students entering ninth grade in the same year but who never participated in Éxito™.

The analysis accounted for demographic variables that the literature suggests influence student success. The differences we were able to control for include demographics, pre-existing EWIs, and 8th grade PSSA scores.[17] Appendix A provides our methodology for estimating the models.

In addition, descriptive analyses were also conducted. Our descriptive analyses compared the outcomes of Éxito™ alumni to non-participants; it does not, however, control for baseline differences. The graphics depicting the descriptive analyses are in Appendix D. In general, the descriptive analyses aligned with the findings of the regression analyses.

PCM™ Analysis: We attempted to conduct a separate analysis on the sub-group of students who received PCM™ supports. However, this analysis was limited by small sample size and the lack of a true comparison group. Students are referred to PCM™ supports when they have additional risk factors such as family stress, mental health issues and teen pregnancy. We were unable to match for these additional risk factorings in creating the comparison group therefore, the PCM group is likely to be at higher risk than the comparison group. Results of the PCM™ analysis are available in Appendix D and should be interpreted in light of these limitations.

Interpretation of Findings

Because the analysis was conducted for four separate groups, findings may be different for each group. In this report we present the findings for which there was the most "consistent evidence." We considered a finding consistent when the direction of the finding (positive or negative) was the same for three of four analysis groups, even if the finding was only found to be significant for one analysis group. We would classify findings as inconsistent when there was equal number of positive and negative findings. As seen in Table 1, sample sizes were fairly small for three of four analysis groups, with Cohort 1A being the largest (N=113).

A Note about Terminology: Defining Dropout

Our definition of dropout mirrors the definition used in other research on dropping out. It includes both formal dropouts as well as "near dropouts," or students who attend school less than 50% of the time but have not formally been designated by the school as dropouts.[18]

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[13] We control for the baseline differences between Éxito versus non-Éxito participants using logistic regression and OLS regression. When conducting the regression analyses, baseline differences were controlled for using data from the year prior to enrollment in Éxito. Thus, for Cohort 1A and Cohort 2A, it is the 8th grade data while for Cohort 1B and Cohort 2B, it is the 9th grade data. This also explains why the Cohort 1 and Cohort 2 were split into separate analysis groups depending on time of entry into Éxito.

[18] Neild, R. & Balfanz, R. (2006). Unfulfilled Promise. Project U-Turn, Philadelphia Youth Network: Philadelphia.

In This Report

This report examines the dropout and graduation rates of Éxito™ alumni and provides an update of the analysis of EWIs for Éxito™ alumni in the 2011-12 school year, after their involvement in the Éxito™ program had ended.[19] For each outcome we address the following questions:

- Are Éxito™ alumni more likely to demonstrate stronger outcomes than non-participants in 2011-12?
- Is level of participation in the Éxito™ program between 2008 and 2011 related to participant outcomes in 2011-12?

The analysis of dropout rates and EWIs also addresses changes over time. While in previous evaluation reports, students from either Cohort 1 and/or Cohort 2 were still participating in Exito™, neither cohort was participating in the program by Year Four. We examine dropout rates between the time participants were enrolled in the program and the time period after they exited the program. We also compare the results of this Year Four analysis of EWI outcomes with results from analysis in previous years to understand the effect of Éxito™ a year or more after program participation has ended. For these outcomes we consider the following questions:

- Did the dropout rates of Éxito™ participants change from the time they participated in the program through the years after they exited the program?
- Is Éxito™ participation between 2008 and 2011 still related to better school attendance and course-passage rates than among non-participants in 2011-12? Is Éxito™ participation between 2008 and 2011 related to fewer cumulative suspensions than are received by non-participants in 2011-12?

The report is structured as follows:

- Chapter 1: Staying in School
- Chapter 2: High School Graduation (for Cohort 1, who were seniors in 2011-12)
- Chapter 3: Early Warning Indicators
- Chapter 4: Summary and Recommendations
- Appendices A-I: Includes summary of implementation results from previous evaluations, PCM™ analyses, and the full results of each regression analysis

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[19] Cohort 1 is two years out of the program while Cohort 2 is one year out of the program.

Chapter 1: Staying In School

In this section, we compare Éxito™ alumni with similar students in the same cohort to answer the following questions:

1.1. Did the dropout rates of Éxito™ participants change from the time they participated in the program through the years after they exited the program?

1.2. Were Éxito™ alumni less likely to have dropped out of school by 2011-12 than non-participants?

1.3. Is a student's level of participation in the Éxito™ program between 2008 and 201 related to their likelihood of dropping out of school by 2011-2012?

Question 1.1: Did the dropout rates of Éxito™ participants change from the time they participated in the program through the years after they exited the program?

Figures 1-4 show the dropout rates (in percentages) over time. The key applies to all four figures.

Key for Figures 1-4

	Non- Éxito™		Éxito™
	Period of **Enrollment** in Éxito™		Period **Post Enrollment** in Éxito™

Figure 1. Cohort 1A Dropout Rates

Non-Éxito n=440	16%	Cohort Begins 9th grade at Edison High School School Year 2008-09*** Period of Enrollment in Éxito
Éxito n=113	3%	
Non-Éxito n=395	15%	School Year 2009-10* Period of Enrollment in Éxito
Éxito n=109	6%	
Non-Éxito n=440	16%	School Year 2010-11*** Period Post Enrollment in Éxito
Éxito n=113	16%	
Non-Éxito n=395	16%	School Year 2011-12* Period Post Enrollment in Éxito
Éxito n=109	11%	

Figure 2. Cohort 1B Dropout Rates

		Cohort Begins 9th grade at Edison High School School Year 2008-09
Non-Éxito n=395	15%	School Year 2009-10 Period of Enrollment in Éxito
Éxito n=22	5%	
Non-Éxito n=355	16%	School Year 2010-11 Period Post Enrollment in Éxito
Éxito n=22	9%	
Non-Éxito n=285	16%	School Year 2011-12 Period Post Enrollment in Éxito
Éxito n=20	15%	

Figure 3. Cohort 2A Dropout Rates

Non-Éxito n=424	14%	Cohort Begins 9th grade at Edison High School School Year 2009-10* Period of Enrollment in Éxito
Éxito n=48	4%	
Non-Éxito n=389	13%	School Year 2010-11† Period of Enrollment in Éxito
Éxito n=46	4%	
Non-Éxito n=331	12%	School Year 2011-12† Period Post Enrollment in Éxito
Éxito n=40	23%	
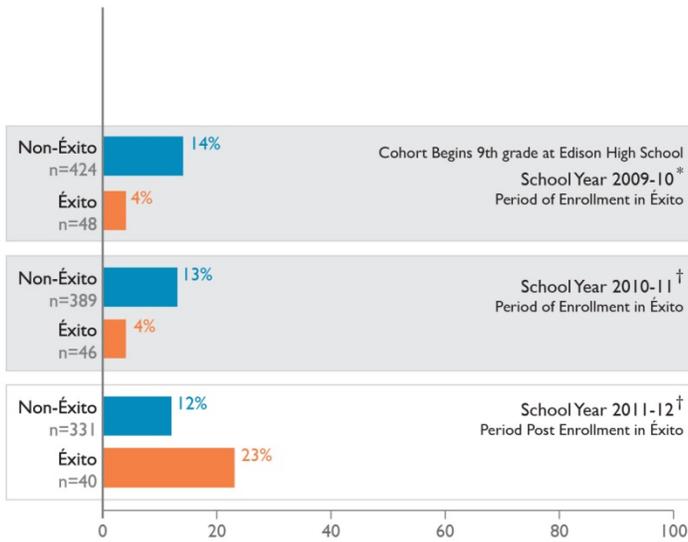
Figure 4. Cohort 2B Dropout Rates

		Cohort Begins 9th grade at Edison High School
Non-Éxito n=389	13%	School Year 2010-11† Period of Enrollment in Éxito
Éxito n=46	3%	
Non-Éxito n=331	12%	School Year 2011-12† Period Post Enrollment in Éxito
Éxito n=40	5%	
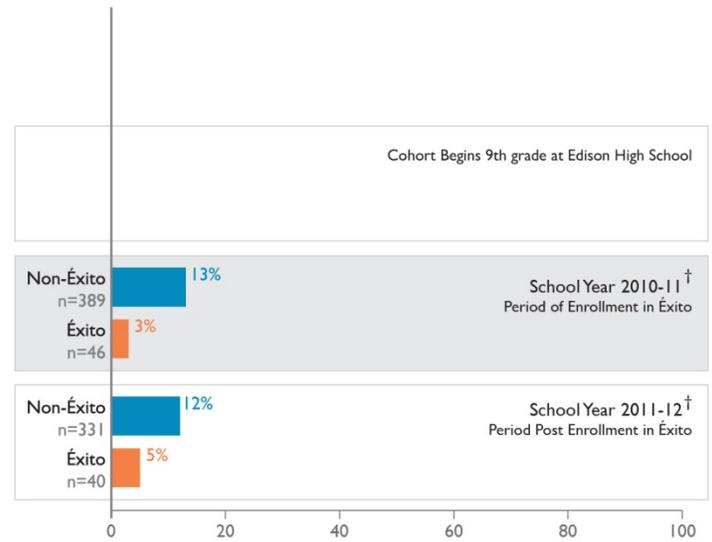
†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Findings:

- During Éxito™ enrollment, participants had lower dropout rates than the non-participants.
- After completion of Éxito™, alumni dropped out of school at the same rate as non-participants.
    - For example, as seen in Figure 1, a significantly smaller percentage of Cohort 1A Éxito™ participants dropped out of school between 2008-09 and 2009-10 when they were enrolled in Éxito™. In the years following Éxito™ participation, comparable percentages of Éxito™ alumni and non-participants dropped out of school.
    - Similarly, for Figure 2, a smaller percentage of Cohort 1B Éxito™ participants dropped out of school in 2009-2010 when they were participating in Éxito™. This difference was not statistically significant. In the years following Éxito™ participation, comparable percentages of Éxito™ alumni and non-participants dropped out of school.
    - A similar pattern of dropout rates were also found for Cohorts 2A and 2B, as shown in Figures 3 and 4.

The following key applies to the regression tables in the proceeding chapters.

Key for Regression Tables			
Positive Finding	**Negative Finding**	**Neutral Finding**	**Inconsistent Finding**
●	●	●	●
Definition of Logistic Regression: Logistic Regression is a type of statistical modeling that can be used when the outcome variable is a categorical variable, for example, a dichotomous variable such as dropout versus non-dropout.			
Definition of Ordinary Least Squares (OLS) Regression: Ordinary least squares regression is a statistical modeling that can be used to predict a continuous outcome using a set of independent variables. For example, it can be used to predict the number of suspensions based on students' prior academic achievement, prior EWIs, and demographic variables.			

Question 1.2: Were Éxito™ alumni less likely to have dropped out of school by 2011-12 than non-participants?

Table 2 provides a summary of the analyses we conducted to answer this question.

Table 2. Regression Analysis for Dropout

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading
Who? Éxito™ alumni versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Dropout in 2011-12

Dropout outcome for Éxito™ alumni vs. non-Éxito™ participants			
Cohort 1A (N=99 vs. 355)	**Cohort 1B (N=21 vs. 355)**	**Cohort 2A (N=43 vs. 370)**	**Cohort 2B (N=38 vs. 370)**
0.62[†]	0.56	1.31	0.51

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note: A number greater than 1 would indicate a greater likelihood while a number less than 1 would indicate a lesser likelihood.

Findings:

- Éxito™ alumni were less likely to drop out than a similar group of non-participants, after controlling for baseline differences.[20]
- The biggest difference was found in Cohort 1A, where students were significantly less likely to drop out than non-participants. This is especially meaningful because Cohort 1A has the largest number of participants. Please refer to Appendix F for the full results of the logistic regression analysis.

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[20] Cohort 1 and Cohort 2 entered Edison at different times, with Cohort 2 entering Edison a year later than Cohort 1. Formal dropout status is cumulative and hence, there would likely be more students in Cohort 1 with a final dropout status than Cohort 2. Suspension outcome examined in this report is also cumulative; hence Cohort 1 will have more suspensions than Cohort 2.

Question 1.3: Is a student's level of participation in the Éxito™ program between 2008 and 2011 related to their likelihood of dropping out of school in 2011-12?

Table 3 describes the analyses we conducted to answer this question.

Table 3. Regression Analysis for Dropout while Considering Level of Program Participation During the Period of Program Involvement

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading, and days of program attendance. (The comparison group is defined by having 0 days of attendance.)
Who? Éxito™ alumni versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Dropout in 2011-12

Dropout outcome for Éxito™ alumni when considering level of program attendance			
Cohort 1A (N=99 vs. 355)	**Cohort 1B (N=21 vs. 355)**	**Cohort 2A (N=43 vs. 370)**	**Cohort 2B (N=38 vs. 370)**
0.99*	0.98	0.99	0.93

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note: A number greater than 1 would indicate a greater likelihood while a number less than 1 would indicate a lesser likelihood.

Findings:

- The likelihood of dropping out decreased as program attendance increased. This finding was consistent across all analysis groups.[21]
- The difference was most pronounced for Cohort 1A. When Cohort 1A students attended Éxito™ for at least 27 days (where 27 days is the average number of days of attendance for Cohort 1 students), they were 0.7 times as likely (or 30 percent less likely) to drop out of high school than non-participants. Conversely, we can say that the non-participants were 1.4 times as likely (or 40% more likely) to drop out than Éxito™ alumni.

Please refer to Appendix F for the detailed results of the logistic regression analysis.

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[21] The odds ratio obtained from the logistic regression analysis was 0.99. Thus, for each day attended, these Éxito students were 0.99 less likely to drop out of school.

Summary of Findings: Dropout Rates

- Éxito™ was influential in keeping students from dropping out of school while they were participating in the program.
- However, benefits of the program dissipated when students were no longer participating in the program.
- Participating more frequently in the Éxito™ program increased students' likelihood of staying in school through 2011-12.

Chapter 2: Graduation Rates

This chapter examines the following three questions related to high school graduation for Cohort 1 students who were seniors in 2011-12:

2.1. Are Cohort 1 Éxito™ alumni more likely to graduate from high school within four years than non-participants from the same cohort?

2.2. Is level of participation in the Éxito™ program during 2008-2010 related to the likelihood of graduating on time in 2011-12?

We examine each of these questions below.

Question 2.1: Are Cohort 1 Éxito™ alumni more likely to graduate from high school within four years than non-participants from the same cohort?

Table 4 describes the analysis we used to answer this question.

Table 4. Regression Analysis for Graduation

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading
Who? Cohort 1 Éxito™ alumni versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Graduation in 2011-12

Graduation outcome for Éxito™ alumni vs. non- Éxito™ participants			
Cohort 1A (N=111 vs. 418)	**Cohort 1B (N=21 vs. 418)**	**Cohort 2A**	**Cohort 2B**
1.05	3.03[*]	N/A	N/A

†p<0.10; *p<0.05; **p<0.01; ***p<0.001

Note: A number greater than 1 would indicate a greater likelihood while a number less than 1 would indicate a lesser likelihood.

Findings:

- Éxito™ Cohort 1 alumni were more likely to graduate on time than a similar group of non-participants. In particular, Cohort 1B alumni were three times more likely to graduate on time than a similar group of non-participants, as evidenced by the odds ratio.[22] For the actual results from the logistic regression analysis, please refer to Appendix F.
- It is important to note that while a higher percentage of Cohort 1A alumni graduated than non-participants, still only 45% of this group graduated on time (see Appendix E).

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[22] The odds ratio represents the odds that an outcome will occur given a particular exposure (participation in the Éxito program), compared to the odds of the outcome occurring in the absence of that exposure (non-participation in the Éxito program).

Question 2.2: Is level of participation in the Éxito™ program between 2008 and 2012 related to the likelihood of graduating on time in 2011-12?

Table 5 describes the analysis we used to answer this question.

Table 5. Regression Analysis for Graduation while Considering Level of Program Attendance During the Period of Program Involvement

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading, and days of program attendance. (The comparison group is defined by having 0 days of attendance.)
Who? Cohort 1 Éxito™ alumni versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Graduation in 2011-12

Graduation outcome for Éxito™ alumni when considering level of program attendance			
Cohort 1A **(N=111 vs. 418)**	**Cohort 1B** **(N=21 vs. 418)**	**Cohort 2A**	**Cohort 2B**
1.02**	1.04*	**N/A**	**N/A**

†*p*<0.10; *p<0.05; **p<0.01; ***p<0.001

Note: A number greater than 1 would indicate a greater likelihood while a number less than 1 would indicate a lesser likelihood.

Finding:

- The more students attended Éxito™ between 2008 and 2010, the more likely they were to graduate in 2011-12. The logistic regression determined that for each additional day attended, students in both analysis groups were more likely to graduate from high school on time.
- Cohort 1A was two percent more likely to graduate on time for each day of Éxito™ attended, while Cohort 1B was four percent more likely to graduate from high school on time for each day of Éxito™ attended.
- In other words, for every 27 days of attendance (the average number of days of attendance for Cohort 1 students), Éxito™ alumni in Cohort 1A were 1.5 times more likely to graduate and Éxito™ alumni in Cohort 1B were three times more likely to graduate from high school. For the results from the logistic regression analysis, please refer to Appendix F.

Summary of Findings: High School Graduation

- Cohort 1 alumni, were more likely to graduate on time than non-participants.
- A positive relationship was found between frequency of program attendance and graduation.

Chapter 3: Early Warning Indicator Four Year Trends

As in previous years, RFA's Year Four analysis examined student outcomes in the EWI indicator areas – course passage of math and English, school attendance and suspensions – as well as students' on-grade level status. Analyses in previous years found Éxito™ participants to have had better school attendance than non-participants, and to have been more likely to pass Math and English courses than non-participants. In this chapter, we compare the results of the analysis conducted in Year Four (aggregated across the four analysis groups) with the analysis conducted in previous years, reporting on each of the four evaluation years. Through this analysis, we examine whether the program had any lasting impact on Éxito™ alumni in the EWI areas.

Our analysis of suspensions does not compare the results of the Year Four analysis to analysis done in previous years due to the limitations of the previous year's analysis described earlier. Instead, we look at cumulative suspensions as of 2011-12 and examine whether level of involvement in Éxito™ between 2008 and 2011 is related to cumulative suspensions in 2011-12.

This section addresses the following question for school attendance, course passage and grade-level status:

3.1. Is Éxito™ alumni participation between 2008 and 2011 still related to better school attendance, academic performance and on grade level status than non-participants in 2011-12?

We address the following questions related to cumulative suspensions in 2011-12:

3.2. Are Éxito™ alumni demonstrating fewer cumulative suspensions than non-participants in 2011-12?
3.3. Is level of participation of Éxito™ alumni between 2008 and 2011 related to the likelihood of receiving suspensions?

Each of these questions is addressed in detail below.

The following key applies to the regression and other results tables that follow.

Key for Four Year Results Tables			
Positive Finding	**Negative Finding**	**Neutral Finding**	**Inconsistent Finding**
🟢	🔴	🟡	⚪

Note: In Year 1-3, a finding is positive or negative when the results were statistically significant and neutral when they are not statistically significant. The label "inconsistent" was not relevant to findings in the first three years. In Year Four, we classify the findings somewhat differently because there were four analysis groups. A finding is considered positive or negative when the direction of the finding (positive or negative) was the same for three of four analysis groups, even if the finding was only found to be significant for one analysis group. We would classify findings as inconsistent when there was equal number of positive and negative findings and neutral when there is no different between treatment and control groups for all analysis groups.

Question 3.1: Are Éxito™ alumni continuing to demonstrate better school attendance, academic performance, and on-grade level status than non-participants in the same cohort?

Table 6 describes the analysis we used to answer this question in Year Four.

Table 6. Regression Analysis for School Attendance, Academic Performance, and On-Grade Level in 2011-12 for All Participants, Including Students Receiving PCM™ Supports

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading,
Who? 3.1. Éxito™ alumni versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? School attendance, pass math, pass English, and on grade level

School Attendance

We examined school attendance of the Éxito™ alumni in 2011-12 using the threshold identified as an EWI, *i.e.,* attending school less than 80% of the time. Table 7 below displays the results of analysis conducted for school attendance each year for the last four years. The column on the far right shows the result of the Year Four analysis, aggregated across all four analysis groups. The first three columns show the results of the analysis of school attendance in the first three years of the evaluation.

Table 7. School Attendance Outcome Over Time

School Attendance

| Éxito™ participants attended school more frequently than a comparison group of similarly situated students at their high school | Éxito™ participants who entered the program with an EWI were attending school more frequently than students in the non-EWI comparison group when they attended the program at least 34% of the time | Éxito™ alumni were consistently less likely than non-participants to attend school more than 80% of the time |
| Year One Findings 2008-2009 | Year Two Findings 2009-2010 | Year Three Findings 2010-2011 | **Year Four Findings 2011-2012** |

Findings for 2011-12:

- In contrast to findings in three previous years, Éxito™ alumni were consistently less likely than non-participants in the same cohort to attend school more than 80% of the time.
- These findings might suggest that the benefits of Éxito™ with respect to school attendance disappear after students are no longer participating in the program.

Academic Performance

We defined academic performance of Éxito™ alumni using two measures: Passing math and Passing English. Table 8 summarizes the results of analyses conducted each year over the last four years of the evaluation. The column on the far right shows the aggregated results of the 2011-12 analysis.[23] The first three columns show the results of the analysis of academic performance in the first three years of the evaluation.

Table 8. Academic Performance Outcome Over Time

Academic Performance *(The data should be interpreted with caution given the amount of missing data for math and English grades)*			
Éxito™ participants were no more likely to pass math or English than comparison group	Éxito™ participants were less likely to fail math than non-participants	Éxito™ participants who entered the program with an EWI were no more likely to fail math and English than non-EWI comparison students when they attended the program a sufficient amount of time	The findings were inconsistent from one cohort to another cohort, as well as inconsistent for math and English
Year One Findings 2008-2009	Year Two Findings 2009-2010	Year Three Findings 2010-2011	**Year Four Findings 2011-2012**

Findings for 2011-12:

- Unlike the finding in previous years, Éxito™ alumni were not consistently more likely to pass math or English than non-participants.
- Again, Éxito™ alumni were no longer receiving direct academic support from the program, which may help to explain why we cannot find consistent evidence that Éxito™ alumni were performing better than non-participants from the same cohort.

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[23] Results were aggregated across all four analysis group. See the key on page 14 for an explanation of how data were aggregated.

On-Grade Level Status

We defined the grade level status of Éxito™ alumni using the current grade level assigned by the School District of Philadelphia in 2011-12. This definition does not account for "credits earned," which are important in determining whether students are on-track to graduation. Table 9 summarizes the results of analyses conducted each year over the last four years of the evaluation. The column on the far right shows the aggregated results of the 2011-12 analysis. The first three columns show the results of the analysis of on-grade level status in the first three years of the evaluation.

Table 9. On Grade Level Status Over Time

On Grade Level Status			
Éxito™ participants were equally likely to be promoted to the next grade level as non-participants		Éxito™ participants who entered the program with an EWI were equally likely to be on credit level as non-EWI peers when they attended at least 30% of the time	Éxito™ alumni were consistently less likely to be on grade level than non-participants
●	●	●	●
Year One Findings 2008-2009	Year Two Findings 2009-2010	Year Three Findings 2010-2011	**Year Four Findings 2011-2012**

Findings for 2011-12:

- Unlike the finding in previous years, Éxito™ alumni were less likely to be on-grade level than non-participants.

Question 3.2: Are Éxito™ participants demonstrating fewer suspensions than similar students?

Due to the limitations of the suspension analysis in previous years, we do not compare the analysis of suspensions in Year Four to previous years' findings. This section reports on analysis conducted based on Éxito™ alumni's cumulative suspensions as of 2011-12.

Table 10 describes the analyses we conducted to answer this question.

Table 10. Regression Analysis for Suspensions

How? Ordinary Least Squares Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading,
Who? Éxito™ alumni versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Cumulative suspensions from the school year after enrollment up until 2011-12

Suspension outcome for Éxito™ vs. non-Éxito™ alumni

Cohort 1A (N=109 vs. 407)	Cohort 1B (N=22 vs. 361)	Cohort 2A (N=46 vs. 394)	Cohort 2B (N=38 vs. 331)
0.40*	0.73***	0.30	0.09

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note: A number greater than 0 (positive) would indicate more suspensions while a number less than 0 (negative) would indicate less suspensions.

Findings for 2011-12:

- The average cumulative number of suspensions as of the 2011-12 school year for Éxito™ alumni was higher than for non-participants. The findings were significant for Cohort 1A and 1B. For actual results of the OLS regression analysis on suspensions, please refer to Appendix F.

Question 3.3: Is level of participation in Éxito™ related to having more cumulative suspensions in 2011-12?

Table 11 describes the analyses we conducted to answer this question.

Table 11. Regression Analysis for Suspensions while Considering Level of Program Participation During the Period of Program Involvement

How? Ordinary Least Squares Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading, and days of program attendance. (The comparison group is defined by having 0 days of attendance.)
Who? Éxito™ alumni and non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Cumulative suspensions from the school year after enrollment up until 2011-12

Cumulative Suspension outcome in 2011-12 for Éxito™ alumni considering their level of program participation while in Éxito™ (2008-2011).

Cohort 1A (N=109 vs. 407)	Cohort 1B (N=22 vs. 361)	Cohort 2A (N=46 vs. 394)	Cohort 2B (N=38 vs. 331)
0.00	0.00	0.00	0.00

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note: A '0' would indicate no difference in the number of suspensions.

Findings:

- Across all analysis groups, there was no difference in the number of cumulative suspensions accrued by 2011-12 between Éxito™ alumni and non-Éxito™ participants from the same cohort when their historic level of program participation is taken into account. For actual results of the regression analysis on suspensions, please refer to Appendix F.

Summary of Findings: EWIs

- Éxito™ alumni who attended the program more frequently while enrolled, did not demonstrate better school attendance, course passage rates or on-grade level status in 2011-12 than a comparison group.
- Éxito™ alumni had more cumulative suspensions as of 2011-12 than non-participants even after controlling for baseline differences. However, when we consider the amount of time spent in the Éxito™ program, the differences in the number of suspensions between Éxito™ participants and non-Éxito™ students becomes non-significant.

Chapter 4: Summary and Recommendations

RFA's Year Four evaluation finds several promising outcomes for Éxito™ alumni, especially the program's effect on student dropout and graduation rates. Importantly, these benefits were evident even after students had aged out of the program. Findings from the Year Four evaluation add to the evidence base of Éxito™'s success and point to the promise and potential of Éxito™ as a model for replication.

Summary of Findings

- Éxito™ students had lower dropout rates than non-participants while enrolled in the Éxito™ program but their dropout rates increased to a level similar to the comparison after they aged out of the program.
- Éxito™ alumni, particularly those who attended the program more frequently while enrolled in Éxito™, were more likely than non-participants to graduate from high school in four years.
- Unlike the findings from previous evaluations, the Éxito™ alumni were not more likely than non-participants to attend school more frequently, pass math and English at a higher level, or be on-grade level in 2011-12.
- Éxito™ alumni demonstrated higher levels of cumulative suspensions in 2011-12 than non-participants. However, there was no difference between the cumulative suspensions of Éxito™ alumni and non-participants when their level of participation while enrolled in the program was taken into consideration.
- The long-term effect of the Éxito™ program was evident particularly with regard to graduation rates. However, the dropout rates of alumni increased to the level of the non-participants from the same cohort once they were no longer involved in the program. In addition, Éxito™ alumni's school attendance, course passage rates and likelihood of being on-grade level was no different from the similar students who never attended the program.

Program Recommendations

Éxito™ staff should focus on program participation. Our analysis found that Éxito™ was most effective when students participated frequently. Éxito™ is serving a population of students who are disengaged from school; continuing to find ways to systematically monitor and increase students' level of program participation is important to ensuring that participants have the greatest chance to benefit from the program.

Taken together, these findings suggest that Éxito™ participants need more support in 11th and 12th grade. The program should consider extending supports to students until they graduate from high school. While the program had a lasting positive impact of Éxito™ alumni's likelihood of graduating on-time, alumni did not fare as well in other areas once they were no longer involved in the program. Research on dropout suggests that the phenomenon is driven by a number of factors in the school environment, including anonymity and climate issues.[24] As Éxito™ works to keep students in school, students that complete the program continue to deal with stressful school-level

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[24] Balfanz, R., Letgers, N. (2006). Closing dropout factories: The graduation rate crisis we know and what can be done about it. *Education Week*, July 12.

factors and could benefit from the on-going support that Éxito™ provides to students to help them more successfully navigate these challenges.

Develop strategies for addressing student suspensions. Historically, Éxito™ has not been found to reduce student suspensions. Éxito™ should consider why it has had limited impact on reducing suspensions and how it may strengthen its impact in this area. Case management is the primary strategy used by Éxito™ for addressing behavioral issues leading to suspensions. However, case managers may need even more tools and strategies to support students with these issues.

Recommendations for Future Evaluation

RFA will continue to follow the Éxito™ program for one more year and will continue to monitor the program's long-term outcomes. Of particular interest will be the five-year graduation rate for Cohort 1 and the four-year graduation rate for Cohort 2.

Replication and scale-up of Éxito™ would provide the opportunity to further solidify the evidence about the program's impact. RFA's evaluation is limited by small sample sizes for each analysis group. However, even with a small sample size and lack of power for analysis, some positive evidence of the program's effect on students was found. Scaling the Éxito™ program with large sample sizes will go further in solidifying this evidence. Together, replication and scale-up of Éxito™ will allow RFA as evaluators to generalize the effectiveness of the program. However, replication efforts may require Éxito™ to fully codify its model. Clarifying and codifying the model would be an important first step in ensuring program fidelity.

Continue to document the development of program implementation and core programming practices. The Éxito™ program has continued to evolve since the first two cohorts participated and it would be important for future research to document the status of implementation. If the program is replicated or adds supports for 11th and 12th grade students, implementation research could help to inform its development and could serve to better understand student outcomes.

Conclusion

Éxito™ is a program that continues to show promise. Research findings demonstrate that a community-based organization can work with a school to reduce the dropout rate and improve the graduation rates. However, the evaluation also points to the tension for community-based organizations in partnering with underperforming schools; the benefits of their efforts are fragile in the context of an underperforming school. This evaluation suggests that students need continued support throughout their tenure in these schools to stay on track to graduation.

Appendix A: Methodology

This section describes the methodology used in the analyses for the report.

Data

Data was obtained from Congreso's UNIDAD ETO database and the School District of Philadelphia (SDP). The SDP data obtained was then merged with the Congreso attendance data using the student ID number.

Population Studied

In the data request of SDP, first-time ninth graders at Edison in Cohort 1 (2008-09) and Cohort 2 (2009-10) were pulled. Their school district data that included both academic and behavioral data from 2007-08 to 2011-12 were obtained.

The treatment group was defined as those students who enrolled in the Éxito™ program during their first or second year at Edison. Enrollment in the Éxito™ program for treatment students must be at least one day. One student was recorded as enrolling and exiting within the same day in the Éxito™ program. This student was not included in the analysis.

The comparison group was defined as those students who were in Cohort 1 or Cohort 2 at Edison who were not enrolled in the Éxito™ program.

Students that were excluded from the analysis were:

- One student who enrolled and exited the program on the same day
- Éxito™ students that were not part of Cohort 1 or Cohort 2 at Edison

It should also be noted that there were eight students in the Congreso dataset for whom we did not have a SDP ID, and were therefore unable to be linked to the SDP dataset. Hence, they could have ended up being in the comparison group.

Analysis Method

Three analyses were conducted:

1. Éxito™ students who were enrolled for at least one day in the program versus non-Éxito™ students
2. Éxito™ student who also had PCM™ (regardless of when they had PCM™) versus non-Éxito™ students
3. Students who had PCM™ including those who were never enrolled in Éxito™ (there were 12 students who had PCM™ but never enrolled in Éxito™) versus non-Éxito™ students

The comparison students in all three analyses were the same. These were the students who were never enrolled in Éxito™ or ever had PCM™.

Variables Used in Propensity Score to Control for Baseline Differences

- Gender
- Ethnicity (i.e., Latino or not)
- Disability indicator
- LEP indicator
- EWI indicator
- PSSA math
- PSSA reading

Outcomes Examined

- Graduated on time (yes, no)
- Dropout (yes, no)
- On-grade level (yes, no)
- Attendance at 80% or more (yes, no)
- Passed math (yes, no)
- Passed English (yes, no)
- Suspensions (cumulative number of suspensions)

Graphs presented in the report show the percentage of Éxito™ students and comparison students exhibiting the outcomes. Significant differences between the two groups were tested using: Fisher Exact test for outcomes that were (Yes, No); and, *t*-test for outcomes that were continuous (suspensions).

Propensity Scores Used in Logistic Regression and OLS Regression to Control for Baseline Differences

It has been shown that adjustment for the propensity score is sufficient to remove baseline differences.[25] For the analyses in this report, the outcomes were modeled as a function of a treatment group indicator (where 1=Éxito™ participants and 0=non-Éxito™ participants) and the propensity score. The significance of the treatment group indicator would indicate whether participation in Éxito™ had been effective, adjusted for baseline differences through the propensity score. Put in equation form,

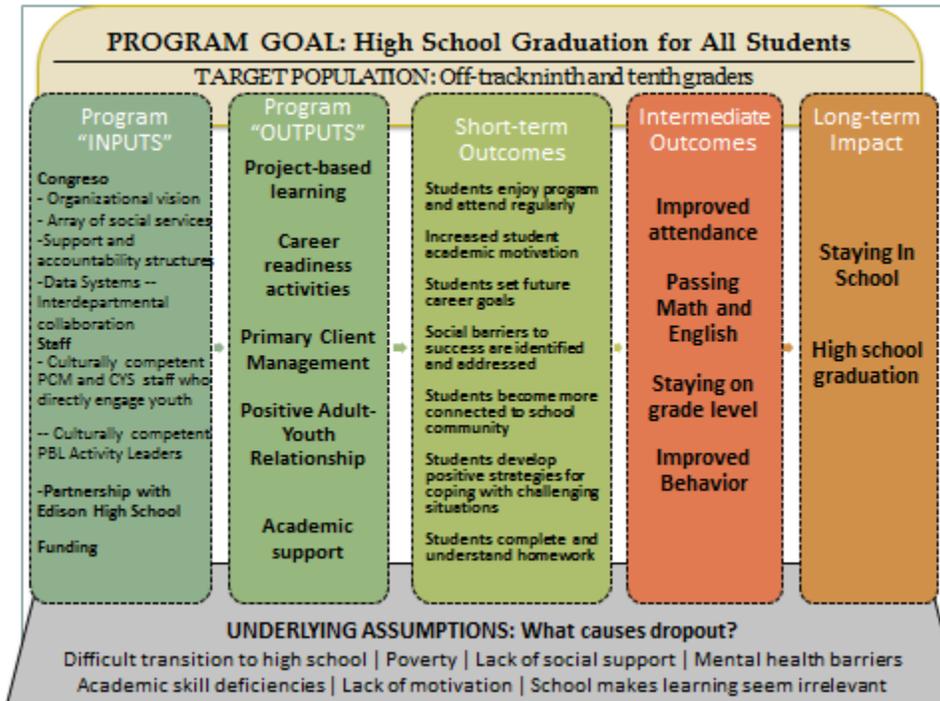$$Outcome = a + b(\text{treatment group indicator}) + c(\text{propensity score})$$

The values that were presented in the tables in the report were estimated values of *b* that would indicate the impact of the Éxito™ program on students as compared to comparison students.

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[25] Rosenbaum, P., & Rubin, D. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika, 70*(1), 41-55.

Appendix B: Previous Evaluation Findings (Program Inputs, Outputs and Short-Term Outcomes)

Figure B1: Éxito™ Theory of Action

PROGRAM GOAL: High School Graduation for All Students
TARGET POPULATION: Off-track ninth and tenth graders

Program "INPUTS"	Program "OUTPUTS"	Short-term Outcomes	Intermediate Outcomes	Long-term Impact
Congreso - Organizational vision - Array of social services -Support and accountability structures -Data Systems -- Interdepartmental collaboration Staff - Culturally competent PCM and CYS staff who directly engage youth -- Culturally competent PBL Activity Leaders -Partnership with Edison High School Funding	Project-based learning Career readiness activities Primary Client Management Positive Adult-Youth Relationship Academic support	Students enjoy program and attend regularly Increased student academic motivation Students set future career goals Social barriers to success are identified and addressed Students become more connected to school community Students develop positive strategies for coping with challenging situations Students complete and understand homework	Improved attendance Passing Math and English Staying on grade level Improved Behavior	Staying In School High school graduation

UNDERLYING ASSUMPTIONS: What causes dropout?
Difficult transition to high school | Poverty | Lack of social support | Mental health barriers
Academic skill deficiencies | Lack of motivation | School makes learning seem irrelevant

The Éxito™ program model has evolved over time. The primary program components of the Éxito™ program were constant across the three years in which Cohort 1 and 2 were involved. However, the after-school program model changed slightly each year. Table 1 illustrates how Éxito™ expanded project-based learning activities in Year Two, and then scaled these back in Year Three, when staff added programming focused on socio-emotional themes and college preparation. Meanwhile, Congreso reduced the resources dedicated to its academic support component in Year Two, after finding these were not sufficiently engaging in the first year, and then worked to increase the structure and number of volunteer tutors in Year Three.

Table B2. Program Components by Year

Component	Year One	Year Two	Year Three	Rationale for Change
Transition from school day	None	Gathering/ socializing time	Gathering/ socializing time	To better differentiate the program from the school day.
After-School Enrichment activities	Enrichment activities two days/week: • Entrepreneurship • Dance • Art	Project-based learning groups four days/week: • Entrepreneurship • Culinary arts • Latin percussion • Graphic arts • Storytelling • Robotics	Project-based learning groups two days/week: • Entrepreneurship • Culinary arts • Latin percussion • Graphic arts • Theater Gender-separate groups one day/week College and career visits one day/week	Project-based learning was added to increase program engagement. Project-based learning was cut back in Year Three to allow for other career-focused and socio-emotional activities. Reduction in PBL also reduced the cost of the program by reducing hours of instruction. The program lost 60% of its DHS funding in December 2011.
After-School Academic Support	Mandatory tutoring in math & English two days/week for the entire session, provided by paid Edison teachers	Optional Homework Help supported by few Éxito™ staff	Optional Homework Help supported by Éxito™ staff and volunteer tutors	Homework Help was made optional because of low student engagement when it was mandatory. Tutors were recruited in Year Three to provide more individual support.
Socio-emotional supports	• Case management services for a subset of students • Informal supports from after-school staff	• Case management services for a subset of students • Informal supports from after-school staff	• Case management services for a subset of students • Informal supports from after-school staff	Gender-separate groups and college and career visits were added in Year Three to offer more alternative activities to students.

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Consistent Strengths

Éxito™ has built on its strengths since Year One:

- As intended, participants have included a significant number of students with EWIs – students at higher risk for dropout.
- The program has successfully attracted and retained students by offering project-based learning activities that engage students' interests, and providing the support of positive adult-student and student-student relationships.
- An ongoing relationship with Edison High School administrators and staff has benefited the program.

Ongoing Challenges

Despite improvements, a number of challenges have continued from year to year:

- The collaboration between after-school and PCM™ staff has continued to be challenged by gaps in communication and role confusion.
- Efforts to provide students with high-quality Homework Help are challenged in part because after-school is a difficult time of day to engage students to complete schoolwork. Congreso made strides in strengthening this component of the program in Year Three; however, the level of participation in Homework Help continued to be low.
- Overall participation rates declined in Year Three as compared to Year Two, while at the same time, a group of upperclassmen wished for continued involvement in the program.
- Staff turnover has continued to occur, although the program successfully weathered the transition to a new program director in Year Three.

Appendix C: Describing Cohorts 1 and 2

Early Warning Indicators

Evaluation efforts over the past two years have documented that between 31% (Year One) and 73% (Year Three) of program participants have come into the program with one or more of the Early Warning Indicators. The percentages varied each year as new students joined the program. Also, percentages were subject to change based on missing data in data files obtained from the School District of Philadelphia. Figure C1 below displays the percentages of students with EWIs based on the data file received from the School District of Philadelphia for this report.

Figure C1. Percent of Students with Prior EWIs in either 8th or 9th Grade
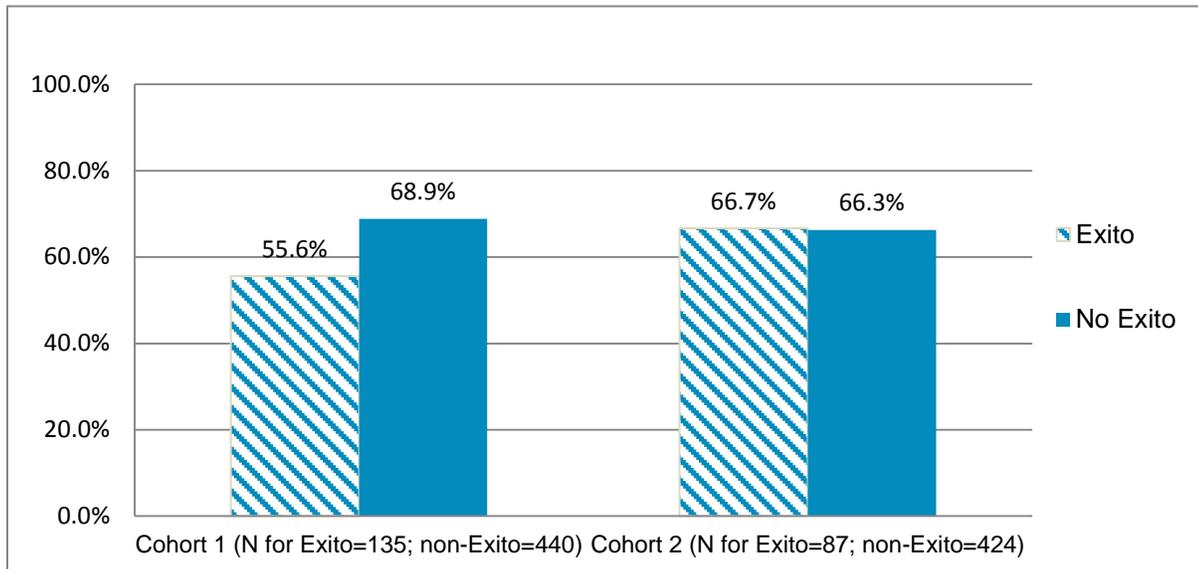
Figure C1 shows that 56% of Cohort 1 participants had EWIs while 69% of non-participants had EWIs. Sixty-seven percent of Cohort 2 participants had EWIs, which was similar to the percentage of non-participants at Edison with EWIs.

Program Participation

Program participation is a key factor determining whether after-school programs have an impact on participants. The table below shows the level of program participation for each analysis group between 2008-11. It displays both the average number of days as well as the percentage of all possible program days that participants attended.

Table C1. Program Attendance of Éxito™ Students, by Cohort and Year of Entry into Éxito™

	Average of the Total Number of Days of Program Attendance Per Year	Average Percent of Attendance[2]
Cohort 1A	26.6 days	24.2%
Cohort 1B	32.5 days	38.2%
Cohort 2A	20.8 days	29.0%
Cohort 2B	20.4 days	24.8%

Note:
[1]Analysis is limited to those with non-missing school district data of students who participated in Éxito™ during that year
[2]Average Percent Attendance is the average of the percent of attendance where percent of attendance is *Total Days Attended* divided by *Total Days from First Attend to Last Day of Program*

- On average, Cohort 1 attended more program days than Cohort 2.
- However, Cohort 2 students attended a similar percentage of program days due to fewer program days in Years Two and Three.

PCM™ Supports

A subset of Éxito™ participants also received a case manager. Case managers were assigned to students when the Éxito™ staff became aware of particular barriers the students were experiencing in succeeding in school (i.e., truancy, family issues, mental health issues, pregnancy). Case managers worked with students for varying amounts of time, depending on the needs of the students. Table C2 below displays the number of students in each analysis group that received a PCM™ and the average number of minutes that a PCM™ spent with an Éxito™ client. The minutes examined here included all activities including talking to teachers, visiting parents, doing research on services for students.

Table C2. PCM™ Participation, Including Summer Participation, by Analysis Group

Analysis Group	Percent of Éxito™ participants who Received PCM™ Supports	Number of Éxito™ participants who Received PCM™ Supports	Average Number of Minutes
Cohort 1A	43%	49	426
Cohort 1B	36%	8	465
Cohort 2A	33%	16	551
Cohort 2B	33%	13	323

- Cohort 1A had the highest percentage of students receiving PCM™ supports, at 43%. About one third of participants received PCM™ supports in each of the other analysis groups.
- Éxito™ participants receiving PCM™ generally obtained over 400 minutes of PCM™ contact except for Cohort 2B where they received slightly over 300 minutes of PCM™ contact.

In previous evaluations, RFA has found that PCM™ clients attend the Éxito™ program more frequently than non-PCM™ clients.[26] The following Table C3 shows the average number of days that PCM™ clients participated in Éxito™ by analysis group.

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[26] At the same time, there was a small group of PCM™™ clients (N=12) that were not interested in attending the Éxito after-school program. They were not included in our analysis of PCM™™ clients reported here. However, analyses with the inclusion of these 12 PCM™™ clients are presented in Appendix G. Overall, the inclusion or exclusion of them in the analyses did not change the results.

Table C3. Éxito™ Attendance by PCM™/Éxito™ Participants Who Had Participated in PCM™, Including Summer Participation, vs. Non-PCM™ Éxito™ Participants

	Average of the Total Number of Days of Program Attendance Per Year for Éxito™ PCM™	Average of the Total Number of Days of Program Attendance Per Year for Éxito™ non-PCM™
Cohort 1A	37.1 days	18.6 days
Cohort 1B	28.4 days	34.9 days
Cohort 2A	21.3 days	20.5 days
Cohort 2B	19.1 days	21.0 days
	Average Percent of Attendance[1] for Éxito™ PCM™	Average Percent of Attendance[1] for Éxito™ non-PCM™
Cohort 1A	31.5%	18.6%
Cohort 1B	40.7%	36.7%
Cohort 2A	25.4%	30.7%
Cohort 2B	22.3%	26.1%

Note:
[1]Average Percent of Attendance defined as *Total Days Attended* divided by *Total Days from First Day Participant First Attended to Last Day of Program*.

- On average, Éxito™ participants in Cohort 1A who received PCM™ attended the Éxito™ program 18 days more than the non-PCM™ Éxito™ participants (37 days vs. 19 days). For the other analysis groups, the difference in attendance varied less in comparison to the non-PCM™ Éxito™ participant.

Appendix D: PCM™ Analysis

Question D.1: Were Éxito™ PCM™ alumni less likely to drop out of school in 2011-12 than non-participants?

Table D1 describes the analyses we conducted to answer this question.

Table D1. Regression Analysis for Dropout of Éxito™ Alumni who had Received PCM™ Supports

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading
Who? Éxito™ alumni who received PCM™ services versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Dropout in 2011-12
Dropout outcome for Éxito™ alumni who had received a PCM™ vs. non- Éxito™ participants

Cohort 1A (N=43 vs. 355)	Cohort 1B (N=13 vs. 355)	Cohort 2A (N=16 vs. 370)	Cohort 2B (N=15 vs.370)
0.50†	1.77	1.35	0.28

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Findings:

- There was no consistent evidence to suggest that PCM™ alumni were less likely to drop out of school than non-participants. Specifically, for Cohort 1A and Cohort 2B, Éxito™ alumni were less likely to drop out of school. This difference was statistically significant for Cohort 1A. Cohort 1B and Cohort 2A Éxito™ alumni were more likely to drop out of school.

See Appendix G for the full results of the logistic regression analysis.

Limitations of the PCM™ analysis: The sample size for PCM™ clients was very small, ranging from 13 to 43 per cohort. Small sample sizes limit the ability of the analysis to detect the impact of the PCM™ supports. In addition, it is challenging to identify a true comparison group for Éxito™ PCM™ clients because PCM™ supports are provided to students that have additional barriers to school success, such as family issues, mental health challenges, pregnancy, or juvenile justice involvement for which no data were available. These limitations reduce the power of the analysis and, therefore, the findings should be interpreted with caution.

Question D.2: Are Éxito™ alumni who received PCM™ supports more likely to graduate on time than non-participants?

Table D2 describes the analyses we conducted to answer this question.

Table D2. Regression Analysis for Graduation of Éxito™ Alumni who had Received PCM™ Supports

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail Math, fail English, attendance less than 80%, or more than two suspension), PSSA Math, PSSA Reading
Who? Éxito™ alumni who received PCM™ services versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Graduation in 2011-12

Graduation outcome for Éxito™ alumni who had received a PCM™ vs. non- Éxito™ participants			
Cohort 1A (N=45 vs. 418)	**Cohort 1B (N=13 vs. 418)**	**Cohort 2A**	**Cohort 2B**
1.37	0.62	N/A	N/A

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Finding:

- We found no consistent evidence that participation in PCM™ increased on-time graduation. Cohort 1A was more likely to graduate while Cohort 1B was less likely to graduate and none of the findings were statistically significant. As mentioned in the previous section, the analysis was limited by small sample sizes and difficulty in finding a true comparison group. For full results on the logistic regression, please refer to Appendix G.

Question D.3: Are Éxito™ alumni who had received PCM™ services continuing to demonstrate better school attendance, academic performance, and on-grade level status than non-participants?

The following key applies to the regression and other results tables that follow.

Key for Four Year Results Tables			
Positive Finding	**Negative Finding**	**Neutral Finding**	**Inconsistent Finding**
🟢	🔴	🟡	⚪

Note: A finding is positive or negative when the majority of the findings in that year were positive or negative; they need not be significantly positive or negative. A finding is neutral when the majority of the findings in that year were the same for both treatment and comparison students. A finding is inconsistent when about half the findings for that year were positive and the other half were negative.

Table D3. Regression Analysis for School Attendance, Academic Performance, and On-Grade Level in 2011-12 for All Alumni, Including Alumni who had Received PCM™ Supports

How? Logistic Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading,
Who?. Éxito™ alumni who had received PCM™ services versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? School attendance, pass math, pass English, and on grade level

Table D.3a. School Attendance Outcome Over Time

Finding:

- In contrast to findings in two of three previous years, Éxito™ alumni who received PCM™ were consistently less likely to attend school more than 80% of the time than non-participants.

Table D.3b. Academic Performance Outcome Over Time

Academic Performance *(The data should be interpreted with caution given the amount of missing data for math and English grades)*			
Éxito PCM™ clients were no more likely to pass math and English than a comparison group	Éxito PCM™ client were no more likely to pass math and were less likely to pass English than a comparison group	Éxito PCM™ clients were no more likely to pass math and English than a comparison group	The findings were inconsistent from one cohort to another cohort, as well as inconsistent for math and English
PCM™ clients 🟠	⚪	🟠	⚪
Year One Findings 2008-2009	Year Two Findings 2009-2010	Year Three Findings 2010-2011	**Year Four Findings 2011-2012**

Finding:

- Similar to findings in previous years, Éxito™ alumni who had received PCM™ supports were not consistently more likely to pass math or English.

Table D.3c. On Grade Level Outcome Over Time

On Grade Level Status			
90% of Éxito PCM™ clients were promoted to the next grade level	Éxito PCM™ clients were less likely to be promoted to the next grade level as non-participants	Éxito PCM™ clients were equally as likely to be promoted to the next grade level as non-participants	Éxito PCM™ alumni were consistently less likely to be on grade level than non-participants
PCM™ clients 🟠	🔴	🟠	🔴
Year One Findings 2008-2009	Year Two Findings 2009-2010	Year Three Findings 2010-2011	**Year Four Findings 2011-2012**

Finding:

- Similar to the findings in previous years, Éxito™ alumni who had received PCM™ supports were less likely to be on-grade level.

Question D.4: Do Éxito™ alumni who had received PCM™ supports have more cumulative suspensions than similar students?

Students incurring suspensions were often referred to PCM™ supports. Therefore, it was particularly important to conduct a separate analysis of suspensions for former PCM™ clients. Table D.4 describes the analyses we used to answer this question.

Table D.4. Regression Analysis for Suspensions of Éxito™ Alumni who had Received PCM™ Supports

How? Ordinary Least Squares Regression Analysis
What are the baseline differences controlled for in the analysis? Gender, Latino, Disability indicator, LEP indicator, EWI indicator (exhibiting one or more of the following: fail math, fail English, attendance less than 80%, or more than two suspensions), PSSA math, PSSA reading
Who? Éxito™ alumni who received PCM™services versus non-Éxito™ participants entering Edison at the same time
What is the outcome examined? Cumulative suspensions from school year after enrollment up until 2011-12

| **Suspension for Éxito™ PCM™ alumni vs. non-participants**			
Cohort 1A (N=48 vs. 407)	**Cohort 1B (N=14 vs. 361)**	**Cohort 2A (N=16 vs. 394)**	**Cohort 2B (N=15 vs. 331)**
0.30	1.45***	-0.06	0.05

†*p*<0.10; **p*<0.05; ***p*<0.01; ****p*<0.001

Findings:

- Overall, a higher number of suspensions were observed for Éxito™ PCM™ alumni as compared to non-participants. The average cumulative number of suspensions of Éxito™ PCM™ alumni was higher than the comparison group in Cohorts 1A, 1B, and 2B and lower in Cohort 2A. However, as noted earlier, the analysis of former PCM™ clients is limited by small sample sizes and the difficulty of identifying a similar comparison group. For actual results of the regression analysis on suspensions, please refer to Appendix G.

Appendix E: Descriptive Analysis

Staying in School

FigureE1. Percent of Éxito™ Alumni vs. non-Éxito™ Students who Dropped Out in 2011-12
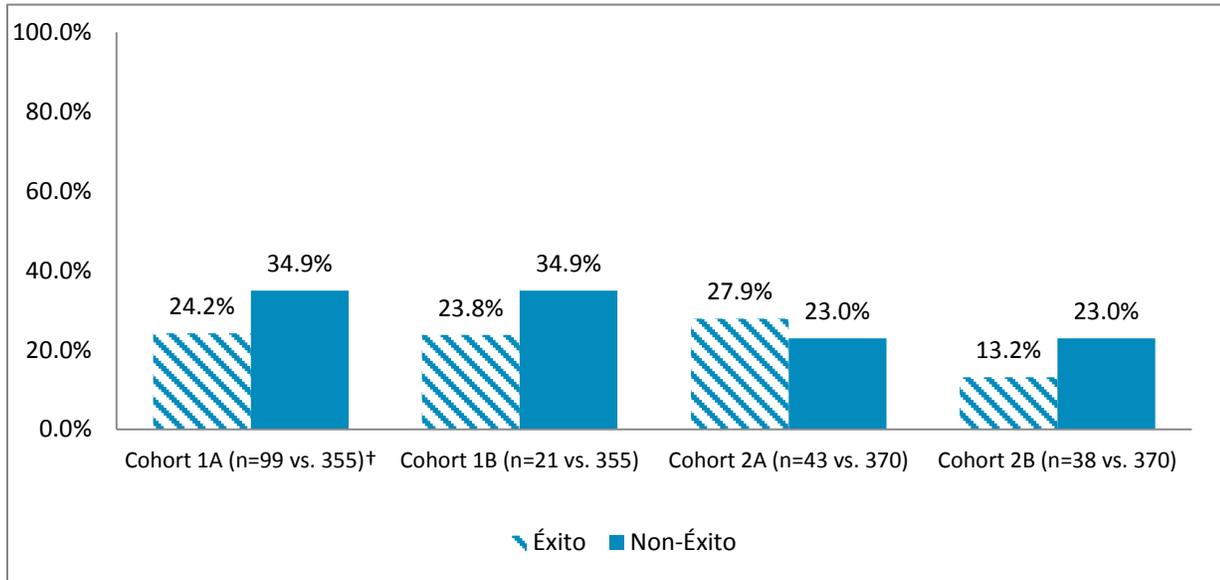
†p<0.1

A smaller percentage of Éxito™ Cohort 1 alumni dropped out of school as compared to a similar group of non-participants. This finding was only statistically significant (p <.10) for Cohort 1A, and not for those students in Cohort 1B. In both groups of students in Cohort 1, less than one quarter of Éxito™ students dropped out as compared to more than one third of the comparison group. For Cohort 2A & 2B, no significant difference in the dropout rate was found for Éxito™ alumni as compared to other students at Edison.

PCM™ Clients

Figure E2. Percent of Éxito™ PCM™ Alumni vs. Non-Éxito™ Students who Dropped Out in 2011-12
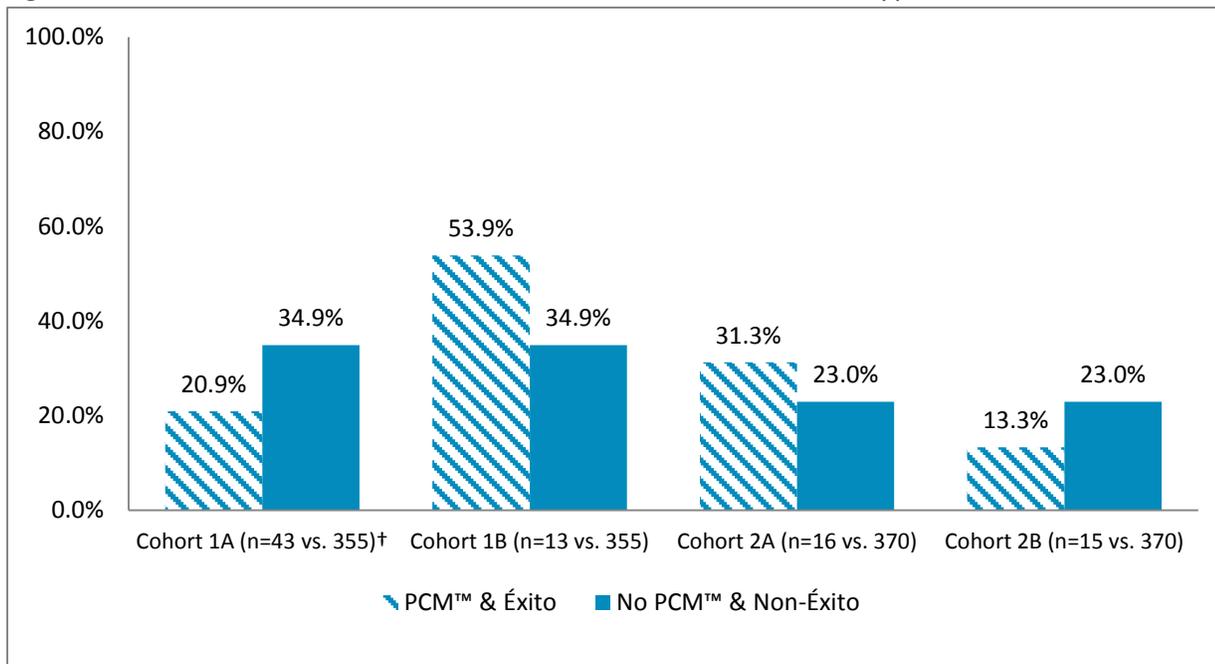
†*p*<0.1

Note: The Éxito™ alumni who had received PCM™ in the figure above excluded those students who only participated in PCM™. There were 12 of these students who were deleted from the analysis. For inclusion of these 12 students in the analysis, refer to the Appendix H. The non-Éxito™ students were students who also had no PCM™.

Results for the percentage of Éxito™ PCM™ alumni who dropped out were mixed as compared to a similar group of non-Éxito™ students. As shown in Figure E2 above, in two of four analysis groups the percentages of Éxito™ alumni who received PCM™ and then dropped out of school or were near dropouts were lower than the percentages for a comparison group of non-Éxito™ students. However, in the other two analysis groups, the percentages were higher. None of these differences is statistically significant.

High School Graduation

Figure E3. Percent of Éxito™ Alumni vs. Non-Éxito™ Students Who Graduated on Time in 2011-12
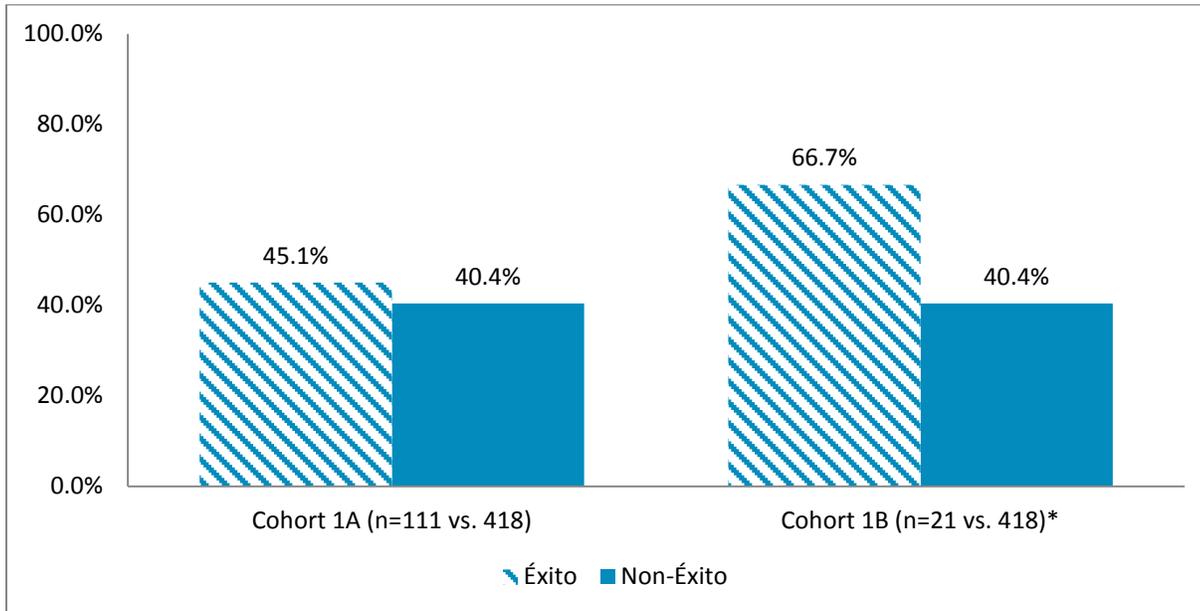

*p<0.05

A higher percentage of Éxito™ Cohort 1 alumni graduated on time than a similar group of non-participants. This finding was statistically significant at $p < .05$ only for Cohort 1B students. It is important to note that while a higher percentage of Cohort 1A participants graduated than non-participants, still only 45% of this group graduated. However, the previous analysis shows that these students were more likely to have stayed in school than the comparison group, so they may have been retained and will graduate in a subsequent year.

PCM™ Clients

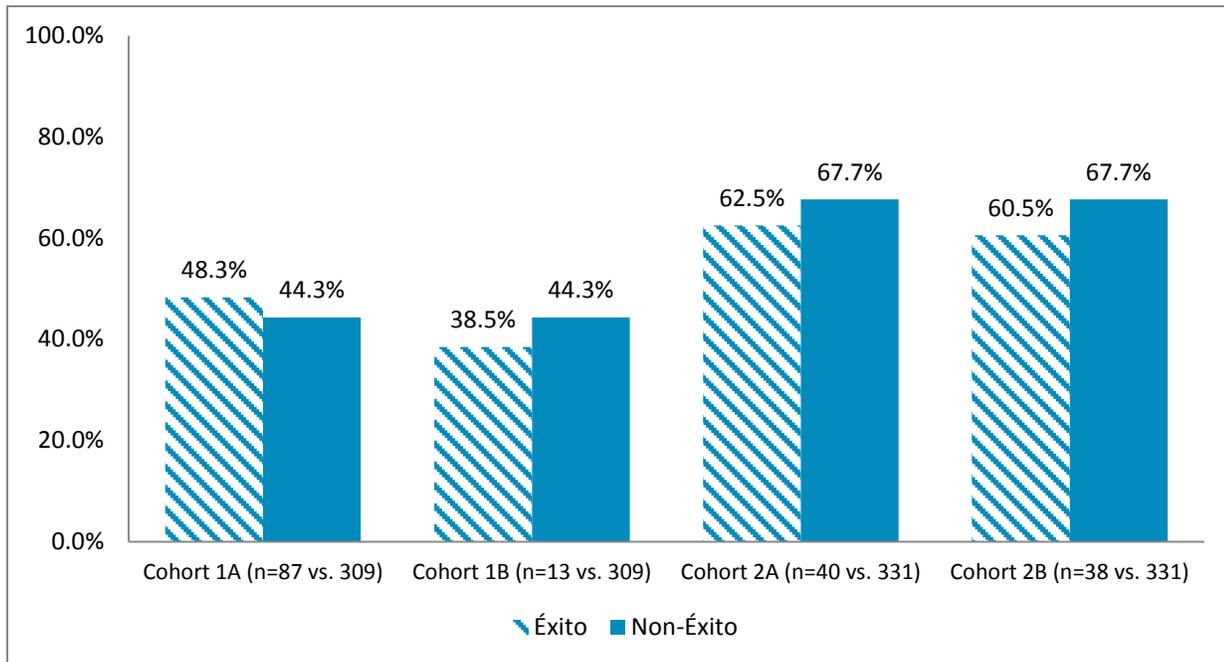Figure E4. Percent of Éxito™ PCM™ Alumni vs. Non-Éxito™ Students Who Graduated On Time in 2011-12
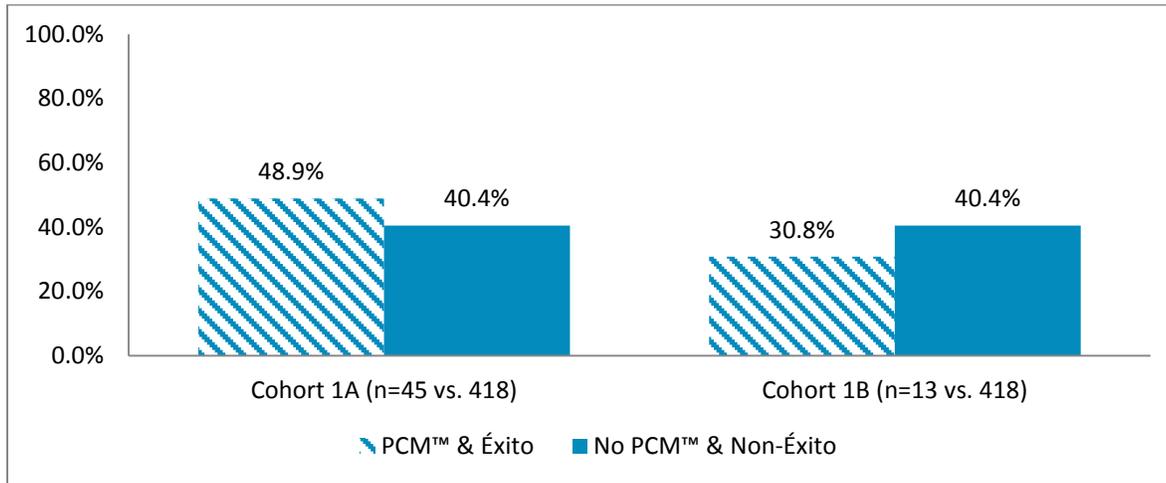
Note: The Éxito™ alumni who had received PCM™ in the figure above excluded those students who only participated in PCM™. There were 12 of these students who were deleted from the analysis. For inclusion of these 12 students in the analysis, refer to Appendix H. The non-Éxito™ students were students who also had no PCM™.

The percentages of Éxito™ PCM™ alumni and non-participants who graduated on time were not significantly different. As shown in Figure E4 above, a higher percentage of PCM™ Cohort 1A alumni graduated on time as compared to non-Éxito™ students. However, a lower percentage of PCM™ Cohort 1B alumni graduated on time as compared to non-Éxito™ students. These differences were not statistically significant.
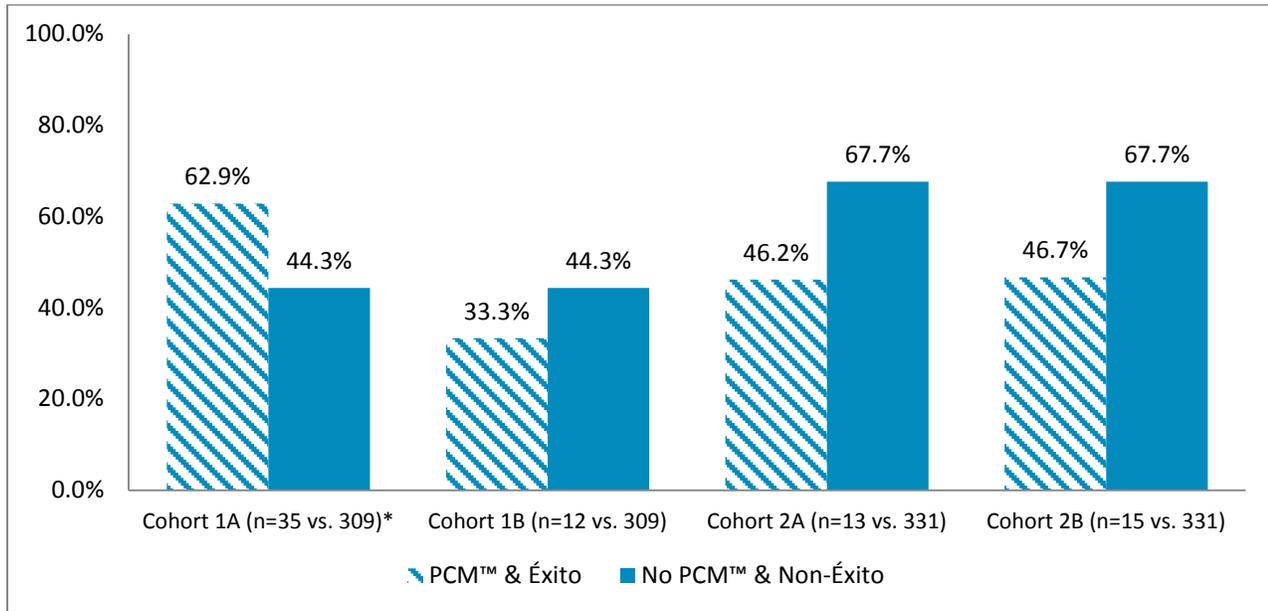
Staying On-Grade Level

Figure E5. Percent of Éxito™ Alumni vs. Non-Éxito™ Students Who Were on Grade Level in 2011-12

A higher percentage of Éxito™ alumni from Cohort 1A were on grade level than a similar group of non-participants. However, the percent of Éxito™ students who were on grade level was lower in the other analysis groups. None of these differences were significant.

PCM™ Clients

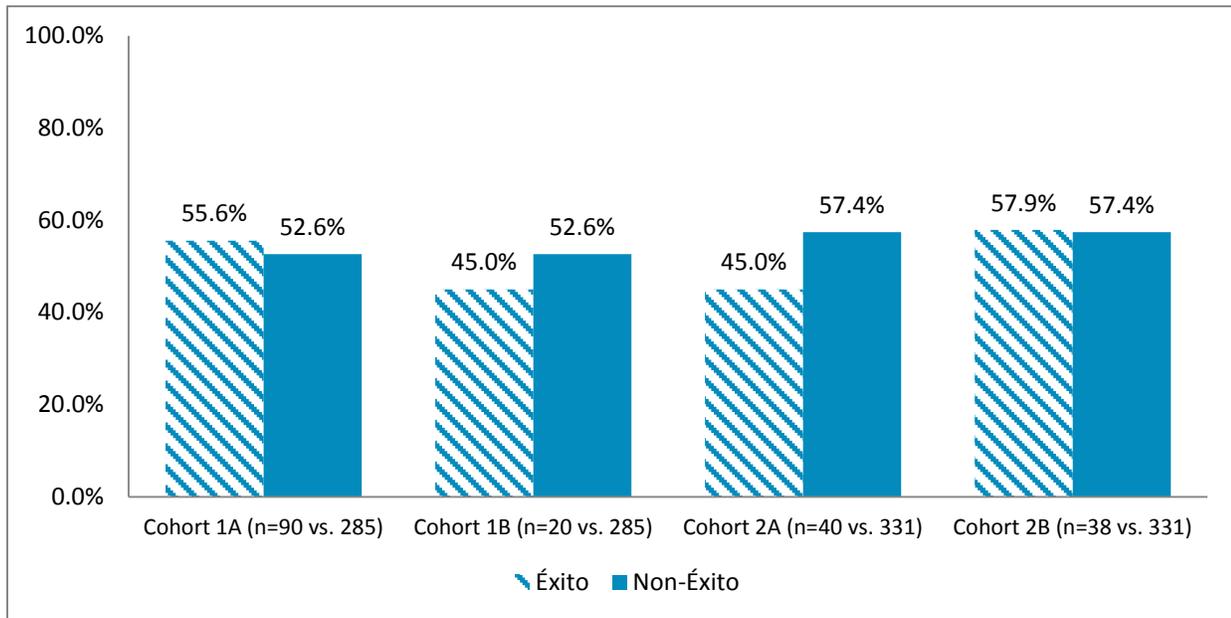Figure E6. Percent of Éxito™ PCM™ Alumni vs. Non-Éxito™ Students Who Were on Grade Level in 2011-12

*p<0.05

Note: The Éxito™ alumni who had received PCM™ in the figure above excluded those students who only participated in PCM™. There were 12 of these students who were deleted from the analysis. For inclusion of these 12 students in the analysis, refer to the Appendix H. The non-Éxito™ students were students who also had no PCM™.

A higher percentage of PCM™ alumni from Cohort 1A were on grade level than a similar group of non-participants. However, the percent of PCM™ alumni who were on grade level were lower in the other analysis groups. None of these differences was significant.

School Attendance

Figure E7. Percent of Éxito™ Alumni vs. Non-Éxito™ Students Who Had 80 Percent or More Attendance in 2011-12

Similar percentages of Éxito™ alumni and non-participants attended school more than 80% of the time. None of the differences was found to be significant.

PCM™ Clients

Figure E8. Percent of Éxito™ PCM™ Alumni vs. Non-Éxito™ Students Who Had Attendance of 80% or More
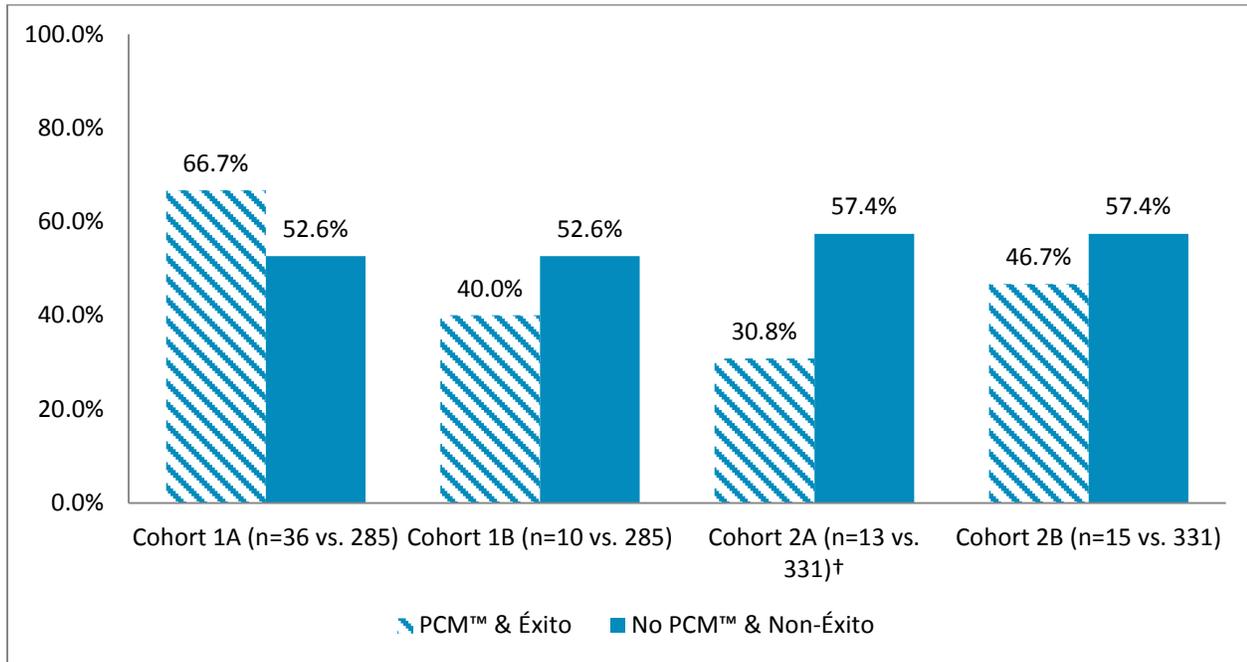
†$p<0.10$

Note: The Éxito™ alumni who had received PCM™ in the figure above excluded those students who only participated in PCM™. There were 12 of these students who were deleted from the analysis. For inclusion of these 12 students in the analysis, refer to Appendix H. The non-Éxito™ students were students who also had no PCM™.

The percentage of PCM™ alumni from Cohort 2A who attended school at least 80% of the time was significantly lower than a similar group of non-participants.

Math and English Course Grades

The figures presented below should be interpreted with caution given the amount of missing data for math and English grades. Figures E9 and E10 display the percentages of Éxito™ alumni and non-participants who passed math and English in 2011-12.

Figure E9. Percent of Éxito™ Alumni vs. Non-Éxito™ Students Who Passed Mathematics in 2011-12
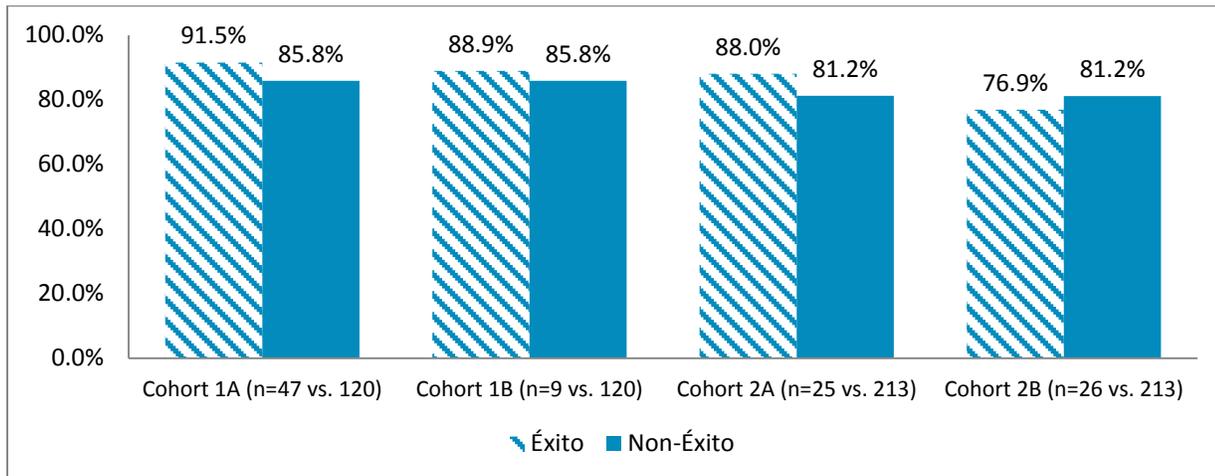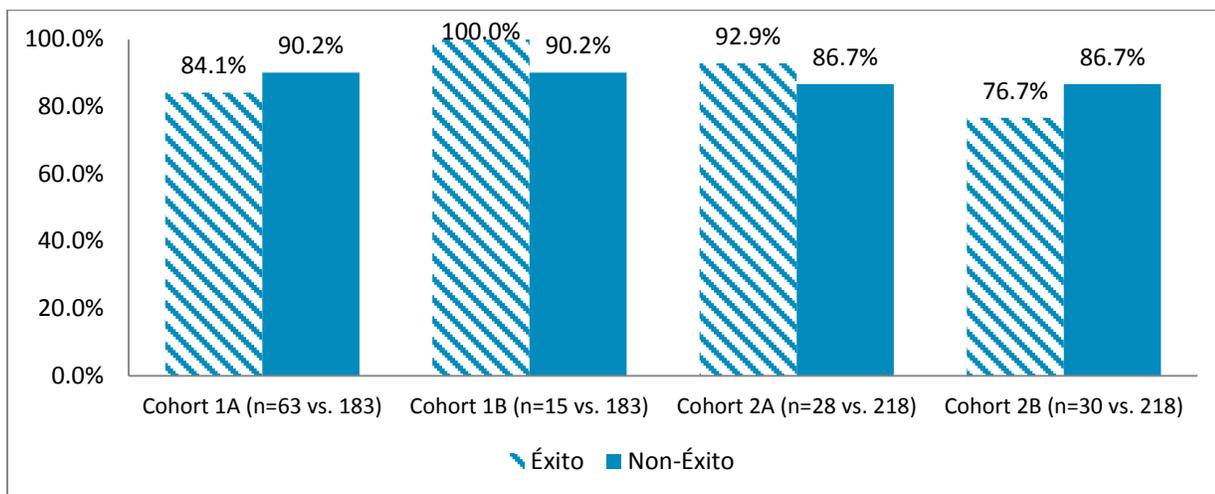

Figure E10. Percent of Éxito™ Alumni vs. Non-Éxito™ Students Who Passed English in 2011-12

Similar percentages of Éxito™ alumni and non-participants passed Math and English.

PCM™ Clients

Figures E11 and E12 display the percentages of Éxito™ PCM™ alumni and non-participants who passed Math and English in 2011-12.

Figure E11. Percent of Éxito™ PCM™ Alumni vs. Non-Participants Who Passed Mathematics
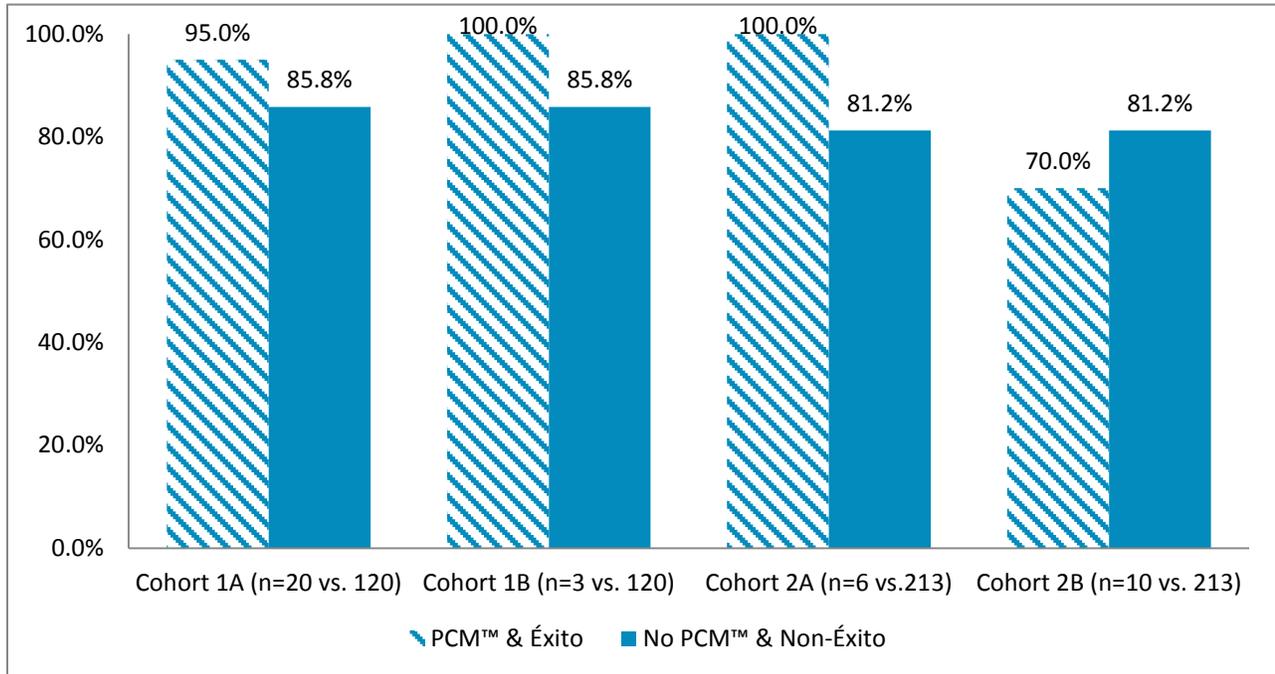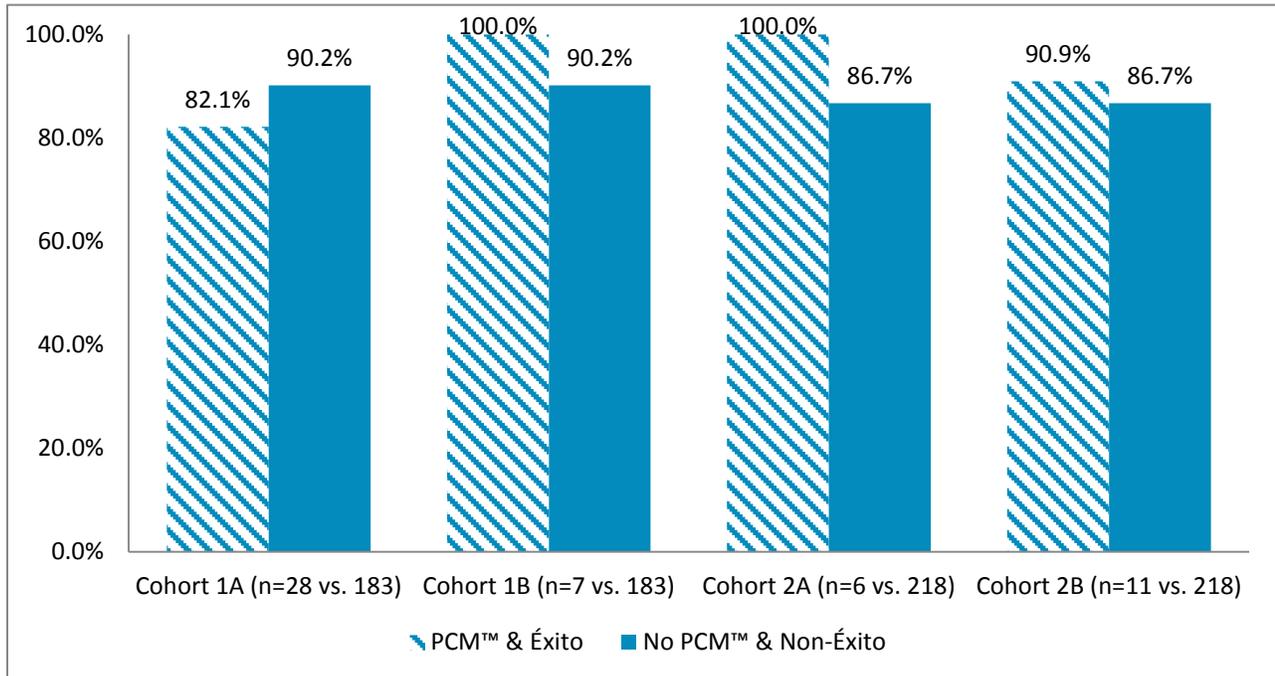

Figure E12. Percent of Éxito™ PCM™ Alumni vs. Non-Participants Who Passed English

Note: The Éxito™ alumni who had received PCM™ in the figure above excluded those students who only participated in PCM™. There were 12 of these students who were deleted from the analysis. For inclusion of these 12 students in the analysis, refer to Appendix H. The non-Éxito™ students were students who also had no PCM™.

Generally, higher percentages of Éxito™ PCM™ alumni passed math and English than non-participants but these differences were not significant.

Appendix F: Results from the Logistic Regression and OLS Regression of Éxito™ Alumni vs. Non-Éxito™ Students

Table F1. Regression Analysis by Using a Dummy Variable for Indication of Having Been in Treatment or Not and Using Propensity Scores to Take into Account Prior EWI, 8th Grade PSSA Scores in Reading and Math, and Demographics

2011-2012 Outcomes	Cohort 1 Enrolled in Éxito™ 1st year at Edison	Cohort 1 Enrolled in Éxito™ 2nd year at Edison	Cohort 2 Enrolled in Éxito™ 1st year at Edison	Cohort 2 Enrolled in Éxito™ 2nd year at Edison
Odds Ratio[1] of Having Been in Treatment or Not				
Pass math	1.47	1.02	1.60	0.71
Pass English	0.46[†]	Model failed to converge	1.90	0.45[†]
On grade level	1.02	0.76	0.74	0.72
Graduate on time	1.05	3.03*	NA	NA
Attendance of 80% or more	1.06	0.60	0.64	0.93
Dropout[3]	0.62[†]	0.56	1.31	0.51
Regression Coefficient[2] of Having Been in Treatment or Not				
Total # of suspensions one year after enrollment	0.40*	0.73***	0.30	0.09

[†]$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Table F2. Analysis by Dosage in Terms of the Total Éxito™ Attendance[4] and Using Propensity Scores to Take into Account Prior EWI, 8th Grade PSSA Scores in Reading and Math, and Demographics

2011-2012 Outcomes	Cohort 1 Enrolled in Éxito™ 1st year at Edison	Cohort 1 Enrolled in Éxito™ 2nd year at Edison	Cohort 2 Enrolled in Éxito™ 1st year at Edison	Cohort 2 Enrolled in Éxito™ 2nd year at Edison
	Odds Ratio[1] of Total Éxito™ Attendance			
Pass math	1.02	1.05	1.01	1.00
Pass English	1.00	Model failed to converge	1.00	1.01
On grade level	1.01	0.98	1.00	1.00
Graduate on time	1.02**	1.04*	NA	NA
Attendance of 80% or more	1.01*	1.00	1.01	1.01
Dropout[4]	0.99*	0.98	0.99	0.93
	Regression Coefficient[2] of Total Éxito™ Attendance			
Total # of suspensions one year after enrollment	0.00	0.00	0.00	-0.00

[†]$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note:

[1] Interpretation of odds ratio when treatment is a dummy variable—an odds ratio of 1 indicates that Éxito™ alumni and non-Éxito™ students were equally likely to have the same outcome. If odds ratio is greater than 1, the Éxito™ alumni were most likely to experience that outcome, while for odds ratio less than 1, Éxito™ alumni were less likely to experience that outcome. Interpretation of odds ratio when dosage is considered—for example, an odds ratio of 2 indicates that with an increase by one day of Éxito™ attendance, the Éxito™ alumni would be twice as likely to experience that outcome.
[2] Interpretation of regression coefficient when treatment is a dummy variable—for example, with a regression coefficient of 0.40, an Éxito™ alumni would have 0.40 more suspensions than a non-Éxito™ student. Interpretation of regression coefficient when dosage is considered—for example, with a regression coefficient of 0.01, increase in each day of attendance is associated with 0.01 more suspensions.
[3] Dropout is defined as either the final drop status provided by the School District of Philadelphia or near dropout which is defined as average daily attendance of less than 0.5.
[4] For the definition of dosage in terms of total Éxito™ attendance, non-Éxito™ students had a dosage of 0.

Appendix G: Results from the Logistic Regression and OLS Regression of Éxito™ Alumni who Received PCM™ vs. Non-Éxito™ Students

Table G1. Analysis of Éxito™ Alumni Who Had PCM™ vs. Non-PCM™/Non-Éxito™ Students

2011-2012 Outcomes	Cohort 1 Enrolled in Éxito™ 1st year at Edison	Cohort 1 Enrolled in Éxito™ 2nd year at Edison	Cohort 2 Enrolled in Éxito™ 1st year at Edison	Cohort 2 Enrolled in Éxito™ 2nd year at Edison
	Odds Ratio[1] of Having Had PCM™ vs. Non-PCM™/Non-Éxito™ Students			
Pass math	2.71	Model failed to converge	Model failed to converge	0.36
Pass English	0.42	Model failed to converge	Model failed to converge	1.11
On grade level	1.62	0.24	0.60	0.29*
Graduate on time	1.37	0.62	NA	NA
Attendance of 80% or more	1.72	0.60	0.26*	0.76
Dropout[3]	0.50†	1.77	1.35	0.28
	Regression Coefficient[2] of Having Had PCM™ vs. Non-PCM™/Non-Éxito™ Students			
Total # of suspensions one year after enrollment	0.30	1.45***	-0.06	0.05

†$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note:

[1] Interpretation of odds ratio—an odds ratio of 1 indicates that Éxito™ alumni who had PCM™ and non-PCM™/non-Éxito™ students were both equal likely to have the same outcome. If odds ratio is greater than 1, the Éxito™ alumni who had PCM™ were most likely to experience that outcome, while for odds ratio less than 1, Éxito™ alumni who had PCM™ were less likely to experience that outcome.

[2] Interpretation of regression coefficient—For example, with a regression coefficient of 0.30, an Éxito™ alumni who had PCM™ would have 0.30 more suspensions than a non-PCM™/non-Éxito™ student. Conversely, with a regression coefficient of -0.06, an Éxito™ alumni who had PCM™ would have 0.06 fewer suspensions than a non-PCM™/ non-Éxito™ student.

[3] Dropout is defined as either the final drop status provided by the School District of Philadelphia or near dropout, which is defined as average daily attendance of less than 0.5.

Appendix H: Results from the Logistic Regression and OLS Regression of Alumni Who Received PCM™, Including Those Who Did Not Enroll in Éxito™, versus Non-Éxito™ students

Table H1. Analysis of Éxito™ Alumni Who Had PCM™ (Including Students Who Did Not Participate in Éxito™) vs. Non-PCM™/Non-Éxito™ Students

2011-2012 Outcomes	Cohort 1 Enrolled in Éxito™ 1st year at Edison	Cohort 1 Enrolled in Éxito™ 2nd year at Edison	Cohort 2 Enrolled in Éxito™ 1st year at Edison	Cohort 2 Enrolled in Éxito™ 2nd year at Edison
Odds Ratio[1] of Having Had PCM™ vs. Non-PCM™/Non-Éxito™ Students				
Pass math	2.54	0.68	Model failed to converge	0.66
Pass English	0.36[†]	1.28	Model failed to converge	3.09
On grade level	1.94[†]	0.86	0.48	0.72
Graduate on time	1.36	0.77	NA	NA
Attendance of 80% or more	1.68	0.50	0.39	0.67
Dropout[3]	0.44[†]	1.60	1.32	0.36
Regression Coefficient[2] of Having Had PCM™ vs. Non-PCM™/Non-Éxito™ Students				
Total # of suspensions one year after enrollment	0.06	1.12***	-0.39	0.28

[†]$p<0.10$; *$p<0.05$; **$p<0.01$; ***$p<0.001$

Note:

[1] Interpretation of odds ratio—an odds ratio of 1 indicates that Éxito™ alumni who had PCM™ and non-PCM™/non-Éxito™ students are equally likely to have the same outcome. If odds ratio is greater than one, than the Éxito™ alumni who had PCM™ are most likely to experience that outcome, while for odds ratio less than 1, Éxito™ alumni who had PCM™ are less likely to experience that outcome.

[2] Interpretation of regression coefficient—for example, with a regression coefficient of 0.15, an Éxito™ alumni who had PCM™ will have 0.15 more suspensions than a non-PCM™/non-Éxito™ student. Conversely, with a regression coefficient of -0.06, an Éxito™ alumniwho had PCM™ will have 0.06 fewer suspensions than a non-PCM™/ non-Éxito™ student.

[3] Dropout is defined as either the final drop status provided by the School District of Philadelphia or near dropout, which is defined as average daily attendance of less than 0.5.

Appendix I: Analysis of Suspensions Before and After Program Enrollment

In previous years, negative findings were found for suspensions, which was a cause of a concern for Congreso. Hence, for the Year Four analysis, it was decided that the suspension outcome should be examined more closely.

One explanation for the greater number of suspensions among Éxito™ participants is that participants were referred to Éxito™ primarily because they had suspensions. The data available to RFA in previous years did not allow us to examine whether suspensions occurred prior to enrollment in Éxito™. Rather, only year-end totals were available. In the fourth year of the evaluation, RFA requested suspension data for each month of the school year so we could take a deeper look at when suspensions occurred.

Table H1 below displays the results of an analysis of the timing of Éxito™ suspensions. The analysis looks at the average number of cumulative suspensions for Éxito™ participants for 11 months prior to enrolling in Éxito™ and 11 months after enrolling in Éxito™. SD in the table refers to the "standard deviation" which indicates how much variation there is within the sample.

The average number of cumulative suspensions increased after students enrolled in the Éxito™ program, **though none of the increases was significant across the first three years of the program**.

Table 11. Mean of Éxito™ Participants' Cumulative Number of Suspensions 11 Months before the Month of Enrollment in Éxito™ and 11 Months after the Month of Enrollment in Éxito™

Enrollment Year	Mean Cumulative Suspensions before Enrollment	Mean Cumulative Suspensions after Enrollment	Mean of the Paired Difference between Before and After (After – Before)[1]
	0.68	0.73	0.08
2008-09 (N=112)	(SD = 1.18)	(SD = 1.34)	(SD = 1.34)
	0.71	0.78	0.08
2009-10 (N=101)	(SD = 1.26)	(SD = 1.42)	(SD = 1.42)
	0.61	0.56	-0.06
2010-11 (N=54)	(SD = 1.22)	(SD = 1.21)	(SD = 1.22)

Note:

[1]A positive difference means that there were more suspensions after enrollment than before enrollment. The mean differences across the three years were found to be not significant.

The standard deviation was found to be large relative to the mean, indicating there is variation among Éxito™ participants in their number of suspensions.