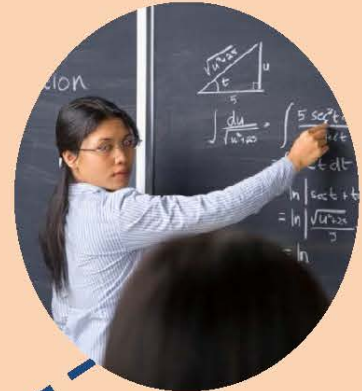


Taking Stock of the California Linked Learning District Initiative

Technical Supplement to the Fourth-Year Evaluation Report



February 2014
Prepared for The James Irvine Foundation

SRI International

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February 2014

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Chapter 1: Introduction

This document is a technical supplement to SRI International's fourth annual evaluation report (referred to throughout this supplement as "the report") on the progress of the California Linked Learning District Initiative (Guha et. al, 2014). This document provides information and data supporting the analysis of student engagement and achievement outcomes and the student survey.

Linked Learning aims to increase student engagement in school and ultimately improve high school graduation rates and increase successful transitions to a full range of postsecondary education opportunities, particularly for low-income and disadvantaged youth. In the report, we examined indicators of pathway students' engagement in school, their progress toward high school graduation and college eligibility, and their gains in knowledge, statistically adjusting for their background characteristics and prior achievement.

The report demonstrates that, compared with similar peers, students in certified pathways make significantly more progress toward graduation each year, though these differences in student behavior do not seem to lead to higher scores on standardized tests of English language arts and mathematics content knowledge. The most notable differences between pathway students and similar peers in their district are in the number of high school credits accumulated.

Also relevant to the success of the Linked Learning approach are the 21st century skills and productive behaviors that students may gain from their pathway experiences. In particular, recent research has focused on the importance of academic mindsets such as a sense of belonging, self-efficacy, a belief that ability and competence grow with effort, and perceived value and relevance of academic tasks for meeting future goals in predicting the perseverance and academic behaviors leading to student success in school (Farrington et al., 2012). Although these mindsets are influenced by many factors outside school, we surveyed 11th-graders about the extent to which they felt high school had helped them improve related skills and behaviors. In our student survey, pathway students were more likely than comparison students to report that high school has helped them develop professional competencies such as collaboration and presentation skills as well as a greater sense of self-efficacy and the value of school. Regardless of whether all pathway students experience high school with a specific career goal in mind, equipping students with broadly applicable 21st century skills while nurturing productive behaviors may better engage students during high school and ultimately lead to their long-term postsecondary success.

The next two chapters will provide information on methods and more details on findings for both extant student data and student survey analyses.

Chapter 2: Extant Student Data and Value Added Methods

To estimate the value added of participation in Linked Learning pathways on students' engagement and achievement outcomes, SRI researchers obtained student-level data for all nine Linked Learning districts. In eight of the districts, these data enabled us to obtain a detailed picture of the outcomes of pathway students compared with peers in the district with similar demographic characteristics and prior achievement, as presented in Chapter 6 of the full report.

In this chapter we provide supporting detail to the analyses presented in Chapter 6 of the report. We describe the pathways and other academic programs available in the districts analyzed, detail the data available in each of the districts, provide descriptive statistics for enrollment and retention in various academic programs within the district, and provide a detailed description of how we estimated the value added of certified pathway enrollment on students' engagement and achievement outcomes. We looked at two engagement indicators, students' absences and retention in district, and multiple indicators of school success and academic achievement: credit accumulation, course failures, a-g completion and standardized test scores.

Background and District Context

Each of the Linked Learning districts provides students with a variety of academic options for school and pathway enrollment, including certified pathways, traditional high schools, alternative schools, and charter schools.

We assigned students to a particular pathway or school based on their 9th- or 10th-grade enrollment, depending on the lowest grade level served by certified pathways in the district. In Antioch, Long Beach, Los Angeles, Montebello, Sacramento, and Porterville, certified pathways begin in 9th grade. In Oakland and West Contra Costa, pathways begin in 10th grade. In Pasadena a single certified pathway begins in the 10th grade. We assigned students in this district into their 9th grade program, with the exception of students who transferred from a traditional high school into this pathway.

To describe enrollment in these various academic options, we classified all program types in each district, although we focused on the outcomes of students in certified pathways. We also excluded any schools deemed out of district control (e.g., home school programs). All districts analyzed in Chapter 6 had the following program types:

- **Certified pathways:** Because pathways develop throughout the students' time in them, we considered a student to be enrolled in a certified pathway if the pathway had passed certification before the students' 10th-grade year. This classification means that students enrolled in the same pathway in different cohorts may be considered to be enrolled in different program types. We considered pathways to be certified based on Linked Learning's classification and thus included those certified by the National Academy Foundation (NAF) in the 2012-13 school year. Exhibit 2-1 shows the certified pathways in each district, including the year certified and the first graduating cohort for which students in the pathway were classified as belonging to a certified pathway.
- **Non-Certified Pathways:** We considered any program having a career theme and small cohort to be a "themed, non-certified pathway." These programs shared some important features with the certified pathways (including a small cohort and typically a career theme) but varied in how closely they align with or aim to replicate the full Linked Learning approach. We included in the themed category pathways deemed "in progress" toward certification.

- **Traditional high school:** We classified schools with neither an intentional cohort nor a career theme in this category.
- **Alternative schools:** We classified schools for struggling students (e.g., credit recovery programs) or students with special needs (e.g., English language learners) into one group. In Long Beach, the alternative schools category also encompassed freshman academies within three high schools that enrolled students who had not yet selected a pathway or program. Long Beach has begun to phase out freshman academies at two high schools, but one school has decided to maintain a model where all students enroll in the freshman academy and all their pathways begin in 10th grade, after the students have been exposed to each program and career theme.

There were two additional program types that do not exist in all districts:

- **IB/ Honors programs:** Long Beach provides a small number of academic pathways that share a small cohort experience with the Linked Learning model but do not have a strong career theme. These programs are also among the more academically rigorous in the district, with minimum recommended GPAs and sometimes minimum test scores, middle school curriculum, and/or recommendations for entry.
- **Non-pathway at wall-to-wall schools:** Several districts have at least one high school where all students should be assigned a pathway designation (these schools are commonly referred to as “wall-to-wall schools”), but not all the students in the school had a flag identifying their pathway. We designated any students at these wall-to-wall schools without a pathway flag as “non-pathway at wall-to-wall schools.” We included these students in the descriptive demographic tables, but excluded them from the outcomes analysis.

Exhibit 2-1
Certified Pathways Included in Analysis, by District

District	High School	Certified Pathway	First Cohort Certified
Antioch^a			
	Dozier-Libbey Medical HS	Health Science and Medical Technology	Class of 2013
Long Beach^b			
	California Academy of Math and Science	Engineering and BioScience	Class of 2013
	Jordan HS	Architecture, Construction and Engineering	Class of 2013
	Millikan HS	Community of Musicians, Performers, Artists, and Social Scientists (COMPASS)	Class of 2013
	Millikan HS	PEACE Academy	Class of 2013
Los Angeles			
	Robert F. Kennedy Community Schools Complex	Los Angeles High School for the Arts	Class of 2014
	Miguel Contreras Learning Complex	Los Angeles School of Global Studies	Class of 2014
Oakland			
	LIFE Academy	Life Academy of Health and Bioscience	Class of 2014
	Media College Preparatory	Media Academy	Class of 2014
	Skyline HS	Education Academy	Class of 2014
Pasadena			
	John Muir HS	Arts, Entertainment, Media ^c	Class of 2013
	John Muir HS	Business and Entrepreneurship Academy	Class of 2013
	John Muir HS	Engineering and Environmental Science Academy	Class of 2015
	Pasadena HS	Creative Arts, Media, and Design Academy	Class of 2013
Porterville			
	Granite Hills HS	Digital Communication and Design	Class of 2015
	Harmony Magnet	Engineering Academy ^d	Class of 2013
	Harmony Magnet	Performing Arts Academy ^d	Class of 2014
	Monache HS	Multimedia Technology Academy	Class of 2014
	Porterville HS	Partnership Academy of Business	Class of 2013
	Porterville HS	Partnership Academy of Health Sciences	Class of 2014
Sacramento			
	A. A. Benjamin Health Professions HS	Health Professions	Class of 2014
	Hiram W. Johnson HS	Business Corporate Academy	Class of 2015
	New Technology HS	School of Design	Class of 2014
	School of Engineering and Sciences	Engineering and Science	Class of 2015
	The MET	Learning Through Internship	Class of 2015

Exhibit 2-1
Certified Pathways Included in Analysis, by District (concluded)

District	High School	Certified Pathway	First Cohort Certified
West Contra Costa ^e			
	Richmond HS	Engineering Academy	Class of 2014
	Richmond HS	Law Academy	Class of 2014
	Richmond HS	Multimedia Academy	Class of 2014

^a The two pathways certified in the 2012–13 school year will be included when Class of 2015 data is available for Antioch.

^b Because the one additional pathway in Long Beach certified in 2012-13 starts in the 10th grade (the Media and Communication pathway at Jordan High School), it will be included when 10th-grade data is available for the Class of 2015.

^c Includes students enrolled in the Graphic Communications pathway.

^d Pathway flags were unavailable for Harmony Magnet for the 2010–11 and 2011–12 school year. Both pathways are modeled jointly in these two school years.

^e The Health Academy at De Anza High School will be included when 10th-grade data is available for the Class of 2015.

Data Sources and Descriptive Statistics

The research team received student-level data from a third party, the Institute for Evidence-Based Change (IEBC). The research team requested 7th- through 11th- grade data for the class of 2013 (students who started 9th grade in the 2009–10 school year) in Antioch, Long Beach, Pasadena, and Porterville and 7th- through 9th- or 10th-grade data for the classes of 2014 and 2015, respectively (students who began high school in 2010–11 and 2011–12) in all nine districts. In Exhibit 2-2 we describe each data element used in the analysis.

**Exhibit 2-2
Data Elements**

Variable	Description
7th Grade ELA CST	7th grade ELA CST score
8th Grade ELA CST	8th grade ELA CST score
9th Grade ELA CST	9th grade ELA CST score
10th Grade ELA CST	10th grade ELA CST score
11th Grade ELA CST	11th grade ELA CST score
% Proficient or Higher, 7th Grade ELA CST	Equal to 1 if a student scored proficient or higher on the 7th grade ELA CST. Equal to 0 if a student scored below proficiency.
% Proficient or Higher, 8th Grade ELA CST	Equal to 1 if a student scored proficient or higher on the 8th grade ELA CST. Equal to 0 if a student scored below proficiency.
% Proficient or Higher, 9th Grade ELA CST	Equal to 1 if a student scored proficient or higher on the 9th grade ELA CST. Equal to 0 if a student scored below proficiency.
% Proficient or Higher, 10th Grade ELA CST	Equal to 1 if a student scored proficient or higher on the 10th grade ELA CST. Equal to 0 if a student scored below proficiency.
% Proficient or Higher, 11th Grade ELA CST	Equal to 1 if a student scored proficient or higher on the 11th grade ELA CST. Equal to 0 if a student scored below proficiency.
7th Grade Math CST	7th grade Math CST score
8th Grade Math CST	8th grade Math CST score
9th Grade Math CST	9th grade ELA CST score
7th Grade Math CST: General Math	Equals 1 if student took the 7th grade general math CST test; equals 0 if student did not take 7th grade general math CST test and the value is non-missing
7th Grade Math CST: Algebra I	Equals 1 if student took the 7th grade algebra I CST test; equals 0 if student did not take 7th grade algebra I CST test and the value is non-missing
8th Grade Math CST: General Math	Equals 1 if student took the 8th grade general math CST test; equals 0 if student did not take 8th grade general math CST test and the value is non-missing
8th Grade Math CST: Algebra I	Equals 1 if student took the 8th grade algebra I CST test; equals 0 if student did not take 8th grade algebra I CST test and the value is non-missing
8th Grade Math CST: Geometry Test	Equals 1 if student took the 8th grade geometry CST test; equals 0 if student did not take 8th grade geometry CST test and the value is non-missing
9th Grade Math CST: General Math	Equals 1 if student took the 9th grade general math CST test; equals 0 if student did not take 9th grade general math CST test and the value is non-missing
9th Grade Math CST: Summative Math	Equals 1 if student took the 9th grade summative math CST test; equals 0 if student did not take 9th grade summative math CST test and the value is non-missing

Variable	Description
9th Grade Math CST: Integrated Math	Equals 1 if student took the 9th grade integrated math CST test; equals 0 if student did not take 9th grade integrated math CST test and the value is non-missing
9th Grade Math CST: Geometry Test	Equals 1 if student took the 9th grade geometry CST test; equals 0 if student did not take 9th grade geometry CST test and the value is non-missing
9th Grade Math CST: Algebra II	Equals 1 if student took the 9th grade algebra II CST test; equals 0 if student did not take 9th grade algebra II CST test and the value is non-missing
% Taking Algebra or Higher in 8th grade	Equals 1 if student took the 8th grade math CST test for any of the following subjects: algebra I, intermediate math I, geometry, intermediate math II, algebra II, or intermediate math III; equal to 0 if student took the 8th grade math CST test in general math or summative high school math and value is non-missing
Class Fail Indicator, 7th Grade	Equals 1 if student failed a semester course in 7th grade; equals 0 if student did not fail any courses and value was non-missing
Class Fail Indicator, 8th Grade	Equals 1 if student failed a semester course in 8th grade; equals 0 if student did not fail any courses and value was non-missing
Number of F's Received in the 9th Grade	The number of semester F's received in the 9th grade
Number of F's Received in the 10th Grade	The number of semester F's received in the 10th grade
Number of F's Received in the 11th Grade	The number of semester F's received in the 11th grade
Number of Credits Accumulated in the 9th Grade	Sum of credits for all classes in which students received a passing grade by the end of 9th grade
Number of Credits Accumulated in the 10th Grade	Sum of credits for all classes in which students received a passing grade by the end of 10th grade
Number of Credits Accumulated in the 11th Grade	Sum of credits for all classes in which students received a passing grade by the end of 11th grade
7th Grade GPA	7th Grade Academic, unweighted GPA. Plusses or minuses are ignored
8th Grade GPA	8th Grade Academic, unweighted GPA. Plusses or minuses are ignored
9th Grade GPA	9th Grade Academic, unweighted GPA. Plusses or minuses are ignored
10th Grade GPA	10th Grade Academic, unweighted GPA. Plusses or minuses are ignored
11th Grade GPA	11th Grade Academic, unweighted GPA. Plusses or minuses are ignored
On Track to Complete a-g Course Requirements in 9th Grade	This variable equals 1 if, in the 9th grade, a student has received a C or better in two semesters each of a "b" class and a "c" class and four additional courses that count towards any a-g requirement. We use the grade-level classes suggested by Transcript Evaluation Services to determine what coursework students should have completed by the end of each grade. Our a-g on track indicator does not include courses above the number required for UC admission (e.g., more than two semesters of "g" courses). We also exclude a-g courses taken in middle school since we lack consistent course data for grades prior to the 9th. We assume that students who consistently take math CSTs beyond Algebra I (i.e., Geometry, Algebra II) have successfully completed two semesters of math (c) curriculum in middle school.

Variable	Description
On Track to Complete a-g Course Requirements in 10th Grade	This variable equals 1 if, by the end of the 10th grade, a student has received a C or better in four semesters each of a "b" class and a "c" class and six additional semesters that count towards any a-g requirement. We use the grade-level classes suggested by Transcript Evaluation Services to determine what coursework students should have completed by the end of each grade. Our a-g on track indicator does not include courses above the number required for UC admission (e.g., more than two semesters of "g" courses). We also exclude a-g courses taken in middle school since we lack consistent course data for grades prior to the 9th. We assume that students who consistently take math CSTs beyond Algebra I (i.e., Geometry, Algebra II) have successfully completed two semesters of math (c) curriculum in middle school.
On Track to Complete a-g Course Requirements in 11th Grade	This variable equals 1 if, by the end of the 11th grade, a student has received a C or better in six semesters each of a "b" class and a "c" class, two semesters each of "a," "d," and "e" classes, as well as 4 additional a-g approved classes. We use the grade-level classes suggested by Transcript Evaluation Services to determine what coursework students should have completed by the end of each grade. Our a-g on track indicator does not include courses above the number required for UC admission (e.g., more than two semesters of "g" courses). We also exclude a-g courses taken in middle school since we lack consistent course data for grades prior to the 9th. We assume that students who consistently take math CSTs beyond Algebra I (i.e., Geometry, Algebra II) have successfully completed two semesters of math (c) curriculum in middle school.
Days Absent in the 9th Grade	Number of days absent in 9th grade
Days Absent in the 10th Grade	Number of days absent in 10th grade
Days Absent in the 11th Grade	Number of days absent in 11th grade
Retention in District From 9th to 10th Grade	Equal to 1 if evidence of student retained in district from 9th to 10th grade. Students are considered present in the district if they have a non-missing value for 10th grade ELA CST, 10th Grade GPA or 10th Grade school or pathway enrollment. This variable is only defined for students in the Classes of 2013 and 2014.
Retention in District From 9th to 11th Grade	Equal to 1 if evidence of student retained in district from 9th to 10th grade. Students are considered present in the district if they have a non-missing value for 11th grade ELA CST, 11th Grade GPA or 11th Grade school or pathway enrollment. This variable is only defined for students in the Class of 2013.
California High School Exit Exam, ELA	10th grade ELA California High School Exit Exam score (CAHSEE)
Passed California High School Exit Exam, ELA	Equal to 1 if a student score 350 or above on the ELA CAHSEE. Equal to 0 if student scored below 350 on the ELA CAHSEE
California High School Exit Exam, Mathematics	10th grade Math CHASEE score
Passed California High School Exit Exam, Mathematics	Equal to 1 if a student score 350 or above on the Math CAHSEE. Equal to 0 if student scored below 350 on the math CAHSEE
Passed California High School Exit Exam	Equal to 1 if student passed both the math and ELA CAHSEE; equal to zero if student took both exams but did not pass one or both
Female	Equal to 1 if student is female; equal to zero if student is male
Low SES	Equal to 1 if student is part of the National School Lunch Program or their parent's education level is not higher than high school graduate; equal to 0 if student is not part of the National School Lunch Program and their parent's education level is higher than a high school graduate and the value is non-missing

Variable	Description
White	Equal to 1 if student is White, Non-Latino; equal to 0 if student is not White and the value is non-missing
Latino	Equal to 1 if student is Latino; equal to 0 if student is not Latino and the value is non-missing
African American	Equal to 1 if student is African American, Non-Latino; equal to 0 if student is not African American and the value is non-missing
Asian Group 1	Equal to 1 if student is of Chinese, Japanese, Korean, Vietnamese, Indian, or Filipino descent (groups with higher than national average high school graduation rates); equal to 0 if student is not from any of these ethnic groups and the value is non-missing
Asian Group 2	Equal to 1 if student is of Laotian, Cambodian, Hmong, Hawaiian, Guamanian, Samoan, or Tahitian descent (groups with lower than national average high school graduation rates); equal to 0 if student is not from any of these ethnic groups and the value is non-missing
Other Race/ Ethnicity	Equal to 1 if student is American Indian, Alaskan Native, or ethnicity unknown; equal to 0 if student's ethnicity is known and is not American Indian or Alaskan Native
Gifted and Talented	Equal to 1 if student is gifted and talented; equal to 0 if student is not gifted and talented and the value is non-missing
Special Education	Equal to 1 if student is in special education; equal to 0 if the student is not in special education and the value is non-missing
English Language Learner	Equal to 1 if student is classified as an English language learner; equal to 0 if student is not classified as an English language learner and the value is non-missing
Redesignated Fluent English Proficient	Equal to 1 if student is reclassified as proficient in English; equal to 0 if student is not classified as reclassified as proficient in English and the value is non-missing
Initially Fluent English Proficient	Equal to 1 if student has a home language other than English, but who is initially classified as proficient in English; equal to 0 if student was not initially classified as proficient in English and the value is non-missing
Class of 2013	A student in the 9th grade in the 2009–10 school year (Class of 2013 if graduates on time)
Class of 2014	A student in the 9th grade in the 2010–11 school year (Class of 2014 if graduates on time)

Data Challenges

Providing all the specific data elements needed for the analysis posed a challenge for districts, which often house data elements in different data systems and are still developing systems for flagging and tracking pathway students. A number of gaps in the data meant that analysis based on student-level data was not possible in some cases or must be interpreted with caution.

- Antioch was unable to provide accurate data in this year of the evaluation. The evaluation team therefore included the data from last year's analysis (9th- and 10th-grade data for the class of 2013 and 9th-grade data for the class of 2014). These data have several gaps. First, Antioch was unable to provide pathway flags for students in 2009–10 (i.e., 9th grade for the class of 2013). Because the only certified pathway in Antioch is a stand-alone school, we were still able to estimate a certified pathway effect in Antioch but could not identify students enrolled in the one non-certified pathway in 2009–10. Additionally, because there was a large proportion of students with credits earned but a failing grade in the student data from Antioch, we recalculated credits earned assuming that each class indicated five credits attempted, with these credits awarded when students earned a non-failing course grade.
- Porterville could only provide prior achievement data for students who attended middle schools in the district, so in our student outcome analysis we could not include the approximately 50% of high school students who entered the district in high school from feeder districts. Additionally, the pathway flags submitted for Harmony Magnet—a wall-to-wall pathway school housing two certified pathways—did not identify which pathway students in the classes of 2014 and 2015 were enrolled. The evaluation team treated the entire school as a single certified pathway for the purposes of this analysis.
- Each district's data contained some records where students were listed as attending a pathway not housed at their school of record. In such cases, we assumed the school assignment was correct and recoded the students' pathway accordingly.
- Each district data set included a few more minor omissions. The evaluation team was unable to estimate models predicting the a-g on-track indicator in Sacramento because of issues with the course data file; in Antioch, Pasadena, Porterville and West Contra Costa, problems with the absence data prevented an analysis of this outcome. We detail the control variables included in each district in the methodology section.

In addition to these data issues, a few facets of Linked Learning implementation limited the analysis of outcomes in three districts:

- In both Oakland and West Contra Costa, pathways do not begin until 10th grade. Analyses in these districts therefore included only outcomes beginning in the 10th grade, limiting the sample in these districts to students from the class of 2014.
- Montebello has not yet put a pathway through certification, and the results for the certified pathways were therefore not included in the main analyses. The results for other program types are presented in this technical supplement.

In Exhibits 2-3 through 2-29, below, we display descriptive statistics for students in each district, both the overall mean for the district and the students enrolled in each pathway type. These tables present the sample sizes, means (for continuous variables) or percents (for dichotomous variables),

and, for continuous variables, standard deviations for all students in the district, regardless of inclusion in the analytic sample. We provide these overall descriptive statistics to allow for an understanding of certified pathway enrollment in comparison to the district as a whole. The tables show student demographics, standardized test scores, and school achievement, respectively.

Exhibit 2-3
Antioch Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N^a</i>	3,210	354	345	2,376	135
% Class of 2013	49	46	30	53	44
% Class of 2014	51	54	70	47	56
% Class of 2015	0	0	0	0	0
% Female	50	64	46	48	48
% Low SES	52	47	39	54	58
% White	26	25	32	25	35
% Latino	34	38	28	35	30
% African American	26	16	28	27	29
% Asian Group 1 ^b	8	14	10	8	0
% Asian Group 2 ^c	4	6	2	4	4
% Other Race / Ethnicity	2	1	2	2	3
% Gifted and Talented	3	3	6	2	1
% Special Education	11	6	6	12	12
% English Language Learner	10	10	3	11	9

^a Sample size will differ by cell.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-4
Antioch Standardized Testing Descriptive Statistics—Overall Sample

	<i>N</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>7th Grade</i>		3,210	354	345	2,376	135
ELA CST		340	360	364	334	315
SD		(55)	(52)	(48)	(55)	(49)
% Proficient or Higher, ELA CST		46	59	63	41	26
<i>8th Grade</i>						
ELA CST		342	364	366	336	311
SD		(57)	(55)	(54)	(56)	(55)
% Proficient or Higher, ELA CST		45	58	62	41	23
% Taking Algebra or Higher		37	49	53	34	12
<i>9th Grade</i>						
ELA CST		351	376	373	345	311
SD		(58)	(49)	(52)	(58)	(57)
% Proficient or Higher, ELA CST		54	72	68	50	26
<i>10th Grade</i>						
ELA CST		340	355	359	336	309
SD		(53)	(50)	(51)	(53)	(60)
% Proficient or Higher, ELA CST		44	55	64	40	30
Math CAHSEE		379	391	385	377	359
SD		(37)	(32)	(39)	(37)	(30)
% Passing, Math CAHSEE		78	92	81	75	61
ELA CAHSEE		382	397	393	379	368
SD		(36)	(30)	(31)	(37)	(41)
% Passing, ELA CAHSEE		81	94	90	78	68
<i>11th Grade</i>						
ELA CST		-	-	-	-	-
SD		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
% Passing, EAP ELA		-	-	-	-	-

^a Sample size will differ by cell.

Exhibit 2-5
Antioch Engagement and School Success Descriptive Statistics—Overall Sample

	<i>N^a</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>Number of F's Received</i>						
9th Grade		2.25	2.10	0.92	2.44	6.33
SD		(3.10)	(3.25)	(1.84)	(3.16)	(4.73)
10th Grade		2.78	2.20	1.83	2.95	4.20
SD		(3.48)	(3.02)	(2.72)	(3.59)	(3.39)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>Number of Credits</i>						
9th Grade		49	58	62	46	27
SD		(20)	(18)	(13)	(20)	(6)
10th Grade		49	58	60	46	19
SD		(21)	(18)	(16)	(21)	(22)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>GPA</i>						
9th Grade		1.96	2.35	2.45	1.84	1.17
SD		(1.19)	(1.18)	(1.03)	(1.19)	(1.61)
10th Grade		1.79	2.30	1.87	1.72	0.97
SD		(1.15)	(1.07)	(1.01)	(1.16)	(1.45)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>% a-g On Track</i>						
9th Grade		30	54	51	23	0
10th Grade		25	48	31	22	0
11th Grade		-	-	-	-	-
<i>Absences</i>						
9th Grade		-	-	-	-	-
SD		-	-	-	-	-
10th Grade		-	-	-	-	-
SD		-	-	-	-	-
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>% Retained from 9th Grade</i>						
to 10th Grade		90	98	97	88	80
to 11th Grade		-	-	-	-	-

^a Sample size will differ by cell.

Exhibit 2-6
Long Beach Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>IB/ Honors Program</i>	<i>Traditional High School</i>	<i>Alternative School^f</i>	<i>Non-Pathway at Wall-to-Wall</i>
<i>N^b</i>	20,167	1,809	8,988	1,987	3,463	2,715	1,205
% Class of 2013	34	34	39	36	32	22	28
% Class of 2014	33	33	32	37	36	30	34
% Class of 2015	32	33	28	27	32	48	38
% Female	50	53	49	62	51	45	40
% Low SES	73	60	77	48	64	93	77
% White	15	22	11	29	26	2	9
% Latino	52	51	51	38	50	68	48
% African American	17	12	20	9	12	21	27
% Asian Group 1 ^c	11	12	12	19	8	5	7
% Asian Group 2 ^d	4	2	5	5	3	4	6
% Other Race / Ethnicity	1	0	1	0	1	1	2
% Gifted and Talented	-	-	-	-	-	-	-
% Special Education	8	2	7	1	7	9	36
% English Language Learner	19	5	18	4	17	36	36

^a In Long Beach this primarily refers to Freshman Academies.

^b Sample size will differ by cell.

^c Asian groups with higher than national average high school graduation rates.

^d Asian groups with lower than national average high school graduation rates.

Exhibit 2-7
Long Beach Standardized Testing Descriptive Statistics—Overall Sample

	<i>N^b</i>	<i>Overall</i> 20,167	<i>Certified Pathway</i> 1,809	<i>Non-Certified Pathway</i> 8,988	<i>IB/ Honors Program</i> 1,987	<i>Traditional High School</i> 3,463	<i>Alternative School^a</i> 2,715	<i>Non-Pathway at Wall-to-Wall</i> 1,205
<i>7th Grade^c</i>								
ELA CST		348	374	340	417	362	310	296
SD		(59)	(44)	(50)	(43)	(59)	(46)	(60)
% Proficient or Higher, ELA CST		49	70	43	95	61	20	25
<i>8th Grade^d</i>								
ELA CST		352	377	347	417	364	315	300
SD		(62)	(48)	(54)	(53)	(63)	(48)	(63)
% Proficient or Higher, ELA CST		51	72	47	89	59	23	31
% Taking Algebra or Higher		31	39	30	57	32	20	9
<i>9th Grade</i>								
ELA CST		350	387	342	415	357	310	301
SD		(61)	(52)	(51)	(50)	(62)	(48)	(56)
% Proficient or Higher, ELA CST		50	76	45	91	57	21	26
<i>10th Grade</i>								
ELA CST		341	373	329	397	344	297	287
SD		(59)	(52)	(52)	(48)	(60)	(46)	(50)
% Proficient or Higher, ELA CST		45	66	35	87	48	15	21
Math CAHSEE		385	402	377	421	389	365	352
SD		(36)	(32)	(33)	(28)	(36)	(30)	(35)
% Passing, Math CAHSEE		83	96	80	98	86	68	48
ELA CAHSEE		383	401	376	415	391	359	342
SD		(36)	(29)	(32)	(27)	(36)	(29)	(38)
% Passing, ELA CAHSEE		82	97	80	98	87	65	40
<i>11th Grade</i>								
ELA CST		342	371	324	399	349	296	279
SD		(63)	(55)	(57)	(49)	(64)	(51)	(53)
% Proficient or Higher, ELA CST		46	65	33	86	53	15	18
% Passing, EAP ELA		37	55	24	77	48	8	7

^a In Long Beach this primarily refers to Freshman Academies.

^b Sample size will differ by cell.

^c 7th grade CST scores missing for Class of 2014 and Class of 2015.

^d 8th grade CST scores missing for Class of 2013.

Exhibit 2-8
Long Beach Engagement and School Success Descriptive Statistics—Overall Sample

	<i>N^b</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>IB/ Honors Program</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>	<i>Non-Pathway at Wall-to-Wall</i>
		20,167	1,809	8,988	1,987	3,463	2,715	1,205
<i>Number of F's Received</i>								
9th Grade		1.87	0.73	1.89	0.57	2.03	3.20	2.11
SD		(2.83)	(1.78)	(2.69)	(1.85)	(3.23)	(3.18)	(2.84)
10th Grade		1.63	0.73	1.92	0.57	1.24	3.04	2.18
SD		(2.66)	(1.68)	(2.78)	(1.66)	(2.30)	(3.26)	(3.20)
11th Grade		1.01	0.59	1.26	0.36	0.76	1.78	1.25
SD		(1.94)	(1.31)	(2.08)	(1.25)	(1.61)	(2.65)	(2.35)
<i>Number of Credits</i>								
9th Grade		54	65	52	65	57	44	44
SD		(17)	(14)	(16)	(10)	(19)	(17)	(19)
10th Grade		56	67	53	65	57	44	49
SD		(16)	(13)	(16)	(11)	(15)	(18)	(19)
11th Grade		58	62	55	66	59	53	53
SD		(14)	(11)	(14)	(10)	(11)	(18)	(17)
<i>GPA</i>								
9th Grade		2.14	2.62	2.01	3.11	2.19	1.57	1.92
SD		(1.14)	(0.99)	(1.05)	(0.93)	(1.20)	(1.01)	(1.20)
10th Grade		2.25	2.77	2.07	2.97	2.38	1.54	2.05
SD		(1.06)	(0.91)	(1.01)	(0.89)	(1.00)	(0.96)	(1.13)
11th Grade		2.46	2.73	2.22	3.13	2.64	2.04	2.28
SD		(0.92)	(0.82)	(0.87)	(0.74)	(0.85)	(0.91)	(1.00)
<i>% a-g On Track</i>								
9th Grade		33	59	24	80	41	14	6
10th Grade		30	53	20	72	36	7	5
11th Grade		28	42	16	67	30	4	7
<i>Absences</i>								
9th Grade		6.77	4.39	6.51	3.74	5.76	11.06	8.53
SD		(9.46)	(6.15)	(8.81)	(5.14)	(7.60)	(13.24)	(11.47)
10th Grade		7.89	5.68	8.03	5.26	6.35	12.92	12.66
SD		(10.65)	(6.60)	(10.57)	(8.13)	(7.75)	(14.65)	(16.04)
11th Grade		8.47	7.42	9.41	5.35	6.35	14.02	11.94
SD		(11.03)	(8.53)	(11.55)	(7.81)	(7.25)	(16.15)	(17.91)
<i>% Retained from 9th Grade</i>								
to 10th Grade		93	97	93	97	93	87	84
to 11th Grade		93	94	87	93	83	75	79

^a In Long Beach this primarily refers to Freshman Academies.

^b Sample size will differ by cell.

Exhibit 2-9
Los Angeles Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Non-Pathway at Wall-to-Wall</i>
<i>N</i> ^a	6,387	403	3,932	2,036	16
% Class of 2014	50	51	45	60	13
% Class of 2015	50	49	55	40	88
% Female	48	54	51	43	56
% Low SES	85	85	84	87	94
% White	2	0	3	2	0
% Latino	86	93	86	86	81
% African American	3	1	3	2	13
% Asian	8	5	8	10	0
% Other Race / Ethnicity	1	1	1	1	6
% Gifted and Talented	10	8	11	8	19
% Special Education	8	3	8	8	6
% English Language Learner	35	34	32	41	31

^a Sample size will differ by cell.

Exhibit 2-10
Los Angeles Standardized Testing Descriptive Statistics—Overall Sample

	<i>N^a</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Non-Pathway at Wall-to-Wall</i>
<i>7th Grade</i>		6,387	403	3,932	2,036	16
ELA CST		320	321	322	316	313
SD		(53)	(50)	(54)	(50)	(56)
% Proficient or Higher, ELA CST		30	28	32	26	17
<i>8th Grade</i>						
ELA CST		324	322	327	318	303
SD		(55)	(51)	(56)	(52)	(60)
% Proficient or Higher, ELA CST		32	30	34	26	14
% Taking Algebra or Higher		66	70	67	65	57
<i>9th Grade</i>						
ELA CST		330	332	334	320	310
SD		(54)	(47)	(55)	(51)	(80)
% Proficient or Higher, ELA CST		36	36	39	30	21
<i>10th Grade</i>						
ELA CST		335	332	338	328	-
SD		(50)	(49)	(52)	(50)	-
% Proficient or Higher, ELA CST		37	34	39	32	-
Math CAHSEE		383	383	384	379	-
SD		(34)	(32)	(34)	(34)	-
% Passing, Math CAHSEE		82	86	83	79	-
ELA CAHSEE		375	377	377	370	-
SD		(33)	(28)	(33)	(34)	-
% Passing, ELA CAHSEE		79	83	82	74	-

^a Sample size will differ by cell.

Exhibit 2-11
Los Angeles Engagement and School Success Descriptive Statistics—Overall Sample

	<i>N</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Non-Pathway at Wall-to-Wall</i>
<i>Number of F's Received</i>						
9th Grade		2.36	0.86	2.53	2.31	5.50
SD		(3.26)	(1.80)	(3.40)	(3.12)	(3.60)
10th Grade		1.60	0.89	1.81	1.56	-
SD		(2.59)	(1.96)	(2.73)	(2.47)	-
<i>Number of Credits</i>						
9th Grade		57	70	57	55	36
SD		(19)	(16)	(20)	(18)	(25)
10th Grade		63	68	61	60	-
SD		(15)	(18)	(17)	(15)	-
<i>GPA</i>						
9th Grade		2.27	2.71	2.23	2.26	1.10
SD		(1.02)	(0.79)	(1.03)	(1.02)	(0.89)
10th Grade		2.50	2.69	2.42	2.47	-
SD		(0.92)	(0.88)	(0.93)	(0.95)	-
<i>% a-g On Track</i>						
9th Grade		34	37	37	29	13
10th Grade		32	27	31	30	-
<i>Absences</i>						
9th Grade		7.75	4.87	7.66	8.39	18.94
SD		(11.93)	(6.48)	(11.95)	(12.57)	(13.75)
10th Grade		8.36	5.60	8.06	10.02	-
SD		(12.99)	(8.23)	(11.91)	(15.19)	-
<i>% Retained from 9th Grade</i>						
to 10th Grade		94	97	97	90	100

^a Sample size will differ by cell.

Exhibit 2-12
Montebello Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N</i> ^a	3,405	108	3,269	28
% Class of 2013	0	0	0	0
% Class of 2014	54	56	53	64
% Class of 2015	46	44	47	36
% Female	45	44	45	21
% Low SES	93	93	93	96
% White	2	3	2	0
% Latino	92	95	92	79
% African American	0	0	0	4
% Asian Group 1 ^b	3	2	3	0
% Asian Group 2 ^c	0	0	0	0
% Other Race / Ethnicity	2	0	2	18
% Gifted and Talented	10	8	10	0
% Special Education	11	7	11	25
% English Language Learner	25	21	25	48

^a Sample size will differ by cell.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-13
Montebello Standardized Testing Descriptive Statistics—Overall Sample

		<i>Overall</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N^a</i>		3,405	108	3,269	28
<i>7th Grade</i>					
	ELA CST	-	-	-	-
	<i>SD</i>	-	-	-	-
	% Proficient or Higher, ELA CST	-	-	-	-
<i>8th Grade</i>					
	ELA CST	336	351	336	282
	<i>SD</i>	(59)	(55)	(59)	(41)
	% Proficient or Higher, ELA CST	39	44	39	0
	% Taking Algebra or Higher	24	34	23	7
<i>9th Grade</i>					
	ELA CST	332	348	332	287
	<i>SD</i>	(58)	(52)	(58)	(55)
	% Proficient or Higher, ELA CST	38.11	46.30	37.90	23.81
<i>10th Grade</i>					
	ELA CST	329	335	329	258
	<i>SD</i>	(57)	(48)	(57)	(37)
	% Proficient or Higher, ELA CST	36	36	37	0
	Math CAHSEE	372	374	372	339
	<i>SD</i>	(37)	(32)	(37)	(33)
	% Passing, Math CAHSEE	70	80	69	40
	ELA CAHSEE	369	375	369	315
	<i>SD</i>	(36)	(29)	(36)	(31)
	% Passing, ELA CAHSEE	71	85	70	17

^a Sample size will differ by cell.

Exhibit 2-14
Montebello Engagement and School Success Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N^a</i>	3,405	108	3,269	28
<i>Number of F's Received</i>				
9th Grade	2.27	0.76	2.33	1.36
SD	(2.67)	(1.21)	(2.69)	(1.86)
10th Grade	2.44	1.10	2.50	1.43
SD	(2.52)	(1.45)	(2.55)	(1.65)
<i>Number of Credits</i>				
9th Grade	30	22	30	6
SD	(19)	(15)	(19)	(10)
10th Grade	35	22	36	11
SD	(21)	(16)	(21)	(19)
<i>GPA</i>				
9th Grade	1.58	1.74	1.57	0.83
SD	(1.13)	(1.07)	(1.13)	(1.09)
10th Grade	1.71	2.02	1.71	1.20
SD	(1.06)	(1.09)	(1.06)	(1.15)
<i>% a-g On Track</i>				
9th Grade	12	11	13	0
10th Grade	11	4	12	0
<i>Absences</i>				
9th Grade	8.47	5.71	8.61	0.00
SD	(10.12)	(5.93)	(10.24)	(0.00)
10th Grade	8.37	6.96	8.40	14.00
SD	(9.95)	(7.36)	(9.97)	(19.18)
<i>% Retained from 9th Grade</i>				
to 10th Grade	87	100	86	83

^a Sample size will differ by cell.

Exhibit 2-15
Oakland Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N</i> ^a	1,990	158	1,014	758	60
% Class of 2013	0	0	0	0	0
% Class of 2014	100	100	100	100	100
% Class of 2015	0	0	0	0	0
% Female	48	54	50	46	40
% Low SES	84	92	84	83	93
% White	8	4	9	9	0
% Latino	33	56	37	23	33
% African American	37	27	31	45	55
% Asian Group 1 ^b	11	7	11	13	0
% Asian Group 2 ^c	10	6	12	8	5
% Other Race / Ethnicity	1	0	0	1	7
% Gifted and Talented	14	13	16	12	5
% Special Education	11	9	8	15	10
% English Language Learner	24	27	28	20	17

^a Sample size will differ by cell.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-16
Oakland Standardized Testing Descriptive Statistics—Overall Sample

	<i>N</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>7th Grade</i>		1,990	158	1,014	758	60
ELA CST		-	-	-	-	-
<i>SD</i>		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
<i>8th Grade</i>						
ELA CST		331	325	338	325	303
<i>SD</i>		(62)	(60)	(63)	(62)	(54)
% Proficient or Higher, ELA CST		37	30	41	35	23
% Taking Algebra or Higher		76	88	75	76	60
<i>9th Grade</i>						
ELA CST		331	340	336	326	285
<i>SD</i>		(64)	(54)	(65)	(65)	(45)
% Proficient or Higher, ELA CST		38	40	42	34	17
<i>10th Grade</i>						
ELA CST		317	328	320	314	280
<i>SD</i>		(61)	(54)	(63)	(60)	(46)
% Proficient or Higher, ELA CST		33	33	34	33	7
Math CAHSEE		372	373	377	366	345
<i>SD</i>		(41)	(40)	(41)	(41)	(34)
% Passing, Math CAHSEE		68	71	72	63	45
ELA CAHSEE		367	374	371	362	350
<i>SD</i>		(40)	(36)	(40)	(41)	(33)
% Passing, ELA CAHSEE		68	80	72	62	50
<i>11th Grade</i>						
ELA CST		-	-	-	-	-
<i>SD</i>		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
% Passing, EAP ELA		-	-	-	-	-

^a Sample size will differ by cell.

Exhibit 2-17
Oakland Engagement and School Success Descriptive Statistics—Overall Sample

	<i>N^a</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
	1,990	158	1,014	758	60	
<i>Number of F's Received</i>						
9th Grade	2.08	2.15	1.74	2.38	4.74	
SD	(3.13)	(3.11)	(2.86)	(3.36)	(3.63)	
10th Grade	2.41	3.06	2.02	2.87	1.23	
SD	(3.31)	(3.71)	(2.98)	(3.59)	(2.05)	
11th Grade	-	-	-	-	-	
SD	-	-	-	-	-	
<i>Number of Credits</i>						
9th Grade	48	56	49	47	23	
SD	(18)	(18)	(17)	(17)	(16)	
10th Grade	52	60	54	48	16	
SD	(20)	(24)	(17)	(20)	(15)	
11th Grade	-	-	-	-	-	
SD	-	-	-	-	-	
<i>GPA</i>						
9th Grade	2.19	2.38	2.32	2.03	1.13	
SD	(1.20)	(1.22)	(1.20)	(1.17)	(0.94)	
10th Grade	2.10	2.18	2.25	1.89	1.66	
SD	(1.17)	(1.26)	(1.14)	(1.18)	(0.90)	
11th Grade	-	-	-	-	-	
SD	-	-	-	-	-	
<i>% a-g On Track</i>						
9th Grade	39	50	42	33	8	
10th Grade	30	31	34	26	4	
11th Grade	-	-	-	-	-	
<i>Absences</i>						
9th Grade	8.35	7.90	7.74	9.25	8.64	
SD	(12.63)	(10.73)	(12.26)	(13.35)	(13.81)	
10th Grade	8.74	7.05	7.89	10.75	2.15	
SD	(13.26)	(10.10)	(11.03)	(16.11)	(12.96)	
11th Grade	-	-	-	-	-	
SD	-	-	-	-	-	

^a Sample size will differ by cell.

Exhibit 2-18
Pasadena Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>	<i>Non-Pathway at Wall-to-Wall</i>
<i>N</i> ^a	4,329	1,013	294	2,851	55	116
% Class of 2013	35	31	31	37	18	48
% Class of 2014	33	31	44	32	47	42
% Class of 2015	32	39	26	31	35	9
% Female	48	51	48	48	25	34
% Low SES	80	86	89	77	72	85
% White	12	7	4	15	9	3
% Latino	61	63	66	59	56	56
% African American	20	26	26	18	20	28
% Asian Group 1 ^b	4	3	3	5	2	2
% Asian Group 2 ^c	1	0	1	1	0	0
% Other Race / Ethnicity	2	1	0	2	13	12
% Gifted and Talented	12	7	6	15	2	1
% Special Education	10	9	9	9	24	35
% English Language Learner	15	18	15	14	26	19

^a Sample size will differ by cell.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-19
Pasadena Standardized Testing Descriptive Statistics—Overall Sample

			Overall	Certified Pathway	Non-Certified Pathway	Traditional High School	Alternative School	Non-Pathway at Wall-to-Wall
		N	4,329	1,013	294	2,851	55	116
7th Grade								
	ELA CST		341	331	330	347	314	297
	sd		(59)	(53)	(52)	(61)	(63)	(51)
	% Proficient or Higher, ELA CST		44	36	34	49	26	28
8th Grade								
	ELA CST		345	334	334	352	307	302
	sd		(61)	(57)	(53)	(62)	(56)	(60)
	% Proficient or Higher, ELA CST		47	37	35	52	20	39
	% Taking Algebra or Higher		50	50	53	52	25	15
9th Grade								
	ELA CST		349	337	336	356	301	317
	sd		(59)	(55)	(55)	(60)	(57)	(63)
	% Proficient or Higher, ELA CST		51	41	43	56	27	54
10th Grade								
	ELA CST		342	330	330	349	275	310
	sd		(55)	(51)	(51)	(55)	(53)	(55)
	% Proficient or Higher, ELA CST		45	35	38	50	12	55
	Math CAHSEE		383	375	378	387	335	366
	sd		(36)	(33)	(33)	(36)	(37)	(36)
	% Passing, Math CAHSEE		81	78	81	83	13	63
	ELA CAHSEE		382	376	372	385	330	358
	sd		(35)	(34)	(33)	(35)	(41)	(44)
	% Passing, ELA CAHSEE		82	79	76	85	27	56
11th Grade								
	ELA CST		338	322	313	346	332	311
	sd		(61)	(57)	(58)	(61)	(63)	(65)
	% Proficient or Higher, ELA CST		43	29	27	48	50	53
	% Passing, EAP ELA		32	21	21	37	-	25

^a Sample size will differ by cell.

Exhibit 2-20
Pasadena Engagement and School Success Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>	<i>Non-Pathway at Wall-to-Wall</i>
<i>N^a</i>	4,329	1,013	294	2,851	55	116
<i>Number of F's Received</i>						
9th Grade	1.99	2.61	2.38	1.67	2.40	3.13
SD	(3.05)	(3.63)	(3.28)	(2.69)	(3.36)	(3.81)
10th Grade	1.77	2.37	2.37	1.48	2.06	2.48
SD	(2.62)	(3.07)	(3.05)	(2.29)	(4.05)	(3.47)
11th Grade	1.38	1.95	2.55	1.07	0.25	2.68
SD	(2.37)	(2.80)	(3.61)	(1.94)	(0.50)	(3.48)
<i>Number of Credits</i>						
9th Grade	55	62	62	52	30	40
SD	(19)	(20)	(20)	(16)	(23)	(28)
10th Grade	57	62	64	54	39	61
SD	(17)	(20)	(21)	(15)	(21)	(27)
11th Grade	59	62	65	58	30	55
SD	(18)	(22)	(25)	(15)	(21)	(27)
<i>GPA</i>						
9th Grade	2.09	2.01	1.93	2.17	1.53	1.45
SD	(1.08)	(1.06)	(1.09)	(1.08)	(1.02)	(1.28)
10th Grade	2.13	1.93	1.99	2.23	1.95	1.74
SD	(0.99)	(0.97)	(1.00)	(0.97)	(1.27)	(1.15)
11th Grade	2.28	2.07	2.09	2.37	2.65	1.88
SD	(0.92)	(0.94)	(1.08)	(0.88)	(0.84)	(1.34)
<i>% a-g On Track</i>						
9th Grade	31	34	30	31	6	5
10th Grade	24	25	26	23	0	17
11th Grade	20	18	32	19	0	25
<i>Absences</i>						
9th Grade	-	-	-	-	-	-
SD	-	-	-	-	-	-
10th Grade	-	-	-	-	-	-
SD	-	-	-	-	-	-
11th Grade	-	-	-	-	-	-
SD	-	-	-	-	-	-
<i>Retention from 9th Grade</i>						
to 10th Grade	87	93	92	88	53	43
to 11th Grade	89	83	85	80	40	36

^a Sample size will differ by cell.

Exhibit 2-21
Porterville Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>	<i>Non-Pathway at Wall-to-Wall^a</i>
<i>N^b</i>	5,264	869	417	3,837	134	7
% Class of 2013	34	19	31	37	37	-
% Class of 2014	33	38	35	32	41	-
% Class of 2015	33	44	33	31	22	-
% Female	48	50	49	48	46	-
% Low SES	76	67	73	78	81	-
% White	21	23	24	19	34	-
% Latino	71	68	68	72	57	-
% African American	1	1	0	1	1	-
% Asian Group 1 ^c	2	3	2	2	1	-
% Asian Group 2 ^d	2	1	2	2	0	-
% Other Race / Ethnicity	4	3	3	4	7	-
% Gifted and Talented	4	7	4	3	1	-
% Special Education	4	1	3	5	6	-
% English Language Learner	19	10	14	21	17	-

^a Cell size less than ten, not reported.

^b Sample size will differ by cell.

^c Asian groups with higher than national average high school graduation rates.

^d Asian groups with lower than national average high school graduation rates.

Exhibit 2-22
Porterville Standardized Testing Descriptive Statistics—Overall Sample

	<i>N^b</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>	<i>Non-Pathway at Wall-to-Wall^a</i>
<i>7th Grade</i>		5,264	869	417	3,837	134	7
ELA CST		340	370	352	333	323	-
SD		(51)	(49)	(48)	(50)	(50)	-
% Proficient or Higher, ELA CST		41	64	49	36	24	-
<i>8th Grade</i>							
ELA CST		342	375	355	335	317	-
SD		(54)	(51)	(53)	(52)	(55)	-
% Proficient or Higher, ELA CST		44	66	53	39	26	-
% Taking Algebra or Higher		42	41	39	42	43	-
<i>9th Grade</i>							
ELA CST		347	375	361	338	324	-
SD		(54)	(49)	(51)	(53)	(55)	-
% Proficient or Higher, ELA CST		49	68	64	42	31	-
<i>10th Grade</i>							
ELA CST		338	364	352	331	315	-
SD		(51)	(46)	(47)	(50)	(49)	-
% Proficient or Higher, ELA CST		41	63	50	35	31	-
Math CAHSEE		381	402	388	376	354	-
SD		(35)	(31)	(30)	(34)	(33)	-
% Passing, Math CAHSEE		82	97	91	79	51	-
ELA CAHSEE		375	395	384	370	359	-
SD		(34)	(28)	(31)	(33)	(32)	-
% Passing, ELA CAHSEE		80	95	89	75	58	-
<i>11th Grade</i>							
ELA CST		336	360	368	329	303	-
SD		(53)	(52)	(47)	(51)	(44)	-
% Proficient or Higher, ELA CST		40	58	63	35	12	-
% Passing, EAP ELA		27	40	40	23	0	-

^a Cell size less than ten, not reported.

^b Sample size will differ by cell.

Exhibit 2-23
Porterville Engagement and School Success Descriptive Statistics—Overall Sample

	<i>N^b</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>	<i>Non-Pathway at Wall-to-Wall^a</i>
		5,264	869	417	3,837	134	7
<i>Number of F's Received</i>							
9th Grade		1.52	0.59	0.96	1.77	2.41	-
<i>SD</i>		(2.31)	(1.26)	(1.79)	(2.45)	(3.00)	-
10th Grade		1.78	0.93	1.14	2.04	1.41	-
<i>SD</i>		(2.58)	(1.81)	(1.87)	(2.73)	(2.24)	-
11th Grade		1.09	0.89	0.69	1.17	0.77	-
<i>SD</i>		(1.94)	(1.84)	(1.18)	(2.01)	(1.77)	-
<i>Number of Credits</i>							
9th Grade		56	66	62	54	34	-
<i>SD</i>		(17)	(8)	(10)	(17)	(23)	-
10th Grade		59	66	66	57	43	-
<i>SD</i>		(18)	(10)	(12)	(18)	(26)	-
11th Grade		62	66	68	61	40	-
<i>SD</i>		(18)	(12)	(9)	(18)	(25)	-
<i>GPA</i>							
9th Grade		2.14	2.59	2.37	2.01	1.95	-
<i>SD</i>		(0.99)	(0.86)	(0.89)	(0.99)	(1.07)	-
10th Grade		2.03	2.46	2.23	1.91	2.35	-
<i>SD</i>		(0.99)	(0.92)	(0.92)	(0.99)	(1.00)	-
11th Grade		2.30	2.64	2.53	2.22	2.70	-
<i>SD</i>		(0.84)	(0.87)	(0.84)	(0.82)	(0.69)	-
<i>% a-g On Track</i>							
9th Grade		25	46	33	19	7	-
10th Grade		21	40	21	18	12	-
11th Grade		17	36	21	15	4	-
<i>Absences</i>							
9th Grade		5.44	3.68	6.08	5.76	7.57	-
<i>SD</i>		(8.29)	(4.52)	(7.17)	(9.01)	(13.52)	-
10th Grade		5.48	4.44	4.98	5.70	10.16	-
<i>SD</i>		(8.14)	(6.22)	(5.74)	(8.61)	(13.01)	-
11th Grade		5.52	3.68	4.80	5.83	7.20	-
<i>SD</i>		(8.93)	(4.83)	(4.79)	(9.63)	(11.55)	-
<i>% Retained from 9th Grade</i>							
to 10th Grade		90	97	97	89	67	-
to 11th Grade		92	95	91	81	53	-

^a Cell size less than ten, not reported.

^b Sample size will differ by cell.

Exhibit 2-24
Sacramento Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
<i>N^b</i>	6,058	556	938	4,555	9
% Class of 2013	0	0	0	0	-
% Class of 2014	52	35	67	51	-
% Class of 2015	48	65	33	49	-
% Female	49	52	53	48	-
% Low SES	78	84	75	78	-
% White	20	21	26	18	-
% Latino	35	41	32	35	-
% African American	18	25	14	18	-
% Asian Group 1 ^c	12	5	11	13	-
% Asian Group 2 ^d	14	7	15	14	-
% Other Race / Ethnicity	2	2	2	2	-
% Gifted and Talented	15	7	14	16	-
% Special Education	11	9	8	11	-
% English Language Learner	21	20	22	21	-

^a Cell size less than ten, not reported.

^b Sample size will differ by cell.

^c Asian groups with higher than national average high school graduation rates.

^d Asian groups with lower than national average high school graduation rates.

Exhibit 2-25
Sacramento Standardized Testing Descriptive Statistics—Overall Sample

	<i>N</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School^b</i>
<i>7th Grade</i>		6,058	556	938	4,555	9
ELA CST		-	-	-	-	-
<i>SD</i>		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
<i>8th Grade</i>						
ELA CST		354	346	358	354	-
<i>SD</i>		(65)	(58)	(67)	(65)	-
% Proficient or Higher, ELA CST		52	46	51	52	-
% Taking Algebra or Higher		43	34	36	46	-
<i>9th Grade</i>						
ELA CST		352	335	359	352	-
<i>SD</i>		(63)	(55)	(61)	(64)	-
% Proficient or Higher, ELA CST		51	40	55	52	-
<i>10th Grade</i>						
ELA CST		347	331	355	343	-
<i>SD</i>		(59)	(48)	(60)	(60)	-
% Proficient or Higher, ELA CST		49	36	53	48	-
Math CAHSEE		389	376	393	389	-
<i>SD</i>		(37)	(31)	(38)	(37)	-
% Passing, Math CAHSEE		85	80	87	84	-
ELA CAHSEE		383	373	390	381	-
<i>SD</i>		(37)	(29)	(38)	(38)	-
% Passing, ELA CAHSEE		83	86	87	81	-

^a Cell size less than ten, not reported.

^b Sample size will differ by cell.

Exhibit 2-26
Sacramento Engagement and School Success Descriptive Statistics—Overall Sample

	<i>N^b</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
<i>Number of F's Received</i>						
9th Grade		1.63	1.85	2.18	1.49	-
SD		(2.65)	(2.72)	(2.99)	(2.54)	-
10th Grade		1.38	1.86	1.29	1.30	-
SD		(2.38)	(2.65)	(2.32)	(2.33)	-
<i>Number of Credits</i>						
9th Grade		52	55	51	52	-
SD		(16)	(18)	(18)	(16)	-
10th Grade		55	54	57	53	-
SD		(15)	(18)	(16)	(15)	-
<i>GPA</i>						
9th Grade		2.36	2.20	2.18	2.41	-
SD		(1.13)	(1.06)	(1.21)	(1.11)	-
10th Grade		2.37	2.21	2.53	2.36	-
SD		(1.03)	(1.05)	(1.05)	(1.02)	-
<i>% a-g On Track</i>						
9th Grade		39	22	40	40	-
10th Grade		-	-	-	-	-
<i>Absences</i>						
9th Grade		6.48	7.12	6.66	6.36	-
SD		(7.95)	(8.58)	(8.01)	(7.85)	-
10th Grade		6.47	7.93	5.72	6.89	-
SD		(8.02)	(8.73)	(7.15)	(9.03)	-
<i>% Retained from 9th Grade to 10th Grade</i>						
		86	89	87	85	-

^a Cell size less than ten, not reported.

^b Sample size will differ by cell.

Exhibit 2-27
West Contra Costa Demographic Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N</i> ^a	1,862	218	603	973	68
% Class of 2013	0	0	0	0	0
% Class of 2014	100	100	100	100	100
% Class of 2015	0	0	0	0	0
% Female	47	31	56	46	46
% Low SES	76	98	84	66	88
% White	10	0	9	13	10
% Latino	47	84	52	35	49
% African American	23	6	21	27	32
% Asian Group 1 ^b	11	5	8	15	3
% Asian Group 2 ^c	9	4	10	10	4
% Other Race / Ethnicity	0	0	0	0	1
% Gifted and Talented	11	6	12	12	3
% Special Education	13	12	9	16	10
% English Language Learner	27	48	29	22	26

^a Sample size will differ by cell.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates

Exhibit 2-28
West Contra Costa Standardized Testing Descriptive Statistics—Overall Sample

	<i>N^a</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>7th Grade</i>		1,862	218	603	973	68
ELA CST		-	-	-	-	-
SD		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
<i>8th Grade</i>						
ELA CST		325	300	329	333	289
SD		(61)	(48)	(57)	(65)	(43)
% Proficient or Higher, ELA CST		35	16	33	42	11
% Taking Algebra or Higher		73	76	76	71	50
<i>9th Grade</i>						
ELA CST		328	312	328	335	288
SD		(58)	(47)	(56)	(61)	(45)
% Proficient or Higher, ELA CST		37	20	35	43	14
<i>10th Grade</i>						
ELA CST		316	297	316	324	272
SD		(60)	(48)	(56)	(65)	(44)
% Proficient or Higher, ELA CST		32	13	29	40	10
Math CAHSEE		369	362	370	373	342
SD		(38)	(31)	(37)	(41)	(26)
% Passing, Math CAHSEE		68	64	69	70	42
ELA CAHSEE		370	360	372	373	345
SD		(37)	(31)	(35)	(40)	(33)
% Passing, ELA CAHSEE		73	64	78	74	46
<i>11th Grade</i>						
ELA CST		-	-	-	-	-
SD		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
% Passing, EAP ELA		-	-	-	-	-

^a Sample size will differ by cell.

Exhibit 2-29
West Contra Costa Engagement and School Success Descriptive Statistics—Overall Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>N^a</i>	1,862	218	603	973	68
<i>Number of F's Received</i>					
9th Grade	2.07	1.72	1.93	2.05	5.81
SD	(2.84)	(2.61)	(2.65)	(2.85)	(3.19)
10th Grade	1.85	1.83	1.73	1.89	4.00
SD	(2.76)	(2.77)	(2.58)	(2.87)	(1.90)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>Number of Credits</i>					
9th Grade	50	52	52	50	23
SD	(17)	(14)	(15)	(18)	(17)
10th Grade	51	51	54	50	11
SD	(18)	(14)	(15)	(19)	(9)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>GPA</i>					
9th Grade	2.11	2.09	2.17	2.14	0.72
SD	(1.14)	(1.02)	(1.10)	(1.17)	(0.73)
10th Grade	2.09	2.04	2.11	2.12	0.52
SD	(1.14)	(1.04)	(1.08)	(1.18)	(0.55)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>% a-g On Track</i>					
9th Grade	36	36	37	37	0
10th Grade	28	28	27	30	0
11th Grade	-	-	-	-	-
<i>Absences</i>					
9th Grade	8.28	7.88	6.74	16.18	18.85
SD	(11.52)	(10.77)	(9.38)	(17.94)	(15.05)
10th Grade	11.16	11.44	12.31	10.28	-
SD	(11.46)	(11.60)	(11.86)	(11.08)	-
11th Grade	-	-	-	-	-
SD	-	-	-	-	-

^a Sample size will differ by cell.

Methodology

In Chapter 6 of the report we present value-added estimates of certified pathway enrollment on students' absences, retention in district, credit accumulation, course failures, a-g completion and standardized test scores. These value-added results estimate the extent to which students who enroll in Linked Learning certified pathways perform differently on these outcomes, on average, as compared to similar peers who enroll in other programs in the same district, accounting for the demographics and prior achievement of each student. In this section we describe the process by which we derived these estimates, beginning with how we determined the analytic sample of students for each outcome. We then present descriptive statistics by district for the analytic sample including demographics, prior achievement, and outcomes. Note that all descriptive statistics are based on the analytic sample for the models predicting 9th grade CST and, as such, will vary slightly for other 9th grade outcomes and significantly for models in 10th and 11th grade, which include fewer cohorts of students. Finally, we describe the methodology by which we estimated the value-added results and the estimates themselves.

Analytic Sample

In all districts but Los Angeles, the analytic sample was determined by the number of cases with nonmissing values for all control variables and outcomes. In Los Angeles, an additional restriction applied: only high schools that were originally in Local District 4 and ended up in the innovation subdistrict were included, since the district reorganized during the period under study. Note that the analytic sample varied slightly among outcomes, even within the same district, for several reasons. When using retention in the district into the 10th grade as an outcome, the 10% or so of students who left the district between 9th and 10th grade were included in this model but not in any other 10th-grade outcomes. Additionally, the logistic models dropped some programs because of lack of variation in the outcome. Rather than exclude these programs from all analyses, we chose to allow the sample size of the estimates to vary slightly between models. We additionally dropped any programs with fewer than 10 students, as we deemed these programs too small to accurately estimate a value-added effect. We also dropped any non-pathway students in a wall-to-wall school.

In Exhibits 2-30 through 2-56 we present the descriptive statistics for the analytic sample used to predict the 9th grade CST scores. Note that the loss of students missing prior achievement scores in either the 7th and/or 8th grade drove the most dramatic differences between the overall district numbers and the analytic sample. The sample size changes most dramatically in Porterville, where we do not have middle school achievement data for students attending any of the feeder districts outside of Porterville Unified. The district does not provide this middle school achievement data from feeder districts to IEBC.

Exhibit 2-30
Antioch Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n</i> ^a	2,064	267	258	1,490	49
% Class of 2013	48	44	26	52	49
% Class of 2014	52	56	74	48	51
% Class of 2015	0	0	0	0	0
% Female	50	63	43	49	49
% Low SES	54	51	40	57	69
% White	27	21	29	27	45
% Latino	38	42	30	39	33
% African American	20	16	26	20	14
% Asian Group 1 ^b	10	14	11	9	0
% Asian Group 2 ^c	4	6	2	4	6
% Other Race / Ethnicity	2	2	2	2	2
% Gifted and Talented	4	4	7	3	0
% Special Education	3	2	2	3	0
% English Language Learner	10	9	3	11	14

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-31
Antioch Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>7th Grade</i>						
ELA CST		346	363	366	340	323
SD		(52)	(50)	(45)	(52)	(43)
% Proficient or Higher, ELA CST		49	60	65	44	27
<i>8th Grade</i>						
ELA CST		348	366	371	342	318
SD		(56)	(55)	(52)	(55)	(58)
% Proficient or Higher, ELA CST		48	60	66	44	24
% Taking Algebra or Higher		52	62	67	49	27
<i>9th Grade</i>						
ELA CST		359	376	374	354	325
SD		(55)	(49)	(50)	(55)	(49)
% Proficient or Higher, ELA CST		59	74	70	55	24
<i>10th Grade</i>						
ELA CST		344	359	364	340	314
SD		(52)	(45)	(47)	(53)	(51)
% Proficient or Higher, ELA CST		47	59	68	43	29
Math CAHSEE		386	395	391	384	369
SD		(35)	(30)	(34)	(36)	(25)
% Passing, Math CAHSEE		85	96	89	83	77
ELA CAHSEE		390	401	399	388	382
SD		(32)	(28)	(27)	(32)	(35)
% Passing, ELA CAHSEE		88	96	95	87	85
<i>11th Grade</i>						
ELA CST		-	-	-	-	-
SD		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
% Passing, EAP ELA		-	-	-	-	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-32
Antioch Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
		2,064	267	258	1,490	49
<i>Number of F's Received</i>						
9th Grade		1.99	1.91	0.96	2.17	1.00
SD		(2.98)	(3.03)	(1.92)	(3.08)	
10th Grade		2.56	2.11	1.67	2.72	3.20
SD		(3.42)	(2.91)	(2.61)	(3.56)	(3.27)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>Number of Credits</i>						
9th Grade		53	59	63	50	30
SD		(18)	(17)	(11)	(18)	
10th Grade		51	58	61	49	33
SD		(20)	(17)	(14)	(20)	(23)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>GPA</i>						
9th Grade		2.10	2.39	2.44	1.99	3.00
SD		(1.17)	(1.13)	(1.01)	(1.18)	
10th Grade		1.91	2.34	1.93	1.84	1.73
SD		(1.14)	(1.01)	(0.99)	(1.16)	(1.76)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>% a-g On Track</i>						
9th Grade		36	56	51	30	0
10th Grade		30	49	27	28	0
11th Grade		-	-	-	-	-
<i>Absences</i>						
9th Grade		-	-	-	-	-
SD		-	-	-	-	-
10th Grade		-	-	-	-	-
SD		-	-	-	-	-
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>% Retained from 9th Grade</i>						
to 10th Grade		92	97	99	91	83
to 11th Grade		-	-	-	-	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-33
Long Beach Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>IB/ Honors Program</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
<i>n^b</i>	15,449	1,309	7,552	1,758	2,819	2,011
% Class of 2013	35	34	40	36	32	19
% Class of 2014	32	31	31	36	35	28
% Class of 2015	33	35	29	28	33	52
% Female	51	54	49	61	51	43
% Low SES	74	64	79	51	65	96
% White	16	25	11	28	27	2
% Latino	54	56	52	39	52	73
% African American	15	10	19	8	10	17
% Asian Group 1 ^c	11	7	13	19	8	5
% Asian Group 2 ^d	4	2	5	5	3	4
% Other Race / Ethnicity	0	0	0	0	1	0
% Gifted and Talented	-	-	-	-	-	-
% Special Education	6	3	7	1	6	10
% English Language Learner	18	7	18	4	16	39

^a In Long Beach this primarily refers to Freshman Academies.

^b Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^c Asian groups with higher than national average high school graduation rates.

^d Asian groups with lower than national average high school graduation rates.

Exhibit 2-34
Long Beach Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^b	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>IB/ Honors Program</i>	<i>Traditional High School</i>	<i>Alternative School</i> ^a
<i>7th Grade</i> ^c							
ELA CST		352	374	341	417	364	311
<i>SD</i>		(57)	(45)	(50)	(43)	(59)	(47)
% Proficient or Higher, ELA CST		51	70	43	95	61	20
<i>8th Grade</i> ^d							
ELA CST		357	377	348	418	365	316
<i>SD</i>		(60)	(48)	(53)	(52)	(63)	(47)
% Proficient or Higher, ELA CST		53	72	48	90	60	22
% Taking Algebra or Higher		38	51	33	62	38	24
<i>9th Grade</i>							
ELA CST		353	374	342	415	361	310
<i>SD</i>		(59)	(47)	(51)	(50)	(61)	(47)
% Proficient or Higher, ELA CST		52	69	45	91	59	20
<i>10th Grade</i>							
ELA CST		343	360	329	396	347	295
<i>SD</i>		(57)	(46)	(51)	(49)	(59)	(43)
% Proficient or Higher, ELA CST		46	58	36	87	50	13
Math CAHSEE		387	394	377	422	391	364
<i>SD</i>		(35)	(29)	(32)	(28)	(35)	(28)
% Passing, Math CAHSEE		85	95	81	98	87	68
ELA CAHSEE		385	394	376	415	393	359
<i>SD</i>		(35)	(26)	(32)	(27)	(36)	(28)
% Passing, ELA CAHSEE		84	96	80	98	88	65
<i>11th Grade</i>							
ELA CST		344	359	323	398	352	298
<i>SD</i>		(61)	(54)	(57)	(49)	(62)	(49)
% Proficient or Higher, ELA CST		47	57	33	85	55	15
% Passing, EAP ELA		37	46	23	77	48	7

^a In Long Beach this primarily refers to Freshman Academies.

^b Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^c 7th grade CST scores missing for Class of 2014 and Class of 2015.

^d 8th grade CST scores missing for Class of 2013.

Exhibit 2-35
Long Beach Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>IB/ Honors Program</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
<i>n^b</i>	15,449	1,309	7,552	1,758	2,819	2,011
<i>Number of F's Received</i>						
9th Grade	1.80	0.84	1.82	0.55	1.89	3.26
SD	(2.76)	(1.89)	(2.62)	(1.81)	(3.09)	(3.19)
10th Grade	1.59	0.92	1.91	0.56	1.14	3.11
SD	(2.60)	(1.88)	(2.77)	(1.61)	(2.19)	(3.24)
11th Grade	1.00	0.68	1.28	0.38	0.72	1.75
SD	(1.92)	(1.37)	(2.11)	(1.29)	(1.57)	(2.59)
<i>Number of Credits</i>						
9th Grade	55	63	52	65	58	44
SD	(17)	(14)	(16)	(10)	(18)	(17)
10th Grade	56	64	53	65	58	43
SD	(16)	(13)	(16)	(11)	(15)	(17)
11th Grade	58	61	55	66	59	53
SD	(13)	(12)	(15)	(10)	(11)	(17)
<i>GPA</i>						
9th Grade	2.16	2.47	2.02	3.11	2.24	1.55
SD	(1.12)	(0.97)	(1.04)	(0.92)	(1.19)	(0.98)
10th Grade	2.25	2.58	2.07	2.96	2.41	1.48
SD	(1.04)	(0.90)	(1.00)	(0.89)	(0.99)	(0.92)
11th Grade	2.45	2.59	2.21	3.11	2.67	2.03
SD	(0.91)	(0.81)	(0.87)	(0.75)	(0.83)	(0.89)
<i>% a-g On Track</i>						
9th Grade	35	53	24	80	43	13
10th Grade	31	41	19	72	37	6
11th Grade	27	29	16	67	31	4
<i>Absences</i>						
9th Grade	6.40	4.71	6.24	3.64	5.47	10.60
SD	(8.87)	(6.51)	(8.33)	(5.11)	(6.82)	(12.92)
10th Grade	7.49	5.96	7.89	5.29	6.03	12.74
SD	(10.04)	(7.10)	(10.32)	(8.11)	(7.30)	(14.73)
11th Grade	8.09	7.37	9.26	5.43	6.16	12.07
SD	(10.20)	(8.78)	(11.49)	(7.95)	(6.88)	(12.16)
<i>% Retained from 9th Grade</i>						
to 10th Grade	94	97	94	97	95	90
to 11th Grade	94	94	89	94	87	79

^a In Long Beach this primarily refers to Freshman Academies.

^b Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-36
Los Angeles Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>
<i>n</i> ^a	6,371	403	3,932	2,036
% Class of 2014	50	51	45	60
% Class of 2015	50	49	55	40
% Female	48	54	51	43
% Low SES	85	85	84	87
% White	2	0	3	2
% Latino	86	93	86	86
% African American	3	1	3	2
% Asian	8	5	8	10
% Other Race / Ethnicity	1	1	1	1
% Gifted and Talented	10	8	11	8
% Special Education	8	3	8	8
% English Language Learner	35	34	32	41

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-37
Los Angeles Standardized Testing Descriptive Statistics—Analytic Sample

		Overall	Certified Pathway	Non-Certified Pathway	Traditional High School
	<i>n</i> ^a	6,371	403	3,932	2,036
<i>7th Grade</i>					
	ELA CST	320	321	322	316
	<i>SD</i>	(53)	(50)	(54)	(50)
	% Proficient or Higher, ELA CST	30	28	32	26
<i>8th Grade</i>					
	ELA CST	324	322	327	318
	<i>SD</i>	(55)	(51)	(56)	(52)
	% Proficient or Higher, ELA CST	32	30	34	26
	% Taking Algebra or Higher	66	70	67	65
<i>9th Grade</i>					
	ELA CST	330	332	334	320
	<i>SD</i>	(54)	(47)	(55)	(51)
	% Proficient or Higher, ELA CST	36	36	39	30
<i>10th Grade</i>					
	ELA CST	335	332	338	328
	<i>SD</i>	(50)	(49)	(52)	(50)
	% Proficient or Higher, ELA CST	37	34	39	32
	Math CAHSEE	383	383	384	379
	<i>SD</i>	(34)	(32)	(34)	(34)
	% Passing, Math CAHSEE	82	86	83	79
	ELA CAHSEE	375	377	377	370
	<i>SD</i>	(33)	(28)	(33)	(34)
	% Passing, ELA CAHSEE	79	83	82	74

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-38
Los Angeles Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>
<i>n^a</i>	6,371	403	3,932	2,036
<i>Number of F's Received</i>				
9th Grade	2.35	0.86	2.53	2.31
SD	(3.26)	(1.80)	(3.40)	(3.12)
10th Grade	1.60	0.89	1.81	1.56
SD	(2.59)	(1.96)	(2.73)	(2.47)
<i>Number of Credits</i>				
9th Grade	57	70	57	55
SD	(19)	(16)	(20)	(18)
10th Grade	63	68	61	60
SD	(15)	(18)	(17)	(15)
<i>GPA</i>				
9th Grade	2.27	2.71	2.23	2.26
SD	(1.02)	(0.79)	(1.03)	(1.02)
10th Grade	2.50	2.69	2.42	2.47
SD	(0.92)	(0.88)	(0.93)	(0.95)
<i>% a-g On Track</i>				
9th Grade	34	37	37	29
10th Grade	32	27	31	30
<i>Absences</i>				
9th Grade	7.72	4.87	7.66	8.39
SD	(11.91)	(6.48)	(11.95)	(12.57)
10th Grade	8.36	5.60	8.06	10.02
SD	(12.99)	(8.23)	(11.91)	(15.19)
<i>% Retained from 9th Grade</i>				
to 10th Grade	94	97	97	90

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-39
Montebello Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
<i>n^b</i>	2,484	94	2,384	6
% Class of 2013	0	0	0	-
% Class of 2014	53	56	52	-
% Class of 2015	47	44	48	-
% Female	46	41	46	-
% Low SES	94	93	95	-
% White	2	3	2	-
% Latino	94	95	94	-
% African American	0	0	0	-
% Asian Group 1 ^c	3	2	3	-
% Asian Group 2 ^d	0	0	0	-
% Other Race / Ethnicity	0	0	0	-
% Gifted and Talented	13	10	13	-
% Special Education	10	4	10	-
% English Language Learner	23	18	23	-

^a Cell size less than ten, not reported.

^b Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^c Asian groups with higher than national average high school graduation rates.

^d Asian groups with lower than national average high school graduation rates.

Exhibit 2-40
Montebello Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^b	<i>Overall</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
<i>7th Grade</i>		2,484	94	2,384	6
ELA CST		-	-	-	-
SD		-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-
<i>8th Grade</i>					
ELA CST		337	350	337	-
SD		(59)	(54)	(59)	-
% Proficient or Higher, ELA CST		39	43	39	-
% Taking Algebra or Higher		31	38	31	-
<i>9th Grade</i>					
ELA CST		336	351	335	-
SD		(58)	(52)	(58)	-
% Proficient or Higher, ELA CST		40	48	40	-
<i>10th Grade</i>					
ELA CST		331	337	331	-
SD		(57)	(45)	(58)	-
% Proficient or Higher, ELA CST		38	38	38	-
Math CAHSEE		374	377	374	-
SD		(37)	(31)	(37)	-
% Passing, Math CAHSEE		72	85	71	-
ELA CAHSEE		372	378	371	-
SD		(35)	(27)	(36)	-
% Passing, ELA CAHSEE		73	90	72	-

^a Cell size less than ten, not reported.

^b Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-41
Montebello Engagement and School Success Descriptive Statistics—Analytic Sample

		<i>Overall</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School^a</i>
	<i>n^b</i>	2,484	94	2,384	6
<i>Number of F's Received</i>					
9th Grade		2.41	0.66	2.48	-
SD		(2.71)	(1.04)	(2.73)	-
10th Grade		2.47	1.06	2.54	-
SD		(2.53)	(1.35)	(2.55)	-
<i>Number of Credits</i>					
9th Grade		32	22	33	-
SD		(19)	(16)	(19)	-
10th Grade		36	22	37	-
SD		(20)	(16)	(20)	-
<i>GPA</i>					
9th Grade		1.59	1.75	1.59	-
SD		(1.12)	(1.09)	(1.12)	-
10th Grade		1.73	2.02	1.72	-
SD		(1.05)	(1.08)	(1.05)	-
<i>% a-g On Track</i>					
9th Grade		14	13	14	-
10th Grade		13	4	13	-
<i>Absences</i>					
9th Grade		8.20	5.43	8.33	-
SD		(9.63)	(5.94)	(9.75)	-
10th Grade		8.34	6.51	8.44	-
SD		(10.10)	(7.08)	(10.24)	-
<i>% Retained from 9th Grade</i>					
to 10th Grade		92	100	92	-

^a Cell size less than ten, not reported.

^b Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-42
Oakland Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n</i> ^a	1,358	123	692	526	17
% Class of 2013	0	0	0	0	0
% Class of 2014	100	100	100	100	100
% Class of 2015	0	0	0	0	0
% Female	50	55	53	47	35
% Low SES	86	93	86	84	94
% White	8	3	8	9	0
% Latino	36	62	40	25	35
% African American	32	24	27	40	59
% Asian Group 1 ^b	13	5	13	14	0
% Asian Group 2 ^c	11	7	13	11	0
% Other Race / Ethnicity	0	0	0	1	6
% Gifted and Talented	18	15	20	16	18
% Special Education	5	3	3	8	0
% English Language Learner	22	26	24	18	12

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-43
Oakland Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>7th Grade</i>						
ELA CST		-	-	-	-	-
SD		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
<i>8th Grade</i>						
ELA CST		337	333	342	331	322
SD		(61)	(58)	(61)	(61)	(49)
% Proficient or Higher, ELA CST		40	34	42	37	29
% Taking Algebra or Higher		97	99	98	95	100
<i>9th Grade</i>						
ELA CST		338	341	343	332	301
SD		(62)	(51)	(62)	(64)	(49)
% Proficient or Higher, ELA CST		41	40	45	36	18
<i>10th Grade</i>						
ELA CST		324	330	327	319	301
SD		(60)	(54)	(61)	(60)	(55)
% Proficient or Higher, ELA CST		35	33	37	34	15
Math CAHSEE		377	379	382	371	355
SD		(40)	(37)	(39)	(40)	(40)
% Passing, Math CAHSEE		74	78	79	67	58
ELA CAHSEE		373	379	377	367	362
SD		(37)	(32)	(36)	(39)	(38)
% Passing, ELA CAHSEE		76	87	79	69	67
<i>11th Grade</i>						
ELA CST		-	-	-	-	-
SD		-	-	-	-	-
% Proficient or Higher, ELA CST		-	-	-	-	-
% Passing, EAP ELA		-	-	-	-	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-44
Oakland Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n^a</i>	1,358	123	692	526	17
<i>Number of F's Received</i>					
9th Grade	1.82	1.85	1.49	2.18	6.43
SD	(2.82)	(2.72)	(2.53)	(3.09)	(3.36)
10th Grade	2.35	2.95	1.86	2.87	3.00
SD	(3.27)	(3.67)	(2.84)	(3.61)	(2.94)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>Number of Credits</i>					
9th Grade	51	59	52	49	27
SD	(16)	(15)	(15)	(16)	(15)
10th Grade	53	62	56	49	8
SD	(19)	(24)	(16)	(20)	(7)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>GPA</i>					
9th Grade	2.29	2.49	2.44	2.07	0.73
SD	(1.16)	(1.13)	(1.15)	(1.14)	(0.56)
10th Grade	2.15	2.24	2.32	1.90	0.71
SD	(1.16)	(1.24)	(1.10)	(1.17)	(0.89)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>% a-g On Track</i>					
9th Grade	45	54	48	38	0
10th Grade	35	33	39	31	0
11th Grade	-	-	-	-	-
<i>Absences</i>					
9th Grade	7.01	7.41	6.28	7.86	7.31
SD	(9.51)	(10.34)	(8.16)	(10.70)	(13.05)
10th Grade	7.83	6.17	6.87	9.77	0.00
SD	(12.19)	(7.52)	(9.73)	(15.58)	(0.00)
11th Grade	-	-	-	-	-
SD	-	-	-	-	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-45
Pasadena Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n</i> ^a	3,027	722	223	2,064	18
% Class of 2013	33	28	29	35	11
% Class of 2014	33	32	45	32	61
% Class of 2015	34	40	26	33	28
% Female	51	53	53	50	28
% Low SES	83	89	88	80	78
% White	10	6	3	13	11
% Latino	66	68	69	66	72
% African American	18	23	25	16	11
% Asian Group 1 ^b	4	2	3	5	6
% Asian Group 2 ^c	0	0	0	1	0
% Other Race / Ethnicity	0	0	0	0	0
% Gifted and Talented	17	9	9	20	6
% Special Education	6	6	5	6	6
% English Language Learner	14	18	12	12	28

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-46
Pasadena Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	Overall	Certified Pathway	Non-Certified Pathway	Traditional High School	Alternative School
<i>7th Grade</i>		3,027	722	223	2064	18
ELA CST		345	334	335	350	328
sd		(58)	(53)	(51)	(60)	(54)
% Proficient or Higher, ELA CST		46	38	37	50	28
<i>8th Grade</i>						
ELA CST		349	338	337	354	329
sd		(60)	(55)	(54)	(61)	(47)
% Proficient or Higher, ELA CST		48	39	38	53	28
% Taking Algebra or Higher		66	65	63	67	61
<i>9th Grade</i>						
ELA CST		354	340	340	361	332
sd		(58)	(54)	(54)	(58)	(53)
% Proficient or Higher, ELA CST		53	43	46	58	45
<i>10th Grade</i>						
ELA CST		347	334	335	353	307
sd		(53)	(49)	(48)	(53)	(53)
% Proficient or Higher, ELA CST		48	38	40	52	22
Math CAHSEE		387	380	381	390	353
sd		(35)	(32)	(32)	(35)	(48)
% Passing, Math CAHSEE		86	84	85	87	29
ELA CAHSEE		386	380	377	389	361
sd		(32)	(31)	(28)	(33)	(35)
% Passing, ELA CAHSEE		87	85	83	88	57
<i>11th Grade</i>						
ELA CST		344	330	321	350	332
sd		(60)	(54)	(53)	(61)	(63)
% Proficient or Higher, ELA CST		45	35	30	49	50
% Passing, EAP ELA		34	24	22	38	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-47
Pasadena Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n^a</i>	3,027	722	223	2064	18
<i>Number of F's Received</i>					
9th Grade	1.79	2.44	2.16	1.51	2.89
SD	(2.86)	(3.47)	(3.01)	(2.55)	(2.68)
10th Grade	1.66	2.25	2.09	1.42	2.20
SD	(2.53)	(2.99)	(2.90)	(2.26)	(3.97)
11th Grade	1.32	1.80	2.37	1.09	0.50
SD	(2.34)	(2.82)	(3.43)	(2.00)	(0.71)
<i>Number of Credits</i>					
9th Grade	56	64	63	53	31
SD	(17)	(19)	(20)	(14)	(17)
10th Grade	57	63	67	55	35
SD	(16)	(18)	(18)	(14)	(14)
11th Grade	60	64	66	58	48
SD	(17)	(20)	(24)	(14)	(4)
<i>GPA</i>					
9th Grade	2.17	2.05	1.99	2.23	1.52
SD	(1.04)	(1.02)	(1.07)	(1.04)	(1.04)
10th Grade	2.18	1.97	2.09	2.26	1.82
SD	(0.97)	(0.95)	(0.97)	(0.96)	(1.28)
11th Grade	2.31	2.13	2.12	2.37	2.80
SD	(0.89)	(0.92)	(1.07)	(0.86)	(0.08)
<i>% a-g On Track</i>					
9th Grade	33	35	31	33	11
10th Grade	25	26	28	24	0
11th Grade	21	20	33	20	0
<i>Absences</i>					
9th Grade	-	-	-	-	-
SD	-	-	-	-	-
10th Grade	-	-	-	-	-
SD	-	-	-	-	-
11th Grade	-	-	-	-	-
SD	-	-	-	-	-
<i>Retention from 9th Grade</i>					
to 10th Grade	94	96	93	94	77
to 11th Grade	92	88	88	87	100

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-48
Porterville Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n</i> ^a	1,934	343	148	1,401	42
% Class of 2013	33	22	21	37	43
% Class of 2014	33	28	46	33	33
% Class of 2015	34	50	33	30	24
% Female	51	52	58	50	57
% Low SES	89	83	90	91	90
% White	16	16	19	15	33
% Latino	75	72	74	76	64
% African American	1	2	0	1	0
% Asian Group 1 ^b	1	3	1	1	0
% Asian Group 2 ^c	2	4	2	2	0
% Other Race / Ethnicity	4	3	4	4	2
% Gifted and Talented	9	17	9	7	5
% Special Education	2	0	1	2	5
% English Language Learner	14	8	11	16	10

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-49
Porterville Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>7th Grade</i>						
ELA CST		343	370	353	336	320
SD		(50)	(49)	(48)	(48)	(49)
% Proficient or Higher, ELA CST		43	64	49	38	19
<i>8th Grade</i>						
ELA CST		346	376	356	339	319
SD		(52)	(51)	(50)	(50)	(52)
% Proficient or Higher, ELA CST		46	66	55	40	21
% Taking Algebra or Higher		99	100	100	99	95
<i>9th Grade</i>						
ELA CST		352	377	361	345	318
SD		(51)	(51)	(46)	(49)	(50)
% Proficient or Higher, ELA CST		51	67	65	46	24
<i>10th Grade</i>						
ELA CST		341	366	350	336	311
SD		(49)	(48)	(46)	(47)	(54)
% Proficient or Higher, ELA CST		42	65	49	37	31
Math CAHSEE		385	404	387	382	361
SD		(33)	(33)	(30)	(31)	(38)
% Passing, Math CAHSEE		86	96	89	84	56
ELA CAHSEE		378	395	385	375	365
SD		(31)	(30)	(29)	(30)	(33)
% Passing, ELA CAHSEE		85	95	93	82	69
<i>11th Grade</i>						
ELA CST		338	355	358	334	282
SD		(49)	(56)	(59)	(46)	(43)
% Proficient or Higher, ELA CST		40	55	52	37	0
% Passing, EAP ELA		25	38	32	23	0

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-50
Porterville Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>Number of F's Received</i>						
9th Grade		1.52	0.77	1.08	1.73	2.32
SD		(2.27)	(1.51)	(1.97)	(2.39)	(2.79)
10th Grade		1.95	1.14	1.56	2.14	1.79
SD		(2.62)	(2.06)	(2.18)	(2.71)	(2.73)
11th Grade		1.16	1.27	1.07	1.16	0.60
SD		(2.01)	(2.36)	(1.60)	(1.99)	(1.26)
<i>Number of Credits</i>						
9th Grade		58	65	63	56	35
SD		(15)	(9)	(11)	(15)	(21)
10th Grade		59	65	63	58	41
SD		(17)	(11)	(14)	(18)	(26)
11th Grade		61	64	66	61	35
SD		(18)	(15)	(9)	(18)	(18)
<i>GPA</i>						
9th Grade		2.11	2.53	2.23	2.00	1.93
SD		(0.97)	(0.91)	(0.89)	(0.96)	(1.14)
10th Grade		1.95	2.39	2.06	1.85	2.30
SD		(0.99)	(0.97)	(0.91)	(0.97)	(1.11)
11th Grade		2.26	2.50	2.27	2.21	2.66
SD		(0.85)	(0.94)	(0.99)	(0.83)	(0.56)
<i>% a-g On Track</i>						
9th Grade		25	43	33	21	10
10th Grade		20	39	18	17	8
11th Grade		16	33	11	13	0
<i>Absences</i>						
9th Grade		5.02	3.40	5.85	5.37	0.00
SD		(6.59)	(4.31)	(7.39)	(6.92)	(0.00)
10th Grade		5.18	4.29	5.39	5.30	6.60
SD		(6.63)	(4.96)	(6.78)	(6.87)	(5.22)
11th Grade		5.05	3.24	6.77	5.17	10.60
SD		(6.58)	(3.94)	(6.43)	(6.72)	(15.44)
<i>% Retained from 9th Grade</i>						
to 10th Grade		94	98	97	94	75
to 11th Grade		93	97	94	89	56

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-51
Sacramento Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>
<i>n^a</i>	4,828	426	702	3,700
% Class of 2013	0	0	0	0
% Class of 2014	51	36	69	49
% Class of 2015	49	64	31	51
% Female	50	53	54	49
% Low SES	79	86	79	79
% White	19	19	23	19
% Latino	36	42	34	36
% African American	17	24	14	16
% Asian Group 1 ^b	13	5	12	14
% Asian Group 2 ^c	14	9	16	15
% Other Race / Ethnicity	1	1	1	1
% Gifted and Talented	18	9	18	19
% Special Education	10	9	9	10
% English Language Learner	20	19	21	19

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-52
Sacramento Standardized Testing Descriptive Statistics—Analytic Sample

		<i>n^a</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>
<i>7th Grade</i>			4,828	426	702	3,700
	ELA CST	-	-	-	-	-
	SD	-	-	-	-	-
	% Proficient or Higher, ELA CST	-	-	-	-	-
<i>8th Grade</i>						
	ELA CST	354	346	358	354	
	SD	(65)	(58)	(67)	(65)	
	% Proficient or Higher, ELA CST	52	46	51	52	
	% Taking Algebra or Higher	54	44	47	56	
<i>9th Grade</i>						
	ELA CST	354	338	361	354	
	SD	(62)	(54)	(61)	(63)	
	% Proficient or Higher, ELA CST	53	41	56	53	
<i>10th Grade</i>						
	ELA CST	349	329	358	345	
	SD	(59)	(49)	(60)	(59)	
	% Proficient or Higher, ELA CST	50	37	55	48	
	Math CAHSEE	391	376	395	390	
	SD	(37)	(33)	(38)	(37)	
	% Passing, Math CAHSEE	86	76	87	86	
	ELA CAHSEE	384	372	391	383	
	SD	(37)	(30)	(38)	(37)	
	% Passing, ELA CAHSEE	84	84	87	82	

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-53
Sacramento Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>
<i>n^a</i>	4,828	426	702	3,700
<i>Number of F's Received</i>				
9th Grade	1.58	1.79	2.13	1.44
SD	(2.61)	(2.67)	(3.03)	(2.50)
10th Grade	1.35	1.87	1.31	1.26
SD	(2.33)	(2.66)	(2.35)	(2.26)
<i>Number of Credits</i>				
9th Grade	53	55	52	53
SD	(15)	(17)	(16)	(15)
10th Grade	55	54	56	54
SD	(14)	(17)	(16)	(14)
<i>GPA</i>				
9th Grade	2.39	2.21	2.24	2.44
SD	(1.11)	(1.05)	(1.20)	(1.09)
10th Grade	2.38	2.22	2.52	2.38
SD	(1.03)	(1.06)	(1.05)	(1.01)
<i>% a-g On Track</i>				
9th Grade	41	24	43	43
10th Grade	-	-	-	-
<i>Absences</i>				
9th Grade	6.27	6.84	6.40	6.18
SD	(7.79)	(8.05)	(7.74)	(7.77)
10th Grade	6.22	7.67	5.57	6.60
SD	(7.80)	(7.84)	(7.17)	(8.89)
<i>% Retained from 9th Grade</i>				
to 10th Grade	90	90	91	89

^a Reported sample sizes refer to models predicting 9th grade CST scores.
The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-54
West Contra Costa Demographic Descriptive Statistics—Analytic Sample

	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>n</i> ^a	1,351	187	495	637	32
% Class of 2013	0	0	0	0	0
% Class of 2014	100	100	100	100	100
% Class of 2015	0	0	0	0	0
% Female	48	30	57	47	53
% Low SES	77	98	85	64	81
% White	9	1	8	12	6
% Latino	48	84	51	35	47
% African American	20	6	20	23	41
% Asian Group 1 ^b	13	5	9	19	0
% Asian Group 2 ^c	10	4	11	12	6
% Other Race / Ethnicity	0	1	0	0	0
% Gifted and Talented	14	7	14	17	6
% Special Education	7	7	6	7	9
% English Language Learner	26	46	28	19	19

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

^b Asian groups with higher than national average high school graduation rates.

^c Asian groups with lower than national average high school graduation rates.

Exhibit 2-55
West Contra Costa Standardized Testing Descriptive Statistics—Analytic Sample

	<i>n</i> ^a	Overall	Certified Pathway	Non-Certified Pathway	Traditional High School	Alternative School
7th Grade		1,351	187	495	637	32
	ELA CST	-	-	-	-	-
	SD	-	-	-	-	-
	% Proficient or Higher, ELA CST	-	-	-	-	-
8th Grade						
	ELA CST	331	302	332	340	296
	SD	(59)	(47)	(56)	(61)	(49)
	% Proficient or Higher, ELA CST	37	17	34	46	16
	% Taking Algebra or Higher	90	84	88	94	63
9th Grade						
	ELA CST	333	315	332	342	290
	SD	(56)	(46)	(55)	(59)	(46)
	% Proficient or Higher, ELA CST	38	20	38	45	16
10th Grade						
	ELA CST	323	300	321	334	276
	SD	(59)	(48)	(54)	(62)	(45)
	% Proficient or Higher, ELA CST	34	14	30	44	7
	Math CAHSEE	375	364	374	380	347
	SD	(37)	(31)	(36)	(38)	(23)
	% Passing, Math CAHSEE	75	67	74	79	57
	ELA CAHSEE	376	363	376	381	350
	SD	(34)	(30)	(32)	(36)	(35)
	% Passing, ELA CAHSEE	80	69	83	82	60
11th Grade						
	ELA CST	-	-	-	-	-
	SD	-	-	-	-	-
	% Proficient or Higher, ELA CST	-	-	-	-	-
	% Passing, EAP ELA	-	-	-	-	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Exhibit 2-56
West Contra Costa Engagement and School Success Descriptive Statistics—Analytic Sample

	<i>n^a</i>	<i>Overall</i>	<i>Certified Pathway</i>	<i>Non-Certified Pathway</i>	<i>Traditional High School</i>	<i>Alternative School</i>
<i>Number of F's Received</i>						
9th Grade		1.88	1.66	1.79	1.86	6.00
SD		(2.66)	(2.56)	(2.55)	(2.64)	(2.93)
10th Grade		1.70	1.71	1.55	1.78	3.44
SD		(2.63)	(2.64)	(2.35)	(2.82)	(1.67)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>Number of Credits</i>						
9th Grade		53	53	53	53	26
SD		(15)	(14)	(14)	(15)	(17)
10th Grade		53	52	55	52	11
SD		(16)	(14)	(14)	(18)	(10)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>GPA</i>						
9th Grade		2.22	2.14	2.24	2.28	0.77
SD		(1.11)	(1.03)	(1.09)	(1.14)	(0.67)
10th Grade		2.17	2.10	2.17	2.22	0.55
SD		(1.11)	(1.05)	(1.05)	(1.15)	(0.70)
11th Grade		-	-	-	-	-
SD		-	-	-	-	-
<i>% a-g On Track</i>						
9th Grade		41	40	41	44	0
10th Grade		32	31	29	36	0
11th Grade		-	-	-	-	-
<i>Absences</i>						
9th Grade		7.87	7.82	6.70	15.47	13.86
SD		(10.84)	(10.87)	(9.28)	(16.48)	(11.17)
10th Grade		10.44	11.27	11.53	9.26	-
SD		(10.77)	(11.79)	(11.11)	(10.01)	-
11th Grade		-	-	-	-	-
SD		-	-	-	-	-

^a Reported sample sizes refer to models predicting 9th grade CST scores. The sample sizes will vary for other grades, which may not include all cohorts.

Value-Added Analysis

Once we obtained the correct analytic sample for each model, we centered all control variables around the mean of the analytic sample (standardizing continuous variables, centering indicator variables). The availability of control variables varied by district (and sometimes by outcome), as we did not have all prior achievement variables for all districts and cohorts. Exhibit 2-57 lists the control variables used in each model. We used quadratic and cubic terms for the middle school CST scores in models predicting continuous outcomes. We squared/ cubed the standardized terms, then re-centered them. This centering meant that we estimated outcomes for the student in each district who is average on all control variables.

Exhibit 2-57
Control Variables Used in Each Model

	Antioch	Long Beach	Los Angeles	Montebello	Oakland	Pasadena	Porterville	Sacramento	West Contra Costa
All Models									
Female	X	X	X	X	X	X	X	X	X
Low SES	X	X	X	X	X	X	X	X	X
Race/Ethnicity	X	X	X	X	X	X	X	X	X
Gifted and Talented	X		X	X	X	X	X	X	X
Special Education	X	X	X	X	X	X	X	X	X
English Language Learner	X	X	X	X	X	X	X	X	X
7th Grade GPA		X							
8th Grade GPA		X							
7th Grade Math CST	X	X ^a	X			X	X		
8th Grade Math CST	X	X ^b	X	X	X	X	X	X	X
9th Grade Math CST					X				X
7th Grade ELA CST	X	X ^a	X			X	X		
8th Grade ELA CST	X	X ^b	X	X	X	X	X	X	X
9th Grade ELA CST					X				X
7th grade math CST test taken	X	X ^a	X			X	X		
8th grade math CST test taken ^c	X	X ^b	X	X	X	X	X	X	X
9th grade math CST test taken					X				X
Models Predicting 9th Grade Outcomes Only									
Class of 2013	X	X				X	X		
Class of 2014		X	X	X		X	X	X	
Models Predicting 10th Grade Outcomes Only									
Class of 2013		X				X	X		
Class of 2014		X				X	X		
Models Predicting Failures Only									
Failed one or more class in 7th grade		X							
Failed one or more class in 8th grade		X				X			

^a Class of 2013 only.

^b Classes of 2014 and 2015 only.

^c All students in the analytic sample in Porterville took the same math CST exam.

We begin by explaining the procedure to estimate the value-added scores for models predicting continuous outcome variables (in this case the standardized test scores and credits accumulated), then explain the differences when estimating a fixed effect model for the other outcomes.

To estimate the value-added scores for models predicting continuous outcome variables, we regressed the outcome variable (score Y for student i in pathway s) on a vector of centered control variables representing the demographics and prior achievement of student i (X_i). We used a vector of indicators for the student's pathway (η_s) to predict the fixed effects of each pathway:

$$Y_{is} = \beta + X_i\lambda + \eta_s + \mu_i$$

Next, we calculated the individual value-added estimate for each pathway/ school by adding the individual fixed effect for that pathway/school to the constant term (β). For each pathway s , $\beta + \eta_s$ predicts the average value of Y for a student with a value of zero for all other covariates. Since we centered the covariates at the sample means, this term predicts the test score for an "average" student in the sample.

To predict the overall district average, we weighted each pathway's predicted average outcome by the size of the pathway enrollment. We summed these weighted values, providing us with the predicted average outcome for an "average" student in the district, without regard to pathway or school enrollment.

To predict the outcomes for the certified pathways, we multiplied the individual estimates for the certified pathways by the percent of certified pathway students in the sample enrolled in that particular pathway. We summed these weighted values, giving us the predicted outcome for the average student in that district, if that student enrolls in a certified pathway.

Our final step in predicting the value-added score was to compare this predicted outcome for the average student in that district, if enrolled in a certified pathway, to the district average for this student. To do so, we subtracted the predicted district outcome from the predicted outcome for students in a certified pathway. We performed this test using the *lincom* command in Stata, which tests the difference against zero. The null hypothesis in this case is that the average student in a district performs no differently in a certified pathway than they do without regard to pathway enrollment. We refer to this difference as the "value-added" score.

We made some modifications for models predicting binary (on track to complete a-g; at least conditionally college ready on the EAP exam, retained in district to 10th or 11th grade) and count (number of F's, days absent) outcomes. We used logistic regression to predict binary outcomes. Although binary indicators for categories can provide biased estimates of fixed effects when predicted as dummy variables, the sample sizes of our pathways were large enough to preclude this problem.

For models predicting count data we began by testing the fit of a Poisson regression. The goodness-of-fit test was significant for this model ($p < .001$), however, indicating that this data exhibits overdispersion. We therefore used a negative binomial model, which models count data while allowing for an individual error term (Kennedy, 2003). For both types of models, we first transformed the estimates into probabilities or counts before combining the scores of different pathways or schools. Finally, we performed significance testing of these combined estimates using the *nlcom* command in Stata, for non-linear combinations of estimates.

We present all value-added estimates for certified pathways in Exhibits 2-58 through 2-73. All certified pathway value-added estimates are presented, along with their significance level and the associated standard error. Note that continuous variables (credits, CST and CAHSEE scores) have been standardized and value-added scores should therefore be interpreted in standard deviation

units. Count data (absences, number of F's) should be interpreted as counts of the outcome variable (that is, .5 could be interpreted as half a day or failing .5 few classes). Binary outcomes (on-track indicator, retention in district, passing the EAP exam) should be interpreted as percentage points (.05 indicates 5 percentage points more likely to have a value of 1 in the outcome).

We present several other numbers, for the sake of better interpreting the outcomes. We report the adjusted mean for the outcome in the analytic sample (i.e., the mean outcome for the average student in the district, against which the value-added point estimate is tested). For continuous variables this adjusted mean should be zero, as the outcome variable is standardized. Given that we estimate these models using OLS, a student who has the average on all control variables (which have also been centered) will be predicted to have an average value on all continuous outcomes. We also present the overall mean in the analytic sample, which has neither been standardized nor adjusted for the "average" student. Finally, we present the standard deviation of the outcome variable for continuous and count outcomes.

Exhibit 2-58
Antioch Value Added Standardized Testing Outcomes

	9th Grade	10th Grade	11th Grade
<i>ELA CST (Std.)</i>			
VAM	0.07 *	0.02	-
SE	(0.03)	(0.06)	-
Adjusted Mean	0.00	0.00	-
Mean in Analytic Sample	359.18	344.25	-
SD	(54.60)	(52.15)	-
n	1,906	835	-
<i>ELA CAHSEE (Std.)</i>			
VAM	-	0.08	-
SE	-	(0.05)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	390.31	-
SD	-	(31.96)	-
n	-	859	-
<i>Math CAHSEE (Std.)</i>			
VAM	-	0.01	-
SE	-	(0.05)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	386.10	-
SD	-	(35.11)	-
n	-	865	-
<i>ELA EAP</i>			
VAM	-	-	-
SE	-	-	-
Adjusted Mean	-	-	-
Mean in Analytic Sample	-	-	-
n	-	-	-

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-59
Antioch Value Added Engagement and School Success Outcomes

	9th Grade		10th Grade		11th Grade	
<i>Absences</i>						
VAM	-		-		-	
SE	-		-		-	
Adjusted Mean	-		-		-	
Mean in Analytic Sample	-		-		-	
SD	-		-		-	
n	-		-		-	
<i>Retention</i>						
VAM	-		0.05	**	-	
SE	-		(0.02)		-	
Adjusted Mean	-		0.93		-	
Mean in Analytic Sample	-		0.92		-	
n	-		918		-	
<i>Number of F's Received</i>						
VAM	0.29	*	0.24		-	
SE	(0.13)		(0.27)		-	
Adjusted Mean	1.26		1.85		-	
Mean in Analytic Sample	1.99		2.56		-	
SD	(2.98)		(3.42)		-	
n	1,907		821		-	
<i>Number of Credits (Std.)</i>						
VAM	0.19	***	0.21	**	-	
SE	(0.05)		(0.08)		-	
Adjusted Mean	0.00		0.00		-	
Mean in Analytic Sample	52.69		51.22		-	
SD	(17.82)		(19.68)		-	
n	1,907		821		-	
<i>a-g On Track</i>						
VAM	0.17	***	0.14	**	-	
SE	(0.04)		(0.05)		-	
Adjusted Mean	0.29		0.22		-	
Mean in Analytic Sample	0.36		0.31		-	
n	1,906		820		-	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-60
Long Beach Value Added Standardized Testing Outcomes

	9th Grade	10th Grade	11th Grade
<i>ELA CST (Std.)</i>			
VAM	0.04 **	0.04	0.04
SE	(0.01)	(0.02)	(0.03)
Adjusted Mean	0.00	0.00	0.00
Mean in Analytic Sample	352.57	341.03	339.37
SD	(59.15)	(57.70)	(62.40)
n	15,183	9,311	4,533
<i>ELA CAHSEE (Std.)</i>			
VAM	-	-0.03	-
SE	-	(0.02)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	384.41	-
SD	-	(34.89)	-
n	-	9,398	-
<i>Math CAHSEE (Std.)</i>			
VAM	-	-0.06 ***	-
SE	-	(0.02)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	386.13	-
SD	-	(35.59)	-
n	-	9,392	-
<i>ELA EAP</i>			
VAM	-	-	0.04
SE	-	-	(0.03)
Adjusted Mean	-	-	0.24
Mean in Analytic Sample	-	-	0.36
n	-	-	4,357

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-61
Long Beach Value Added Engagement and School Success Outcomes

	9th Grade	10th Grade	11th Grade
<i>Absences</i>			
VAM	-0.56 **	-0.51 *	-0.13
SE	(0.20)	(0.25)	(0.43)
Adjusted Mean	5.77	6.93	7.68
Mean in Analytic Sample	6.40	7.49	8.28
SD	(8.86)	(10.04)	(10.48)
n	9,764	8,835	3,960
<i>Retention</i>			
VAM	-	0.01	0.03 *
SE	-	(0.01)	(0.01)
Adjusted Mean	-	0.95	0.90
Mean in Analytic Sample	-	0.94	0.89
n	-	10,265	5,378
<i>Number of F's Received</i>			
VAM	-0.16 *	-0.01	-0.02
SE	(0.07)	(0.05)	(0.08)
Adjusted Mean	0.94	0.93	0.71
Mean in Analytic Sample	1.80	1.61	1.05
SD	(2.76)	(2.61)	(1.95)
n	15,416	9,405	4,552
<i>Number of Credits (Std.)</i>			
VAM	0.23 ***	0.31 ***	0.14 **
SE	(0.02)	(0.03)	(0.05)
Adjusted Mean	0.00	0.00	0.00
Mean in Analytic Sample	54.58	55.71	57.60
SD	(16.72)	(16.05)	(14.04)
n	15,406	9,400	4,527
<i>a-g On Track</i>			
VAM	0.09 ***	0.06 **	-0.02
SE	(0.02)	(0.02)	(0.01)
Adjusted Mean	0.23	0.16	0.11
Mean in Analytic Sample	0.35	0.30	0.25
n	15,340	9,347	4,482

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-62
Los Angeles Value Added Standardized Testing Outcomes

	9th Grade	10th Grade
<i>ELA CST (Std.)</i>		
VAM	0.07 *	-0.02
SE	(0.03)	(0.05)
Adjusted Mean	0.00	0.00
Mean in Analytic Sample	332.73	335.36
SD	(51.62)	(49.98)
n	4,935	1,794
<i>ELA CAHSEE (Std.)</i>		
VAM		0.06
SE		(0.05)
Adjusted Mean		0.00
Mean in Analytic Sample		376.16
SD		(31.22)
n		1,724
<i>Math CAHSEE (Std.)</i>		
VAM		0.06
SE		(0.04)
Adjusted Mean		0.00
Mean in Analytic Sample		384.01
SD		(33.22)
n		1,730

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-63
Los Angeles Value Added Engagement and School Success Outcomes

	9th Grade	10th Grade
<i>Absences</i>		
VAM	-2.28 *	-2.32 ***
SE	(0.98)	(0.54)
Adjusted Mean	6.81	7.75
Mean in Analytic Sample	7.34	8.38
SD	(11.36)	(12.87)
n	4,986	2,269
<i>Retention</i>		
VAM		0.01
SE		(0.01)
Adjusted Mean		0.97
Mean in Analytic Sample		0.96
n		1,658
<i>Number of F's Received</i>		
VAM	-1.23	-1.09 ***
SE	(0.98)	(0.12)
Adjusted Mean	1.83	2.04
Mean in Analytic Sample	2.37	2.56
SD	(3.29)	(3.42)
n	4,962	2,366
<i>Number of Credits (Std.)</i>		
VAM	0.69 ***	0.50 ***
SE	(0.04)	(0.06)
Adjusted Mean	0.00	0.00
Mean in Analytic Sample	58.28	54.97
SD	(18.33)	(20.90)
n	4,961	2,366
<i>a-g On Track</i>		
VAM	0.13 ***	0.06
SE	(0.03)	(0.03)
Adjusted Mean	0.58	0.29
Mean in Analytic Sample	0.55	0.34
n	4,961	2,362

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-64
Oakland Value Added Standardized Testing Outcomes

	9th Grade	10th Grade	
<i>ELA CST (Std.)</i>			
VAM	-	0.16	**
SE	-	(0.05)	
Adjusted Mean	-	0.00	
Mean in Analytic Sample	-	324.70	
SD	-	(60.29)	
n	-	1,230	
<i>ELA CAHSEE (Std.)</i>			
VAM	-	0.22	***
SE	-	(0.04)	
Adjusted Mean	-	0.00	
Mean in Analytic Sample	-	373.46	
SD	-	(36.91)	
n	-	1,250	
<i>Math CAHSEE (Std.)</i>			
VAM	-	0.20	***
SE	-	(0.05)	
Adjusted Mean	-	0.00	
Mean in Analytic Sample	-	377.47	
SD	-	(39.77)	
n	-	1,247	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-65
Oakland Value Added Engagement and School Success Outcomes

	9th Grade	10th Grade
<i>Absences</i>		
VAM	-	-2.06 ***
SE	-	(0.58)
Adjusted Mean	-	6.87
Mean in Analytic Sample	-	7.79
SD	-	(12.20)
n	-	1,288
<i>Retention</i>		
VAM	-	-
SE	-	-
Adjusted Mean	-	-
Mean in Analytic Sample	-	-
n	-	-
<i>Number of F's Received</i>		
VAM	-	0.09
SE	-	(0.17)
Adjusted Mean	-	1.42
Mean in Analytic Sample	-	2.34
SD	-	(3.27)
n	-	1,273
<i>Number of Credits (Std.)</i>		
VAM	-	0.59 ***
SE	-	(0.08)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	53.61
SD	-	(18.84)
n	-	1,270
<i>a-g On Track</i>		
VAM	-	0.05
SE	-	(0.05)
Adjusted Mean	-	0.31
Mean in Analytic Sample	-	0.36
n	-	1,263

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-66
Pasadena Value Added Standardized Testing Outcomes

	9th Grade	10th Grade	11th Grade
<i>ELA CST (Std.)</i>			
VAM	-0.06 **	-0.13 ***	-0.11 *
SE	(0.02)	(0.03)	(0.05)
Adjusted Mean	0.00	0.00	0.00
Mean in Analytic Sample	354.11	347.37	344.24
SD	(57.54)	(52.70)	(59.70)
n	2,937	1,808	809
<i>ELA CAHSEE (Std.)</i>			
VAM	-	-0.04	-
se	-	(0.03)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	385.81	-
SD	-	(32.41)	-
n	-	1,832	-
<i>Math CAHSEE (Std.)</i>			
VAM	-	-0.09 **	-
se	-	(0.03)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	386.97	-
SD	-	(34.47)	-
n	-	1,824	-
<i>ELA EAP</i>			
VAM	-	-	-0.07 *
se	-	-	(0.04)
Adjusted Mean	-	-	0.25
Mean in Analytic Sample	-	-	0.34
n	-	-	723

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-67
Pasadena Value Added Engagement and School Success Outcomes

	9th Grade		10th Grade		11th Grade	
<i>Absences</i>						
VAM	-		-		-	
SE	-		-		-	
Adjusted Mean	-		-		-	
Mean in Analytic Sample	-		-		-	
SD	-		-		-	
n	-		-		-	
<i>Retention</i>						
VAM	-		0.01		0.01	
SE	-		(0.01)		(0.02)	
Adjusted Mean	-		0.95		0.90	
Mean in Analytic Sample	-		0.94		0.87	
n	-		1,981		990	
<i>Number of F's Received</i>						
VAM	0.26		0.31		0.18	
SE	(0.91)		(0.97)		(4.20)	
Adjusted Mean	1.07		1.13		0.81	
Mean in Analytic Sample	1.78		1.66		1.32	
SD	(2.86)		(2.52)		(2.34)	
n	2,971		1,847		858	
<i>Number of Credits (Std.)</i>						
VAM	0.64	***	0.39	***	0.32	***
SE	(0.04)		(0.04)		(0.07)	
Adjusted Mean	0.00		0.00		0.00	
Mean in Analytic Sample	56.30		57.55		59.96	
SD	(16.71)		(16.21)		(16.60)	
n	2,987		1,847		854	
<i>a-g On Track</i>						
VAM	0.08	**	0.06	**	0.06	
SE	(0.02)		(0.02)		(0.03)	
Adjusted Mean	0.29		0.18		0.15	
Mean in Analytic Sample	0.33		0.25		0.21	
n	2,972		1,826		839	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-68
Porterville Value Added Standardized Testing Outcomes

	9th Grade	10th Grade	11th Grade
<i>ELA CST (Std.)</i>			
VAM	0.01	0.08	-0.09
SE	(0.03)	(0.05)	(0.07)
Adjusted Mean	0.00	0.00	0.00
Mean in Analytic Sample	352.12	341.18	337.72
SD	(50.66)	(48.65)	(49.17)
n	1,823	1,105	495
<i>ELA CAHSEE (Std.)</i>			
VAM	-	0.13 **	-
SE	-	(0.05)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	378.32	-
SD	-	(30.66)	-
n	-	1,103	-
<i>Math CAHSEE (Std.)</i>			
VAM	-	0.15 ***	-
SE	-	(0.04)	-
Adjusted Mean	-	0.00	-
Mean in Analytic Sample	-	384.91	-
SD	-	(32.73)	-
n	-	1,109	-
<i>ELA EAP</i>			
VAM	-	-	0.01
SE	-	-	(0.06)
Adjusted Mean	-	-	0.15
Mean in Analytic Sample	-	-	0.25
n	-	-	433

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-69
Porterville Value Added Engagement and School Success Outcomes

	9th Grade		10th Grade		11th Grade	
<i>Absences</i>						
VAM	-		-		-	
SE	-		-		-	
Adjusted Mean	-		-		-	
Mean in Analytic Sample	-		-		-	
SD	-		-		-	
n	-		-		-	
<i>Retention</i>						
VAM	-		0.01		0.07	***
SE	-		(0.01)		(0.02)	
Adjusted Mean	-		0.96		0.90	
Mean in Analytic Sample	-		0.94		0.88	
n	-		1,186		613	
<i>Number of F's Received</i>						
VAM	-0.35	***	-0.31	*	0.12	
SE	(0.08)		(0.15)		(12.15)	
Adjusted Mean	1.15		1.49		0.78	
Mean in Analytic Sample	1.51		1.95		1.20	
SD	(2.26)		(2.62)		(2.04)	
n	1,888		1,161		533	
<i>Number of Credits (Std.)</i>						
VAM	0.24	***	0.11		-0.06	
SE	(0.05)		(0.07)		(0.11)	
Adjusted Mean	0.00		0.00		0.00	
Mean in Analytic Sample	57.78		58.81		61.54	
SD	(14.97)		(17.14)		(17.55)	
n	1,887		1,160		528	
<i>a-g On Track</i>						
VAM	0.02		0.05		0.02	
SE	(0.02)		(0.03)		(0.03)	
Adjusted Mean	0.16		0.13		0.06	
Mean in Analytic Sample	0.26		0.21		0.16	
n	1,835		1,132		523	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-70
Sacramento Value Added Standardized Testing Outcomes

	9th Grade	10th Grade
<i>ELA CST (Std.)</i>		
VAM	-0.06 *	-0.02
SE	(0.03)	(0.05)
Adjusted Mean	0.00	0.00
Mean in Analytic Sample	354.39	347.21
SD	(62.07)	(59.14)
n	4,638	2,075
<i>ELA CAHSEE (Std.)</i>		
VAM	-	-0.05
SE	-	(0.04)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	383.59
SD	-	(37.11)
n	-	2,094
<i>Math CAHSEE (Std.)</i>		
VAM	-	0.01
SE	-	(0.04)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	390.22
SD	-	(36.99)
n	-	2,103

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-71
Sacramento Value Added Engagement and School Success Outcomes

	9th Grade	10th Grade
<i>Absences</i>		
VAM	-0.05	0.17
SE	(0.31)	(0.57)
Adjusted Mean	5.60	5.78
Mean in Analytic Sample	6.27	6.46
SD	(7.79)	(8.52)
n	4,427	2,068
<i>Retention</i>		
VAM	-	0.02
SE	-	(0.02)
Adjusted Mean	-	0.91
Mean in Analytic Sample	-	0.89
n	-	2,365
<i>Number of F's Received</i>		
VAM	-0.02	0.17
SE	(0.06)	(0.15)
Adjusted Mean	0.87	0.88
Mean in Analytic Sample	1.58	1.31
SD	(2.61)	(2.31)
n	4,731	2,153
<i>Number of Credits (Std.)</i>		
VAM	0.31 ***	0.17 *
SE	(0.04)	(0.08)
Adjusted Mean	0.00	0.00
Mean in Analytic Sample	53.31	54.17
SD	(15.29)	(14.97)
n	4,729	2,152
<i>a-g On Track</i>		
VAM	-0.05	-
SE	(0.05)	-
Adjusted Mean	0.38	-
Mean in Analytic Sample	0.41	-
n	2,376	-

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-72
West Contra Costa Value Added Standardized Testing Outcomes

	9th Grade	10th Grade
<i>ELA CST (Std.)</i>		
VAM	-	-0.04
se	-	(0.04)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	324.11
SD	-	(58.31)
n	-	1,270
<i>ELA CAHSEE (Std.)</i>		
VAM	-	0.00
se	-	(0.05)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	376.17
SD	-	(33.77)
n	-	1,288
<i>Math CAHSEE (Std.)</i>		
VAM	-	-0.02
se	-	(0.05)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	375.00
SD	-	(36.64)
n	-	1,292

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Exhibit 2-73
West Contra Costa Value Added Engagement and School Success Outcomes

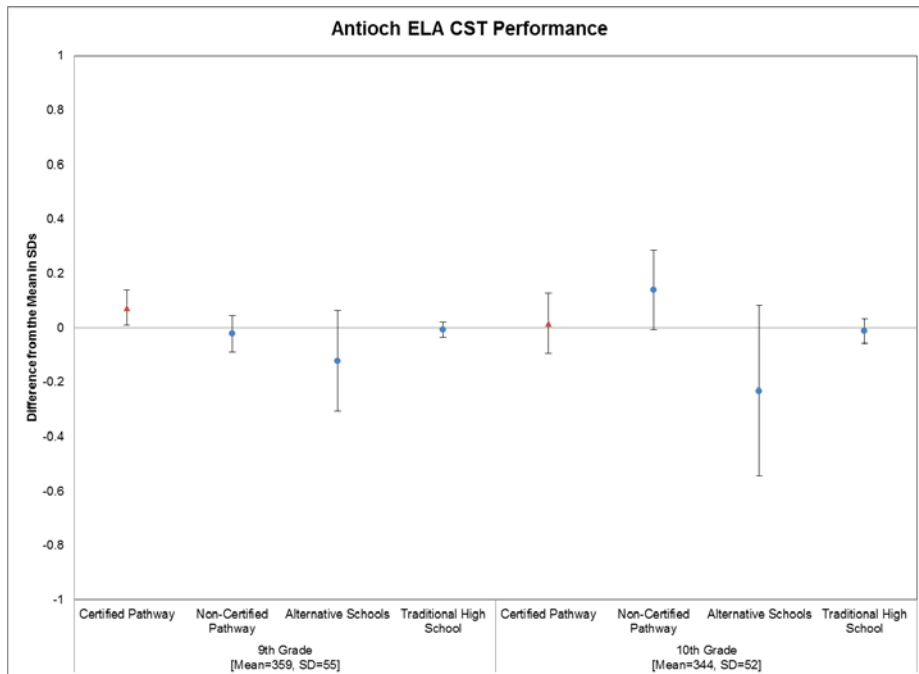
	9th Grade	10th Grade
<i>Absences</i>		
VAM	-	0.22
SE	-	(0.56)
Adjusted Mean	-	9.62
Mean in Analytic Sample	-	10.36
SD	-	(10.56)
n	-	1,264
<i>Retention</i>		
VAM	-	-
SE	-	-
Adjusted Mean	-	-
Mean in Analytic Sample	-	-
n	-	-
<i>Number of F's Received</i>		
VAM	-	-0.30
SE	-	(9.80)
Adjusted Mean	-	0.87
Mean in Analytic Sample	-	1.66
SD	-	(2.60)
n	-	1,298
<i>Number of Credits (Std.)</i>		
VAM	-	0.14 *
SE	-	(0.07)
Adjusted Mean	-	0.00
Mean in Analytic Sample	-	53.64
SD	-	(15.65)
n	-	1,295
<i>a-g On Track</i>		
VAM	-	0.17 **
SE	-	(0.05)
Adjusted Mean	-	0.27
Mean in Analytic Sample	-	0.33
n	-	1,288

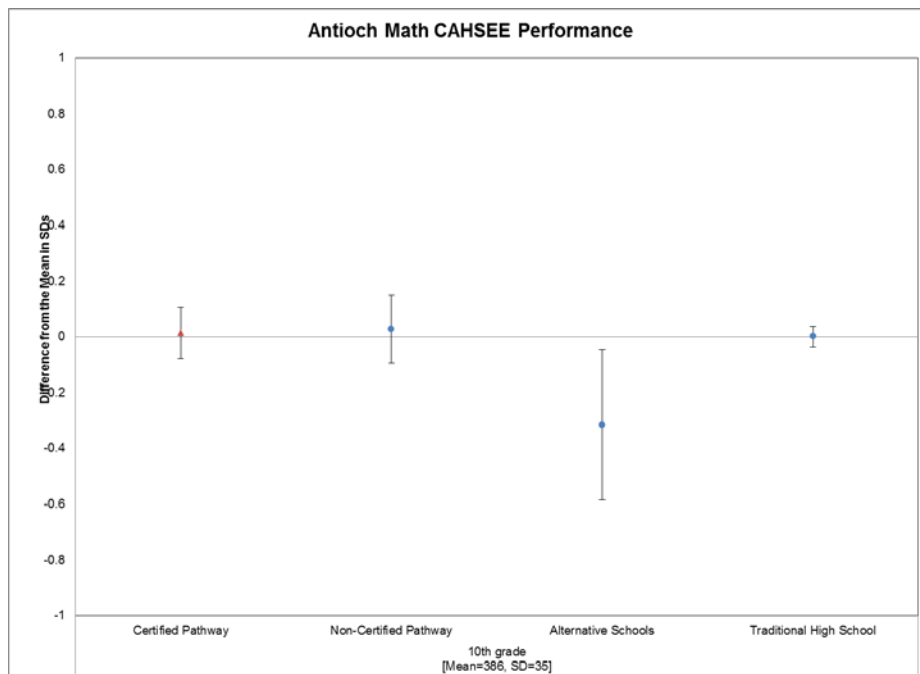
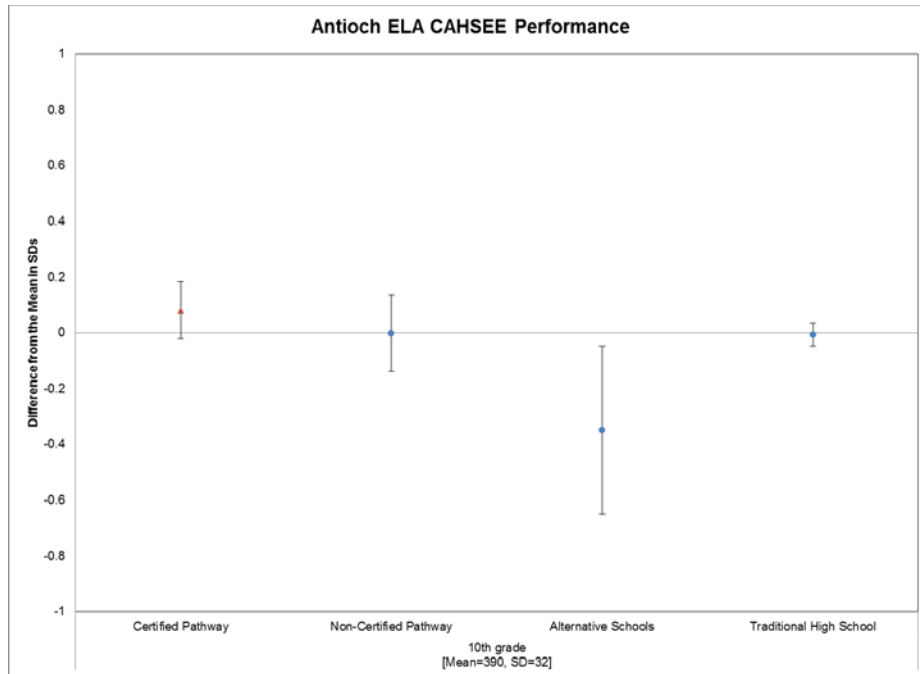
Note: * $p < .05$, ** $p < .01$, *** $p < .001$

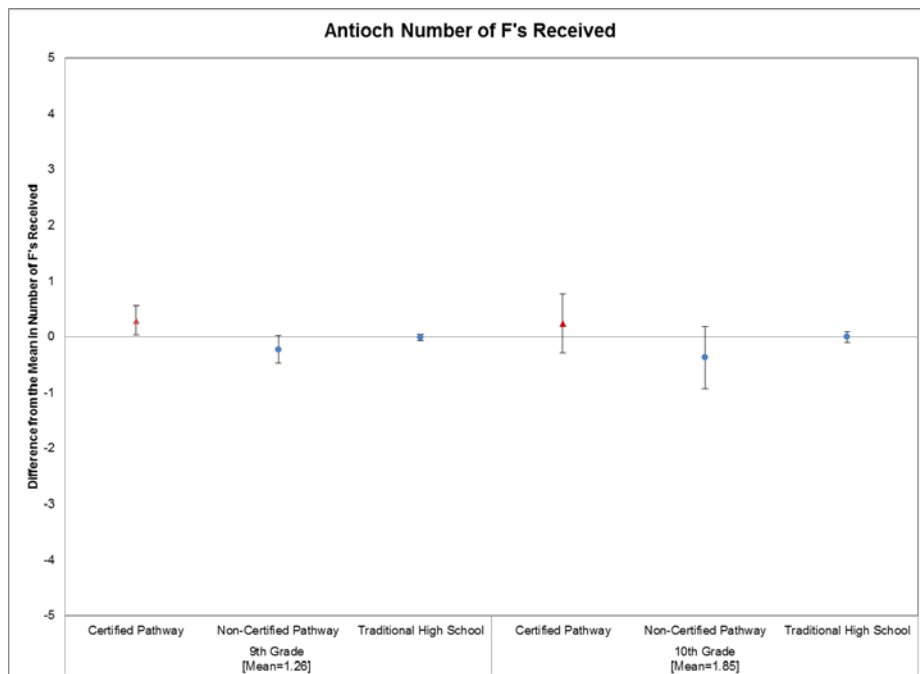
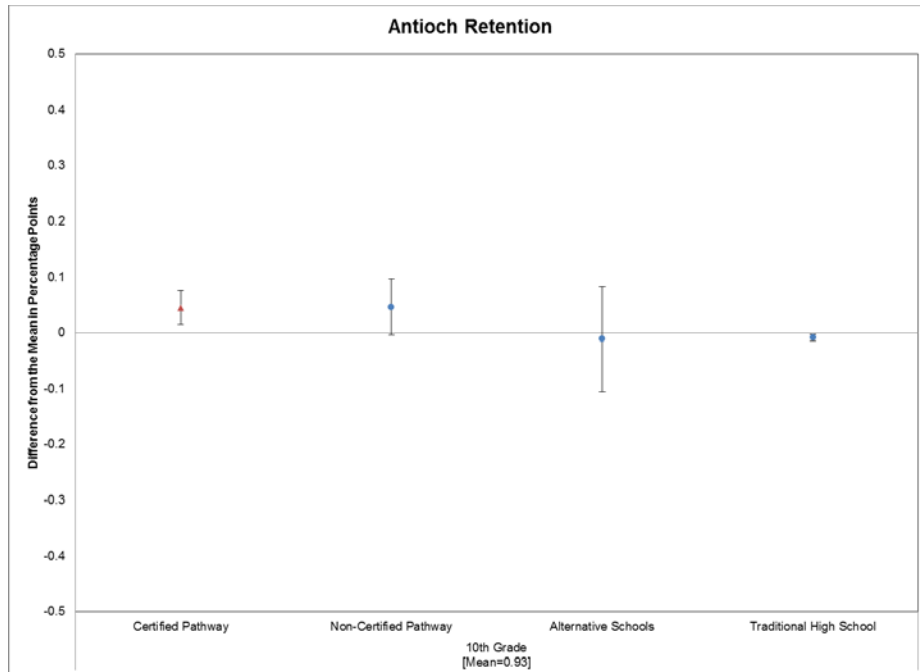
Value-Added Estimates for All Pathway Types

In Exhibits 2-74 through 2-82, we present the value-added estimates for all pathway types. These graphs show the point estimates and a standard error bar representing the 95% confidence interval for these estimates. These point estimates are compared to the district average, represented on these charts by a line at 0. We present the mean value (which varies by grade) in the X-axis value labels. As with the value-added estimates above, value-added estimates for continuous variables are estimated in standard deviation units. Value-added estimates for count data can be interpreted in counts (number of days, number of course failures). Binary variables estimates can be interpreted in percentage points.

Exhibit 2-74 Antioch Value Added Estimates for All Pathway Types







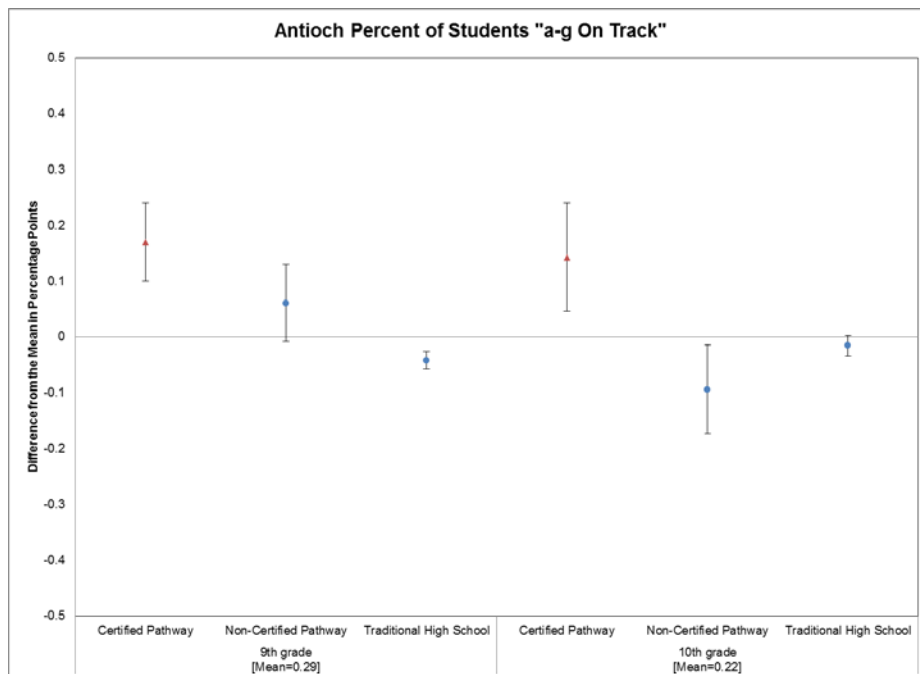
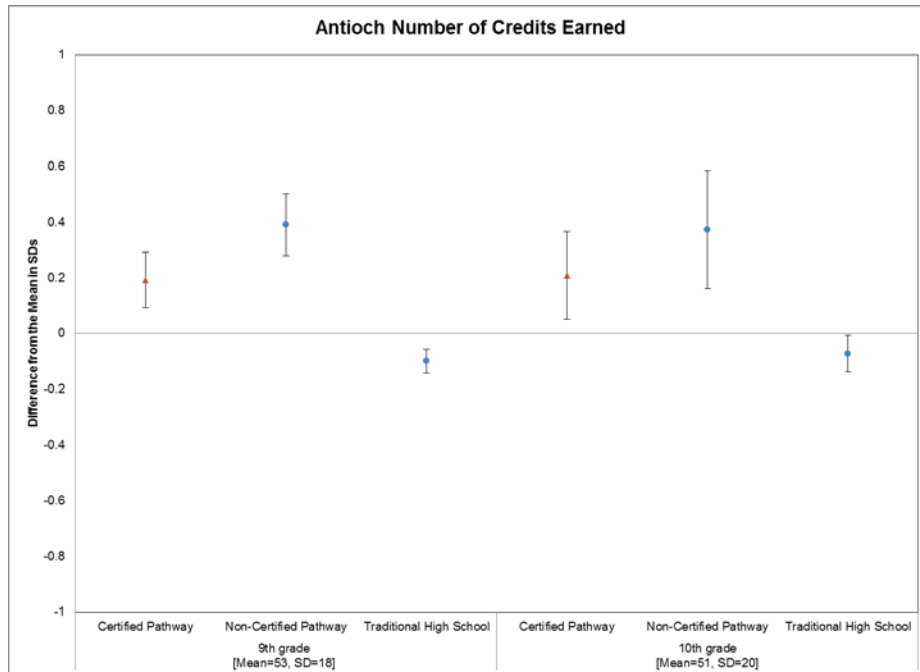
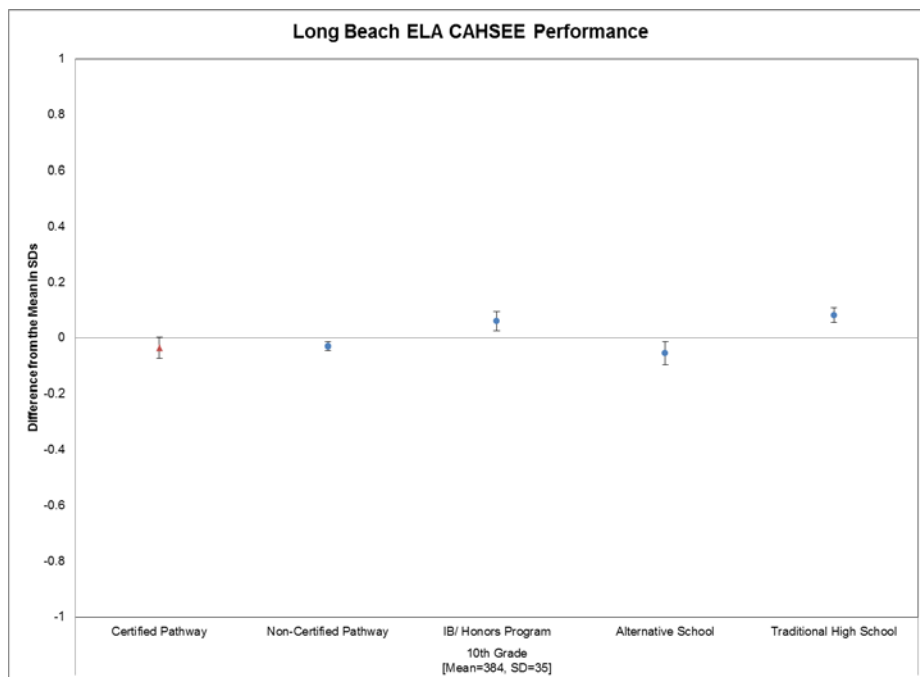
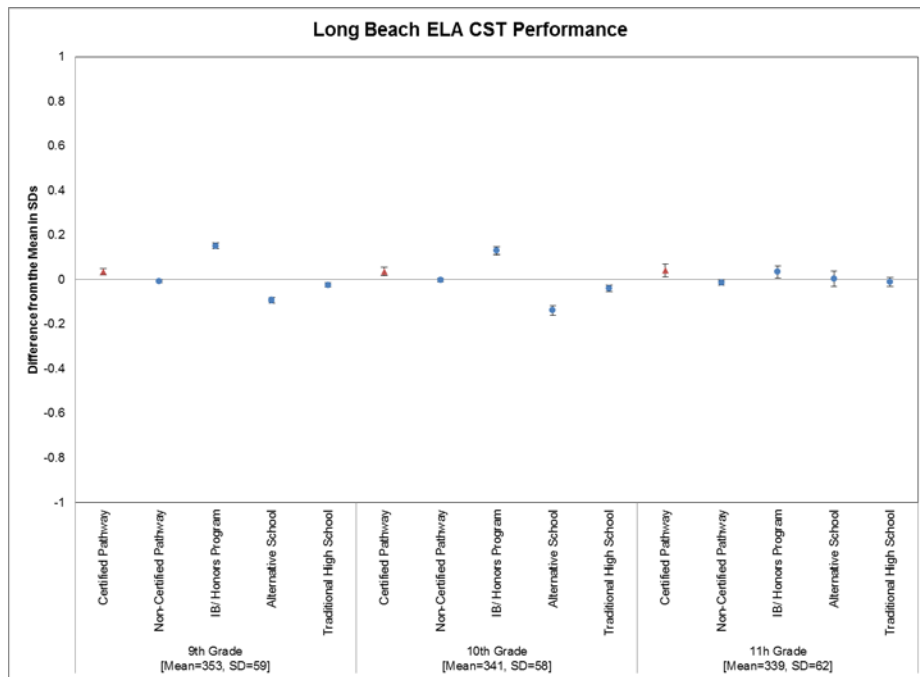
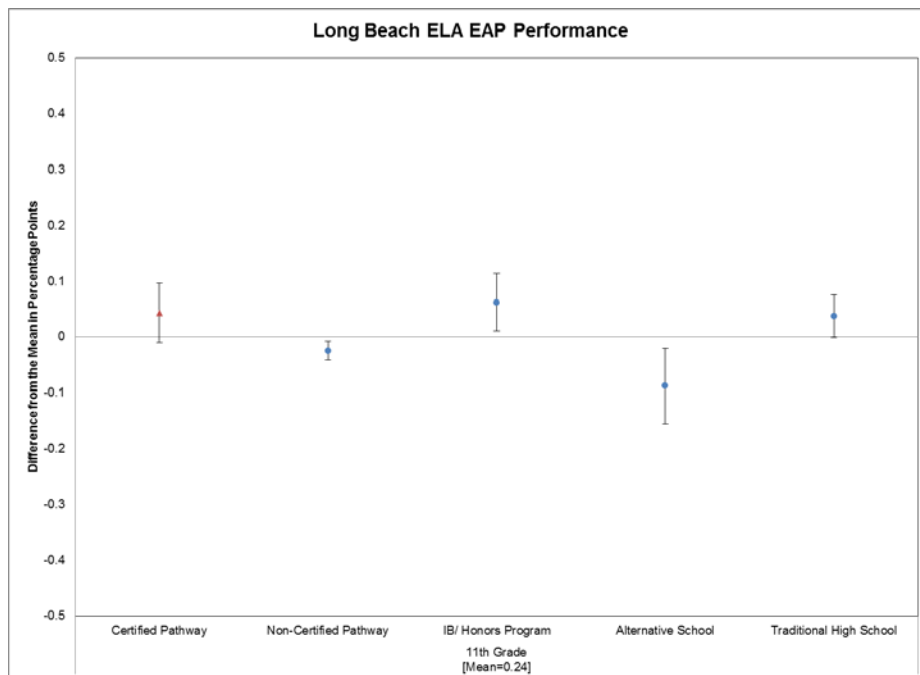
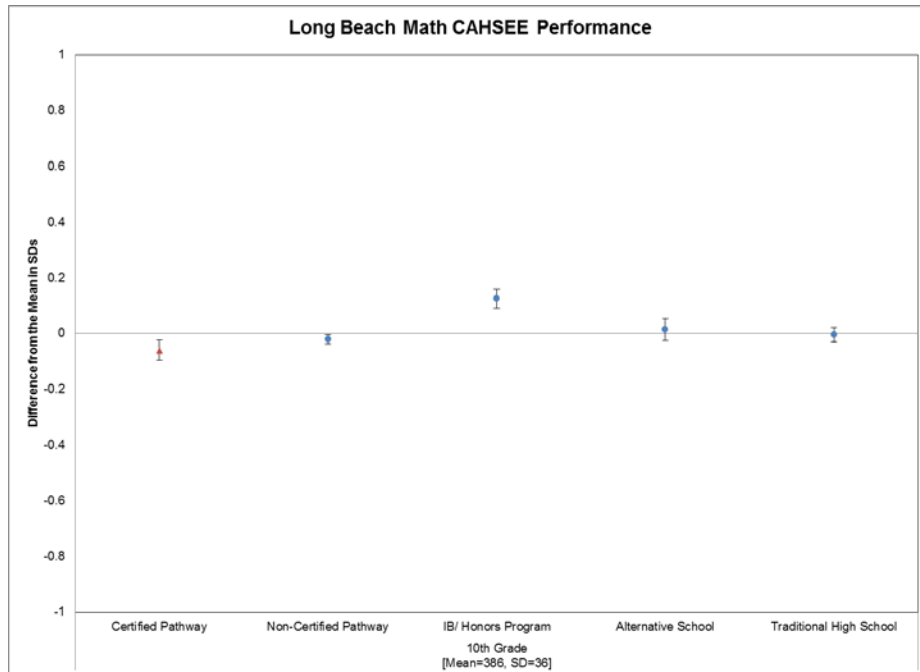
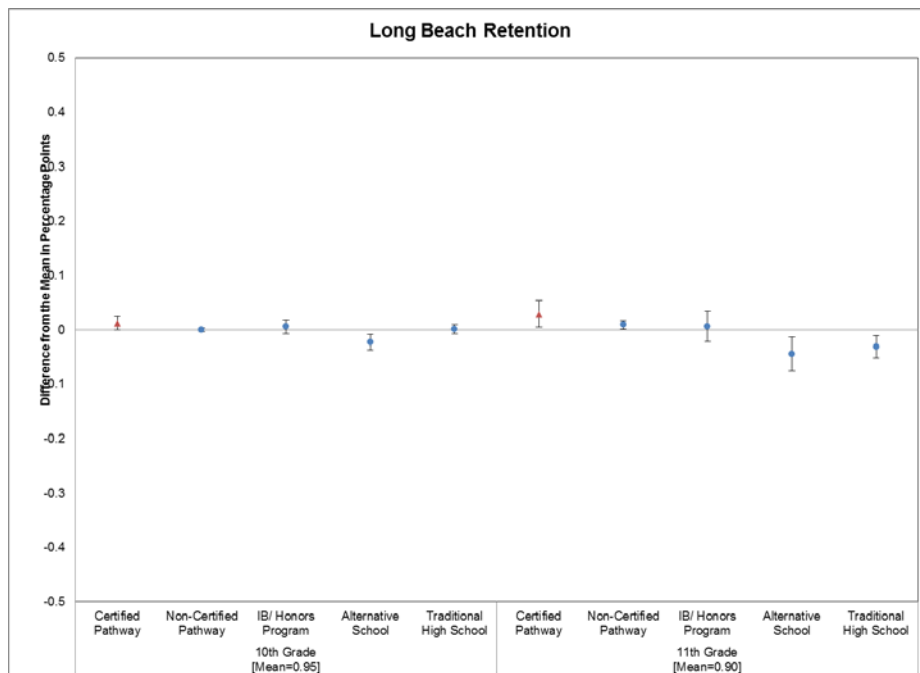
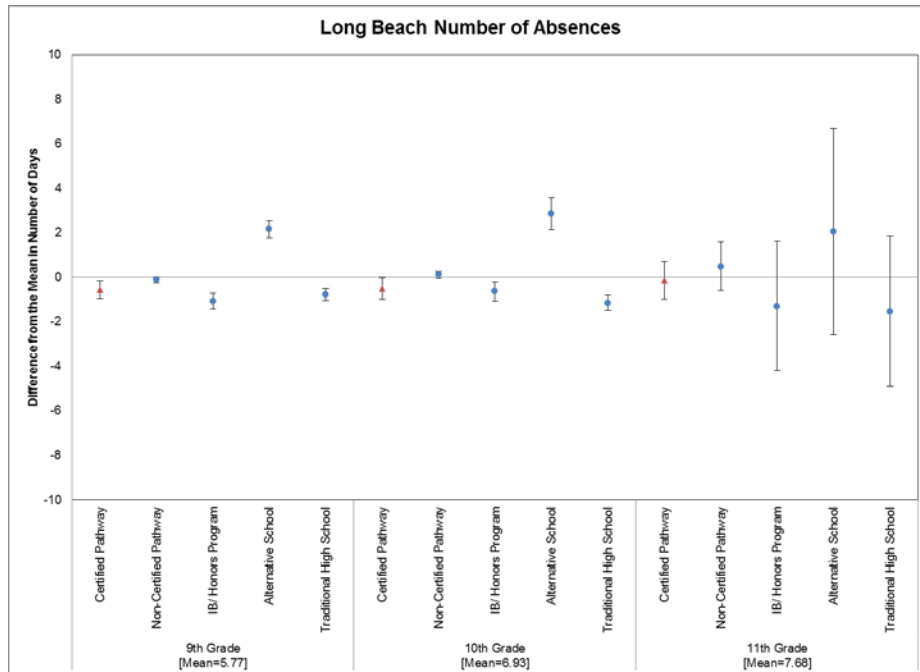
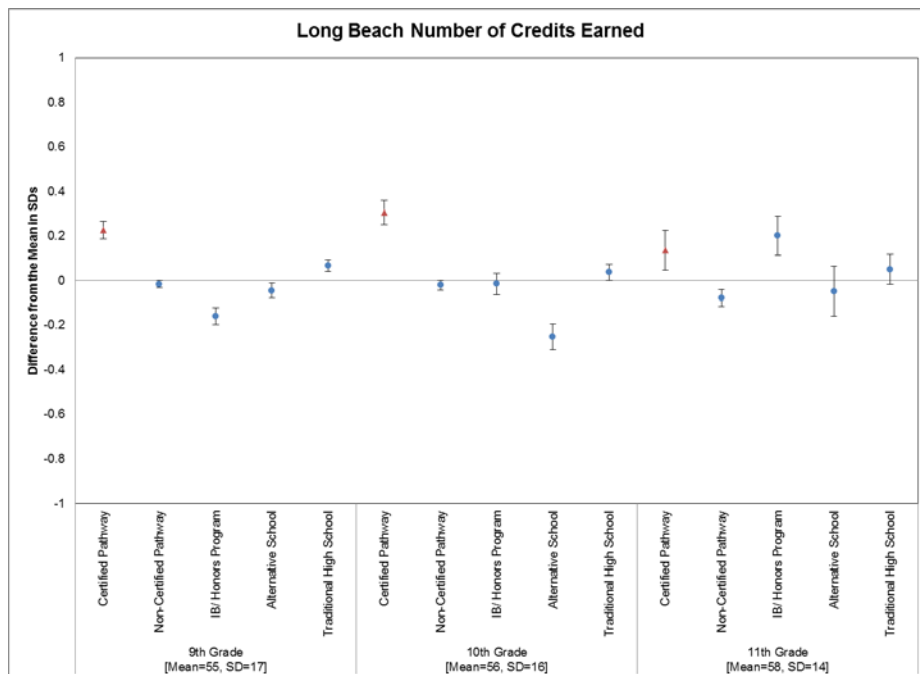
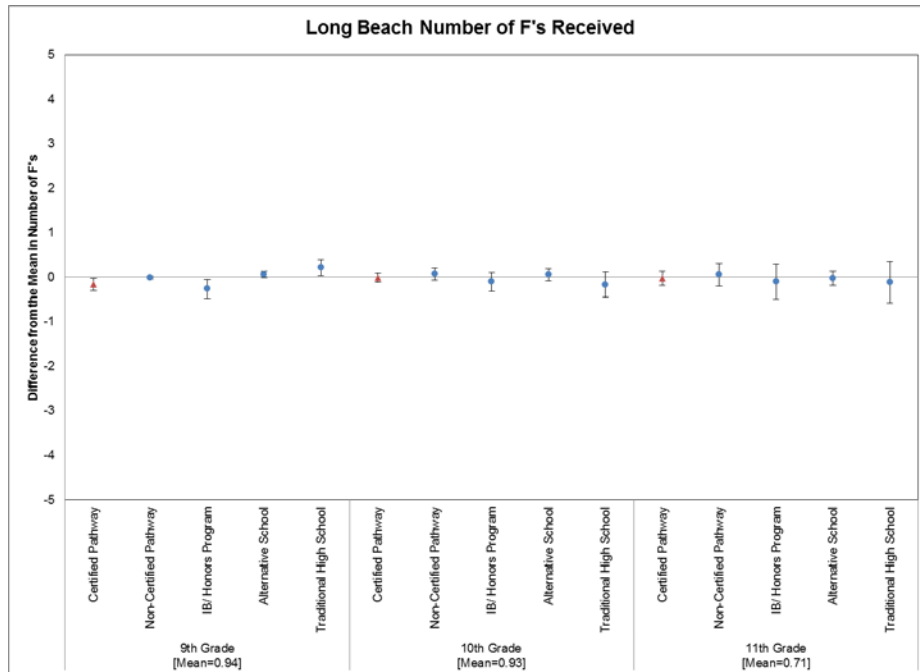


Exhibit 2-75 Long Beach Value Added Estimates for All Pathway Types









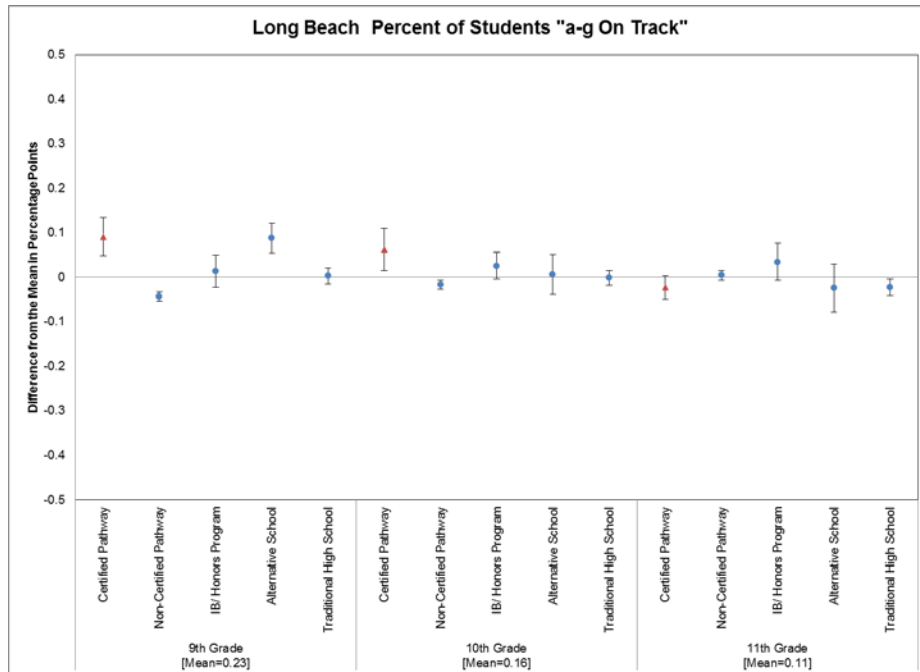
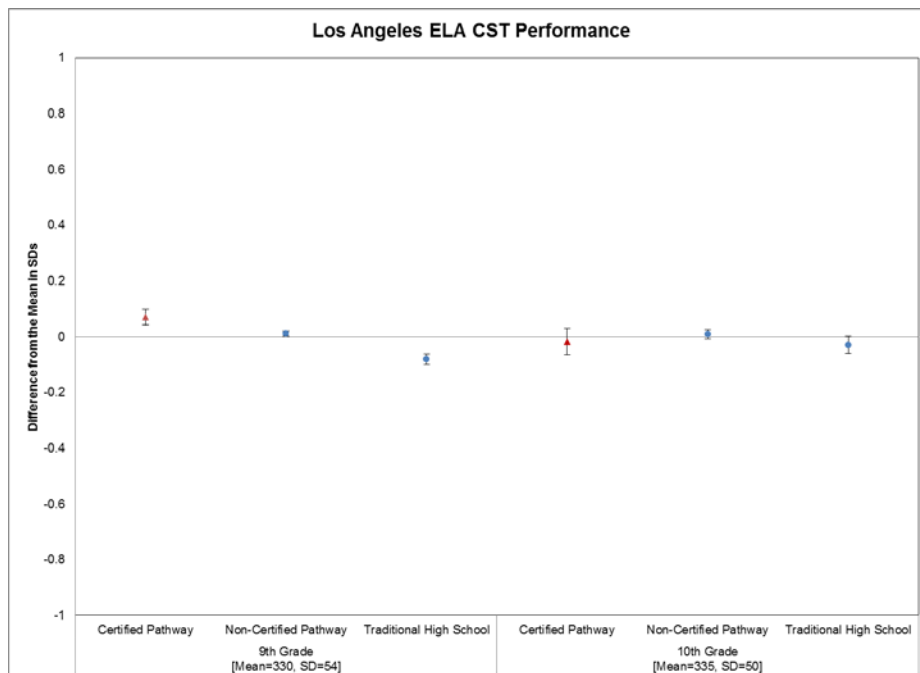
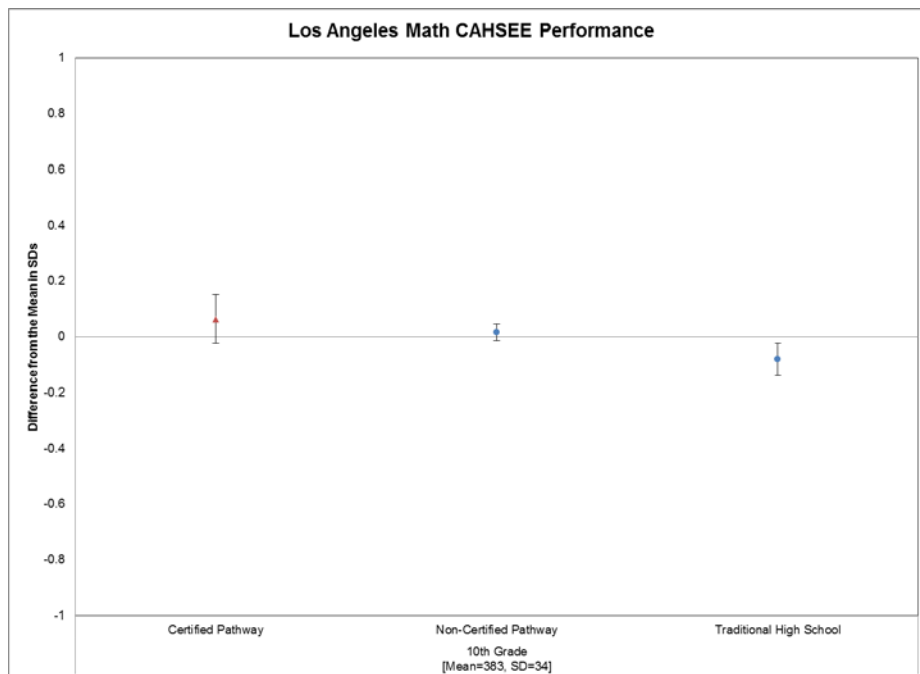
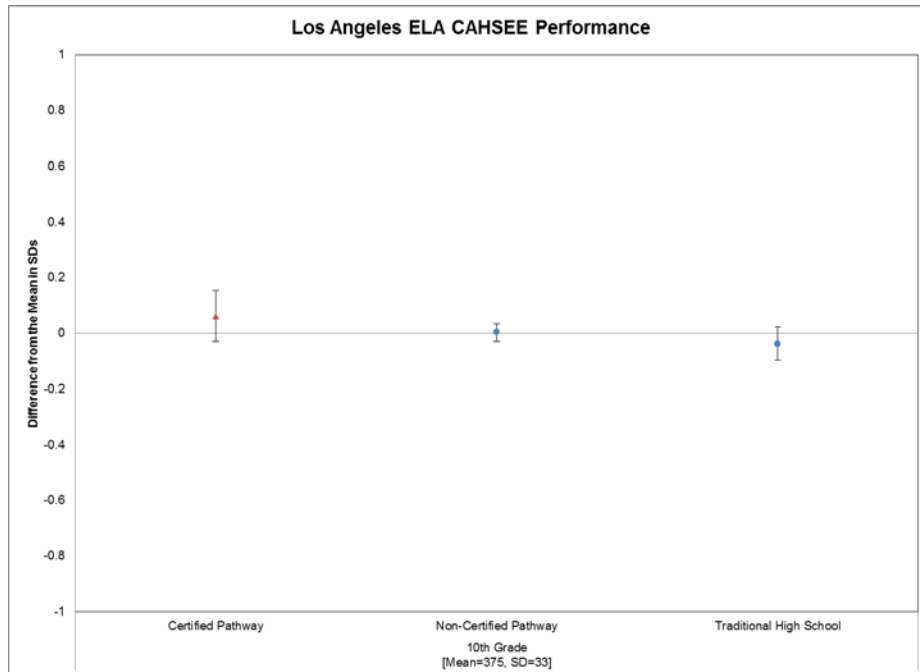
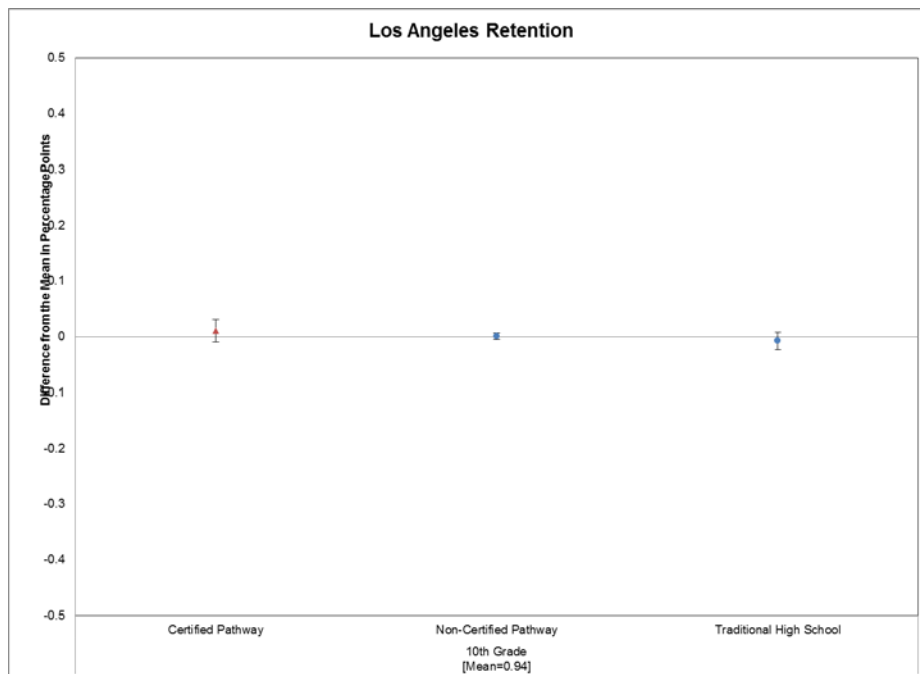
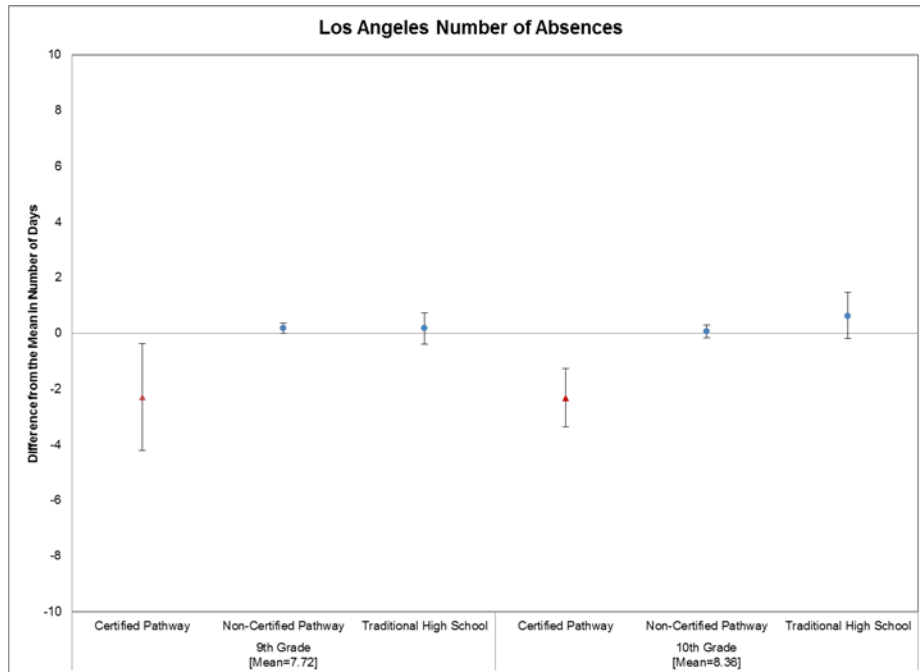
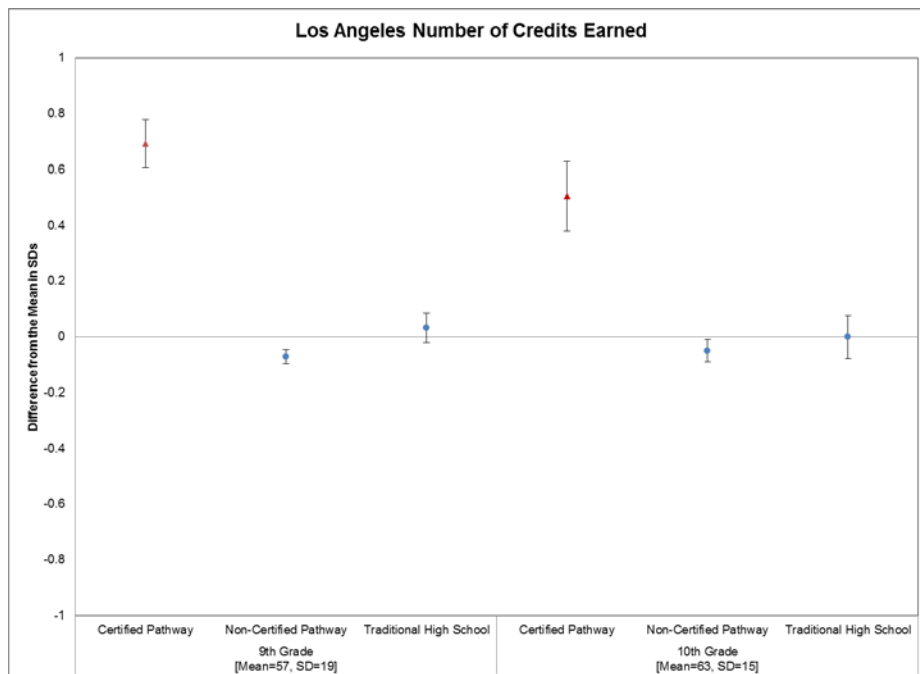
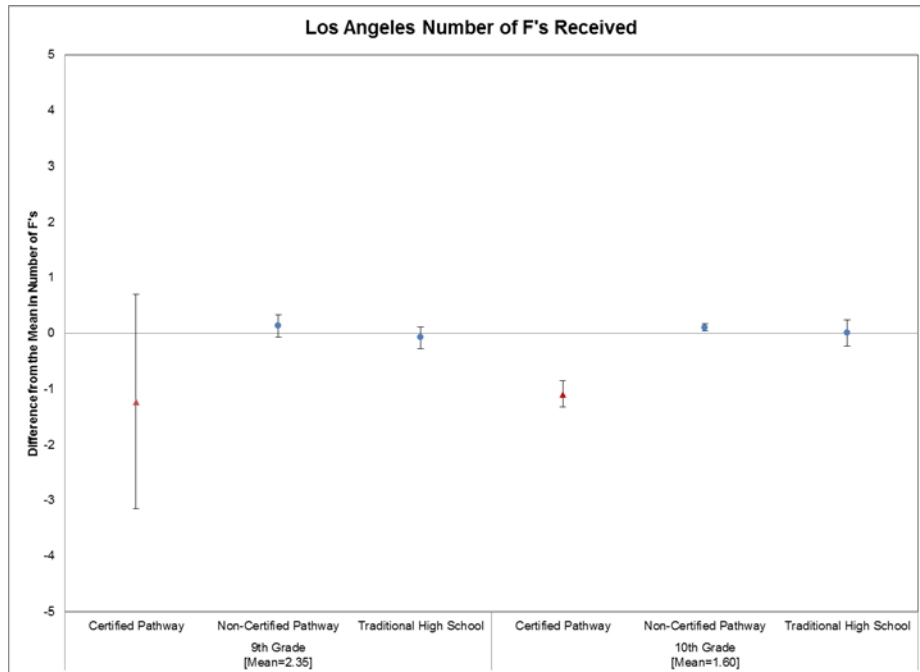


Exhibit 2-76 Los Angeles Value Added Estimates for All Pathway Types









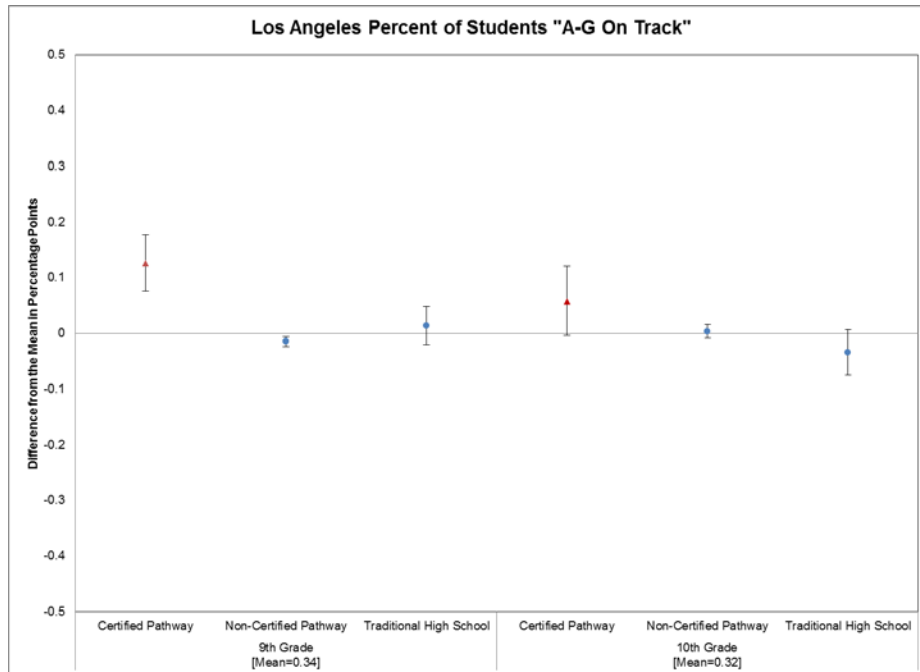
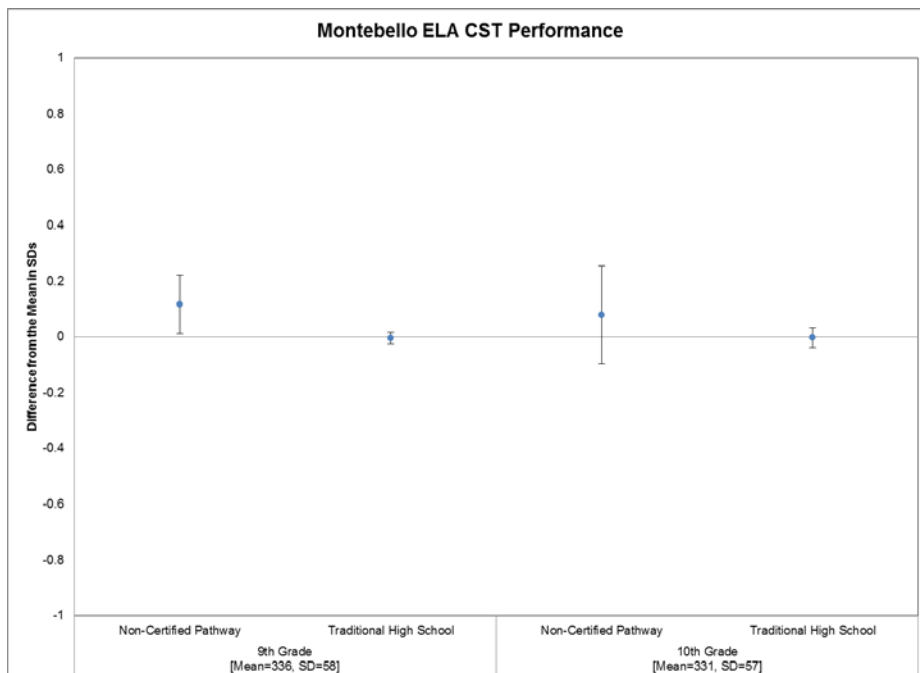
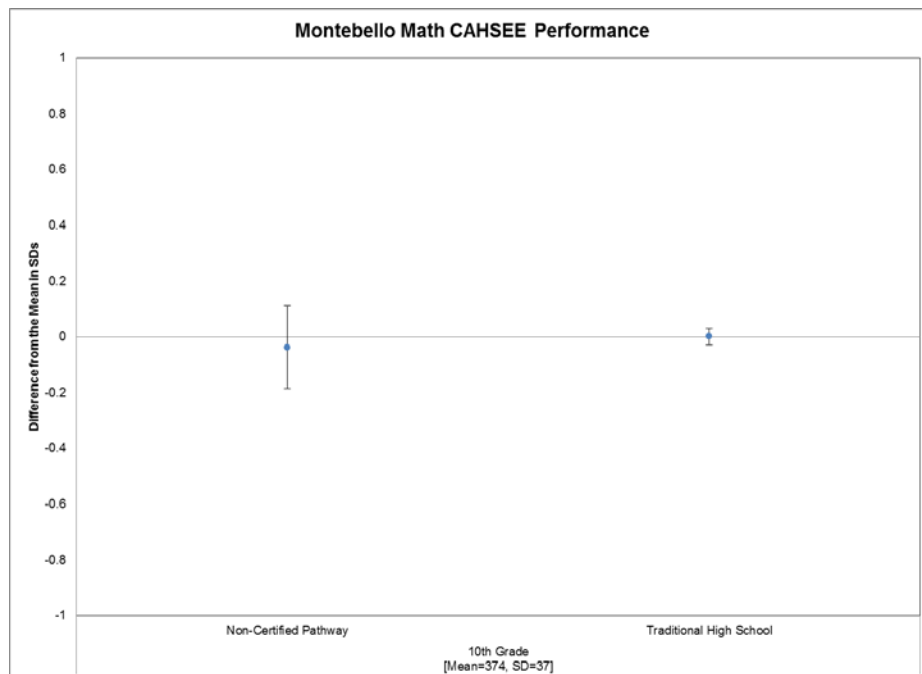
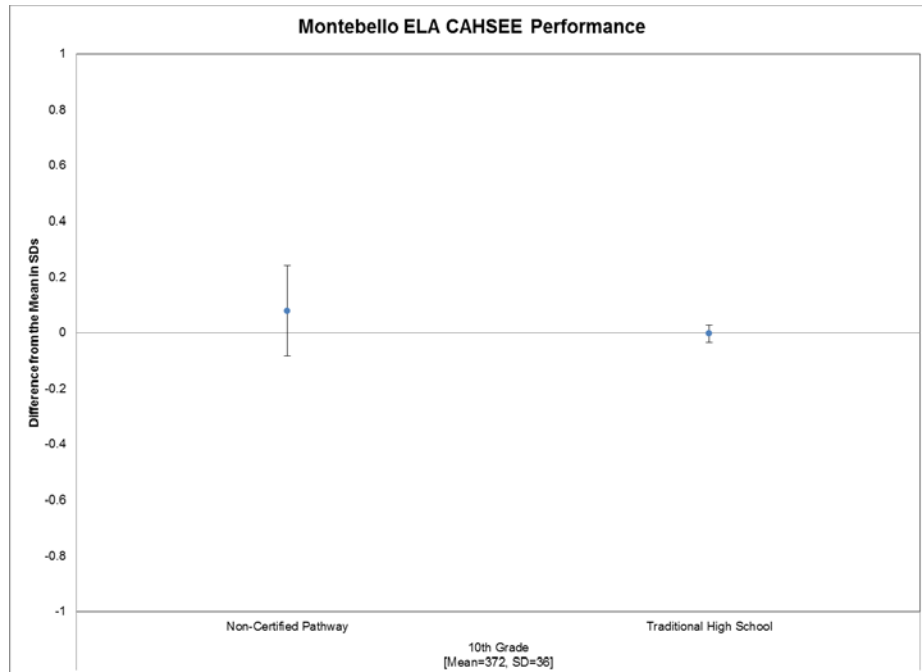
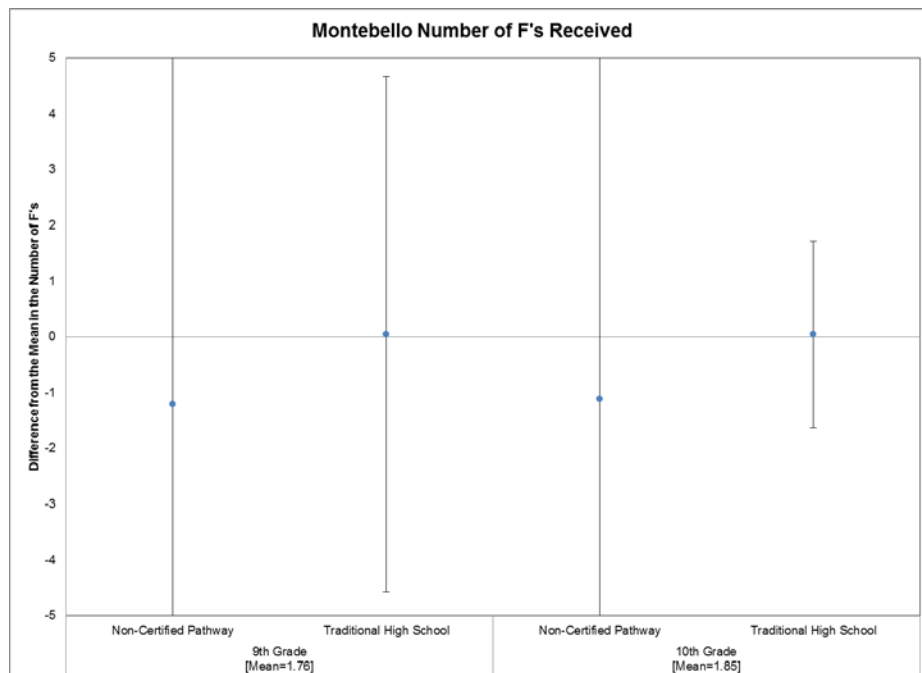
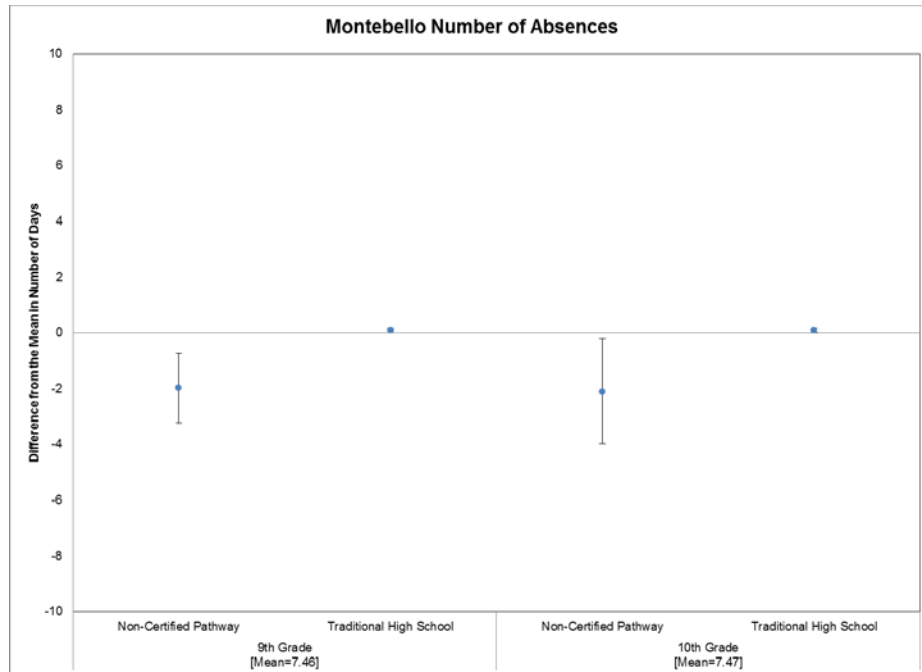


Exhibit 2-77 Montebello Value Added Estimates for All Pathway Types







Note: In the interest of comparability, the y-axis range for each variable is set to be consistent across districts. Consequently, in Montebello, error bars for 9th and 10th grade number of F's received in Non-Certified Pathways extend beyond the exhibit range (9th grade $SE = 59.5$; 10th grade $SE = 23.8$).

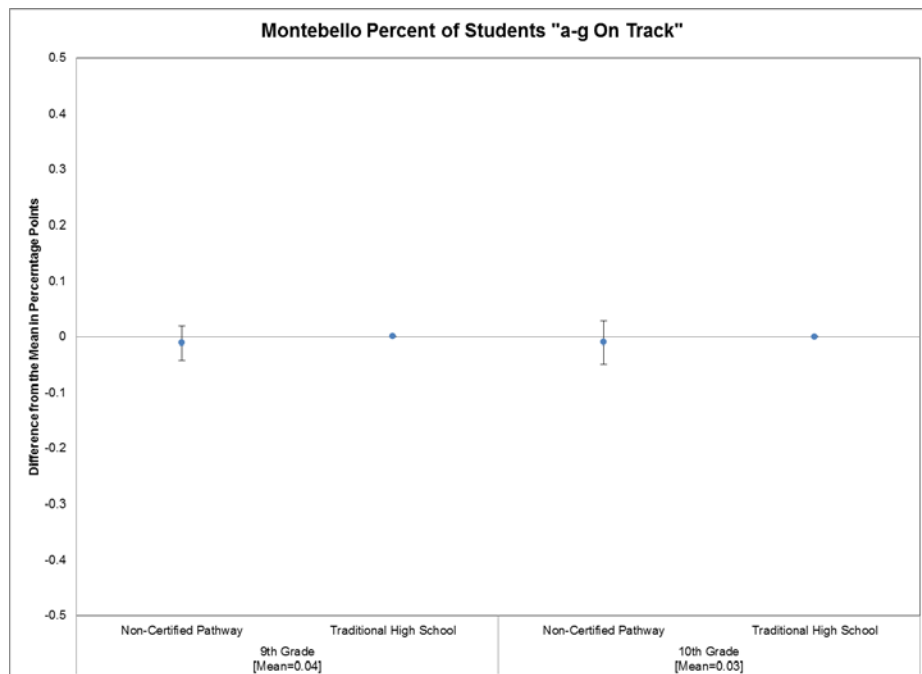
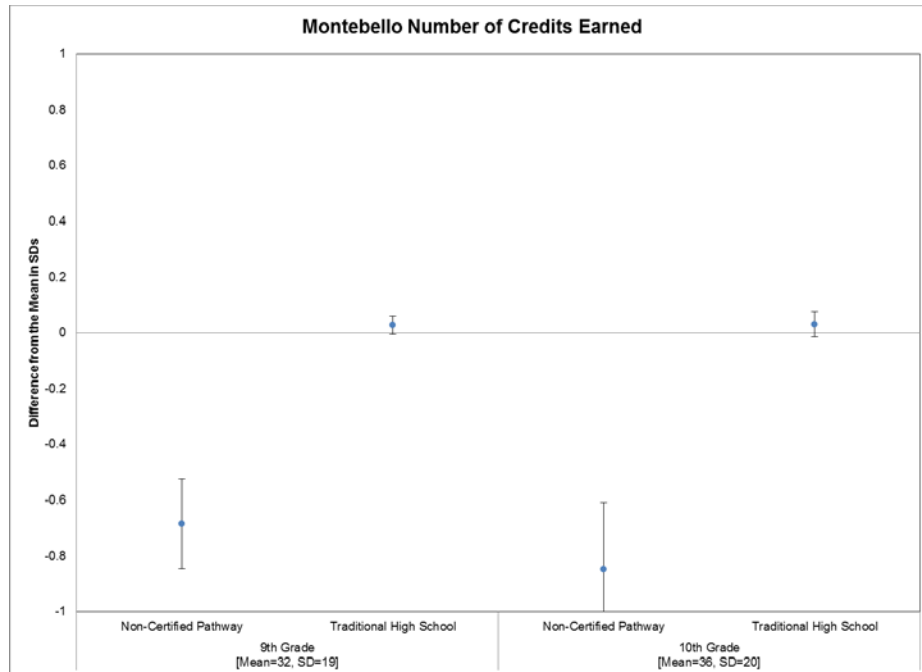
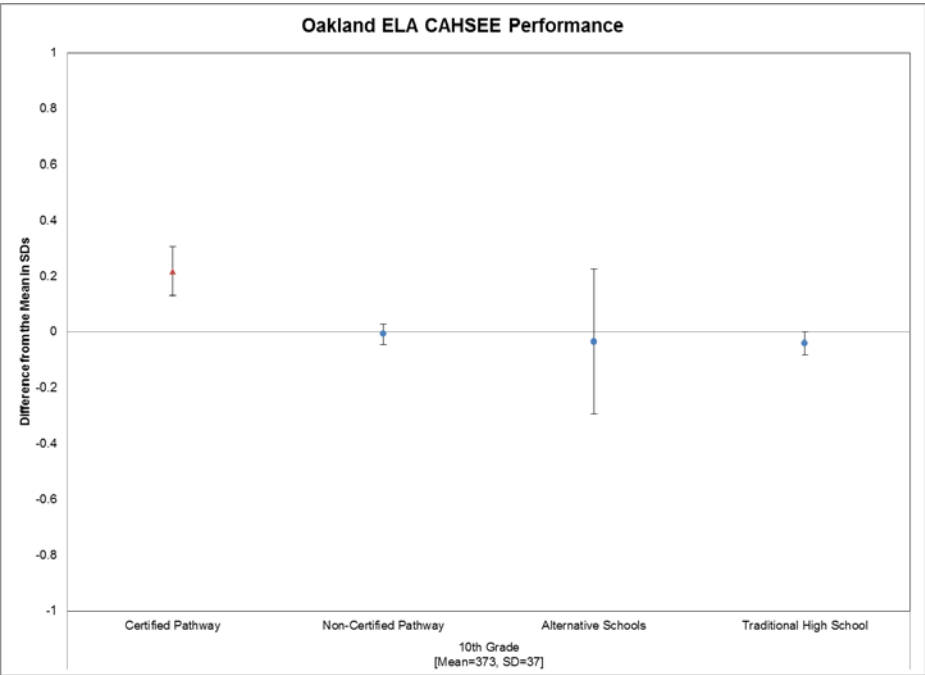
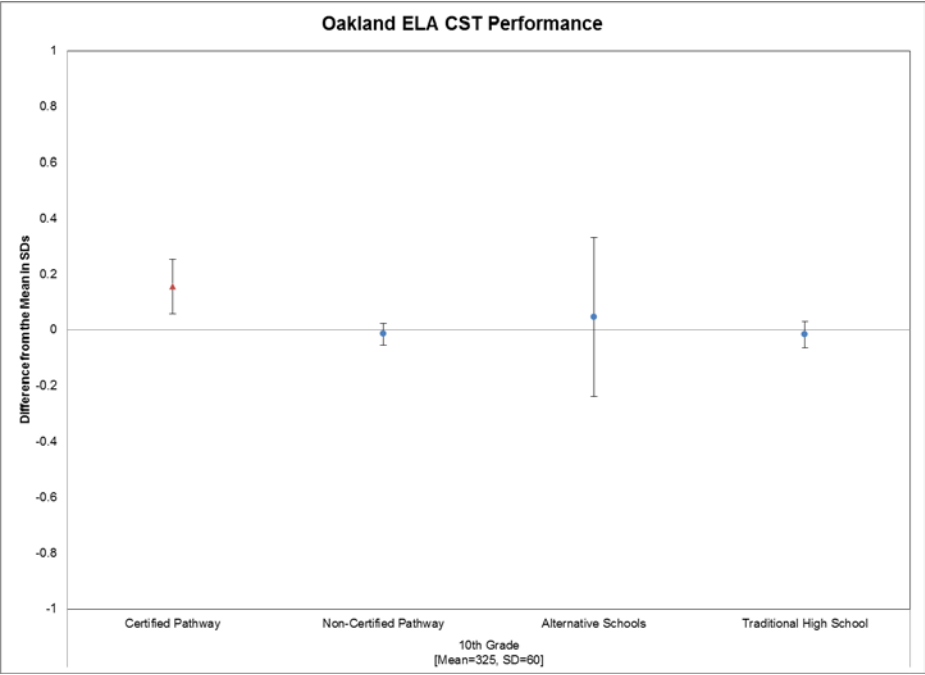
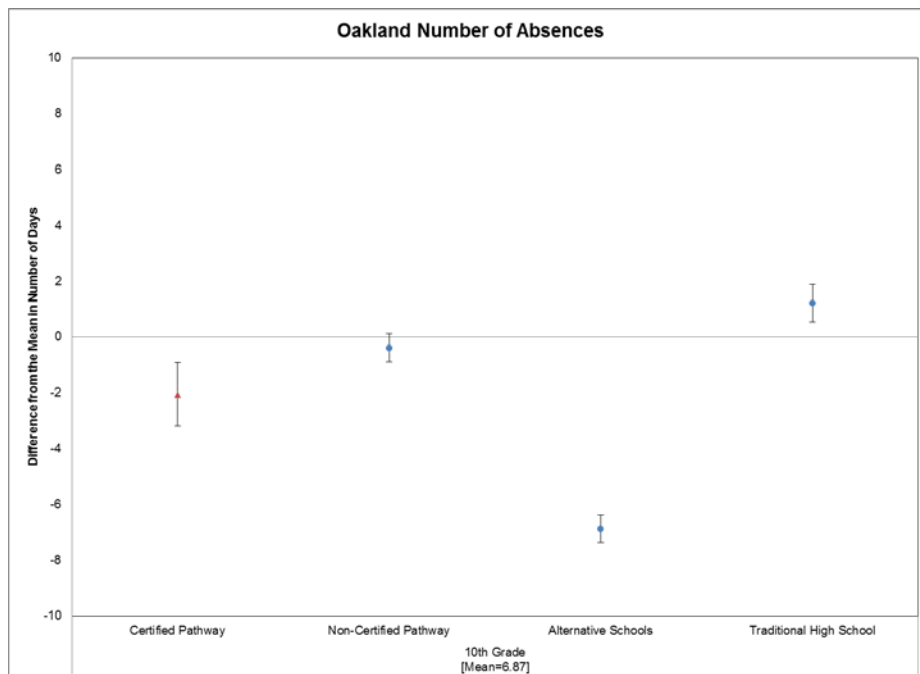
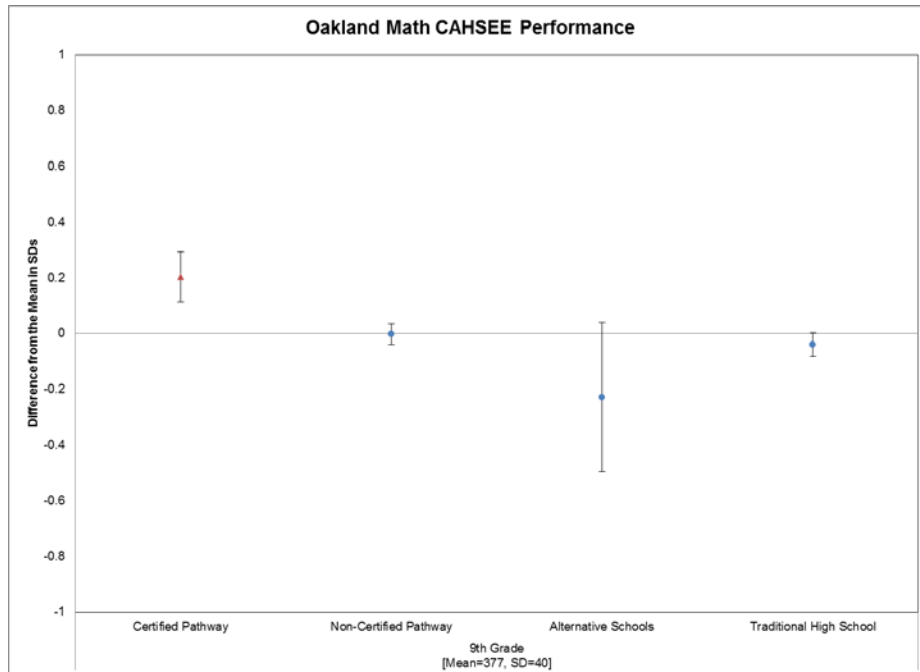
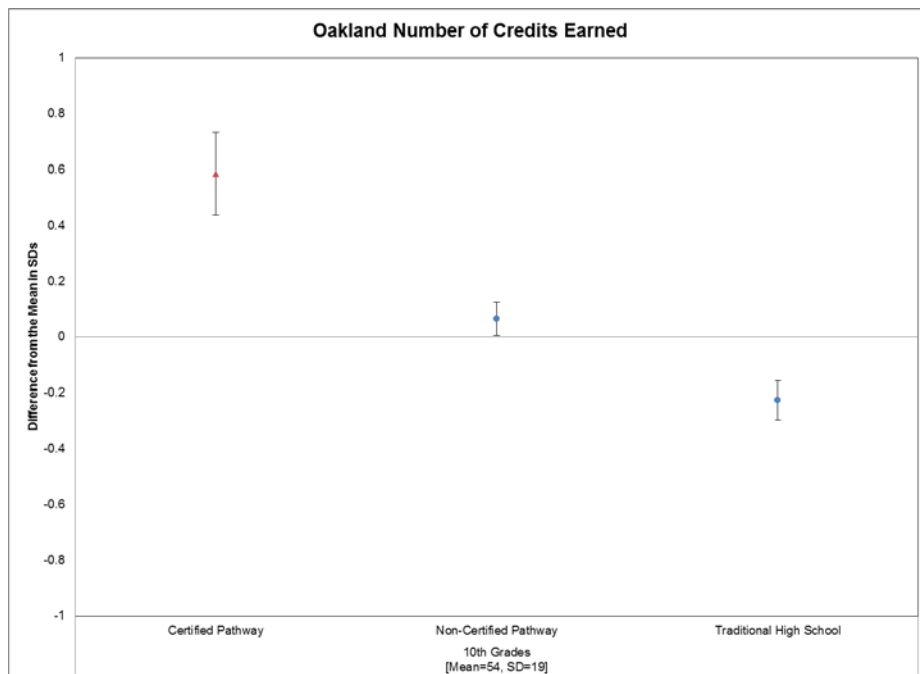
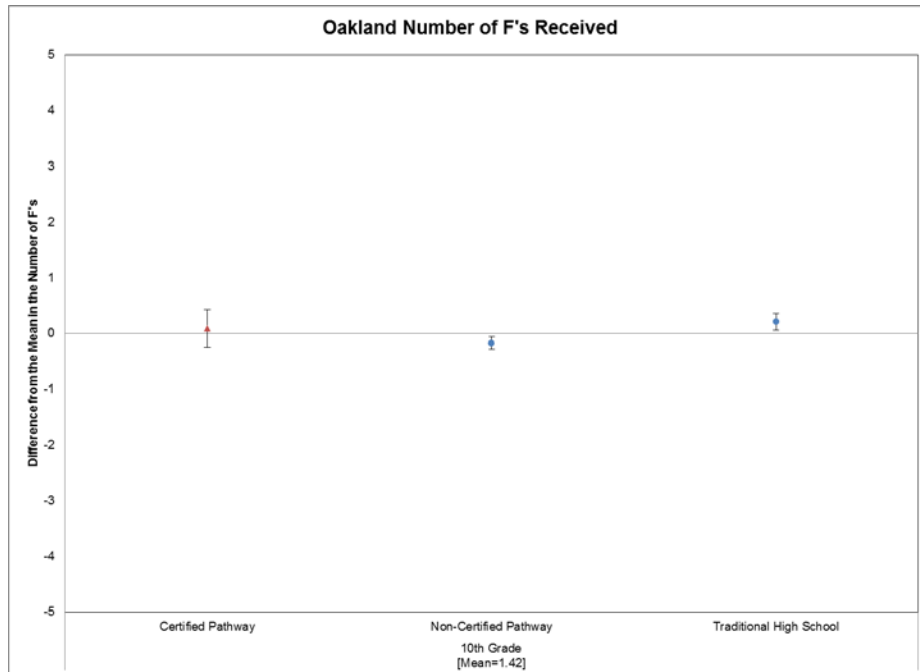


Exhibit 2-78 Oakland Value Added Estimates for All Pathway Types







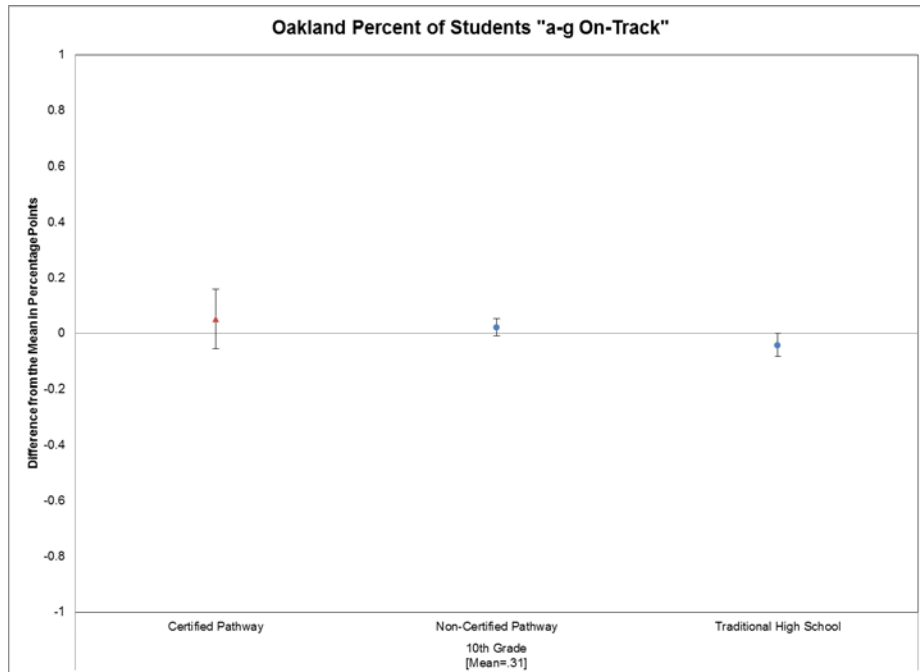
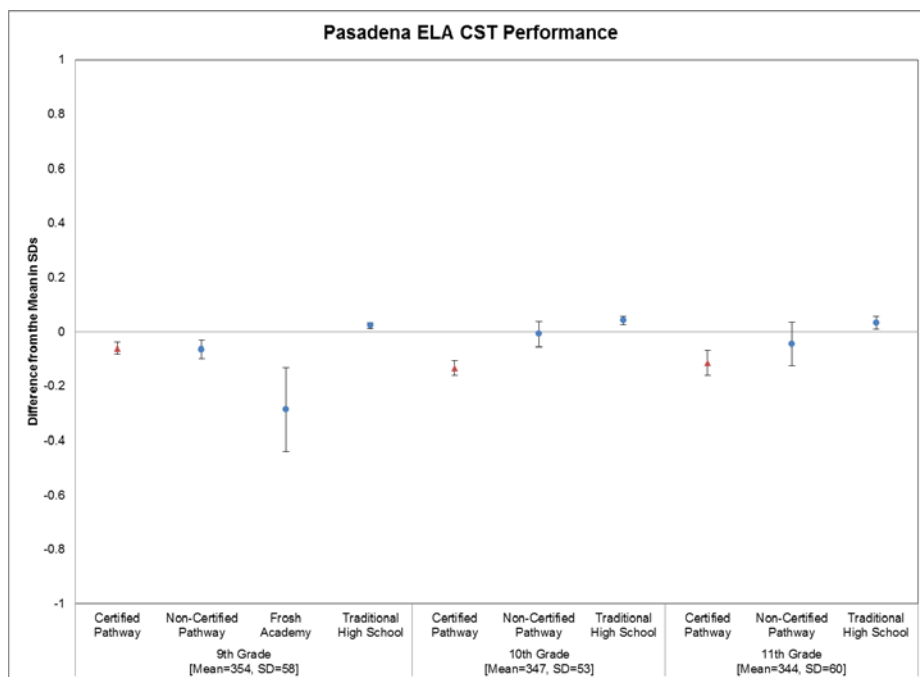
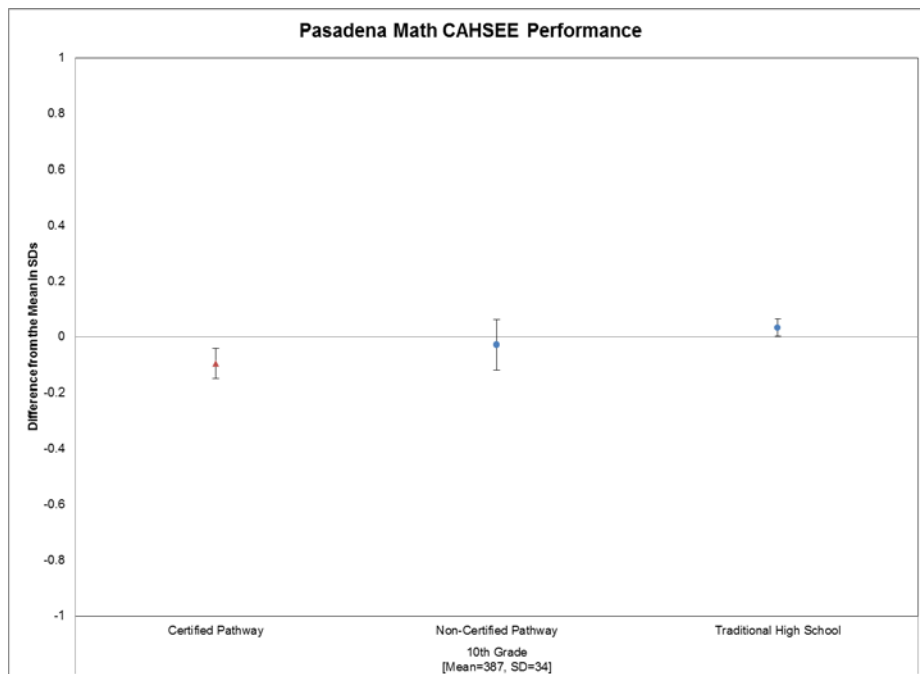
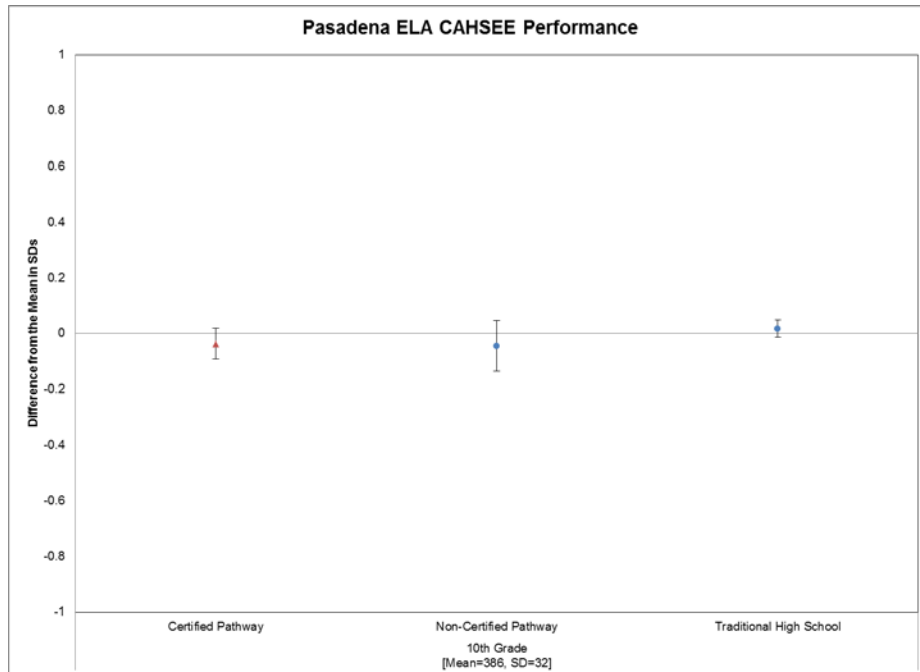
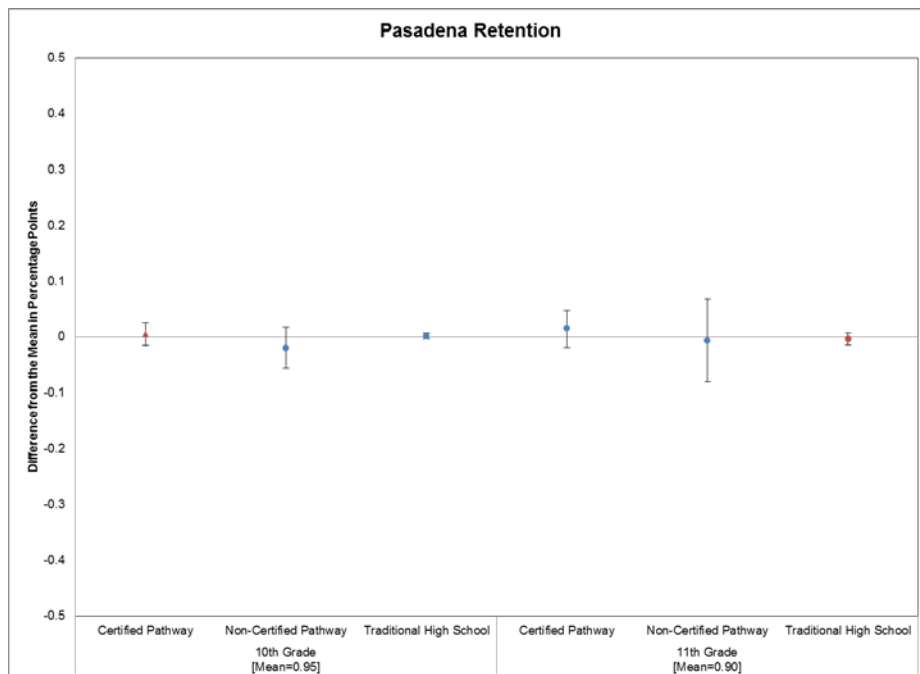
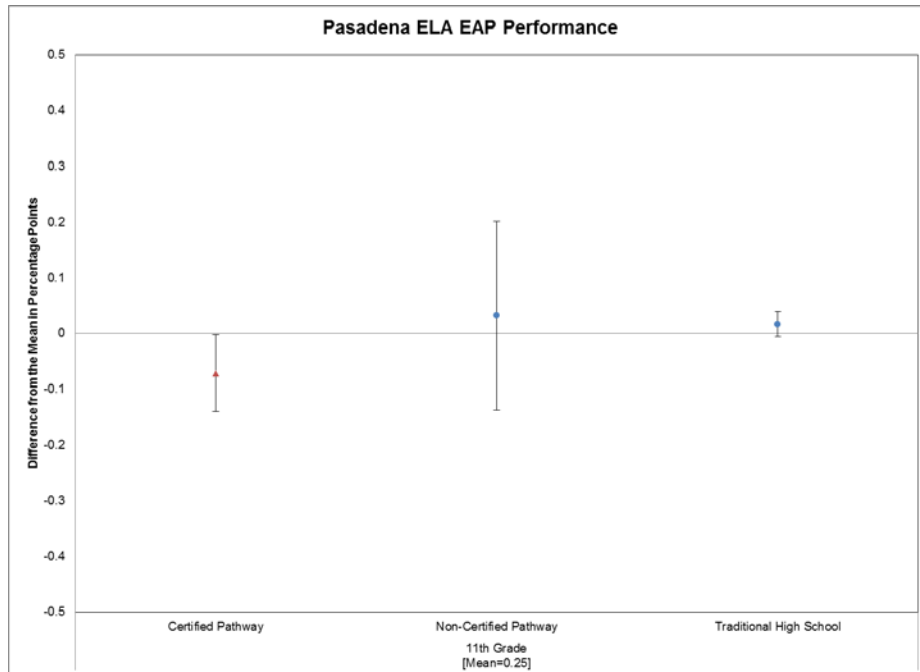
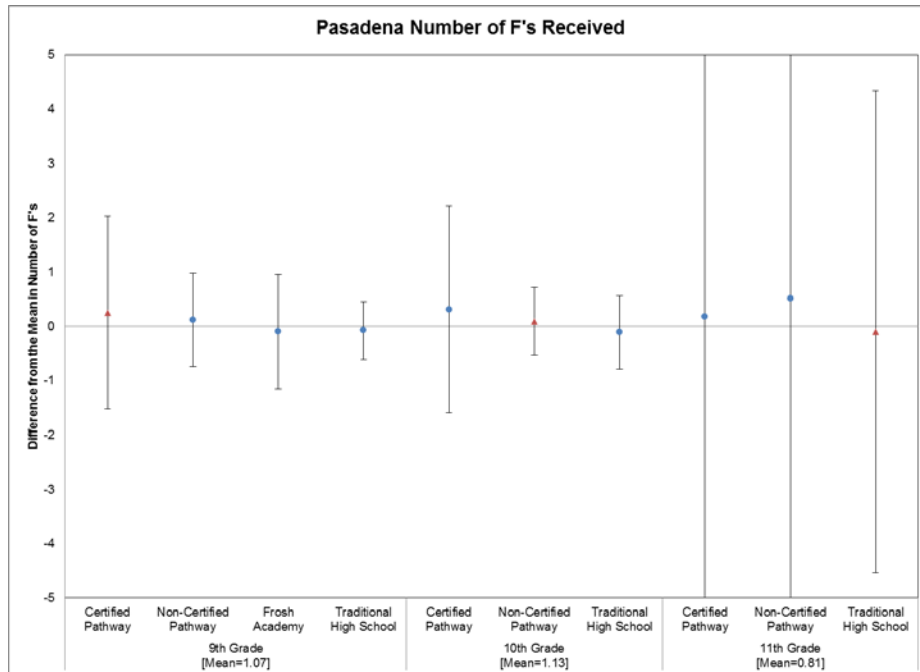


Exhibit 2-79 Pasadena Value Added Estimates for All Pathway Types

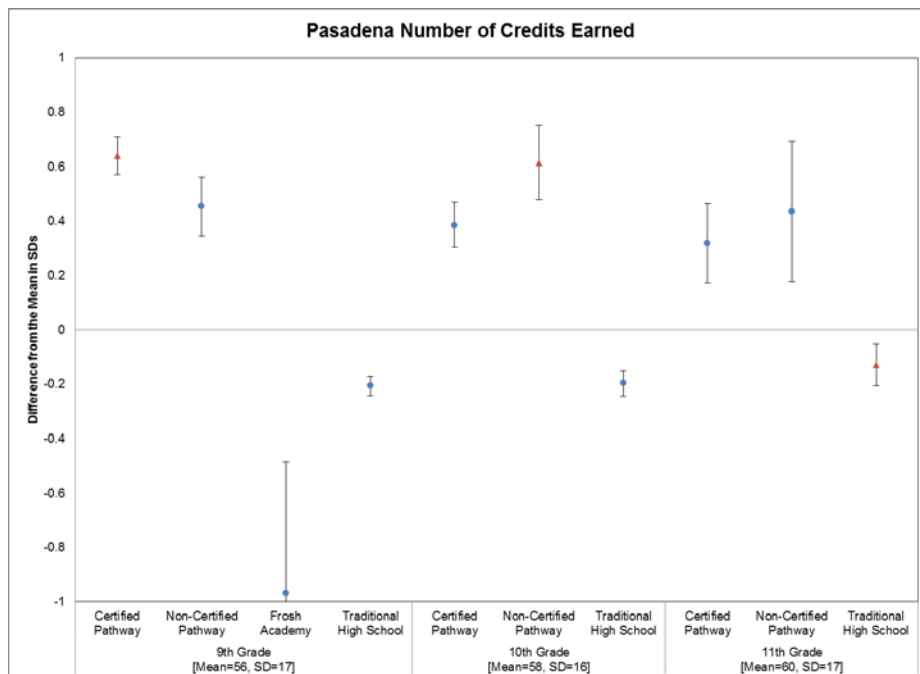








Note: In the interest of comparability, the y-axis range for each variable is set to be consistent across districts. Consequently, in Pasadena, error bars for 11th grade number of F's received in Certified and Non-Certified Pathways extend beyond the exhibit range (Certified Pathway $SE = 4.2$; Non-Certified Pathway $SE = 11.9$)



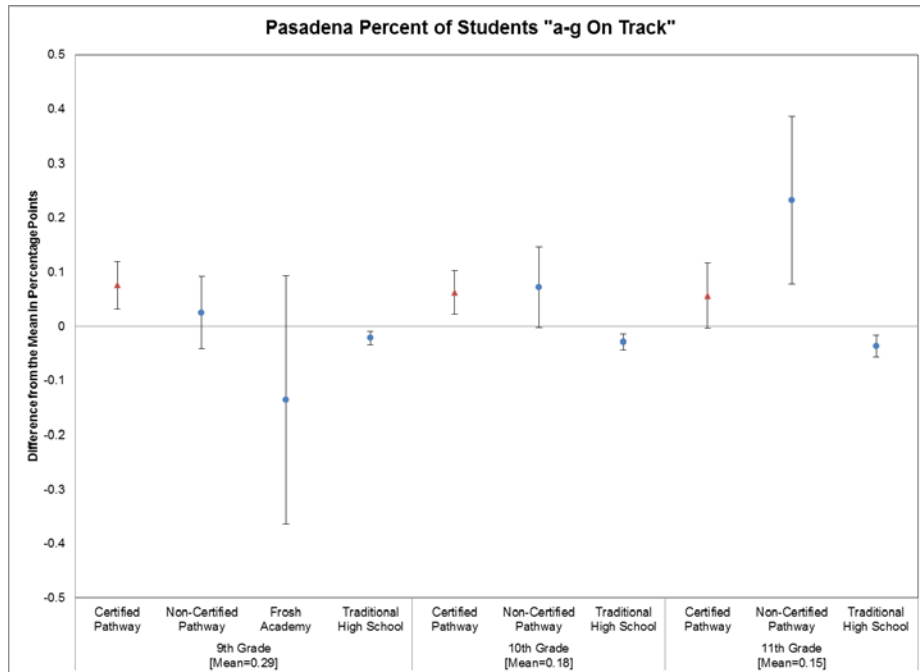
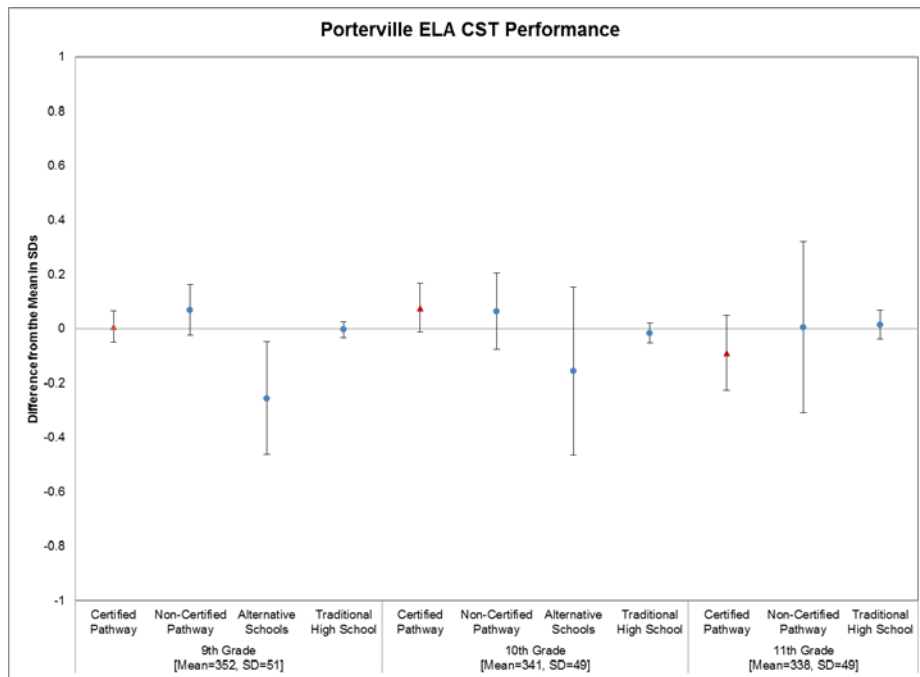
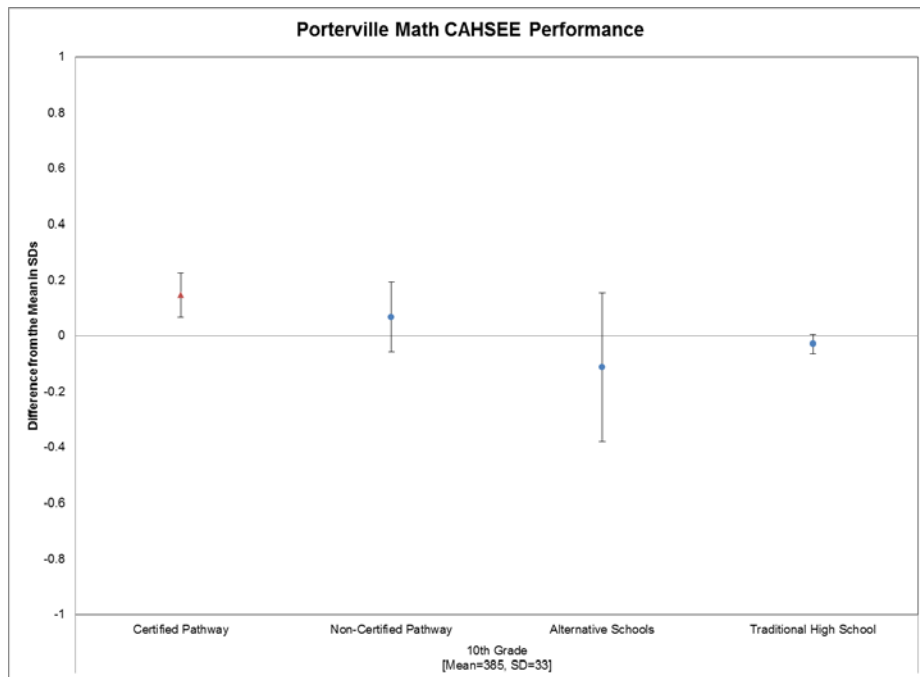
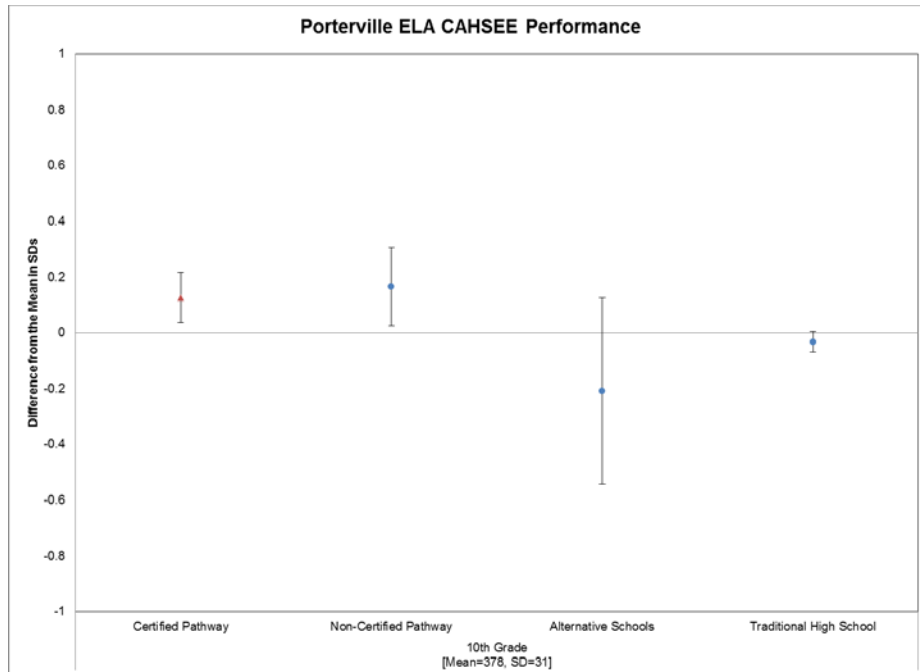
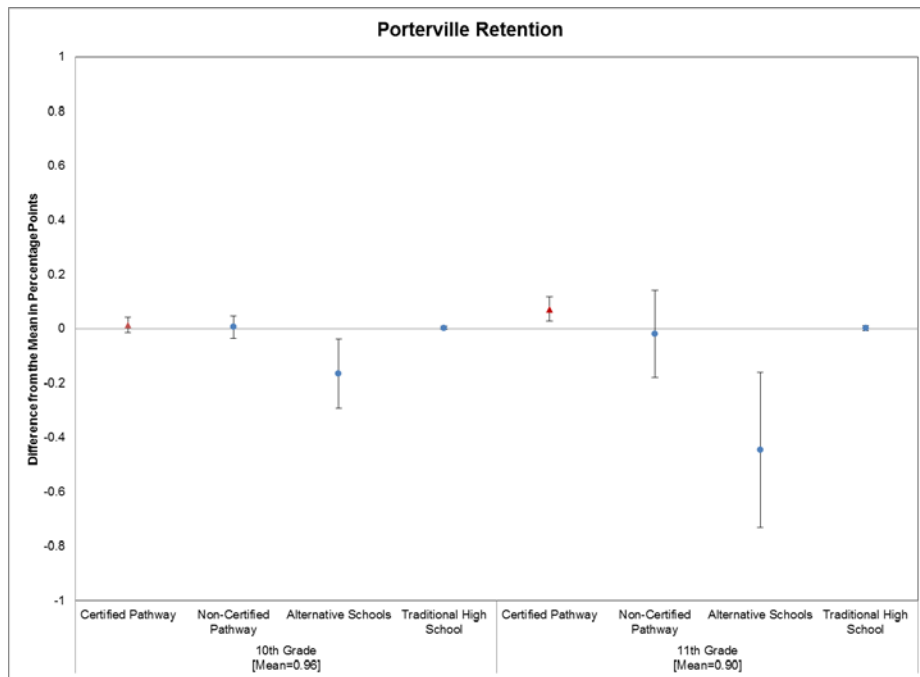
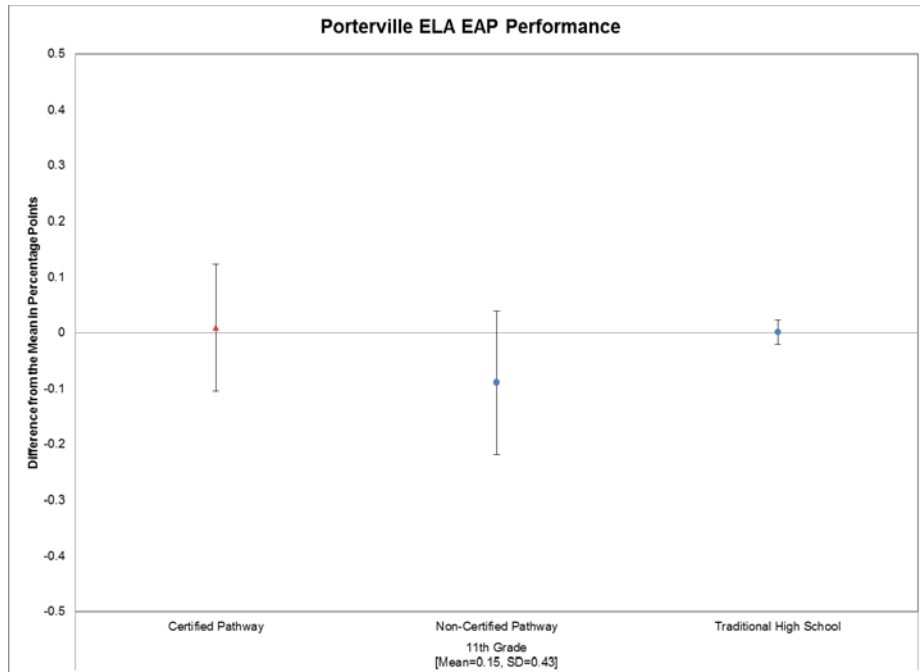
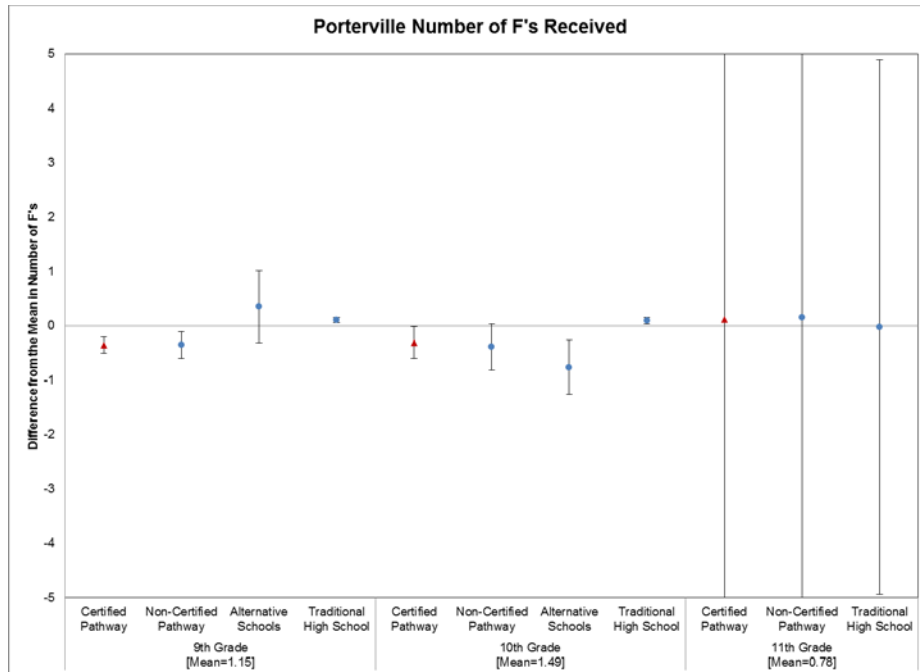


Exhibit 2-80 Porterville Value Added Estimates for All Pathway Types









Note: In the interest of comparability, the y-axis range for each variable is set to be consistent across districts. Consequently, in Porterville, error bars for 11th grade number of F's received in Certified and Non-Certified Pathways extend beyond the exhibit range (Certified Pathway $SE = 12.2$; Non-Certified Pathway $SE = 15.2$).

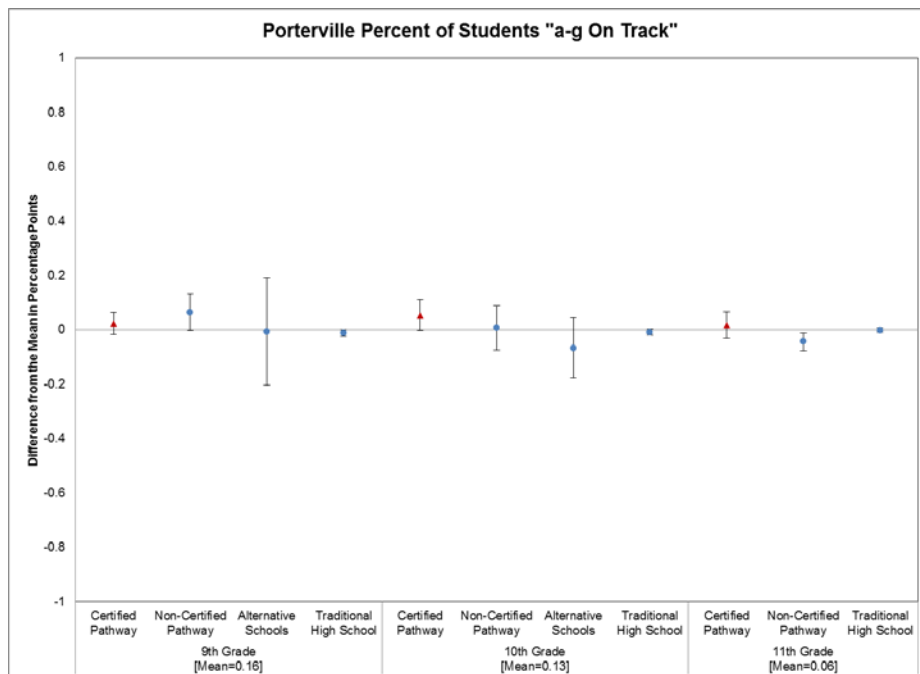
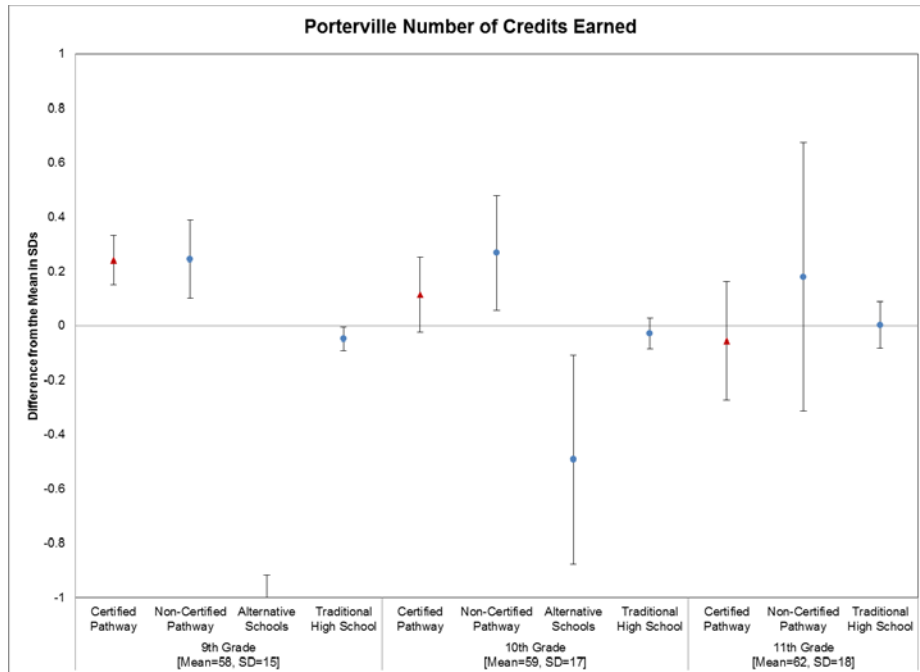
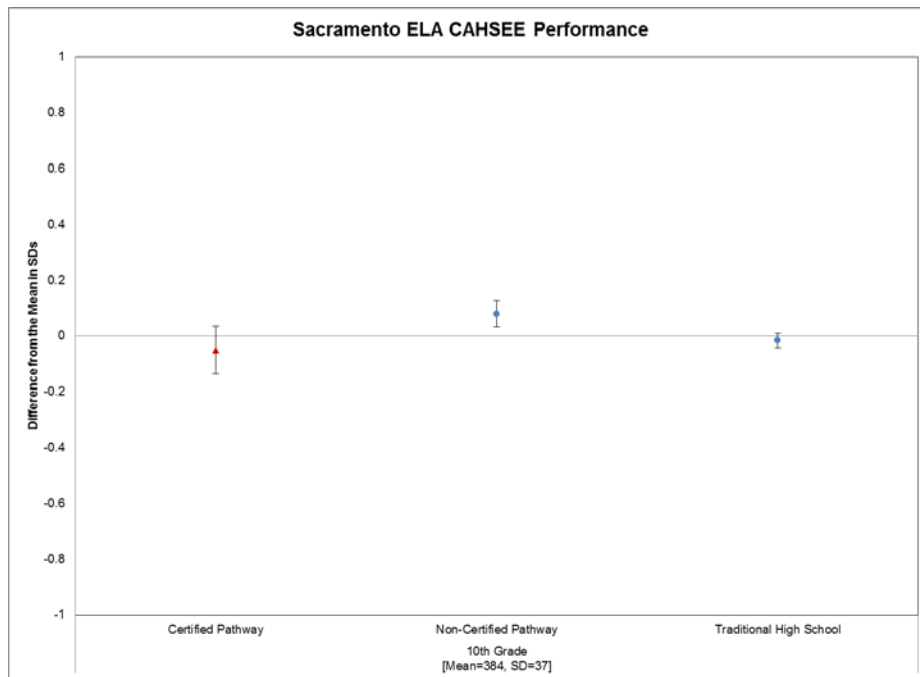
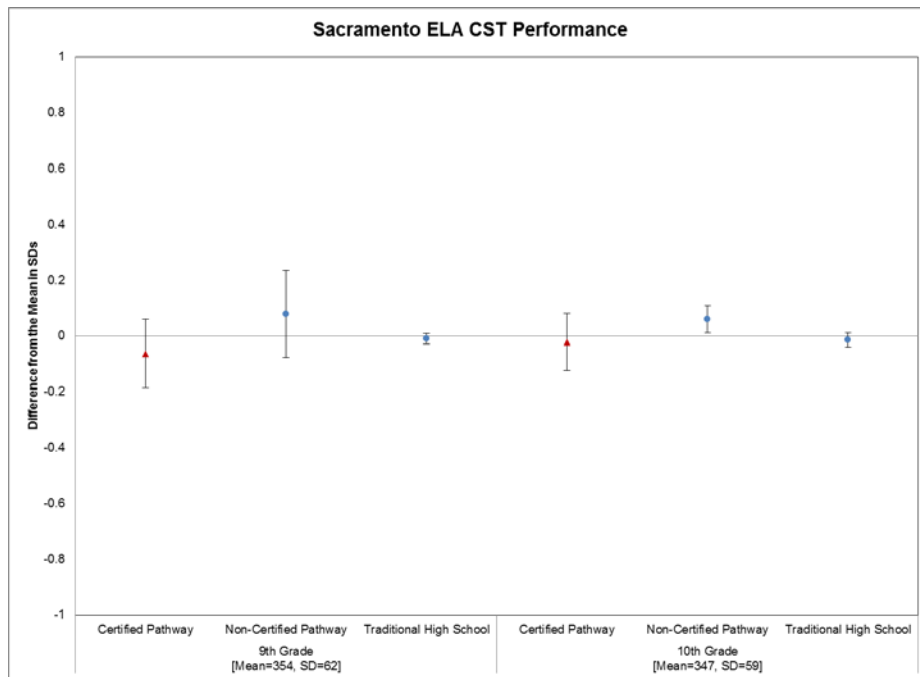
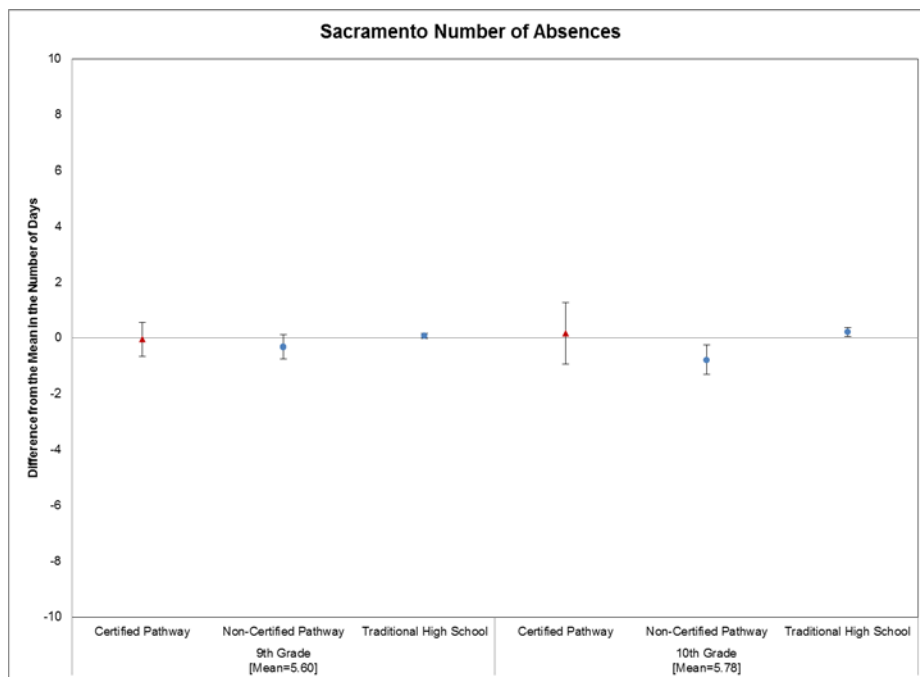
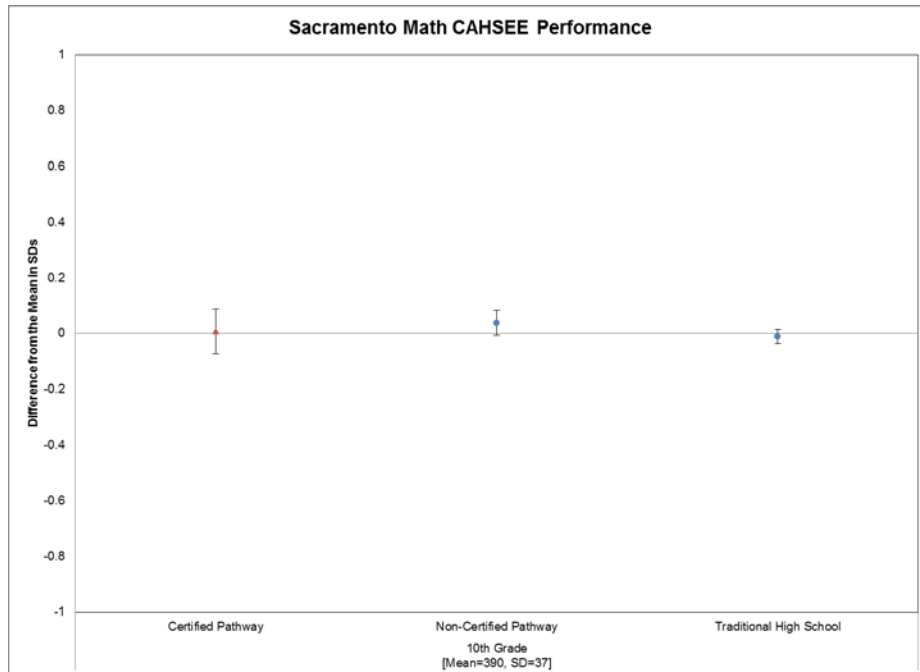
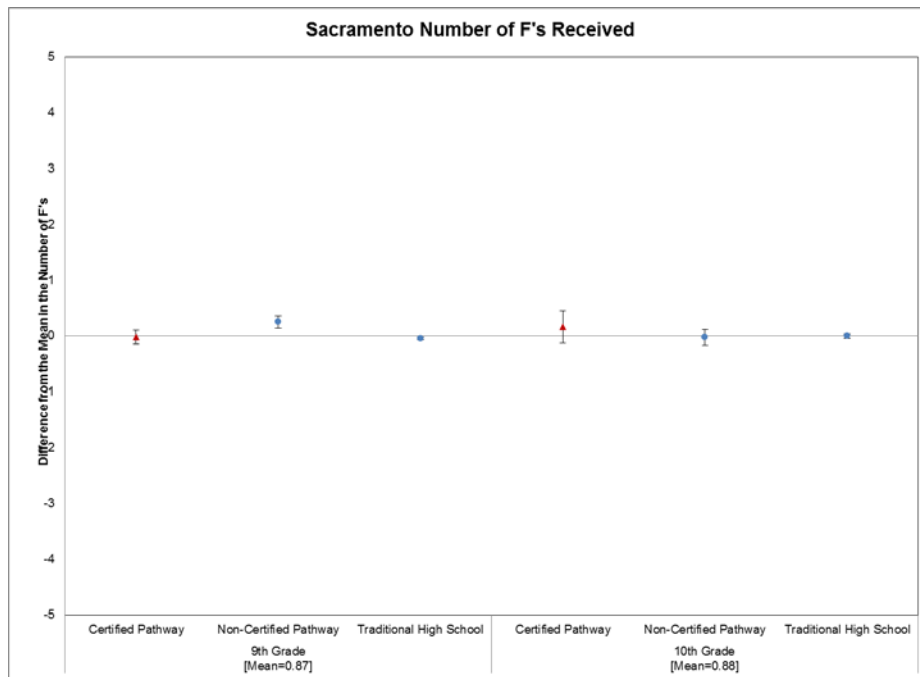
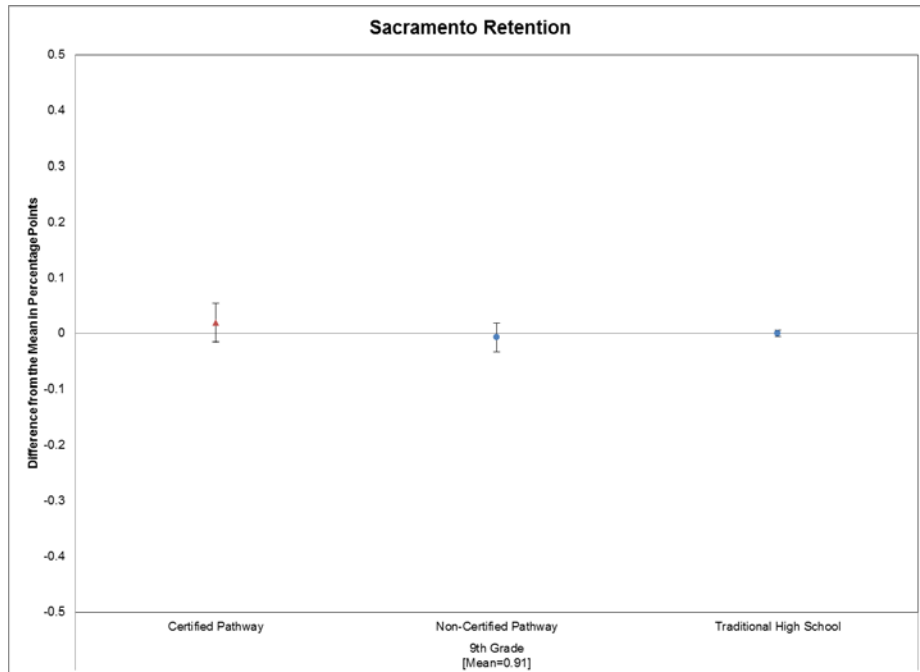


Exhibit 2-81 Sacramento Value Added Estimates for All Pathway Types







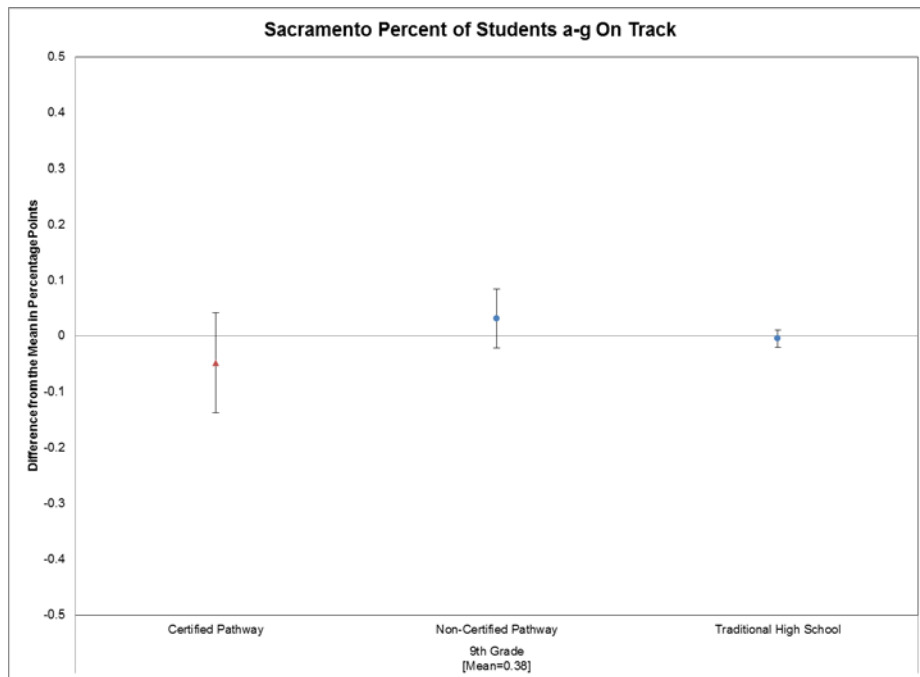
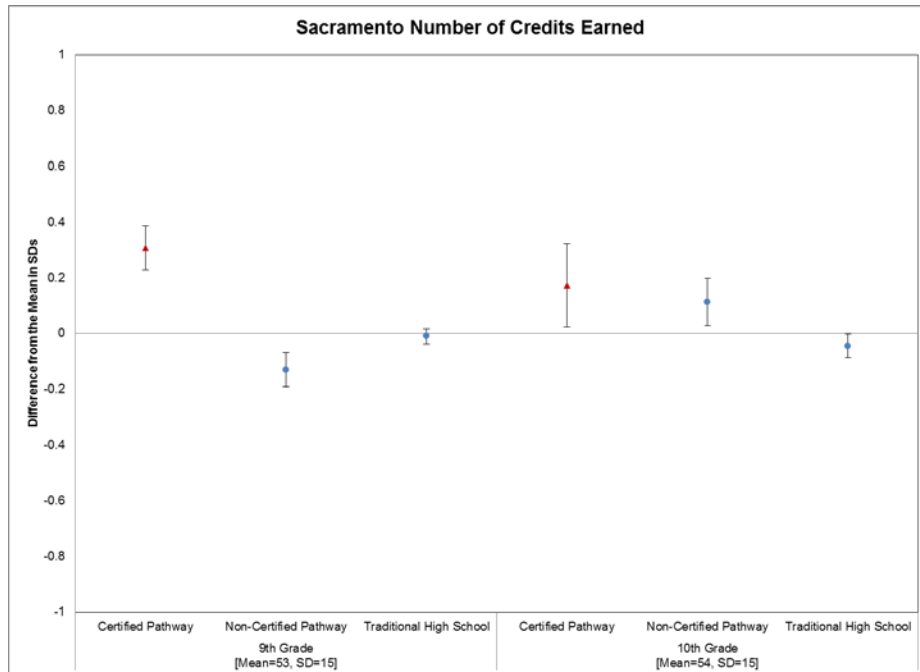
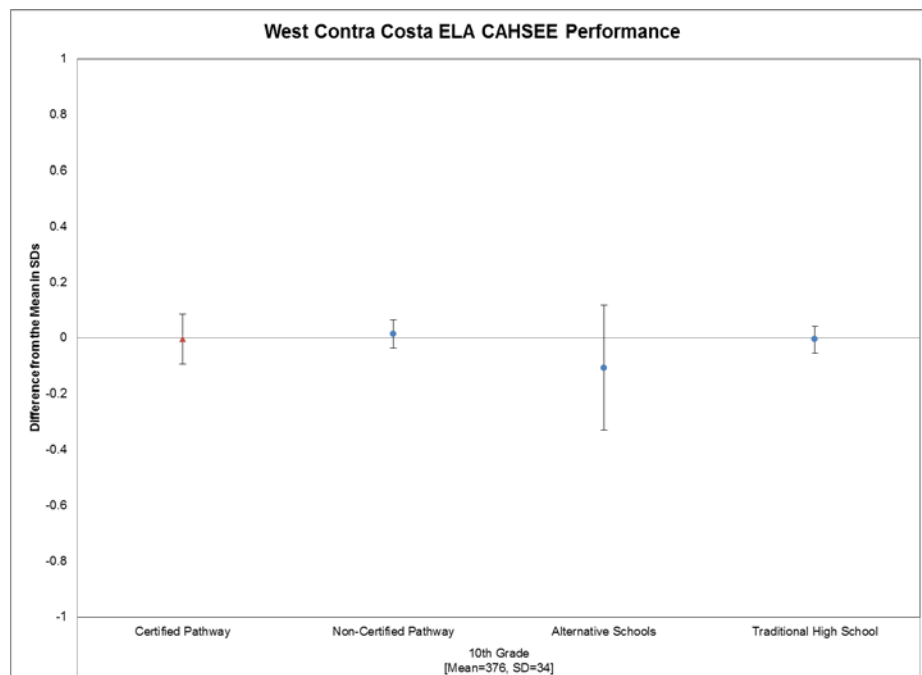
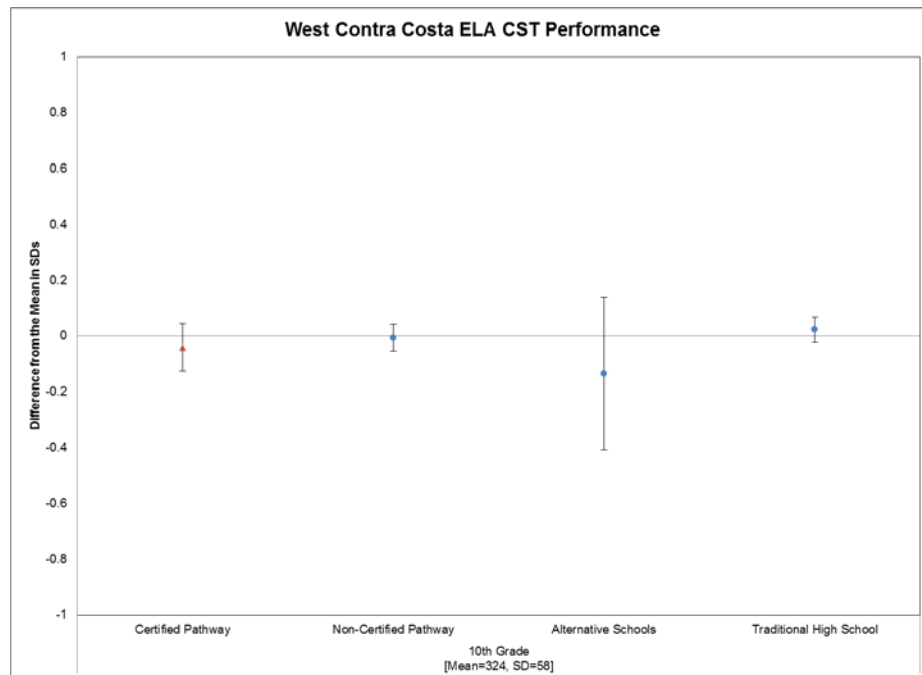
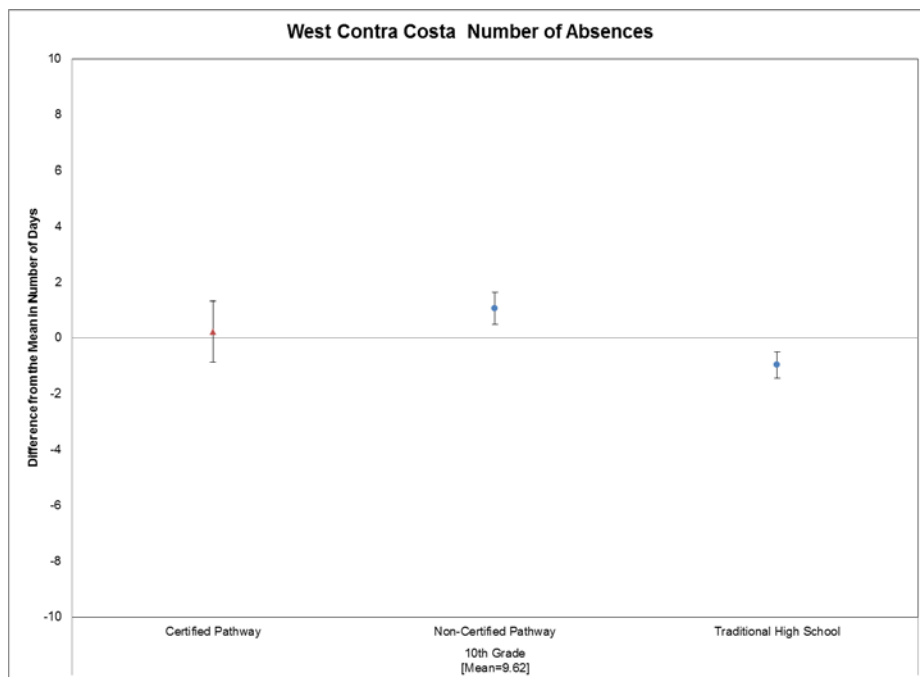
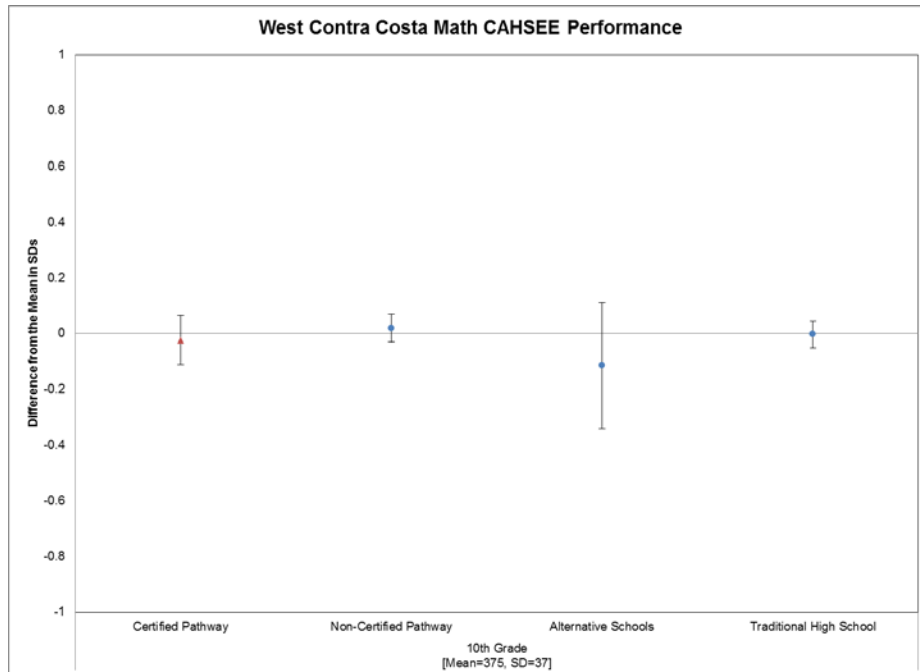
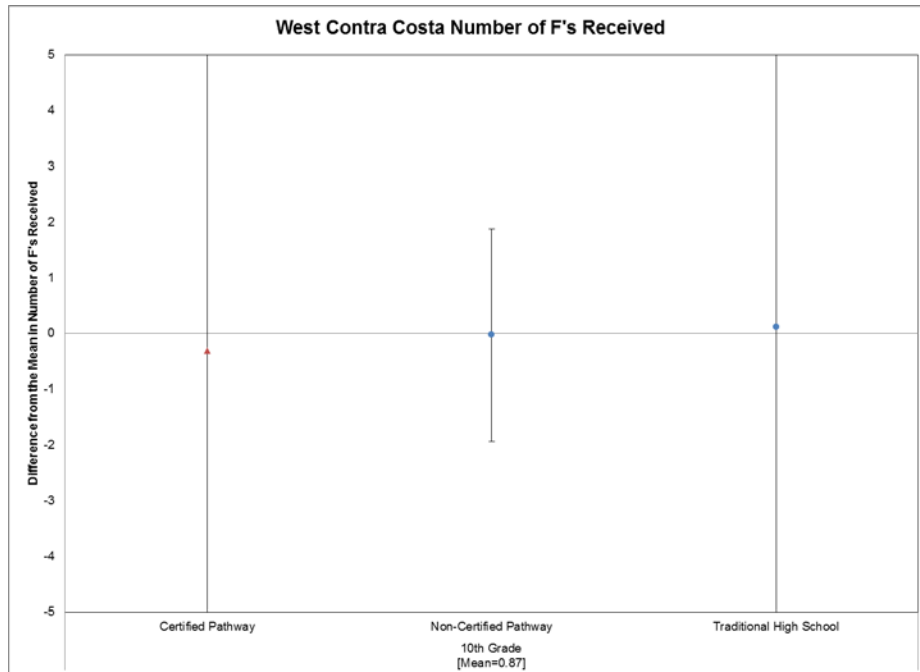


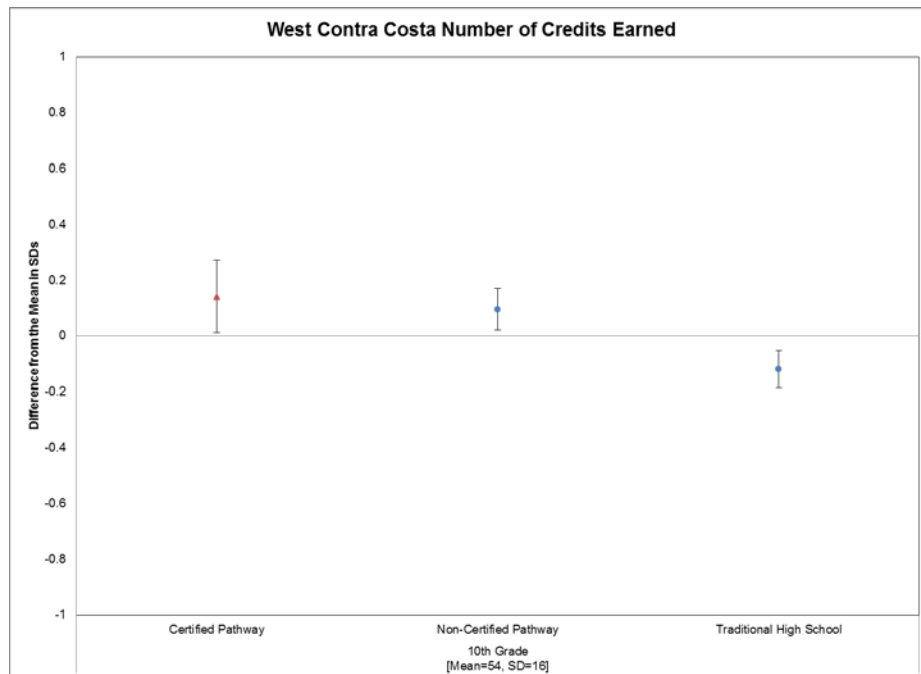
Exhibit 2-82 West Contra Costa Value Added Estimates for All Pathway Types

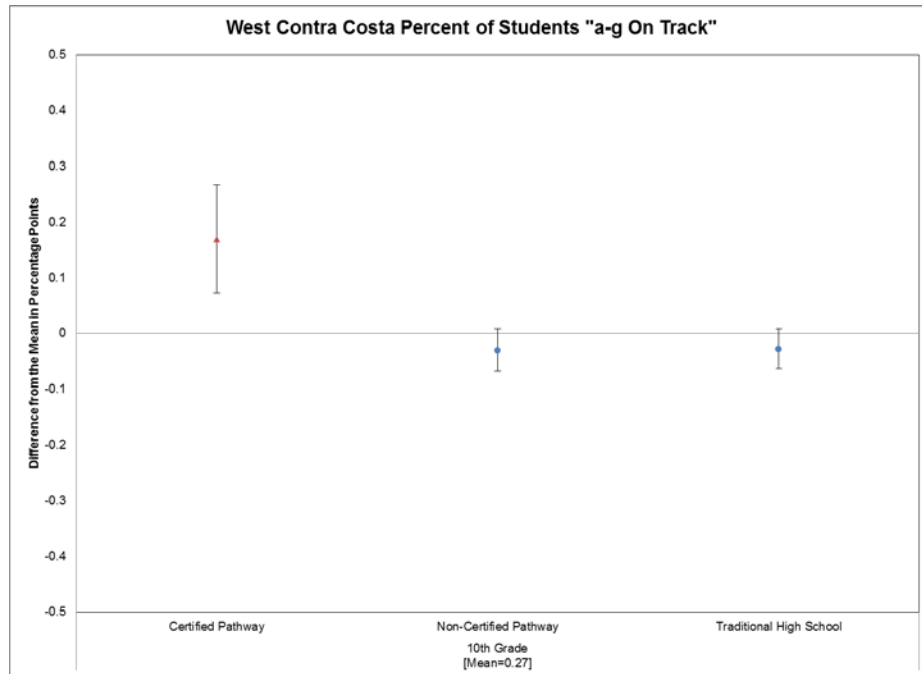






Note: In the interest of comparability, the y-axis range for each variable is set to be consistent across districts. Consequently, in West Contra Costa, error bars for number of F's received in Certified Pathways and Traditional High Schools extend beyond the exhibit range (Certified Pathway $SE = 9.8$; Traditional High School $SE = 3.7$).





Chapter 3: Survey Methods

In spring 2013, the research team surveyed 11th-grade pathway and comparison students to provide an update on students' perceptions of school climate, their sources of support and advising, the skills they perceived to have gained in high school, their experiences with work-based learning and integrated instruction, and their postsecondary plans as well as their sense of preparation for college or career. In this chapter we provide details about the sample and response rates for the survey, followed by summaries of the results for each survey item, including the items report on in Chapters 3 and 5 of the full report.

Survey Sample

For the spring 2013 survey, we sampled 11th-grade pathway and comparison students in the Linked Learning districts.

Pathway Sample: We surveyed 11th-graders in all pathways certified as of the 2011-12 school year across the nine Linked Learning districts (Exhibit 3-1). Montebello was the only district that had no certified pathways as of 2011-12, so we surveyed 11th-graders there in the four pathways the district identified as being most developed. In all districts except Long Beach, we sampled all students enrolled in 11th grade in these pathways. Because so many 11th-graders are enrolled in the four certified pathways in Long Beach (590), we sampled half the students in each of those pathways.

Comparison Sample: We determined the number of comparison students to sample based on the number needed to achieve sufficient power (80%) to detect a difference in means of .30 standard deviations for a continuous outcome variable or a difference in proportion of .15 on a dichotomous outcome variable between pathway and comparison students. We sampled comparison students from the same school where the numbers of students not enrolled in pathways were sufficient. Otherwise, the team selected comparison schools based on their similarity to the size, achievement level, and demographics of the pathway schools. We avoided charter schools and schools with special themes or programs whenever possible. Where districts had implemented wall-to-wall pathways in all schools, we sampled comparison students from selected pathways or small learning communities that were in the earliest stages of development or least aligned with the Linked Learning approach. Within comparison schools, we selected a sample of students that were academically similar to pathway students.

Exhibit 3-1
Pathways Surveyed, by District

District	Pathways Surveyed, 2012–13
Antioch	Health Science and Medical Technology at Dozier-Libbey Medical High School
Los Angeles	Los Angeles High School of the Arts Los Angeles School of Global Studies
Long Beach	Architecture, Construction and Engineering Academy California Academy of Math and Science The Community of Musicians, Performers, Artists, and Social Scientists (COMPASS) PEACE Academy
Montebello	Creative Arts and Technology School (CATS) Culinary Hospitality Opportunities Pathway (CHOP) Developing Resourceful Individuals who Value Education Now (DRIVEN) Innovation, Child Development, Academia, Resources for Family, and Education (iCARE)
Oakland	Education Academy Life Academy of Health and Bioscience Media College Preparatory
Pasadena	Arts, Entertainment and Media Academy Business and Entrepreneurship Academy Creative Arts, Media and Design Academy
Porterville	Engineering Academy Multimedia Technology Academy Partnership Academy of Business Partnership Academy of Health Science Performing Arts Academy
Sacramento	Health Professions High School New Technology High School
West Contra Costa	Engineering Academy Law Academy Multimedia Academy

Note: All pathways were certified as of the 2011–12 school year except those in Montebello.

Survey Administration

We worked with the Linked Learning director of each district to identify district and/or school liaisons to help coordinate survey administration. We asked schools to provide enrollment numbers for pathway and for non-pathway classes. We then randomly sampled classrooms until we met our targeted sample size. We verified enrollment numbers with each teacher at the time of survey administration. Districts chose paper or online administration, and in some cases this varied by school within districts.

SRI researchers traveled to four of the nine districts to administer the surveys in person to reduce the burden on school staff. In the other five districts, we trained and supported district staff in administering the surveys using SRI protocols. We followed up with teachers wherever there were significant numbers of students absent on the day of administration to ensure a high response rate in all districts.

Survey Response Rate

SRI surveyed 1,656 11th-graders in certified pathways and 2,488 comparison students, excluding Montebello. We achieved an overall response rate of 83% of surveys fielded. Exhibit 3-2 displays response rates for both pathway and comparison students in each district, as well as the overall response rate across the district

Exhibit 3-2
Student Survey Response Rates

	Surveys Fielded	Response Rate (%)
Antioch		
Pathway	148	99%
Comparison	328	82
Total	476	87
Long Beach		
Pathway	298	92
Comparison	175	88
Total	473	90
Los Angeles		
Pathway	175	78
Comparison	326	76
Total	501	77
Montebello^a		
Pathway	99	75
Comparison	N/A	N/A
Total	99	75
Oakland		
Pathway	164	62
Comparison	472	69
Total	636	67

Exhibit 3-2
Student Survey Response Rates (concluded)

	Surveys Fielded	Response Rate (%)
Pasadena		
Pathway	239	94
Comparison	225	93
Total	464	94
Porterville		
Pathway	283	91
Comparison	217	98
Total	500	94
Sacramento		
Pathway	146	90
Comparison	506	88
Total	652	88
West Contra Costa		
Pathway	203	88
Comparison	239	61
Total	442	73
Overall^a		
Pathway	1,656	88
Comparison	2,488	81
Total	4,144	83

^a Because Montebello did not have any pathways certified as of the 2011–12 school year, we did not survey comparison students there and do not include students from Montebello in the overall analysis of pathway and comparison students in the body of the report.

^b Overall numbers do not include Montebello.

Survey Analysis

We compared the frequency with which pathway and comparison students reported participating in different activities and experiences related to core components of Linked Learning. Because Montebello did not have any certified pathways as of the 2011–12 school year, we did not include students from there in the overall analysis of students in the body of the report. We used a chi-squared test of independence to determine whether differences between pathway and comparison students in the survey sample were likely to represent true underlying differences in the population of students (i.e., were statistically significant at the .05 level). We used univariate analysis such as frequencies and means when presenting responses for pathway students only. For overall means and frequencies that pooled data from across the districts, we weighted both pathway and comparison respondents so that the total number of respondents in each group equaled the number of pathway students surveyed in each district. This weighting was done to ensure that the number of comparison students by district was proportional to the number of pathway students in each district in calculations of overall frequencies.

Survey Results

The following tables provide a summary of the results to all the survey items, including those cited in the full report. In these exhibits, the notation *SE* is used to denote standard error of the percent, *n* denotes the sample size, X^2 denotes the chi-square statistic, *df* denotes degrees of freedom and *p* denotes the p-value.

Exhibit 3-3
Survey Data for Question 2: School climate set by adults

2. Thinking about the adults you know at your school (teachers, guidance counselors, or other school staff). During this school year (2012-2013), how many adults at your school do the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
2a. Treat me with respect	41	(1.4)	29	(1.4)	3441	3868	37.9	1	<.0001
2b. Encourage me to continue my education after high school	54	(1.4)	41	(1.5)	3428	3851	39.3	1	<.0001
2c. Make sure students know how they can get help if they fall behind in their classes	31	(1.3)	21	(1.3)	3424	3850	28.6	1	<.0001
2d. Care about how well I'm doing in school	28	(1.2)	16	(1.1)	3434	3858	52.1	1	<.0001
2e. Expect me to do my best all of the time	51	(1.4)	38	(1.5)	3413	3828	38.8	1	<.0001

Note: Percent represents students that responded "All" rather than "None," "A Few," "About half," or "Most."

Exhibit 3-4
Survey Data for Question 3: School climate set by students

3. How many students in your current class do the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
3a. Treat each other with respect	58	(1.3)	41	(1.5)	3442	3869	74.0	1	<.0001
3b. See what they learn in high school as useful for the future	46	(1.4)	26	(1.4)	3431	3851	89.9	1	<.0001
3c. Think it's important to get good grades in school	64	(1.3)	48	(1.5)	3438	3862	61.6	1	<.0001
3d. Help each other with school work	57	(1.4)	39	(1.5)	3431	3858	75.0	1	<.0001

Note: Percent represents students that responded "Most" or "All" rather than "None," "A Few," or "About half."

Exhibit 3-5
Survey Data for Question 4: Personal connection to school

4. To what extent do you agree or disagree with the following statements?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
4a. I feel like I belong at this school.	86	(0.9)	80	(1.2)	3425	3854	13.0	1	0.0003
4b. At least one adult at my school knows me well.	77	(1.2)	72	(1.4)	3422	3850	8.6	1	0.0034

Note: Percent represents students that responded "Agree" or "Strongly agree" rather than "Strongly disagree" or "Disagree."

Exhibit 3-6
Survey Data for Question 5: Non-cognitive skill development (Exhibit 5-2 in Fourth-Year Evaluation Report)

5. To what extent do you think your experiences in high school have helped you in the following areas?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
5a. Believe I can learn something really hard if I try	58	(1.4)	47	(1.5)	3437	3859	28.9	1	<.0001
5b. Believe I can reach my goals if I work hard enough	66	(1.3)	54	(1.5)	3433	3852	38.3	1	<.0001
5c. Learn to manage my time better	39	(1.4)	30	(1.4)	3419	3835	20.0	1	<.0001
5d. Believe that if I want to learn something well I can	56	(1.4)	47	(1.5)	3428	3844	21.8	1	<.0001
5e. See the benefits of doing well in school	65	(1.3)	54	(1.5)	3413	3826	26.7	1	<.0001
5f. Figure out what career I want	30	(1.3)	20	(1.3)	3429	3849	30.7	1	<.0001
5g. Understand what kind of education I need for the career I want	42	(1.4)	28	(1.4)	3435	3854	46.1	1	<.0001

Note: Percent represents students that responded "A lot" rather than "Somewhat," "A little," "Not at all," or "Don't know."

Exhibit 3-7
Survey Data for Question 6: College and career readiness skill development (Exhibit 5-1 and 5-2 in Fourth-Year Evaluation Report)

6. To what extent do you think high school has helped you improve your abilities in the following areas?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
6a. Communicate with adults outside of your family	40	(1.3)	29	(1.4)	3418	3830	31.6	1	<.0001
6b. Make a public presentation or perform in front of a group	51	(1.4)	31	(1.4)	3403	3815	97.2	1	<.0001
6c. Write a letter to apply for a job or create a resume	40	(1.3)	22	(1.3)	3376	3794	80.6	1	<.0001
6d. Conduct web searches to answer a question (for example, using Google or Bing)	57	(1.4)	43	(1.5)	3422	3841	44.9	1	<.0001
6e. Judge if you can trust the results of a web search	42	(1.4)	26	(1.3)	3405	3817	68.2	1	<.0001
6f. Summarize information from multiple sources	50	(1.4)	38	(1.5)	3410	3828	34.5	1	<.0001
6g. Get along with people from different backgrounds	67	(1.3)	57	(1.5)	3404	3814	26.9	1	<.0001
6h. Work with people in a professional setting	56	(1.4)	33	(1.4)	3403	3817	120.8	1	<.0001
6i. Work in a group to achieve a shared goal	62	(1.3)	39	(1.5)	3405	3819	128.8	1	<.0001
6j. Accept responsibility for the quality of your work	69	(1.3)	57	(1.5)	3406	3820	37.8	1	<.0001
6k. Know expectations for behavior in a workplace or at a job	65	(1.3)	51	(1.5)	3407	3825	48.6	1	<.0001
6l. Use information to make good decisions	64	(1.3)	52	(1.5)	3417	3835	34.6	1	<.0001

Note: Percent represents students that responded "A lot" rather than "Somewhat," "A little," "Not at all," or "Don't know."

Exhibit 3-8

Survey Data for Question 7a: Students who report they would be most likely to talk with a teacher about a problem in class

7. Thinking about adults in your school:	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
7a. Who are you most likely to talk with if you are having a problem in class?	58	(1.4)	45	(1.5)	3370	3798	37.2	1	<.0001

Note: Percent represents students that responded "Teachers" rather than "Principal," Assistant Principal," "Other adult at my school" or "No adult at my school."

Exhibit 3-9

Survey Data for Question 7b: Students who report they would be most likely to talk with no adult at their school about a problem with classmates or friends

7. Thinking about adults in your school:	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
7b. Who are you most likely to talk with if you are having a problem with other students such as friends or classmates?	39	(1.4)	47	(1.5)	3374	3790	15.1	1	0.0001

Note: Percent represents students that responded "No adult at my school" rather than "Principal," "Assistant Principal," "Teacher," "Counselor," or "Other adult at my school."

Exhibit 3-10

Survey Data for Question 7c: Students who report they would be most likely to talk with a counselor about plans after high school

	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
7. Thinking about adults in your school:									
7c. Who are you most likely to talk with about your plans after high school?	40	(1.4)	44	(1.6)	3356	3776	3.4	1	0.0654

Note: Percent represents students that responded "Counselor" rather than "Principal," "Assistant Principal," "Teacher," "Other adult at my school" or "No adult at my school."

Exhibit 3-11

Survey Data for Question 8: Students reporting that there are counselors at their school

	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
8. Are there counselors at your school?									
Yes	95	(0.6)	96	(0.5)	3416	3837	3.6	1	0.0590

Note: Percent represents students that responded "Yes" rather than "No" or "Don't know."

Exhibit 3-12
Survey Data for Question 9: Students reporting having the same counselor throughout high school

9. Have you had the same counselor for the whole time you have been at this high school?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Yes	63	(1.3)	53	(1.5)	3416	3838	23.2	1	<.0001

Note: Percent represents students that responded "Yes" rather than "No" or "Don't know."

Exhibit 3-13
Survey Data for Question 10: Frequency of students' interactions with counselors

10. During this school year (2012-13), how frequently have you met with your counselor?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
A few times a year/About once a month/At least once a week	53	(1.4)	58	(1.5)	3259	3669	5.7	1	0.0174

Note: Percent represents students that responded "A few times this year," "About once a month," or "At least once a week" rather than "Never" or "Once or twice this year."

Exhibit 3-14
Survey Data for Question 11: Types of support provided by counselors

11. During this school year (2012-13), has a counselor at your school helped you understand the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
11a. High school graduation requirements	65	(1.3)	65	(1.4)	3250	3649	0.0	1	0.9648
11b. What I want to do after I graduate from high school	34	(1.4)	31	(1.5)	3245	3648	2.2	1	0.1389
11c. What kind of education or training I will need after HS to help prepare me for my possible career	34	(1.4)	32	(1.5)	3237	3637	1.5	1	0.2283
11d. What high school courses I will need to get into college	56	(1.4)	56	(1.5)	3241	3644	0.1	1	0.7720
11e. How to choose a 2- or 4- year college	38	(1.4)	38	(1.6)	3233	3636	0.0	1	0.8474
11f. How to choose a career training program or trade school (such as information and technology (IT) school, automotive school, cooking school, beauty school, etc.)	25	(1.3)	22	(1.4)	3236	3633	1.9	1	0.1661
11g. Financial aid options (how to pay for college or a training program).	28	(1.3)	30	(1.6)	3240	3638	0.6	1	0.4265

Note: Percent represents students that responded "A lot" rather than "Not at all" or "A little."

Exhibit 3-15
Survey Data for Question 12: Types of support provided by teachers (Exhibit 3-5 in Fourth-Year Evaluation Report)

12. During this school year (2012-13), has at least one teacher at your school helped you understand the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
12a. High school graduation requirements.	63	(1.3)	51	(1.5)	3401	3814	30.7	1	<.0001
12b. What I want to do after I graduate from high school	43	(1.4)	29	(1.4)	3390	3802	46.6	1	<.0001
12c. What kind of education or training I will need after high school to help prepare me for my possible career	42	(1.4)	29	(1.4)	3386	3796	43.0	1	<.0001
12d. High school courses I will need to get into college	53	(1.4)	44	(1.5)	3395	3805	19.0	1	<.0001
12e. How to choose a 2- or 4- year college	41	(1.4)	32	(1.5)	3377	3786	22.8	1	<.0001
12f. How to choose a career training program or trade school (such as information and technology (IT) school, automotive school, cooking school, beauty school, etc.)	29	(1.3)	22	(1.4)	3390	3796	10.4	1	0.0013
12g. Financial aid options (i.e., how to pay for college or a training program).	31	(1.3)	27	(1.5)	3391	3800	4.3	1	0.0390

Note: Percent represents students that responded "A lot" rather than "Not at all" or "A little."

Exhibit 3-16
Survey Data for Question 13: Enrollment in advanced coursework

13. Since you started high school have you enrolled in any of the following kinds of courses?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
13a. Advanced Placement	38	(1.3)	44	(1.5)	3364	3752	9.1	1	0.0026
13b. International Baccalaureate (IB)	2	(0.4)	4	(0.8)	3263	3617	6.5	1	0.0106
13c. Honors course	40	(1.4)	45	(1.6)	3318	3688	5.7	1	0.0169
13d. Course that gives you credits that can transfer to college (including classes taken at a community college or university but NOT including AP or IB classes)	31	(1.3)	24	(1.4)	3279	3654	12.5	1	0.0004

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-17
Survey Data for Question 14: Frequency with which teachers make coursework relevant

14. Since the beginning of this school year (2012-13), how often has at least one of your teachers done the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
14a. Discussed how to apply what you are learning in class to the real world	49	(1.4)	41	(1.5)	3404	3812	17.0	1	<.0001
14b. Explained how what you learn in one class relates to what you learn in another class	52	(1.4)	42	(1.5)	3400	3806	23.7	1	<.0001
14c. Explained how what you learn in class could be applied to what you might do after school	53	(1.4)	45	(1.5)	3400	3805	15.5	1	<.0001
14d. Asked you to use tools or equipment (such as computers or machinery) that you might use in a job	55	(1.4)	42	(1.5)	3397	3804	36.6	1	<.0001

Note: Percent represents students that responded "About once a month," "About twice a month" or "At least once a week" rather than "Never," "Once or twice this year" or "A few times this year."

Exhibit 3-18
Survey Data for Question 15: Frequency with which teachers make coursework challenging

15. Since the beginning of this school year (2012-13), how often has at least one of your teachers done the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
15a. Required you to work on a project that lasted for 2 weeks or longer	37	(1.3)	23	(1.3)	3382	3784	53.6	1	<.0001
15b. Required you to work with other students on projects	55	(1.4)	43	(1.5)	3378	3780	30.9	1	<.0001
15c. Challenged you to understand difficult topics	62	(1.3)	54	(1.5)	3366	3762	17.8	1	<.0001
15d. Provided a rubric for an assignment so you know how you will be graded	63	(1.3)	50	(1.5)	3371	3764	36.7	1	<.0001

Note: Percent represents students that responded "About once a month," "About twice a month," or "At least once a week" rather than "Never," "Once or twice this year" or "A few times this year."

Exhibit 3-19
Survey Data for Question 16: Work-based learning participation (Exhibit 3-1 in Fourth-Year Evaluation Report)

16. During this school year (2012-13), have you participated in any of the following work-based learning experiences as part of your high school program?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
16a. Listening to guest speakers from a particular industry of profession.	79	(1.1)	65	(1.5)	3371	3769	57.3	1	<.0001
16b. Participating in career explorations field trips arranged by your school such as company tours or job shadowing (visits to work places to observe one worker or many workers)	48	(1.4)	26	(1.4)	3365	3763	112.3	1	<.0001
16c. Community service (volunteer work arranged by your school to support your local community)	50	(1.4)	36	(1.6)	3368	3764	42.2	1	<.0001
16d. Cooperative education (work experience that is part of a career-themed class and for which you earn class credit)	41	(1.4)	27	(1.5)	3367	3760	47.3	1	<.0001
16e. Internship (work experience arranged or required by your school, but not necessarily part of a career-themed class)	33	(1.3)	17	(1.3)	3369	3767	65.0	1	<.0001
16f. Mentoring (a school-arranged match with an adult for career advice and support)	30	(1.3)	22	(1.4)	3372	3763	21.0	1	<.0001
16g. School-based enterprise (working in a business run by students or teachers from your school, such as a school store)	27	(1.2)	21	(1.3)	3364	3760	12.2	1	0.0005
16h. Career-related student competitions (for example, a marketing campaign or fundraiser)	40	(1.4)	30	(1.5)	3369	3768	25.0	1	<.0001
16i. Mentoring or tutoring another student on a regular basis as arrange by your school.	30	(1.3)	24	(1.4)	3362	3755	9.4	1	0.0021
16 all. Any of the work-based learning opportunities listed in "a-i" above	89	(0.9)	76	(1.3)	3459	3896	67.7	1	<.0001

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-20
Survey Data for Question 17: Course grades linked to work-based learning experiences

17. Does your performance or participation in any of the work-based learning experiences in Question 16 affect your grade in at least one of your high school classes?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Yes	48	(1.5)	42	(1.8)	2708	3104	6.0	1	0.0142

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-21
Survey Data for Question 18: Experiences with work-based learning

18. Thinking about your work-based learning experience(s) from Question 16, how often have you done the following during this school year (2012-13)?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
18a. Tied your work-based learning experience(s) back to a school project or other classwork	28	(1.3)	17	(1.4)	2628	3077	25.9	1	<.0001
18b. Used tools or equipment (such as computers or machinery)	46	(1.5)	35	(1.8)	2614	3064	23.4	1	<.0001

Note: Percent represents students that responded "Most of the time" or "Always" rather than "Never," "Rarely," or "Sometimes."

Exhibit 3-22
Survey Data for Question 19: Satisfaction with work-based learning experiences

19. Thinking back to your previous work-based learning experience(s) from Question 16, how satisfied were you overall with these experiences during this school year (2012-13)?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Satisfied/Very Satisfied	58	(1.5)	41	(1.8)	2605	3054	50.5	1	<.0001

Note: Percent represents students that responded "Satisfied" or "Very Satisfied" rather than "Not at all satisfied" or "Somewhat satisfied."

Exhibit 3-23
Survey Data for Question 20: Perceived preparation for college and/or career

20. Do you think high school will prepare you for the following?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
20a. College	92	(0.7)	87	(1.0)	3348	3761	15.0	1	0.0001
20b. Job or career of my choice	79	(1.2)	69	(1.4)	3278	3670	27.8	1	<.0001

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-24
Survey Data for Question 21: Projected completion of a-g requirements

21. By the end of high school, do you think you will complete the course required to enter the University of California and California State University systems (referred to as the a-g courses)?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Yes	70	(1.3)	66	(1.4)	3371	3777	6.2	1	0.0130

Note: Percent represents students that responded "Yes" rather than "No" or "Don't know."

Exhibit 3-25
Survey Data for Question 22: Plans to complete technical or trade school

22. Do you plan to complete any kind of technical or trade school (for example, information and technology (IT) school, automotive school, cooking school, beauty school, etc.)?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Yes	37	(1.3)	38	(1.5)	3347	3750	0.2	1	0.6300

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-26
Survey Data for Question 23: Highest level of education expected

23. What is the highest level of education you think you will complete in your lifetime?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Degree from a 2-year community college/Degree from a 4-year college/Graduate degree	95	(0.6)	92	(0.8)	3359	3769	11.2	1	0.0008

Note: Percent represents students that responded "Degree from a 2-year community college," "Degree from a 4-year college" or "Graduate degree" rather than "Less than high school" or "High school diploma."

Exhibit 3-27
Survey Data for Question 24: Pathway influence on student goals (pathway students only)

24. To what extent do you feel your experiences in a pathway, academy or career/industry-themed school has influenced your goals?	Pathway		n	Weighted n
	Percent	SE		
Helped me know that I want to continue my education or training beyond high school	51	(1.4)	1365	1839

Note: Percent represents students that responded "A lot" rather than "Not at all," "A little" or "Somewhat."

Exhibit 3-28
Survey Data for Question 25: Future job or career interest known

	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
25. Do you know what job or career you want to have in the future?									
Yes	73	(1.2)	73	(1.4)	3346	3750	0.0	1	0.9483

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-29
Survey Data for Question 27: Student Gender

	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
27. Are you male or female?									
Are you male or female?	49	(1.4)	51	(1.5)	3356	3763	1.1	1	0.3014

Note: Percent represents students that responded "Male" rather than "Female."

Exhibit 3-30
Survey Data for Question 28: Student Grade

	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
28. What grade are you in?									
What grade are you in?	99	(0.3)	98	(0.5)	3365	3774	1.8	1	0.1781

Note: Percent represents students that responded "11th grade" rather than "9th grade," "10th grade" or "12th grade."

Exhibit 3-31
Survey Data for Question 29: Student Ethnicity

29. What is your race/ethnicity?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
29a. Latino	66	(1.3)	50	(1.6)	3324	3729	56.5	1	<.0001
29b. American Indian	0	(0.1)	0	(0.1)	3324	3729	0.1	1	0.8207
29c. Asian	6	(0.7)	14	(1.2)	3324	3729	31.4	1	<.0001
29d. Black	8	(0.7)	11	(1.0)	3324	3729	9.4	1	0.0022
29e. Pacific Islander	0	(0.2)	1	(0.3)	3324	3729	1.9	1	0.1706
29f. White	11	(0.9)	9	(0.8)	3324	3729	1.6	1	0.2076
29g. Multi	7	(0.7)	11	(1.0)	3324	3729	11.2	1	0.0008
29h. Other	2	(0.4)	4	(0.6)	3324	3729	6.2	1	0.0131

Note: Percent represents students that responded "Yes" rather than "No."

Exhibit 3-32
Survey Data for Question 30: Highest level of education completed by a parent or guardian

30. Think of one of your parents or guardians. What is the highest level of school this person completed?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Didn't graduate high school	25	(1.2)	21	(1.3)	3295	3707	3.9	1	0.0470

Note: Percent represents students that responded "Did not graduate from high school" rather than "Graduated from high school," "Went to college, but did not graduate," "Graduated from a 2-year college or technical/trade school," "Graduated from a 4-year college," "Earned a graduate degree" or "Don't know."

Exhibit 3-33
Survey Data for Question 31: Highest level of education completed by a second parent or guardian

31. If you have a second parent or guardian, what is the highest level of school this person completed?	Pathway		Comparison		n	Weighted n	X ²	df	p
	Percent	SE	Percent	SE					
Didn't graduate high school	28	(1.3)	24	(1.4)	3259	3673	4.5	1	0.0341

Note: Percent represents students that responded "Did not graduate from high school" rather than "Graduated from high school," "Went to college, but did not graduate," "Graduated from a 2-year college or technical/trade school," "Graduated from a 4-year college," "Earned a graduate degree," "Don't know" or "Do not have a second parent or guardian."

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