City Study 2022:

CAMDEN

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Table of Contents

01 REPORT OVERVIEW

- About The City Studies Project
- Sectors of Schools
- Research Question and Analyses
- Measure of Academic Performance

02 RESEARCH FINDINGS

Overall Camden Results

- Reading & math

Sector Analysis

- vs. state
- comparison within Camden

Charter Subsector Analysis

- vs. state & comparison within Camden

Research Findings Cont'd.

Student Subgroup Analysis

Black Students

- vs. state & comparison within Camden

Hispanic Students

- vs. state & comparison within Camden

Students in Poverty

- vs. state & comparison within Camden

ELL Students

- vs. state & comparison within Camden

Special Ed Students

- vs. state & comparison within Camden

Male Students

- vs. state & comparison within Camden

Female Students

- vs. state & comparison within Camden

Summary of Findings

03 APPENDIXES

- Acknowledgments
- Types of Charter Schools
- Methods
- Days of Learning

Note

- Free/reduced lunch variable is used as a proxy for poverty in the analysis.
- In 2019-2020 the NJDOE expanded its collection of gender data to include non-binary and undesignated gender, but this study uses data from 2016-17 through 2018-19 school years that only contains binary male and female category as an option.

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REPORT OVERVIEW

01

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About The City Studies Project

The City Studies project examines the performance of schools in select U.S. cities, including Camden. We study the academic progress of students as the measure of school performance.

Cohort 1

Cohort 2

Sectors of Schools

COMMUNITIES MAY HAVE UP TO FOUR SECTORS OF SCHOOLS

CHARTER SCHOOLS

Public schools operated independently from the traditional school district, with autonomy in adapting school designs and held accountable for education results.

Charter Management Organizations (CMOs)

Organizations holding the charter and overseeing the operation of at least three charter schools.

Independent Charter Schools

Organizations holding the charter and overseeing the operation of a single or two charter schools.

RENAISSANCE SCHOOLS

State-mandated charter schools run by CMOs based on Urban Hope Act of 2012. Renaissance schools enroll students from local neighborhoods.

SELECTIVE MAGNET SCHOOLS

District-run schools that screen all the students with academic criteria.

OTHER DISTRICT-RUN SCHOOLS

Public schools not belonging to any of above types.

Research Question and Analyses

IN THIS REPORT WE EXAMINE ACADEMIC PERFORMANCE IN CAMDEN USING DATA FROM THE SCHOOL YEARS 2016-17 THROUGH 2018-19. THERE ARE THREE LEVELS OF ANALYSIS.

01

Overall performance in Camden schools over two years.

02

Performance for Renaissance schools, charter schools, magnet schools, and the rest of Camden public schools over two years

03

Performance in the 2018-2019 school year **by school type, race, poverty status, English language learner (ELL) status, special education status and gender.**

WE MAKE TWO SETS OF COMPARISONS.

- The performance of Camden students is benchmarked against the state average performance, accounting for student characteristics.
- The performance of Renaissance school students, performance of charter school students, performance of magnet school students within Camden are then compared to that of similar traditional public school (other district school) students within Camden.

Measure of Academic Performance

ACHIEVEMENT VS. GROWTH

Achievement scores capture what a student knows at a point in time. They are influenced by students' prior conditions in addition to schools' contributions.

Growth scores indicate how much progress a student makes from one year to the next. Growth scores allow us to zero in on the contributions of schools separately from other factors that affect point-in-time scores.

IN THIS STUDY WE MEASURE ACADEMIC PERFORMANCE AS HOW MUCH GROWTH STUDENTS MAKE FROM ONE YEAR TO THE NEXT

We analyze student growth in standard deviation units so that the results can be assessed for statistical differences.

In the following tables of findings, we transform growth from standard deviation units into days of learning based on a typical 180-day school year.

RESEARCH FINDINGS

02

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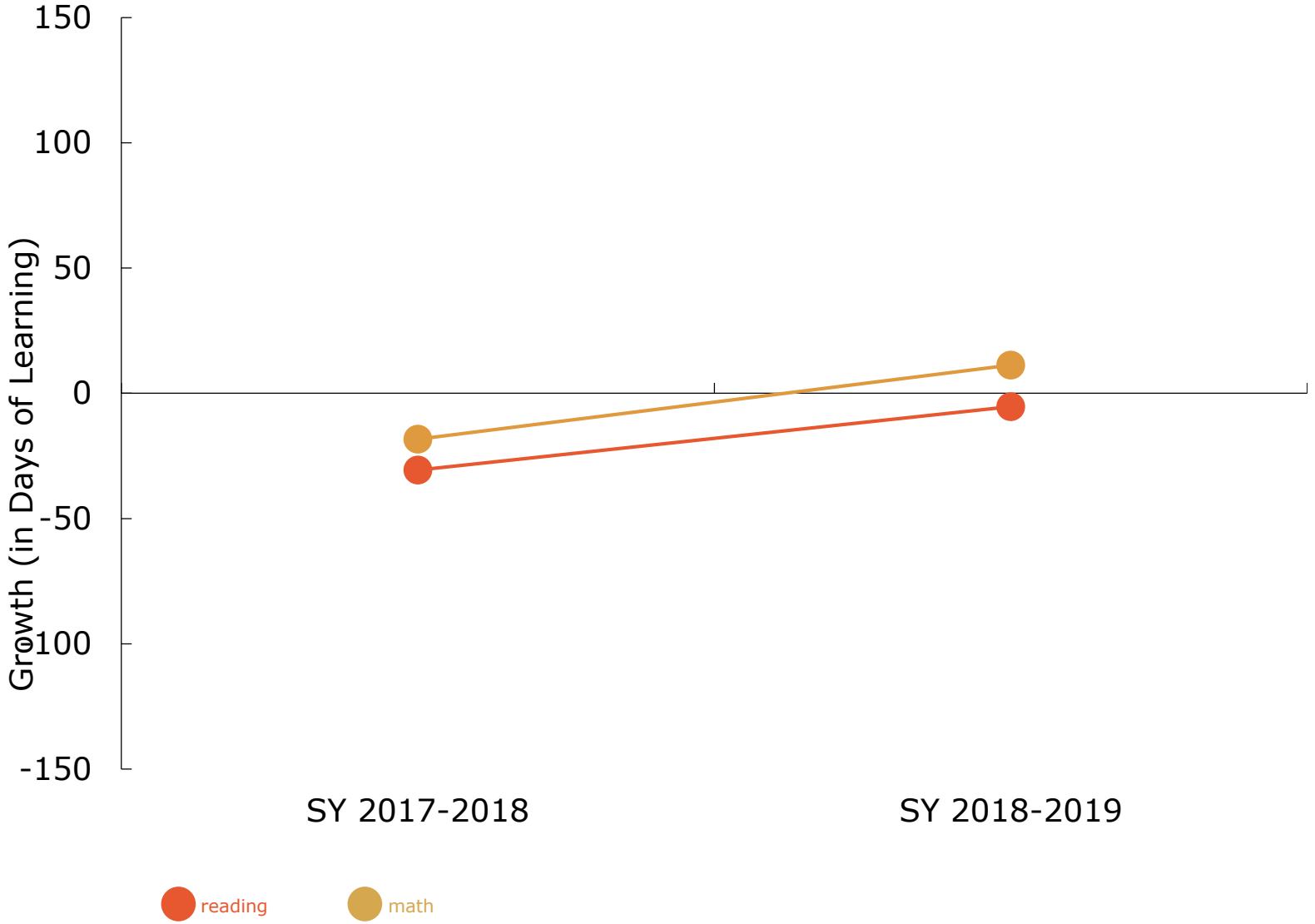
Research Findings > Overall Camden Results > Reading & Math

Average One-Year Learning Gains for All Camden Students Compared to the State Average Learning Gains, by Year and Subject



significantly different at p< 0.05

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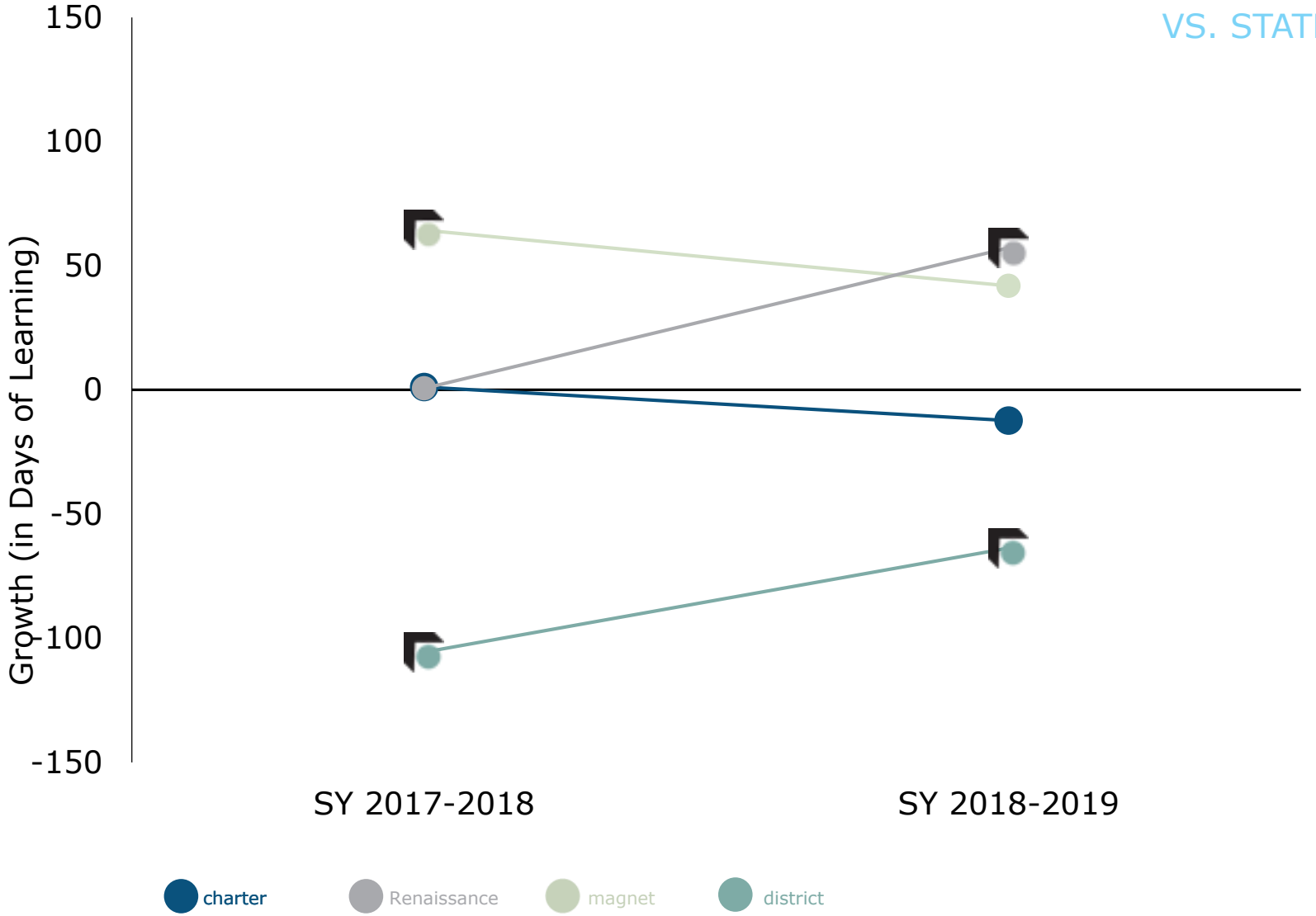
Research Findings > Sector Analysis > Reading

VS. STATE & COMPARISON WITHIN CAMDEN

Learning Gains in Reading for Students in Camden Charter Schools, Camden Renaissance Schools, Camden Magnet Schools and Camden District Compared to the State Average Learning Gains by Year



Tests of Differences		
Reading	'17-'18	'18-'19
Charter vs. District	⌜	⌜
Magnet vs. District	⌜	
Renaissance vs. District		⌜
Charter vs. Magnet	⌜	
Charter vs. Renaissance		⌜

⌜ significantly different at p< 0.05

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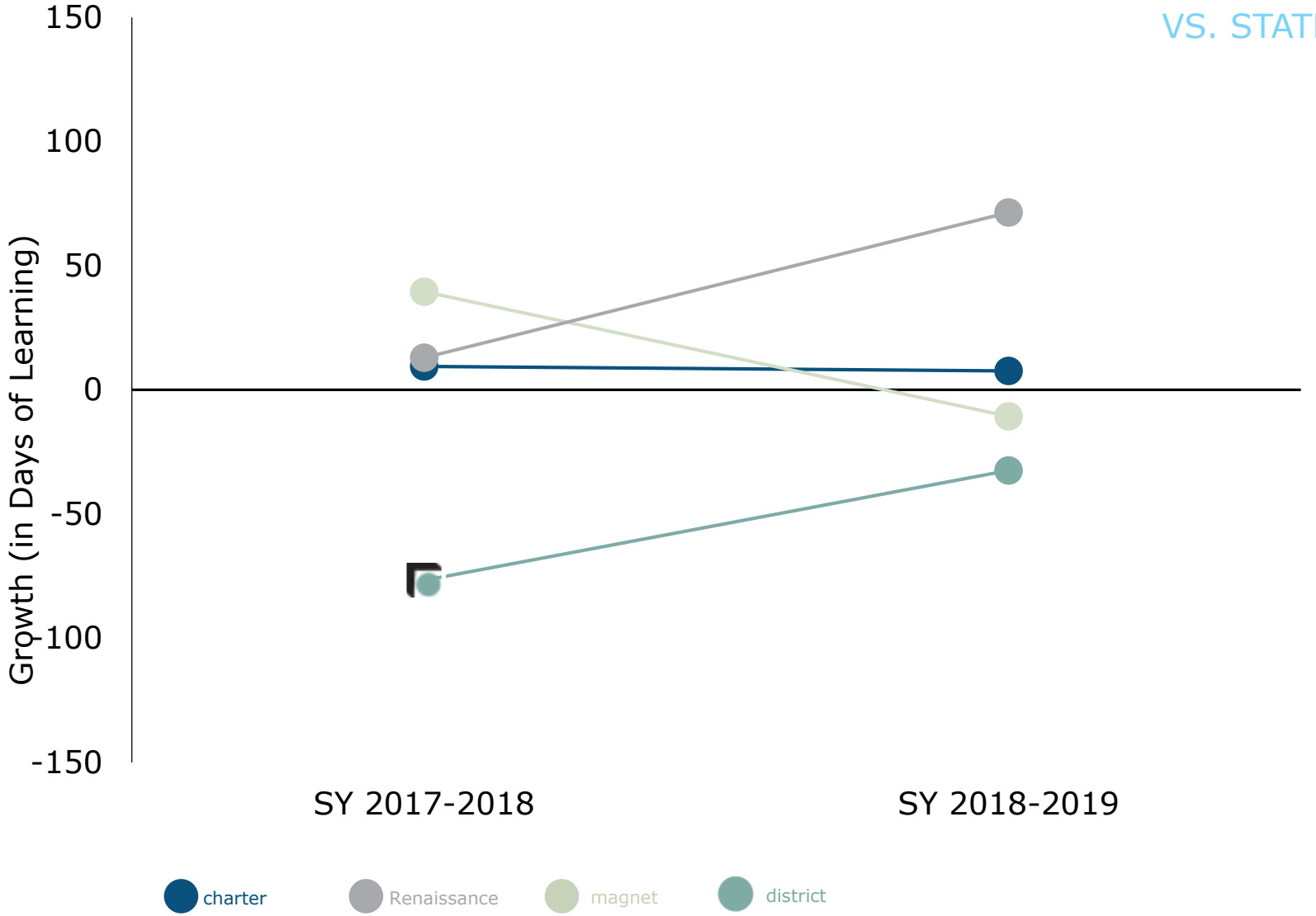
Research Findings > Sector Analysis

> Math

VS. STATE & COMPARISON WITHIN CAMDEN

Learning Gains in Math for Students in Camden Charter Schools, Camden Renaissance Schools, Camden Magnet Schools and Camden District Compared to the State Average Learning Gains by Year



Tests of Differences		
Math	'17-'18	'18-'19
Charter vs. District	⌜	⌜
Magnet vs. District	⌜	
Renaissance vs. District	⌜	⌜
Charter vs. Magnet		
Charter vs. Renaissance		

⌜ significantly different at p< 0.05

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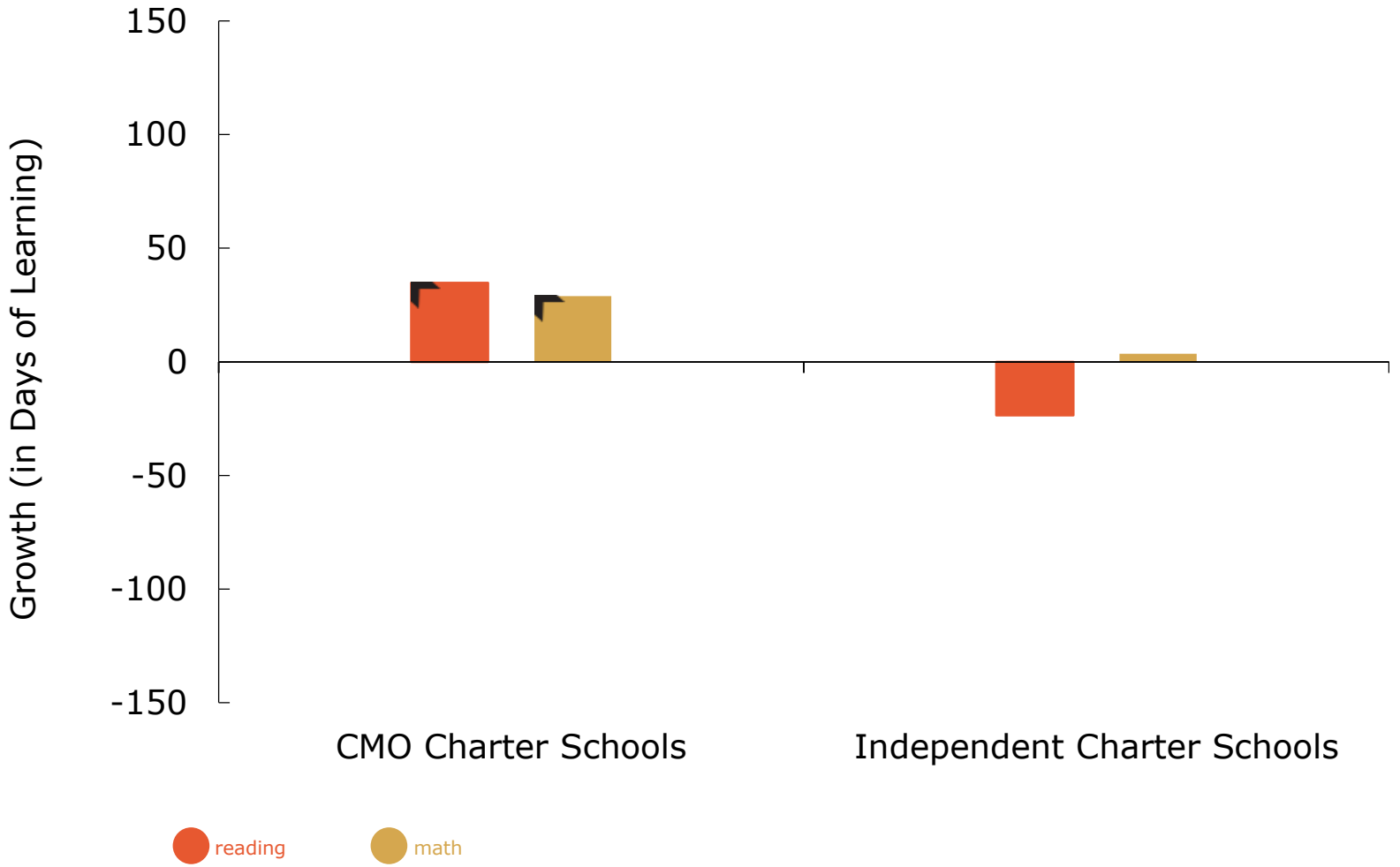
Research Findings > Charter Subsector Analysis
> vs. state & comparison within Camden

Relative Learning Gains for Students in Camden Network-Affiliated Charter Schools and Independent Camden Charter Schools Compared to the Average Learning Gains for All Student in the State, by Subject



Tests of Differences

	sig
Reading	
CMOs vs Independent Charter Schools	⌜
Math	
CMOs vs Independent Charter Schools	⌜

⌜ significantly different at p< 0.05

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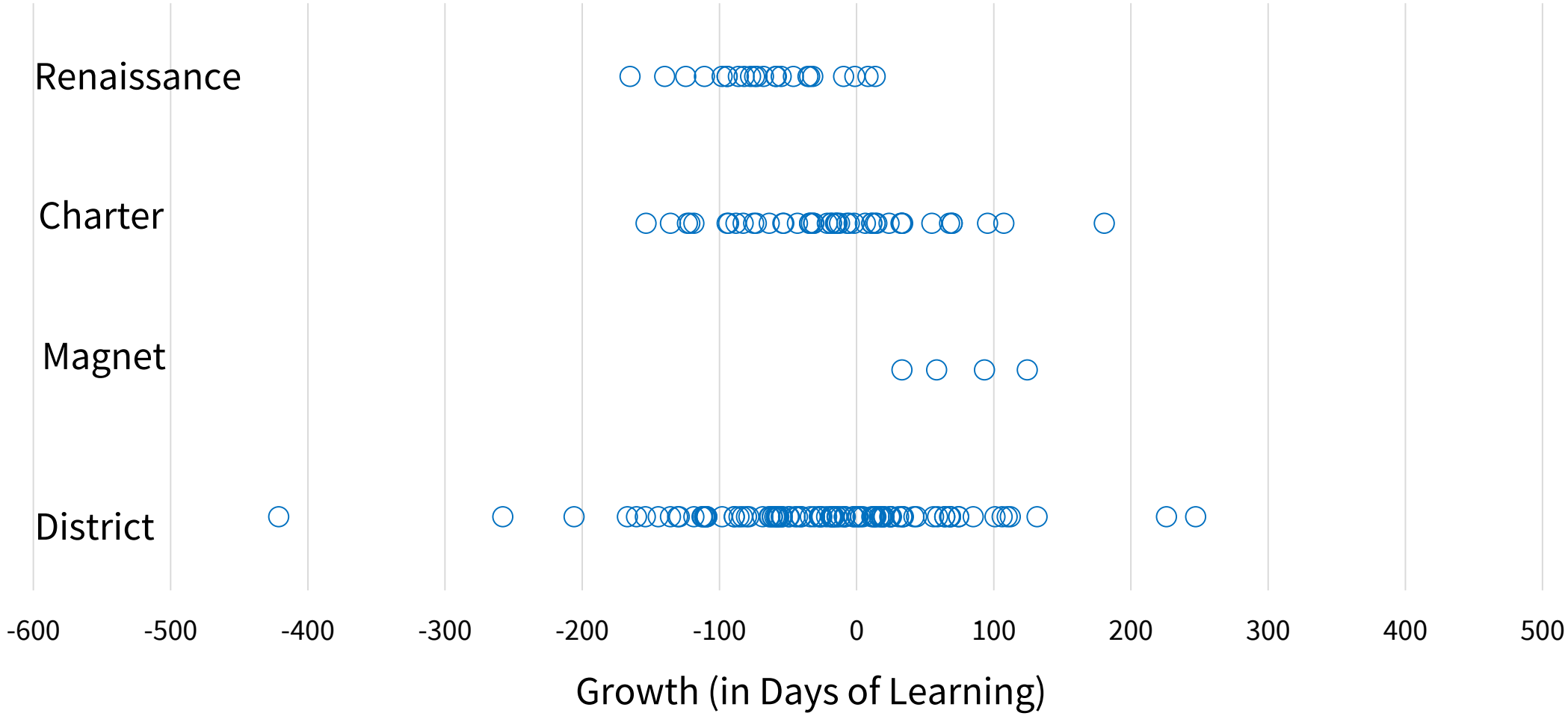
Research Findings > School-Level Performance by Sector > Reading



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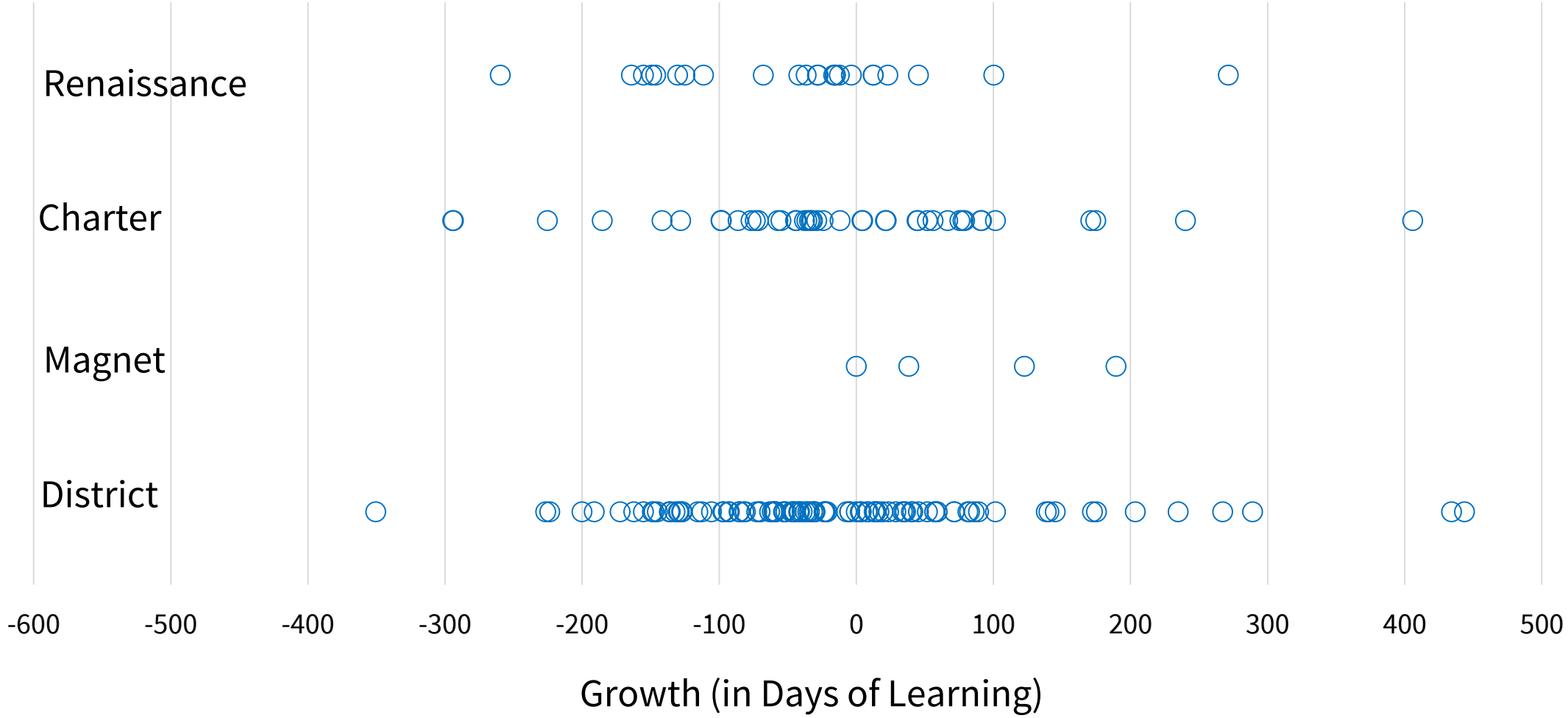
Research Findings > School-Level Performance by Sector

>Math



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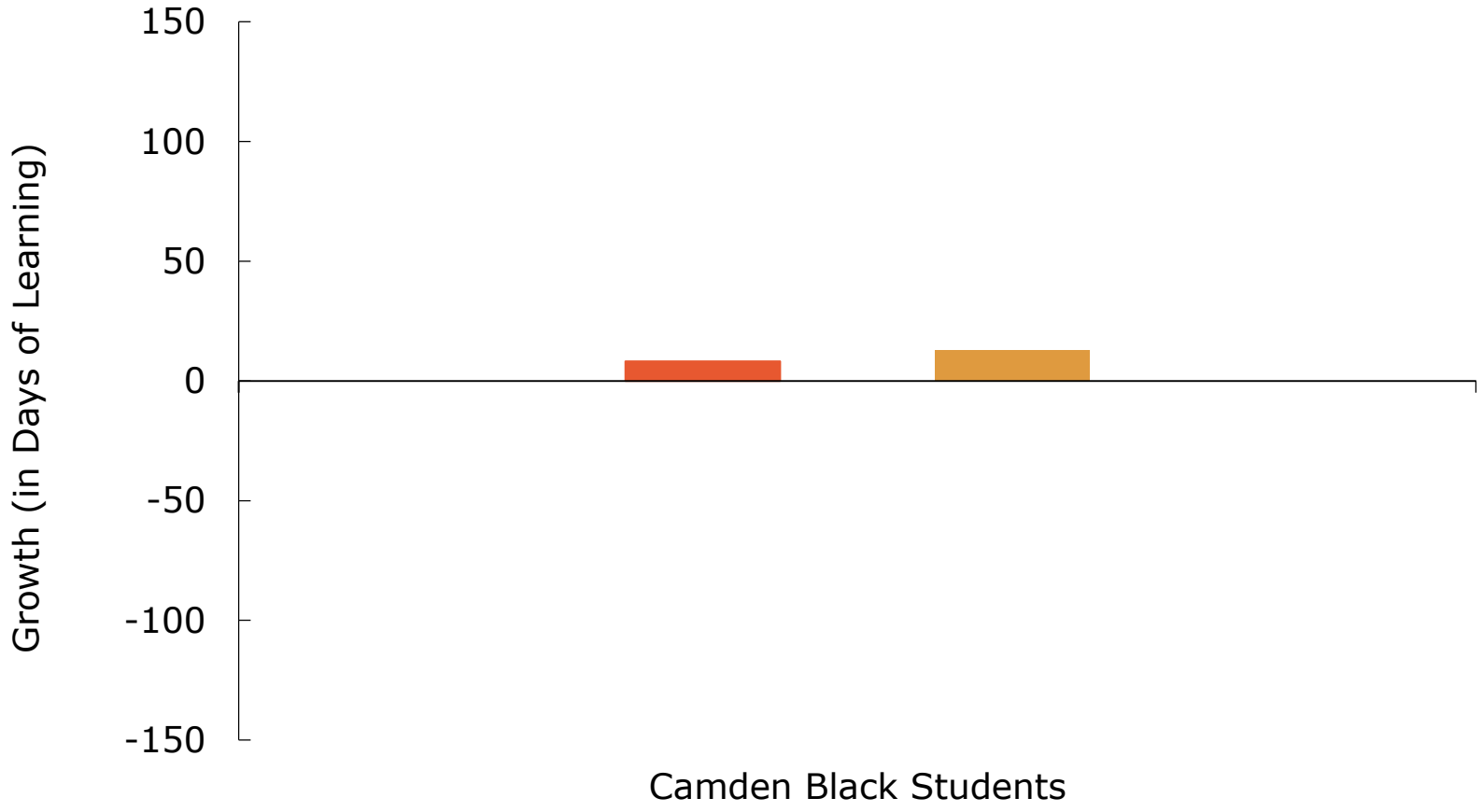
Research Findings > Student Subgroup Analysis > Black Students

ALL VS. STATE

Learning Gains for All Camden Black Students Compared to the Average Black Learning Gains of Black Students Statewide, by Subject



significantly different at p< 0.05

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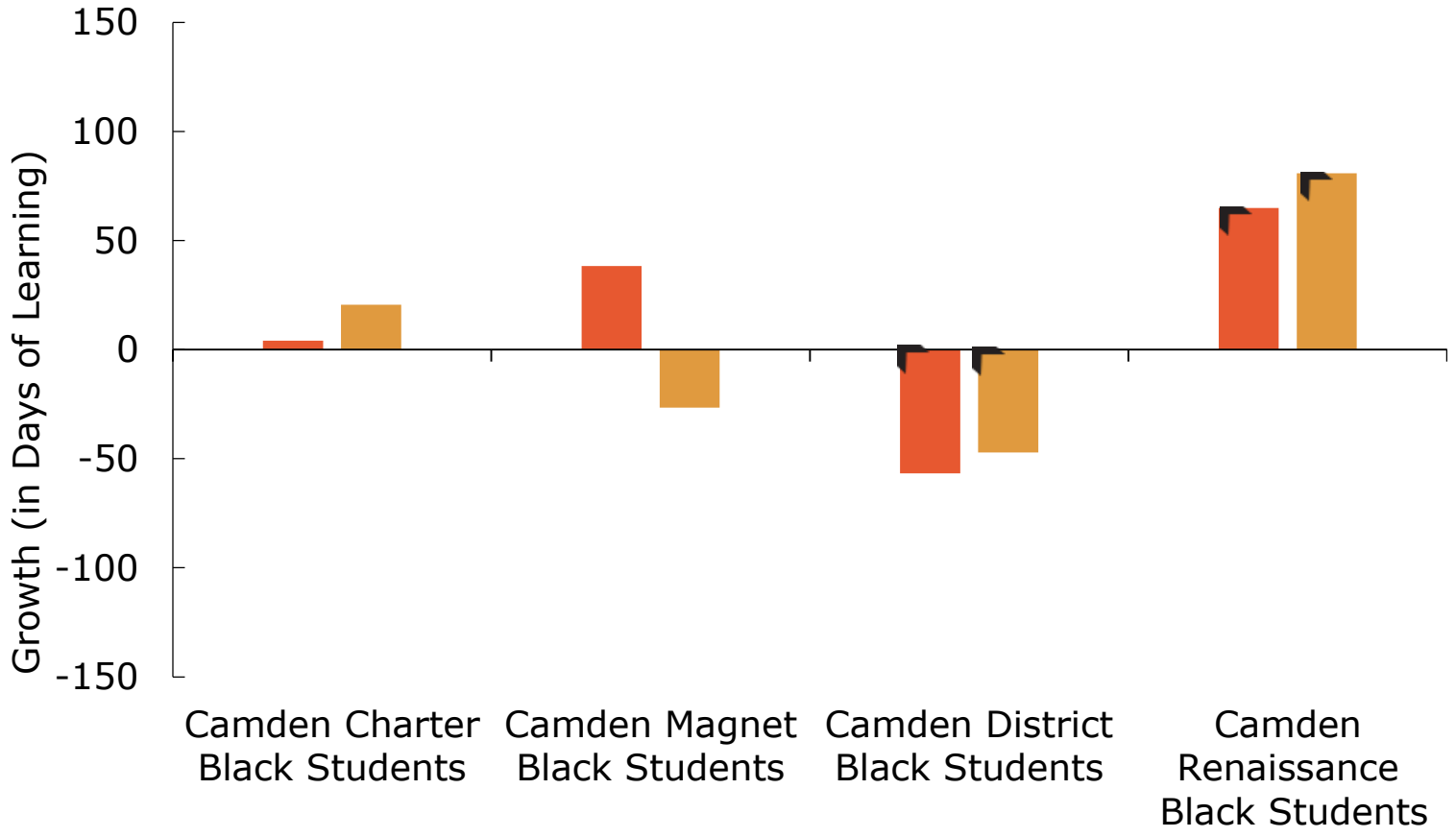
Research Findings > Student Subgroup Analysis

> Black Students

VS. STATE BY SECTOR

Learning Gains for Black Charter School Students, Black Renaissance School Students, and Black District Students in Camden Compared to the Average Learning Gains of Black Students Statewide, by Subject



Tests of Differences	sig
Reading	
Charter Black vs. District Black	⌜
Magnet Black vs. District Black	⌜
Renaissance Black vs. District Black	⌜
Math	
Charter Black vs. District Black	⌜
Magnet Black vs. District Black	⌜
Renaissance Black vs. District Black	⌜

⌜ significantly different at p< 0.05

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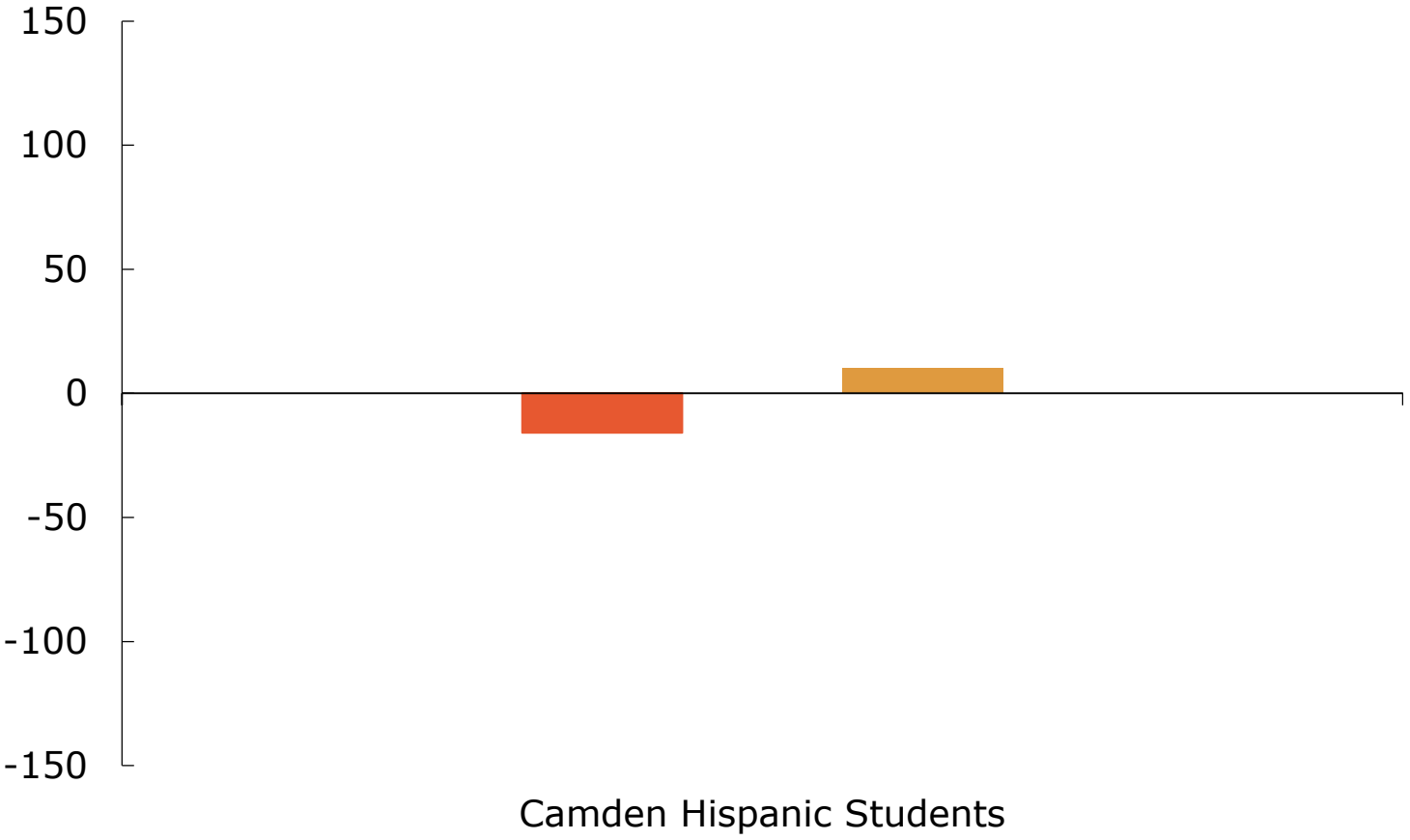
Research Findings > Student Subgroup Analysis
> Hispanic Students
ALL VS. STATE

Learning Gains for All Camden Hispanic Students
Compared to the Hispanic Average Learning Gains of
Hispanic Students Statewide, by Subject



significantly different at p< 0.05

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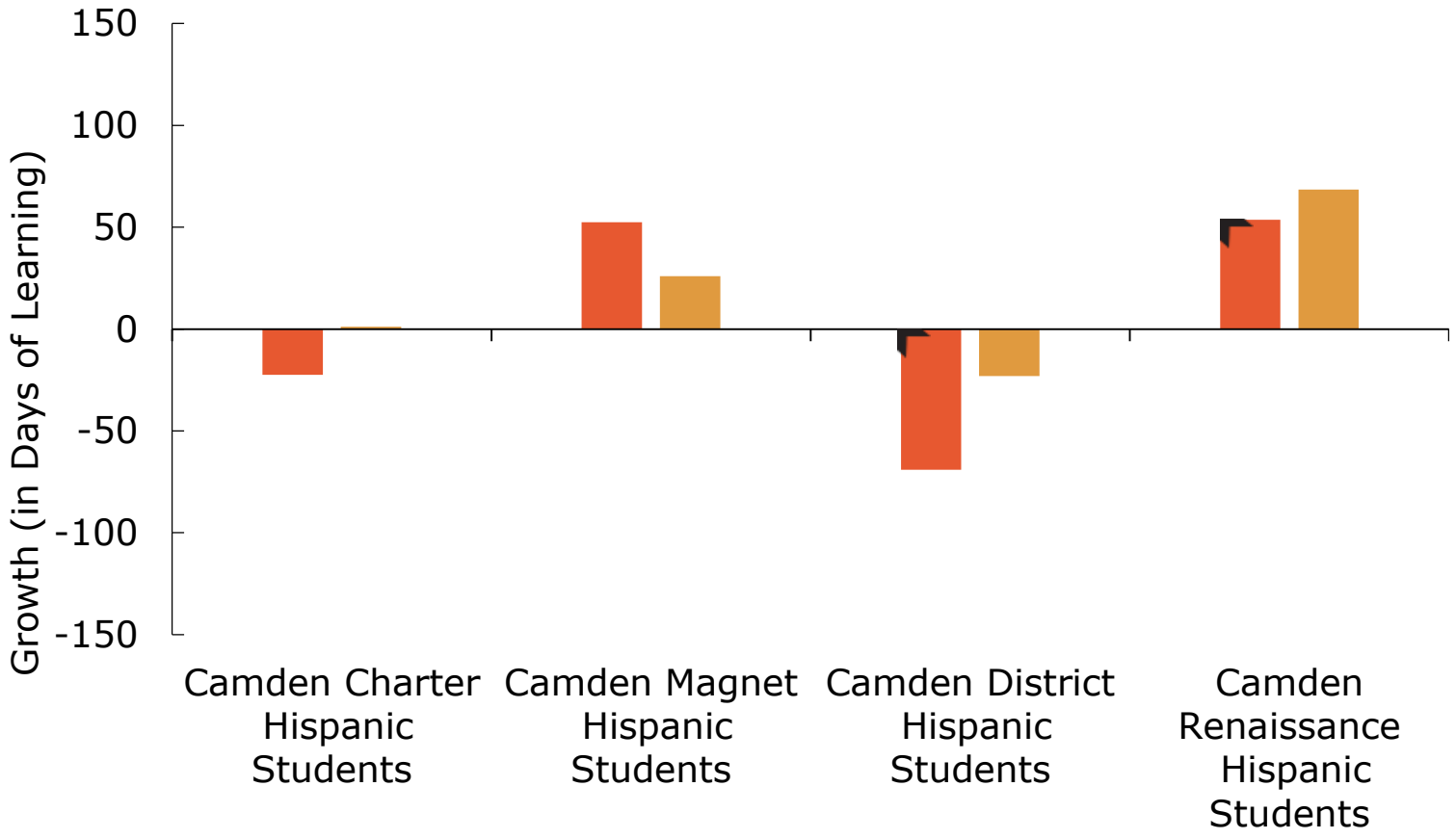
Research Findings > Student Subgroup Analysis > Hispanic Students

VS. STATE BY SECTOR

Learning Gains for Hispanic Charter School Students, Hispanic Renaissance School Students, and Hispanic District Students in Camden Compared to the Average Learning Gains of Hispanic Students Statewide, by Subject



Tests of Differences	
Reading	sig
Charter Hispanic vs. District Hispanic	
Magnet Hispanic vs. District Hispanic	
Renaissance Hispanic vs. District Hispanic	⌜
Math	
Charter Hispanic vs. District Hispanic	
Magnet Hispanic vs. District Hispanic	⌜
Renaissance Hispanic vs. District Hispanic	⌜

⌜ significantly different at p< 0.05

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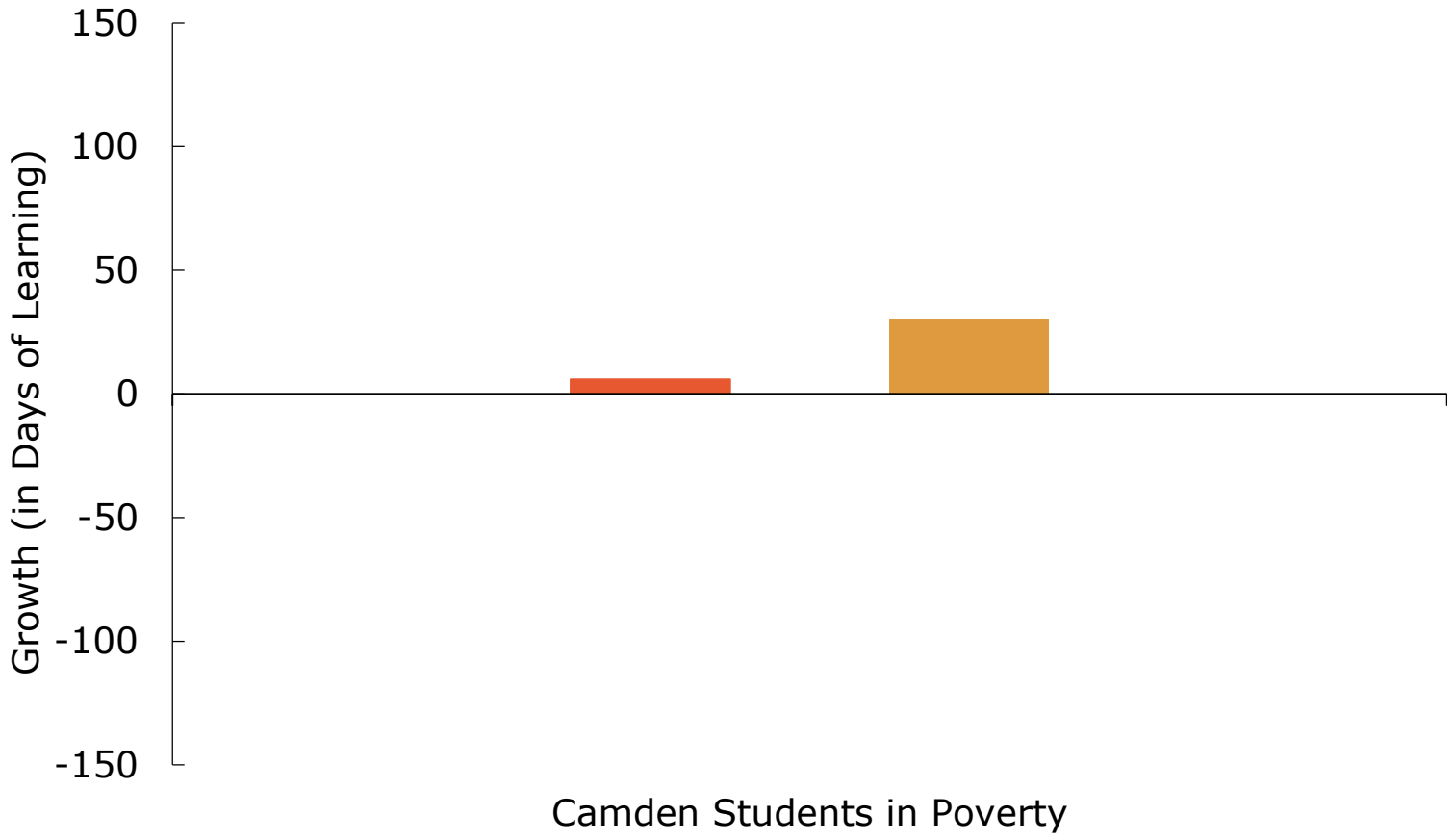
Research Findings > Student Subgroup Analysis
> Students in Poverty
ALL VS. STATE

Learning Gains for All Camden Students in Poverty Compared to the Poverty Average Learning Gains of Students in Poverty Statewide, by Subject



significantly different at p< 0.05

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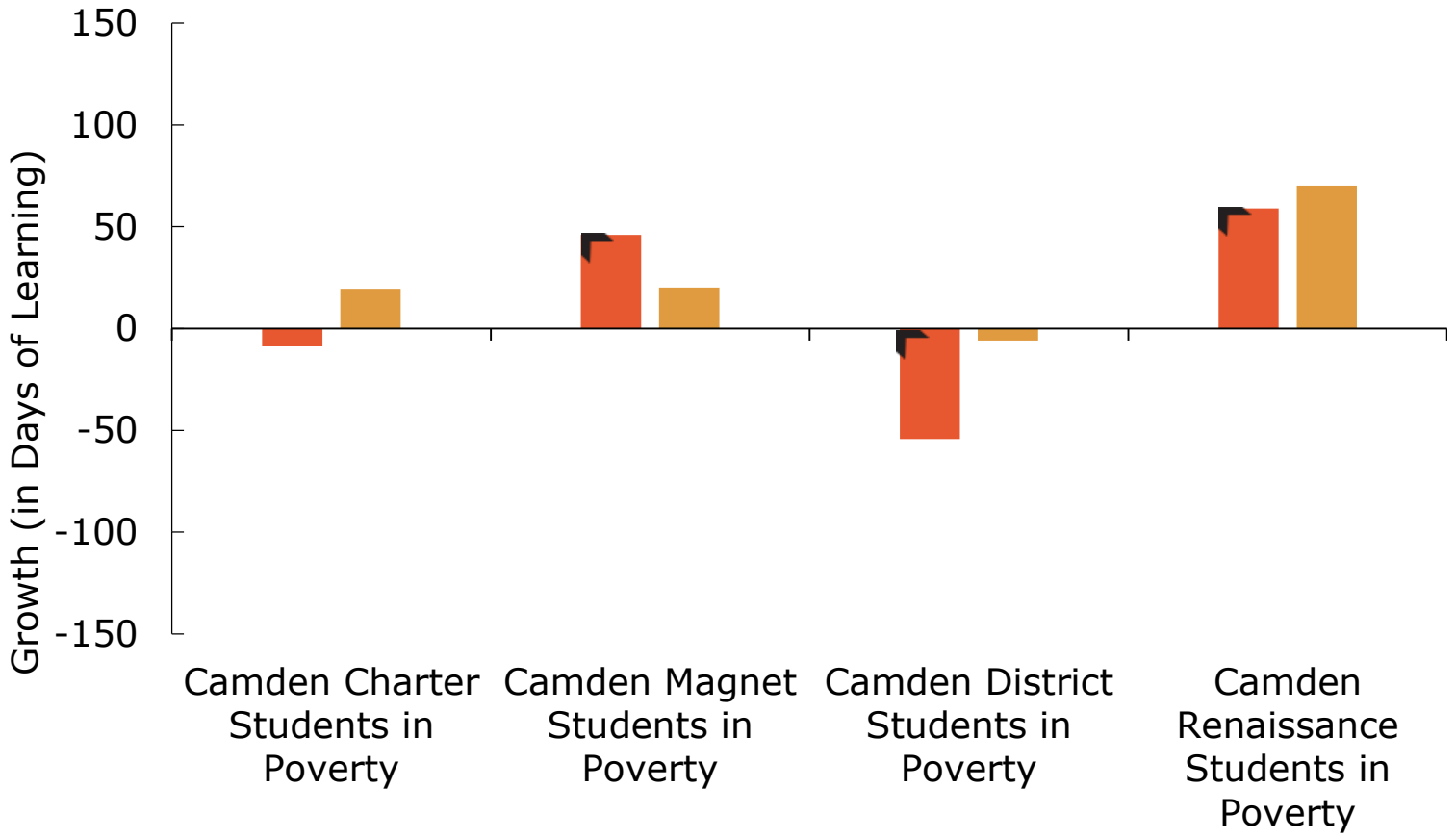
Research Findings > Student Subgroup Analysis

> Students in Poverty

VS. STATE BY SECTOR

Learning Gains for Camden Charter School Students in Poverty, Camden Renaissance School Students in Poverty, and Camden District Students in Poverty Compared to the Average Learning Gains of Students in Poverty Statewide, by Subject



Tests of Differences	
Reading	sig
Charter Poverty vs. District Poverty	
Magnet Poverty vs. District Poverty	
Renaissance Poverty vs. District Poverty	⌜
Math	
Charter Poverty vs. District Poverty	
Magnet Poverty vs. District Poverty	
Renaissance Poverty vs. District Poverty	

⌜ significantly different at p< 0.05

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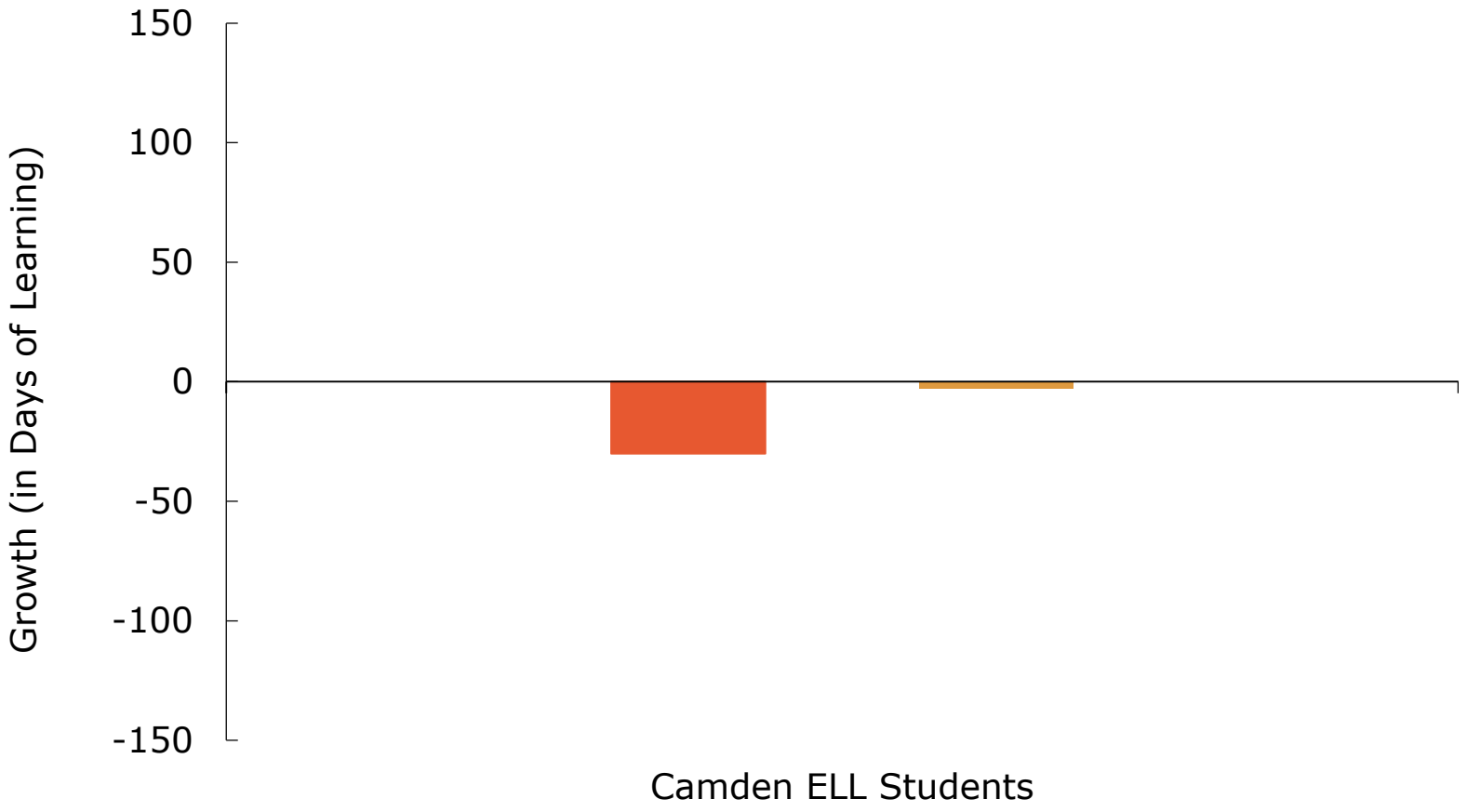
Research Findings > Student Subgroup Analysis

> ELL Students

ALL VS. STATE

Learning Gains for All ELL Students in Camden Compared to the Average ELL Learning Gains of ELL Students Statewide, by Subject



significantly different at p< 0.05

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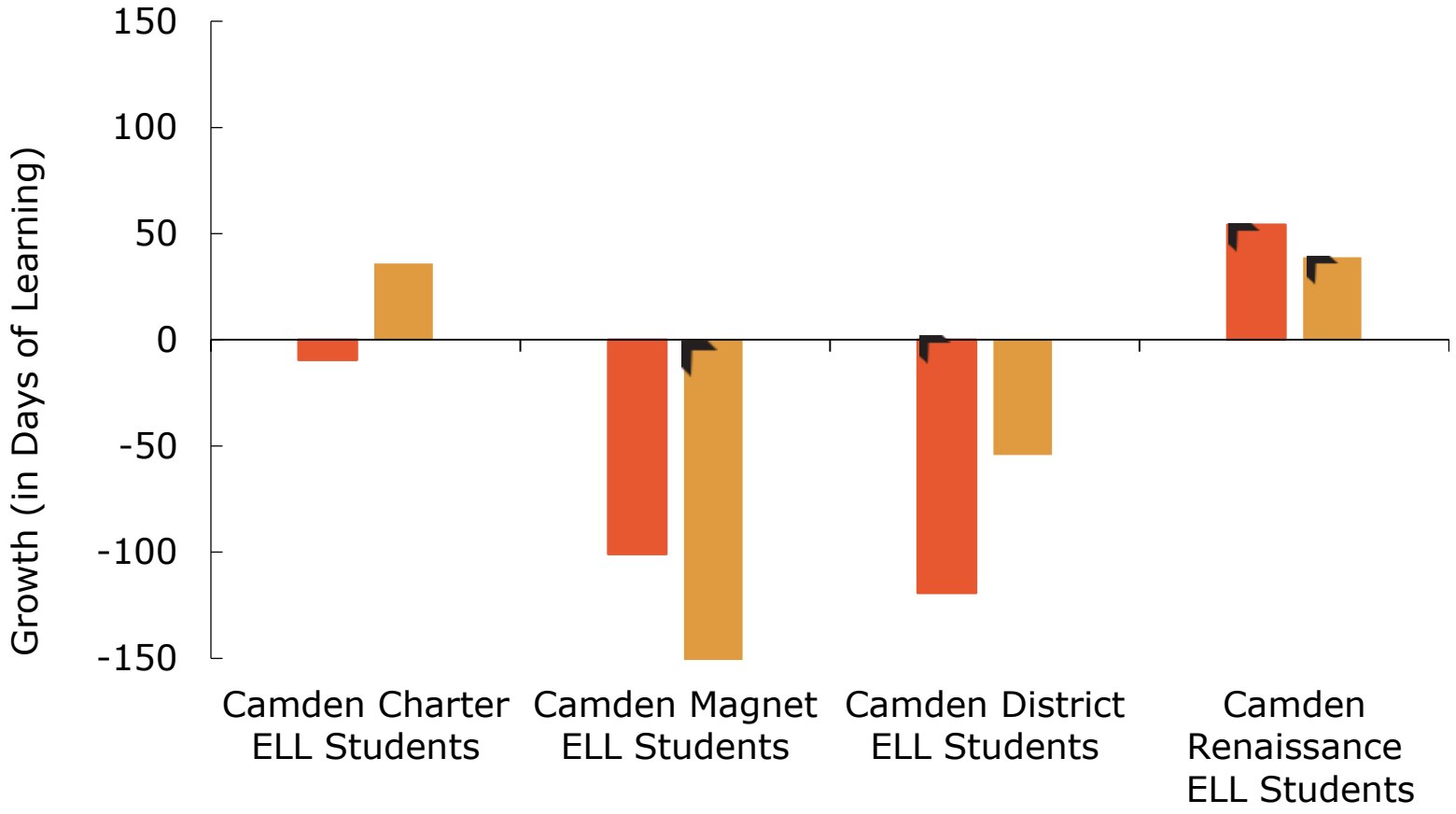
Research Findings > Student Subgroup Analysis

> ELL Students

VS. STATE BY SECTOR

Learning Gains for ELL Students in Camden Charter Schools, ELL Students in Camden Renaissance Schools, and ELL Students in Camden District Compared to the Average Learning Gains of ELL Students Statewide, by Subject



Tests of Differences	sig
Reading	
Charter ELL vs. District ELL	⌜
Magnet ELL vs. District ELL	
Renaissance ELL vs. District ELL	⌜
Math	
Charter ELL vs. District ELL	⌜
Magnet ELL vs. District ELL	⌜
Renaissance ELL vs. District ELL	⌜

⌜ significantly different at p< 0.05

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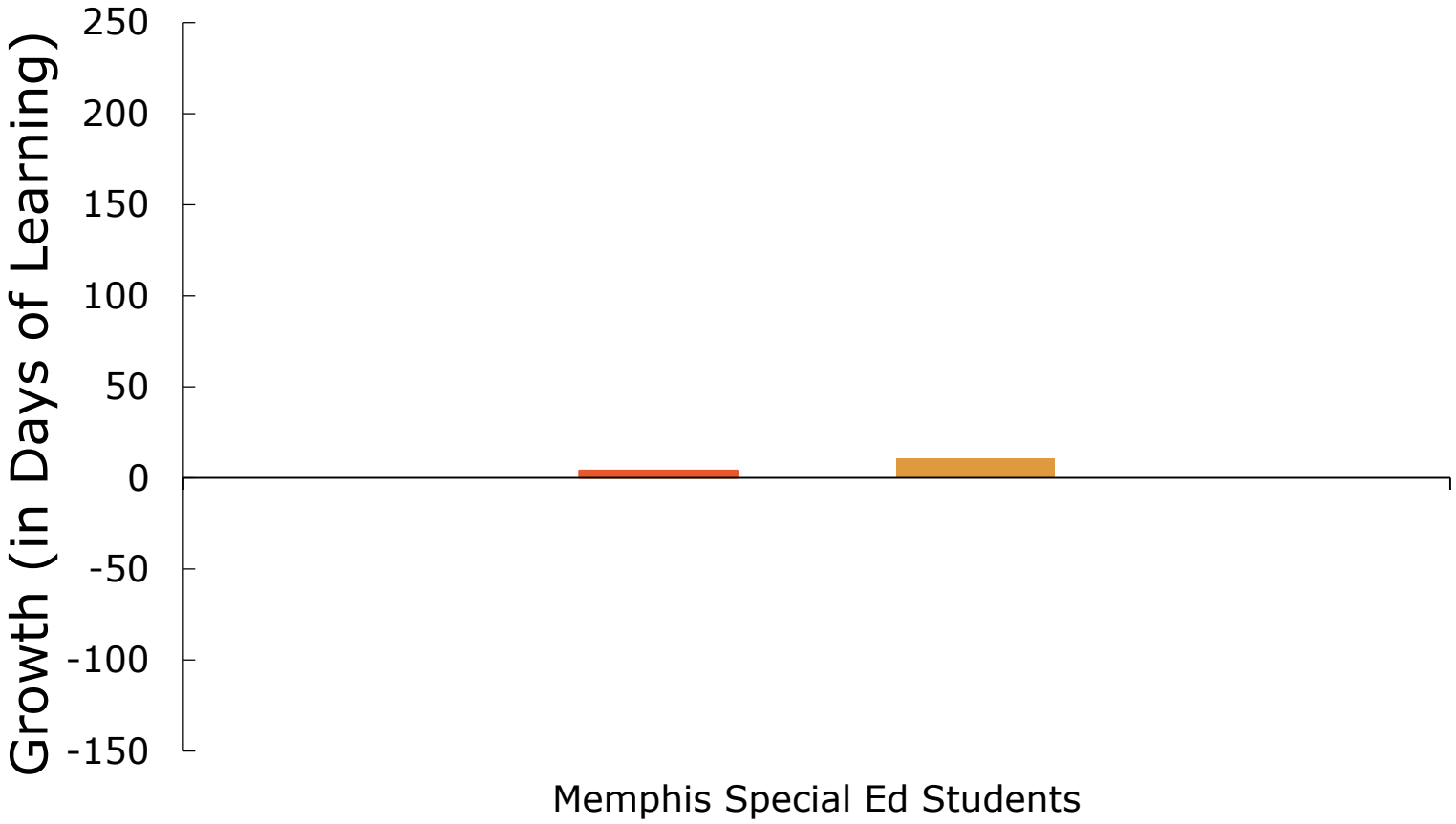
Research Findings > Student Subgroup Analysis > Special Ed Students

ALL VS. STATE

Learning Gains for All Camden Students in Special Education Compared to the Average Learning Gains of Students in Special Education Statewide, by Subject



significantly different at p< 0.05

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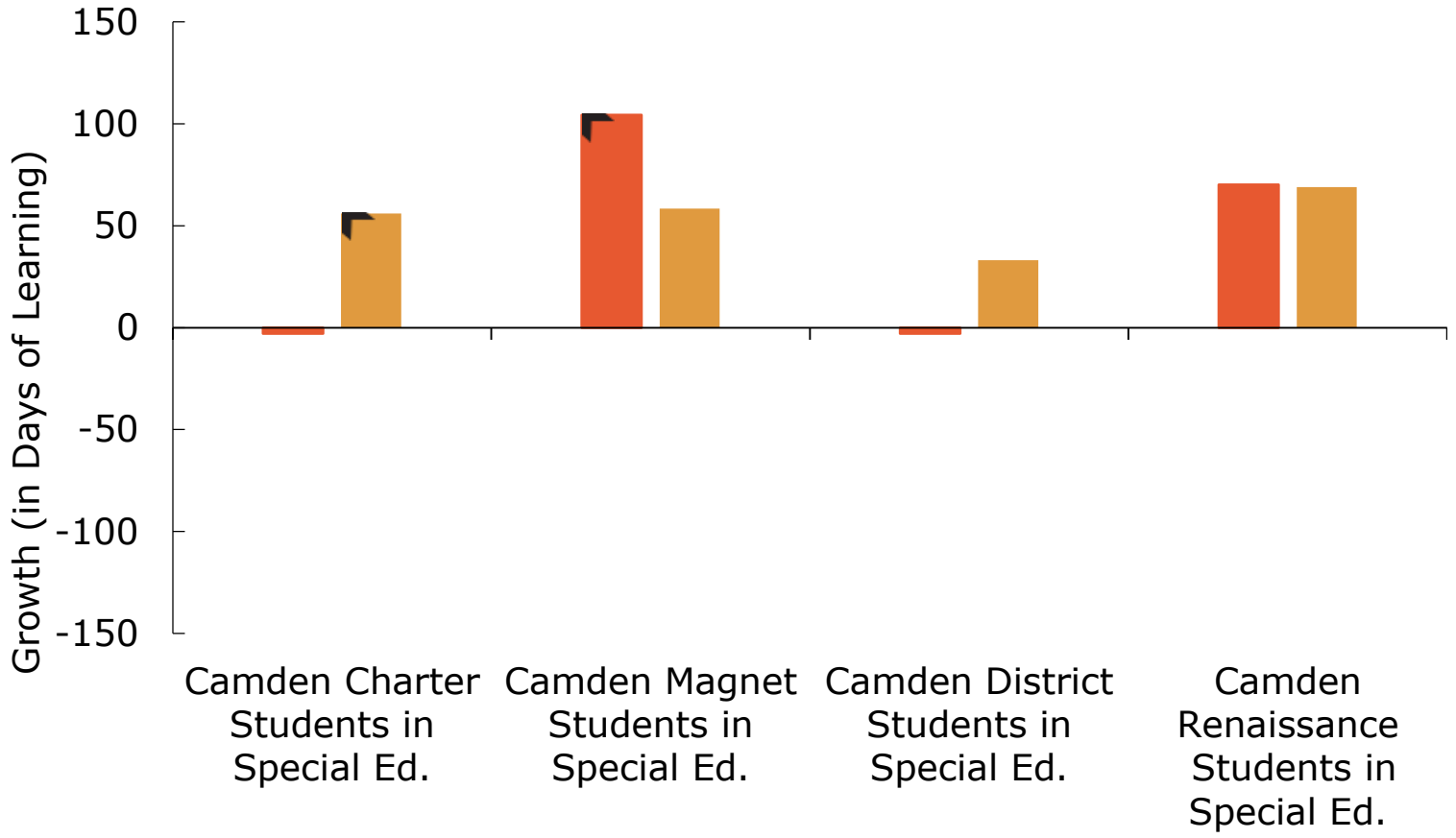
Research Findings > Student Subgroup Analysis > Special Ed Students

VS. STATE BY SECTOR

Learning Gains for Camden Charter School Students in Special Ed., Camden Renaissance School Students in Special Ed., and Camden District Students in Special Ed. Compared to the Average Learning Gains of Students in Special Ed. Statewide, by Subject



Tests of Differences	
Reading	sig
Charter Sped vs. District Sped	
Magnet Sped vs. District Sped	⌜
Renaissance Sped vs. District Sped	
Math	
Charter Sped vs. District Sped	
Magnet Sped vs. District Sped	
Renaissance Sped vs. District Sped	

⌜ significantly different at p< 0.05

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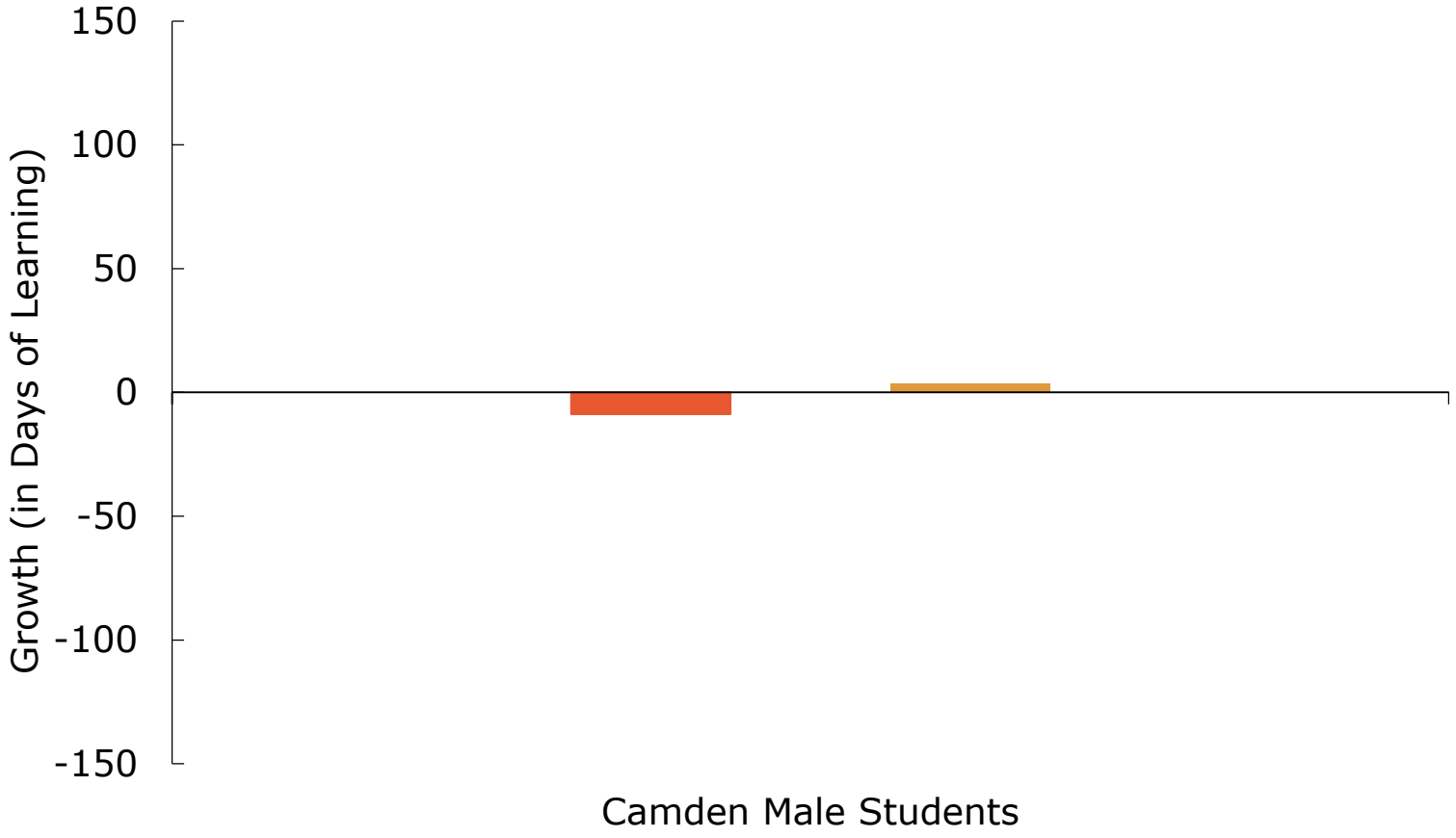
Research Findings > Student Subgroup Analysis > Male Students

ALL VS. STATE

Learning Gains for All Camden Male Students
Compared to the Average Male Learning Gains of
Male Students Statewide, by Subject



significantly different at p< 0.05

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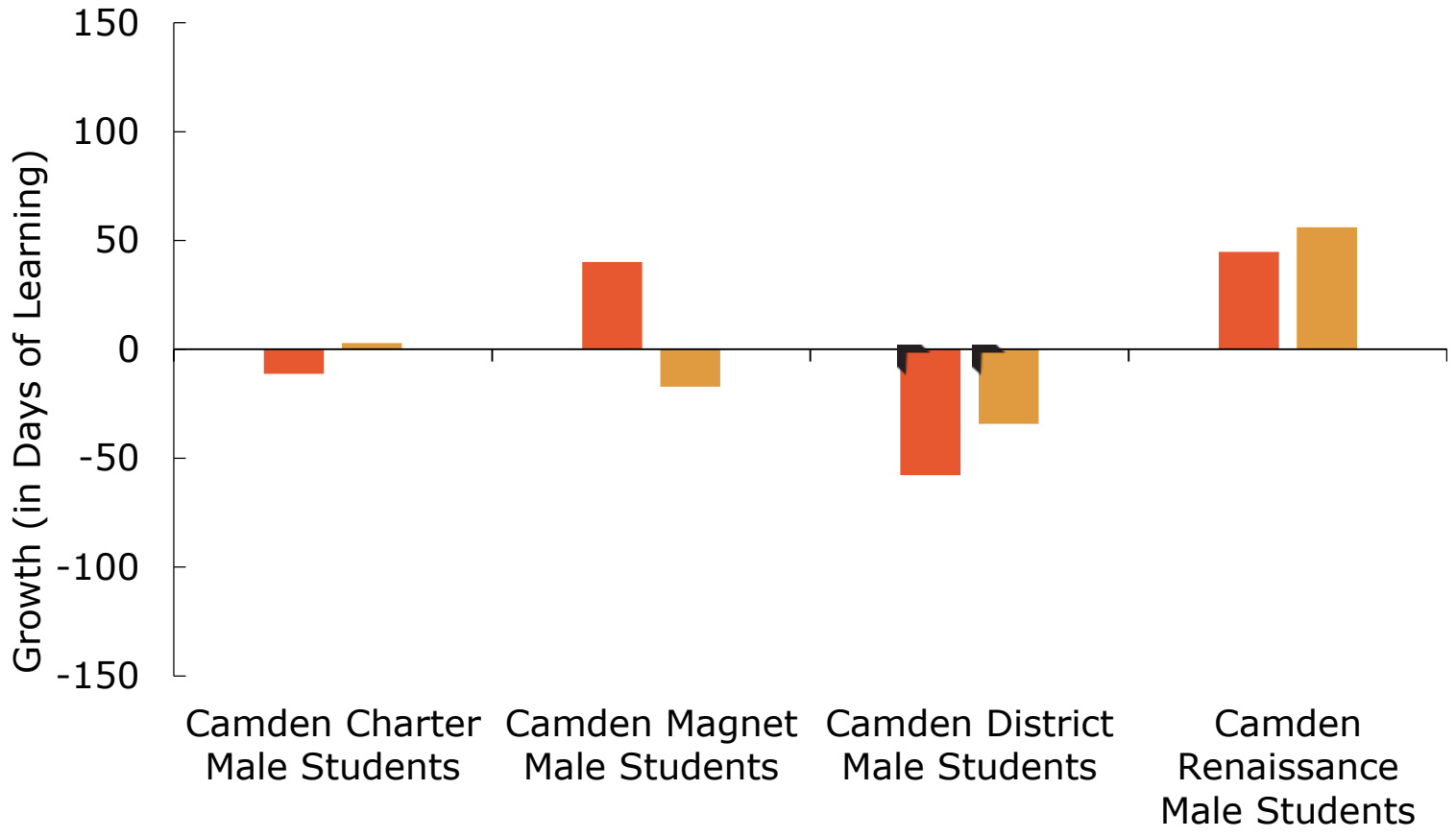
Research Findings > Student Subgroup Analysis

> Male Students

VS. STATE BY SECTOR

Learning Gains for Male Charter School Students, Male Renaissance School Students, and Male District Students in Camden compared to the Average Learning Gains of Male Students Statewide, by Subject



Tests of Differences	
Reading	sig
Charter Male vs. District Male	
Magnet Male vs. District Male	
Renaissance Male vs. District Male	⌜
Math	
Charter Male vs. District Male	⌜
Magnet Male vs. District Male	
Renaissance Male vs. District Male	

⌜ significantly different at p< 0.05

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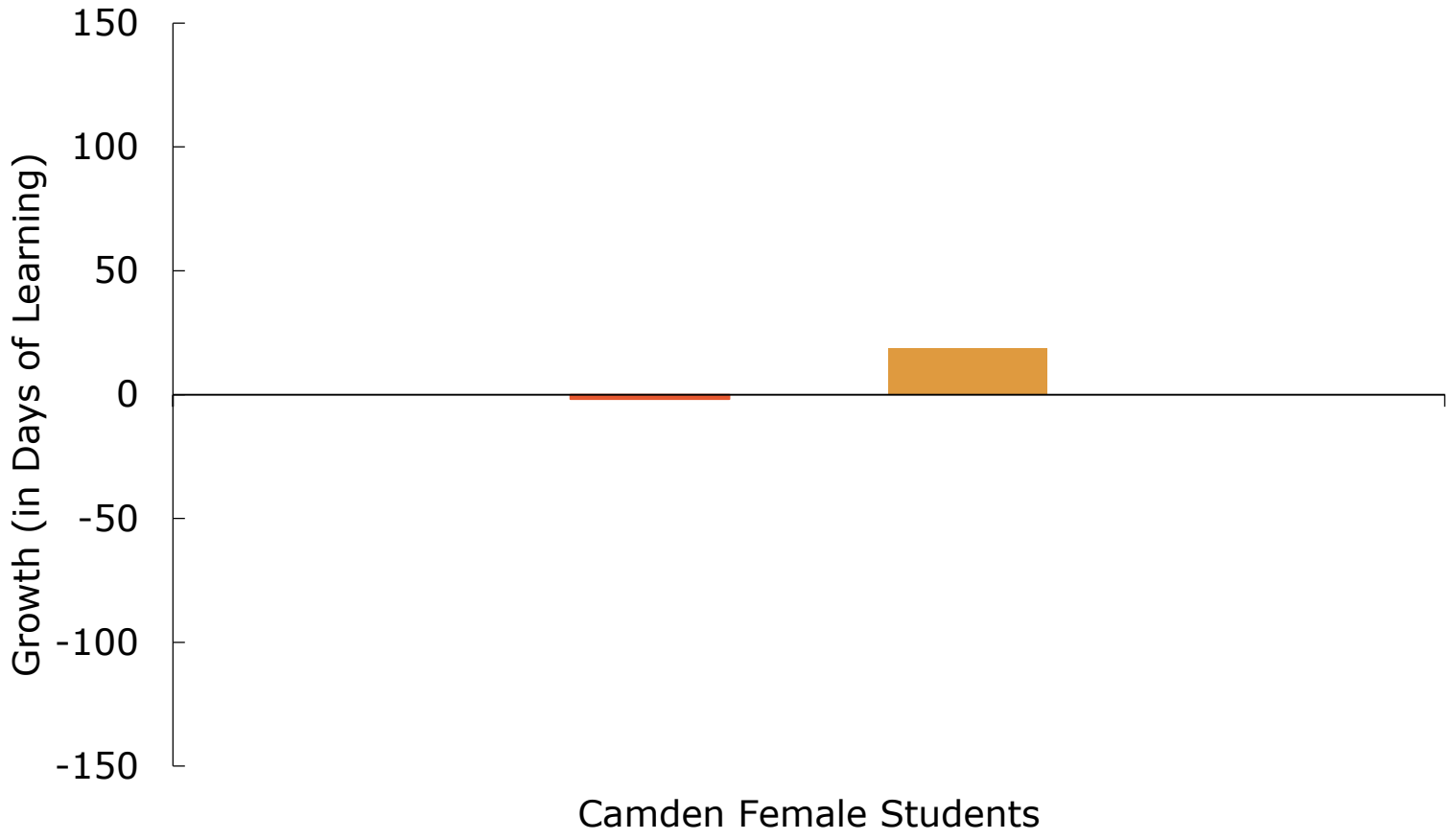
Research Findings > Student Subgroup Analysis > Female Students

ALL VS. STATE

Learning Gains for All Camden Female Students
Compared to the Female Average Learning Gains of
Female Students Statewide, by Subject



significantly different at p< 0.05

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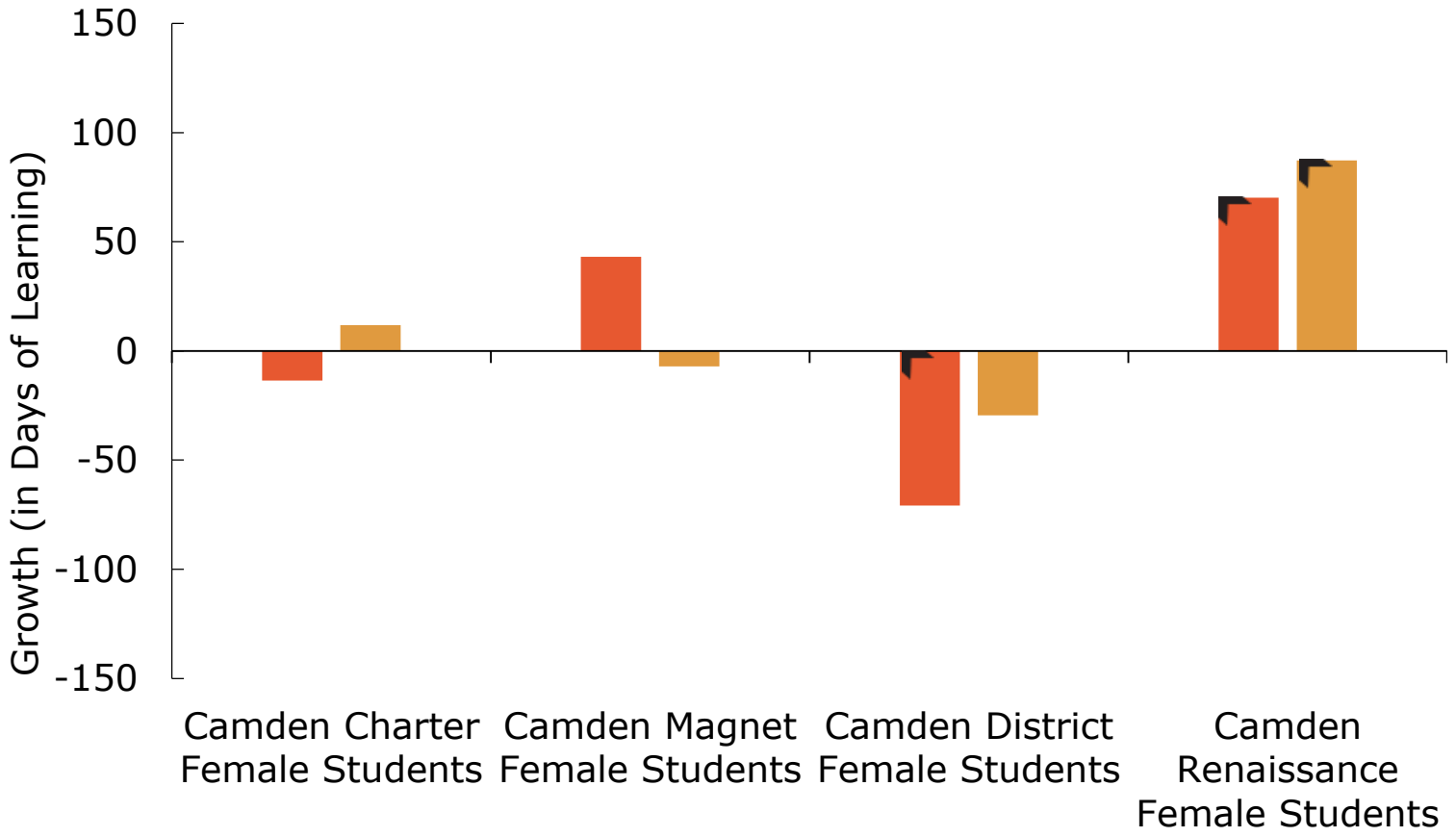
Research Findings > Student Subgroup Analysis > Female Students

VS. STATE BY SECTOR

Learning Gains for Female Charter School Students, Female Renaissance School Students, and Female District Students in Camden Compared to the Average Learning Gains of Female Students Statewide, by Subject



Tests of Differences	sig
Reading	
Charter Female vs. District Female	⌜
Magnet Female vs. District Female	⌜
Renaissance Female vs. District Female	⌜
Math	
Charter Female vs. District Female	⌜
Magnet Female vs. District Female	
Renaissance Female vs. District Female	⌜

⌜ significantly different at p< 0.05

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Summary of Findings

The summary of the findings from the analysis of Camden schools is presented here.

APPENDIXES

03

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Acknowledgments

New Jersey Department of Education provided supports in the acquisition of student-level data.

Camden Education Fund assisted CREDO with verifying the list of public schools in Camden.

Types of Charter Schools

There are two types of charter schools.

CHARTER MANAGEMENT ORGANIZATIONS (CMOS)

Organizations holding the charter and overseeing the operation of at least three charter schools.

INDEPENDENT CHARTER SCHOOLS

Organization holding the charter and overseeing the operation of a single charter school. It may run the school directly or contract with an organization which provides services to one or two charter schools.

OUR ANALYSES OF CAMDEN CHARTER SCHOOLS INCLUDE A BREAKOUT OF CMOS AND INDEPENDENT CHARTERS.

- With more schools and students than a single charter school, CMOs have some operational advantages in their ability to spread administrative fixed costs, thus providing the possibility of greater efficiency. In addition, CMOs may be able to support additional programs and more robust staffing.
- Whether CMOs lead to better student outcomes is a matter of interest across the country.

Methods

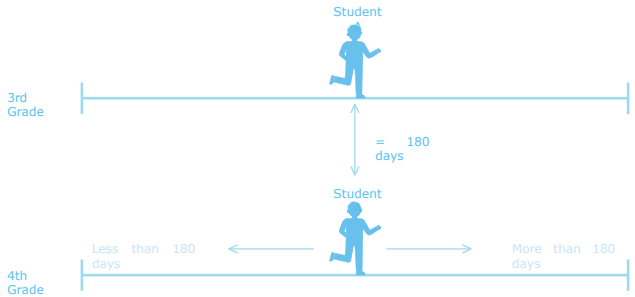
The annual academic growth of students in Camden from 2016-17 to 2018-19, overall and by sector, is benchmarked to the state average growth, accounting for student characteristics.

We also explore how one-year growth of Camden students for the period ending in Spring 2019 differs by school type, race, poverty status, English language learner status, special education status, and gender.

Days of Learning

CREDO USES ADVANCED TECHNOLOGY AND SOPHISTICATED STATISTICAL TOOLS TO MEASURE STUDENTS, SCHOOLS AND THE EDUCATION LANDSCAPE.

While these tools create precise and reliable answers, they are presented in technical terms that are not user-friendly to a general audience. To translate the technical results into terms that are accessible to non-technical audiences, CREDO developed Days of Learning.



01 **Think about the students in your state's public schools.** For many of their years of schooling, they take achievement tests to measure what they know at the end of the school year. We can identify the average score for each test each year.

02 **Imagine a student who scores exactly at the average in one year**, say 4th grade, and then in the following year, scores exactly at the average again on the 5th-grade test. The amount of year-to-year learning for that student show us what the average learning is for all the students who took both tests.

03 **We do that calculation for every grade the state tests:** 4th to 5th, 5th to 6th, and so on.

04 **CREDO uses those annual measures of average learning** to represent a typical year of learning, and equates that to a typical 180-day school year. We say that the student in our example has gained 180 days of learning.

05 **If a student makes more progress than the average student,** we take the amount of extra achievement and translate it into 180-days of learning plus "X" extra days. We are creating a measure of student learning as if the student went to school for 180 days plus X days. The size of "X" depends on how much more the student learns than the average student — if it's a lot more, then "X" will be a large number, and if it's a small amount more, "X" will be a small number.

06 **The same is true for students who do not learn as much as the average student.** Instead of adding to the 180-days-of-learning average, we subtract from that base to reflect the smaller-than-average advances that those students realize. In these cases, the difference leads to numbers such a "165 days of learning" or "152 days of learning". Against the average standard of 180 days, these smaller days show that students learned as if they had only attended school for 180 days minus X days during the school year.

Overall Camden Results

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Camden Overall 2017-18	-0.05	-31	-0.03	-19
Camden Overall 2018-19	-0.01	-6	0.02	11

Significant at p < 0.05*

Significant at p < 0.01**

Camden School Sectors Compared to State Average

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Renaissance Schools 2017-18	0.00	0	0.02	12
Renaissance Schools 2018-19	0.10*	57*	0.12	71
Charter Schools 2017-18	0.00	1	0.02	9
Charter Schools 2018-19	-0.02	-13	0.01	7
Magnet Schools 2017-18	0.11**	64**	0.07	39
Magnet Schools 2018-19	0.07	41	-0.02	-11
Other District Schools 2017-18	-0.18**	-106**	-0.13**	-77**
Other District Schools 2018-19	-0.11**	-64**	-0.06	-33

Significant at $p < 0.05$*

Significant at $p < 0.01$**

Comparison of School Sectors within Camden

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Renaissance Schools vs. Other District 2017-18	0.18	106	0.15*	89*
Renaissance Schools vs. Other District 2018-19	0.28**	162**	0.18*	103*
Charter Schools vs. Other District 2017-18	0.18**	106**	0.15**	86**
Charter Schools vs. Other District 2018-19	0.09*	51*	0.07**	40**
Magnet Schools vs. Other District 2017-18	0.29**	169**	0.20**	116**
Magnet Schools vs. Other District 2018-19	0.18	105	0.04	21

Significant at $p < 0.05$*

Significant at $p < 0.01$**

Charter Subsector Analysis

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Camden CMO vs. State Average	0.06**	34**	0.05**	28**
Camden Independent Charters vs. State Average	-0.04	-24	0.01	3
Camden CMO vs. Camden Independent Charters	0.10**	58**	0.04**	25**

Significant at p < 0.05*

Significant at p < 0.01**

Student Subgroup Analysis> Black Students

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of Black Students				
Camden Black Students Overall	0.01	8	0.02	12
Camden Renaissance School Black Students	0.11*	64*	0.14*	80*
Camden Charter School Black Students	0.01	4	0.04	20
Camden Magnet School Black Students	0.07	38	-0.05	-27
Camden Other District Black Students	-0.10**	-57**	-0.08*	-48*
Compared with Black Students in Other District in Camden				
Camden Charter School Black Students	0.10**	60**	0.12**	67**
Camden Magnet School Black Students	0.16**	94**	0.04*	20*
Camden Renaissance School Black Students	0.21**	121**	0.22**	128**

Significant at p < 0.05*

Significant at p < 0.01**

Student Subgroup Analysis> Hispanic Students

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of Hispanic Students				
Camden Hispanic Students Overall	-0.03	-16	0.02	10
Camden Renaissance School Hispanic Students	0.09**	53**	0.12	68
Camden Charter School Hispanic Students	-0.04	-23	0.00	1
Camden Magnet School Hispanic Students	0.09	52	0.04	25
Camden Other District Hispanic Students	-0.12**	-70**	-0.04	-24
Compared with Hispanic Students in Other District in Camden				
Camden Charter School Hispanic Students	0.08	46	0.04	24
Camden Magnet School Hispanic Students	0.21	121	0.08*	48*
Camden Renaissance School Hispanic Students	0.21**	122**	0.16*	91*

Significant at p < 0.05*

Significant at p < 0.01**

Student Subgroup Analysis> Students in Poverty

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of Students in Poverty				
Camden Students in Poverty Overall	0.01	5	0.05	30
Camden Renaissance School Students in Poverty	0.10*	59*	0.12	70
Camden Charter School Students in Poverty	-0.02	-9	0.03	19
Camden Magnet School Students in Poverty	0.08**	46**	0.03	20
Camden Other District Students in Poverty	-0.09**	-55**	-0.01	-6
Compared with Students in Poverty in Other District in Camden				
Camden Charter School Students in Poverty	0.08	45	0.04	25
Camden Magnet School Students in Poverty	0.17	100	0.04	25
Camden Renaissance School Students in Poverty	0.19**	113**	0.13	76

Student Subgroup Analysis> ELL Students

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of ELL Students				
Camden ELL Students Overall	-0.05	-31	-0.01	-3
Camden Renaissance School ELL Students	0.09**	54**	0.07**	38**
Camden Charter School ELL Students	-0.02	-10	0.06	35
Camden Magnet School ELL Students	-0.17	-101	-0.26**	-154**
Camden Other District ELL Students	-0.20**	-120**	-0.09	-55
Compared with ELL Students in Other District in Camden				
Camden Charter School ELL Students	0.19**	109**	0.15*	90*
Camden Magnet School ELL Students	0.03	18	-0.17**	-100**
Camden Renaissance School ELL Students	0.29**	173**	0.16**	93**

Student Subgroup Analysis> Special Ed Students

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of Special Ed Students				
Camden Special Ed Students Overall	0.05	27	0.09*	51*
Camden Renaissance School Special Ed Students	0.12	70	0.12	69
Camden Charter School Special Ed Students	-0.01	-3	0.10**	56**
Camden Magnet School Special Ed Students	0.18*	104*	0.10	58
Camden Other District Special Ed Students	-0.01	-3	0.06	33
Compared with Special Ed Students in Other District in Camden				
Camden Charter School Special Ed Students	0.00	0	0.04	23
Camden Magnet School Special Ed Students	0.18*	107*	0.04	25
Camden Renaissance School Special Ed Students	0.12	73	0.06	35

Student Subgroup Analysis> Male Students

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of Male Students				
Camden Male Students Overall	-0.02	-9	0.01	3
Camden Renaissance School Male Students	0.08	44	0.10	56
Camden Charter School Male Students	-0.02	-12	0.01	2
Camden Magnet School Male Students	0.07	40	-0.03	-18
Camden Other District Male Students	-0.10**	-58**	-0.06*	-35*
Compared with Male Students in Other District in Camden				
Camden Charter School Male Students	0.08	46	0.06*	37*
Camden Magnet School Male Students	0.17	97	0.03	17
Camden Renaissance School Male Students	0.17**	102**	0.15	90

Student Subgroup Analysis> Female Students

	READING		MATH	
	Standard Deviation	Days of Learning	Standard Deviation	Days of Learning
Compared with Statewide Average of Female Students				
Camden Female Students Overall	0.00	-2	0.03	18
Camden Renaissance School Female Students	0.12**	70**	0.15**	87**
Camden Charter School Female Students	-0.02	-14	0.02	11
Camden Magnet School Female Students	0.07	43	-0.01	-8
Camden Other District Female Students	-0.12**	-71**	-0.05	-30
Compared with Female Students in Other District in Camden				
Camden Charter School Female Students	0.10*	57*	0.07*	41*
Camden Magnet School Female Students	0.19*	113*	0.04	22
Camden Renaissance School Female Students	0.24**	141**	0.20*	116*

THANK YOU