What's in this analysis?

- Description of Student Demography
- Achievement Trajectories
- Charter School Impacts
  - ✓ Full Sample
  - ✓ By School Level
  - ✓ School Quality Curve
  - ✓ Subgroups

This analysis serves as a benchmark for charter school performance as COVID-19 recovery begins.

The findings serve as a foundation for future studies.

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Statewide Comparison of TPS, Feeders, and Charters

	Statewide Traditional Public Schools (TPS)	Feeder TPS (TPS Charters attract students from)	Charters
Number of schools	286	86	31
Average enrollment per school	464	491	286
Total number of students enrolled	132,589	42,204	8,859
Students in Poverty	47%	67%	71%
English Language Learners	9%	19%	13%
Special Education Students	18%	20%	14%
White Students	60%	38%	23%
Black Students	8%	14%	16%
Hispanic Students	23%	38%	55%
Asian/Pacific Islander Students	4%	4%	2%
Native American Students	1%	1%	0%
Multi-Racial Students	4%	5%	4%

Impact Evaluation Methodology

- ***Outcome*** 1-year academic growth
  - ✓ 1 growth period requires 2 years of data
 - ✓ Four growth periods are possible

- ***Test Scores*** used from state assessments

Sample Size	2014-15	2015-16	2016-17	2017-18
Reading	2,242	2,103	2,201	2,495
Math	1,933	1,989	2,208	2,506

- ***Comparisons*** are obtained from Virtual Control Records (VCR)
  - ✓ Feeder and Charter students matched on all demographics and baseline achievement
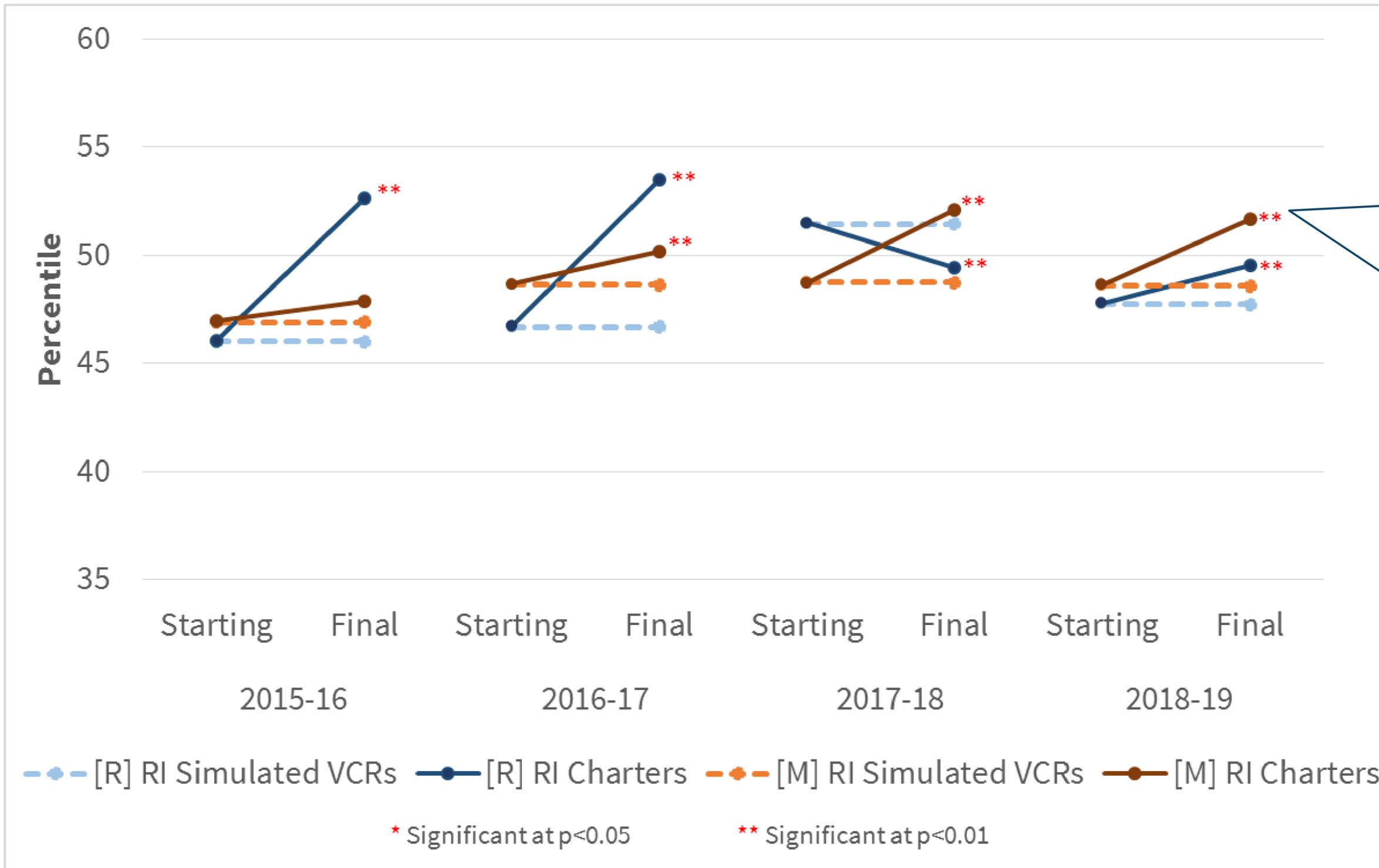 - ✓ Match rate: 70% in reading, 68% in math

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Achievement Trajectories in Charter and TPS VCR
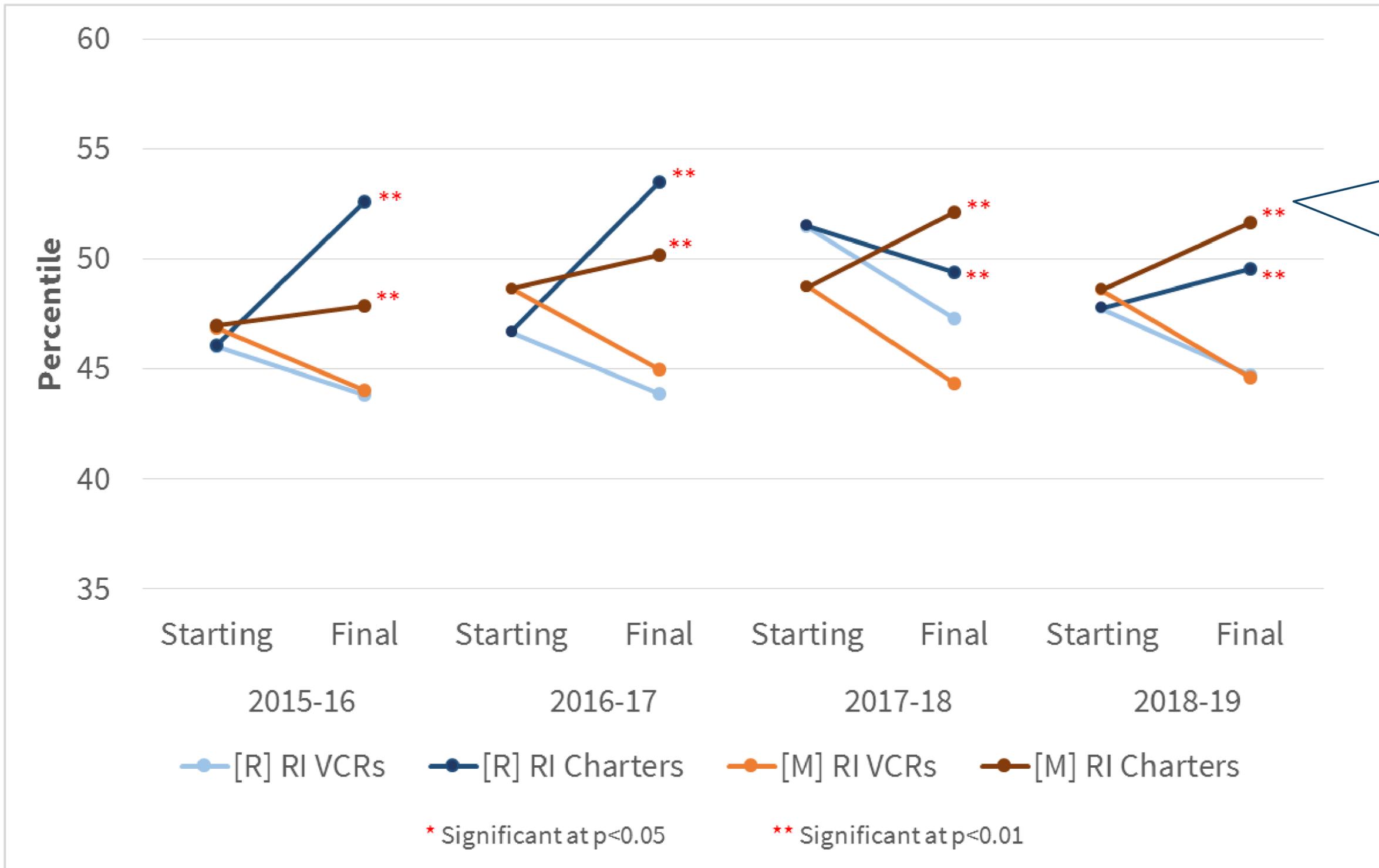
Student progress is significantly higher in charter schools than in TPS in 2018-19.
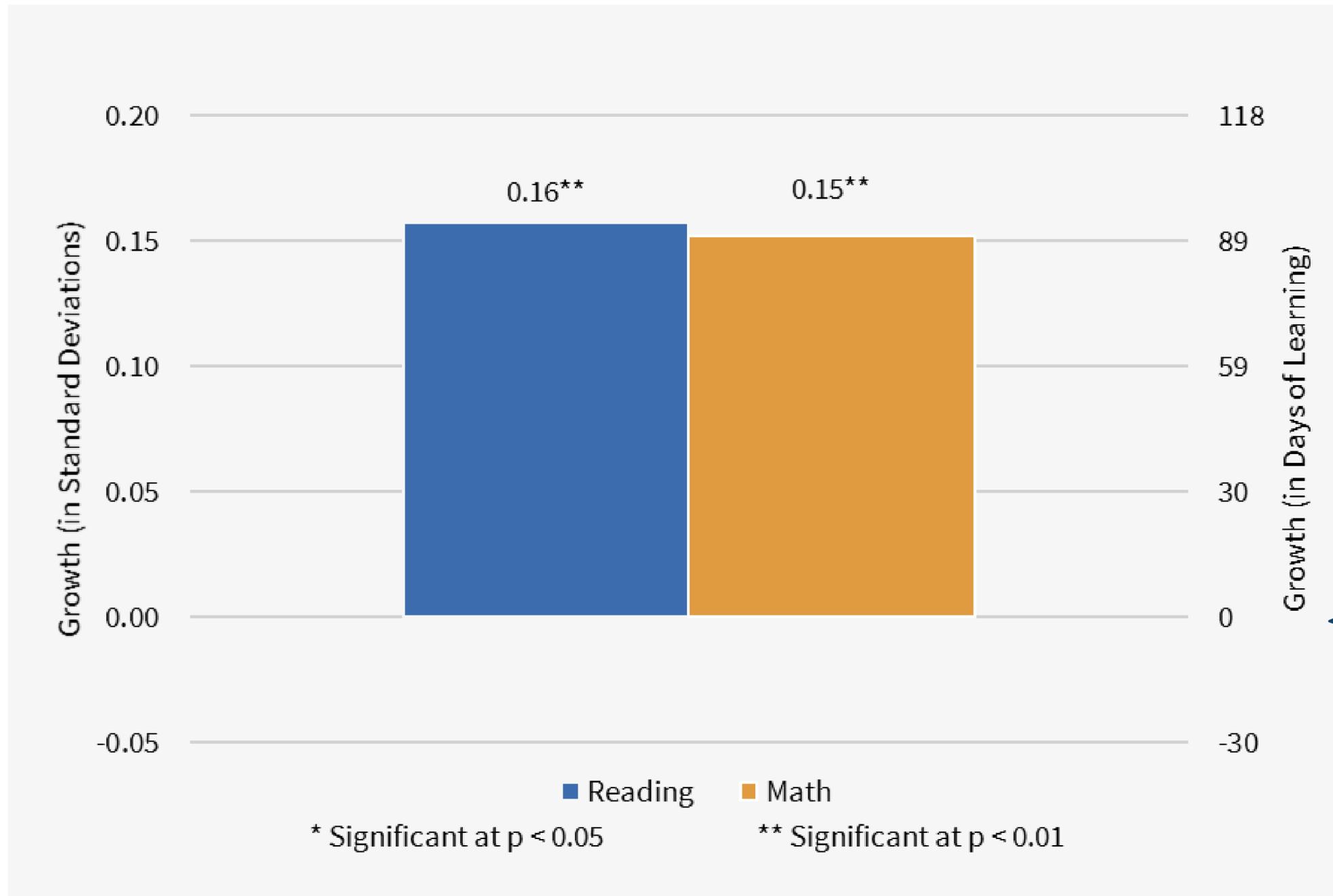
Achievement Trajectories in Charter and Simulated TPS VCR

Student progress in charter schools is significantly higher than zero (simulated VCR) in 2018-19.

Legend:
- [R] RI Simulated VCRs
- [R] RI Charters
- [M] RI Simulated VCRs
- [M] RI Charters

* Significant at p<0.05   ** Significant at p<0.01

Overall Charter Effects

Impact by School Level
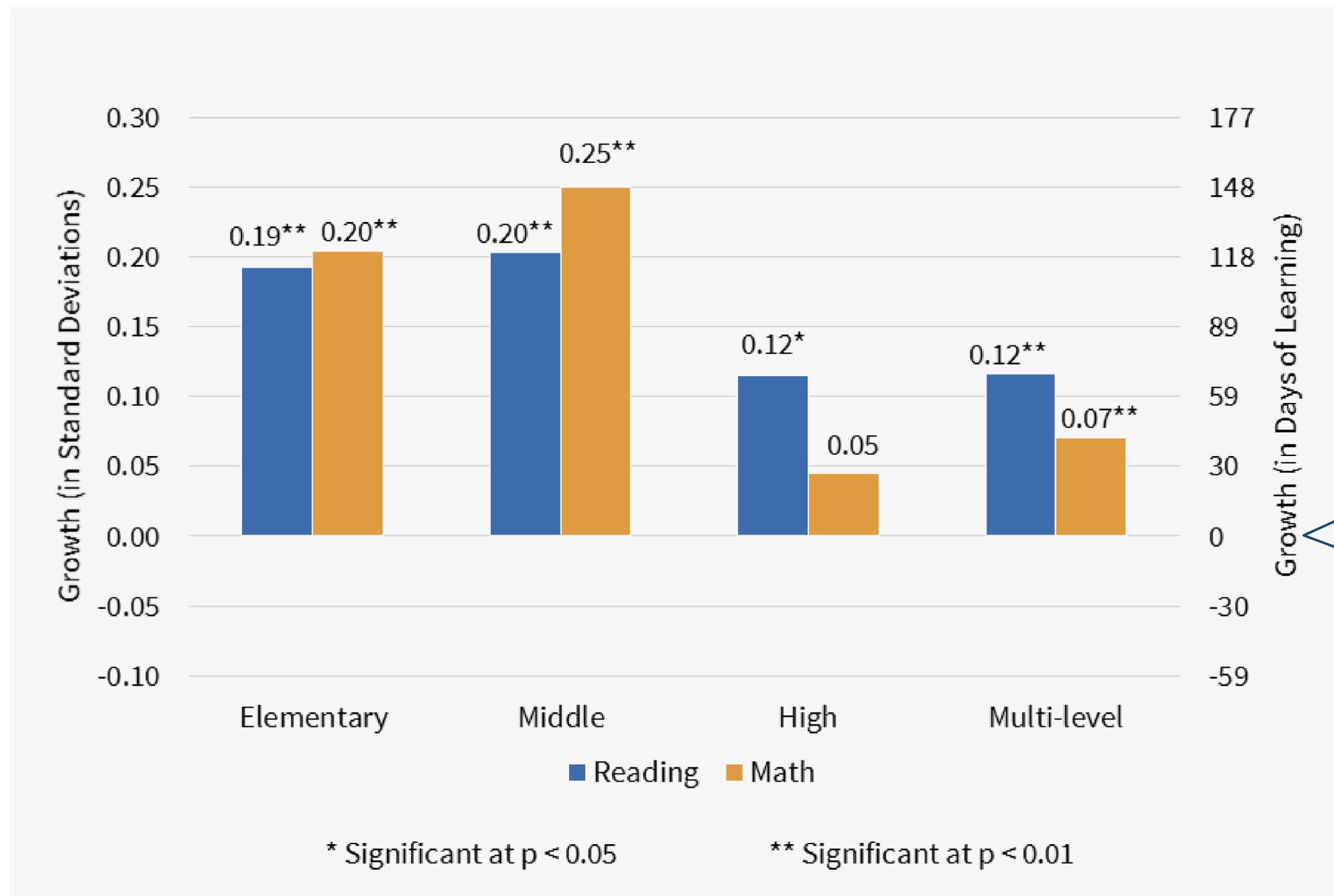
Quality Curve

12 RI Charter Schools significantly outperform local public school options in reading.

Read

| 2 | 14 | 12 |

- ■ Worse ■ No Different ■ Better

Math

| 1 | 10 | 15 |

- ■ Worse ■ No Different ■ Better
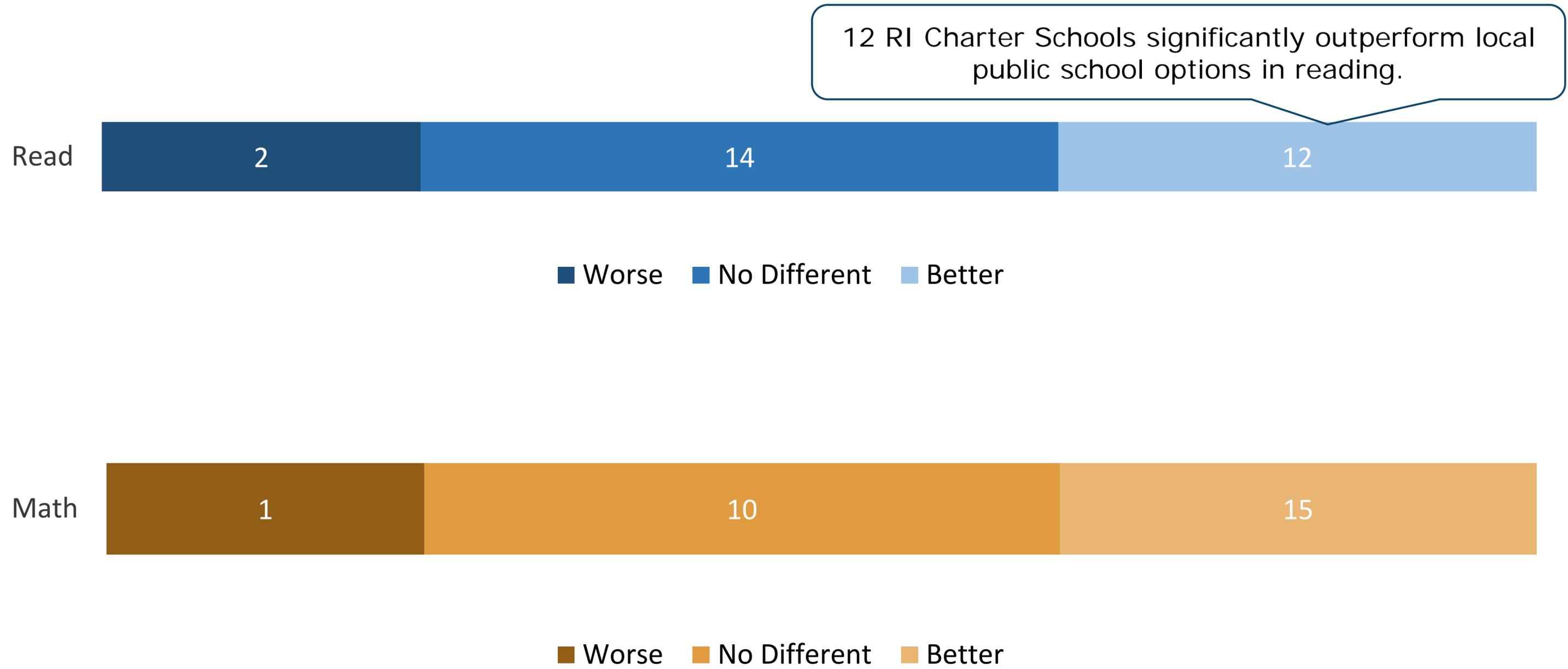
Learning Gains in TPS and Charter by Student Support Services

Reading				
Student Group	Standard Deviation Units		Days of Learning	
	TPS	Charter	TPS	Charter
All Students[1]	0.00	0.16**	0	94**
Students in Poverty[2]	-0.09**	0.08**	-53**	47**
Special Education Students[3]	-0.20**	-0.10**	-118**	-59**
English Language Learners[4]	-0.07**	0.04	-41**	n.s.

Math				
Student Group	Standard Deviation Units		Days of Learning	
	TPS	Charter	TPS	Charter
All Students[1]	0.00	0.15**	0	89**
Students in Poverty[2]	-0.09**	0.07	-53**	n.s.
Special Education Students[3]	-0.15**	-0.05	-89**	n.s.
English Language Learners[4]	-0.05	0.10*	n.s.	59*

[1] Benchmarked against all control TPS students.
[2] Benchmarked against control non-poverty TPS students.
[3] Benchmarked against control TPS students not in special education.
[4] Benchmarked against control non-ELL TPS students.
* p<0.05; ** p<0.01; n.s. not significant

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Charter School Impact by Student Support Services

Reading		
Student Group	Standard Deviation Units	Days of Learning
All Students[1]	0.16**	94**
Students in Poverty[2]	0.17**	100**
Special Education Students[3]	0.10**	59**
English Language Learners[4]	0.11*	65*

Math		
Student Group	Standard Deviation Units	Days of Learning
All Students[1]	0.15**	89**
Students in Poverty[2]	0.16**	94**
Special Education Students[3]	0.10**	59**
English Language Learners[4]	0.15**	89**

[1] Benchmarked against all control TPS students.
[2] Benchmarked against poverty control TPS students.
[3] Benchmarked against control TPS students in special ed.
[4] Benchmarked against control ELL students in TPS.
[5] Benchmarked against control Hispanic ELL TPS students.
* $p<0.05$; ** $p<0.01$; n.s. not significant

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Learning Gains in TPS and Charter by Race/Ethnicity and Poverty Status

Reading				
Student Group	Standard Deviation Units		Days of Learning	
	TPS	Charter	TPS	Charter
All Students[1]	0.00	0.16**	0	94**
Black[2]	-0.20**	-0.05	-118**	n.s.
Black in Poverty[3]	-0.30**	-0.12**	-177**	-71**
Hispanic[2]	-0.13**	0.01	-77**	n.s.
Hispanic in Poverty[3]	-0.24**	-0.07*	-142**	-41*

Math				
Student Group	Standard Deviation Units		Days of Learning	
	TPS	Charter	TPS	Charter
All Students[1]	0.00	0.15**	0	89**
Black[2]	-0.17**	-0.02	-100**	n.s.
Black in Poverty[3]	-0.27**	-0.10*	-159**	-59*
Hispanic[2]	-0.15**	0.01	-89**	n.s.
Hispanic in Poverty[3]	-0.26**	-0.09*	-153**	-53*

[1] Benchmarked against all control TPS students.
[2] Benchmarked against control white TPS students.
[3] Benchmarked against control white non-poverty TPS students.
* $p<0.05$; ** $p<0.01$; n.s. not significant

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Charter School Impact of Students by Race/Ethnicity

Reading		
Student Group	Standard Deviation Units	Days of Learning
All Students[1]	0.16**	94**
Black[2]	0.15**	89**
Black Students in Poverty[3]	0.18**	106**
Hispanic[2]	0.14**	83**
Hispanic Students in Poverty[3]	0.17**	100**

Math		
Student Group	Standard Deviation Units	Days of Learning
All Students[1]	0.15**	89**
Black[2]	0.15**	89**
Black Students in Poverty[3]	0.17**	100**
Hispanic[2]	0.16**	94**
Hispanic Students in Poverty[3]	0.17**	100**

[1] Benchmarked against all control TPS students.
[2] Benchmarked against control TPS students in poverty in the same racial/ethnic group.

[3] Benchmarked against control TPS students in poverty in the same racial/ethnic group.
* p<0.05; ** p<0.01; n.s. not significant

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Conclusions

- In the aggregate, we find positive and significant gains associated with charter attendance in both reading and math.

- 43% (57%) of RI charter schools outperform local options in reading (math), which is higher than 25% (29%) found nationally in the 2013 CREDO Study.

- Charter attendance is associated with improved learning gains for students in poverty, students in Special Education, and English language learners relative to TPS.

- Charter attendance is associated with higher learning gains for black and Hispanic students relative to TPS.

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES

Conclusions

Even with the good news of higher learning gains in charter schools relative to TPS, our analysis reveals substantial learning inequalities:

- ✓ Our results show learning gaps in one or both subjects for TPS students in poverty, English language learners in TPS, and special education students in either school setting.

- ✓ We also find significant learning gaps of minority students in poverty in both TPS and charter schools in either subject.

Learning gaps require attention to avoid leaving students behind.

credo
CENTER FOR RESEARCH ON EDUCATION OUTCOMES