

DOING MORE FOR LESS? STAFFING PATTERNS IN CALIFORNIA CHARTER SCHOOLS

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The Charter School Promise

Improve public education through competition and efficiency

(Buckley & Schneider, 2009; Ravitch, 2010)

“arguments favoring expansion of charter schooling as a policy option often involve three key claims: that they are (a) *more effective* and (b) *less costly*, while (c) serving the *same children* as regular district schools”

(Baker, Libby & Wiley, 2012, p. 2)

Less Costly?

- Charter schools receive less revenue and spend less
(Arsen & Ni, 2012; DeAngeles, Wolf, Maloney & May, 2018; Miron & Urschel, 2010; Reed & Rose, 2015)
- Charter schools spend less on instruction
(Miron & Urschel, 2010; Reed & Rose, 2015)
- Charter schools spend less on student support services
(Nelson, Muir & Drown, 2000; Miron & Urschel, 2010; Reed & Rose, 2015)
- California charter schools spend less on administration
(Reed & Rose, 2015)

Does less spending equate to fewer resources?

Lower
\$



Fewer
Resources
for
Student

Purpose of Current Project

- To better understand resource allocation in charter schools compared to traditional public schools by studying the staffing patterns
- To update knowledge base regarding staffing patterns in charter schools in light of economic shifts and policy changes in last decade

Data

- California Department of Education data files
 - *Professional Assignment and Information Form*
 - individual-level data on experience, education, demographics, and duty assignments for every certificated staff member
 - School-level (and grade-level) student enrollment
 - School characteristics
 - school size, longevity of operation, concentration of socioeconomically disadvantaged students, and geographic location
 - Charter school indicator

Data

2007-2008

Before Recession

2015-2016

After Recovery

2013-2014

New Funding Formula

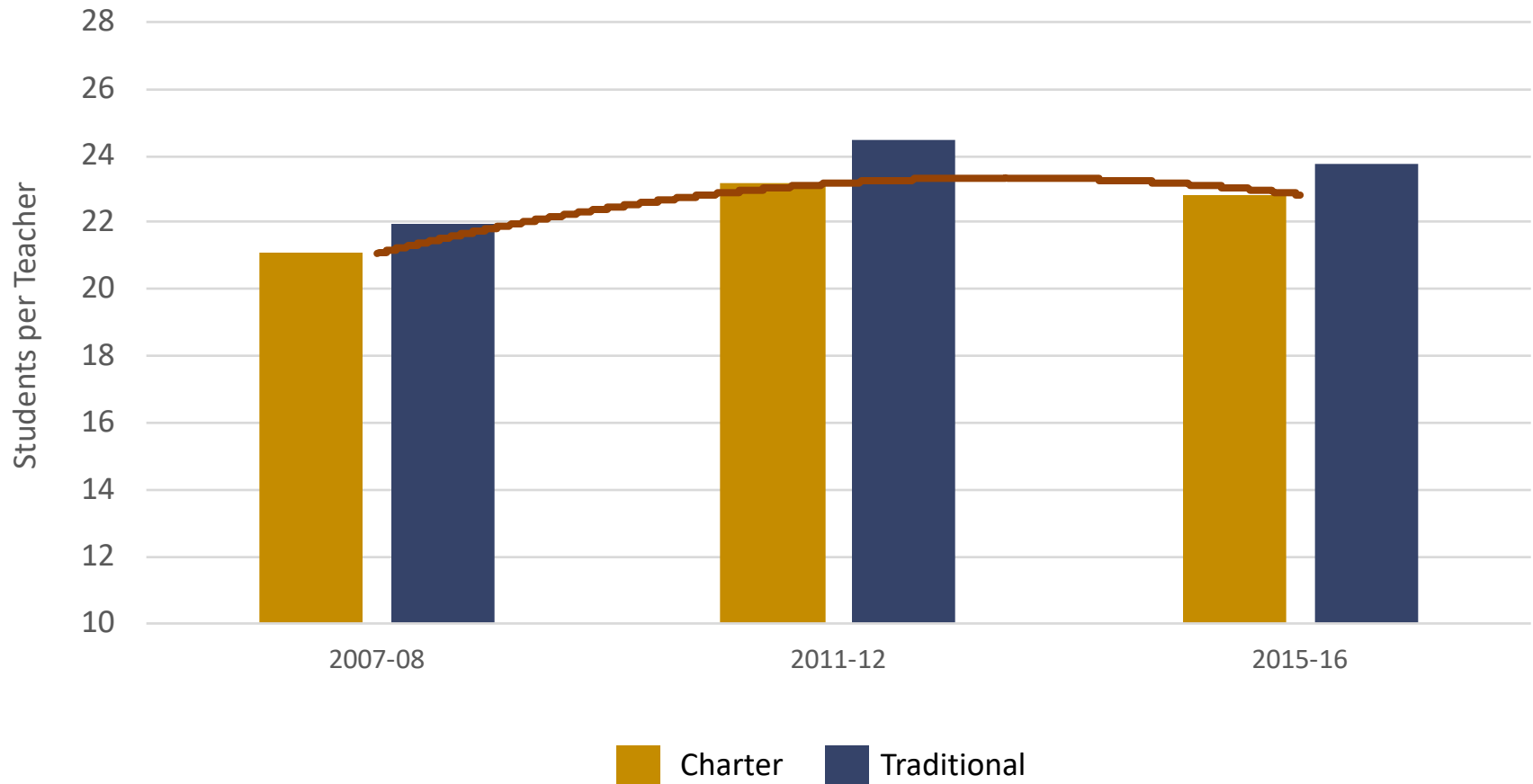
2011-2012

Trough of Recession



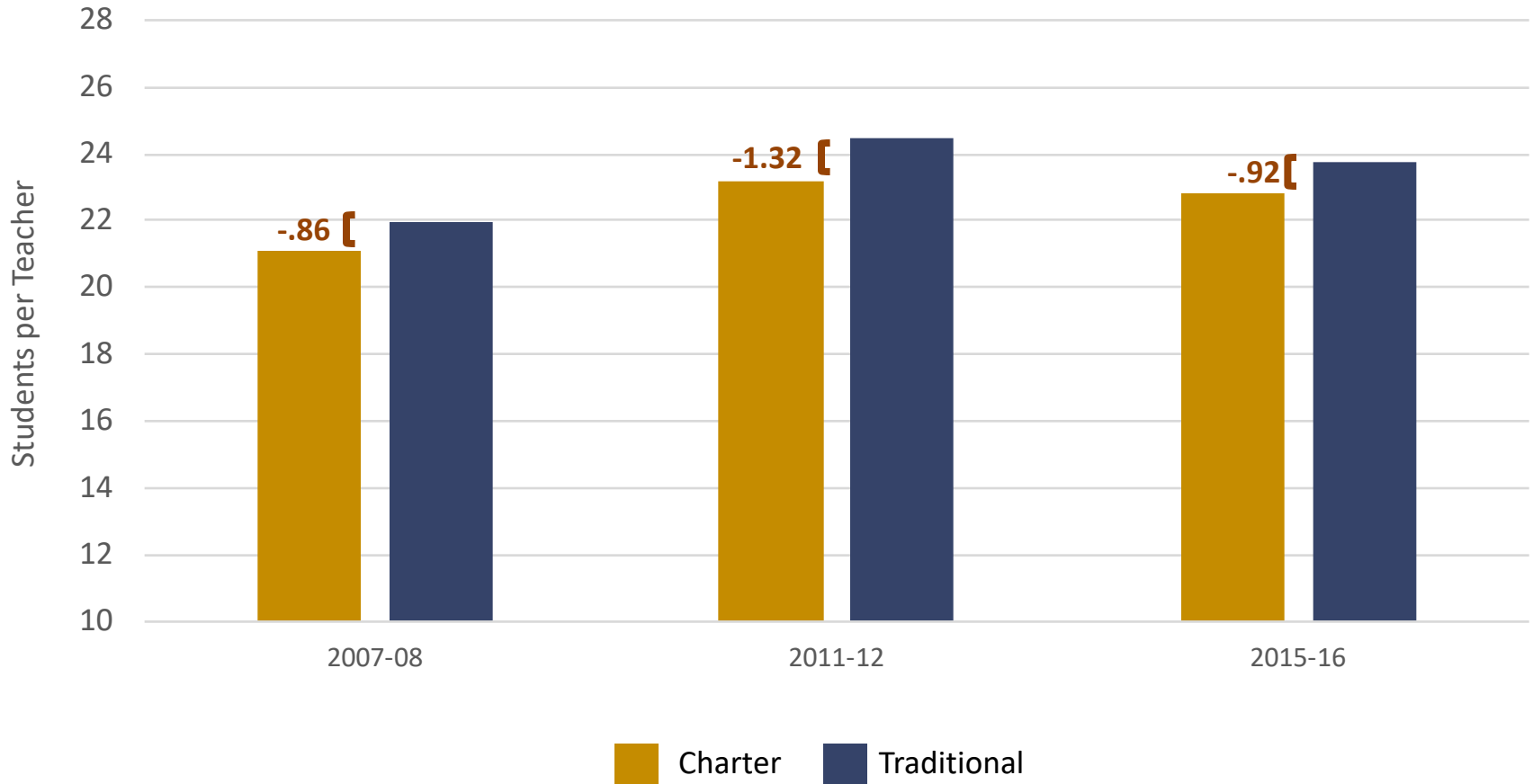
Larger Student-Teacher Ratios During and After Recession

Grades K-12

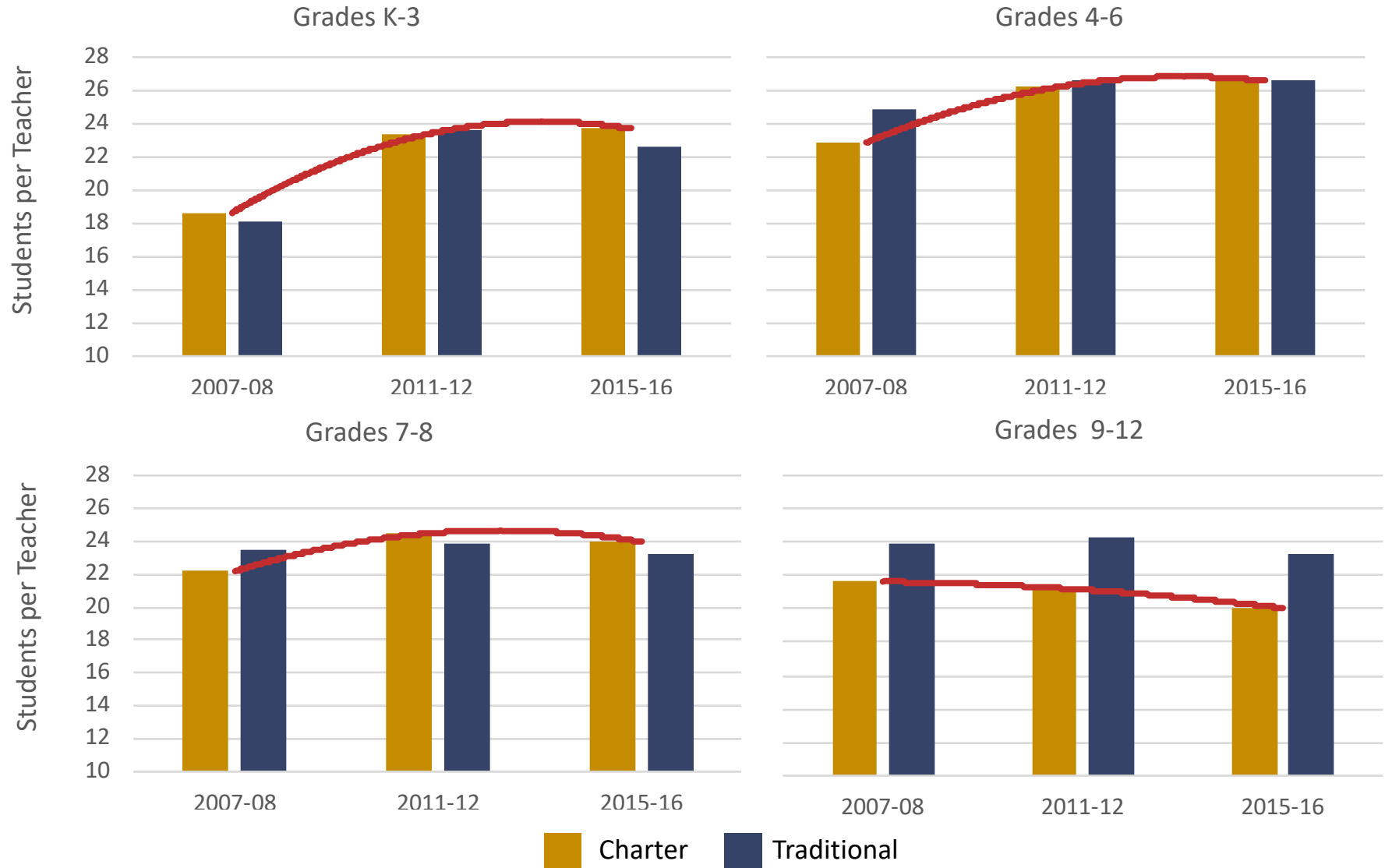


Charter Schools have More Teachers per Student

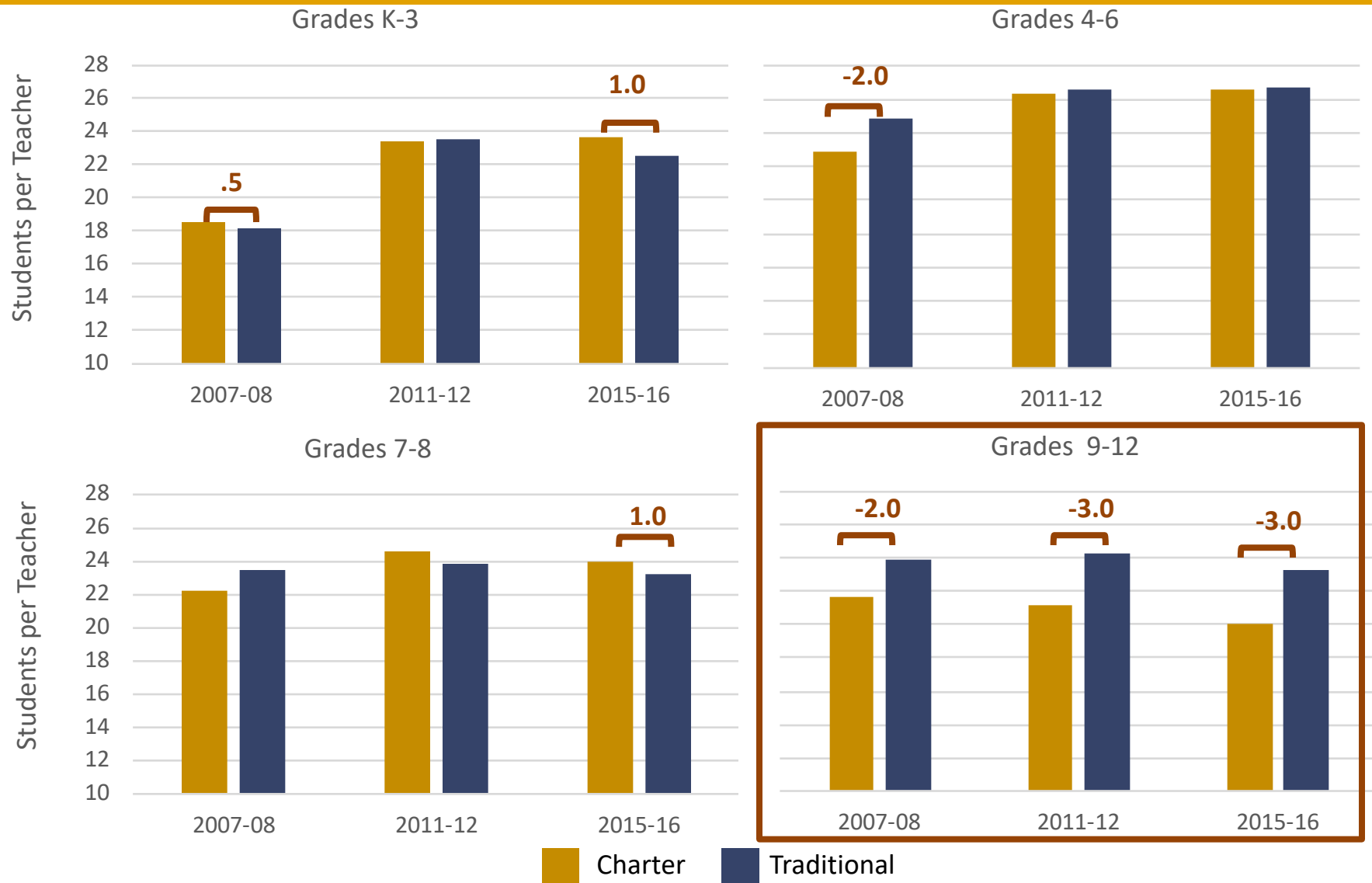
Grades K-12



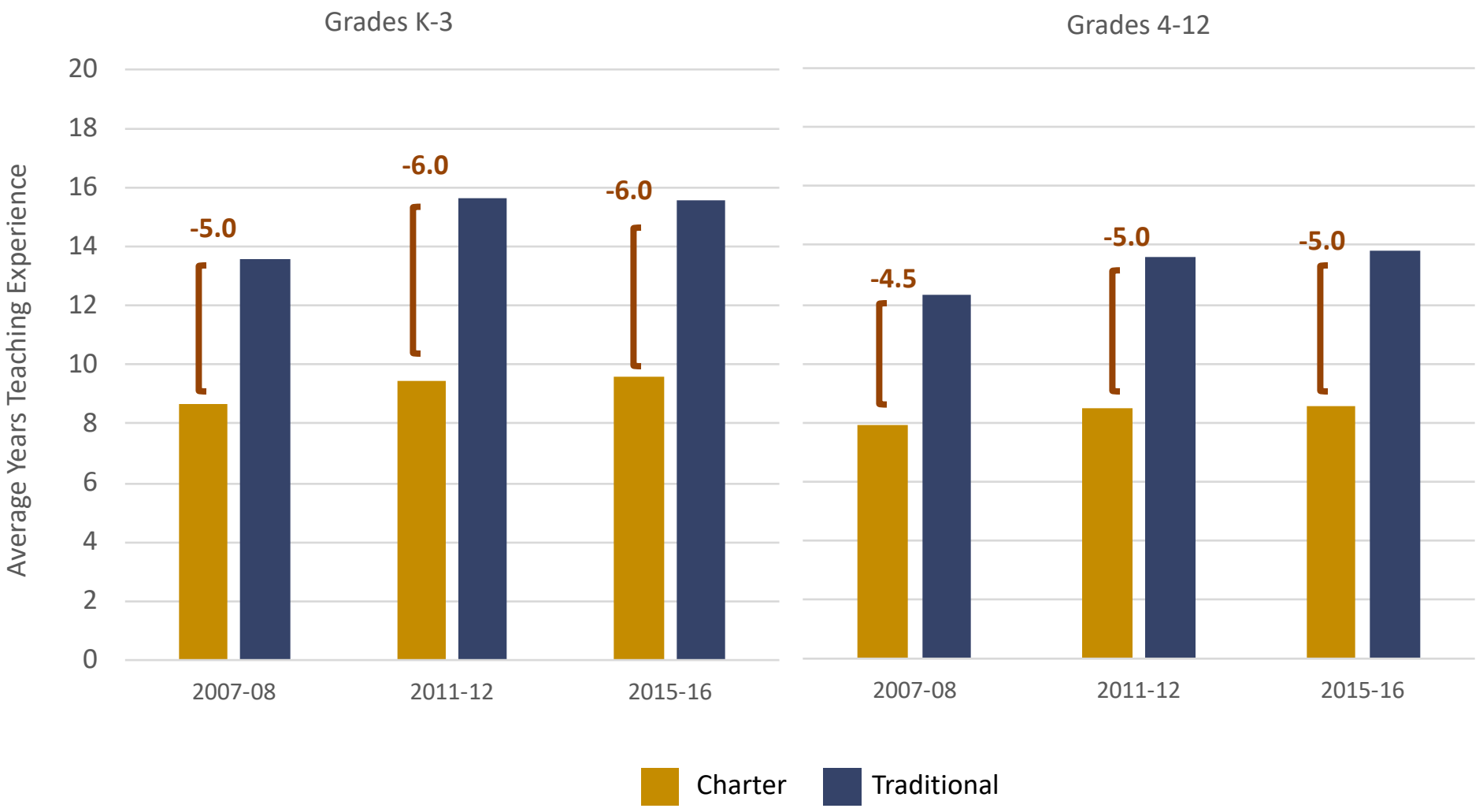
Class Sizes Increase during Recession for all Grade Spans, Except 9th -12th



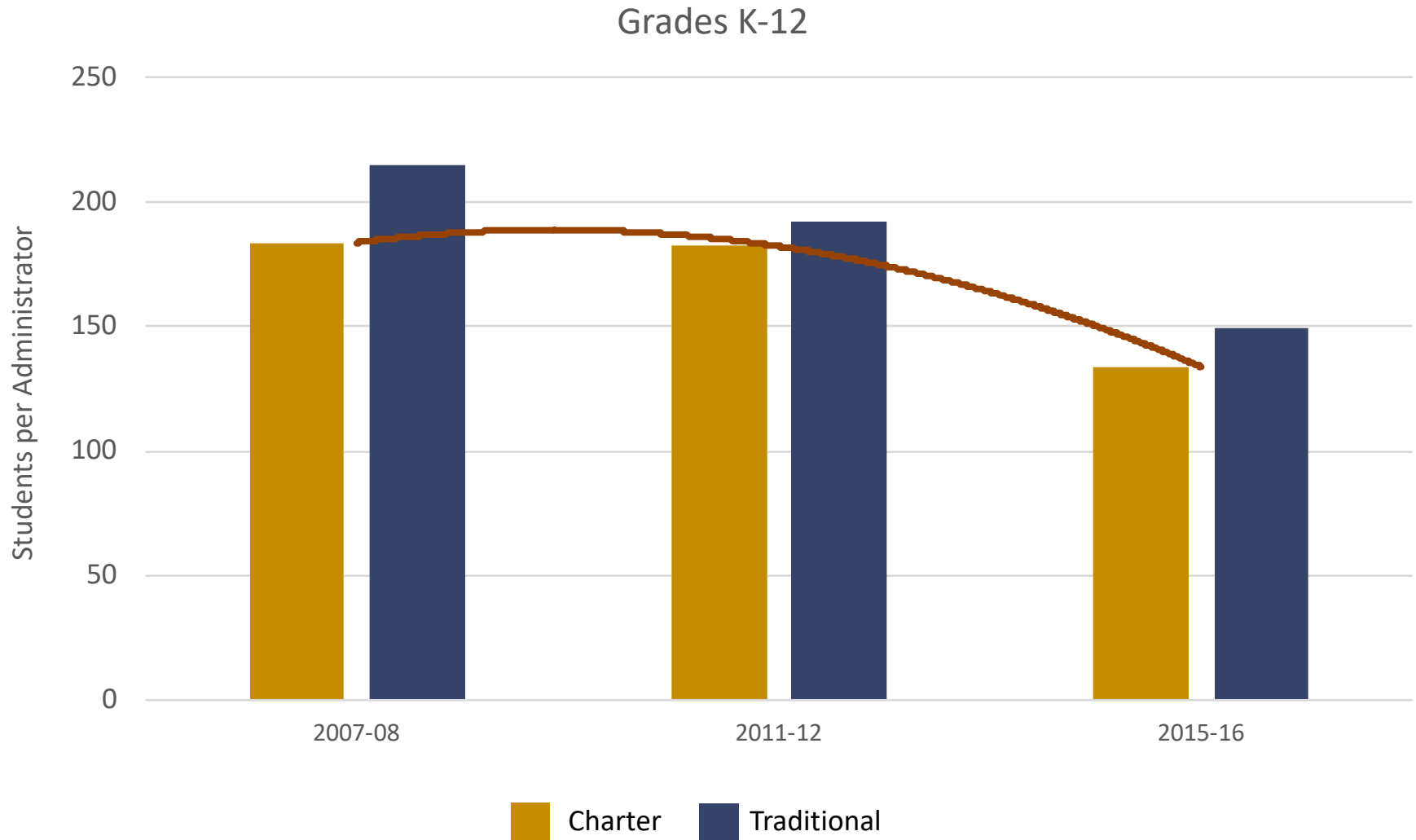
Charter Schools have More Teachers per Student in Grades 9th – 12th



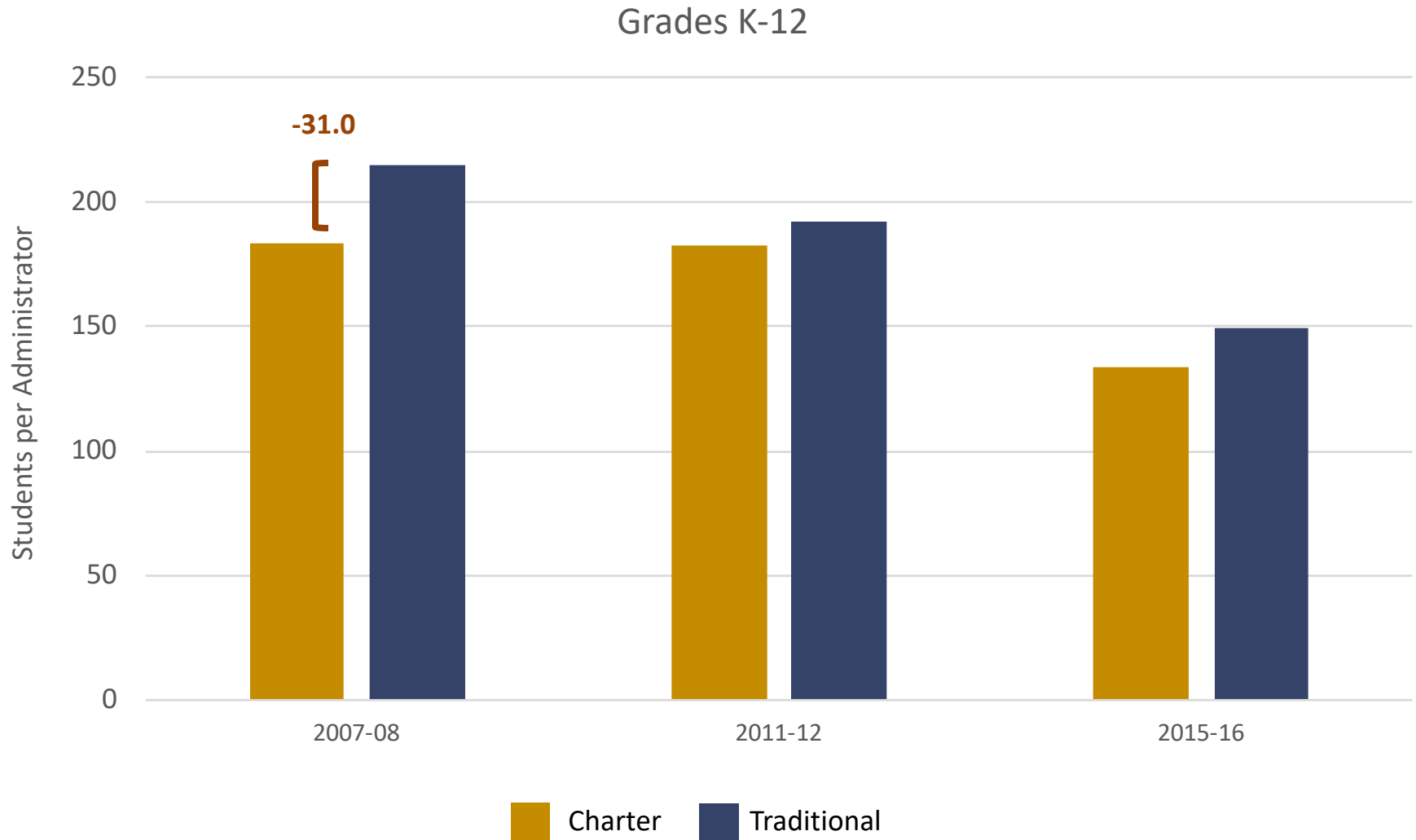
Charter School Teachers have Less Experience



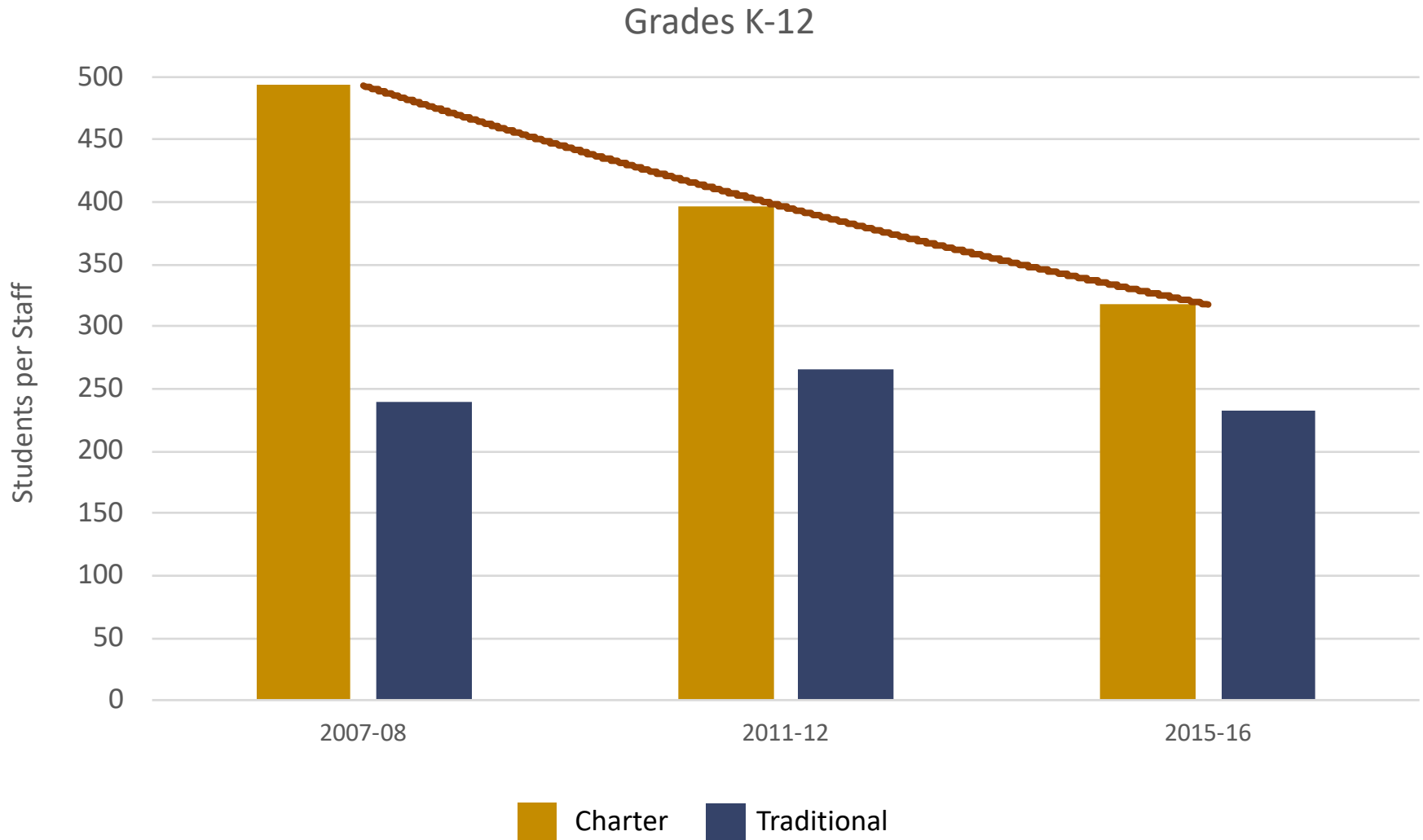
Students per Administrator Decreasing Overtime



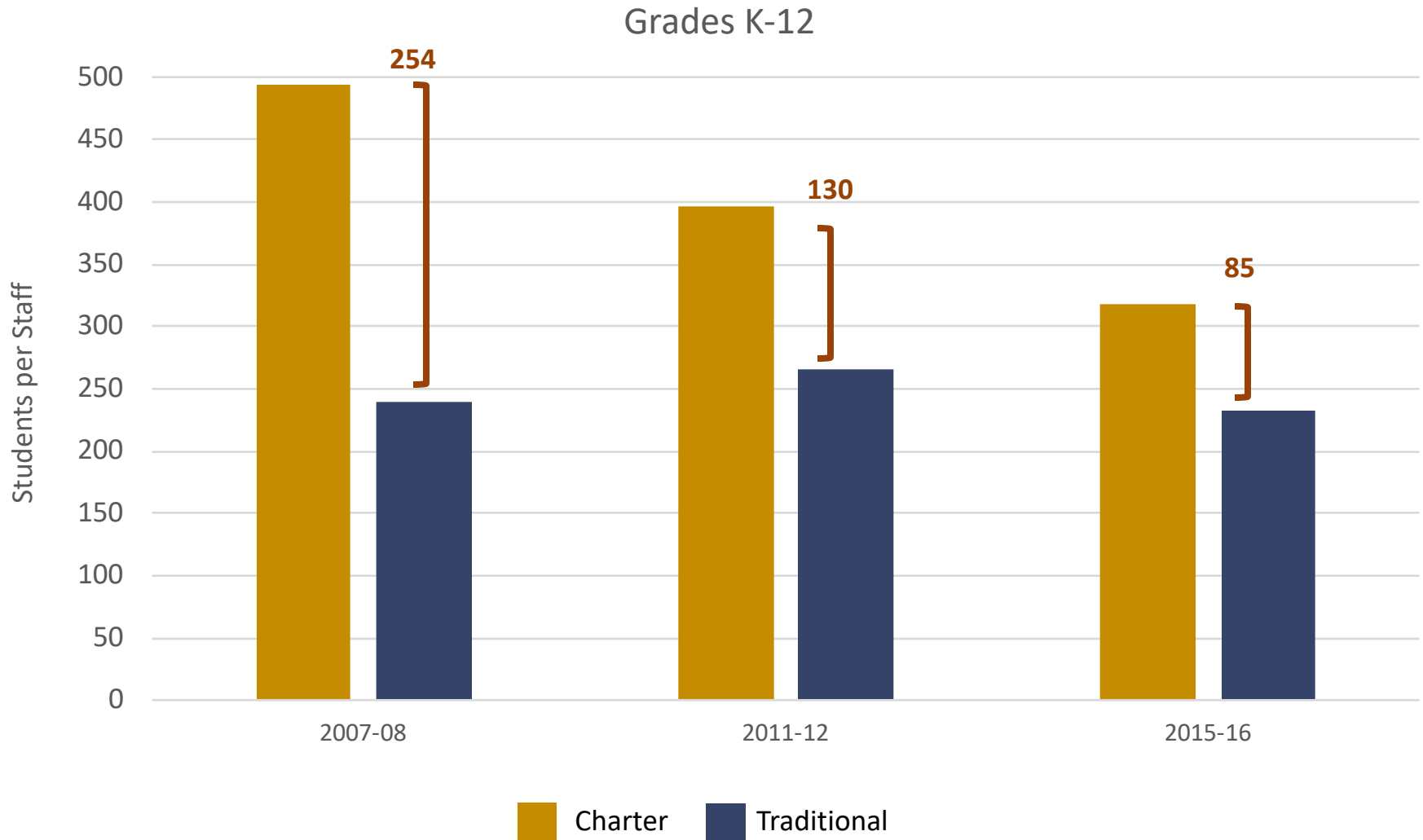
Charter Schools have Similar Number of Administrators per Student



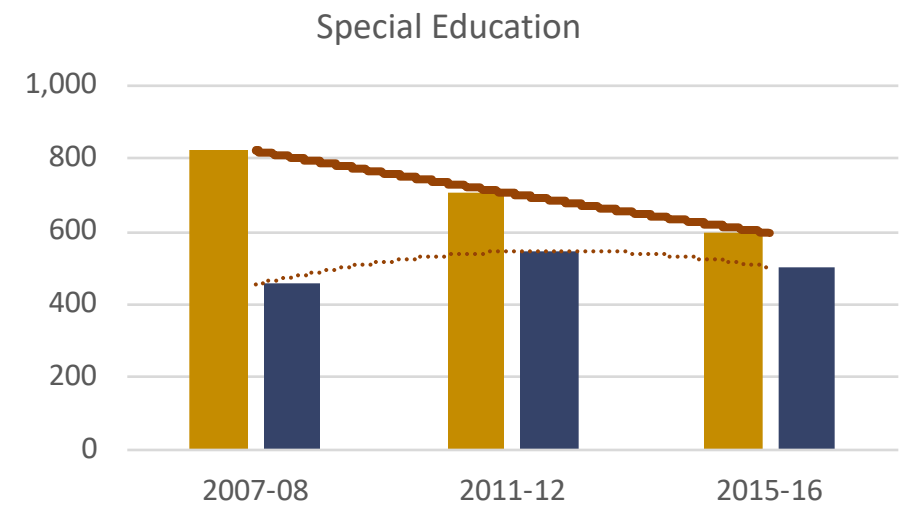
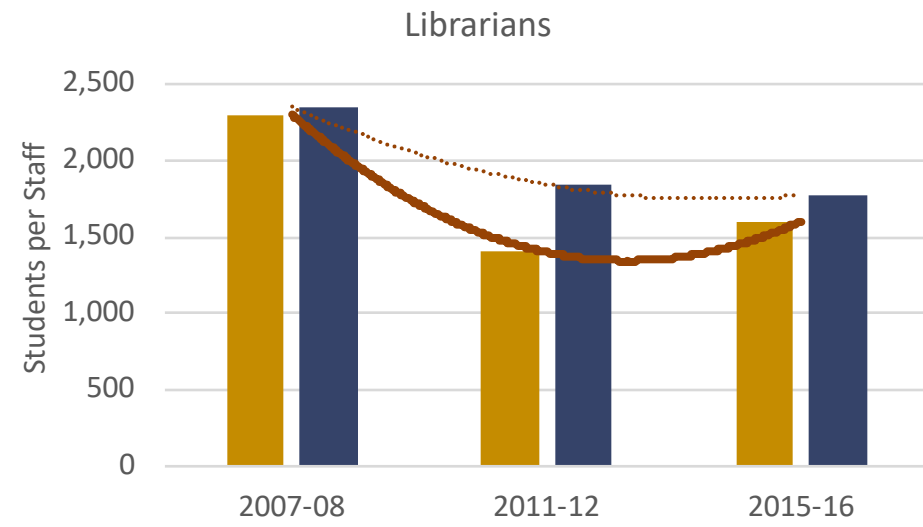
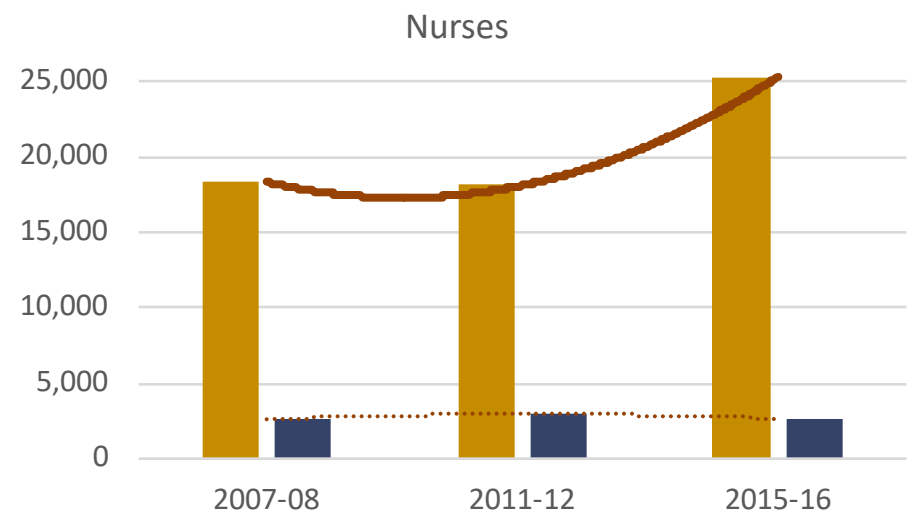
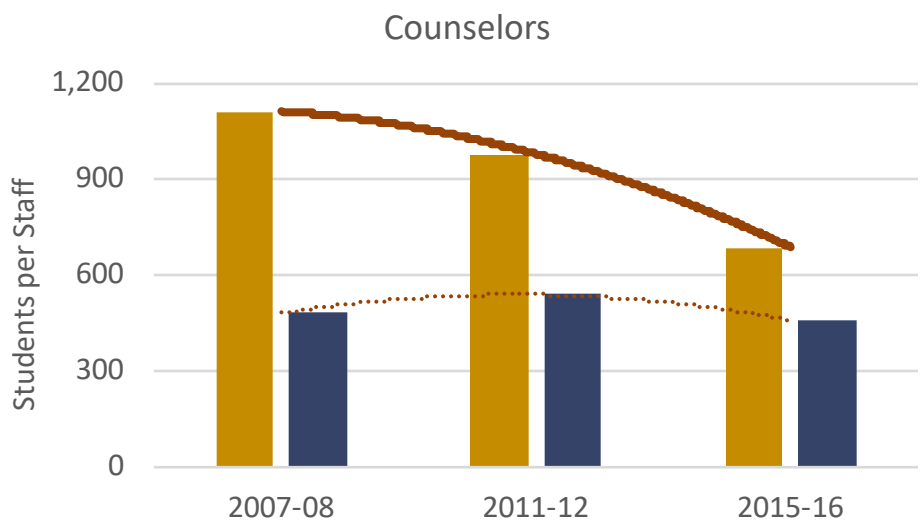
Students per Pupil Support Staff Decreasing Overtime



Charters have More Students per Pupil Support Staff

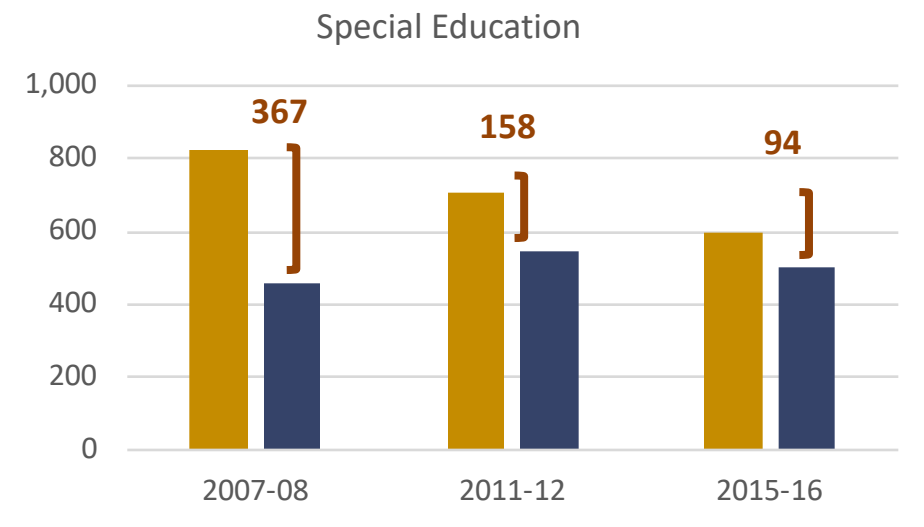
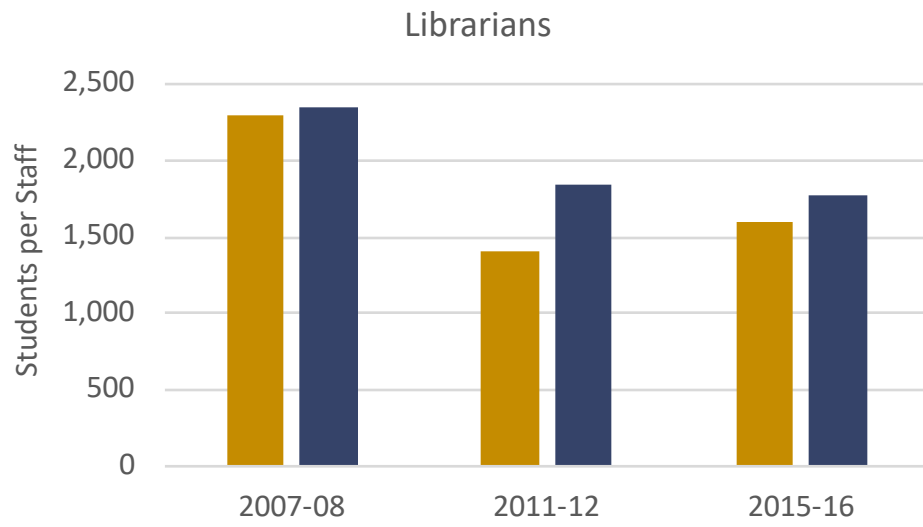
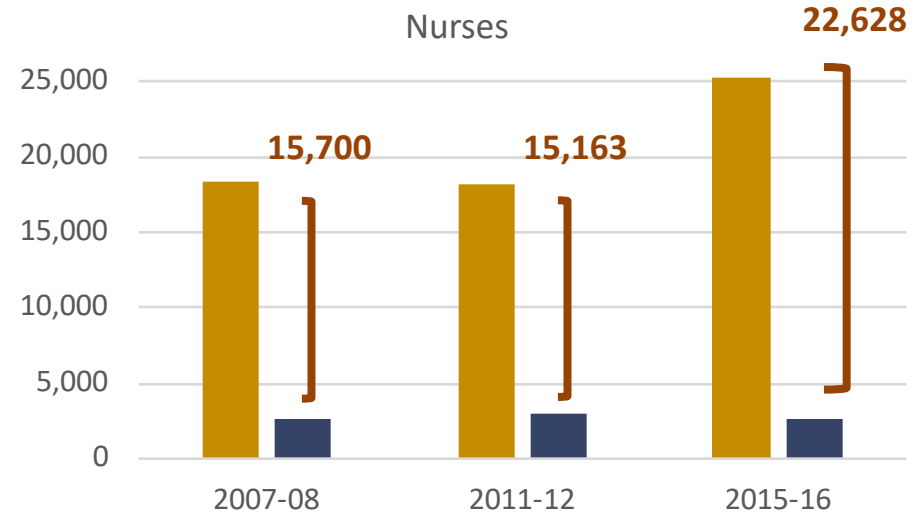
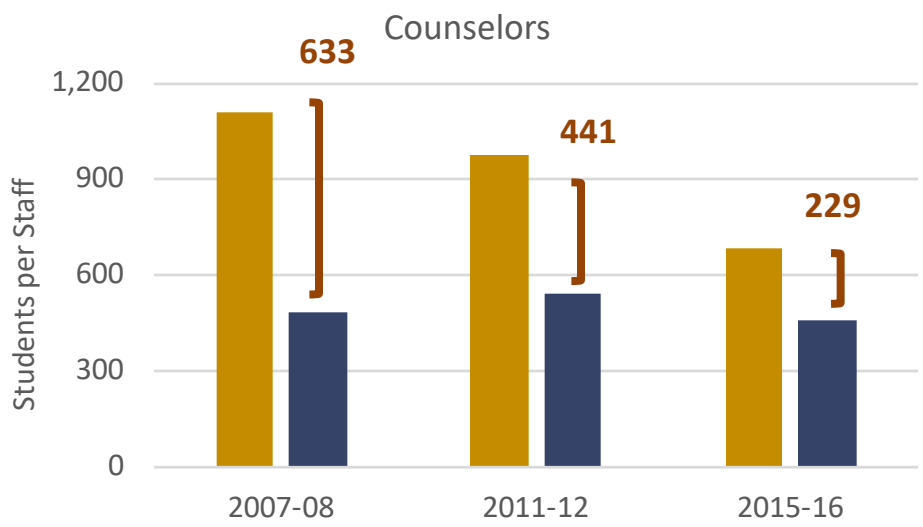


Students per Pupil Support Staff Relatively Stable for Traditional Public Schools



Charter Traditional

Charters have More Students per Pupil Support Staff



Charter Traditional

Key Conclusions

- Differences between charters and traditional public schools decreasing overtime
- More instructional resources in charter high schools
- Charter teachers have less experience

Doing More for Less?

- Some indication of doing the same for less...
 - Similar staffing patterns for teachers and administration between charters and TPS
 - Charters spend less on teachers and administrators
- BUT...
 - Charters have fewer pupil support personnel
 - Are charters providing support services through consultants rather than staff?
 - Are fewer support personnel needed due to differences in students?
- How do resource differences between charters and traditional public schools relate to student performance?

Thank You!

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Next Steps

- Account for length of operation of charter schools
 - Is lower average experience level of teachers in charters a result of new schools entering market or teacher turnover?
 - Are there more pupil support personnel in more established schools?
 - Are there economies of scale present in staffing patterns?

Extra Slides

Same Students?

	US		CA	
	All Students	Charter Students	All Students	Charter Students
Socioeconomically Disadvantaged				
English Language Learners				
Special Education				
Asian				
Black/African American				
Hispanic				
White				

More Effective?

- “Charters under-perform traditional public schools in some locations, grades, and subjects, and out-perform traditional public schools in other locations, grade, and subjects”
(Betts & Tang, 2011)
- 17% of charter schools outperform traditional public schools, 50% perform no differently, and 37% perform worse
(CREDO, 2009)
- In a meta-analysis, 19 studies positive effects of charter schools, 12 studies finding mixed results, and 16 studies finding negative effect
(Miron, Evergreen & Urschel, 2008)

CA School Funding Formulas

	Traditional Public School Districts	Charter Schools
Base Grant	Per Pupil \$ Rates vary by grade span	
Grade Span Adjustment	10.4% of base grant for K-3 2.6% of base grant for 9-12	
Supplemental Grant	20% of base grant X % of high needs students	
Concentration Grants	50% of base grant X % of high needs students greater than 55%	50% of base grant X % of high needs students in local district greater than 55%

Methods

- Compute staff-student ratios for charter schools and traditional public schools
- School-level regression using a maximum likelihood estimator to determine statistical significance

Methods

- School-level regression using a maximum likelihood estimator

$$Y_{sdt} = \beta_0 + \beta_1 * CH_{sdt} + \beta_2 * Post11_t + \beta_3 * Post15_t + \beta_4 * (CH_{sdt} * Post11_d) + \beta_5 * (CH_{sdt} * Post15_t) + \varepsilon_{sdt} + \mu_{dt} \quad (1)$$

Trends Overtime

Overtime...

- Elementary class sizes *increasing* in both charter and TPS
- Class sizes *decreasing* in charters serving grades 9 – 12
- Administrators per student *increasing* in both charter and TPS
- Number of pupil support staff per student *increasing*

Differences between charters and traditional public schools
decreasing overtime

Differences between Charters and TPS

Compared to traditional public schools, charter schools have...

- More teachers per student in grades 9 - 12
- Teachers with less experience
- Similar ratio of administrators per student
- Fewer pupil support staff per student

Differences between charters and traditional public schools
decreasing overtime