



THE MULTISITE STUDY OF THE IMPLEMENTATION AND IMPACT OF SUPPLEMENTAL EDUCATIONAL SERVICES

SUMMARY OF PROVIDER-LEVEL EFFECTS

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Acknowledgments

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- **Study web page:** www.sesiq2.wceruw.org
- **Toll-free number:** 1-855-471-1700

SESIQ²: Research objectives and questions

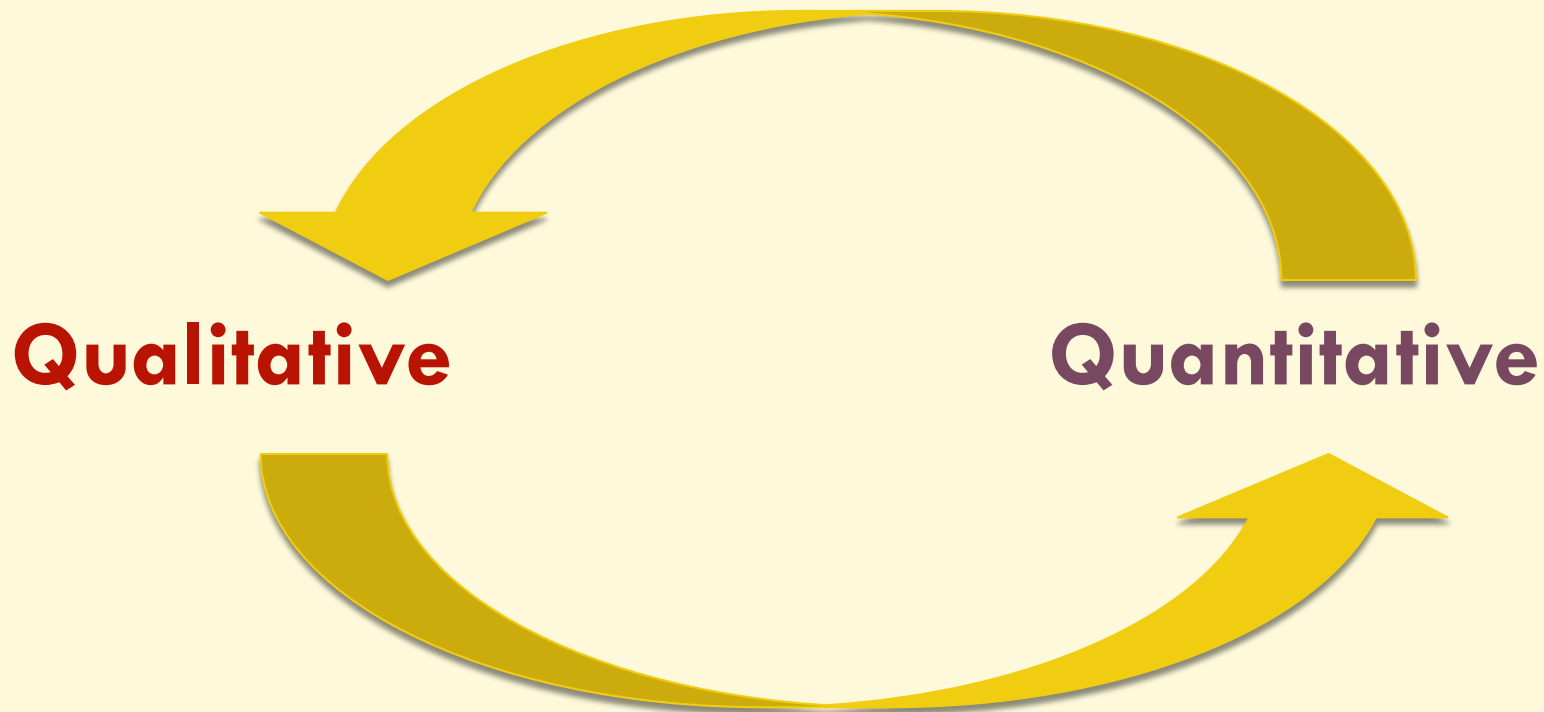
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- Improve student learning and achievement by identifying successful approaches (and variables that increase success) in the organization and management of Supplemental Educational Services (SES) in school districts and delivery of SES by providers
 - ▣ What constitutes a high-quality SES program?
 - ▣ Is SES effective in improving student achievement (in reading and math), and what types of (and which) SES providers are more effective in improving educational outcomes for low-income and disadvantaged students?
 - ▣ What policy tools are available to state and local educational agencies to ensure that SES services are available and effective?

SESIQ² Research Design

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Continuous feedback and integration



Qualitative Research Design

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- *Observations of tutoring sessions* using classroom observation instrument specific to SES tutoring (n=136)
- *Interviews with program directors* of SES providers and *tutoring staff* about instructional formats, curriculum, adaptations for special student needs, staff background and training, and interactions with schools, teachers, students, and families (n=142)
- *Interviews with district officials and state-level personnel* (n=30)
- *Focus groups* with parents of SES-eligible students (n=168)
- *Document analysis*: provider curriculum materials; diagnostic, formative, or final assessments used; policy documents

Quantitative Research Design

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- Sample frame: students eligible for SES, registered for SES and attending SES in five study districts
- Elementary, middle and high school data from administration of standardized tests, administrative data bases for managing SES provision, and district student transcript and demographic data
 - Used in constructing measures of receipt of SES, student-level controls to account for selection into SES and outcome measures (changes in tests scores)
- 2007-08, 2008-09, 2009-10 and 2010-11 data; 2011-12 data to follow

Empirical approaches to estimating SES effects

- Value Added Model

$$A_{jst} - A_{jst-1} = \alpha SES_{jt} + \beta X_{jt-1} + \pi_s + \mu_{gt} + \epsilon_{jst}$$

- Student Fixed Effects Model

$$A_{jst} - A_{jst-1} = \alpha SES_{jt} + \beta X_{jt-1} + \delta_j + \mu_{gt} + \epsilon_{jst}$$

- Student and School Fixed Effects Model

$$A_{jst} - A_{jst-1} = \alpha SES_{jt} + \beta X_{jt-1} + \pi_s + \delta_j + \mu_{gt} + \epsilon_{jst}$$

- Propensity Score Matching

$$Y_0 \perp D | X \implies Y_0 \perp D | P(X),$$

$$E(Y_{0t_1} - Y_{0t} | D_1 = 1, X) = E(Y_{0t_1} - Y_{0t} | D_1 = 0, X)$$

This presentation summarizes quantitative analysis of provider-level effects, by district. Please visit our website for further discussion of these data, as well as qualitative findings and integrated, mixed-method analyses.

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General, average effects of attending SES

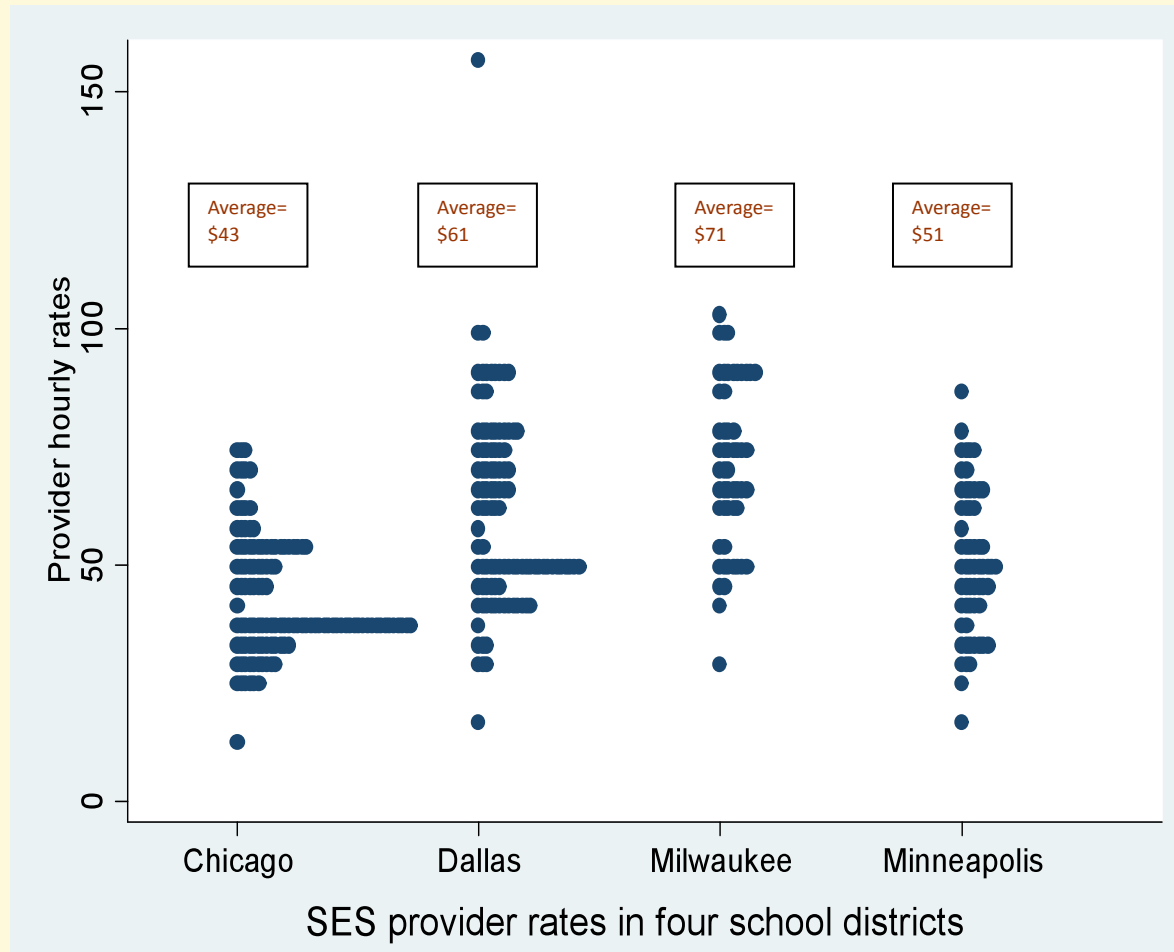
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- Students attended the fewest number of hours of SES in Dallas ISD in 2010-11 (significant decline from 2009-10); most positive SES effects observed in Chicago Public Schools where tutoring hours are double the number of those provided in Dallas ISD
- Positive effects are found for students in Minneapolis for the first time in 2010-11
- Effect sizes are mostly in the range of 0.04 to 0.10 s.d., although they are smaller for students with disabilities, and a few estimates are higher
- Some studies estimate SES effect sizes of 0.07-0.09 s.d.; other studies find no effects

SES Providers Effective in Increasing Student Reading and Math Achievement by School District, 2010-11						
	All Students		ELL Students		SWD Students	
Provider Name	Reading	Math	Reading	Math	Reading	Math
Small providers	MPS		Dallas			
A+ Tutoring Service, LTD	Mpls	Mpls		Mpls		
Abacus In-Home Tutoring	Mpls	Mpls				
Academic Advantage	CPS	CPS	CPS	CPS		CPS
Academic Solutions			CPS	CPS		CPS
Aim High	CPS	CPS	CPS	CPS		CPS
Apex Academics LLP		Dallas	Dallas			
ATS Project Success	Mpls	Mpls		Mpls		
Brain Hurricane	CPS, MPS		CPS	CPS		CPS
Brainfuse	CPS					
Cambridge Educational Services		CPS			CPS	
Chess Academy	CPS	CPS				
ClubZ! Tutoring Service, Inc.		CPS				
College Nannies+Tutors	Mpls	Mpls				
Confidence Music	Dallas		Dallas	Dallas		
Cranium Maximus		Dallas				
Diverse Learning, Inc.				Dallas		
Educate Online	Mpls	Mpls				
Huntington	CPS					
Learn it Systems	CPS					
NESI - 116		CPS				
Newton Learning	CPS	CPS				
Orion's Mind	CPS	CPS		CPS		
SES of Illinois	CPS	CPS				
School Service Systems	CPS					
Spanish Learning Center, Inc.	CPS	CPS		CPS		
Sparkplug Education Program-Tutoring		MPS				
Sylvan Learning	CPS					
The Homework Master Center/Tra	CPS					
TutorCo	Mpls	Mpls	Mpls			
Unparalleled Solutions		CPS				

SES Provider Hourly Rates by District, 2008-2011

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In Chicago Public Schools, 22 SES providers increased their rates (by 5.02% on average), while 15 providers decreased rates (by 13.27% on average); in Dallas ISD, 6 SES providers increased their rates by an average of 36.33% (from 2008 to 2011)

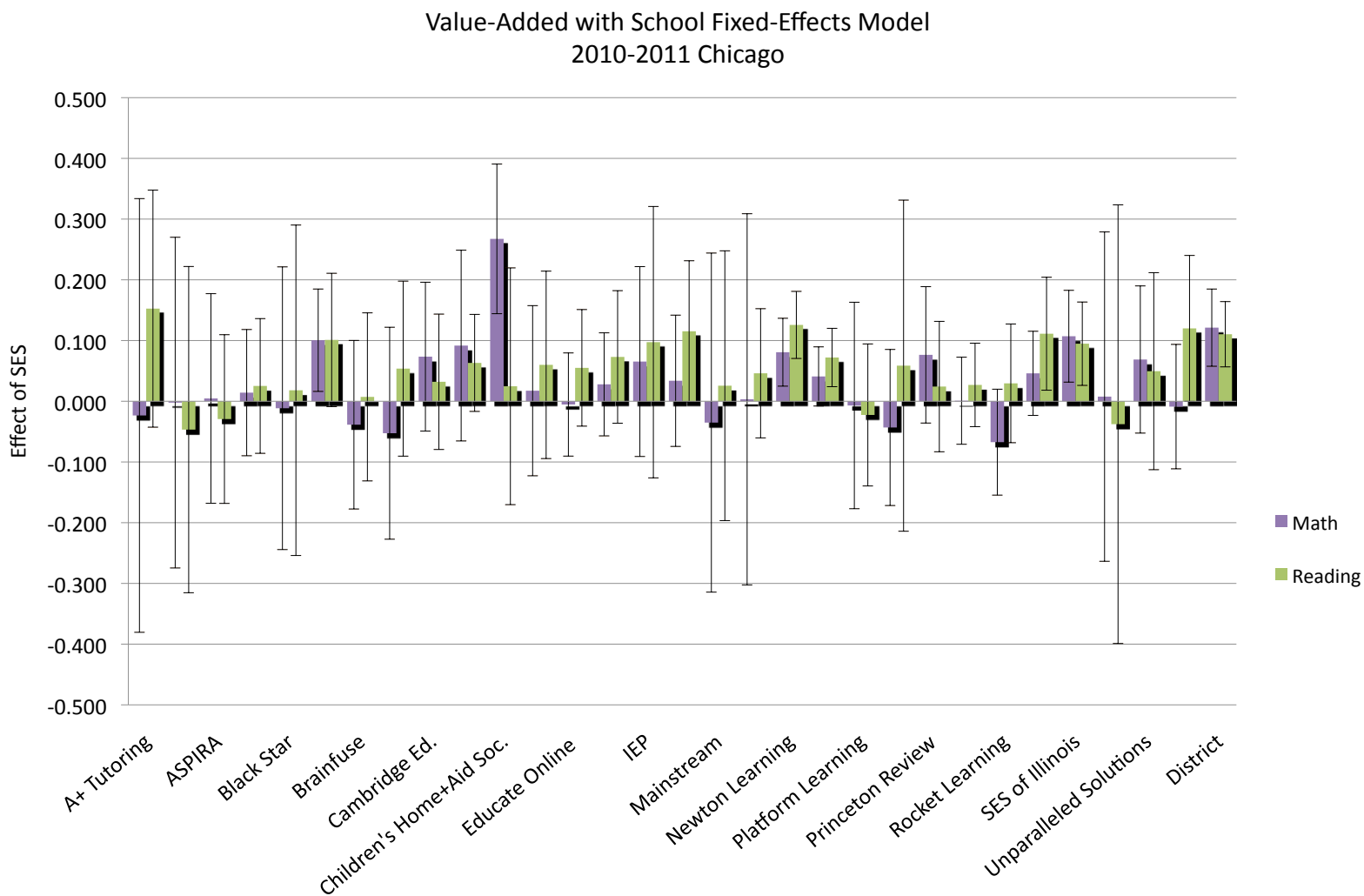
Chicago: SES provider-specific effects

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- Average number of hours of SES delivered by providers identified as effective in 2010-11: 38.8 hours
- 16 SES providers have positive effects on student reading achievement in 2010-11; 11 SES providers have positive effects on student math gains
- SES provider with the largest market share (20%), Rocket Learning, does not generate positive impacts
- SES providers with impacts on student reading and/or math achievement all three study years: A.I.M. High, Brain Hurricane, Cambridge Educational Services, Chess Academy, Newton Learning, Orion's Mind, SES of Illinois, School Service Systems, Unparalleled Solutions

SES provider effects in Chicago Public Schools

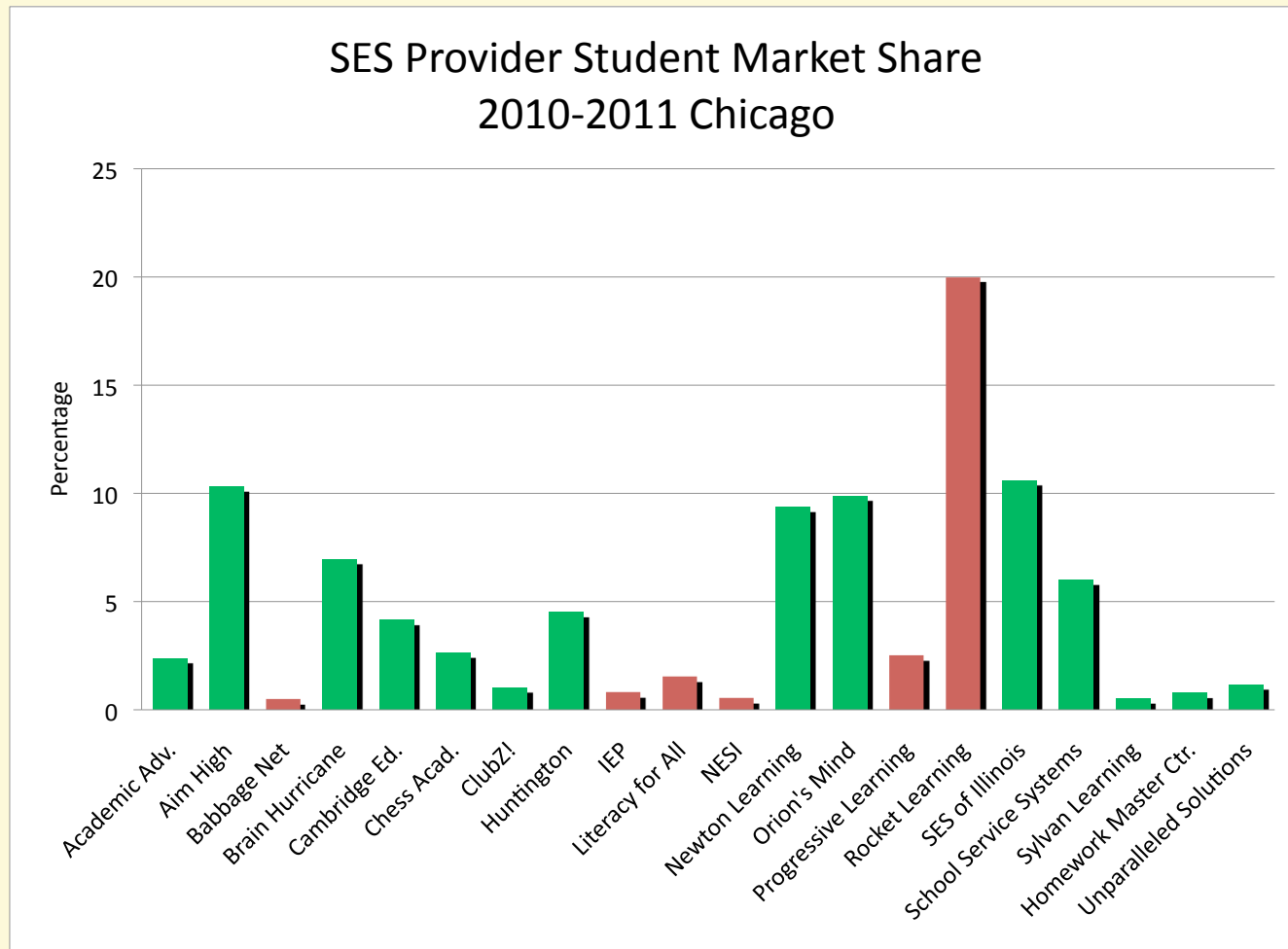
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Chicago: SES provider (student) market share, 2010-11

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Green bars
indicate
providers
with
positive
impacts



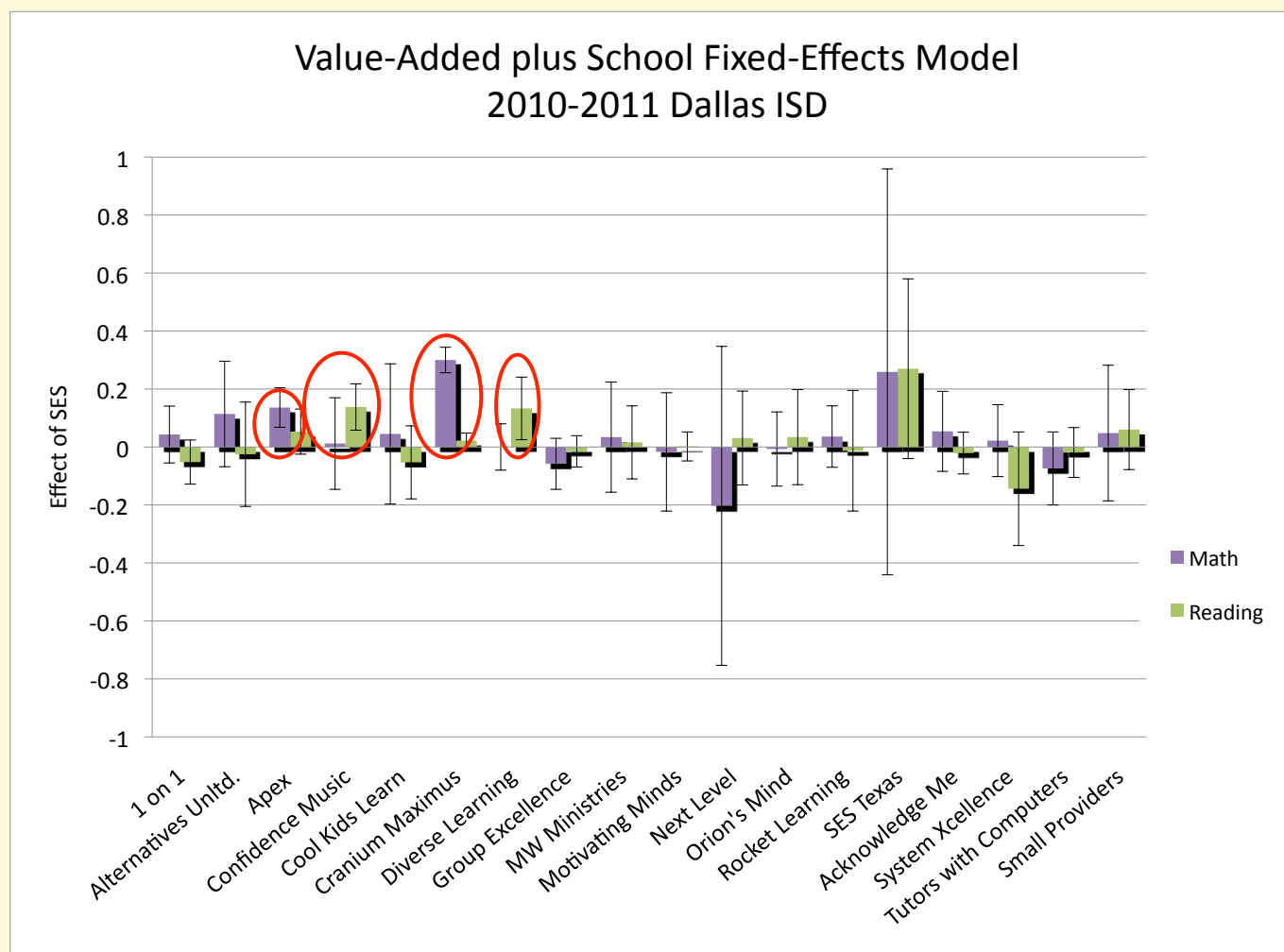
Dallas: SES provider-specific effects

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- ❑ Only about 1/3 of SES providers deliver at least 20 hours of SES to students who attend
- ❑ Group Excellence again has the largest market share and was not identified as effective in 2010-11
- ❑ Cranium Maximus continues to have large, statistically significant effects on student math gains
- ❑ Confidence Music has positive effects and stands out as the only provider also effective for ELL students
- ❑ Apex Academics and Diverse Learning also generated positive effects on student achievement in 2010-11

Provider effects in Dallas ISD (all students)

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Milwaukee: SES provider-specific effects

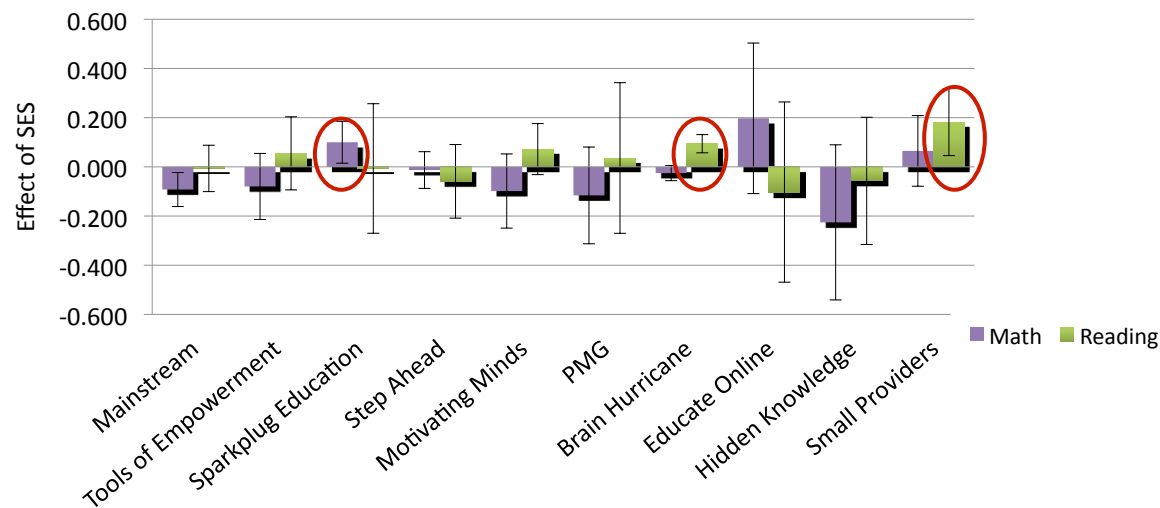
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- Average SES provider hourly rate in 2010-11: \$80/hour
- Three SES providers have 55% of market share: Tools of Empowerment Educational Services, Mainstream Development Group and Step Ahead Tutors
 - None of these is estimated to have a significant, positive effect on student reading or math gains
- Brain Hurricane charges lowest rate (\$55/hour) and is one of two providers with positive effects
- Academic Solutions of Milwaukee: small provider that separate analyses suggest drives positive effect of small providers on reading gains (also highly effective in Chicago Public Schools)

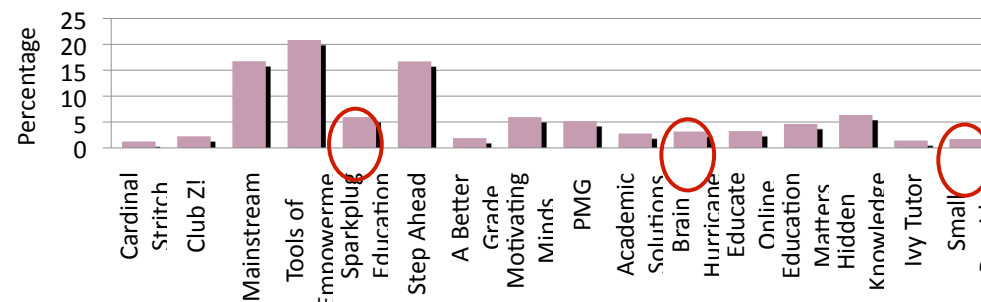
Milwaukee: Provider effects and student market share

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Value-Added with School Fixed-Effects Model
2010-2011 Milwaukee



Student Market Share
2010-2011 Milwaukee



Minneapolis: SES provider-specific effects

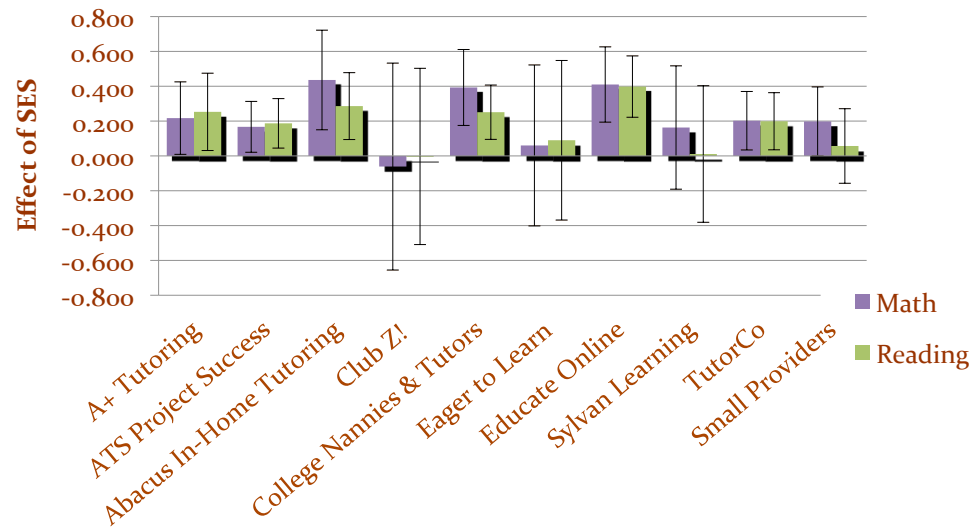
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- ATS Project Success has the largest market share of all attending students (28%) and has shown positive effects on student achievement for 2 consecutive years
- In 2009-10, ATS Project Success was the only provider identified as having a positive effect on student achievement; in 2010-11, it is one of 7 providers, as well as small providers combined, that are identified as effective in increasing students' math and/or reading gains
 - Average SES provider rate charged declined from \$70/hour to just under \$62/hour (from 2009-10 to 2010-11)

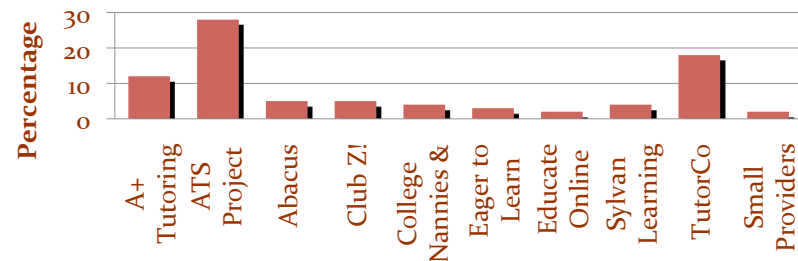
Provider effects in Minneapolis Public Schools (all students)

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Value-Added plus School Fixed-Effects Model, 2010-2011



**Student Market Share
2010-2011 Minneapolis**



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