

Online Schools: Evidence on Performance

New Mexico Legislative Education Study Committee

Margaret E. Raymond, Ph.D. November 17, 2016

Quick Tutorial

Most online education is "blended" with in-class time. 65% of courses are taken by juniors and seniors.

Full-time online programs allow students to enroll and earn academic credit based on successful completion of courses provided by the online school.

Full-time online schools can be managed by a state, district, university, charter school, not-for-profit, for-profit or other institution.



Quick Tutorial

447 full-time virtual schools

- Enrolled close to 262,000 students in 2013-2014
- One third K-5, one third 6 8 on 1st enrollment
- 33 States allow full-time virtual schools
- Even split charter district

Average enrollment differs by type of provider:

- For-profit EMO: 1027
- Non-profit EMO: 286
- Independently run: 266

Fewer minority or low-income students enrolled.

Research Question

Compared to identical students in traditional public schools, how does the average one-year academic progress of students in cyber charter schools compare?



Included States

- Arkansas
- Arizona
- California
- Colorado
- DC
- Florida
- Georgia
- Illinois
- Louisiana
- Michigan

- Minnesota
- New Mexico
- Nevada
- Ohio
- Oregon
- Pennsylvania
- Texas
- Utah
- Wisconsin

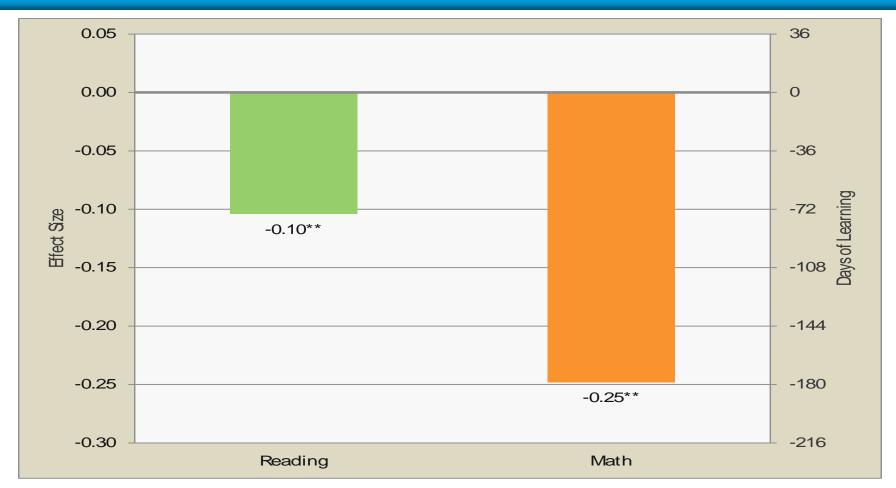


Methods

- Matched Comparison
 - more details at Credo.Stanford.edu
- Pre-post enrollment comparisons
- Panel data analysis



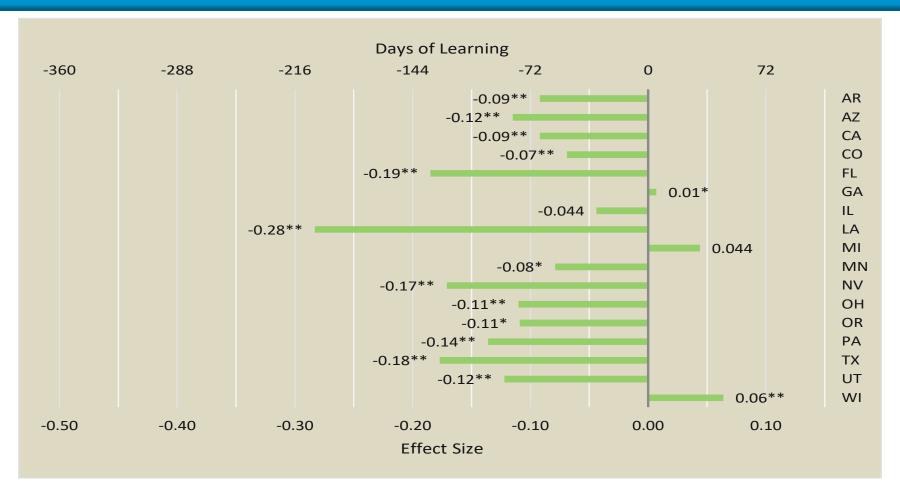
Overall Performance Online Charters vs TPS



** Denotes significant at the .01 level.



Reading Performance by State Online Charters vs TPS

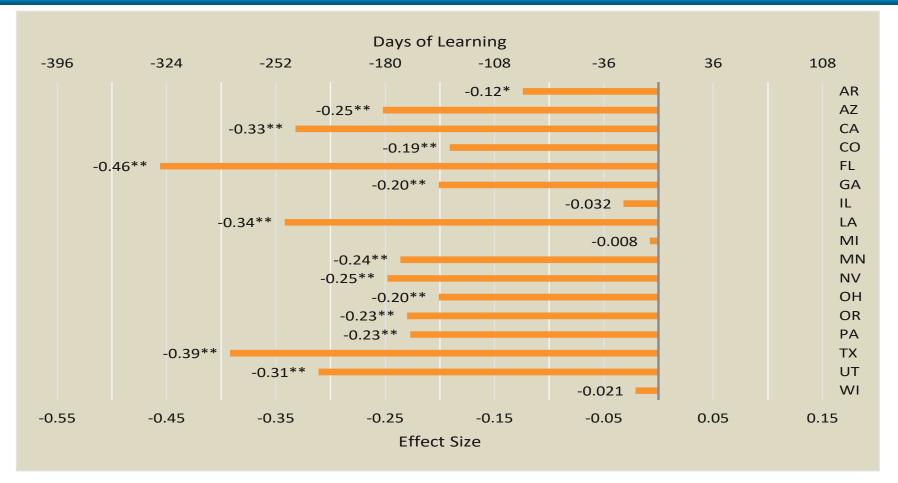


** Denotes significant at the .01 level.

New Mexico results: -.12 (not sig.)



Math Performance by State Online Charters vs TPS



** Denotes significant at the .01 level.

New Mexico results: -.07 (not sig.)





Performance by Race/Ethnicity Online Charters vs TPS

Racial-Ethnic Subpopulation	Reading	Days of Learning	Math	Days of Learning
White	-0.11**	-79	-0.25**	-180
Black	-0.08**	-58	-0.22**	-158
Hispanic	-0.11**	-79	-0.29**	-209
Asian/Pacific Islander	-0.09**	-65	-0.26**	-187
Native American	-0.12**	-86	-0.30**	-216
Multi-Racial	-0.09**	-65	-0.26**	-187

^{**} Denotes significant at the .01 level.





Deeper Dive on Results

Three areas of Inquiry

- 1. Do different students enroll in online schools?
- 2. Are there school-level attributes that explain the results?
- 3. Are there policy factors that relate to results?



Student Factors

ARE ONLINE STUDENTS MORE MOBILE?

Before enrolling in online:

9% for online students

8% for comparison students

After online enrollment:

15% for online students

8% for comparison students



Student Factors

ARE STUDENTS MORE TRAUMATIZED?

NCES 2015: 22% of students report bullying

Petrosina et al: only 36% of bullied students report

Ergo: population estimate = 66% of all

public school students bullied

Online bullying: 27% of students were bullied

before enrolling

(Edge Research, 2016)



School Factors

WHAT ATTRIBUTES OF SCHOOLS MATTER?

Synchronous vs. asynchronous instruction

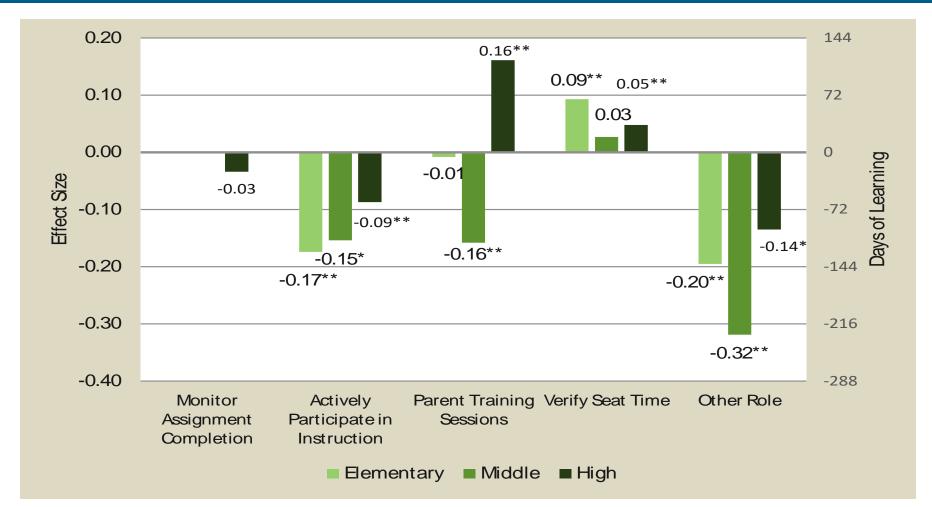
- Self-paced seems to work
- Number of active contact hours is very low
- Lack of progress monitoring large negative role

Assessments

- Frequency of assessments matters
- Providing assessment results to teachers matters



Expected Parental Roles





Policy Factors

POLICY	Math	Reading
Authorizer Oversight Fees	-0.21*	-0.12
For-profit	0.19	-0.11
Statewide enrollment	0.19	-0.11
Specialized Oversight Policy	0.20*	-0.19
Strength of Charter Law	0.33*	0.25*
Charter Law Ranking	0.32*	0.06



Implications

- 1. Current online charter schools may be a good fit for some students, but the evidence suggests that online charters don't serve very well the students that currently attend these schools, much less the general population.
- 2. Current oversight policies in place may not be sufficient for online charter schools.
- 3. States should examine the current progress of existing online programs before allowing expansion.



Issues

- 1. Need a common set of performance standards
- 2. Desperate need to innovate AND improve
- 3. Market based protections are *currently weak*
- 4. Isolation of students and parents
- 5. Authorizers face extreme information challenges





Thank you!