MATHEMATICA Policy Research

Infocus

That National Study of Online Charter Schools is organized into three separate, topical report volumes. In Volume I, **Mathematica** describes the universe of online charter schools, the students they serve and their operations. In Volume II, the Center on Reinventing Public **Education (CRPE)** at the University of Washington describes the policy environments of online charter schools and provides recommendations to state policymakers. In Volume III, the Center for Research on **Education Outcomes** (CREDO) at Stanford University describes the achievement effects of

online charter schools.

Online Charter Schools' Operational and Instructional Practices: Highlights of Findings

Online charter schools—also known as virtual charters or cyber charters—are publicly funded schools of choice that deliver student instruction via telecommunications. Today, about 200 online charter schools are operating in the United States, serving about 200,000 students at the elementary, middle, and high school grade levels. Online instruction is increasing rapidly, but there have been few studies of its operations and effects. In innovative new research funded by the Walton Family Foundation, the National Study of Online Charter Schools fills this gap in the research. Mathematica Policy Research's report provides the first nationwide data and analysis of the operations and instructional approaches of online charter schools, based on data collected in a survey completed by 127 principals of online charter schools across the country.

OVERVIEW

Mathematica's report offers a snapshot of online charter schools operating across the country, describing their numbers, the states in which they operate, and the students they serve. The report then describes the instructional programs of online charter schools; methods used to engage students and parents, along with expectations of parental involvement; the teachers and principals of online charter schools; and the schools' management and governance. Our analysis indicates that the greatest challenge for online charter schools, in which student-teacher interactions are more limited than in conventional schools, is maintaining student engagement. This challenge could be exacerbated by high student-to-teacher ratios and instructional programs that provide very limited contact time between students and teachers. Perhaps to compensate for limited student-teacher interaction, online charter schools expect parents to provide significant instructional support. These findings suggest reason for concern about whether the online charter school sector is

likely to be effective in promoting the achievement of its students—an issue addressed in depth by CREDO in the third volume of the study.

KEY FINDINGS

Student-driven, independent study is the dominant mode of learning for online charter schools

- Three-fifths (60 percent) of online charter schools reported that half or more of their courses are self-paced—including one-third (33 percent) of online charter schools that offer only self-paced instruction.
- A large majority of online charter schools allow students to earn course credits by demonstrating mastery, regardless of seat time.
- Online charter schools typically provide their students with less synchronous instructional time (students and teachers participating in discussion at the same time) in one week than students in conventional schools have in one day.

• Most online charter schools offer only limited one-on-one instructional support, with a median of only 45 to 60 minutes per week

Median weekly time spent in synchronous instruction 4th grade 7th grade High school Median hours per week

• Online charter schools have substantially higher student-teacher ratios, compared with brick-and-mortar charter schools and public schools (30:1, 20:1, 17:1, respectively).

Student-to-teacher ratios 30:1 17:1 Online Conventional charters public schools

Student engagement is the most significant challenge for online charter schools

- Online charter school principals identified student engagement as the greatest challenge nearly three times as often as any other issue.
- The virtual environment presents inherent challenges for ensuring that students are focused on coursework. These challenges are compounded in online charter schools by high student-teacher ratios, a small number of live contact hours, and issues related to a subset of students who previously disengaged from conventional schools.

Online charter schools place substantial expectations on parents

- Limited tools for monitoring student engagement, combined with fewer hours of synchronous instruction and one-on-one support, mean that online charter schools expect substantial support from parents.
- Many online charter schools—43 percent in high school, 56 percent in middle school, and 78 percent in elementary school—expect parents to actively participate in student instruction.

Percentage of online charter schools expecting parents to participate in student instruction 78% 4th grade 7th grade High school Actively participate in the student's instruction

Online Charter School and Student **Population Characteristics**

- About a quarter (24 percent) of online charter schools are very large schools that account for nearly 80 percent of student enrollment.
- Nearly all online charters schools serve high school grades; more than half (56 percent) serve elementary and middle school grades, as well.
- A large majority (90 percent) of online charter schools report that they serve a general student population, rather than focusing specifically on students with special needs.
- Online charter schools have an overrepresentation of white students (71.0 percent) and an underrepresentation of Hispanic students (12.0 percent) and English learners (0.4 percent) relative to other public schools in their states.
- Only about half of online charter principals (48 percent) had prior experience teaching in an online environment.

Analyses for Mathematica's report for the National Study of Online Charter Schools are derived from survey responses received from a majority (68 percent) of principals at public charter online schools that serve full-time students and deliver instruction entirely online. Public data sources from the U.S. Department of Education supplemented the survey findings.

Read Mathematica's full report, Inside Online Charter Schools.

Volumes II and III of the National Study of **Online Charter Schools** CRPE and CREDO





2