In 2018 virtual schools continued to be a focal point for policymakers. As proponents continued to make the case that virtual education can expand student choices and improve the efficiency of public education, full-time virtual schools (also sometimes referred to as virtual charter schools, virtual academies, online schools or cyber schools) have attracted a great deal of attention. Many argue that online curriculum can be tailored to individual students more effectively than curriculum in traditional classrooms, giving it the potential to promote greater student achievement than can be realized in traditional brick-and-mortar schools. These claims are not supported by the research evidence; nonetheless, the promise of lower costs—primarily for instructional personnel and facilities—continues to make virtual schools financially appealing to both policymakers and for-profit providers. This report provides disinterested scholarly analyses of the characteristics and performance of full-time, publicly funded K-12 virtual schools; reviews the relevant available research related to virtual school practices; provides an overview of recent state legislative efforts to craft virtual schools policy; and offers policy recommendations based on the available evidence.

Virtual Schools in the U.S. 2019 is organized into three sections:

- Section I, Full-Time Virtual and Blended Schools: Enrollment, Student Characteristics, and Performance, documents the number of virtual and blended-learning schools, their student characteristics, and their performance.

- Section II, What Virtual and Blended Education Research Reveals, reviews the relevant available research literature.

As reported in previous NEPC virtual schools reports, the number of virtual schools in the U.S. continues to grow.

In 2017-18, 501 full-time virtual schools enrolled 297,712 students, and 300 blended schools enrolled 132,960. Enrollments in virtual schools increased by more than 2,000 students between 2016-17 and 2017-18, and enrollments in blended learning schools increased by over 16,000 during this same time period. Virtual schools enrolled substantially fewer minority students and fewer low-income students compared to national public school enrollment.

Virtual schools operated by for-profit EMOs were more than four times as large as other virtual schools, enrolling an average of 1,345 students. In contrast, those operated by nonprofit EMOs enrolled an average of 344 students, and independent virtual schools (not affiliated with an EMO) enrolled an average of 320 students.

Among virtual schools, far more district-operated schools achieved acceptable state school performance ratings (56.7% acceptable) than charter-operated schools (40.8%). More schools without EMO involvement (i.e., independent) performed well (59.3% acceptable ratings), compared with 50% acceptable ratings for schools operated by nonprofit EMOs, and only 29.8% acceptable ratings for schools operated by for-profit EMOs. The pattern among blended learning schools was similar with highest performance by district schools and lowest performance by the subgroup of schools operated by for-profit EMOs.

**Recommendations Arising from Section 1**

Given the overwhelming evidence of poor performance by full-time virtual and blended learning schools it is recommended that policymakers:

- Slow or stop the growth in the number of virtual and blended schools and the size of their enrollments until the reasons for their relatively poor performance have been identified and addressed.
- Implement measures that require virtual and blended schools to reduce their student-to-teacher ratios.
- Enforce sanctions for virtual and blended schools that perform inadequately.
- Sponsor research on virtual and blended learning “programs” and classroom innovations within traditional public schools and districts.

Section II reviews research relevant to K-12 virtual and blended learning schools. Research describing the experience of students enrolled in virtual or blended learning schools is sparse; therefore, relatively little is known about the instructional models, the nature of the curriculum, and the type and amount of programmatic support provided by these schools. Much of the research that is available is a-theoretical, methodologically questionable, con-
textually limited, and overgeneralized. As a result, despite the growth of virtual schools, the available research is of little value in guiding policy.

**Recommendations Arising from Section II:**

- The growth and geographic reach of full-time, taxpayer-funded virtual schools should be regulated. At present, there are serious questions about the effectiveness of many models of virtual schooling. Until these questions can be adequately addressed, policymakers should limit or consider a moratorium on their growth.

- Given the lack of understanding of what is actually happening in virtual education (e.g., the nature of and amount of teaching in the instructional model, the specific curriculum that is used, the learning that occurs, etc.), policymakers should require that any virtual school operating in their jurisdiction be required to provide the necessary information to examine the effectiveness of the virtual education that is actually being provided.

- State and federal policymakers should create long-term programs to support independent research on and evaluation of virtual schooling, particularly full-time virtual schooling. More than twenty years after the first virtual schools began, there continues to be an inadequate research base of empirical, longitudinal studies to guide the practice and policy of virtual schooling.

In 2017 and 2018 there was a relative decrease in the amount of legislative activity related to virtual schools. As in past years, bills to increase oversight of virtual schools continue to be introduced. There is little evidence, however, that legislative actions are being informed by available research on virtual schools performance.

**Recommendations Arising from Section III:**

Policymakers should:

- Develop new funding formulas based on the actual costs of operating virtual schools.

- Develop new accountability structures for virtual schools, calculate the revenue needed to sustain such structures, and provide adequate support for them.

- Establish geographic boundaries and manageable enrollment zones for virtual schools by implementing state-centered funding and accountability systems.

- Develop guidelines and governance mechanisms to ensure that virtual schools do not prioritize profit over student performance.

- Require high-quality curricula, aligned with applicable state and district standards, and monitor changes to digital content.

- Develop a comprehensive system of formative and summative assessments of student achievement, shifting assessment from a focus on time- and place-related require-
ments to a focus on student mastery of curricular objectives.

- Assess the contributions of various providers to student achievement, and close virtual schools and programs that do not contribute to student growth.

- Define certification training and relevant teacher licensure requirements specific to teaching responsibilities in virtual schools, and require research-based professional development to promote effective online teaching models.

- Address retention issues by developing guidelines for appropriate student-teacher ratios and attending to other working conditions (for example, student attendance) that may affect teachers’ decisions about where to work.

- Work with emerging research to develop valid and comprehensive teacher evaluation rubrics that are specific to online teaching.

- Identify and maintain data on teachers and instructional staff that will allow education leaders and policymakers to monitor staffing patterns and assess the quality and professional development needs of teachers in virtual schools.

- Examine the work and responsibilities of virtual school principals and ensure that those hired for these roles are prepared with the knowledge and skills to be effective, particularly with respect to evaluating teachers and promoting best practices.

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