

A Policymaker's Guide to Virtual Schools

Ben Erwin

Virtual learning has [grown significantly](#) over roughly the last decade and, more recently, was thrust into the spotlight because of the shift to remote instruction caused by the COVID-19 pandemic. In the 2019-20 school year, full-time virtual schools enrolled more than [330,000 students](#), and statewide programs provided over [1 million courses](#), continuing a trend of year-to-year growth. During the 2020-21 pandemic year, full- and part-time virtual enrollment [dramatically increased](#), accounting for nearly 40% of enrollment declines in traditional public schools.

Although [pandemic enrollment levels](#) are unlikely to be sustained with a return to in-person instruction, virtual schooling has emerged as a significant part of the public-school landscape. With the rapid expansion of virtual learning, state policymakers have sought to develop a virtual school policy framework to ensure that students accessing these options have a rigorous, high-quality educational experience. Advocates for virtual schools generally cite schedule flexibility, personalized learning and course access as major benefits of virtual learning options, but mixed research findings raise concerns about student engagement, academic outcomes, and school and resource management.

States are at various stages of virtual school policy development. While there has been a substantial amount of [legislative action](#) over the last five years, some virtual schools are still governed by policies developed for brick-and-mortar schools that are not necessarily conducive to meaningful oversight of a virtual school.



Virtual schools take various forms, including charter schools, single- and multi-district schools and statewide programs.

State policymakers have four key policy levers at their disposal to improve virtual school quality: authorization and school approval, student attendance and engagement, teachers and instruction, and funding.

Virtual school research highlights findings on virtual student outcomes, which emphasize the important role state policymakers have to play in creating a policy framework for quality virtual instruction.

This Policy Guide takes a comprehensive look at virtual schools, including an overview of the various types of virtual schools, research on virtual school outcomes, characteristics of effective virtual instruction, and state policy levers to improve virtual school quality and student outcomes. Despite virtual schools and coursework being inextricably linked to the recent extended interruptions in schooling, this Policy Guide focuses specifically on virtual schools and programs that offer full- or part-time instruction to students — rather than [remote learning](#) that is necessitated by public health crises or [inclement weather](#).

COVID-19 Impact

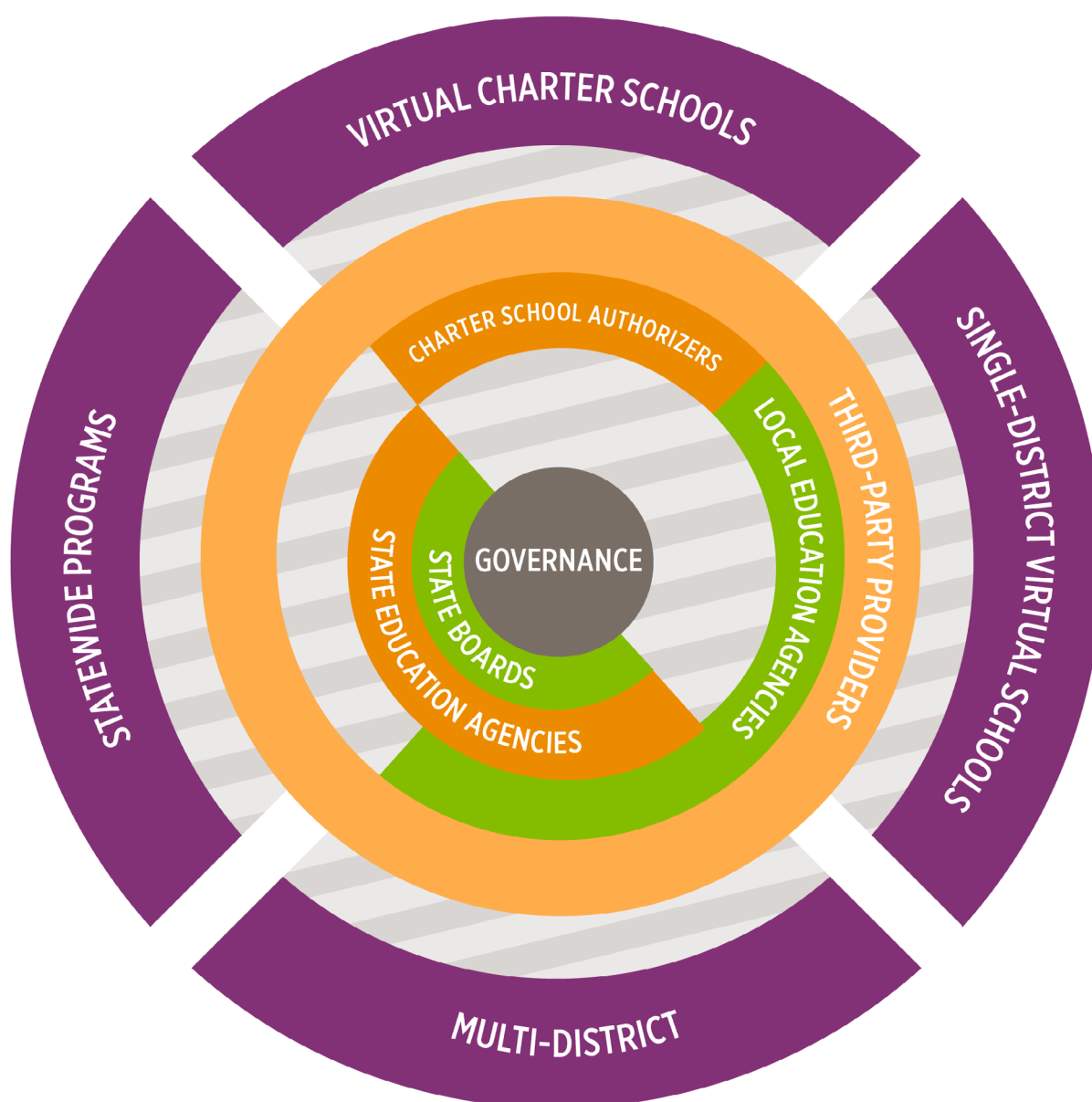
While enrollment data for the 2020-21 and 2021-22 school year is limited, early findings indicate that full-time virtual school enrollment [increased dramatically](#) — at least in some states — during the COVID-19 pandemic. In the 2020-21 school year, **Florida** saw over a [100% increase](#) in full-time enrollment at the Florida Virtual School and a student increase of nearly 19,000 in district-operated virtual programs. Similarly, **Colorado** districts with large online schools experienced [large increases in enrollment](#), and virtual charter schools in **Wisconsin** experienced an [84% enrollment increase](#).

In addition to increased enrollment, district leaders perceive a [high demand](#) for virtual options from families for at least the 2021-22 school year. In response to this demand and the necessity of virtual instruction during the pandemic, states have made significant investments in virtual school infrastructure. **Alaska**, in [partnership](#) with the Florida Virtual School, established the [Alaska Statewide Virtual School](#). Other states continue to expand access to existing infrastructure, including **New Hampshire**, which [allocated funds](#) to its statewide virtual school, and **North Carolina**, which [lifted the cap](#) on virtual charter school enrollment.

Finally, recent investment in district- and school-level virtual learning has opened the door for future establishment of single- and multi-district virtual schools. Both **Indiana** and **Maryland** enacted legislation creating a framework for schools and districts to offer full- and part-time virtual coursework.

School Types

Virtual schools take a variety of forms and operate within a unique policy context in each state. They can be categorized into four main types: charter schools, single-district schools, multi-district schools and state schools. In some cases, states have a combination of these entities in operation. Governance structures vary across the four types of virtual schools, with a variety of agencies and actors responsible for oversight and implementation, depending on state context. The key players in virtual school governance are state education agencies and state boards of education, charter school authorizers, local education agencies and third-party providers.



Virtual Charter Schools

Charter schools constitute nearly half of all full-time virtual schools and have the [largest enrollment share](#). As of January 2020, at least 21 states explicitly permit [virtual charter schools](#) to operate in the state. Like brick-and-mortar charter schools, approved individuals or groups apply with an authorizer to operate a virtual charter school. States that explicitly permit virtual charter schools may have unique application requirements or may limit the authorizing authority to a single entity. Oftentimes, virtual charter schools are operated by third-party entities, such as nonprofit or for-profit management organizations.

West Virginia enacted [legislation](#) during the 2021 session that permits the state's professional charter school board to authorize two statewide virtual charter schools, while each local education agency in the state is allowed to authorize one virtual charter school that serves students within their geographic boundaries. The legislation also established separate provisions for enrollment and instruction in virtual charter schools.

Single- and Multi-District Schools

Some states have developed policies that permit the establishment of single- and multi-district public virtual schools that are not classified as charter schools. While these may be operated by a district or a collection of local education agencies, some states permit LEAs to contract with third-party providers in a manner similar to that of a charter school authorizer. For example, **Virginia** [permits](#) a district or districts to contract with an entity that meets department of education standards to serve as a multi-division online provider.

Under **Tennessee's** [Virtual Public Schools Act](#), districts are charged with establishing and monitoring virtual schools, but they may enter contracts with entities for the operation and management of the school. A number of other states explicitly allow single- and multi-district virtual schools, but districts nationwide have begun autonomously operating similar programs in response to the shift to remote instruction and increased demand for virtual options — often without an explicit state policy allowing or encouraging them to do so.

State-Sponsored Schools

State-sponsored virtual schools represent a third, growing sector in the virtual school landscape. According to the [Digital Learning Collaborative](#), at least 21 states have state virtual schools that either they operate or that they contract with other entities to operate. State-sponsored virtual schools provide both full- and part-time instruction and aim to serve multiple purposes, including providing supplemental coursework, supporting credit recovery and increasing course access.

Florida offers one of the more commonly cited examples of state-sponsored virtual schools. The [Florida Virtual School](#) is run by a governor-appointed [board of trustees](#) with oversight from the state department of education. Students may enroll in the statewide virtual school on a full- or part-time basis. Many states, including **Missouri**, operate [course access programs](#) that authorize course providers — including districts, virtual schools and other entities — to provide approved coursework through a state platform.

Blended Learning

Some states support innovative instructional models beyond virtual schools, such as [blended learning programs](#), that incorporate both in-person and virtual instruction. Blended learning is often viewed as a way to personalize instruction and is sometimes discussed in the context of competency-based education. Blended learning programs are often developed and implemented by local policymakers, but states can create flexibilities in policy to permit these practices and enable innovation.

Some states have established a framework to support and build capacity for blended learning programs. For example, in **Colorado**, a regional board of cooperative educational services developed a [roadmap](#) for the integration and expansion of blended learning in K-12 education. **Ohio** laid out [clear requirements](#) for charter schools wishing to adopt a blended model. Finally, **Texas** [provides](#) grant funding to support the development of blended programs.

States may also create space for blended learning through other flexibilities in policy. Education Commission of the States' [Policy Outline](#) on competency-based education highlights options for state policymakers to create the flexibility needed for its implementation and, in some cases, blended learning programs.

Virtual School Research

Given that virtual schools are relatively new, research is limited. Existing research has mostly focused on virtual charter schools, which account for the largest enrollment share of full-time online students. Studies of virtual charter schools have found that students experience [weaker academic growth](#) and [regression in academic measures](#), [increased mobility](#), and [lower graduation rates](#), when controlling for other factors that influence student success. These findings led the [Center for Reinventing Public Education](#) and the [National Charter School Research Center](#) to develop frameworks for virtual charter school governance that have informed policy in recent years.

A comprehensive [study](#) conducted by Mathematica Policy Research revealed aspects of the operations and instruction of virtual charter schools that may inhibit positive student outcomes. Notably, the report identified a few common deficiencies in virtual charter school instruction, including:

- Instruction defined by independent study and asynchronous instruction.
- Limited student engagement.
- Limited teacher contact time.
- High student-teacher ratios.
- Reliance on family support.

These conditions, combined with lax oversight, have created situations where some students [fade in and out](#) of participation in coursework, and others [never engage at all](#).

Beyond virtual charter schools, state-specific studies into other virtual school types find a wide degree of variation in school quality and performance. In **Michigan**, [school performance varies](#) across district-operated schools (almost 60% pass rates) and virtual charters (below 40%). The researchers also disaggregated the data by full- and part-time students, finding that full-time students pass at significantly lower rates (40%). This data highlights the difficulties and complexities of generalizing about outcomes in virtual schools.

A [study](#) of the Florida Virtual School also reported mixed findings. Researchers found that both students taking virtual courses for first-time credit and credit recovery had positive course outcomes. However, first-time course takers were less likely to take and pass additional courses and be considered graduation ready. Students enrolled in credit recovery courses, on the other hand, were more likely to take additional coursework and progress toward graduation.

Despite a limited research base, some of the available evidence points to promising practices that help to inform potential state policy levers. For instance, the Annenberg Institute released a [research brief](#) that points to key elements of effective virtual instruction, including:

- Technology and internet access.
- Differentiated instruction.
- Student-teacher contact time.
- Teacher professional development and planning time.
- Peer-to-peer engagement opportunities.

A [national survey](#) of virtual school teachers affirmed some of these findings. When asked to identify effective strategies for instruction and student engagement, they emphasized the importance of providing content in multiple formats, connecting individually with students through conferencing, making themselves available through “office hours,” and providing timely and constructive feedback on student work. Similarly, an [evaluation](#) of a virtual summer school program emphasized the importance of professional development, adaptable and high-quality curriculum materials, and synchronous instruction to quality virtual schooling.

While these studies are often limited in scope, the highlighted findings have the potential to inform state policy levers for improving virtual instruction delivery and outcomes.

Inequities in Virtual Learning

[Nationally](#), virtual schools enroll fewer students from low-income backgrounds and fewer students of color. **Michigan** found [similar trends](#). Researchers emphasized that high-performing virtual schools (80% or greater pass rates) served students of color and students from low-income backgrounds well. Unfortunately, high-performing schools were much less likely to enroll these students, leading to persistent opportunity gaps for students of color and students from low-income backgrounds.

The pandemic shined a light on the [digital divides](#) experienced by students from low-income backgrounds and students of color, in addition to disparities in the [quality of instruction](#). As state policymakers craft virtual school or virtual course policies, prioritizing equity will require a two-pronged approach: a focus on technology and broadband availability, which are vital to student access to virtual opportunities; and a focus on school quality, which is paramount for students to benefit from virtual learning.

State Policy Levers

Research into virtual schools, and recent state policy movement, highlights the [various levers](#) state leaders have at their disposal to monitor and improve virtual school quality, regardless of school type. Policymakers have made a concerted effort to use these levers to adapt brick-and-mortar policies to better govern virtual schools and serve virtual students. State policymakers have largely focused on four areas:

- Authorization and approval.
- Student attendance and engagement.
- Teachers and instruction.
- Funding.



Authorization and Approval

Some states have adopted approval standards for virtual schools and course providers that are similar to charter school authorization requirements. Authorization (or school/course approval) is a primary accountability and oversight mechanism that can be used to ensure a minimum standard for school quality. Some states have implemented authorization or approval requirements unique to virtual schools, while other states — [Nevada](#) and [Oklahoma](#) — have taken the approach of centralizing multi-district virtual school authorization with one entity.

In 2021, **Maryland** moved to establish a policy framework for virtual public schools established by either local boards of education or the state education agency. The [legislation](#) requires virtual schools to use state board-approved curriculum, establish provisions for student progression through mastery, administer assessments and comply with the National Standards for Quality Online Education Programs. The standards provide a strong model for school management, curriculum and instruction, student and family engagement, and program evaluation.

Similarly, **Massachusetts** [tasks](#) the board of elementary and secondary education with authorizing commonwealth virtual schools. Virtual schools must include a variety of terms and conditions in their application for authorization, including engagement policies, expectations for student-teacher interactions and other provisions specific to a virtual environment. The state education agency publishes annual [accountability reports](#) that include an evaluation of the school's compliance with statute and its application for authorization.

Louisiana continues to monitor the performance of course providers following their initial authorization. During a course provider's second year of operation, the state board is [required](#) to conduct a thorough review of the provider's instructional activities and student academic performance. The state board is also granted the authority to place the provider on probation in the event of poor performance.



Student Attendance and Engagement

Research indicates that student and family engagement is a significant factor in virtual instruction. State policymakers have approached the issue in a variety of ways, including developing flexible definitions of attendance, establishing progress monitoring provisions and setting family engagement requirements.

Effective virtual instruction is not necessarily measured by the amount of time a student is logged onto an online platform. In recognition of this, and in an effort to better evaluate virtual school performance, some states have created flexibilities in attendance requirements. For example, **Nevada** [permits](#) virtual schools to consider each student's progress in completing tasks, lessons and units during a specific time period when making attendance calculations. **Oklahoma** [requires](#) students to complete 72 instructional activities per academic quarter and complete instructional activities on 90% of school days within the quarter. Instructional activities can include meeting with a teacher, assignments that are factored into a student's grade, testing, field trips and orientation.

Some states have used these attendance definitions to track student progress and provide for disenrollment from a virtual school if students are not engaging in instructional activities. For example, **Ohio** and **Oklahoma** [set a limit](#) on how much instruction may be missed before a student is disenrolled and their home school district is notified. **Missouri** [requires](#) students enrolled in two or more virtual courses to have an individual learning plan developed by a certified teacher. Additionally, the state education agency is tasked with monitoring student progress and reporting it to the sending district. If a student is not making satisfactory progress, the school may reduce the course load or disenroll a student.

Finally, research highlights the significant role of parents in ensuring student success in a virtual setting. Several states have made family engagement a key component of their virtual school policies. **Indiana** [directs](#) all virtual schools to

establish an onboarding process and orientation that all students and families must complete before enrolling and annually thereafter. **Utah** also sought to ensure parents were more informed. Recent [legislation](#) requires parents to be provided with access to the online course management system, course curriculum and student progress reports. Parents and students must also be trained on using the management system and other necessary online tools. These student engagement provisions can help to ensure that students are connected and aware of the expectations of the virtual classroom, but quality instruction remains an imperative.



Teachers and Instruction

Quality instruction is an imperative for all effective schooling. The unexpected shift to remote instruction, brought on by the pandemic, emphasized the fact that virtual instruction requires an entirely different pedagogical approach. **Arizona** used federal funding to provide [training and support](#) for virtual instruction, while other states implemented new teacher training and certification requirements specific to using digital resources. States have sought to improve instructional quality through licensure requirements, professional development and student-teacher contact time requirements.

While many virtual schools may already be governed by state teacher licensure requirements, both [Massachusetts](#) and [Wisconsin](#) explicitly require virtual school teachers to be certified in the subject and grade level they are teaching. Although certification can serve as an important quality control measure, professional development is vital. A [national survey](#) of virtual teachers emphasized the importance of professional development and administrative support in providing quality instruction and in supporting continuous improvement. **Idaho** has leveraged school approval to [require](#) virtual schools to include role-specific duties and professional development plans in their application for authorization.

States have prioritized student-teacher contact time to ensure students are receiving the support they need. [Indiana](#) and [Utah](#) require reporting of student-teacher ratios, which is important data for understanding the workload of individual teachers and their ability to interact with students. The Utah State Board of Education publishes an [annual report](#) on providers that includes this ratio in addition to other school performance metrics. Other states have set minimum standards for interaction. **Oregon** [requires](#) virtual schools to develop and implement

plans to enable twice-weekly meetings between students and teachers, and **South Carolina** [requires](#) at least 25% of instruction in a virtual school to be synchronous.



Funding

Although many states fund virtual schools at the same or a diminished per-pupil rate as brick-and-mortar schools, some policymakers have sought to use funding to drive positive student outcomes. Performance-based funding has emerged as an increasingly popular policy option for virtual schools, with some states establishing a fully performance- or completion-based system and others adopting aspects of performance-based funding. In these cases, funding is used to address quality as an accountability mechanism.

The **New Hampshire** Virtual Learning Academy [Charter School](#) is an oft-cited example of a competency-based funding model. Funding is [distributed to](#) VLACS based on the number of [enrolled](#) students and equivalent students (students who have completed a minimum number of courses). The school is authorized by the state board of education and funding is based on the [completion of course competencies](#), which is outlined in their [charter contract](#). Similarly, **Florida**, **Idaho** and **Minnesota** fund students upon successful course completion.

States have also used alternative funding schedules for virtual schools. In **Missouri**, progress monitoring is paired with a [monthly payment schedule](#) based on student progress and assignment completion. **Utah** [funds incrementally](#) as well. Online learning providers receive payment based on course progress and completion. For a full-credit online course, the provider receives 25% of the online course fee after the withdrawal period, 25% of the course fee upon completion of the first half of the course and the remaining 50% of the online course fee if the full course is completed within 12 months. To encourage continued engagement of a student who does not complete a course within 12 months, online learning providers receive 30% of the course fee if the student completes the course before graduation.

Final Thoughts

A substantial recent investment in virtual learning infrastructure, coupled with increased demand for full- and part-time virtual options, provides state education policymakers with a unique opportunity to craft a policy framework specific to virtual schools. State policymakers can use policy levers such as authorization

and approval, attendance and engagement, teachers and instruction, and school funding to prioritize accountability and program quality across the various virtual school types operating in states. Schedule flexibility, personalized instruction, credit recovery, course access and unique student needs make virtual learning an appealing option. Findings on the effectiveness of virtual learning, however, emphasize the important role state policymakers may play in ensuring all students have access to a quality education, regardless of the setting.

The policy options enumerated in this guide do not represent an exhaustive list but a starting point for state education leaders. Policymakers can [reach out](#) to Education Commission of the States with specific questions or requests.

About the Author

Ben Erwin



As a policy analyst, Ben works on tracking legislation, answering information requests and contributing to other policy team projects. Prior to joining Education Commission of the States, he taught high school social studies in Kentucky and worked in education policy at the National Conference of State Legislatures.

He earned a master's degree in education policy from the University of Colorado Boulder and a bachelor's degree in history and education from Transylvania University. Contact Ben at berwin@ecs.org.

