SNAPSHOT 2024

The post-pandemic digital learning landscape emerges

JANUARY 2024

digital learning COLLABORATIVE

Snapshot 2024: The post-pandemic digital learning landscape emerges

In 2023, the landscape of K-12 digital learning was more dynamic than ever. This Snapshot captures that dynamism, reflecting on a year of innovation. Amidst this backdrop, the Digital Learning Collaborative (DLC) proudly presents its fourth annual report, ***Digital Learning Snapshot, the post-pandemic digital learning landscape emerges***.

Our diverse DLC membership includes individuals, schools, districts, regional and state agencies, non-profit organizations, and companies. Each member plays a vital role in the continuous evolution of digital learning and the development of this report.

This report is named ”Snapshot” for its dual purpose: to provide a concise yet comprehensive overview of current K-12 digital learning activities in the United States, with a focus on public schools, and to offer a glimpse into the extensive resources available on the DLC website. This report mixes new findings with summaries of more detailed reports online, heavily drawing from our Executive and DLAC Program Committee discussions, state profiles, the DLC blog, DLAC sessions, and our first annual survey of trends in online and hybrid learning.

Your feedback and participation are crucial in driving our mission forward. For further engagement, thoughts, or queries, please email us at dlc@evergreenedgroup.com.

About the cover

This year’s cover image was generated by GPT-4 (driven by OpenAI’s DALL-E 3) using the following prompt: “Create an abstract collage, emphasizing the themes of online learning, AI, teacher shortages, and funding challenges in education, with a palette of bright, vivid colors. The collage should incorporate symbolic imagery such as digital elements for AI and online learning, sparse classroom settings for teacher shortages, and financial symbols for funding issues. The use of bright colors should enhance the visual impact of the collage, making it more vibrant and lively while maintaining the abstract style and thematic representations.”

Please note that the image went through nine rounds of prompt and response and refinement. We (Paraphrase Communications) then did a touch with Photoshop to eliminate unnecessary elements.

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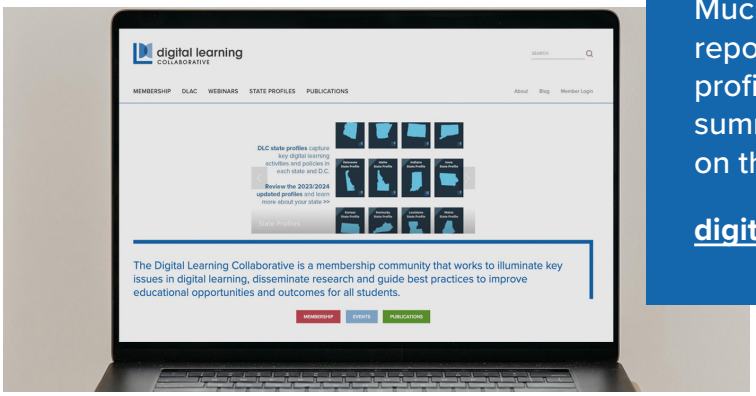


Much of the information in this report is based on our state profiles, blog, and executive summaries of full reports available on the DLC website.

digitallearningcollab.com

Introduction

When COVID-19 hit and the pandemic shut down most schools, some for many months, a common view was, “This changes everything.” In the moment, the expectation that school would never be quite the same was more common than the sense that the post-pandemic landscape would look more or less like the pre-pandemic. With the shift to emergency remote learning at the time, the prospect that digital learning would take on a far greater role, post-pandemic, was especially common in the digital learning field.

Halfway through the 2023-2024 school year, and with the effects of the pandemic fading (notwithstanding ongoing measures of pandemic impacts on academic outcomes), it is becoming clear that the pandemic did not change everything. It is clear that the pandemic greatly increased digital learning activity temporarily—even beyond emergency remote learning. It is also clear that only some of that increase has been sustained. Although the data is not yet fully clear, our current best guess is that relative to digital learning, the pandemic caused a one-time increase in enrollments and activity but did not significantly change the trajectory of adoption of online and hybrid learning.

The first caveat: Data collection is a challenge

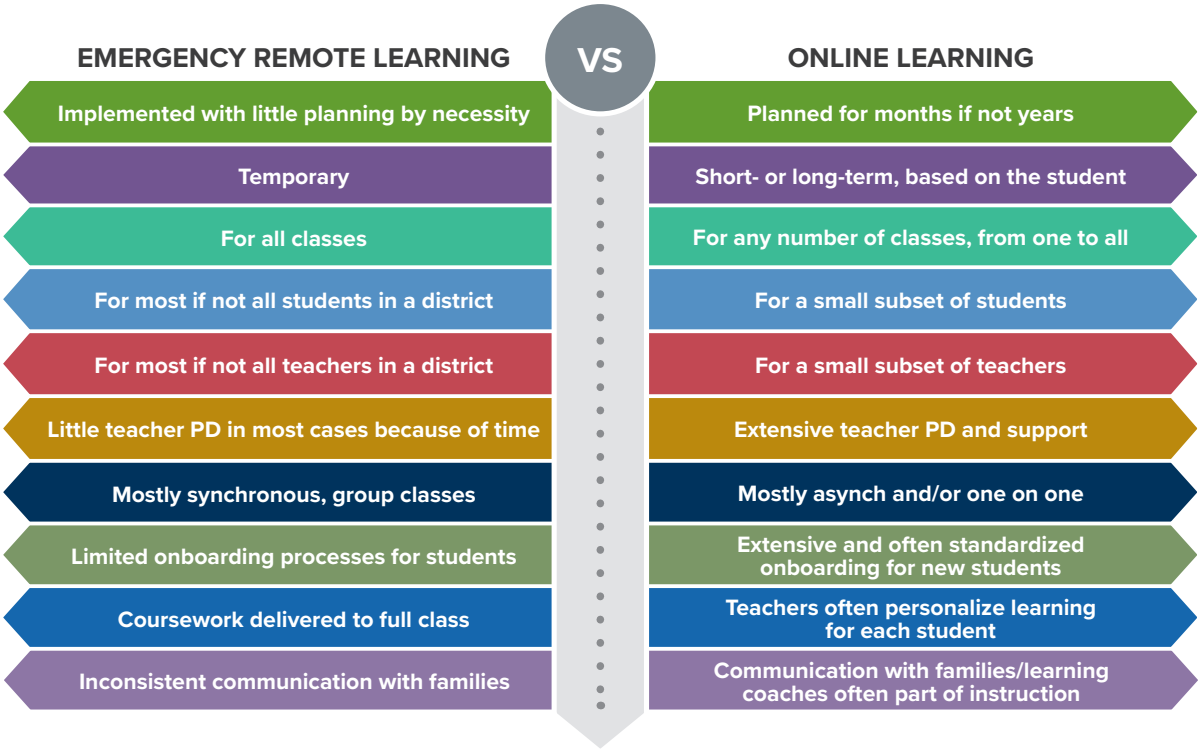
K-12 digital learning as we define it (mostly online and hybrid schools and courses, as explained in our Key Terms section) is notoriously hard to quantify. Unlike in post-secondary, where IPEDS tracks distance learning, there is no single source of K-12 online or hybrid enrollment data gathered relatively quickly. This leaves researchers to rely on state and district data. State data vary in definitions and data quality, from some states which have extensive data available (e.g. Michigan and Washington), to others which have minimal data gathering and aren’t interested in sharing what little information they may have, likely due to the increasing politicization of education. District data is also varied and is challenging simply because there are more than 10,000 districts in the U.S. Add to these challenges the prevalence of digital learning in charter schools, intermediate units, private programs, and state agencies — all of which report data through different channels, if at all — and the challenge becomes clearer.

Additionally, in a field that covers more than 50 million students, 3 million teachers, 100,000 schools, and other large data sets, anyone seeking to make an argument via anecdote, instead of shedding light, can do so fairly easily. Opinions on microschools, Educational Savings Accounts (ESAs), and new technologies are easily bolstered by cherry-picked data that can sound plausible enough to the observer who is not deeply versed in the details of education.

Contrasting emergency remote learning and online learning

When physical schools closed and instruction shifted from brick-and-mortar classrooms to teaching primarily via live video, many observers said that these schools were now online.

But emergency remote learning looked very different from the instruction that experienced online educators had developed over decades.



The second caveat: Emergency remote learning was not online learning

We have been saying this since March 2020, and in fact we first published the figure above in 2021. And we still see confusion in both education-focused and mainstream publications, and among policymakers, so the statement is worth repeating: **Emergency remote learning is not and was not online learning** — for all the reasons shown above, and more.

Remote learning was implemented with little planning by necessity; digital learning is well-planned. As noted above, emergency remote learning was implemented extremely quickly, with little time for planning. Online and hybrid programs, in contrast, are often planned for six to nine months before being launched or significantly expanded. Training teachers, students, and families to teach, learn, and support students learning online takes considerable time, as does selecting or developing content, choosing technology platforms, determining instructional models, and so forth.

Remote learning was required for all classes, all students, and all teachers; digital learning is intended for a subset of each. In almost all digital learning programs other than pandemic-era remote learning, students, families, school leaders, and teachers are opting in, which means that

all parties have shown an interest in trying something new. This contributes to an experimental, expansive outlook on what can be accomplished with new technologies, new roles for teachers and staff, and new uses of time and space.

Remote learning too often consisted of coursework delivered to the full class; digital learning teachers often personalize learning for each student. As schools and teachers scrambled to provide remote learning, many focused on getting the content out, resulting in classes that were even more teacher-driven and students complaining of being online for four or five hours at a time. Through the planning described above, online learning programs offer students comprehensive on-demand learning resources, freeing teachers to work with them to make necessary adjustments.

Where are we now?

In this context, the Snapshot delves into the key trends that have shaped K-12 digital learning over the past year. It provides insights into the challenges and opportunities presented by these trends and offers a forward-looking perspective on how they might continue to influence the educational landscape in 2024.

But with those caveats and a healthy skepticism about how robust our own data are, we do believe that the post-pandemic landscape is becoming clear. Several key points stand out:

- As mentioned above, there has been an increase in digital learning activity, but not a significant change in the trajectory of adoption.
- There is a continued digital divide between states that are allowing and/or supporting digital learning, and those that are not.
- Considerable policy energy exists around Educational Savings Accounts in red states.
- The building wave of AI in education could force changes in the coming years (3-5-year time frame) that will dwarf changes from the pandemic.

Increased digital learning activity, but not a trajectory change

The pages that follow look at enrollments in full-time online schools primarily, because this is the data set that is available. The data shows the large increase in online school enrollments, and then as the pandemic faded, those enrollment numbers settling back down, although to a higher level than pre-pandemic in many cases.

The pattern in these numbers is not consistent between states and major online schools and providers. Some show a large increase since pre-pandemic years. Others show little increase. Only by looking at numbers from all states, and maybe squinting a bit, do we see the pattern taking shape.

Digital policy divides

Before the pandemic, most states allowed online schools, but often with lower funding levels or other restrictions that limited the growth of both online and hybrid schools. In 2024, a few more states are allowing such innovative schools, and a few restrictions have been lifted, but overall, the pace of changes in policy to allow expansion of digital learning has not been much different than pre-pandemic. A considerable number of states still don't allow online schools at all or put in place restrictions that continue to slow their growth.

Education Savings Accounts (ESAs), microschools, and related policies

Policy energy and activity in 2023 was focused mostly on Education Savings Accounts (ESAs), with considerable attention to microschools and other niche areas. ESAs are not directly linked to digital learning, but there is significant overlap between the two. Overlap also exists between digital learning and career education, workforce development, dual enrollment/dual credit programs, and other areas. Even as policies to allow more online school and course options for students are growing slowly, these other topics may spur the growth of online and hybrid learning as tools to accomplish other objectives.

AI in education

Is generative AI the next over-hyped technology that will fail to meet expectations for transformation, or might it be the first technology that truly has a transformative impact?

It is too early to tell. But there are reasons to believe that AI may be different from the technologies that have promised and failed to deliver educational transformation.

Key terms

This section describes several key terms used by the Digital Learning Collaborative (DLC). We purposely call these key terms descriptions and characterizations instead of definitions, because the focus should be on the value and effectiveness of instructional practices, not on whether a certain practice fits a specific definition. Find a full listing on our website and our affiliate Virtual Learning Leadership Alliance's (VLLA) Key Online Learning Terms and Definitions.

Multi-district fully online schools (a.k.a., virtual charter schools, cyber schools). Diploma granting institutions that enroll students on a full-time basis. Teachers and students are geographically remote from one another, and instruction is provided online through a combination of asynchronous and synchronous learning. Multi-district online schools do not usually have a physical facility, although some have small campuses or buildings for some learning and socialization activities. These schools are responsible for providing most if not all of the services of a physical school; special education, administering and reporting state assessments, counseling, state and federal reporting data, etc. Multi-district full-time schools may or may not be charter schools.

State virtual schools. State virtual schools, also known as state virtual programs, deliver online courses, instruction, technology infrastructure, professional development, and other online learning services to schools and districts across their states. They are created by legislation or by state-level agencies, receive state appropriation, grant funding, and/or assess fees to meet operational costs. State virtual schools may be administered by the state agency, be a nonprofit organization, or an organization contracted by the state to operate the online program. In most cases, state virtual schools offer supplemental online programs, although a few do offer full-time options for students. State virtual programs are not diploma granting institutions.

Four main reasons are:

1.) Some previous technologies that were supposed to transform education have had limited impact across society. Think of virtual reality and augmented reality, for example, which were supposed to have major societal impacts in addition to changing education. Instead, so far VR and AR have settled into a niche role across society, with barely a ripple in education. In contrast, generative AI is already producing measurable changes in the economy and society.

2.) Generative AI tools to date have demonstrated tremendous flexibility in the range of tasks they can perform, from automatically generating instructional content and student assessments, to adapting and personalizing resources, transforming materials to improve accessibility, and providing feedback and even formal assessment scores to student work. If these capabilities continue to improve, such general purpose tools and capabilities could transform the educational resources and technology marketplace, for example, by replacing highly targeted science lab simulators and language remediation software with general-purpose tools.

Key terms (cont'd.)

Blended learning. Blended learning is a formal education program where the students learn in part through online learning, with some element of student control over time, place, path, and/or pace. For our purposes, blended learning includes asynchronous elements, but requires in-person attendance on a daily basis to receive instruction at a local school or facility.

Hybrid learning. Hybrid learning combines online instruction with face-to-face interaction in a physical location. A hybrid school combines online and face-to-face instruction and meeting the following characteristics:

- The school enrolls students, receives FTE funding (ADA/ADM/PPOR etc.), and is listed as a school by NCES.
- The school has a physical location which students regularly attend for instructional purposes at least occasionally. The large majority of students must take part in learning activities at the physical location.
- Students are not required to attend the physical campus on a schedule that approaches a regular school schedule.

3.) Generative AI may be poised to support the educators and advocates who are pushing for the types of policy changes, such as ESAs, that could spur digital learning adoption. Both the digital tools required to use generative AI and the opportunities it provides for personalization and flexibility reinforce the reasons for broadening the scope of digital learning in K-12 education.

4.) The facility of generative AI tools with language, information, and dialogue makes it possible for them to engage with students in ways that can be difficult to distinguish from human interaction. Widespread experiments with AI bots providing tutoring and other support services have not yet generated robust enough research findings for us to be sure, but they may enable more self-directed learning for a larger percentage of the student population, which could accelerate the evolution and differentiation of teacher and other instructional support roles in schools.

Through this report, we aim to equip educators, policymakers, and stakeholders with the knowledge and foresight needed to navigate the dynamic world of digital learning. Our goal is to support an education system that not only adapts to the challenges of the present but also anticipates and prepares for the demands of the future.

Now, let us explore the key models of digital learning, policy updates, and significant trends in online and hybrid learning in K-12 education.

The digital learning landscape

After a year of post-pandemic retrenchment, the K-12 digital learning landscape has resumed growth, with a rapidly evolving array of programs sprouting across the country. This year's report cuts through the noise, providing a detailed view of the various types of digital learning programs available to students and families.

Digital learning in school districts

The education landscape is shifting, with online learning opportunities continuing to take root in districts across the country. From large district programs like the Nevada Learning Academy at Clark County School District in Las Vegas, Nevada and Cobb Virtual Academy, in Atlanta, Georgia to remote rural communities offering online learning opportunities through their state virtual schools like the Idaho Digital Learning Alliance and the Ed Ready program in Montana, students are increasingly accessing online courses beyond the walls and bell schedules of their neighborhood schools. This trend holds immense promise, providing flexibility, customization, and access to specialized instruction previously unavailable to many. Yet, amidst this surge, a critical challenge emerges: tracking these invisible students and enrollments.

The current system falls short as many district online programs lack official enrollment reporting requirements, making it difficult to quantify the actual number of participating students. Unlike traditional brick-and-mortar schools, online district programs operate under different reporting mandates as they tend to be non-diploma granting programs within a district rather than an individual school. Students remain affiliated to and counted as enrolled in their neighborhood schools, and there is no reporting as to whether a student took their course online or in-person on a transcript. This lack of transparency creates a major blind spot, hindering our grasp of online learning's true reach and impact.

The absence of robust data on online learning has had far-reaching consequences, limiting understanding of this space. Without accurate enrollment figures, we can't assess the full reach and impact of online programs, potentially overlooking disparities in access and engagement across different demographics and regions. Evaluating the effectiveness of online learning also

becomes a guessing game when student outcomes are obscured by incomplete data. Next, without a clear picture of online learning needs, districts often struggle to allocate resources effectively, potentially under-serving students who rely on these programs. Finally, if marginalized communities are underrepresented in online enrollment data, we risk perpetuating existing educational disparities.

To illuminate the trajectory of online learning, we need a more comprehensive approach to data collection:

- Implementing standardized reporting protocols for online programs, regardless of their affiliation with traditional schools, is crucial for capturing a complete picture.
- Investing in data infrastructure capable of tracking diverse learning pathways, including hybrid models and online-only courses, is essential for accurate representation.
- Sharing best practices for tracking online enrollment and outcomes across all types of districts can foster a collaborative approach to data collection and analysis.

A call to action

We invite you, our valued readers, to be active participants in this critical conversation. Share your experiences and insights:

- How is online learning participation in your district currently being tracked?
- What specific challenges do you face in collecting and analyzing this data?
- What innovative solutions can we explore to better understand the evolving landscape of online education?

By working together, we can illuminate the path forward for online learning, ensuring that every student, regardless of location or traditional school affiliation, has the opportunity to thrive in this dynamic educational landscape. **Please email us with your ideas and feedback at dlc@evergreenedgroup.com.**

State virtual schools

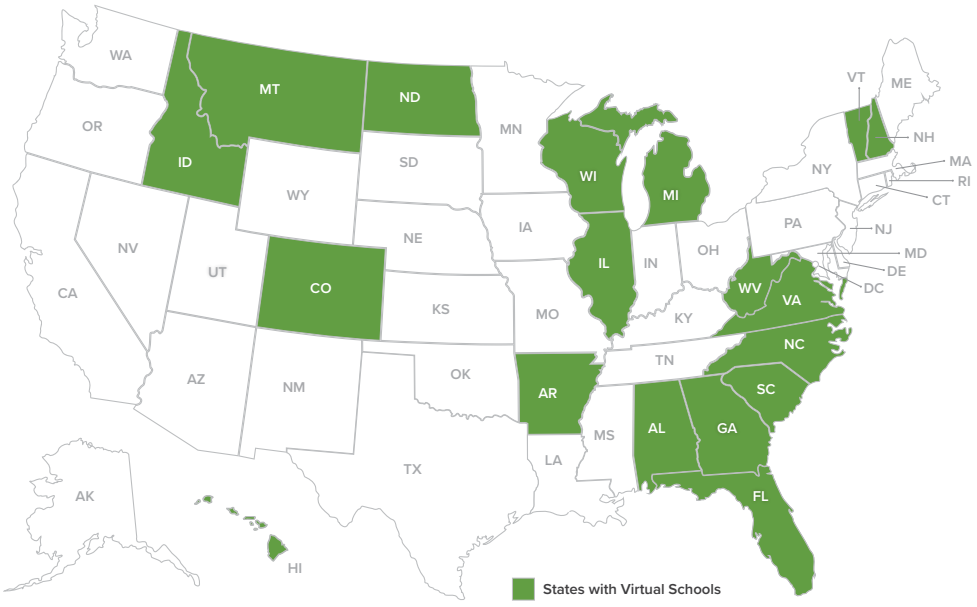
The data for this section were provided by The Virtual Learning Leadership Alliance (VLLA), a 501c3 educational nonprofit organization consisting of leaders from innovative online learning programs in the US.

State Virtual Schools (SVS), operating in 18 states, are integral to the online learning community. In SY 2022-2023, SVS contributed over one million supplemental online course enrollments. They are typically the largest and most recognized providers of online courses, instruction, technology infrastructure and additional online learning services to support schools and districts/divisions within their operational states. These entities, formed through state legislation or by state-level agencies, receive funding primarily from state appropriations, course fees, and grants.

Differing from traditional schools as categorized by the National Center for Education Statistics, SVS do not issue diplomas nor engage in school functions like state assessments or federal reporting. With a median operational history of 18 years, these SVS have been integral in offering high-quality programming and support, particularly during COVID. Their main function is to enhance learning opportunities at the local school level, offering courses unavailable to a student at their home school (Georgia Virtual School and Idaho Digital Learning Alliance), aiding schools dealing with teacher shortages, assisting with local online program development (Virtual Virginia), and in many cases, fulfilling professional development needs (North Carolina Virtual Public School).

Enrollment in SVS courses generally requires district approval, except in states with specific course access policies. SVS complement, rather than replace, traditional schooling, providing students with a broad array of course options that meet their individual learning preferences, needs, and interests.

States with state virtual schools in SY 2022-23.



Program Name	Year started	Grades served	SY 2022-23 semester course enrollments w/ SVS instructors	Number of partner schools	Franchise Model** offered (Y/N); and # schools participating	Professional Learning Service offered (Y/N); and # enrollments
ACCESS Virtual Learning (AL)	2006	6-12	72,902	394	Yes; number unavailable	No
Virtual Arkansas	2013	7-12	39,977	319	Yes; 137	No
Colorado Digital Learning Solutions	2015	K-12	9,461	178 districts	Yes; 12 schools	No
Florida Virtual School	1997	K-12	524,820	number unavailable	Yes; 133,695 course completions	Yes
Georgia Virtual School	2005	6-12	65,191	number unavailable	Yes; number unavailable	Yes; 20,000*
Hawaii	2007	7-12	1,815* supplemental course enrollments	number unavailable	Yes; number unavailable	Yes
Idaho Digital Learning	2002	K-12	44,342	409	No	Yes; number unavailable
Illinois Virtual Schools & Academy	2022	5-12	3,454	number unavailable	No	No
Michigan Virtual	1999	6-12	32,889	491	Yes; 23 schools	Yes; 255,000
Montana Digital Academy	2010	5-12	7,184	194	Yes; 1 school	No
Virtual Learning Academy Charter School (NH)	2008	K-12	27,646	number unavailable	number unavailable	Yes
North Carolina Virtual Public High Schools (NCVPS)	2007	6-12	105,640	1,069	Yes; number unavailable	Yes; 12,281
North Dakota Center for Distance Education	1935	K-12	7,421	400	No	No
VirtualSC	2006	6-12	103,770	320	Yes; 127 schools	Yes; 9,646
Vermont Virtual Learning Cooperative (VTVLC)	2009	6-12	2,377	113	Yes; 5 schools	Yes
Virtual Virginia	1984	K-12	61,520	760	Yes; number unavailable	Yes; 17,000
West Virginia Virtual School	2000	3-12	8,114*	number unavailable	number unavailable	number unavailable
Wisconsin Virtual School	2000	6-12	12,857	300	Yes; 8 schools	Yes; 141

State virtual school summary table. Enrollment numbers are for 2022-23.

*SY 2021-2022 data. SY 2022-23 data will be updated when available.

**Franchise Model: the chart above details semester course enrollments taught by SVS instructors. The majority of SVS offer numerous online learning opportunities, resulting in increased student enrollments and an enhanced educational impact.

Examples include:

- Virtual Arkansas also offers districts a Content Partnership option, often referred to as a franchise model, where Virtual Arkansas provides the course and technology infrastructure, and the local district provides their own teachers. Virtual Arkansas served 7,501 student enrollments in the program during SY 2022-23 in addition to serving 34,000 supplemental course enrollments. The Virtual Arkansas Career Technical Education Campus provides a career focused curriculum addressing both national and state standards including 29 CTE courses in various career areas.
- Michigan Virtual (MV) supported 35,272 student enrollments: 32,889 MV teacher-led, Advanced Placement®, and Essentials enrollments; 1,155 student enrollments in EdReady; and another 1,077 students in its Collaborative online course program (franchise model) taught by local district teachers. Michigan Virtual had 68 students in its NetAcademy, advanced online courses that prepare high school students to earn career certifications in cybersecurity, networking, and Linux operating systems. It has a dual credit program through St. Clair Community College and provides significant professional learning to educators across the state. Michigan Virtual delivered over 133,000 course enrollments to more than 48,000 learners across nearly 300 courses through its professional learning portal in SY 2021-22.
- The VirtualSC franchise program served 15,617 course enrollments during the SY 2022-23 in addition to the 58,573 course enrollments. VirtualSC offers a blended learning Virtual Learning Lab program to provide an interactive online learning solution for schools that may have limited abilities to offer courses due to staffing issues.
- In addition to serving 2,947 unique students in 5,717 course enrollments in SY 2022-23, Montana Digital Academy supports EdReady Montana that provides a personalized learning tool designed to assist K-12 students, college, adult, and incarcerated learners in identifying and overcoming their challenges in mathematics (grades 5 to adult and higher ed) and English (grades 9 to adult and higher ed).

Despite their varied organizational and governance structures, most SVS share common characteristics. They provide teacher-led online courses, employ administrative staff, manage enrollments, train educators, and maintain the technology for course delivery and support. Course content may be locally developed, licensed from vendors, sourced from open educational resources, or a mix of these.

The growing interest in online learning post-COVID has led to new initiatives such as expanded elementary and middle school programs, adding synchronous elements to asynchronous courses, offering tutoring, and assisting districts in developing their own online programs.

Although not considered state virtual schools per the definition above, there are several statewide consortia and regional education agencies that function much like state virtual schools. Three examples include:

- The Launch Virtual Learning consortium, a program of Springfield Public Schools, served 26,252 Missouri students across 93,745 course enrollments in SY 2022-23 with over 380 district members out of 564 districts in the state.
- Indiana Online (IO), a program of the Central Indiana Educational Service Center, functions much like a state virtual school, serving 20,510 students with 33,326 course enrollments in 288 schools during the 2022-23 SY.
- The Capital Area Online Learning Association (CAOLA), supported by the Capital Area Intermediate Unit, is the largest online learning consortium in Pennsylvania. It served 17,053 students and 103,835 course enrollments across 11 Intermediate Units and 137 school and district programs during the 2022-23 SY.

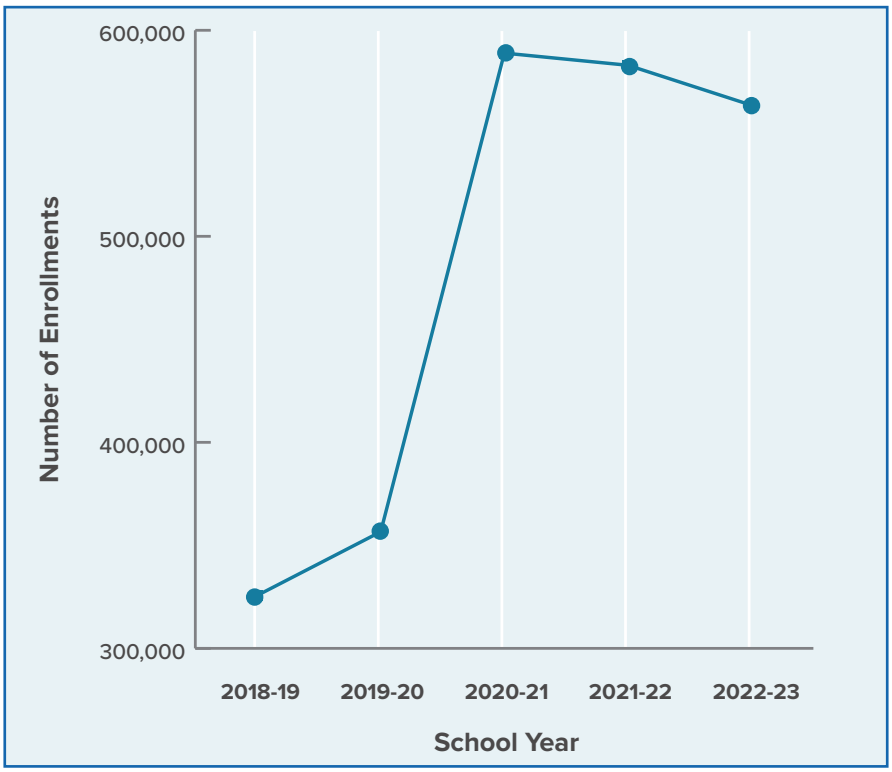
Full-time online schools

Full-time online schools have been an integral part of K-12 education in the US for over two decades. These schools, which often operate as charter schools or district-authorized entities, provide students with instruction entirely online. Characterized by asynchronous learning complemented with real-time lessons, these schools receive funding similar to traditional schools based on full-time enrollment (FTE) metrics and are reported by states as full-time online schools to the National Center for Education Statistics (NCES).

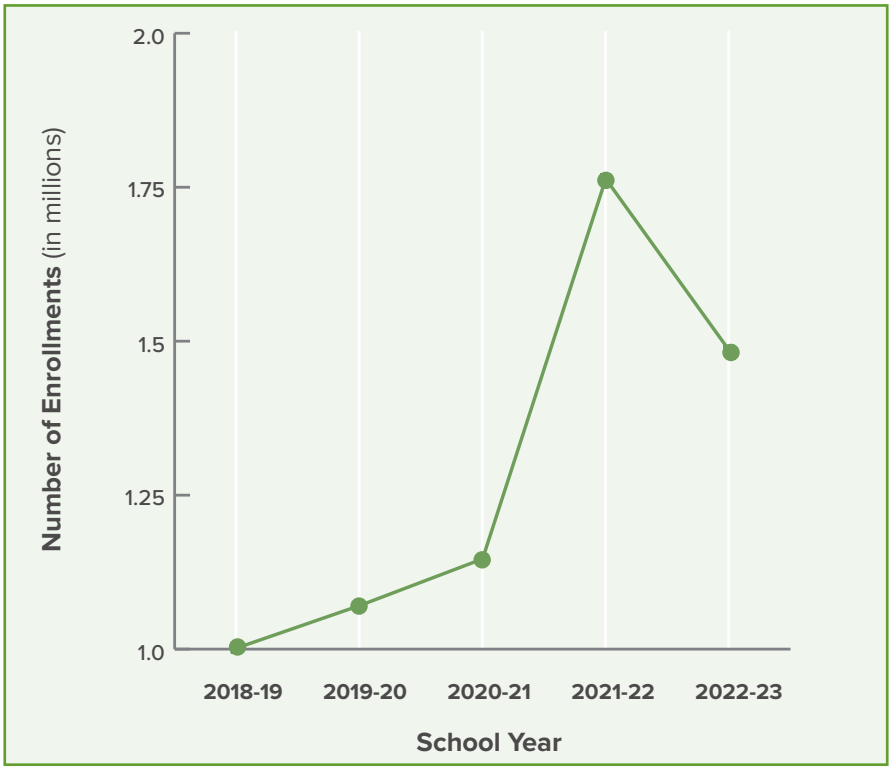
Students in these online programs engage with teachers using a variety of tools such as video meetings, email, text and phone calls, and the schools typically draw students from across entire states or significant regions. The COVID-19 pandemic dramatically changed the landscape of full-time online education, as illustrated by enrollments in full-time online schools. Over the past five school years:

- In the SY 2018-2019, there were 325,648 students enrolled in full-time online schools in the US.
- Enrollment saw a typical annual increase of 9.5 percent to 356,608 in SY 2019-2020.
- A significant jump occurred in SY 2020-2021, with enrollments soaring to 588,924, likely influenced by the pandemic.
- The SY 2021-2022 saw a slight decrease to 583,022 enrollments as the effects of the pandemic continued.
- By SY 2022-2023, enrollments declined to 564,235, which was equivalent to an average annual growth rate of 14.7 percent over the past four years.

Full-time virtual school enrollment over the last five school years



State virtual school course enrollment numbers over the last five school years



The shift in enrollments suggests a surge in demand for online education during the pandemic, followed by a return to annual enrollment growth rates slightly higher than historical growth rates. Additionally, the number of states offering full-time online school options has grown from 36 in SY 2022-2023 to 40 (Illinois, Kentucky, Maryland, and Montana), where policy appears to allow by SY 2024-2025, reflecting a trend towards more widespread acceptance and provision of online education options in response to evolving educational needs. In fact, widespread acceptance has resulted in a growth in district-based programs, which are not counted here largely because counting and enrollment reporting is not consistent across states or within many states.

Online school enrollments spiked for all virtual programs and schools during the pandemic, driven by a shift to remote learning. While the surge has subsided, enrollments remain above pre-pandemic levels, painting a new landscape for K-12 online learning in the United States.

A few key points:

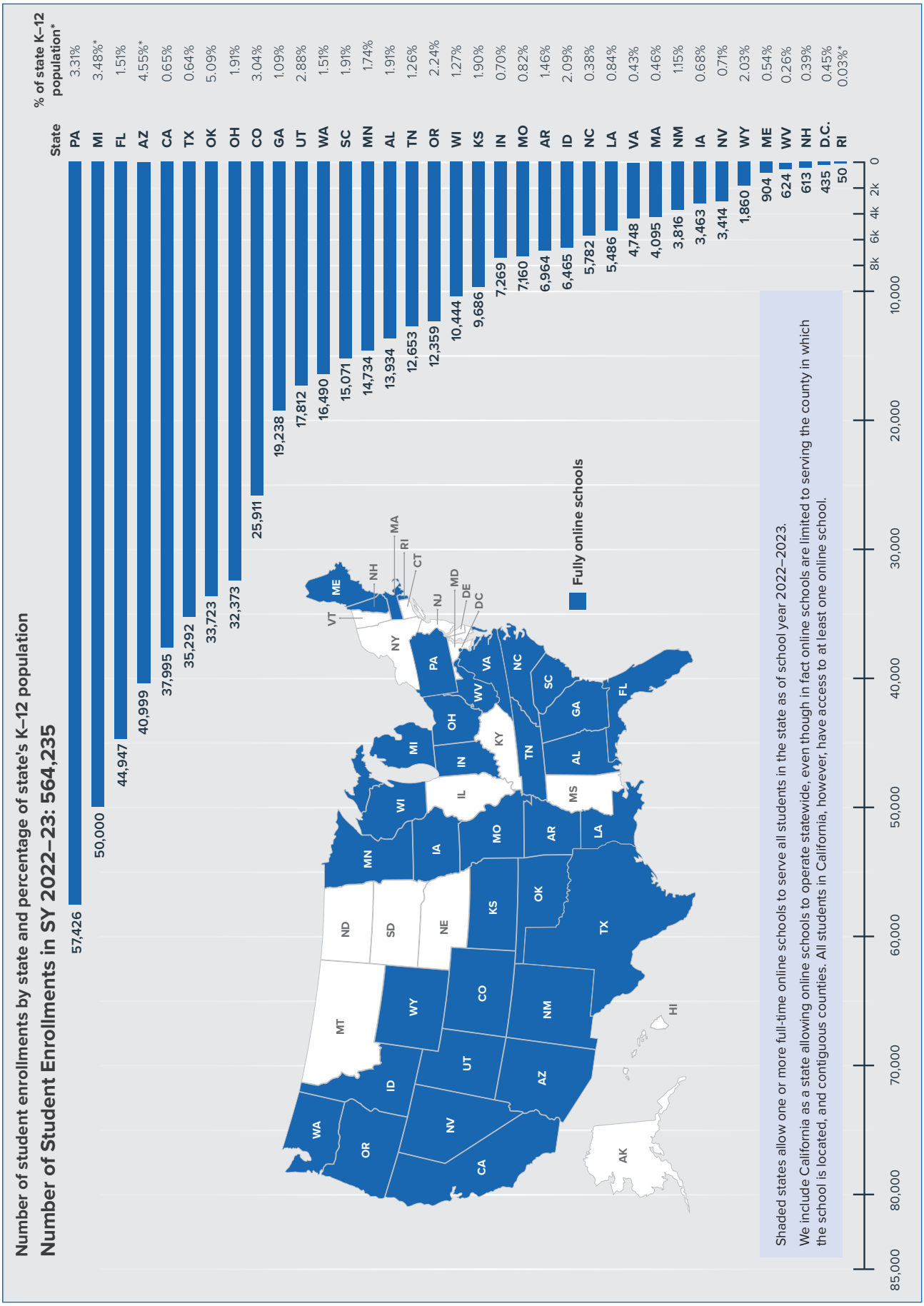
- Pre-pandemic, online school enrollments grew steadily.
- The pandemic triggered a dramatic surge in online students.
- As the pandemic eased, enrollments stabilized above pre-pandemic levels.
- This trend varies across states and providers, but the overall impact is clear.

The pattern in these numbers is not consistent between states and major online schools and providers. Some show a large increase since pre-pandemic years. Others show little increase. Only by looking at numbers from all states, and maybe squinting a bit, do we see the pattern taking shape.

Preliminary data for fall 2023 show full-time enrollments stabilizing. Alabama, Arkansas, Louisiana, and Wyoming have seen slight increases between SY 2022-23 and SY 2023-24 with Nevada and South Carolina showing small decreases. So far Utah is the exception showing a 27 percent increase in enrollments between the SY 2022-23 and SY 2023-24.

The map on the next page shows the statewide enrollment numbers in the 35 states and Washington, D.C, that allowed for statewide online schools during the SY 2022-23.

States with statewide fully online schools



Understanding the shift in K-12 online enrollment

Gone are the days of predictable enrollment patterns in K-12 education. Online learning, once a niche option, has become integrated into the dynamic landscape of reshaped educational choices. We surveyed the field in fall 2023 to better understand what is driving the shifts in online school enrollments. Based on the survey, the driving forces behind this shift include:

- **Parental choice and evolving needs**: During the pandemic, students and parents were exposed to the many benefits of online and hybrid learning models, whether through emergency remote learning and scheduling of a combination of remote and in person learning days, to smaller learning environments in microschools and learning pods. These options, both in public and private models, have returned to robust K-12 enrollment growth while more traditional district models have seen a continued decline in enrollments since the pandemic.
- **Policy and funding**: Government policies can significantly impact online enrollment. Increased funding for virtual learning programs, like Florida Virtual School or Virtual Virginia, can make them more accessible, opening doors for families who might not have considered supplemental online options before. Conversely, changes in regulations or authorization processes for full-time virtual schools, such as those recently passed in Michigan and South Carolina, can limit enrollment, create obstacles, and potentially slow enrollment growth.
- **Competition**: With a growing number of online and charter schools, and some states offering ESAs to allow families to also choose private schools, programs need to stand out. Effective marketing and outreach strategies become crucial, showcasing their unique strengths, and attracting students in a crowded marketplace. Digital learning models offer many benefits for students that can be highlighted such as flexibility in where and when they learn and providing personalized learning pathways tailored to individual interests.
- **Beyond the headlines**: While factors like the pandemic and policy changes grab headlines, individual circumstances also play a role. A natural disaster displacing families might lead them to temporary online enrollment, while a student with learning disabilities could find a supportive online program that caters to their specific needs.
- **Shifts and trends**: Many virtual schools are seeing younger students beginning to transition back to traditional classrooms after the pandemic's initial disruption because parents are going back to the office and are no longer able to serve as their child's learning coach, causing a shift in online enrollment patterns over the past year. Districts that embraced online options early on are adjusting their focus as needs evolve, such as adding new CTE pathways, providing dual enrollment, and shifting their model to add a more balanced use of synchronous and asynchronous learning time, etc. Meanwhile, rural areas and marginalized communities are increasingly turning to State Virtual Schools for flexible and accessible learning opportunities.

Understanding these different forces and how they play out in specific contexts is crucial for all stakeholders — educators, policymakers, and families alike. By recognizing the factors influencing online enrollment, we can ensure that all students, whether navigating traditional classrooms or online learning platforms, have access to quality educational experiences tailored to their needs and aspirations.

Hybrid schools

Adapted from writings by Kim Loomis, I3DigitalPD, Digital Learning Specialist

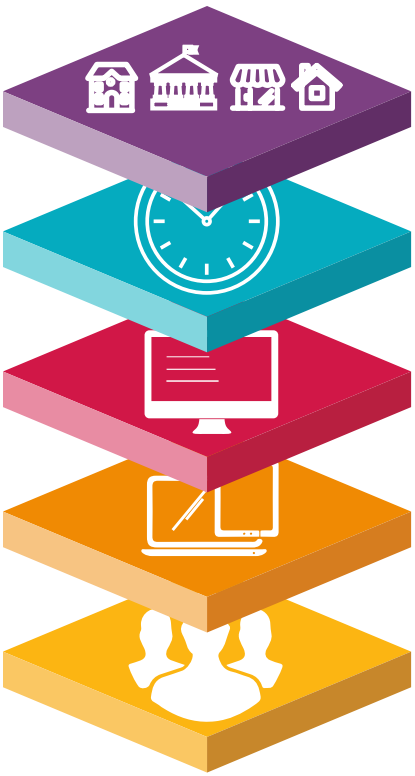
Hybrid schools, emerging as a cornerstone in the evolution of educational models, blend the best of in-person instruction with the convenience and flexibility of online learning. This approach, where we are seeing significant growth since the pandemic's upending of traditional education systems, goes beyond emergency remote learning and draws inspiration from the success of longstanding online schools. Hybrid learning offers a dynamic, adaptable, and innovative pedagogical strategy that reshapes the way educators consider time, space, and engagement in the learning process. It supports diverse teaching methods and flexible schedules, catering to students seeking a more personalized learning trajectory and marking a significant growth in how we think about education in a partly digital world.

In the words of Verjeana McCotter-Jacobs, chief transformation officer for the National School Boards Association, as cited in a 2021 EdTech article, "hybrid learning uses online components for teaching and learning that replaces face-to-face classroom time." This balance of at-home and in-school learning provides the social benefits of traditional schooling alongside the convenience of learning online.

Hybrid learning and blended learning are sometimes used interchangeably. However, there is a difference between these two learning models. In both, there is a mix of in-person learners and online learners. Yet, hybrid learning alters the five-day-a-week onsite schedule of blended learning models to a more flexible arrangement. With hybrid learning, students may only go to the physical school building two to three days a week at their convenience or have particular days or times of day when they are scheduled to be onsite.

Hybrid learning, gaining popularity for its ability to fuse the best aspects of in-person and online education, requires a paradigm shift in teaching and learning beliefs, along with a significant change in instructional practices. This approach is at the heart of hybrid schools, known for their simplicity and potential. By blending online and face-to-face learning, these schools transcend traditional educational boundaries, allowing teachers to foster stronger relationships with students. This method also empowers learners to link their academic endeavors with personal interests and future career goals. In hybrid settings, it's crucial to find an optimal balance between digital content instruction and active student engagement while on site.

Hybrid school model



SPACE: A physical school building combined with students learning from home, libraries, coffee shops, etc

TIME: A combination of onsite and online, in almost any combination that's not 100 percent of either. Most hybrid schools are somewhere closer to the middle of the continuum, or have options for students to be along the middle of the continuum.

CONTENT: Online content supports learning to free some teacher and staff time to focus on 1) harder concepts and 2) relationships. Content includes SEL and PBL components.

TECHNOLOGY PLATFORM: Supports teacher understanding of student's academic status in a class, and "champion" understanding of student's academic standing across classes, as well as "life status."

RELATIONSHIPS: Hybrid schools prioritize relationships between students and adults, who serves as students' champions, mentors, and supporters. These adults may be teachers, counselors, or have other titles.

Colorado is home to several pioneering hybrid schools, setting examples for contemporary education methods. In Colorado, hybrid schools stand out in predominantly traditional public school districts, offering unique approaches to learning. These schools are housed in non-traditional buildings, such as converted banks and warehouses, and despite not providing services like busing or lunch, they attract a high level of interest from students and families, evidenced by growing waitlists.

These institutions, including Springs Studio for Academic Excellence (grades 5-12), Cherry Creek Elevation (grades 6-12), and Village HS (grades 9-12), have developed distinct learning models that blend online and on-site instruction. Information about these schools, including staff numbers, digital content providers, learning management systems, and schedules, can be found in the summaries linked here.

Hybrid schools offer flexible schedules, with varying days and times for on-site instruction. This flexibility accommodates students with commitments outside of academia, such as competitive sports or arts. The use of digital curriculum varies across these schools, with some utilizing vendor products and others employing teacher-created content. Instructional methods and the extent of on-site tutoring also differ among these schools, reflecting their commitment to customized education. For instance, one school focuses on student-selected electives led by teachers, while another emphasizes remote learning periods for live instruction.

In terms of structure, these Colorado hybrid schools typically have around 500 students, with 75-minute class periods. Admission processes include an application and counseling session. They maintain a typical student:teacher ratios but the number of course preparations varies. These schools prioritize hiring experienced teachers who excel in student relationships, contributing to their success rates, which exceed the Colorado average graduation rate.

To demonstrate the wide range of approaches that hybrid schools take for scheduling, the physical learning center, mentoring, and other aspects of instruction and student support, examples of hybrid schools across the country include:

- Crossroads FLEX, Cary, NC
- Dallas Hybrid, Dallas, TX
- Hoosier Academy, Indianapolis, IN
- Map Academy Charter School, Plymouth, MA
- Oasis High School, Aptos, CA
- Poudre Global Academy, Fort Collins, CO
- Taos Academy, West Taos, NM
- Valor Preparatory Academy, Goodyear, AZ

Hybrid schools are at the forefront of an educational revolution, proving that flexibility and individualized learning can coexist within a structured environment. This model not only accommodates diverse learning needs but also prepares students for a world where digital and face-to-face interactions are seamlessly integrated. As these schools continue to evolve and expand, they offer a compelling blueprint for the future of education.

"Permissionless" education is a buzzword that has gained some traction and illustrates one challenge with categorizing and tracking enrollment in the many forms of digital learning that are evolving and emerging. The Yass Prize founder defines permissionless education as "free to exist and thrive without dependence on regulatory bodies." Many use the term to refer to homeschooling-like arrangements, but even in states like Texas where families do not need to tell anyone that they are homeschooling, students must receive instruction in math, reading, spelling, grammar, and citizenship - and a formal curriculum must be involved. But use of digital resources, courses, or even online schools does not need to be reported to anyone and any data on their use is anecdotal or comes from surveys or marketing claims by individual vendors.

Similarly, while much or most online course enrollment is with the intent of having student outcomes added to student records or official transcripts, that data is not tracked and reported as noted elsewhere in this Snapshot report. And if the course does not earn credit or is not intended to earn credit - some enrollments are used by students to support their success in the same course that they are enrolled in at school - there is again no reporting of data outside surveys or marketing claims. Digital learning resources, courses, and programs families use for homeschooling are not truly "permissionless," but like the permissionless supplementary resources, courses, and programs - and even much of what happens in authorized schooling programs - they are not reported in ways that make it possible to understand the true scope and growth in their use.

Microschools and learning pods

The educational landscape is shifting, and microschools are emerging as promising players in this evolution. These vibrant learning communities, typically serving 15-150 students, offer diverse options for educational experiences, unlike traditional schools. Their small size fosters close-knit environments, personalized learning pathways, and community-connected experiences, catering to unique student needs and interests.

Before diving into what microschools are, it is important to note that they are not the same as learning pods. While both cater to smaller, student-focused learning environments, microschools and learning pods offer distinct educational options. Learning pods typically involve small groups of children, within the same age range, often from the same family or neighborhood, and function within the realm of homeschooling. These groups often lack the formal structure and network of a microschool; however, the lines are becoming more blurred with networks of learning pods like KaiPod Learning.

One of the most striking aspects of microschools is their flexibility and accessibility. With their compact structure, they can open quickly in unconventional spaces like libraries, community centers, or even homes. This allows them to address underserved populations in specific geographic areas, such as elementary school students in rural communities (Gem Prep Online) or students experiencing housing instability (Da Vinci RISE High). Additionally, microschools offer full-time or part-time options, catering to families with diverse needs and schedules.

Beyond flexibility, microschools prioritize personalized learning experiences. By moving away from rigid grade levels and traditional classrooms, they embrace student agency and individual learning styles. The Learner-Centered Collaborative exemplifies this shift, creating flexible and inclusive environments where students have a say in their learning journey. Similarly, Ellemercito Academy, staffed by first-generation teachers, tailors its curriculum to high-needs learners, providing an education rooted in real-world experiences. Prenda provides a full, personalized, project-based curriculum to leaders of the schools in their network.

Another key strength of microschools lies in their capacity to forge connections with the local community. By partnering with organizations like healthcare centers (Rooted School Foundation) or industry leaders (ASU Prep Academy), they offer students unique learning opportunities outside the classroom. Many microschools are housed in creative spaces that are embedded in the community — museums, maker spaces, etc. This allows students to connect with a wider range of experts in all fields. This community focus ensures that learning extends beyond textbooks and integrates with the vibrant world around students.

The landscape of microschools is still evolving, and grants, partners, and ESA's funding are helping to support their growth. Innovative models like the PPHS Lab High School, which utilizes state funding and industry partnerships to provide STEM education for neurodivergent youth. Similarly, the University of Cincinnati Early IT Microschool leverages the PAST Foundation to equip underserved students with skills for success in the IT sector. These diverse examples showcase the immense potential of microschools to cater to various needs and communities.

Key 2023 policy updates on digital learning

In 2023, Texas established the Texas Commission on Virtual Education to revamp virtual education in public schools. Tasked with developing policy recommendations for delivering and funding digital learning, the Commission undertook a comprehensive review. It gathered insights from digital learning specialists across the nation and within Texas. Testimony from students, parents, educators, school leaders, content creators, and researchers were invaluable to their understanding. Their diverse perspectives guided the Commission in framing policies aimed at enhancing virtual learning for all Texas students. Although the resulting bill is currently on hold (at the time of publication), the Commission's proactive approach, informed by lessons from pandemic-induced remote learning, may serve as a model for other states modernizing their digital education policies.

The initiatives undertaken by Texas reflect a broader national trend in the post-pandemic educational landscape. Across the United States, the COVID-19 crisis has spurred an introspective examination of K-12 instructional methods, highlighting the urgent need for adaptable and resilient educational policies. Texas's methodical approach, emphasizing collaboration and diverse stakeholder input, serves as a microcosm of this nationwide shift. While Texas focuses on refining its virtual education system, similar patterns of gradual, thoughtful policy evolution are observable in other states. This collective shift indicates a move towards a more dynamic, responsive educational system that can effectively integrate digital learning in a post-pandemic world.

> "I want to be clear. This commission is not on a fault-finding or blame-assigning mission. Rather, I want to thank and praise the unbelievably hard work the teachers, administrators, parents, students, and so many others poured into this emergency response. An unprecedented moment was met with unprecedented effort. And I... and we... applaud our educators and students for how they showed up in the midst of this pandemic. Now, however, we owe it to them to be much better prepared in the future.
>
> Quality virtual education encompasses a whole spectrum of models. This spectrum ranges from supplemental models like the Texas Virtual School Network course catalog, where a kid might take one or two additional classes, to hybrid models with some traditional in-person paired with some asynchronous virtual learning, to full-time virtual models where a student takes all classes virtually. But to be clear, it never looks like an individual sitting in front of a computer staring at a screen for eight hours.
>
> Many students and families continue to demand full-time virtual and hybrid school options. Pandemic emergency-response remote instruction is not indicative of the potential of virtual and hybrid learning. We heard that with intentional design and planning, virtual and hybrid schools can be and will be successful in light of the appropriate staffing, scheduling, curriculum, instruction, engagement, and training."
>
> — Rex Gore, Chairman of Texas Commission on Virtual Education

Since the COVID-19 pandemic, the K-12 instruction landscape has faced intense scrutiny, with debates centering on the pandemic's long-term impacts on educational policy and practice. By late 2023, it's clear that while the pandemic triggered a spike in digital learning, the trajectory of

policy changes has been more evolutionary than revolutionary. This period has witnessed states adapting and improving their online education policies, through a blend of new initiatives and revisions to existing frameworks. The five policy trends we have seen over the last year include:

Limited legislative overhaul

Despite the surge in online learning adoption during the pandemic, major legislative revamps remained scarce. States like Arkansas and Minnesota refined existing regulations around digital providers and full-time online enrollment, but comprehensive policy expansions were largely absent. The notable exceptions are Montana, where legislative reforms established local charter boards and both Montana and North Carolina expanded the state's distance learning offerings.

Funding concerns and accountability measures

Policy updates often centered on funding and accountability issues. Michigan capped cyber school funding while increasing traditional per-pupil allocations (The state originally proposed a 20 percent cut in funding, but a strong coalition of several virtual schools across the state worked to educate policymakers, preventing the cuts) highlighting ongoing concerns about resource allocation amidst diverse learning models. Meanwhile, states like Arkansas and North Dakota added regulations and reporting requirements for online providers, aiming to ensure quality and combat potential malpractices. In addition, Idaho passed a bill requiring consideration of other metrics of success for accountability.

Virtual charter landscape

The pace of growth of virtual charter schools compared to other models (district, private, etc.) remains uncertain. California extended its moratorium on non-classroom-based charters until 2025. Conversely, Montana's new legislation paves the way for full-time enrollment in virtual community choice schools, suggesting potential shifts in policy attitudes towards these models.

Emerging interest in blended learning

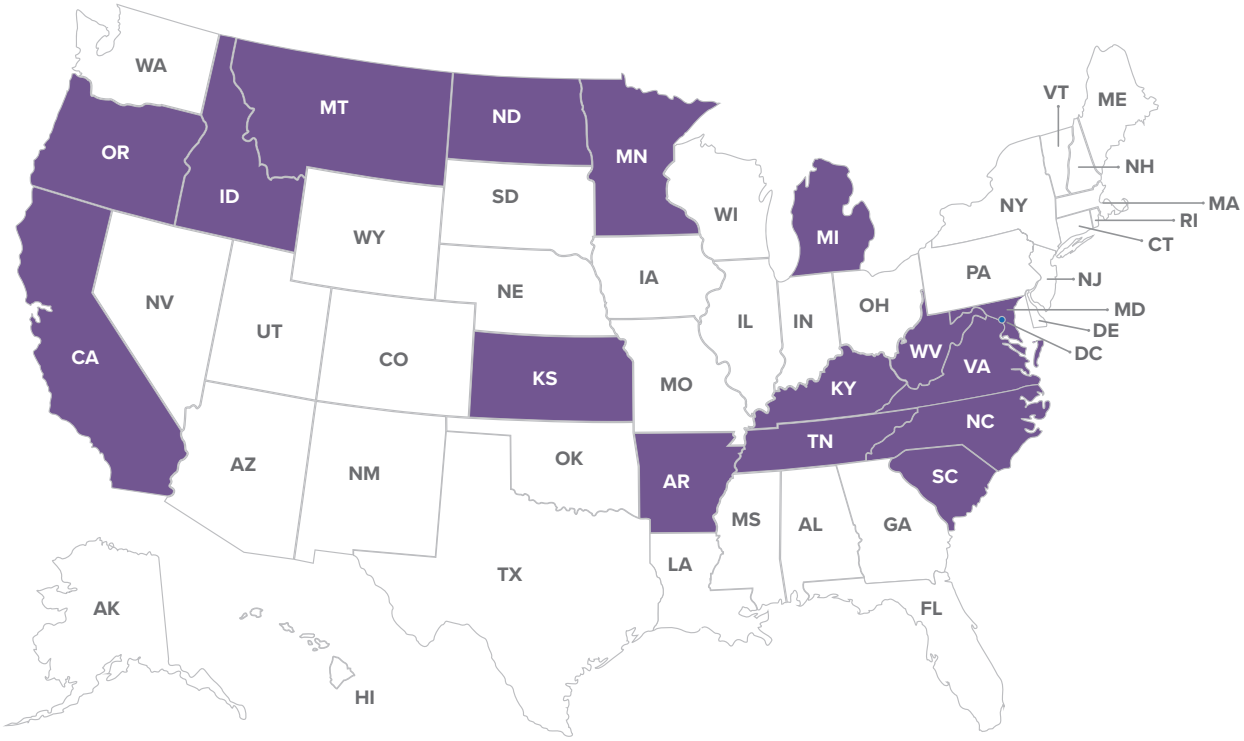
While full-time online learning policies saw limited changes, blended learning models gained traction. VirtualSC offers a blended learning Virtual Learning Lab program to provide an interactive online learning solution for schools that may have limited abilities to offer courses due to staffing issues. Students work on a virtual course in a lab setting, while a course facilitator at the school monitors students and provides classroom management. Instruction is provided both synchronously and asynchronously by the VirtualSC teacher and through the online course. Montana has also expanded its distance learning program to incorporate blended content and platforms, signaling a growing recognition of the potential benefits of hybrid learning approaches.

Online learning requirements for graduation

At one point, at least six states required an online course or experience to graduate: Alabama, Arkansas, Florida, Michigan, Wisconsin, and Virginia. Wisconsin eliminated the requirement several years ago, and this year both Florida and Arkansas have followed suit and eliminated their online learning requirements. Some states, including Georgia, New Mexico, Massachusetts, and West Virginia, have rules or legislation encouraging but not requiring online learning. There are still many individual school districts that require an online learning course or experience to receive a diploma.

While 2023's policy landscape largely mirrored pre-pandemic trends, it also hinted at emerging areas of focus. Increasing interest in blended learning, continued debates surrounding virtual charter schools, and policies related to funding equity and accountability measures are likely to shape future policy directions. As the online learning landscape continues to evolve, the coming years will reveal whether the pandemic ultimately served as a catalyst for more substantive policy shifts or merely accelerated existing trends.

States with key policy changes



State policy updates

- **Arkansas**

  SB 432 — Permits full time online schools in Arkansas to administer state assessments to students in a virtual setting utilizing remote proctoring.

  The LEARNS Act (ACT 237) of 2023 repealed the requirement in the Digital Learning Act of 2013 that required every high school student to take at least one digital learning course to graduate. The LEARNS Act also establishes a "Course Choice Program" in Arkansas by 2025-26. A statewide course catalog, also to be created by the 2025-26 SY, will outline which courses shall be offered by all districts. Any courses not able to be provided by the local public school district must be provided as an option to students through a course provider, defined as any "entity that offers individual courses in person or online."

  All digital providers in Arkansas have been required to be approved through a digital learning provider application with the Arkansas Department of Education. Arkansas currently has 28 approved digital providers. These approved providers typically serve as supplemental online course providers to Arkansas schools and students, with the majority offering both digital content and a certified teacher. The LEARNS Act changes the approval process for digital learning providers and outlines course provider accountability measures. The rules and regulations that will accompany much of the LEARNS Act are currently under development.

- **California**

  Although there is no recent major legislation impacting online and/or blended learning passed through October 2023, virtual charter schools remain impacted by AB1505 (2019) which put a moratorium on starting any new non-classroom-based charter schools. SB114 section 25 (2023) amended AB1505 to extend the moratorium on non-classroom charters to January 1, 2025.

- **Idaho**

  Idaho passed HB 113 stating that the charter school commission must consider other metrics of success for accountability, in addition to the federal and state requirements, when measuring virtual schools.

- **Kansas**

  House Bill 2080 (2023) amends K.S.A. 72-3711 to allow full-time virtual students to take state assessments virtually utilizing remote proctoring.

- **Kentucky**

  The Kentucky Board of Education (KBE) promulgated 704 KAR 3:535 effective July 1, 2023. This new regulation replaces the waiver of specific sections of the Pupil Attendance Regulation utilized by districts from 2020-2022 allowing K-4 students enrolled full-time in an online program to be counted in attendance. The regulation creates a funding mechanism specifically for grades K-4. A district may choose to apply the structures and funding mechanism to any grade K-12. Districts may also choose to use traditional virtual and performance-based structures for students in grades 5-12 available through 704 KAR 3:305, allowing the growing online school to enroll students.

- **Maryland**

  SB0610 (2023) "requires a teacher preparation program to include certain training related to teaching in a virtual learning environment as a component of instruction; providing that a county board of education may authorize a county superintendent of schools, under certain circumstances, to provide virtual education days to students instead of closing the public schools in the county because of severe weather conditions; altering the requirements for virtual schools established by a county board of education (allows for full-time virtual schools to be operated by county school systems); etc."

- **Michigan**

  State School Aid bill (July 2023) capped cyber school funding at 2023 levels while providing all other public schools an increase in per pupil funding.

- **Minnesota**

  The Online Instruction Act Repeals state statute 124D.094 (2022) and defines the parameters for both supplemental and full-time enrollment, the DOE role in program approvals and tracking, Calculation of ADM for online students, and financial agreements between schools and providers, among other aspects of supplemental and full-time options. See Article 2, Sec. 49 for provisions of the Online Instruction Act.

- **Montana**

  The 2023 Montana Legislature passed House Bill 749 which, along with reconfiguring MTDA's governing board, expands the mission of the program to offer additional distance and digital learning to students through their Montana public school. These new services will include blended learning content and platforms, industry certification preparation, additional online course offerings, and proficiency-based testing services.

  HB 562 (2023) allows for the creation of Community Choice Schools which can be authorized by a newly created Commission located within the Board of Public Education, or by local school districts. It allows for virtual community choice schools to enroll students full-time and establishes a set of requirements for virtual community schools (section 9).

  Rule 10.55.907 governs schools using online and distance learning classes. It requires schools to report courses, enrollments, and providers and requires providers to register and report districts they serve, including courses provided and student enrollment.

  In 2023, the Montana Legislature passed two school bills that were signed into law by the Governor which allow for charter or charter-like schools. One bill allows for charter schools and places them almost exclusively under the oversight of local school boards and the Board of Public Education. The other bill refers to "community choice schools" and utilizes either local school boards or a newly formed Community Choice School Commission, which is attached to the Board of Public Education, to authorize and oversee Community Choice Schools. Previously, "charters" were referred to in administrative rule, but limited in scope.

- **North Carolina**

  The 2023 North Carolina Budget Bill (HB 259), section 7.26(a), defines the scope of virtual schools, referred to as remote charter academies, and allows the expansion of remote charters stating, "The Review Board shall approve a minimum of two statewide remote charter academies."

- **North Dakota**

  The North Dakota Center for Distance Education has an entire chapter of state law, outlining its scope of authority to offer distance education and its governing structure, NDCC Ch. 15.19.

  State code NDCC Ch. 15.1-31 (2023) on open enrollment allows a student to enroll full-time in another public school district, including a public virtual academy.

  North Dakota has two chapters of administrative code that govern virtual learning intending to strengthen accountability and quality for virtual instruction. Virtual learning arrangements must keep track of attendance and classroom progress just as is done during normal classroom instruction.

  — ND Administrative Code Chapter 67-30-02 establishes the North Dakota Century Code for any physical school district to create and operate a virtual academy/school.

  — ND Administrative Code Chapter 67-30-01 outlines policy and North Dakota Century Code for schools to implement digital education during an emergency such as inclement weather and not lose their per pupil funding.

  State law on virtual instruction options for military-connected students, those with a medical condition, and those moving out of state can be found in NDCC 15.1-07-37.

- **Oregon**

  HB 3204: Creating a uniform timeline and calculation of, and new exemptions to, the state's three percent per district cap on virtual charter school student enrollment.

- **South Carolina**

  The South Carolina legislature passed a proviso temporarily impacting online learning in 2021 that was renewed in 2023 (provisos require annual approval to remain in effect). The proviso allows school districts to offer a virtual education program for up to five percent of its student population without impacting any state funding. School districts submit their plans for the virtual program to the State Board of Education for approval. As a result of the proviso, the South Carolina Department of Education approved 51 virtual programs for operation. It is uncertain how many of these virtual programs will remain active during the 2023-24 SY.

- **Tennessee**

  SB 382: Renews Virtual Public Schools Act and eliminates the sunset provision making the language permanent.

- **Virginia**

  HB 1820: Permitting online schools to provide state-required growth assessments to students in a virtual setting (note, this does not include the SOLs).

- **West Virginia**

  HB 3084: Charter reform bill that, among other provisions, allows full-time online charter schools to administer state tests in a virtual setting using remote proctoring.

  "Any virtual public charter school may administer any required state assessment, if available, in a virtual setting utilizing remote proctoring that best meets the educational needs of the student."

Key policy areas to watch in 2024

As we step into the year 2024, it is vital for stakeholders in the educational sector to closely monitor several key policy areas that are expected to significantly impact the landscape of education. This section of the annual report focuses on four such pivotal areas:

1. **Education Savings Accounts (ESA) and digital learning**: Education Savings Accounts are becoming a central topic in the discourse on educational reform and innovation. This policy area revolves around the personalized funding model where funds are allocated directly to students rather than schools, allowing for greater flexibility and customization in educational choices, including online learning. We will delve into the development, implementation, and impacts of ESAs, examining how they are reshaping the educational landscape.

2. **Remote testing in full-time virtual schools**: High-stakes testing for students in full-time virtual schools presents unique challenges, including issues of accessibility, integrity, and fairness. As more students enroll in full-time virtual schools, understanding and addressing these challenges becomes crucial, especially as evidence emerges following the pandemic that performance and participation increases when online schools are permitted to administer state tests to students in a virtual setting using remote proctoring, thus enabling online students — just like students in traditional schools — to take tests in the setting where they learn each day. We will analyze the current state of remote proctored high-stakes testing, identify key problems, and discuss potential solutions.

3. **Accountability challenges in digital learning**: Educational accountability is widely criticized for its over-reliance on standardized tests, which limits educators' judgment, disempowers families, and excludes marginalized-community involvement. This approach has led to distrust among educators and stifled system evolution and there is increasing interest in reimagining accountability to align assessment policies with high-quality curricula, use a broader array of quality indicators, and engage policymakers, communities, and families in reciprocal accountability. Such an approach would address whole-child needs, incorporate parents' and students' perspectives, and use a wider array of quality indicators. We identify some of the issues and opportunities for digital learning to contribute to the evolution of such an accountability system.

4. **Virtual school funding models**: The question of funding models for virtual schools, particularly in comparison to traditional schools, is a topic of ongoing debate. This section will provide an in-depth look at various funding models for virtual schools, discussing the arguments for and against funding them on par with traditional schools. We aim to uncover the implications of these models on the quality of education and the sustainability of virtual schools.

By keeping an eye on these policy areas, educators, policymakers, and stakeholders can better prepare for the evolving educational needs and challenges of 2024 and beyond.

Education Savings Accounts and digital learning

Education Savings Accounts (ESAs) went from being among the most overlooked education topics in early 2023 to perhaps one of the most overhyped. This section looks at what ESAs are, how they intersect with online and hybrid learning, their trajectory over the past year, and the outlook for 2024.

What ESAs are — and what they are not

EdChoice provides a short definition of ESAs:

"Education Savings Accounts (ESAs) in K-12 education establish for parents a publicly funded, government-authorized savings account with restricted, but multiple uses for educational purposes. Parents may use the funds to pay for expenses including: school tuition, tutoring, online education programs, therapies for students with special needs, textbooks or other instructional materials, and sometimes, save for college."

The concept of ESAs builds on the idea of publicly funded school choice, and in some ways provides a logical next step to the concept of choice in education which had previously focused on charter schools, vouchers, or tax-credit scholarships, and course choice.

- Charter school laws introduced widely the idea that families could select a public school separate from the traditional public school district system and have public funds flow to the charter school instead of the neighborhood public school the student would otherwise attend. As of fall 2021, according to the National Center for Education Statistics, 3.7 million students attended charter schools in 45 states and Washington D.C., and the number of students attending charter schools had doubled in the prior decade. Many statewide online schools, and some hybrid schools, are charter schools and charter school laws have supported the growth of online learning options.
- Private school choice programs extended the concept of public funds going to alternative public schools of choice, allowing education funds to flow to private schools. EdChoice counts 15 states as offering some sort of voucher program. Prior to the last couple of years and the emergence of ESAs, these voucher programs were limited to a few categories of students, such as students with special needs, which kept overall numbers low — at less than ten percent of charter school enrollment. (Note that an additional confusing element is that some private school choice programs are structured as tax credits, which can be difficult for parents to access.)
- Course choice programs and policies allowed families to select publicly funded courses from a provider other than the school in which the student was enrolled and have the prorated portion of the student's funding flow to the course provider. These programs and policies often focused on online courses, although not always, as in Louisiana, which had plenty of non-online course options.

ESAs represent, in some ways, a next step in educational choice, significantly extended to allow families far greater control over the use of the funds. As noted above, the funds may be used in a variety of ways. These ways include paying tuition at a private school, purchasing individual courses, or even, in some states, buying education-related materials and activities that exist outside of public or private schools.

It is also important to understand what ESAs are not. They are not monolithic. ESA laws vary widely by state in two key ways:

- How many students are eligible now, and/or when all students will be eligible: EdChoice counts 13 states with ESA laws in place, but only 92,000 students have accessed ESA accounts as of school year 2022-23. That is in large part because almost all those 13 states, with the main exception of Arizona, had limited the number of students who could apply. Some states, such as Iowa, have passed an ESA law that will allow increasing numbers of students to access the funds over several years, eventually reaching or approaching 100 percent of all students.
- The extent of requirements for students/families accessing ESA funds: In some states, requirements to access public funds are minimal. In others, ESA-funded students must take state assessments or meet other requirements at which homeschool families may balk.

These two elements will together play a major role in determining how much ESA programs grow in the coming years.

The intersection of ESAs and digital learning

All the types of educational choices noted above intersect with digital learning:

- Many online schools and hybrid schools are charter schools. It's nearly certain that in the US, the growth of online learning would have been very different if charter school laws did not exist. Many of the earliest online and hybrid schools, in states as diverse as Pennsylvania, Colorado, and California, were charter schools.
- Links between private school choice programs and online/hybrid schools are not so clear. Although plenty of private online and hybrid schools exist, we are not aware of any large enrollment online/hybrid private schools that were tapping significantly into private school choice funding. If ESAs become something that all/most students can utilize, this is when we may see ESA being used for private virtual schools and individual online courses.
- Course choice was envisioned, in most states, as being largely or entirely based on enrollment in online courses. In some states such as Florida and Georgia, course choice policies were linked closely to state virtual schools. Other states, such as Utah, developed policies based on the expectation that a wide range of online course providers would be

available. ESAs hold the potential for recipients to use funds for online/hybrid schools and courses. In most states, ESA recipients have the option to use those funds to attend private online and hybrid schools. (However, some states, including Florida, have restricted the use of these funds for full-time private online schools—in an oversight that should be corrected given Florida's historic support of online learning.)

ESAs, microschools, and digital learning

The policy landscape gets even more complicated when we look at the combination of existing online charter schools, ESAs, and microschools.

Microschools have been another growing trend in the past couple of years, although enrollment data is lacking. In 2022 EdChoice estimated that just over a million students were in microschools or learning pods, but as the authors explained, they were using a very broad definition that likely had a very high overlap with families that identify as homeschooling. Because of this, it's unclear how much had changed on the ground, versus just a difference in families being more likely to use the term microschool.

In the absence of public funding availability, it seems likely that the microschool movement will grow slowly, due to the limit of families willing to fund their children's education. However both online charter schools and ESAs offer the opportunity for families to tap into public funds when using a microschool.

An example of a microschool tapping into charter school funds is the Queer Blended Learning Center (QBLC) in Phoenix, a microschool whose students are officially enrolled in one of two online charter schools. This is one example; others exist in Arizona and probably in other states.

In ESA states, those same students could tap into ESA funds to attend a microschool like the QBLC. Whether online charter school enrollment or tapping into ESA funds is easier is likely a state-by-state issue. There is even the potential situation in which two students in the same school would be tapping into different public funding sources.

Trajectory and outlook

The outlook for 2024 and beyond depends on two data sets that we will be watching.

The first is the number of students and families taking part in ESAs, especially in the few states that allow universal or near-universal access. It's too early to tell if ESA uptake is going to grow to be similar in size to homeschool students, private school, and charter schools — or perhaps bigger than all of them combined. These data are very slowly coming into view, partially because of the slow rollout and partially because of data limitations. If ESA uptake grows, ESA students/families will likely become a major part of the digital learning landscape, much as charter schools are now.

The second number we will look at in 2024 is the number of states that pass new ESA laws, less any that restrict already-passed laws. A corollary question will be whether any purple states—or even blue states—pass such laws, which would suggest far broader appeal than if ESAs are limited to conservative states. Here again, Arizona will be a bellwether, because politically Arizona has been very conservative, but it is trending more moderate. If a politically moderate Arizona preserves ESAs, that will be a sign of their staying power.

Remote testing in full-time virtual schools

In most states, public school students are required to be in person, inside a facility, when taking state-mandated tests. For students in traditional public schools, taking state tests in the same school buildings and classrooms where they learn is, for the most part, akin to a normal school day. But for students in full-time public virtual schools, state testing is a far different and far more challenging experience — and one that comes at a cost.

Full-time virtual schools offer an alternative learning environment for students seeking flexibility, personalized learning, or escaping the limitations of traditional brick-and-mortar systems. But when it comes to state-mandated and other high-stakes standardized testing, these students face an uneven playing field riddled with logistical and pedagogical hurdles. The current system of remote testing, relying on physical locations, is a significant burden on schools and families and it fails to adequately serve the needs of students, negatively affecting their participation and success, which in turn harms school performance on these critical accountability measures.

Logistical nightmare

Imagine a student enrolled in a virtual school hundreds of miles away from the nearest testing center. Renting hotel conference rooms or sending proctors across vast distances are exorbitant solutions, straining school budgets and creating logistical nightmares for both proctors and families. For rural students, traveling hours to reach a designated testing site presents an additional barrier, sometimes requiring overnight stays. Teachers often spend weeks traveling the state to oversee testing centers, and students will spend days traveling to and participating in their respective tests — all of which disrupts teaching and learning.

Unfamiliar territory

Virtual students thrive in their online learning environments, accustomed to the pace, format, and technology of their classrooms. Thrusting them into unfamiliar physical testing centers in the company of other students who may not have met in person before adds to the normal anxiety students experience with standardized testing. Studies have shown that students perform better in environments consistent with their learning styles, further highlighting the disparity for virtual learners forced to adapt to traditional testing settings.

Inequitable access

State testing participation rates can be tied to state accountability, and other high-stakes tests like the ACT, PSAT, SAT, and AP tests affect college opportunities and scholarship funds, and even school funding. Failing to create equitable access to these tests for virtual students exacerbates existing educational inequalities. Students from low-income families may struggle to afford travel or childcare arrangements for testing days, while others simply lack access to transportation, further disadvantaging them in this crucial academic exercise.

Adopting online solutions

The technology exists for secure, reliable, and standardized online assessments as well as paper-based assessments with remote proctoring. During the pandemic, these online assessments were taken by students in their homes and other remote learning environments in many states, and standardized testing vendors have acknowledged that such remote test administration can be used to generate valid and reliable results. States that are willing to work with vendors and online schools can eliminate geographical barriers, minimize logistical complications, and enable students to take required tests in familiar environments.

Policy imperative

To ensure equity and fairness, policy changes are essential. Educational bodies need to recognize the need for online high-stakes testing options specifically designed for students enrolled in full-time virtual schools, similar to new policies passed in Arkansas, Kansas, Virginia, and West Virginia. This requires a collaborative effort from policymakers, educators, and technology providers to establish clear guidelines, develop secure online testing platforms, and train proctors for remote monitoring.

The current system of remote testing for full-time virtual schools creates significant barriers to participation and success in high-stakes assessments. Embracing remote proctoring testing solutions and advocating for policy changes is not just about logistical ease but about ensuring equity and fairness in education. By creating a level playing field, we can empower virtual learners to demonstrate their knowledge and skills confidently, paving the way for their academic success and future opportunities.

Accountability challenges in digital learning

With the reauthorization of federal education legislation overdue, and the pandemic bringing to the forefront a growing list of concerns about enrollment, attendance, grades, graduation rates, testing, etc., there is a growing realization that our national approach to educational accountability for public education needs to be rethought. The National Educational Policy

Center's May 2023 critique of educational accountability today and its six principles for rethinking accountability provide a good example of how to frame this subject concerning digital learning.

NEPC's critique of existing accountability systems:

- The existing theory of change suggests that schools will improve if sanctioned for poor student performance on standardized tests. Two decades on, it is clear that this approach fails.
- The current approach largely strips educators of professional judgment and generally fails to empower families, despite federal requirements for community involvement. Additionally, communities have had no say in what gets assessed, how accountability is determined, or what the consequences of accountability are.
- The rigid, top-down approach to accountability of the past two decades has promoted distrust among educators, stifled creativity, and limited the degree to which the system can evolve.

NEPC's principles for rethinking accountability:

1.) Align assessment policy with goals for high-quality curricula and instruction.

2.) Develop a system with reciprocal accountability.

3.) Ensure that representative community members play a meaningful role in the system.

4.) Move toward a broader array of school quality indicators.

5.) Ensure interpretable and actionable results.

6.) Design a system that will evolve and improve.

What follows is an overview of how this approach could be understood in digital learning.

Assessment policy

Online and hybrid/blended programs face the same challenges as traditional brick and mortar schools for test-based accountability. State-mandated tests have narrowed the taught curriculum, and distort and distract from the learning process, rather than reinforcing engaging, challenging, and relevant curriculum. As noted above, outdated requirements for test administration create logistical nightmares for online schools and students, reduce participation rates, and hurt student performance. All of this is especially disappointing given that digital learning approaches, by providing access to a much greater body of student work, can enable valid and reliable assessment embedded into the learning process that can replace standardized tests.

Reciprocal accountability

NEPC calls for state and federal officials and agencies to be accountable for ensuring that the resources are in place for schools, districts, and other operators and authorizers to meet their accountability obligations. Such resources need to include what's necessary for meeting the needs of the whole child, which can include resources for socio-economically disadvantaged students (e.g., Title I funding) and students with special needs (e.g., IDEA Part B funding). Online schools in many states have trouble accessing those funds even for students identified as eligible, and the free and reduced lunch eligibility used for Title I funding does not work well for online schools, resulting in under-reporting of students who need Title I services.

Meaningful involvement

Most online and hybrid/blended schools are choices rather than the default option, making the voices of their students and their parents and guardians even more important. Surveys and focus groups of parents and guardians have consistently found that existing accountability systems don't tell them what they want to know about their students' schools. Parents and guardians are more interested in how schools personalize instruction than how students are doing on standardized tests. They are more interested in understanding what practical things students are learning (like personal finance) than how prepared they are for college. Parents and guardians want to know that there is an adult at the school who knows and cares about their student and that their student is making friends. Answers to questions like these will never be found in accountability systems until the voices of students and their parents and guardians are heard as part of the accountability system.

A broader array of quality indicators

Accountability systems focused on attendance, test scores, graduation rates, etc., are too narrow to capture the quality of a school or the benefits students receive. Online and hybrid/blended schools have access to a tremendous amount of information that could be part of much broader and more robust reporting about quality. For example, cognitive engagement by students in a rigorous academic program is a much more useful predictor of student learning and growth than standardized test scores, and the digital learning tools used in online and hybrid/blended schools provide the data needed to assess that engagement.

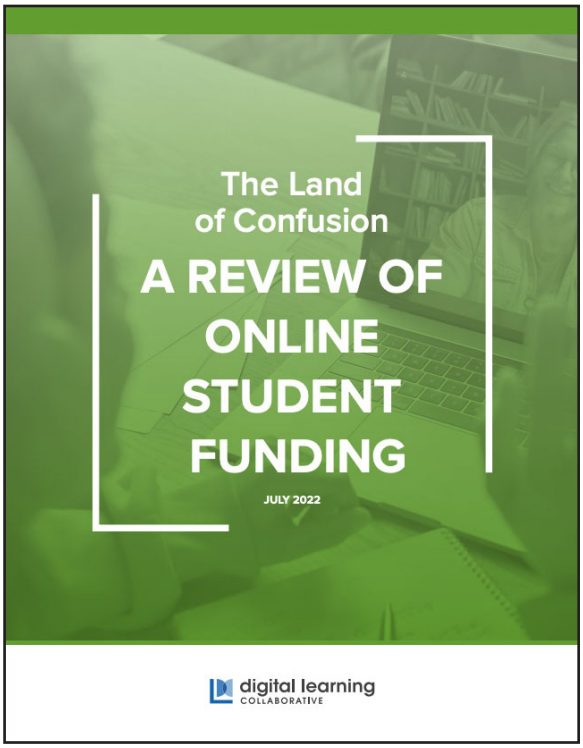
Actionable results and an evolving accountability system

Again, these final two NEPC recommendations apply to all schools but are especially relevant in digital learning. Traditional accountability systems need to be explained to stakeholders, but online and hybrid/blended schools are often different enough that even the best of those explanations don't make sense. For example, many states have complicated growth metrics to report on the extent to which student achievement (as measured by standardized tests) has grown from year to year. Online and hybrid/blended school students are often highly mobile, and often because of challenges that don't fit neatly into accountability system categories.

Growth measures used by most states don't account for those differences and it makes it difficult for online and hybrid/blended schools to take meaningful action in response to such accountability system findings.

Finally, the pace of change in education — especially in digital learning — is not captured in existing accountability systems. As more teachers and students incorporate generative AI tools into their work, the inadequacy of existing accountability measures for explaining what is going on in schools continues to grow. Accountability systems need to help stakeholders understand student access to digital learning resources and the consequences of that access. As digital learning tools and their uses evolve, accountability systems need to be flexible enough to evolve with them.

Funding



In 2022, the DLC reported on the state of virtual school funding. A year later, the landscape of online student funding remains starkly uneven across states, with some generously allocating resources as they would for physical schools and others lagging significantly behind. This discrepancy often stems from the misconception that online learning translates to fewer expenses due to the absence of brick-and-mortar infrastructure. However, this reasoning overlooks the key point: online schools must still provide every essential academic function, albeit in a different form — the digital classroom replacing physical spaces and teachers using technology instead of textbooks. Contrary to assumptions, delivering a quality online education relies heavily on qualified teachers and sophisticated digital tools, making it far from a low-cost endeavor. It's crucial to challenge the policy of reduced funding for online students, as it ultimately penalizes families choosing this educational path and undermines the very quality it aims to promote.

Virtual School Funding Models

School funding mechanisms vary by state. It is important to keep in mind that every state has a highly complex formula with an impressive number of different variables. Most states broadly use one of the following funding calculation methods for public school students (not just those who are online):

- **Single count day or count period**: Students are counted on a single day each year or across a short period of time. This model can be difficult for online schools because of mobility in these schools and getting every student logged on at the same time in schools that offer more flexibility.
- **Multiple count days or count period**: Students are counted on a single day or short periods multiple times throughout the year. This model can be difficult for online schools because of mobility in these schools and getting every student logged on at the same time in schools that offer more flexibility.
- **Average Daily Membership (ADM)**: Although each state has its definition of ADM, it is largely defined as the aggregate days' enrollment in a school during a certain period divided by the number of days the school was actually in session during the same period. *Easier to adapt for online students depending on state record-keeping requirements.
- **Average Daily Attendance (ADA)**: The total number of days of student attendance divided by the total number of days in the regular school year. A student attending every day would equal one ADA. ADA usually is lower than enrollment due to factors such as students missing school for vacation or work or staying home due to illness.
- **Performance-based**: Funding is tied to either course completion or a measure of course competency. States that have adopted this have used it for part-time online programs or supplemental courses at this point, rather than for full-time schools, since these models don't adequately address the higher and fixed costs of full-time online schools.

The per-pupil funding model, adopted by states like Arizona (95 percent of traditional funding) and Florida, allocates resources based on student enrollment numbers. This straightforward approach ensures a direct link between funding and student presence. However, it may not fully address the operational costs unique to virtual education.

Performance-based funding, seen in Ohio and Texas, ties financial support to student achievements or course completions. This model incentivizes educational outcomes but may pose challenges for schools with higher populations of at-risk students or those facing difficulty in course completion.

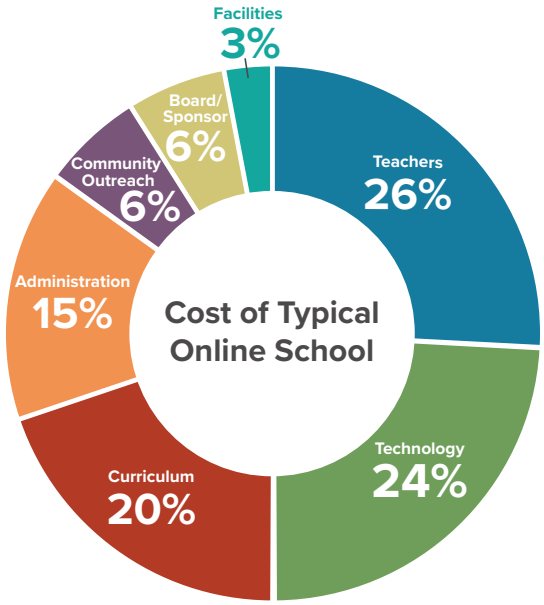
Complex funding formulas, such as those used in Indiana, incorporate a variety of factors, making direct comparisons with traditional schools' funding challenging. These models often aim to balance equity and efficiency in funding but can lead to complexities in implementation.

There are many unique costs associated with online education, such as technological infrastructure and professional development, which are often overlooked in traditional funding models.

The debate over funding equivalence between online and traditional schools is a central theme in discussions about virtual education. Advocates of equal funding for online schools argue that these institutions face different but comparable costs to traditional schools in delivering quality education. This includes expenses related to curriculum development, teacher salaries, and student support services. They contend that online schools, just like traditional schools, play a critical role in providing education and thus should be equally supported.

Key costs for full-time virtual schools

- **Teachers**: instructional personnel, professional development both pre-service and ongoing, travel, instructional supplies and materials, assessment, state testing (renting hotel/meeting rooms, tutoring labs, etc., across a state), contracted services, software licensing, student support and wrap-around services (counselors, speech therapists, etc.)
- **Technology**: computers and office set-ups for all staff members, computers, and connectivity for students, LMS, SIS, networking hardware, software, connectivity (for staff and students), assistive technology, non-management personnel dedicated to technology, software licenses for all non-instructional staff, contracted services



(iNACOL, 2013)

- **Curriculum**: costs associated with developing or purchasing new courses, maintaining or redoing existing courses, students' materials/accounts (not shared)
- **Administration**: administrative personnel, travel, supplies, insurance, legal, postage, marketing, public relations, recruitment, strategic planning
- **Facilities:** administration building(s), space for in-person teaching and learning, office furniture, other on-site meeting/training facilities

On the other hand, opponents of equal funding highlight the different operational expenses between online and brick-and-mortar schools. They point out that virtual schools often have lower costs in areas such as building maintenance and physical infrastructure. Additionally, they argue that the cost-effectiveness of online education should be reflected in its funding model, suggesting that these savings should be passed on to taxpayers.

This debate reflects broader questions about the value and cost of online education, and how best to allocate resources in a way that ensures both efficiency and quality in education across different modes of learning. When thinking about funding online schools, key considerations are:

- What are the COSTS of quality online learning?
- How do taxpayer dollars FLOW to K-12 online learning?
- How can funding be made SUSTAINABLE so every student who wants an online option can have it?

In our funding models report, the DLC calls for a reevaluation of existing funding models. We advocate for approaches that reflect fair, equitable, and sustainable funding for online schools, bridging the gap between virtual and traditional learning environments.

An overview of K-12 digital learning trends in 2023 and beyond

2023 was a year of significant progress in K-12 digital learning, marked by the adoption of new technologies and innovative program structures. This progress holds strong potential for shaping the future of education in 2024 and beyond.

Next, we dive deep into the five key trends that emerged in digital education in 2023.

Integration of AI in education

CTE & dual enrollment

Synchronous & asynchronous learning

Elementary online learning

Teacher shortages & rethinking online teaching

The integration of Artificial Intelligence (AI) in K-12 education

The educational landscape has long buzzed with the potential of transformative technologies, yet many, like virtual and augmented reality, have made only a limited societal impact. However, artificial intelligence (AI), particularly generative AI, seems different. It's already causing measurable changes in society and the economy, unlike its predecessors.

Generative AI stands out due to its versatility in educational tasks, from creating instructional content to adapting resources for better accessibility and personalized learning. It's becoming increasingly capable, suggesting a future where it could replace specialized educational software with more adaptable, general-purpose tools.

Moreover, generative AI's potential to support policy shifts and digital learning adoption in K-12 education is significant. It aligns with initiatives like Education Savings Accounts (ESAs) that advocate for more digital learning. This adaptability in AI supports the case for expanding digital learning scopes.

The human-like interaction capabilities of generative AI are also noteworthy. Current experiments with AI bots in tutoring and support roles hint at a future where AI could facilitate more self-directed learning for a broader student population. This evolution could redefine the roles of teachers and instructional support in schools.

This transformative potential of AI in education is recognized by various states, with Oregon, Michigan, and North Carolina leading the way. Oregon's report on Generative AI in K-12 Classrooms, Michigan Virtual's Planning Guide for Artificial Intelligence, and North Carolina's Generative AI Implementation Recommendations and Considerations for PK-13 Public Schools provide valuable guidance for integrating AI into education systems. These documents emphasize ethical considerations, equity implications, and data privacy concerns, along with practical strategies for AI integration.

However, the Center on Reinventing Public Education (CRPE) notes that only a few states have issued official guidance on AI in education. The majority are either in the process of developing guidelines or have yet to plan for such guidance. This lack of uniformity across states may lead to disparate and potentially inequitable impacts of AI in education.

The US Department of Education is also developing resources and policies related to AI, but more immediate and comprehensive guidance is needed at the state level. Proactive approaches like those in Oregon, Michigan, and Japan, where provisional guidance is being tested and amended as necessary, could serve as models for other states.

While the future of generative AI in education is still uncertain, its potential for transformative impact is clear. States have a critical role in shaping this future, ensuring equitable access, responsible use, and harnessing AI's capabilities to enhance learning and teaching. Now is the time for active engagement and strategic planning in the educational realm, not just to witness but to actively shape the AI-driven transformation, ensuring it empowers rather than disrupts the sacred human endeavor of learning and growth.

New and growing CTE and dual enrollment online opportunities

The educational landscape, particularly in Career and Technical Education (CTE) and dual enrollment, is undergoing a shift since the pandemic. The rising popularity of CTE programs, often offered in online or hybrid formats, along with increasing options for dual enrollment and dual credit, reflects a strategic alignment with the dynamic needs of the contemporary job market. These trends signify not just an expansion of choice but also a recognition of the need

for flexible, accessible pathways to skill development, higher education, and post-secondary readiness. As online and hybrid schools carve out new pathways, they are reshaping the conventional journey from high school to college and career, setting the stage for a generation of students adept at navigating the complexities of the modern economy. This reconfiguration is likely to accelerate in 2024, redefining traditional trajectories and preparing students more effectively for future careers.

Online educational models are at the forefront of expanding both CTE and dual enrollment opportunities. Programs like Pearson's Career Portal for Connections Academy students and other online platforms are initiating students into the world of career exploration and readiness earlier in their academic careers. Dual enrollment courses have become an integral part of this ecosystem, providing high school students with a valuable head start on college education. Many online schools have established partnerships with community colleges, allowing students to accumulate college credits while still in high school, thereby saving time and reducing future educational expenses.

The growth trajectory of online CTE and dual enrollment courses comes with its share of challenges. The credibility of dual credits, particularly their acceptance and transferability across educational institutions, remains a contentious issue. The lack of external validation for "college-level" learning has led to concerns about the quality and promises made to students. This issue is magnified by the fact that students who transfer credits, especially from community colleges, often face significant credit loss, complicating their journey through higher education.

Innovative delivery methods, such as mobile labs, are addressing accessibility issues and providing hands-on experience crucial for both CTE and dual enrollment students. An example of this ingenuity is Destinations Career Academy of Colorado's medical lab RV that travels to students in Colorado, ensuring equitable access to necessary lab hours. Such initiatives underscore the commitment to overcoming geographical barriers and delivering quality education in creative ways.

The value of industry partnerships and internships is amplified in the context of dual enrollment, as these experiences provide a glimpse into the collegiate environment and professional expectations. However, securing these opportunities for high school students requires persistent effort and strategic outreach to industry partners willing to invest in the future workforce.

Managing such expansive programs calls for a deep engagement with students' interests and aspirations. Organizations like Career and Technical Student Organizations (CTSOs) provide a platform for students to engage and excel, offering insights into their future careers and academic paths. These organizations are critical for fostering leadership skills and for bridging the gap between theory and practice, benefiting both CTE and dual enrollment participants.

The curriculum in both CTE and dual enrollment programs is becoming increasingly aligned with labor market demands. The inclusion of contemporary courses like AI, cybersecurity, and supply chain management ensures that students are not only college-ready but also equipped with the skills needed in the current and future job markets.

Attracting and nurturing a capable teaching staff remains central to the success of these programs. The flexibility of online and hybrid models allows for recruitment from a diverse pool of talent, ensuring that educators bring both academic and industry perspectives into the virtual classroom.

The involvement of the corporate community and parents is instrumental in the success of both CTE and dual enrollment initiatives. Parental support is particularly crucial in guiding students through dual enrollment choices, aligning their high school experiences with college aspirations and career goals.

As we look to the future, it's clear that CTE and dual enrollment opportunities are integral components of a comprehensive educational strategy for online and hybrid schools. The DLC's monthly discussions and webinars have this past year crystallized the vision for a future where students are empowered with the knowledge, skills, and credentials to thrive in a multifaceted economy. The path forward for CTE and dual enrollment in online and hybrid schools is one of continuous innovation and responsiveness to the needs of both students and the evolving workforce. As educators, policymakers, and industry leaders collaborate, they chart a course for an educational system that is adaptable, equitable, and forward-thinking.

Balancing synchronous and asynchronous learning

Online learning in K-12 education has predominantly oscillated between two primary modalities: synchronous and asynchronous. Pre-pandemic, most online schools leaned heavily towards asynchronous content delivery. This method allowed students to access and engage with learning materials at their own pace, catering to individual learning styles and schedules. However, it often lacked the real-time interaction and immediacy of traditional classroom settings.

With the onset of the pandemic, a significant shift occurred. Emergency remote learning programs adopted a predominantly synchronous approach, attempting to replicate the traditional classroom experience online. This method involved real-time, teacher-led instruction via video conferencing tools. While this approach maintained a sense of normalcy, it often failed to fully leverage the benefits of online learning, particularly in terms of flexibility and differentiated instruction.

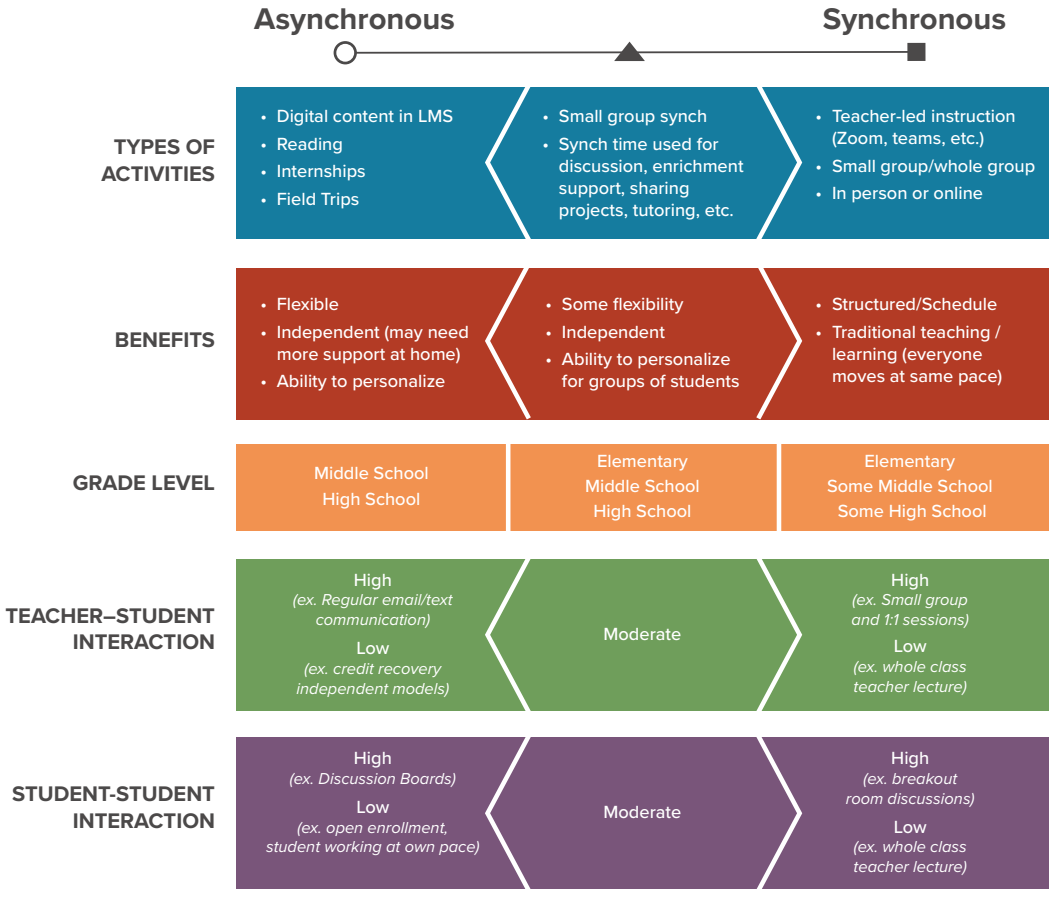
The shift to synchronous learning during the pandemic revealed several challenges. Students and teachers faced "Zoom fatigue" due to prolonged screen time. Moreover, the lack of flexibility in scheduling posed difficulties for students in different time zones or with varying home

environments. This approach also struggled to accommodate diverse learning needs effectively, as it mirrored the one-size-fits-all model of traditional classrooms.

Asynchronous learning, on the other hand, offers several advantages. It allows students to learn at their own pace, providing opportunities for deeper understanding and self-paced revision. For instance, a student can re-watch a recorded lecture or spend more time on challenging assignments. This modality also enables personalized learning paths, catering to the varied learning styles, interests, and speeds of learning of students.

Post-pandemic, quality online schools are recognizing the importance of integrating synchronous elements into their primarily asynchronous models. Synchronous sessions are now being strategically used for activities where real-time interaction is beneficial. Examples include lively discussions, collaborative projects, small group learning, and immediate feedback sessions. These activities foster a sense of community and provide opportunities for social learning and real-time support.

The balance between synchronous and asynchronous learning is also influenced by the age of the students. Younger students often benefit more from synchronous sessions that mimic classroom environments, aiding in engagement and motivation. As students progress to higher grades, they can handle more asynchronous work, which encourages independent learning and critical thinking skills.



The subject matter also plays a crucial role in determining the right balance. Subjects that require more discussion, such as language arts or social studies, might lean towards synchronous sessions for debates or group discussions. In contrast, subjects like mathematics or science might utilize asynchronous work for problem-solving and experiments, with synchronous sessions for clarifying doubts and collaborative learning.

An approach blending both synchronous and asynchronous methods is emerging as an effective model in online K-12 education. For example, a science course might include asynchronous instructional videos, readings, and assignments, supplemented by synchronous virtual labs and Q&A sessions. This model ensures a comprehensive learning experience, combining the strengths of both modalities.

Some newer district online programs that started during the pandemic have continued the fully synchronous model due to parent demand as that was what they knew and were comfortable with. As completely asynchronous programs are reviewing and modifying their models, it is recommended that fully synchronous models review their models to combine the best of both modalities to meet the needs of their students and families. Continuous feedback from students and parents is crucial in fine-tuning the balance between synchronous and asynchronous learning. Schools are increasingly using research, best practices in the field, and surveys and feedback tools to gather insights on student engagement and learning outcomes. This feedback loop helps in making informed decisions about modifying instructional strategies to better suit learner needs.

The optimal use of synchronous and asynchronous learning in K-12 online education is not about choosing one over the other, but rather finding the right balance that suits the needs of the program, the age of the students, and the types of activities involved. The post-pandemic era presents an opportunity for online schools to refine their approaches, ensuring a more personalized, flexible, and effective learning experience for students.

Online learning for elementary students

As discussed elsewhere in this report, during the pandemic many students and families discovered a version of online or remote learning for the first time. For many high school students, online learning may have been new, but most were familiar with some type of educational technology. Some may have taken an online course or two, others may have been in flipped classrooms, and most probably had some experience with Google Classroom, Google Docs, or other instructional software.

For elementary students, the situation was often different because especially the youngest students had less experience with any use of technology in their classrooms. This dynamic led to two outcomes: first, for most elementary students, families, teachers, and school leaders, online or remote learning was very different from the norm. Second, many of the elementary-age online

or remote learning efforts during the pandemic produced poor outcomes. These factors created a narrative in some quarters that elementary online learning did not work.

But that narrative was wrong; it was a result of poor implementations. Online learning for the youngest students may have seemed new, but online schools had been serving all grade levels for about two decades before the pandemic. Instruction in those schools was heavily based on two factors that are different from online learning for older students.

First, experienced online elementary schools recognize, create, and support a formal role for an adult at home, who is often called a Learning Coach. Experienced online schools recognize that teachers can't communicate online consistently well with seven-year-old students. Instead, they are communicating with both learning coaches and students.

Second, the mix of synchronous and asynchronous activities may be different for elementary students, because of the need for more live interaction. Online schools understand how to interact with students and learning coaches in real time — and crucially, they recognize that providing hours of live video classes is not a great strategy.

Finally, many experienced online schools use a variety of instructional materials that include paper books, paper workbooks, manipulatives, and other non-digital interactives. These materials allow students and learning coaches to work together, offline, away from a computer.

Post-pandemic, many elementary programs experienced significant enrollment decreases. In some cases, these decreases simply reflected students and families choosing to go back to a traditional school once the pandemic was over. In other cases, poorly implemented elementary programs represented a missed opportunity, because students and parents might have preferred continuing with an online school if they had been exposed to a higher-quality version of elementary online learning.

The evolving landscape of online elementary education is revealing a complex narrative. While digital learning has emerged as a pivotal educational option, its effectiveness in the context of elementary education is increasingly scrutinized. Research and trends indicate a dichotomy: while some regions report thriving online elementary programs (Haven School in Widefield School District in Colorado and Launch Virtual Learning in Missouri), there is a notable decline in enrollment (and schools closing) in others, such as Florida who saw a drop of 15,000 elementary student enrollments in 2022-23 and the Idaho Digital Learning Alliance whose elementary enrollments dropped in half, and they transitioned their program from core instruction to ELA intervention. This shift highlights the growing recognition of the inherent challenges in delivering effective online education to young learners. In a recent survey and discussions with the DLC members, we identified four key themes impacting online elementary schools this past year:

- Literacy development: Young learners in kindergarten through second grade can struggle with online content due to developing reading skills. Navigating and comprehending digital material becomes a hurdle, impeding their learning progress. Digital content must be developed and designed in ways for students to navigate and learn in a variety of modalities (online, offline, and both synchronously and asynchronously). Content is usually animated to demonstrate and engage these younger students.
- Logistical demands on families: Online learning often requires constant adult supervision, placing a significant burden on parents or guardians who must juggle work and educational assistance. Online elementary schools usually require an adult to be home with the student during their school day. This adult acts as a Learning Coach, partnering with the student's online teacher(s) to support their learning at home. This demand proves impractical for many families, particularly those with working parents, who are now returning to the office.
- Limited social and physical development: Elementary education encompasses more than academics. Students need time away from screens to engage in physical activities, develop fine motor skills, and build social relationships, aspects that online platforms struggle to provide. Most full-time virtual schools provide online clubs and activities and support families who live near each other to meet up for field trips and special events to provide socialization for those students and families who want to engage offline.
- Financial burden of high-quality content: Many districts who created full-time virtual schools during the pandemic, used teacher-created content or tried to replicate their traditional classrooms, spending the entire school day on synchronous platforms. Building quality online content is expensive and requires a lot of time and teams of instructional and technical professionals. Creating and maintaining engaging, age-appropriate, asynchronous, digital content is even more costly and time-consuming because of the literacy levels and attention spans of younger children. Delivering instruction online for elementary students is also a newer space for the field, so there are not as many options for districts to purchase content and Learning Management Systems that are age-appropriate.

With the pandemic receding, many families are returning to traditional schools or finding other options. Policymakers are acknowledging these challenges, with Texas restricting online learning for lower (K-2) elementary grades due to a lack of research and understanding of its impact on a student's learning and development. Other states are providing additional options of microschools (Arizona) and hybrid (Colorado and North Carolina) schools that still provide the flexibility of the online school, with more of in-person socialization that comes with more traditional elementary schools.

While the initial enthusiasm for online learning may be waning, it's not disappearing entirely. Some districts are transitioning their full-time online elementary students to state-wide virtual schools that have developed asynchronous digital content for students of all ages and have provided intense training for instructional teams to specifically engage and support younger students in the online environment.

Rethinking education in the face of teacher shortages

The nationwide teacher shortage presents a critical challenge, but within this crisis lies an opportunity for bold shifts in educational models. Virtual schools have emerged as vital partners, stepping in with online teachers and courses to fill gaps in staffing and curriculum, but their contributions extend far beyond just plugging temporary holes. We will explore how virtual schools are not only supporting traditional schools in the immediate present but also pushing them toward a more sustainable and adaptable future.

While filling open positions with qualified instructors is crucial, simply placing "warm bodies" in classrooms isn't the answer. Virtual schools are leading the way in reconceptualizing teacher roles. By providing online-based content creation, instructional support, and student mentorship, they demonstrate that effective education can be delivered through a distributed network of expertise, not solely reliant on the traditional classroom model.

The current teacher shortage often gets framed as a deficit, highlighting the lack of qualified professionals. However, virtual schools advocate for a proactive and optimistic approach. Instead of viewing this as a crisis to be mitigated, they see it as an opportunity to introduce innovative models and forge reciprocal relationships between traditional and virtual learning environments.

Examples of collaboration in action:

- **Hybrid models**: Districts with open positions can utilize online courses combined with a qualified online educator, supporting students and a paraprofessional in the classroom with students, ensuring student support and engagement while alleviating the pressure to find a full-time teacher.
- **Leveraging expertise**: Virtual schools can provide access to specialized instructors, like those certified in multiple states or teaching rare languages and specialized courses, and overcoming geographical and logistical barriers.
- **Support systems**: Online educators can act as mentors for local teachers and paraprofessionals, offering guidance and best practices, particularly in subjects facing the most significant staffing shortages.

In summary, online schools and teachers are uniquely positioned to support their in-person colleagues by sharing expertise, advocating for change, and demonstrating innovative, flexible staffing models for the future. Collaboration is key to addressing the teacher shortage crisis sustainably.

Virtual schools offer more than immediate relief; they have the potential to drive systemic transformation. To create a thriving education landscape, we need to:

- **Support educators**: Address issues like workload, compensation, and mental health. Online teachers and schools can mentor and provide professional development for in-person teachers, helping to build skills and prevent burnout.
- **Embrace new roles**: Develop roles like mentors, content creators, and instructional facilitators. Online schools use diverse staffing models, which can inspire traditional schools to adopt similar approaches.
- **Challenge traditional models**: Experiment with hybrid learning and flexible staffing to cater to diverse student and educator needs. This approach can widen the teacher pool by reducing geographical limitations.
- **Advocate for legislative changes**: Push for national teacher certification and state reciprocity to broaden the qualified educator pool.

The teacher shortage is a complex challenge, but virtual schools are uniquely positioned to offer not just stop-gap solutions but also new possibilities. By rethinking the teacher role, fostering collaboration, and embracing innovation, we can shift from a reactive posture to one of proactive change. This is not about replacing traditional schooling; it's about building a more adaptive and resilient education system that leverages the best of both virtual and physical environments to meet the needs of every student and educator. The future of education is not about finding more warm bodies, but about nurturing a diverse ecosystem of talent and expertise that can unlock the full potential of every learner.

Role of an online teacher

Role of research in the field

As the leadership team of the National Standards for Quality Online Learning (NSQOL) prepares a 2024 update of the three sets of standards that underpin quality in online learning, they are working to ground the process in current research. To this end, the Digital Learning Collaborative (DLC), Quality Matters (QM), and the Virtual Learning Leadership Alliance (VLLA) have commissioned an extensive annotated bibliography. This document, which will be published on the NSQOL website in spring 2024, reviews research, especially in the last five years, around the following topics in K-12 online, blended, and hybrid learning: synchronous modes, learner engagement, assessment, SEL and life skills, equity, accessibility, cybersecurity and, of course, AI. The annotated bibliography offers numerous insights, synthesizes key findings, and pinpoints areas where future research is most urgently needed to advance the field.

Drawing heavily but not exclusively from that annotated bibliography, here are some observations about the state of research into online, blended, and hybrid learning:

- **Author and publication trends**: The field of researchers focusing on online, hybrid, and blended learning remains small and focused on the US, though there are 230 researchers cited in the commissioned bibliography who have published one article, and the bibliography identifies more geographic diversity than the prior reviews it cites. Especially since the pandemic, however, it is impossible for any bibliography to capture all relevant research, given growing geographic diversity and the challenge of navigating a chaotic landscape of higher education-focused research and journal paywalls. A prominent journal ranking database does not include one of the two leading journals referenced in the bibliography and the other is ranked 57th behind many higher education-focused journals that include an occasional K-12 article.
- **Key topics identified**: Many studies focused on K-12 students and full-time online teachers, though there were of course many studies about K-12 teachers navigating emergency online teaching scenarios during the pandemic. Research themes included high school education, COVID-19 impacts, personalized learning, professional development, instructional materials, online collaboration, generative AI and machine language applications, student engagement, and digital competencies.
- **Identified tensions**: Taken as a whole, the research highlights crucial tensions, such as balancing relational and technological support in online education both from a teacher and student perspective; navigating student engagement, collaboration, and self-regulation in online learning environments; and ensuring coherence between instructional and program design elements and technology, including applied learning theories, accessibility, and data privacy.

- **Recommendations**: The findings lead to several recommendations, including reframing the role and mechanisms of student engagement; enhancing professional learning for teachers concerning social and emotional learning and when to use synchronous and collaborative methods; assessing foundational learning theories and beliefs; critically evaluating program design, learning materials, and technology for those theories; integrating accessibility throughout online learning; and prioritizing cybersecurity for student data protection.
- **Emerging issues and future research needs**: There continues to be great opportunity to increase the range, depth, and quality of research in online, blended, and hybrid learning. Practitioners need a refined understanding of the elements of effective programs and their effect sizes to outcomes. Research is needed to further delve into asynchronous versus synchronous instruction, explore AI's role in empowering learners, document and analyze actual achievement outcomes, and address the placement and context of students with social and emotional challenges in online programs.

This report highlights the evolving landscape of K-12 online learning and emphasizes the urgency for ongoing research to address emerging trends and challenges. The goal is clear: to continually elevate the quality of online learning experiences for students across diverse contexts. The insights and recommendations presented suggest directions for future exploration and innovation.

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Join us at the Digital Learning Annual Conference.
February 26-28, 2024, Austin, TX
February24-26, 2025; Atlanta, GA

Conclusion: What we're watching in 2024

As noted at the start of this report, we believe that the digital learning field is leaving pandemic pressures and issues behind, and a new landscape is emerging. The new landscape, as detailed in the previous pages, includes both existing and new factors. In 2024, we will be watching both to further understand our field.

The existing factors include:

- The push and pull of new policies, including new laws, regulations, and interpretations of such policies by education agencies. Will any of the states that have generally lagged in online and hybrid learning opportunities change their trajectory? Will any of the states with relatively large enrollments in online and hybrid schools and courses pull back via policy restrictions, lower funding, or other mechanisms?
- Will the enrollment trends discussed in this report continue? Will we see changes as the 2023-2024 data becomes clear? Will discrepancies in enrollments and access between states grow or shrink?
- What new instructional trends will emerge or continue to grow? This report discusses synchronous versus asynchronous learning, and the decline in the growth of online learning for elementary-age students. Both issues were highlighted during the pandemic. What new issues will emerge in 2024?
- With the growth in interest in digital instructional technologies overseas, will any of those countries or regions leapfrog the US and other countries that have been previous leaders in our field? An analogy here is cellular phone technology, in which the US and other Western developed countries were early leaders—but they were then left behind, in terms of access at least, by some developing countries. Will we see signs of that trend in 2024?

The three new factors are AI, the growth of new policies spreading ESAs, and the spread of programs such as CTE, dual credit, and independent study (in California) that don't identify primarily as online or hybrid but depend on both digital instructional strategies and policies that support teaching and learning independent of time and place.

These factors have been discussed elsewhere in this report and do not need to be further explained here. But each alone has the potential to shift the arc of digital learning, and together the effect could become exponential.

Is that likely? No. K-12 education has never been transformed quickly. But hope springs eternal.

Appendix

About this report

In 2023, the landscape of K-12 digital learning was more dynamic than ever. This *Snapshot* captures the evolving state of play, reflecting on a year of innovation. Amidst this backdrop, the Digital Learning Collaborative (DLC) proudly presents its fourth annual Digital Learning *Snapshot, the post-pandemic digital learning landscape emerges*.

Since 2004, the Evergreen Education Group has mapped the progress of digital learning with its comprehensive reports and publications, culminating in the annual Keeping Pace series that concluded in 2016. The Keeping Pace reports were re-visioned and rebranded as *Snapshot* under the DLC. Since 2019, the Snapshot has become an annual tradition, except in 2021 when we pivoted to real-time blog updates to adapt to rapidly changing educational landscapes.

These reports, backed by a spectrum of educational stakeholders, have served as a cornerstone for understanding the policies and practices shaping K-12 online, blended, and digital learning. Our diverse DLC membership includes individuals, schools, districts, regional and state agencies, non-profit organizations, and companies. Each member plays a vital role in the continuous evolution of digital learning.

This report is named *Snapshot* for its dual purpose: to provide a concise yet comprehensive overview of current K-12 digital learning activities in the US, with a focus on public schools, and to offer a glimpse into the extensive resources available on the DLC website. This report mixes new findings with summaries of more detailed reports online, heavily drawing from our state profiles, the DLC blog content, and other reports.

We invite you to dive deeper into this report to discover key insights, practical resources, and innovative strategies that are shaping the future of K-12 digital learning. Your feedback and participation are crucial in driving our mission forward. For further engagement, feedback, or queries, please email us.

About Evergreen Education Group

We at Evergreen Education Group have been fortunate to be associated with many of the people and organizations responsible for the development of K-12 online, hybrid, and digital learning in the US. Evergreen Education Group knows that many more students and teachers haven't yet realized the benefits that are possible.

Evergreen has been working in this field for twenty-four years, and our key people worked in education well before joining Evergreen. Our priority has always been, and continues to be, unbiased information development and reporting of activity within the digital learning space.

Our services include:

- **Consulting services**

  We work with a wide range of organizations, from schools, districts, and operators to authorizers and agencies to companies and other product and service providers. We combine deep discovery of services, products, goals, and strategies with our knowledge of the field to uncover key insights and explore new directions. Our independent, unbiased expertise allows us to take stock of current situation, clarifying direction, helping chart realistic paths to get there.

- **Market research and strategy**

  We conduct market research to help inform company, product, and communication strategies. What differentiates us is our deep understanding and far-reaching network enable us to ask the right questions of the right people in schools, districts, state agencies, and other organizations. This leads to better insights and deeper context about customer and stakeholder needs and interests and the directions their organizations, and the field as a whole, are going.

- **White papers and case studies**

  We research and publish white papers exploring topics of interest to our clients, related to policy, practice, or elements of the digital learning landscape that demonstrate how to further educational goals and improve student outcomes. Our researchers understand the field deeply, so we can quickly identify and focus on key information and implications.

- **Convening and supporting boards, panels, networks**

  We organize, convene, and support groups on behalf of our clients for a variety of purposes. Examples include advisory boards for organizations seeking sustained input, panels for more narrowly defined purposes or timeframes, and networks of practitioners or organizations to facilitate collaboration.

Our typical consulting engagement is built on a deep working relationship that encompasses two or more of the services in the list above and spans several months at a minimum. We do not typically take on the development of a single case study or running a single focus group, for example, because we seek to build a deeper understanding of each client's needs and interests.

Learn more at www.evergreenedgroup.com.

DIGITAL LEARNING COLLABORATIVE

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