

EDUCATION EVOLUTION: THE NEED TO KEEP PACE WITH DEVELOPMENT OF K-12 ONLINE LEARNING

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Online learning—also referred to as e-learning, virtual learning, and a mode of distance learning—is unconstrained by time or place. Online learning provides opportunities for students whose choices may be limited due to their rural location, who are unable to attend classes due to physical illness or expulsion, who seek credit recovery or advanced courses, or who have scheduling conflicts in their home school. Online learning also can be a good alternative for students who have work or family obligations outside of school. In addition, students who have social or behavioral issues in school find that online learning allows them to focus more on content. High school reformers in particular, bent on boosting dismal graduation rates and bringing back students who have left the education system, look at online learning as a means of providing new options to students. For all these reasons, it is clear that online learning is more than a passing fad.

Online learning programs vary significantly from one another in terms of quality, funding, purpose, governance, and geographic reach. It is a mistake to consider and treat all online learning programs as though they are alike, although district and state leaders frequently still do so at the peril of sound policymaking.

POLICY RECOMMENDATIONS

- *Develop state-level guidance specifically for online education programs. (See page 12.)*
- *Implement policies for cyberschools to address students' special needs. (See page 12.)*

ISSUE OVERVIEW

Online learning is a growing force in K-12 education. It levels the playing field for students by providing educational opportunities and addressing barriers to attending a brick-and-mortar school. Online learning will play an increasingly important role in education as demand for greater choices in public schools continues.

Few states have addressed all of the policy implications of online education. More than three years ago, the National Association of State Boards of Education (2001, p. 5) warned of the need for appropriate state-level policies: "In the absence of firm policy guidance, the nation is rushing pell-mell toward an ad hoc system of education."

Bearing in mind this call to action, this edition of Policy Issues describes K-12 online learning policy and practice using the results of a recent study of 11 states, Keeping Pace With K-12 Online Learning: A Snapshot of State-Level Policy and Practice (Watson, Winograd, & Kalmon, 2004), as a primary source. State education agencies and legislators need to be proactive in shaping policies in order to ensure success in broad access, equitable opportunities, and high-quality online learning options.

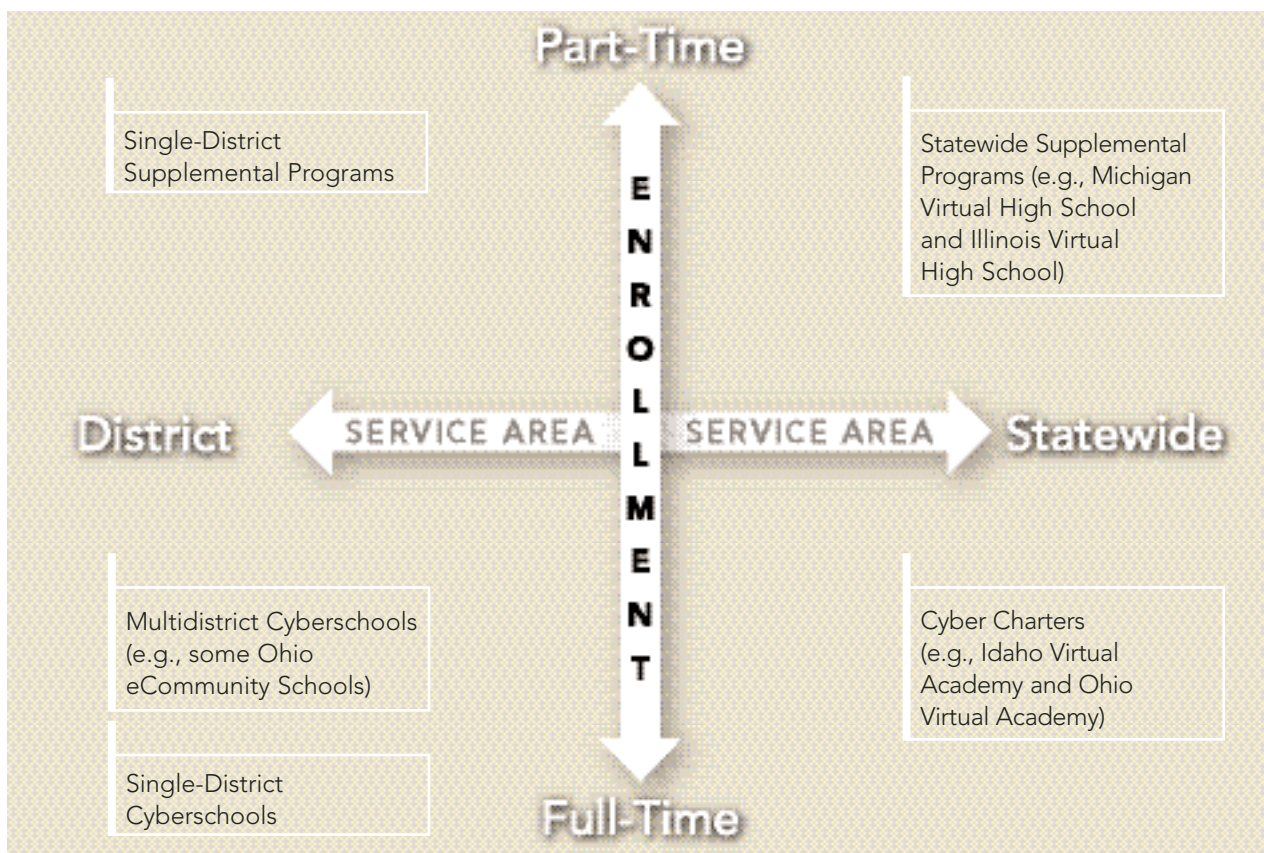
A host of organizations are coming forth to provide online learning opportunities for K–12 students. Public school programs include those operated by districts, state-sponsored organizations, and charter schools (referred to here as *cyber charters*). One effect of the surge in online learning is that, at least in some states, it has made the concept of competing for students a reality. Some district leaders now sharply oppose online learning, after losing significant per-pupil funding to full-time, online entities. Other districts develop their own programs, or work with statewide programs, to provide online opportunities to their students.

From this perspective, a key distinction among online providers is whether they complement existing public schools or compete with them. Most programs sponsored by a state education agency (SEA) are designed to supplement or complement school district course offerings, whereas cyberschools are designed to compete with districts for full-time student enrollment.

Another way of characterizing online programs is illustrated in Figure 1 below. Two dimensions—*enrollment* and *service area*—affect how schools operate, how they are funded, and how they respond to student needs.

- The *enrollment* dimension ranges from part-time (supplemental providers) to full-time (cyberschools and cyber charters). Supplemental providers gear their services to students who seek one or more online courses in addition to coursework at their school of record. Cyberschools enroll students in full-time online learning and are authorized to grant credits and diplomas to students.
- The *service area* dimension refers to the jurisdictional level or territory at which the program operates, such as statewide, multidistrict, or single district.

FIGURE 1. DIMENSIONS OF ONLINE PROGRAMS



Within the dimensions already described, there are five basic types of online programs. Some states have all five types, some have one to four, and some have none. These five types of programs develop and operate independently of one another in each state. Communication is weak among programs, as well as among the state-level agencies responsible for supervision. Coordination of efforts is not the rule. The five types of online programs are as follows:

- **Statewide supplemental programs** provide individual courses to students anywhere in the state who are enrolled in a physical school or cyberschool. These programs are authorized in some way by state-level authority (e.g., state law or through the SEA) to operate on a statewide basis. Examples include programs in Colorado, Florida, Idaho, Illinois, Michigan, and Wisconsin. Student enrollment information is usually tracked and reported.
- **Single-district supplemental programs** exist in many states. Because they are operated by individual districts, they are not tracked by SEAs. In most cases, little is known by the state about the number or types of students taking courses in these programs. One exception is California, which tracks online program participation as part of a pilot project created in 2003 by the California Department of Education.
- **Single-district cyberschools** are run by individual school districts to serve district residents who seek an alternative to the physical school environment. Often a single-district cyberschool is housed within one of the district's physical schools. The students tend to be academically at-risk, and may enroll part- or full-time in the cyberschool. In most states, enrollment is quite small. However, the number and size of such programs may soon grow as school districts look for ways to retain students they now lose to multidistrict cyberschools.
- **Multidistrict cyberschools** are operated by or chartered within individual school districts but enroll students from several school districts or even from across the state. Multidistrict cyberschools represent the largest growth sector

in K–12 online learning. This phenomenon is gathering much attention but not necessarily enough attention in terms of policy guidance.

- **Cyber charters** exist in some states that allow charter schools. They are chartered within a single district but, as with multidistrict cyberschools, usually draw students from across the state. They frequently are connected to commercial vendors, such as the curriculum provider K12 Inc. Some states (e.g., Minnesota) have enacted laws that explicitly address cyber charters and put quality, accessibility, and other requirements in place that are specific to online education. Other states, such as Wisconsin and Idaho, do not have any laws or policies specifically for cyber charters; in these states, cyber charters operate under general charter school laws and regulations. In other states, such as Illinois, cyber charters are prohibited.

In *Keeping Pace With K–12 Online Learning: A Snapshot of State-Level Policy and Practice* (Watson, Winograd, & Kalmon, 2004), 11 states were chosen for an in-depth analysis based on some combination of the level and nature of online education activity in the state, the presence of state laws and regulations concerning online activity, and the presence of a statewide online education program. Individual state profiles were created to represent the status of online education activity. Key characteristics for each of the 11 states include the following:

California: Has a large statewide online program, a handful of district-level online programs, and four cyber charters. A law was passed in 2003 that allows 40 supplemental online programs to obtain per-pupil general education funding for their programs.

Colorado: Has 20 cyberschools, a prominent statewide program, and numerous district-level supplemental online programs. Significant tension exists between multidistrict cyberschools and physical school districts because of competition over student enrollment and the associated state per-pupil funding.

Florida: Has a large and prominent statewide online program, which provides online curriculum and instruction through a partnership with all of Florida's public school districts. Two K–8 pilot programs,

Florida Virtual School and Florida Connections Academy, also are funded by the state.

Idaho: Has a statewide program, the Idaho Digital Learning Academy, created by law, and three cyberschools that operate under charter school laws.

Illinois: Has a statewide program, the Illinois Virtual High School, and virtual programs operated by local school districts or through interdistrict agreements.

Michigan: Has a statewide program, the Michigan Virtual High School, funded by state appropriations and district membership fees, district-level supplementary programs, and dual enrollments with postsecondary institutions.

Minnesota: Has cyber charters and online education programs within districts, and has laws that set forth a number of policies directly affecting online education and requiring the state department of education to review and certify online providers.

Ohio: Has 39 online cyber charters, called eCommunity schools, and state laws that provide guidance for their operations.

Pennsylvania: Has cyber charters and school district-operated online programs. Also has state laws clarifying state support of cyber charters.

Texas: Has state-funded supplemental programs offered through school districts and through two postsecondary institutions. Also has created a pilot program designed to examine quality assurance mechanisms for online courses.

Wisconsin: Has a statewide program, the Wisconsin Virtual School operated by a regional educational service agency, and several cyber charters whose existence is encouraged by Wisconsin's open enrollment law.

At least seven states fund statewide programs, which are created by law or by a state-level agency. Most of these programs are directly funded by a state appropriation or grant for the purpose of providing online learning opportunities across the state. (See "Funding Online Programs" on page 8.) The Web sites of these programs offer course demonstrations, course catalogs, and an

overview of the program. Visit the sites to get a first-hand view of what an online course involves.

- **California:** University of California College Preparatory Initiative
www.uccp.org/home.htm
- **Colorado:** Colorado Online Learning
www.col.k12.co.us
- **Florida:** Florida Virtual School
www.flvs.net
- **Idaho:** Idaho Digital Learning Academy
idla.k12.id.us
- **Illinois:** Illinois Virtual High School
www.ivhs.org
- **Michigan:** Michigan Virtual High School
www.mivhs.org
- **Wisconsin:** Wisconsin Virtual School
www.wisconsinvirtuallschool.org

ONLINE LEARNING POLICY ANALYSIS

Overall, states would do well to consider online learning in a comprehensive manner in all its manifestations. Currently, various online learning programs within a state are administered by different entities. With only spotty data and reporting, it is difficult to assess the current level of online participation, much less exert consistent policy influence over the content and quality of programs. Online learning is all but certain to grow substantially in the next five years. Should state policies apply across all programs? Is a commission necessary to oversee online learning quality across the board?

Consider the driving forces behind the growth of online learning. In some states, funding opportunities and threats, rather than student educational needs, are driving the growth of online learning. Vendors are marketing their curricula and online schools across the state in order to collect state-financed, per-pupil funding with each FTE enrollment. In response, some districts are creating their own online programs in order to keep students (and their funding) in the district. Is online learning evolving according to a model of quality, response to need, or opportunity?

Online education policy issues fall under broad categories: quality (program, teacher, course, and student support), funding, access and equity, accountability and oversight, and research and evaluation data. Each area is discussed in detail.

Quality

State policies rarely provide specific outcome requirements for online programs, relying instead on local district quality controls, state assessment tests, and self-enforced guidelines established by online programs. As a result, little is known about the quality of online learning. Policies should address program quality, teacher quality, course quality (design, delivery, and content), and the quality of student support.

Program Quality. Except for the statewide programs, online programs are operated by school districts. State policies almost always defer to districts' "local control" in determining the effectiveness of these programs—a practice that is consistent with, and extended from, state policy with respect to physical schools. Yet the districts rarely have the experience required to make such determinations. In the case of multidistrict cyberschools, they lack incentive to be rigorous in setting standards. As a result, the quality of the learning experience offered by online programs is often uncertain.

Statewide programs are a notable exception because of their greater visibility to state-level policymakers and/or state agency oversight. At least one statewide program director has reported that his program's rigor often put the program at a competitive disadvantage with lower quality district-level programs. State assessments only partially fill the quality assurance gap for two reasons: (1) because online students only recently began taking these assessments, and (2) because the student population changes substantially from one year to the next.

In an effort to respond to concerns about quality, equity, and accountability, state-level charter school laws and other state-level policies written specifically for online learning frequently mandate that online programs establish internal compliance

mechanisms. Instead of prescribing specific rules for online programs, the states require that online programs establish their own policies and goals; processes for meeting their goals; and reporting mechanisms to the state, district, or other governing body.

This approach, which is similar to what is used for quality control and environmental management in the private sector, can be powerful and flexible. But the approach requires that state agencies be knowledgeable about the issues specific to online education programs. Further, SEAs need the capacity to provide active oversight for the online programs. In the absence of reliable information about these programs and without the staffing sufficient to provide meaningful oversight, state agencies are unlikely to obtain the intended results.

Teacher Quality. Most states require that online teachers meet state standards in terms of licensure or certification.

One exception to this is Michigan, which notes, "The teacher of record may be the instructor associated with the virtual course and, therefore, may not necessarily hold a Michigan teacher certification" (Michigan Department of Education, 2002, p. 2). In this case, however, the state requires that an on-site mentor assigned to the student is a certified teacher.

With the exception of California and Minnesota, no additional standards or requirements are in place. In fact, some charter school laws allow some teachers in charter schools not to have state certification (e.g., Pennsylvania, where a charter school needs to have only 75 percent of its staff licensed).

California law (Online Classroom Programs, 2003) has several stipulations for teachers:

- "The teacher of an online course shall be online and accessible to the pupil on a daily basis to respond to pupil queries, assign tasks, and dispense information."
- "At each participating school site, the ratio of full-time equivalent certificated teachers teaching through online instruction to pupils engaging in

that instruction shall be substantially equivalent to the ratio of teachers to pupils in traditional in-classroom study of the same subject matter.”

- “A teacher may teach pupils in one or more online courses ... only if the teacher concurrently teaches the same course to pupils in a traditional in-classroom setting in the providing school district or did so within the immediately preceding two-year period.”
- “A teacher teaching in an online classroom program shall hold the appropriate subject matter credential.”

Minnesota limits the student-teacher ratio to 40:1, and its law states, “Actual teacher contact time or other similar communication is an expected on-line learning component” (Minnesota House of Representatives, 2003). Both California and Minnesota require that online programs have policies in place to address teacher performance. California law (Online Classroom Programs, 2003) provides that school districts offering online courses must “develop and implement” policies for teacher selection, training, and evaluation. Minnesota requires programs to describe the methods “for interactivity and assessment between students and teachers” (Minnesota Department of Education, 2003).

In the absence of state requirements, many online programs have their own standards for teacher qualifications. Although the online programs almost never require certification or licensure beyond the state mandates, they frequently implement their own training for online teachers and often require their faculty to take online courses in order to understand the experience of learning online.

Statewide programs make extensive use of part-time teachers hired on contract to teach the courses. Idaho Digital Learning Academy, Illinois Virtual High School, Michigan Virtual High School, and Wisconsin Virtual School use only part-time teachers. In addition to the part-time teachers, Colorado Online Learning has two full-time staff members who teach as part of their job responsibilities. The University of California College Preparatory Initiative uses vendors who provide teachers for many of its courses

but also has three teachers on staff to teach its homegrown courses. Florida Virtual School has an equal number of full- and part-time teachers.

Statewide programs have quality assurance and other processes for evaluating teachers, although almost none of these are state mandated. Many statewide programs (and some states) require that teachers be state licensed. Idaho law allows Idaho Digital Learning Academy to waive the certification requirement in order to obtain high-quality teachers from outside the state.

Course Quality. No state has created detailed curriculum standards for online courses. All states require that online courses meet state content standards, in the same way that all courses in brick-and-mortar schools must. These standards, however, do not address issues specific to the online environment, either in content development or delivery. In most cases, individual school districts are primarily responsible for ensuring that online courses meet content standards. In some cases, this task is different for charter schools, which often are measured solely by outcomes and not by inputs.

There are exceptions.

- Texas implemented the Investigating Quality of Online Courses (IQ Pilot), which has focused on developing criteria and processes for evaluating the quality of online courses.
- Minnesota requires that online courses be “rigorous” and have standards of instruction “equivalent” to non-online courses.
- California law requires online courses to have content that is “the same” as that of a physical school course, but the details of how the online course must achieve this sameness are left to the school district.

In some states, postsecondary institutions have come together to form a consortium and purchase a course management system to be used across the state. No state has done this at the K–12 level.

Courses are either homegrown or purchased/licensed from vendors or other programs. A few courses have been developed by a statewide program in collaboration with other organizations (e.g., Colorado Online Learning's three middle school math courses, developed in Colorado's MathStar program). Some statewide programs (e.g., Colorado Online Learning, Florida Virtual School, and Idaho Digital Learning Academy) develop all or almost all of their own courses. At the other end of the spectrum, Wisconsin Virtual School licenses all its courses from a vendor, Class.com. Illinois Virtual High School, Michigan Virtual High School, and the University of California College Preparatory Initiative all use a mix of homegrown and licensed courses.

Programs require that courses meet state content standards where applicable.

- In the case of Wisconsin Virtual School, this alignment is carried out by the vendor.
- Idaho has developed end-of-course assessments in several subjects, and these are used by the Idaho Digital Learning Academy as the final exam for these courses.
- Colorado Online Learning has an extensive quality-assurance process that examines both content and instructional strategies. In most states, however, because local schools grant credit, the districts are ultimately responsible for evaluating course quality.

Quality of Student Support. Depending on the type of program, student support varies widely. Supplemental programs work with the student's physical school to provide student support. This support is often a "site coordinator" who assists students with any technical problems, makes sure students complete assignments on time, and works with the online teachers as needed. Cyberschools may or may not have a physical location where students meet with instructors or other support personnel. Support often is provided by phone or online, or the parent serves as the primary support person.

Key questions related to online quality include the following:

- What is the state role in ensuring that online learners get a quality education?
- Is course content aligned with state standards?
- How will instructional quality be determined and enforced?
- What teacher qualifications and certification are required to teach in online programs?
- Do students have appropriate support to be successful online learners?
- Are the needs of students with disabilities properly addressed?

Funding

As with other policy areas, significant differences exist between supplemental and cyberschool providers on the topic of funding. Statewide supplemental providers may have a state grant or appropriation and may charge a fee per each course enrollment. Cyberschools and cyber charters typically draw per-pupil funding.

Online learners (See "Which Students Choose to Learn Online?" on page 13) currently account for less than 1 percent of all K–12 students. As such, the fiscal impact is relatively minor. What fiscal impact may be expected as online learning grows? Each state may well want to map out current programs and enrollment patterns, and then consider the potential impact on other education policy areas. For example, if full-time online learning options (cyberschools and cyber charters) are drawing home schoolers back into the state-funded education picture, how will a continuation of that trend affect per-pupil funding? How will students leaving physical schools to enroll in cyberschools affect small or rural schools?

FUNDING ONLINE PROGRAMS

Almost all statewide programs were initially funded by government grants, either in the form of state appropriations (e.g., Colorado Online Learning, Florida Virtual School, Idaho Digital Learning Academy, Michigan Virtual High School, and University of California College Preparatory Initiative) or a grant from the SEA (e.g., Colorado Online Learning, Wisconsin Virtual School). State funding of programs has varied widely from approximately \$25 million for Florida Virtual School over six years to \$140,000 for Wisconsin Virtual School over five years. Idaho Digital Learning Academy is unique in having gained a large percentage of its funding from a private foundation; Illinois Virtual High School is unique in having received federal earmarked funding for program development for several years.

Most programs, including those with grant funding, charge course fees. Fees range from \$100 per student per semester (Colorado Online Learning) to \$325 per student per semester (Wisconsin Virtual School). Florida Virtual School and the University of California College Preparatory Initiative do not charge course fees; the former is funded through direct appropriations, the latter through full-time equivalent (FTE) state aid. Florida Virtual School is the only statewide program supported through state education FTE funding. This funding began with the 2003–04 school year; before then, the program was funded primarily through annual legislative appropriations. Florida Virtual School is also the only statewide program that is funded on the basis of successful course completions rather than course registrations.

In most states, cyberstudents (i.e., those enrolled full-time in an online program) are funded through the same mechanism as all other students. In other words, states pay districts and cyberschools based on per-pupil enrollment, with adjustments for grade levels, size of districts, and other factors. Variations include the following:

- Students in cyberschools often are funded at the same rate as students in charter schools, which may be the same or different from students in noncharter public schools. State policies rarely contain provisions about demonstrating attendance for cyberstudents.

- District-level supplemental programs are generally funded by district appropriations, not directly by FTE funding. The districts do receive state FTE funds for the students in such programs when enrolled in a district physical school.
- Almost all cyberschool FTE funding is based on seat time rather than on some other mechanism developed specifically for online learning. Florida Virtual School is a notable exception, with funding based on successful course completions. The Florida model eliminates the problem of how to measure seat time in an online course but raises other quality assurance issues.
- The costs of online education are not well known. Colorado has sponsored two studies in the past two years on such costs, both of which concluded that the “true” cost is difficult to ascertain but appears to be comparable to the cost of physical schooling (see Adsit, 2003). Florida and Texas have both implemented pilot online programs, at least in part to determine whether online education may cost less than physical school education.
- Because the availability of online courses means that students can potentially take more than a full load of courses, several states (e.g., Minnesota and Idaho) restrict funding to no more than 1.0 FTE per student.
- Some states demonstrate concern about home-schooled students being attracted into cyber charters and generating FTE funding, thus raising the state’s education costs. The practice of private companies, such as K12 Inc., of marketing to home-schooled students has heightened this concern. In response, at least two states—Colorado and Minnesota—have limited the funding available to such students. Texas specifically denied K12 Inc. the right to operate in the state.
- Other states (e.g., Wisconsin and Idaho) have implemented policies based on the premise that the state should pay for all students regardless of circumstances and have not limited funding for previously home-schooled students.
- Charter school laws in Minnesota and Wisconsin set the amount of per-pupil funding that flows to a cyber charter and the amount that stays with the student’s home district.

Key questions related to online funding include the following:

- What are the actual costs of delivering online learning, as compared with brick-and-mortar schools?
- What is the relationship between online costs and quality?
- Should the state monitor costs and quality?
- Should the state provide funding for and/or a mechanism to deliver online learning options to all students across the state?

Access and Equity

All states require that online programs comply with federal nondiscrimination laws, such as the Americans with Disabilities Act. Some states (e.g., Florida, Ohio, and Pennsylvania) require that cyberschools provide enrolled students with computers and Internet connectivity. In addition, some states' charter school laws and some laws specific to online programs require that all students be given the opportunity to participate. California law requires school districts with online programs to develop and implement policies regarding prioritization of students for online courses. The same law also requires districts to have policies for equity and access in terms of hardware and to provide on-site support to online students, but the law does not specify details for those policies. Minnesota law allows cyberstudents access to hardware and software in the school district where they reside.

Minnesota law also states "special education students must have equal access to on-line learning" (Minnesota Department of Education, 2003, p. 1). The state requires online programs to describe how they "will ensure that a student with a disability has equal access, assuming the student's Individualized Education Program (IEP) team determines that online learning is appropriate education for the student, and how the needs of special education students will be met through the proposed on-line learning program" (Minnesota Department of Education, 2003, p. 1). In Wisconsin, a cyber charter may not

deny access to a student who needs special education services unless the school lacks space in the student's grade or program.

Almost no states have made significant movement toward using online learning as a vehicle for improving access to learning opportunities for highly mobile students (e.g., children of migrant workers and homeless children). A notable exception is the Texas Education Agency's Division of Migrant Education (DME), which envisions a virtual high school that will enable migrant students to take coursework anywhere and anytime. Texas has the second largest population of migrant workers in the United States, and the DME has several distance learning programs in place to help the children of migrant workers. One such program, the University of Texas Migrant Education Program, received a grant from Microsoft that has allowed the program to put online the secondary school course Mathematical Models.

Several states (e.g., California and Minnesota) require that students under age 17 obtain parental permission to take online courses. California also stipulates that a student may not be required to take an online course.

Statewide programs address access issues through a mix of adherence to federal laws (e.g., the Americans with Disabilities Act) and processes designed to meet such needs. There are no examples of policies related to access that are specific to the online environment and go beyond Americans with Disabilities Act requirements, but all statewide programs indicate some level of accommodations in practice in developing and delivering courses. Program representatives interviewed also believe that part of the responsibility for accommodations falls on the local schools in which participating students are enrolled. The law creating the Idaho Digital Learning Academy, for example, states that online courses must be available to all students who want to participate; but, in practice, much of the responsibility falls to local schools.

Equity is addressed in different ways by different programs. Some programs (e.g., Colorado Online

Learning and University of California College Preparatory Initiative) have a mandate to address needs of underserved students or students from high-poverty districts. Florida Virtual School gives priority for course registrations to students in rural or low-performing school districts, while Michigan Virtual High School has created a pilot program to help underserved students in Detroit Public Schools. Illinois Virtual High School was created specifically to address equity of access to curriculum across the state. It is doing that through its significant partnership with Chicago Public Schools, the third largest school district in the nation. Overall, 57 percent of students using Illinois Virtual High School come from low-socioeconomic areas. In addition, some programs assist low-income families with acquiring hardware and software in order to access online courses.

Most school districts and schools provide students with computer access and Internet access of some sort, but all access is not equal. Some rural areas have slow or spotty Internet access, which may make for a low-quality experience of online learning. Key questions related to access and equity include the following:

- Is there a state role in ensuring equal access?
- If one school or district offers an exceptional, high-quality online learning program, does the state have an obligation to provide online learning opportunities of equal quality to all?
- Should online programs be required to provide the same quality of support services to students with special needs as their brick-and-mortar counterparts?
- Can states make use of online learning to fill unmet needs (e.g., helping children of migrant workers stay on track)?

Accountability and Oversight

States require that cyberstudents take part in state assessments, but the logistical challenges of getting cyberstudents to take tests given by physical schools are left to the local schools and districts. Texas Virtual School Pilot schools are required to

administer end-of-semester and end-of-course exams at physical locations. Florida's K–8 Virtual Pilot schools and Ohio's eCommunity schools are required to provide physical locations for testing. Charter school law in Idaho requires the online school to describe "the measurable student educational standards identified for use by the charter school[,] ... the method by which student progress in meeting those student educational standards is to be measured[,] ... [and a] provision by which students of the charter school will be tested with the same standardized tests as other Idaho public school students" (Public Charter Schools Act of 1998). Wisconsin charter school law takes a similar approach.

With regard to the role of the SEA, most states consider themselves to be "local control" states, with the bulk of decision making at the district level. In practice, the extent of local control varies and the degree of centralization of online education efforts varies significantly. This, in turn, influences how online education has developed in each state and the role of each state department of education. In Kentucky, for example, almost all K–12 online education activity is conducted by the Kentucky Virtual High School. As a result, the school, which is operated by the SEA, plays a key role in the development of online education policy in the state. In several other states, Colorado among them, the statewide program is a prominent part of the state's online education landscape but coexists with a number of district-operated supplemental programs and/or cyberschools—a mix that creates a fragmented landscape. Still other states (such as Minnesota) do not have statewide online programs, usually creating even more fragmentation.

In some states (e.g., Colorado, Florida, Illinois, and Michigan), the departments of education have played a significant role in creating the statewide supplemental program. Florida and Texas are among states in which a state agency is conducting pilot programs. In most cases, however, the ongoing operations of the statewide program occur without direct oversight from the SEA—even in cases such

as Idaho, where the program is housed within the department. California is unique in that its department of education initiated in early 2004 a pilot project to fund and monitor 40 supplemental programs. The pilot includes significant elements of evaluation and data collection. In states with substantial cyber charter activity (e.g., Minnesota), oversight is sometimes based on laws created specifically for cyberschools. More commonly (e.g., Idaho, Pennsylvania, and Wisconsin), district charter school laws written for physical schools are applied to cyber charters. In these cases, oversight is usually provided by the chartering districts.

State agencies in several states also have been involved at some level in efforts to create policy, either through creation of task forces or commissions, or through the research and reporting efforts. In some states (e.g., Colorado, Michigan, and Texas), this process has been a step toward creation of a statewide program, pilot program, and/or online-specific policy. In other states (e.g., Oregon and Washington), the task force process has not led to statewide programs or policies (as of March 2004). In California, a similar effort has taken place outside the SEA, spearheaded first by the University of California College Preparatory Initiative and more recently joined by other educators across the state through the California Consortium of Virtual Educators.

All of the statewide programs studied are entirely or primarily supplemental programs serving high school students. Some programs (e.g., Colorado Online Learning, Florida Virtual School, and Wisconsin Virtual School) also serve smaller numbers of middle school students. Florida Virtual School and Michigan Virtual High School are the largest programs, with approximately 10,000 registrations per year. (Throughout this *Policy Issues*, the term registration is used to describe a student registering to take a course. Registration is distinguished from enrollment, which in this report means that a student is counted by a school toward the school's share of state FTE funds. Accordingly, students register for courses in supplemental online programs but enroll in cyberschools.) University of California College

Preparatory Initiative has roughly 5,000 registrations. Other programs range from about 500 to 2,000 registrations annually. Because these programs are supplemental, most students take one or two courses; thus, the number of students and the number of registrations are similar. While most programs have shown steady growth in recent years, some (e.g., University of California College Preparatory Initiative and Idaho Digital Learning Academy) have seen a drop in registrations due to budget cuts.

The ways in which statewide programs have been created and are governed vary. Some programs (e.g., University of California College Preparatory Initiative and Idaho Digital Learning Academy) were created by law; most were not. All are operated and governed essentially independently of their SEAs, even though some (e.g., Idaho Digital Learning Academy) are housed within the department. Illinois Virtual High School, for example, is operated by the Illinois Mathematics and Science Academy. Michigan Virtual High School is governed by the Michigan Virtual University, and University of California College Preparatory Initiative is operated by the University of California system (UC Santa Cruz). Colorado Online Learning is governed by a board of directors representing Colorado school districts. Regional educational service agencies play a role in some cases. In Colorado, a Board of Educational Cooperative Services is the fiscal agent for Colorado Online Learning; in Wisconsin, Wisconsin Virtual School is run by a cooperative educational service agency (CESA 9).

Supplemental programs do not grant credit for courses, since this responsibility falls to the schools in which students are enrolled. Some supplemental programs (e.g., Colorado Online Learning, Florida Virtual School, and Michigan Virtual High School) have secured or are working toward their own accreditation to help certify their quality. Idaho Digital Learning Academy is required by law to seek accreditation.

Policymakers may want to consider appointing an agency or commission to oversee online learning

in all its manifestations. Without such oversight, the quality of learning is likely to differ from district to district, from charter to district, and from statewide programs to all of the above. When students or parents go to choose among online providers, by what standards or guidelines should they base their decision? By what standards should districts evaluate online coursework for which students are seeking credit?

Research and Evaluation Data

As a relatively new area of education, there is a limited body of data on the effectiveness of online teaching and learning. Findings from a recent meta-analysis titled *The Effects of Distance Education on K–12 Student Outcomes* (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004) provide a framework for moving forward to acquire new evidence about online learning. States can play an important role in ensuring that data collection and reporting take place and that data points are consistent.

Although most statewide programs are required to collect and report certain data and provide regular reports conducted by external evaluators, this is not the case with other providers. At the minimum, it would be useful for states to require all online entities to report enrollment data, student demographic data, and course completion data.

As online teaching practices mature and improve, the potential exists for online learning to outperform the traditional classroom in terms of quality and outcome measures. It is important that best practices in course design and instruction are well understood and disseminated. Organizations such as the North American Council for Online Learning (www.nacol.org) can play a role in developing standards for online teaching and learning practice, as well as coordinating reporting and evaluation efforts.

In that vein, the North Central Regional Educational Laboratory at Learning Point Associates recently launched an Online Learning Research Initiative. The first round of reports will be available in July 2005.

POLICY RECOMMENDATIONS

- **Develop state-level guidance specifically for online education programs.** Policies created for physical schools are often a poor fit for online programs. For example, existing charter school laws often have no regulations pertinent to online programs. Yet cyber charters are being created and operated under laws written with physical schools in mind. Similarly, funding formulas based on seat time are outdated and do little to encourage outcomes-based learning enabled by online learning. In the absence of policy specific to online learning, providers and practitioners are creating de facto policy through their practices. Minnesota and California now require state agencies to track online programs, which will generate vital information about the programs and provide good models for other states to follow.
- **Implement policies for cyberschools to address students' special needs.** In the absence of policies specific to online learning, student needs—especially those that are not academic—are often neglected. Special education delivery systems were designed on the premise that students with special needs receive services in or through their school districts. Now that students may “attend” online schools hundreds of miles from where they live, special education service delivery should be reconsidered.

In Colorado, for example, the district of residence is held financially responsible for all special education and related services, even if the student is not enrolled in that district. The district receives no money for that student but must pay for whatever services the student requires according to his or her individualized education program. Meanwhile, a multidistrict cyberschool must hire itinerant therapists or make contractual arrangements with treatment agencies throughout the state. Some cyberschools are simply ignoring such special-needs issues, while others are billing districts of residence for costs that are far greater than these districts would have incurred if they were still providing all services to the special-needs students.

CONCLUSION

Online learning is becoming an increasingly common option for today's K–12 students, whether they choose to take a few courses or to enroll full-time in a cyberschool. Although only a small percentage of students currently learn online, the numbers are expanding rapidly and the growth is likely to accelerate. The field is still evolving, but several observations can be made.

- Online learning programs differ widely in many ways, most notably with regard to funding, quality, and impact on existing schools.
- Online learning is an educational frontier. Online providers are expanding into new territory, but policy guidance is not yet fully on the scene.
- States need to be thoughtful in shaping policy to ensure that online learning remains a viable, high-quality option for all students.
- Urgent attention and action are needed to ensure the quality of online learning. Policies and regulations designed to provide a framework of sustainability and value will enable online education to flourish and meet the diverse needs of students.

WHICH STUDENTS CHOOSE TO LEARN ONLINE?

Online programs target students of all kinds, including high-achieving students (University of California College Preparatory Initiative), students from high-poverty districts (Colorado Online Learning), and students who are making up lost credits (Wisconsin Virtual School). Although most supplemental programs primarily enroll high school students, cyberschools often enroll students at all grade levels.

Common reasons high school students take one or more online learning courses include the following:

- Schedule conflicts
- Credit recovery
- Course is not offered at physical school
- Need to take Advanced Placement courses
- Dual enrollment and college credit
- Class is full at physical school
- Student is expelled
- Student is homebound due to illness

Students who enroll in full-time online programs may do so for some of the same reasons listed above. In addition, they may have been home schooled for a variety of reasons and then choose to enroll in an online school. Students who experienced difficulty in a physical school (due to social or behavioral issues, for example) may enroll in a cyberschool to complete their high school education from home.

States collect and report very little demographic information about online students. Some states (e.g., Ohio and Texas) collect online student data as part of the state's overall data collection from all schools. Texas has noted that although there are categories specific to online students in its information management system, many schools are unaware of these categories and do not report the data. Pennsylvania will begin collecting data as its cyber charter schools come up for review and renewal. In states such as California, reporting requirements for online programs are being put in place, and beginning with school year 2004–05, additional information will be available about students who choose online learning.

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