



AMERICAN YOUTH POLICY FORUM

BRIDGING YOUTH POLICY, PRACTICE AND RESEARCH

What You've Always Wanted to Know about Online and Blended Learning but Were Afraid to Ask ***A Special Briefing for Congressional Staff*** **December 2, 2011**

Background Information

Technology has the power to transform education. This paper summarizes some of the critical policy and practice issues to consider as education changes, with a special emphasis on online learning.

Recent advances in technology have radically changed the way people interact with each other. We all need to embrace new technologies in order to keep up with the ever-evolving world. Advances in technology shift the traditional notion of schooling and break many of the barriers that often stand in the way of providing a high-quality education for all students. Such shifts call for us to explore the policy implications for the intersection of technology and education in a variety of areas: where learning occurs, who facilitates learning and instruction, how teachers are prepared and provided with ongoing professional development, what constitutes effective, high-quality courses and curricula, how skills and knowledge are assessed, how time is used, and the manner in which resources are allocated for equitable outcomes.

Education in the United States is at a critical moment: US high school graduation and college completion rates lag compared to other industrialized nations, dropout rates remain high, demands of the global economy and technology require that students possess more than basic skills, and the current administration emphasizes attaining the highest proportion of college graduates in the world by 2020. In order to reach this ambitious goal, educators need to raise student achievement to an increasingly higher standard. While technology alone will not complete this task, if used effectively, it has the power to transform the education system in the United States.

With technology, there is the possibility of individualization of content, personalized instruction, instant assessment, and consistent feedback. This student-centered experience creates a shorter feedback loop, which helps keep students more engaged and focused as they gain the skills needed to compete in

an increasingly competitive market. Technology has the possibility to change the face of education; policymakers will have to consider how to build the policy infrastructure necessary for implementation in schools, districts, and states.

Technology Plan 2010

At the federal level, keen attention is being paid to developing technology and its impact on education. The U.S. Department of Education published a report outlining the administration's efforts to connect technology and education. The Technology Plan of 2010, *Transforming American Education: Learning Powered by Technology*, outlines five areas that are essential to transform the education system using technology: create powerful learning experiences using technology; build assessments that easily track what matters most; improve teaching by connecting teachers to each other and experts in the field; create a national infrastructure that ensures all school communities have access to the technological tools that they need; and increase student and teacher productivity to guarantee that every student and teacher in every classroom is engaged and inspired to perform well. Through this plan, the Department of Education hopes to build capacity for all schools in both traditional and virtual environments to engage students through the increased availability of existing and emerging technology.

Online and Blended Learning: A New Vision of the "Classroom"

Online Learning—A Newly Structured Classroom

Online learning refers to an approach where all content and student-teacher interaction occurs online. Florida Virtual School (FLVS) was the first school to use this completely virtual approach and serves as an example of an effective online learning model. FLVS offers increased flexibility, as students work from their own space at their own pace. Students collaborate with teachers early on to establish their schedule and learning style needs. They complete assignments and courses according to this pre-established timeline and have the flexibility to sign up for new courses at any point during the school year. The only time students must adhere to a certain schedule is during the proctoring of state standardized assessments.

Some schools have followed Florida's lead and implemented an exclusively online approach, while other schools have chosen to employ other models, such as blending learning. Still relatively new, some

schools and districts use the terms blended and hybrid interchangeably. For the purposes of this overview, blended learning is defined as a school model that offers traditional face-to-face and online learning, which both take place in a brick and mortar building. An increasing number of schools, both traditional and virtual, are beginning to use this model after a 2010 report published by the US Department of Education demonstrated that a blended approach yielded higher gains than a completely online approach. The use of online learning and blended learning approaches mark an important shift in the delivery of classroom instruction that illustrates a fundamental change in the idea of what constitutes a classroom.

Through the use of technology and digital information, teachers are no longer the sole source of knowledge guiding students in their learning process. Instead of being confined to the traditional school day, learning can take place around the clock, allowing for a more connected and personalized experience that matches the needs of each individual student. Similarly, the setting of where learning is taking place is now being re-negotiated, moving beyond school walls to virtual communities, from white boards to chat boards, from buildings to blogs. Students and teachers from around the world can literally connect instantaneously, dispersing knowledge and sharing information with the click of a button.

Growth of Online Learning

The advent of innovative technology, as well as the fast pace of development and proliferation of new devices, is here to stay. The Sloan Consortium, an advocacy group for online education, reported that nationwide, an estimated 1.03 million K-12 students took an online course in 2007-8. This reflected a 47 percent increase from two years earlier. In Ohio, which ranks third in the number of students enrolled in full-time online programs behind Arizona and Pennsylvania, currently more than 31,142 K-12 students attend school online, which is about five times more than seven years ago. Most of the students are in high school, either enrolled in courses not offered at their school or participating in credit-recovery programs that allow students to make up any failed courses online. However, an estimated one fifth of these students are receiving 100 percent of their education through virtual learning. Online course options are now offered to students in 50 states, and students are permitted to attend virtual schools full-time in 30 states.

In a 2009 report, the Center for Digital Education reported that 22 states with full-time statewide online learning programs increased by over 50 percent from the previous year. The number of states offering programs is on the rise as well; of the 16 states that did not have a statewide online school in place, seven were in the planning stages of developing statewide programs, and six additional states allowed charter schools to have online programs. The rest of the states, although they do not fund online schools, allow them to exist. With such large gains over a short period of time, online learning continues to grow and expand across the country.

Benefits of Online Learning

With increased flexibility and individuality, online learning provides a unique opportunity to lead more students to increased access to curriculum, as well as personalized learning experiences. Many schools are not able to offer a wide variety of courses, due to size or geographic location. This is particularly evident in rural areas, where a lack of teachers in particular subjects has traditionally meant a lack of access to diverse course-work. Online learning and access to the internet offer these students the ability to engage in learning beyond the confines of a classroom and grants them access to additional educational opportunities, such as Advanced Placement courses and various electives not offered at their local school. Increasingly, some students are opting out of the traditional school room altogether, taking all of their classes online. Disadvantaged students who have dropped out and are attempting to re-engage in schooling have the option of taking makeup courses online, boosting their likelihood of graduating. If they have mastered a particular skill or body of knowledge, they have the ability to move on to the next challenge, without being forced to wait a set period of time or complete a designated series of lessons, letting them catch up and recover credits more quickly. Online learning also provides children with nontraditional schedules, such as serious athletes and actors, the

Growth of Online Learning at a Glance

- In 2000 there were about 45,000 K-12 students taking an online course; now there are over **2 million K-12 students** participating in an online course.
- Full-time or supplemental online learning opportunities are available to at least some students in **48 out of 50 states** plus Washington, DC.
- About **250,000 students** are currently enrolled in full-time online schools.
- **30 states and Washington, DC** have state-wide, full-time online schools.
- Florida Virtual School is the largest state-led virtual school in the country with roughly **275,000 K-12 students** living in **49 states and 46 countries, 100 online courses**, and over **1,500 employees**.

opportunity to complete their courses on their own timeframe, giving them the flexibility to further their education while pursuing their personal interests.

Online Learning and Teacher Development

In light of the changes created by online learning opportunities for students, the need for teacher professional development that accommodates this new model of education arises. Teachers will need to develop new pedagogy for the online format and become well-acquainted with existing and emerging technologies. Therefore, teacher preparation programs will need to include a focus on the changing role of the teacher from instructor to facilitator. Teachers will continue to be a vital component of students' learning experience.

Technology and online learning platforms also hold the promise of improving a teacher's practice. Through a virtual environment, teachers have the opportunity to instantaneously connect to one another, allowing them to share best practices through video and other media. Novice teachers can learn from experts throughout the country and world, gaining valuable tips and growing as educators. The result of such collaboration holds the possibility of transforming the profession altogether; thus, the need to encourage and cultivate such behavior is in the best interest of local, state, and federal policymakers.

Challenges of Online Learning

Although online learning provides opportunities for increased access to curriculum and learning resources, barriers and challenges to implementation have emerged that include program and teacher quality, online safety, funding, and seat-time requirements.

Program Quality and Accountability

Assessing the quality of online learning and the results produced is important, as it is directly related to whether to invest the time and technology in this area. Those considering online instruction have to critically assess a number of issues: who is designing the courses, who will be teaching them, how will these courses meet state and district standards, and how will the courses be evaluated and improved over time. Overall, the picture is of mixed findings for online schools, with some performing well, and

others poorly. A recent study by Evergreen Education Group, *Keeping Pace 2011*, noted that research into K-12 online and blended courses and schools has revealed a decade's worth of evidence suggesting that teaching and learning online can work. However, the report also notes that just because online learning *can* work does not necessarily mean it *will* work, and instead what is more useful is a reframing of the issue to examine under what conditions online learning works.

With regard to ensuring instructor quality, one of the conditions is for online learning instructors to practice skills similar to K-12 face to face instructors, postsecondary online instructors, as well as skills unique to teaching and learning online at the K-12 level. Another condition focuses on professional development for instructors, which holds more promise when combining a focus on pedagogical content knowledge with building a community of learners who can examine their practice in process. More attention needs to be paid to putting these conditions in place.

Challenges are also evident in undertaking research, which often involves multiple-year studies, sometimes with limited results. Some researchers are advocating for mining existing data on the many students who have taken thousands of online courses, to assess more rapidly what works and is effective, so that improvements can be made more quickly.

Accreditation of online schools varies from state to state, with many states not requiring that an outside accrediting body accredit public schools, as the state serves this role. The provision of individual online courses by multiple providers further complicates the accreditation process, as does the fact that there is no single set of nationwide accreditation standards. At best, organizations such as The International Association for K-12 Online Learning (iNACOL) can offer guidance on reputable regional agencies, such as Western Association of Schools and Colleges, Northwest Association of Accredited Schools, Association of Schools and Colleges, Commission on Secondary Schools of the Middle States, and Advancing Excellence in Education. Assessing the quality of the courses offered to students thus remains an area for much improvement.

Teacher Quality

Online learning schools have to train their own teachers, due to a dearth of pre-service and professional development opportunities, and this remains an ongoing challenge. Only recently have these training options been put into place at a few institutions. A number of factors need to be addressed to ensure

teacher quality: What are the standards for good online learning instructors; what is the best way to plan for teacher recruitment and hiring; what does professional development look like for first-time teachers; what ongoing supports will teachers need during their first years; how does professional development look different for experienced teachers, and how will online learning instructors be evaluated?

Debate continues regarding the exact qualifications necessary for online instructors. In some districts, a number of years of traditional classroom experience is considered sufficient training for the online environment, with varying amounts of ongoing professional development provided, while other districts require previous training in online instruction at a college or university.

Online Safety

Children's safety online is also an issue that arises as more students are exposed to virtual content. When students engage in online and blended learning, they have increased flexibility to explore content online. This increased autonomy raises questions about safety since all content on the internet may not be suitable for children. Issues around cyber bullying also come into play as more children use social networking sites. In order to address this challenge, many schools, districts and states are engaging in conversations about online safety, and putting policies in place to keep children safe. Debate continues to swirl around the limits to place on student exploration online, how to manage student/teacher interactions online, and how best to educate students to be safe online.

Funding

Another challenge for the implementation of online learning and increased technology in education is funding. On the federal level, for example, the *Technology Plan* addresses the application of technologies, but does not specifically outline how professional development related to education technology will be implemented. Funding that had been provided by the Department of Education's only program devoted exclusively to technology, the Enhancing Education Through Technology (EETT) program, has been defunded. With budget cuts across the board, the federal government has less money to devote to innovation and technology in schools, contributing to challenges for states, districts, and schools that wish to innovate but lack the capacity.

At the state level, states are grappling with how to integrate technology into education in a climate of shrinking budgets and constantly-developing technology. They are grappling with how to pay for technology upgrades; how to provide curriculum in new formats, moving from textbooks to digital media; how to train teachers and technical support specialists, and how to ensure internet access to all students, to name just a few issues.

Seat-Time Requirements

Finally, many states and districts encounter difficulties implementing online learning programs due to legislation that blocks innovation with specific seat-time requirements that are often attached to funding. Many schools and districts use the Carnegie Unit, a measure of how long a student has studied a subject, to determine credits for courses. Therefore, many schools are funded based on time spent in a classroom. This has implications for online and blended learning school models that do not use time as an indicator for completed coursework. In San Diego, for example, some schools are having students engage in a minimum of four hours of seat time before they are permitted to take online courses, just to comply with outdated accounting systems. In order to provide the best education possible for every student in the United States, policies such as this must be reassessed to keep up with evolving technologies.

Current and Possible Solutions

Despite the challenges inherent in venturing into these new realms, there are many promising practices and policies to watch.

Program Quality

A number of resources are available to assist online programs as they work to improve their quality, and provide useful information to states and districts as they expand their online learning opportunities. Examples include The International Association for K-12 Online Learning (iNACOL)'s *National Standards of Quality for Online Courses*, Colorado Online Learning's *Quality Assurance Program*, VHS Global Consortium's program evaluations, the US Department of Education's *National Education Technology Plan*, and *Evaluating Online Programs* report. These offer guidance and also create the expectation of high standards for the newly-emerging field of online learning.

Teacher Quality

A few university teacher preparation programs, such as the University of CA-San Diego, the University of Illinois, and the University of Wisconsin – Boise, are starting to offer certificate programs in online teaching. Much work still needs to be done, however, as these types of programs are the exception, and most teacher preparation programs still lack a focus on online learning.

Attention is also being paid to how online teachers are evaluated, with one helpful resources being The Southern Regional Education Board's *Essential Principles of High Quality Online Teaching: Guidelines for Evaluating K-12 Online Teachers*.

State Policies

Some states have made significant gains in opening up the possibility for online learning. In Florida, for example, Governor Rick Scott recently signed education-focused bills concerning technology: virtual schools are now expanded to elementary-aged students (from middle and high school offerings) with no previous enrollment in a public school system needed; all students are required to take an online course to earn a high school diploma; and charter schools can now, for the first time, provide online instruction. In Utah, students will be able to take online classes offered through schools other than their own starting in fall 2011. The Texas Virtual School Network is expanding learning opportunities for students, especially in rural communities, by allowing them to take courses online. Large urban districts, such as New York City, Chicago, and Boston, have adopted credit-recovery programs that allow students who have failed a course in high school to earn credits by completing coursework online. Some states (Florida, Texas and Maine) have moved to a system of online school funding based on successful completion, instead of relying on time. Seeing the opportunity and flexibility that online learning offers, many states are building capacity through state legislation.

Federal Policies

The federal government also plays a significant role in creating an environment for online learning and technology use to thrive. At the federal level, policymakers can help provide the infrastructure and build capacity for states, districts, and schools to incorporate new technologies and methods of learning. For example, the United States Broadband Plan seeks to make internet access more readily available to

all communities, regardless of geographic location or socio-economic makeup. The US Department of Education, as part of their *Technology Plan*, is also helping build capacity for schools to make the shift from print to digital content. Working with private companies, they are disseminating information widely in order to empower state, district, and school stakeholders to purchase the most appropriate technology for their specific needs. With the federal government's support, states, districts, and schools can utilize technology to enhance the educational experience for every student— young and old. Thus, it is in the best interest of policymakers at the federal level to continue to build access and opportunities for education by collaborating across agencies and funding streams in order to leverage the funds and other supports necessary to facilitate the work.

In Conclusion

Online learning holds great promise for changing the way students will learn both in the present, and into their future. The changes, challenges and opportunities warrant ongoing scrutiny and attention by educators and policymakers, to ensure that carefully-considered policies are put into place to best advance student learning and success.