TEXAS PUBLIC POLICY FOUNDATION
PolicyPerspective

March 2012
Center for Education Policy

Virtual Education and the Future of Texas Education

by James Golsan
Education Policy Analyst

Key Points

- Virtual and blended learning could prove to be a strong cost saver for the state as well as a means to improve academic performance and school choice.
- Texas should shift delivery and funding of virtual education away from the TxVSN into the local districts.
- Texas should also encourage private provider participation, allow scholarships for digital learners, and allow private school and homeschool students to participate.

Introduction

Virtual and blended virtual learning are education's newest frontier. They are mediums that encompass a broad variety of education tools, from distance education for high school students to putting iPads in second grade classrooms. At the K-12 level, the potential of virtual education is enormous. Through the use of technology, students in rural districts would have access to the same educational resources as students in more populated areas. Familiarization with technology could prepare students for the work force more quickly. Further, states facing budget difficulties now have a resource that allows them to educate their students with greater efficiency.

The purpose of this paper is to examine the growing field of virtual education, and to identify steps that Texas should take to expand digital learning through comparisons to states further along in their digital development.

Virtual Education and Blended Learning

Virtual (or digital) education and blended learning are the terms used to describe the integration of technology into the learning process. The sections below explore various approaches to this medium, but for the most part, these two definitions will suffice:

> Digital or online learning is simply the delivery of a learning, training or education program by electronic means.[1]

> Blended learning is any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace.[2]

Classroom Approaches to Virtual Education

It is not common to have students work completely remotely in blended learning situations. The Innosight Institute lists six "models" commonly used in blended learning practices.

Model I: "Face to Face Driver"

This is online learning that would look most like traditional brick-and-mortar classroom learning. Teachers provide the lesson for students, and students in turn use technology to augment the lesson.

Model II: Rotation

Called the most common approach by Innosight this model involves students spending part of their day in a self-paced, strictly online learning environment, and another part in a traditional classroom setting.

Model III: Flex

Flex model learning environments place a heavy emphasis on the online portion of events. Teachers are present to provide on-site support, but for the most part, students learn entirely at their own pace.

Model IV: Online Lab

The online lab model delivers an entire course to a student digitally, but within the confines of a brick-and-mortar lab, generally on an existing school's campus. The students are supervised, but not actively "taught" within the classroom.

Model V: Self Blend

This model most closely resembles what many people think of when they envision online learning's use in the world of higher education. Students take these courses, remotely and on their own time, but still attend traditional brick and mortar schools.

continued

Model VI: Online Driver

The online driver can be thought of as "pure" virtual education. Students participate remotely and almost entirely in an online environment. There are occasional face-to-face meetings with the instructor, but for the most part, the student does their work at their own pace, from their own home.

A fully realized, state level online learning policy would allow for all of these models to flourish. Unfortunately, the options in Texas remain somewhat limited. Full-time virtual students do not yet exist. The self-blend model is most prevalent in the Texas Virtual School Network (TxVSN), as the system is still in relative infancy and designed to augment a student's primary education, rather than sustain it fully.[3]

Benefits of Digital & Blended Learning

In the fall of 2010, the Texas Comptroller's office released its Financial Allocation Study for Texas, examining the fiscal practices of Texas public schools and making recommendations geared toward working greater efficiency into the Texas public school system. The study also discussed some of the benefits of virtual learning:

> Expanding the availability of online courses can provide more students with greater access to educational opportunities. Students who have dropped out and work during the day, for example, might take advantage of online courses to complete their educations. Online systems also can provide advanced courses in rural districts that may not have the resources to offer them.[4]

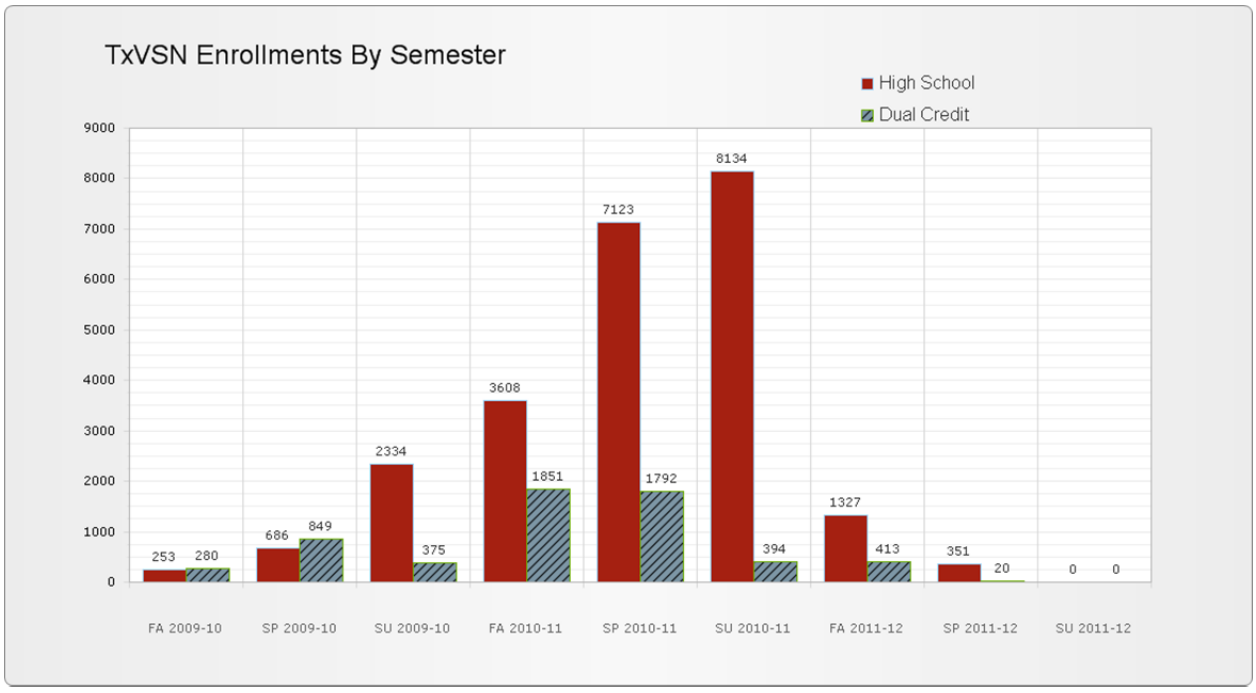
Here's a broader look at some of the ways Texas stands to gain by expanding virtual education.

Course Availability

This is an obvious and central benefit of expanding virtual education. Often, smaller or poorer school districts are unable to offer the same variety of courses that their larger, better funded counter parts can. For instance, many students use the TxVSN's online course catalog to augment the education available at their school; according to the TxVSN, the bulk of its public school students attend on a part time basis, generally taking one to two courses a term on top of their traditional course work.[5] (See Figure below)

Dropout Recovery

Texas has a substantial dropout problem; between the 2008-09 and 2009-10 school years, Texas saw around 75,000 students drop out of its public schools.[6] While there is no "silver bullet" to fix this or any other problem in education, virtual education gives students who have dropped out a chance to begin recovering their middle and high school credits, particularly if the student that dropped out is facing the prospect of getting their course credits around a work schedule. Online learning provides an option beyond attending traditional brick-and-mortar schools for degree completion.



Source: Texas Virtual School Network

A good example of this can be seen in Aldine, TX. iNACOL's June 2008 *Promising Practices in Online Learning* study reported:

> The district has approximately 60,000 students and had met with limited success with its credit recovery program. In 2000, the district recovered only 700 half-credits with its traditional remedial program. By 2007, Aldine's Online Learning Program generated approximately 4,500 half-credits for at-risk and drop out students. Along with transforming opportunities for at-risk students in the district, the online program has been recognized as an outstanding national example by the Principal's Partnership and the National Dropout Prevention Center.[7]

For a state with dropout problems as substantial as Texas, these figures are highly encouraging for continued use of online courses to address the state's dropout problem.

Access to Quality Teachers

Getting high quality teachers into every classroom is a challenge that faces school districts in every state. It is a problem that persists at every level of education, from kindergarten to post-secondary education. The Alliance for Excellent Education notes that "nearly three in 10 high school students are taught by teachers without a college major and certification in English (30 percent), mathematics (31 percent), science (27 percent), or social studies (28 percent)." Numbers from the National Center for Education Statistics support these findings, and point out that the problem tends to be significantly in higher poverty areas.

Virtual education expansion provides more opportunities for students in a state to learn from a quality teacher. While there is no guarantee that every purveyor of online education will be top quality, the very least virtual education gives students an alternative to the teachers present in their own school, should they be faced with an educator who is less than ideally qualified.

Special Needs Students

iNACOL's report, *Access and Equity in Online Education*, points out many of the benefits of online learning for students with special needs. It points out that, much like a traditional brick-and-mortar class, online classes can be designed to benefit students with special needs. This can be done in every aspect of the course, from the core curriculum to the technological interface. The report points to a strong pattern of this in some of the country's more long-standing virtual education programs:

> The first virtual education programs in the country, Virtual High School, Inc. and Florida Virtual School, have enrolled students with disabilities since their inception. Kentucky Virtual High School, the first state-run program, followed that lead and has also enrolled students with disabilities since its beginning. Students with physical disabilities frequently need to be accommodated to enable them access to online courses. These accommodations become easier when from the outset courses are intentionally designed with handicapped students in mind.[8]

Obviously, any education issue that deals with disabled students can be inherently more complex than traditional education models; the laws pertaining to special needs students can be different (in Texas, for example, special needs students are funded differently from regular students), and in some cases health care considerations must be taken. However, given that virtual and blended learning have a track record in states more experienced in the digital field when it comes to special needs students, this is an option Texas should look into as it begins exploring ways to expand its own online learning practices.

Virtual Education in Texas

Though digital learning has been around for more than a decade, it did not gain a serious foothold in Texas until 2007, with the creation of the Texas Virtual School Network through Senate Bill 1788. The idea of the Network, abbreviated TxVSN, "was to set forth the operational, course evaluation, and professional development requirements. Region 10 Education Service Center, in collaboration with Harris County Department of Education, serves as TxVSN Central Operations to coordinate course registration and student enrollments, to ensure the eligibility of virtual school providers, provide an online catalog of approved courses, and to coordinate reporting requirements. Region 10 Education Service Center conducts the review of electronic courses to be offered in the TxVSN catalog."[9]

Currently, the TxVSN offers courses to students in grades 9-12. Course providers are all public schools, open enrollment charter schools, universities, or education service centers. At present, the TxVSN is not designed to support a large volume of full time students, but rather to augment a student's brick-and-mortar education.[10]

Since its inception, enrollment in the TxVSN has grown steadily. At its outset in the fall of 2009, 254 students were enrolled in high school courses through the TxVSN. During Summer 2011, that number grew to over 8,000. While this is

certainly encouraging, it by no means represents a truly substantial digital market, particularly relative to other states.

Virtual Education in Other States

Digital education is expanding rapidly in a number of states. At present, 39 states have some form of state-led virtual education program in place, and 27, plus Washington DC, have at least one full-time virtual school in operation. However, there are a few states that stand out above the rest as leaders in the digital field, many of whom can serve as models for Texas to pattern its own digital learning growth after in the future.

Florida: A Model for Texas' State-Based Digital Learning

Florida has one of the longest standing and most successful virtual education programs in the country. As Texas seeks to improve its own digital learning environment, an examination of the Florida model provides the state with an example by which to fashion, at the very least, its public virtual education after.

Many of the students participating in Florida's virtual school network, much as is the case in Texas, are part-time students. The network encourages parental participation as much as possible:

> [Florida parents have access to] "Guardian Account[s]" that gives them 24-7 access to their child's submitted/graded assignments and to their personal grade book. Additionally, they receive a minimum of one telephone call per month from teachers, monthly progress reports emailed to the parent's account, and regular email updates from teachers.[11]

There are other general policy areas in which the Florida Virtual School Network (FVSN) is strong. They have a strong system in place to ensure as much academic integrity as possible, and their teacher training program is reputed to be excellent. However, perhaps the two things that stand out above the other areas in the FVSN is the funding structure and, perhaps more impressively, its growth rate.

In Texas, all student funding, be it for virtual education or traditional brick-and-mortar school, is fully tied to attendance. In the Florida Virtual School Network, funding is tied to student success:

> Students must be enrolled, receive direct instruction, and successfully complete a FLVS course in order to generate funds through the Florida Education Finance Program (FEFP). Each half-credit course that is successfully completed generates 0.0834 unweighted FTE. Six courses per semester generate full-time funding.[12]

This is a strong accountability measure that Texas' state level virtual education system should look toward implementing. Funding for education in Texas should follow the student to the classroom as much as possible, but the state has a responsibility to taxpayers as well, in that there should be assurance that every dollar spent on education is being maximally used. Tying state funding to academic success would ensure that as much is occurring.

Florida Virtual School Network Enrollment Growth

Years From/To	Enrollment From/To	Gain	Percentage Growth
1997	0 to 77	77	Baseline Year
1998	77 to 225	148	192%
1999	225 to 1,100	875	389%
2000	1,100 to 3,900	2,800	255%
2001	3,900 to 8,900	5,000	128%
2002	8,900 to 11,500	2,600	29%
2003	11,500 to 14,000	2,500	22%
2004	14,000 to 31,000	17,000	121%
2005	31,000 to 48,000	17,000	55%
2006	48,000 to 68,000	20,000	42%
2007	68,000 to 130,900	45,900	68%

Source: Florida Virtual School

Texas is most similar to this model, although it is not as comprehensive, and does not currently incorporate virtual funding into the Foundation School Program. Doing so would bring our model more in line with the Florida model.

Oregon: Virtual Charters

Oregon allows charter and district networks, rather than operate a full scale state network. Students can enroll full-time in these programs, and they have a statewide reach. They are funded within the state's public education formula funding. *States with Similar Programs: Washington, Georgia*

California: District Charters

California is a good example of a state that runs single district programs. These programs are much smaller scale. As they are run at the district level and under district rules, there tends to be a great deal of flexibility for the students; they can enroll full- or part-time in virtual programs. They are funded at the district level. *States with Similar Programs: Florida, Texas, Colorado, Nevada*

Wisconsin: Consortium Schools

Wisconsin is a leader in this brand of virtual education. These are privately funded entities that generate their funds through payments from consortium members or course fees. Their reach varies; they can be statewide, national, or even global, and they generally only offer supplemental education.

University Based Programs

A number of states, notably Nebraska and Utah, run such programs. They are largely self-explanatory. They offer full and part-time education opportunities, and, much like college courses, are funded by course fees. There are several programs like this nationwide.

What the above list shows is the wide variety of available virtual learning styles. There are a number of ways Texas can look toward expanding its own virtual education access. However, in advocating for expansion, an understanding of virtual education benefits is necessary.[13]

Side Bar: The Digital Learning Council and Digital Learning Growth

In 2011, the Digital Learning Council, a national advocacy group for online learning, came out with a series of policy recommendations for states to pursue in order to maximize access and content quality in digital education. Though not every policy suggested is ideal for Texas, there are several that represent areas of improvement for the Lone Star state:

Student Eligibility

Texas still has a long way to go in this regard. Our private school students don't have access to publicly funded digital learning, and neither are our home school students. Texas also does not provide digital content for its kindergarten through second grade students.

Student Access

Texas limits enrollment in virtual charters to students who are within that charter's county. This is an obvious limitation of one of the central benefits of online learning, which is to say the elimination of geographic constraints.

Provider Laws

This is a serious area of weakness for Texas. Among other problems, Texas does not allow virtual providers to apply for approval at any time; they must adhere to a set schedule in concurrence with the rotation of the school year. Further, the state does not grant long-term approval for digital providers, forcing regular renewals that consume state resources. There is also no allowance for private, for-profit content providers to work within the TxVSN. This is a serious limitation for virtual education growth in Texas, and will be addressed in the subsequent section.

Funding

Texas funds its virtual schools through a specific allotment in the school finance formula, rather than from within the main funding stream. This limits growth, as it sets a dollar amount at which the system can reach a limit. Texas must adjust as much before it can experience major virtual growth, especially in publicly provided online learning.

Infrastructure

Digital infrastructure, particularly in the economic climate Texas education is currently facing, is one of the more complex challenges to the expansion of digital learning. The DLC points out that Texas does not require all of its schools to have broadband internet access for the entire campus, however, some schools that do not face financial limitations that prevent as much from happening. Allowing private schools and providers to participate more easily in Texas' online learning system could be one solution the state looks toward as it attempts to solve its infrastructure limitation.

Policy Changes for Texas: Looking Toward the Future

In order to see virtual education and blended learning in Texas grow at a significantly faster rate than it currently is, lawmakers must change the way they approach the providing and funding of digital learning. This section focuses on policy recommendations to foster growth and excellence on Texas' digital frontier.

Funding: Change the School Finance Formula to Make it More Digital Friendly

Currently, the primary system for providing digital learning in Texas is the TxVSN. Though it does not provide the courses directly, online course providers in Texas must have their approved courses through the TxVSN. More importantly, schools receive money for their online students only through a separate funding allotment for the TxVSN. The allotment, per the Texas Education Agency, is explained below:

> The TxVSN allotment provides funding to school districts and charter schools that provide TxVSN courses (provider districts) as well as to districts and charter schools whose students receive instruction through TxVSN courses (resident districts). Funding for students in grades 9 through 12 is based on successful course completion (a provider district receives $400 for each successfully completed course, and a resident district receives $80). Funding for students in grades 3 through 8 is based on Average Daily Attendance (ADA). Provider districts that provide TxVSN courses that exceed a student's normal course load may be entitled to additional funding. Any school district, including a district subject to the provisions of the Texas Education Code, Chapter 41, may receive the benefit of the allotment.[14]

Though this system of finance helped launch the TxVSN in 2007, it stands as a barrier to significant expansion of online options from Texas school districts and other providers. A much more viable approach would be to bring Texas' digital students under the umbrella of the main funding formula.

In addition to expanding access to virtual education, this could also provide substantial cost savings to the state. Currently, Texas funds it students at a rate of around $11,000 per pupil.[15] Research suggests that full-time virtual students can be educated for between $1,500 and $3,000 less per student than those in traditional brick-and-mortar settings.[16] Currently, the state allows a maximum of $4,800 per year for students enrolled full-time in online courses in Texas, which is decidedly less than the state pays for students enrolled in traditional brick-and-mortar classrooms.[17] Rather than require more funding, virtual education should reduce costs. This potential current and long-term savings could offset any short-term infrastructure costs that would be required to bring quality online education to any Texas student that wanted as much.

Ease the Course Approval Process

Section 30A.105 of the Texas education code outlines in detail the course approval process for any provider participating in the TxVSN. The problem with this process is that it treats electronic courses as distinct from traditional brick-and-mortar courses. There is no annual approval process for non-digital courses in Texas. For providers that are non-traditional public school entities, particularly universities, the need for an approval system is understandable; these bodies are not necessarily providing traditional courses within the confines of the state's approved curriculum. However, for education bodies that do provide standard public education, such as public schools and open enrollment charters, the approval process is an unnecessary hindrance. Those entities are trusted to provide Texas students with a traditional brick-and-mortar course; trusting them to provide a quality online education without an approval is an important step toward opening up digital learning in Texas to expansion. Specific steps Texas should be taking in this area include insuring that once a course is approved, it will stay approved for more than three years, and incorporate a concrete timeline into the approval process for digital course providers to ensure that the courses are either made available or sent back to the provider for re-designs immediately. Making this process more efficient would allow more students to easily participate in the state's virtual education system, remove an element that makes virtual courses different than traditional education models, and thus ease the process of changing the virtual education funding pattern.

With a booming student population in Texas (the state has seen around a 20 percent enrollment growth over the last decade)[18] and substantially rising health care costs, the state is going to have to find a way to re-think the way it operates its public schools. A much stronger emphasis on digital learning is one option our lawmakers should be considering.

Encourage Private Provider Participation and Allow Scholarships for Digital Learners

Though not traditionally viewed through the lens of "school choice," digital learning is a means by which parents and students can take a more active role in the structure and design of their education. Encouraging this brand of participation is not only a strong academic move (research suggests that one of the most vital elements in a successful education is active participation from parents), but could provide a means for both cost savings and rapid expansion of online learning in Texas.

Two of the central problems with Texas' current digital law center on a lack of options for private providers, and that funding for online students does not always follow them directly to the digital classroom. In this area, then, Texas needs to take two steps. The first is to allow for-profit schools and other private education providers, once accredited, to provide online content for Texas students in grades K-12 (privately provided online learning is already operational in Texas higher education). Currently in Texas virtual law, private online providers are not able to participate in Texas' virtual education system. One possible remedy the state could consider for accreditation without adding substantial costs would be to let private providers work with our universities to make sure their content is suitable for K-12 dissemination. As higher education institutions are already allowed to provide online learning in Texas, it stands to reason they are prepared to certify that content is appropriate for Texas public education.

Secondly, after private providers are allowed to operate more freely, the state should create a scholarship program for digital learners, funded at a significant reduction from the state's traditional average per student spending. This program would be reserved for students who attend privately operated digital schools full-time, and would allow parents and students a level of educational freedom not previously available in Texas, as they would no longer be bound by geography or enrollment limits during the school selection process.

Such a program would represent a significant overhaul to both Texas' online learning and school funding structures, as education vouchers do not currently exist in any form in this state. However, dependent on participation levels, it is a move that could represent significant savings for Texas; every student funded through a scholarship would cost the state less than a student being funded in a traditional classroom setting. Such a program would also put the state in a position of leadership as digital learning expands nationwide.

Allow Private School and Homeschool Students to Take Virtual Courses

There is yet one more way Texas could encourage online growth in Texas. The state could open its virtual education system up to private and home schooled students. At present, students enrolled in public education are the only ones with full access to the state's virtual school network. Opening up the TxVSN to home and private school students would encourage a rapid expansion of online education, and with it competition, in Texas.

Conclusion

The aim of this paper has been to show both the fiscal and academic potentials of virtual learning, as well as the popularity of this burgeoning field. Texas is entering a pivotal period for determining the future of education in this state. In all likelihood, the state will be facing another budget shortfall heading into the 2013 legislative session.

Increasing access to online learning in this state could prove to be a substantial cost saver, and will without doubt improve choice and flexibility in the design of a student's education. Texas needs to look toward alternative paths to both improve its education quality while simultaneously making the system more fiscally efficient. Virtual education and blended learning are one such path the state must consider taking if it is to execute both of those aims. ✯

[1] Cognitive Design Solutions, "e-learning," last modified 2005.
[2] Rob Darrow, "Is blended learning different?," *California Dreaming* (3 May 2011).
[3] Michael B. Horn and Heather Staker, "The Rise of K-12 Blended Learning," Innosight Institute.
[4] Texas F.A.S.T. Report.
[5] Texas Virtual School Network.
[6] Texas Education Agency.
[7] "Using Online Learning for At-Risk Students and Credit Recovery," *iNACOL Promising Practices.*
[8] "Access and Equity in Online Classes and Virtual Schools," *iNACOL*.
[9] Texas Virtual School Network.
[10] Texas Education Agency.
[11] Florida Virtual School.
[12] Ibid.
[13] James Golsan, "Virtual Learning across the Nation," Texas Public Policy Foundation (4 Aug. 2011).
[14] Texas Virtual School Network.
[15] Texas F.A.S.T. Report.
[16] James Golsan, "Virtual Schools: The Future is Now," Texas Public Policy Foundation (8 Mar. 2011).
[17] Texas Virtual School Network.
[18] Texas F.A.S.T. Report.

About the Author

James Golsan is an education policy analyst at the Texas Public Policy Foundation. He joined the Foundation's Center for Education Policy in October 2010 and contributes to the following issues: K-12 education growth; higher education spending; and increasing spending transparency across academia.

Prior to joining the Foundation, James completed his Master's of Arts degree in English at Texas Tech University. His article, "The Detective as Superhero: A Note on Robert Parker's Spenser", was published in the Spring 2010 edition of *South Central Review Journal for Literary Criticism*.

After completing high school in Bryan, TX, James received his B.S. in Radio-Television-Film and his B.A. in English at the University of Texas at Austin.

Texas Public Policy Foundation

The Texas Public Policy Foundation is a 501(c)3 non-profit, non-partisan research institute. The Foundation's mission is to promote and defend liberty, personal responsibility, and free enterprise in Texas and the nation by educating and affecting policymakers and the Texas public policy debate with academically sound research and outreach.

Funded by thousands of individuals, foundations, and corporations, the Foundation does not accept government funds or contributions to influence the outcomes of its research.

The public is demanding a different direction for their government, and the Texas Public Policy Foundation is providing the ideas that enable policymakers to chart that new course.

900 Congress Ave., Suite 400 | Austin, Texas 78701 | (512) 472-2700 phone | (512) 472-2728 fax | www.TexasPolicy.com