Online Learning:

Connecting with S.C. Students

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SOUTH CAROLINA POLICY COUNCIL

Online Learning: Connecting with S.C. Students

The South Carolina Policy Council Education Foundation was established in 1986 as a nonpartisan, tax-exempt public policy research and education foundation. Its mission is to educate members and all South Carolinians about state and local public policy based on the traditional South Carolina values of individual liberty and responsibility, free enterprise and limited government.

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Executive Summary

One of the biggest challenges in any statewide educational system is how to deliver quality instruction to the individual students who need it. Online, or digital, learning achieves this goal by allowing the public education system to move beyond the traditional boundaries of school buildings and connect with students on a one-to-one basis. As such, online learning platforms provide access to online, or digital, schooling for both nontraditional and traditional students by offering full-time online enrollment options, as well as supplemental course offerings for students attending a brick-and-mortar school.

Online learning can make a high-quality education accessible to students in high poverty and rural areas by more effectively meeting the needs of those who aren't excelling in a traditional classroom setting and also by delivering a wider array of advanced courses to all students. As such, online learning allows students to take courses unavailable at their local school, resolve scheduling conflicts, and retake classes in order to graduate on time. And these goals are accomplished *without* needing to build more brick-and-mortar schools.

In particular, online learning can help address South Carolina's high dropout rate. The vast majority of dropouts – 88 percent – don't drop out because of failing grades. They do so largely because they are not mentally engaged with what's happening at school. Online learning can give many of these young people a second chance by giving them access to innovative educational techniques tailored to their specific needs.

The RAPID INCREASE in enrollment in South Carolina's full-time and blended online schooling options indicates the state is on the brink of an ONLINE learning revolution.

Standards for digital, online schools are just as rigorous as they are for traditional schools. But unlike many traditional programs, online learning isn't geared toward one type of student. Online courses have worked well with students who have different needs, including at-risk students, students in urban and rural areas, gifted students, and those with special needs. Likewise, online schools offer diverse opportunities for social interaction – for example, through sports clubs, virtual homeroom clusters, and academic field trips.

Online Learning in South Carolina

South Carolina offers several forms of online learning via three different systems and programs. The first system provides for an exclusively digital learning environment and includes five virtual charter schools that are part of the state's public charter school district. These schools are: Provost Academy South Carolina, Palmetto State E-cademy, South Carolina Connections Academy, South Carolina Virtual Charter School, and South Carolina

Calvert Academy. Their combined enrollment is 7,690 students. A sixth school (South Carolina Whitmore School) is scheduled to open in August 2011. These schools provide full-time online enrollment and are able to grant diplomas.

The second system is a blended learning model, the South Carolina Virtual School Program, that operates under the direction of the Department of Education. This program offers online learning courses to public school, private school and home school students, enrolled in otherwise traditional settings – that is, brick-and-mortar schools. As of 2010, 11,265 students were enrolled in the program, with many students taking more than one course. Of the 14,024 courses taken, 95 percent of students attended a traditional public school. A third option is a blended learning approach that allows school districts to purchase additional online courses from private providers as well as the state Department of Education.

The rapid increase in enrollment in South Carolina's full-time and blended online schooling options indicates the state is on the brink of an online learning revolution. Consider that:

- Over the past three years, the number of students enrolled in South Carolina's five virtual charter schools has more than tripled.
- Likewise, the number of students enrolled in the state's blended learning school program has more than doubled.
- The number of students from racial minorities served by the state's blended learning program was 44 percent for the 2009-2010 school year. This is to be compared to an average minority enrollment of 39 percent for the traditional public school system.

Likewise, the state's blended learning system (S.C. Virtual School Program) boasts high retention and success rates:

- 87 percent of students remained enrolled in their chosen digital learning course as compared to all students who received a grade for the course.
- 88 percent of students enrolled in a digital learning course passed in proportion to all students who completed the course.

Clearly, there is a significant – and rapidly growing – demand for online learning in South Carolina. The choice facing policymakers is whether to continue to treat online learning as a nonessential "add-on" to an already burdened educational system or whether to embrace online learning as an integral solution to the state's educational challenges. In the end, it's clear online learning is one of the most important ways South Carolina can use technology to expand educational choice and offer more options to parents and students.

- S.C. Policy Council

THE ADVANCEMENT OF TECHNOLOGY HAS DRAMATICALLY CHANGED HOW WE COMMUNICATE, WORK, PLAY AND, YES, EVEN LEARN.

Education Has Changed … and Must Change

When many of us reading this report attended school, we got up early, caught a bus (or walked), arrived at a big building with a large number of our peers heading for a class meeting in one room with many desks, one teacher, all waiting for the tardy bell to ring. After the teacher took roll, we sat down and began the day's lesson, which took from 20 to 30 minutes. The teacher then gave us an assignment that we worked on in class. When we finished, we sat and waited for the bell to inform us that this class was over and that we had three minutes to make it to the next class and be sitting in our seat before the tardy bell rang again. Outside of lunch, this went on five or six times during the day until the final bell rang – at which time we hurried to catch the bus home. Generally, we did this each day for all 180 days of the school year.

Those were different times, and the world we live in has changed. Many students today are learning in new and different ways. The advancement of technology has dramatically changed how we communicate, work, play and, yes, even learn.

As times have changed many educational systems are playing "catch up" to new ways of delivering learning. Students and parents, for a variety of reasons – a lack of available courses or teachers, schedule conflicts, a need for remediation or credit recovery, the risk of dropping out or, in some cases, boredom – are demanding a variety of choices for schooling to meet the demands of the 21st century.

In many states, the complete education of students from K-12 can now be delivered through the Internet. Students can take a full course load in their home through what is generically called a full-time "online" or "virtual" school and/or they can take supplemental online courses in their local school and in their homes – usually through a state-run program.

Today, there is also a new emphasis on how education is delivered. Students who don't fit into the traditional model of educational instruction want increased access to a variety of courses that can prepare them, no matter where they reside, to excel in a world characterized by new technologies and an expanding global marketplace. In particular, the focus is shifting from schooling to student-centered learning.

> Full-time virtual schools **TEACH** socialization **SKILLS** through online and face-to-face **INTERACTIONS** with teachers and other **STUDENTS.**
>
> Michelle Davis, *Education Week*

The U.S. educational system is also rapidly changing. Decades ago, students in the United States outscored other nations in most academic areas. Now, U.S. students have dropped to 33rd in reading, 27th in mathematics, and 22nd in science.[1] Similarly, a Manhattan Institute study concluded that 70 percent of all student graduates and only 32 percent of all students who leave high school are qualified to attend a four-year college.[2]

In particular, the need for high-quality academic courses in middle and high schools is a very serious issue. The Southern Regional Education Board (SREB) reports that only 60 percent of U.S. high schools offer Advanced Placement (AP) courses while 40 percent offer none.[3] Many schools cannot provide the courses students need to graduate. This is particularly true for rural and inner city schools. A 2002 report found that "nearly three in ten 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)."[4] The numbers are even worse for high poverty schools. In 2010, the National Center for Education Statistics reported: "Teacher educational attainment and professional certification varied by school poverty levels.

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[1] Organization for Economic Co-operation and Development (OECD), OECD *Education at a Glance 2009* (http://www.geographic.org/country_ranks/educational_score_performance_country_ranks_2009_oecd.html).

[2] Jay P. Greene, *High School Graduation Rates in the United States*, Manhattan Institute for Policy Research, revised 2002 (http://www.manhattan-institute.org/html/cr_baeo.htm).

[3] Southern Regional Education Board, *Five Academic Reasons: Why State Virtual Schools Are Important to Your State*, 2007.

[4] Scott Joftus, *Every Child a Graduate*, Alliance for Excellent Education, September 2002 (http://www.all4ed.org/files/archive/publications/EveryChildAGraduate/every.pdf).

For both elementary and secondary schools, a smaller percentage of teachers working in high poverty schools had a master's degree for their highest education level than teachers working in low poverty schools."[5]

As the world grows smaller in this new fast paced knowledge economy, competition will increase and the need to out achieve other nations will become ever greater. As we move through this transformational change process, it is extremely valuable for educators, leaders, policymakers, parents and students to constantly rethink, review and update the delivery of learning to ensure all students are achieving at high levels. Thus, change and alternate methods of delivery are necessary and being implemented throughout the world. This paper examines a variety of models available through the use of online schooling as an alternative method of delivering learning.

States and schools are beginning to take advantage of this new technology for learning. The transition for students from a traditional classroom teacher environment to an interactive one with an online source is not difficult. After all, children born in the last 30-plus years have not lived in a world without computers and the Internet, and they are so familiar with this new technology that many teach their parents and sometimes their teachers how to use it. Thus, student learning through the use of an online platform is on the fast track. This growing approach to schooling, complemented by a rigorous delivery framework and management of the technology, holds promise both in terms of students using effective technology to succeed in life but also in training and supporting teachers, principals and parents. A well-planned online learning environment can increase student opportunities by providing a variety of choices in a personalized curriculum, as well as delivery systems geared to a student's individual learning style with access to quality instructors and content.

THE NATIONAL GOVERNORS ASSOCIATION RECENTLY REPORTED THAT CALIFORNIA HAS ESTIMATED POTENTIAL SAVINGS OF $200 MILLION OVER SEVERAL YEARS BY USING ONLINE TECHNOLOGIES.

What is Online Learning?

Online learning is a generic term that means different things to different people. A review of the literature reveals that the terms "online learning" and "virtual schooling" are frequently used interchangeably. However, there seems to be general agreement that a full-time, diploma-granting online school is called a virtual school – and that is the case here in South Carolina.

Generally, virtual schooling can be defined "*… as a personalized learning approach accomplished by leveraging the best of virtual and classroom-based schools and programs tailored to a child's needs and interests."*[6]

This learning approach takes many forms, including full-time virtual programs, blended learning programs and supplemental virtual course offerings. These models are united by the fact that they are offered online via the Internet.

Table 1 delineates the various forms of virtual schooling/online learning.

[5] Susan Aud, William Hussar, Michael Planty, and Thomas Snyder, *The Condition of Education 2010,* National Center for Education Statistics, 2010.

[6] Elizabeth Kanna, Lisa Gillis (with Christina Culver), *Virtual Schooling: A Guide To Optimizing Your Child's Education* (New York: Palgrave McMillian, 2009).

Table 1[7]

Approaches to Virtual Schooling		
APPROACH	DEFINITION	DESCRIPTION
Full-time Online Program	SREB defines a full-time online program as one in which "students earn credit issued by the school and are awarded diplomas. These programs are designed to provide all educational services to students." The delivery of the full-time online program is generally through public supported virtual charter schools or private tuition paying schools.	A virtual charter school is a diploma-granting school that offers all courses aligned with state standards. This virtual school requires full-time attendance and the material is taught by state-certified teachers. Since this is a public school, no tuition is required. A private virtual school may offer full-time or part-time enrollment. The private virtual school may vary from the public virtual school by employing certified and noncertified instructors, not adhering to a traditional school calendar and allowing students to work year round. Private virtual schools are supported by tuition fees.
Blended Learning	iNACOL reports many definitions of blended, or hybrid, learning, but states that: "In general terms, blended learning combines online delivery of educational content with the best features of classroom interaction and live instruction to personalize learning, allow thoughtful reflection, and differentiate instruction from student to student across a diverse group of learners." The delivery of blended learning most often comes from programs offered through the local school, local school district, or the state Department of Education.	A blended model school is a blending of virtual [online learning] and traditional schooling. In this model, students combine an online course(s) with regular school class attendance.
Supplemental Virtual [Online Learning] Course Offering	Supplemental virtual [online] course offerings are single courses that students can take for a variety of reasons. These courses, once approved by the state, may provide academic credit. Since this type of virtual schooling [online learning] consists of single courses, no diploma is granted.	Single course programs offered through the local school, a school district, or the state Department of Education offer online courses for students who need to "retake" a course for a higher grade, take a course that is not offered in their regular school setting, or complete a course needed for graduation or grade advancement. Single courses are also provided by virtual [online learning] vendors. The vendor may be a private corporation or a university. These single course offerings may be purchased from a variety of vendors. These courses may be for credit or may be supplemental to enrich student learning.

[7] Adapted from Kanna, Gillis (with Culver), *Virtual Schooling*; Southern Regional Education Board, *2009 Report on State Virtual Schools in SREB States*; and John Watson, *Promising Practices in Online Learning: Blended Learning: The Convergence of Online and Face-to-Face Education*, National American Council for Online Learning, 2008.

Online learning is delivered by a range of public and private vendors, relying on a variety of sources and organizational units. The International Association for Technology identifies six major categories of online providers, as identified in Table 2.[8]

Table 2

WHO DELIVERS ONLINE LEARNING?	
PROVIDERS	DESCRIPTION
Statewide Virtual Schools	Schools are governed by state education agencies or a nongovernment organization serving the state. Many of the courses they offer are supplemental for middle and high school students.
Multi-district Virtual Charter Schools	These are cyber [virtual] charter schools and schools operated by education management organizations offering full-time programs at the K-12 or secondary levels. There are approximately 217 of these schools across the nation; South Carolina has 5.
Single District Virtual Schools	Single district virtual schools are predominately operated by large urban districts as supplemental at the secondary level (e.g., Chicago Public Schools).
Consortium Programs	Schools operated by networks and districts within a state or across states to offer supplemental secondary courses (e.g., Virtual High School, Cambridge, Massachusetts, with 11,000 enrollments).
College/University Programs	Full-time or supplemental program enrollment offered by public or private universities (e.g., Brigham Young University, Oklahoma University, Indiana University, Stanford University, et.al.).
Private & Parochial Virtual Schools	Schools developed as an arm of existing schools or may be fully online – some specialize in serving families with homeschooled students.

Online Learning in the United States

Countries around the world are rapidly integrating online learning into their educational systems. Many countries that have not had the ability to deliver a first class education to their entire population are now ambitiously implementing online learning. "China and Mexico have digitized their entire K-12 learning system," notes the recent book, *Disrupting Class*. "Turkey now provides online learning to 15 million students. … India, Australia, Europe, New Zealand and South America have similar efforts underway."[9] With such large isolated areas in many of these countries, the delivery bypasses the direct connection to an Internet line. Students instead get their courses on smart phones or other emerging technologies that use satellite transmissions rather than land line/cable connections.

The shift to online learning has made slower progress in the United States. One of the early leaders, however, has been Florida. The state began K-12 virtual schooling in the mid-1990s by launching "The Virtual High School" and "Florida Virtual School." Florida Virtual has grown exponentially from serving 36,679 student course enrollments in 2004-2005 to 154,125 in 2008-2009. The state also sells its online courses to other states and countries.[10]

Today, all but five states have a full-time statewide online school, a state virtual school/or one in development, or both options (see Figure 1). The strongest efforts have been in the Southeast and the Midwest. But some states, particularly in the Northeast, are still lagging behind – particularly those with strong teacher unions.[11] Still, advocates of virtual/online schooling emphasize that virtual schools will allow schools to retain talented employees as online schools offer additional possibilities for retired teachers or those with young children.[12]

[8] Adapted from Mary Gillford, in Cathy Cavanaugh, *Keeping Pace with K-12 Learning*, Report by the International Association for K-12 Learning, 2009.

[9] Clayton Christensen, Curtis Johnson, and Michael Horn, *Disrupting Class: How Disruptive Innovation will Change the Way the World Learn* (New York: McGraw-Hill, 2008).

[10] Memo from Rick Ferdig and Kim Mulkey to Sharon Hall regarding *Virtual Schooling and AT&T*, August 2009.

[11] Ian Quillen, "E-Learning Delivery Debated," *Education Week*, April 20, 2010.

[12] Jamie Sachs and June Weis, *2009 Report on State Virtual Schools in SREB States*, Southern Regional Education Board.

Table 3[13]

[Full-time] Virtual School Enrollment in Southern States (2007)	
State	Number of Students Enrolled
Alabama	7,289
Arkansas	3,850
Delaware	0
Florida	114,090
Georgia	4,331
Kentucky	1,352
Louisiana	5,605
Maryland	782
Mississippi	3,483
North Carolina	7,251
Oklahoma	1,737
South Carolina	2,407 (2011 enrollment = 7,690)
Tennessee	1,155
Texas	0
Virginia	3,198
West Virginia	1,559
TOTAL	**157,698**

In short, many states are rapidly moving toward offering a complete K-12 education online or, at a minimum, a range of accredited online classes/courses. The International Association for K-12 Online Learning (iNACOL) believes that "online learning through virtual schools is one of the most important advancements in attempting to rethink the effectiveness of education in the U.S."[14] Consider the following trends:

- "By 2019 half of all courses in high school grades will be taken online."[15]
- There are "2.5 million students enrolled in at least one class online, 11% of those were students in accredited degree-granting institutions."[16]
- Likewise, iNACOL reports that:
  - At least 45 states, plus Washington D.C., have a statewide online learning program or initiative, full-time online schools, or both.
  - 35 states have statewide virtual schools or state-led online programs.
  - 27 states and D.C. have statewide full-time online schools.
  - 57 percent of U.S. public secondary schools provide access to online learning.
  - 72 percent of school districts with distance learning programs plan to expand offerings.
  - 80 percent of K-12 school districts reported that online course offerings would be "otherwise unavailable."
  - For students in rural schools and students who need to take courses for college credit, 60 percent of the public supports public funding for online learning.[17]
  - Almost three quarters of voters (73 percent) support implementing online learning in their local school district.[18]

As observed in a new report signed by former governors Jeb Bush of Florida and Bob Wise of West Virginia: "Preparing more than 50 million [U.S.] students with the knowledge and the skills to succeed in college and careers is the greatest moral and economic challenge of our era."[19] By all accounts, the United States is positioned for an online learning explosion.

[13] Southern Regional Education Board, *State Virtual Schools – Successes and Growing Pains*, 2007 (http://publications.sreb.org/2007/07T06_Summary_Report_state_virtual.pdf).

[14] National American Council for Online Learning (NACOL) and the Partnership for 21st Century Skills, *Virtual Schools and 21st Century Skills*, 2006.

[15] Christensen, *Disrupting Class*.

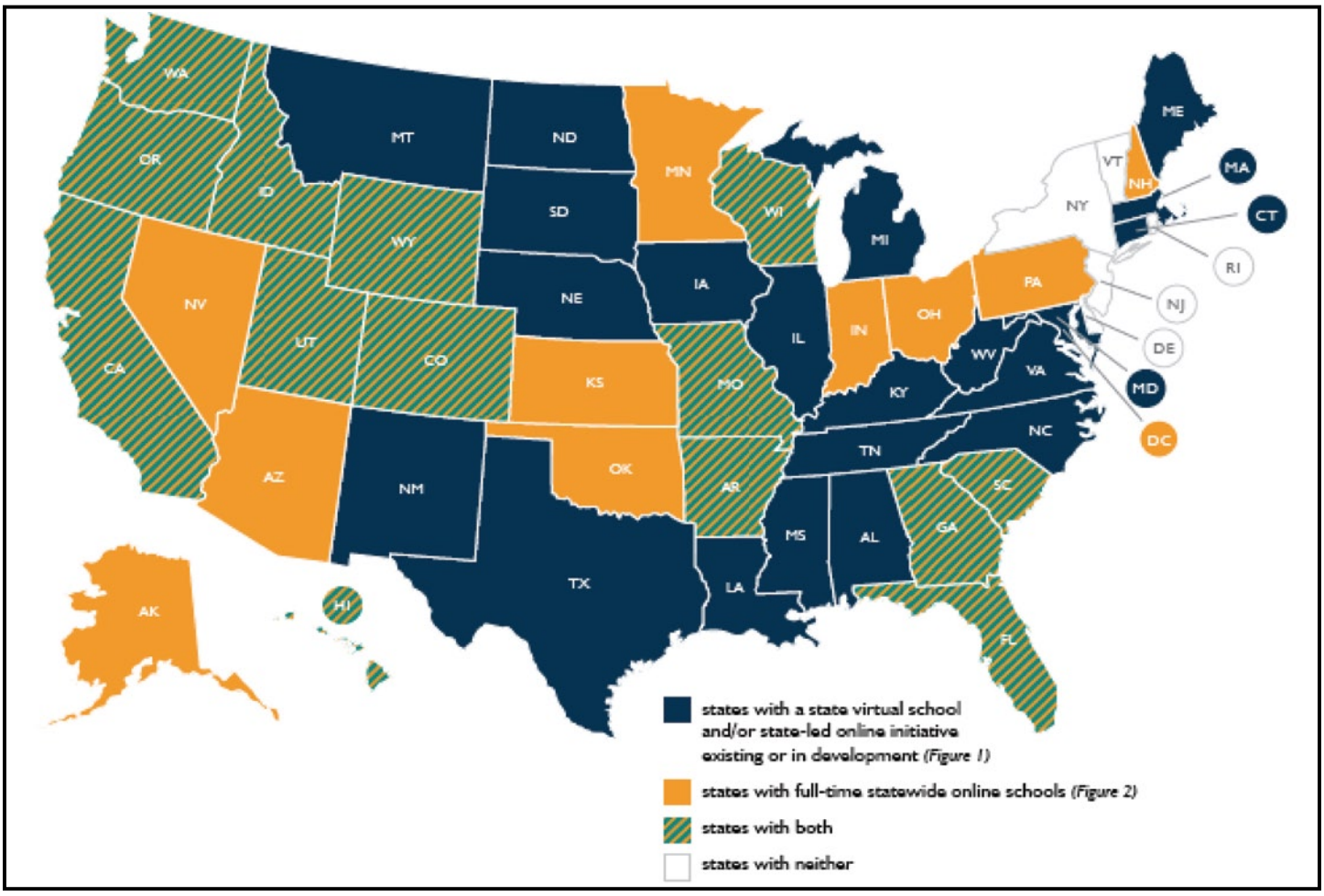
[16] I. Elaine Allen and Jeff Seaman, *Growing by Degrees: Online Education in the United States* (Needham, Mass.: The Sloan Consortium, 2005).

[17] International Association for K-12 Online Learning (iNACOL), *Fast Facts About Online Learning*, 2010.

[18] National quantitative survey conducted November 15-18, 2010, among N=1,000 registered voters. Margin of error is 3.1% in 19 out of 20 cases. On behalf of the International Association for K-12 Online Learning (iNACOL).

[19] Foundation for Excellence in Education, *Digital Learning Now*, 2010 (http://www.excelined.org/Docs/Digital%20Learning%20Now%20Report%20FINAL.pdf).

Figure 1: Map of Virtual Learning in the United States (2010)[20]



Online Learning in the Southeast

As indicated, the strongest efforts to implement virtual schools are in the Southeast and the Midwest.[21] The Southern Regional Education Board (SREB) charted state by state Innovative Policies and Programs of SREB state virtual schools from summer 2008 to spring 2009. A review of southeastern state policies and programs can be found in Table 4 on page 9.

The SREB has focused on online learning as a major priority. In their 2007 report on state virtual schools – *Successes & Growing Pains* – they recognized that online and web based learning is very different than many schools assume them to be. They stressed that a significant difference is "that the focus is on student learning and not on teachers teaching."

Active engagement, communication skills and time management are key ingredients to success. And while it takes a teacher who can adjust his teaching style to be successful – "not all teachers can make this transition."[22]

The SREB counted a total of 157,698 students enrolled in full-time virtual schools in the South. The types of courses offered include: Advanced Placement, Core Academic Courses, Non-Core Electives, Technical, GED, Retake or Catch-Up, and those labeled Other.[23]

SREB also reported that:

- All state virtual schools offer at least one AP course and 10 state virtual schools offer at least a dozen.
- Eight state virtual schools employ full-time teachers as well as adjunct faculty.

[20] PowerPoint Presentation by Susan Patrick, "Funding and Policy Frameworks: Virtual Learning," International Association for K-12 Online Learning.

[21] Quillen, "E-Learning Delivery Debated."

[22] SREB, *Successes and Growing Pains.*

[23] Sachs and Weis, *2009 Report on State Virtual Schools in SREB States.*

- All state virtual schools require teachers to respond to students within 24 hours.
- 14 state virtual schools provide access to digital library resources.
- While guidance services are provided to all students by their full-time schools, six state virtual schools also provide supplemental guidance services to students enrolling in their courses.[24]

Although many states have established and supported online learning, some local districts are also beginning to take significant steps in this direction. For instance, students in the Memphis, Tennessee, school system are now required to take one online course to graduate. As of now, the Memphis school system offers 29 online classes for credit to twelfth- to middle-grade students.[25]

Table 4[26]

Organization and Policies of SREB State Virtual Schools: Summer 2008-Spring 2009

STATE PROGRAMS	INITIAL ACTION	GOVERNANCE	INNOVATIVE POLICIES & PROGRAMS
ACCESS (Alabama)	Legislative Code	Alabama State BOE	In 2008, Alabama became the second state in the nation to create an online learning graduation requirement for public school students.
Arkansas Virtual High School	Arkansas DOE	Arkansas State BOE	In 2009, a three-year pilot program was created that will equip up to three school buses in participating public school districts with wireless Internet service, 15 laptop computers, 40 portable video storage devices, 2 media screens, and math and science software. The purpose of the pilot is to explore the benefits of mobile learning for students who ride a bus long distances to and from school.
Delaware Virtual School	Pilot began in 2008, funding eliminated in 2009		
Florida Virtual School	Legislative Code	Board of Trustees appointed by the Governor	In 2008-2009, Florida became the first state in the nation to pass legislation requiring all districts to offer full-time online programs for grades K-12.
Georgia Virtual School	Legislative Code; Governor's Initiative	Georgia DOE; accountable to State Superintendent and Governor	In 2007, Georgia became the first state in the nation to create standards for an online teaching certificate endorsement. The first cohort of teachers to be eligible for the endorsement was on track to complete requirements in spring 2010.
Kentucky Virtual High School	Governor's Initiative	Kentucky BOE	Kentucky Virtual Schools is collaborating with Appalachian Educational Laboratory and the Collaborative for Teaching and Learning to compare student performance and teacher engagement levels in a blended learning classroom and a traditional, face-to-face classroom.
Louisiana Virtual School	Louisiana DOE	Louisiana BOE	Louisiana Virtual School is in the eighth year of implementation of its Algebra I Online Program. The program provides students with a certified math instructor and standards-based curriculum. It also provides teachers with professional development opportunities that will assist with the facilitation of the Algebra I Online Program and support their efforts to achieve mathematics teaching certification.
Maryland Virtual School	Legislative Code	Maryland DOE	The Maryland Virtual Learning Opportunities Program encompasses three programs: the Maryland Virtual School, Online Professional Development, and Online High School Assessment.

[24] Sachs and Weis, *2009 Report on State Virtual Schools in SREB States.*

[25] Updates section, *Education Week*, January, 2011.

[26] Sachs and Weis, *2009 Report on State Virtual Schools in SREB States.*

Mississippi Virtual Public School	Legislative Code	Mississippi BOE	In 2008-2009, 170 students participated in a free Algebra Readiness Program through Mississippi Virtual Public School.
North Carolina Virtual Public School	Legislative Code	North Carolina BOE	Legislation requires that all state-funded online learning opportunities be consolidated under North Carolina Virtual Public School. In 2008, North Carolina Virtual Public School became the coordinator of Learn and Earn Online, a dual enrollment program that allows high school students to earn college credits. More than 5,000 students were enrolled in the program in the 2008-2009 school year.
University of Oklahoma High School	NA	University of Oklahoma	In 2009, a task force was created to "study the efficiency and accountability of the state's Internet-based instruction program. The task force will review Internet-based instruction programs offered throughout the state and make recommendations for any statutory or regulatory changes necessary to improve the accountability and effectiveness of the program."
South Carolina Virtual School Program	Legislative Code; Governor's Initiative; SC DOE	South Carolina BOE	South Carolina currently has five full-time, virtual charter schools in operation, as well as the SC Virtual School Program that offers supplemental online courses to students attending brick-and-mortar schools.
e4TN (Tennessee)	Tennessee DOE	Partnership between USDOE, Tennessee DOE and 8 School Districts	In 2008, legislation was passed stipulating that "a virtual school would be provided equitable treatment and resources as any other public school in the state."
Texas Virtual School Network	Legislative Code	Texas Commissioner of Education	In January 2009, the Texas Virtual School Network began offering courses for students in grades 9 through 12. The Electronic Course Program, a full-time online program for grades 3 through 9, was to be phased into Chapter 30A, which established the Texas Virtual School Network, beginning in 2009-2010.
Virtual Virginia	Legislative Code; Governor's Initiative; Virginia DOE	Virginia DOE	Students who qualify as Early College Scholars may take AP courses free of charge through Virtual Virginia.
West Virginia Virtual School	Legislative Code; West Virginia DOE	West Virginia Legislature; West Virginia BOE; and West Virginia DOE	In 2008, State Board Policy was amended to recommend that students complete an online learning experience as part of high school graduation requirements.

Online Learning in South Carolina

History and Regulatory Environment

South Carolina offers several forms of online learning via three different systems and programs. The state has created a Public Charter School District, which oversees five full-time virtual charter schools. These schools provide for full-time enrollment and are able to grant diplomas. In addition, the state runs the South Carolina Virtual School Program (SCVSP) controlled by the Department of Education. This program offers blended learning options – i.e., online school courses available to public school, private school and home school students, enrolled in otherwise traditional settings. In addition, school districts may purchase accredited online courses from the state Department of Education or private providers.

The South Carolina Public Charter School District (SCPCSD) was enacted into law in the 116th Session of the South Carolina Legislature in 2005-2006. Thus far, the South Carolina State Charter School District has authorized the creation of five virtual public charter schools.[27] These are: Provost Academy South Carolina, Palmetto State E-cademy, South Carolina Connections Academy, South Carolina Virtual Charter School, and South Carolina Calvert Academy. A sixth virtual charter school (South Carolina Whitmore School) is scheduled to open in August 2011.

[27] Individual charter schools do not require specific legislative approval, but are approved by the charter school district.

In 2007 (Act 26), lawmakers subsequently authorized the S.C. Department of Education to establish the South Carolina Virtual School Program. Among other things the General Assembly stipulated the new initiative should be used to:

1. Create educational opportunities for the students in this state that may not exist without such technology; and

2. Deliver instruction that can provide effective alternatives for credit recovery, graduation requirements, resolving scheduling conflicts, delivering curriculum content when there is a shortage of certified personnel, providing a more flexible and individualized instructional pace, and offering low-incidence courses.

The law also instructed the Department of Education to:

- Provide requirements and procedures for the Virtual School Program.
- Provide for certain online course credits.
- Provide for student eligibility standards.
- Provide for qualifications of teachers and instructors in the program.
- Provide for an online pilot program to determine the feasibility of creating a virtual school program.
- Provide for students enrolled in an adult education program.
- Provide for an annual report to the General Assembly by the Department of Education.

The legislation passed by the General Assembly also imposed certain restrictions. These include the following:

- The SC Virtual School Program MAY NOT award a South Carolina high school diploma.
- Students may be awarded NO MORE than three online initial credits in a school year.
- NO MORE than 12 online initial credits throughout high school may be awarded.
- Students enrolled in online courses MUST be administered final exams and appropriate assessments in a proctored environment.
- It is NOT the responsibility of the school, district, or state to provide home computer equipment or Internet service to virtual school students.
- The Department of Education is REQUIRED to review and approve virtual schooling courses.
- Instructors MUST hold a valid teaching certificate in each content area taught or receive approval from the Department of Education.
- All virtual teachers MUST receive appropriate pre-service and in-service training pertaining to specific aspects of the program.
- Traditional (non-virtual) charter schools SHALL provide NO MORE than 75 percent of a student's core academic K-12 instruction via an online or computer program.

It is also worth noting that the law (§ 59-40-65) forbids providing at the state's expense virtual charter school instructional materials to private or home school students.

THE VAST MAJORITY OF PUBLIC SCHOOL TEACHERS (76 PERCENT) SUPPORT ONLINE LEARNING. NOVEMBER 2010 iNACOL NATIONAL SURVEY

In spite of this relatively stringent regulatory environment (or, really, because of it), waivers are available that permit some flexibility. For instance, a student may take more than three online credits a year in exceptional cases, such as for hospitalized and homebound students or seniors in need of credits for on-time graduation. The Department of Education also provides an option whereby a school may enroll an entire class of students on a payment basis. For example, the SCVSP was recently used to teach Latin 1, 2, and 3 students at Westside High School in Anderson 5. The school lost its Latin teacher at the beginning of the 2010-2011 school year and asked if SCVSP could assist it via their special project option. In this situation, the school pays the cost of the teacher ($2,500 per course or section of a course with 35-45 initial enrollments) and a small administrative cost ($500 per course or section of a course). Since world language courses span two enrollment periods, the district is

paying $15,000 for the year (September-May) for its students to take these three courses.

Enrollment and Demographics for Full-time Virtual Public Charter Schools

As of January 2011, the number of students enrolled in South Carolina's five virtual public charter schools was 7,690. Table 5 reports the number of students per school over the last three years. Further breakdown by race and gender is found in Table 6.[28]

Table 5: Enrollment in South Carolina Public Charter School District by Virtual School

Date	Palmetto State E-cademy	Connections	SC Virtual Charter	Provost	Calvert	TOTALS
Jan. 2009	608	568	981	NA	NA	2,157
Sep. 2009	481	1,517	1,859	1,455	280	5,592
Sep. 2010	433	2,497	2,795	1,544	316	7,585
Jan. 2011	**383**	**2,341**	**3,016**	**1,646**	**304**	**7,690**

Table 6: Virtual Charter School Enrollment by Race and Gender

Race/ Sex	Palmetto State E-cademy	Connections	SC Virtual Charter	Provost	Calvert	TOTALS	%
White	285	1,808	2,400	1,250	202	5,945	77%
Black	65	289	458	334	86	1,232	16%
Other[a]	33	244	158	62	16	513	7%
Male	150	1,129	1,479	667	146	3,571[b]	46%
Female	233	1,206	1,536	979	158	4,112[b]	54%

[a]From the data received, the Other category was found by subtracting the total of White and Black from the January 2011 school total data. Thus, data is approximate.

[b]The total of Male and Female data are seven students less than the total student count in January 2011. Since data were collected at different points in time, the data in January 2011 and Male and Female student counts will not necessarily be the same.

Who is Taking Online Learning School Courses – and Why?

The number of students enrolled in one or more online courses grew from 4,083 in 2007-2008 to 11,265 in 2009-2010. The number of enrolled students (11,265) applies to individual students. Because each student may take more than one course, the number of courses taken was 14,024. Of the courses taken, 58.52 percent were selected by females and 41.48 percent by males. When broken down by race/ethnicity, 55.54 percent were selected by White students and 44.46 percent by non-White students. This is to be compared to an average minority (non-White) enrollment of 39.36 percent for the traditional public school system. Of these minority groups, 34.56 percent were African American; 4.34 percent were Hispanic; and 1.32 percent were Asian.[29]

As indicated above, enrollment in courses offered by the SC Virtual School Program represents a blended learning model in which otherwise traditional students take some online classes. Of the 14,024 courses taken, 94.58 percent of students attended a traditional public school; 3.7 percent were homeschooled; 1.28 percent attended a public charter school; and 0.36 percent attended a private school.

Table 7 displays the number of students over the past three years who have enrolled in one, two, or more courses. (Recall, the cap is no more than 12 credits throughout high school.)

Table 7: Enrollment in SC Virtual School Program

All Year	2007-2008	2008-2009	2009-2010
Requests	n	n	n
1	2,700	4,477	5,699
2	1,011	2,932	4,478
3+	372	742	1,088
Total # Enrolled Students	4,083	8,151	11,265

Of the 14,024 courses taken, most were in social studies (21.28 percent), followed by Career and Technology Education (CATE) courses (20.05 percent); English (18.61 percent); mathematics (17.53 percent); science (9.06 percent); world languages (5.61 percent); health/

[28] South Carolina Public Charter School District, responses to questions, 2010.

[29] South Carolina Department of Education, responses to questions, 2011.

physical education (5.17 percent); and fine arts (2.70 percent).

Table 8: Course Completion for SC Virtual School Program[30]

Year		C	CF	WF	WNG	Total
2007-2008	Total	2,550	1,291	163	2,025	6,029
2008-2009	Total	4,201	1,534	781	3,571	10,087
2009-2010	Total	6,551	930	1,129	5,453	14,024

Students have varied reasons for enrolling in online courses. A 2007 survey by the Southern Regional Education Board concluded that students take online course offerings for the following reasons: courses are unavailable in their local school; to assist in scheduling conflicts; for remedial and credit recovery; or to graduate on time. Other unique circumstances include: homebound cases for illness; professional athletes or performers; students with physical disabilities; those who wish to take advanced and AP courses; and dual credit for college or technical/community colleges.[31]

Online learning is also one way to help dropouts. According to the National Center for Education Statistics, South Carolina's four-year graduation rate was 58.9 percent for the class of 2008 – 48th lowest in the nation.[32] Kids drop out for numerous reasons, but it is interesting to note that 88 percent of dropouts had passing grades.[33] Forty-seven percent of dropouts report that a major reason for dropping out was that "classes were not interesting" and that they "were bored." At the same time, the demand for credit recovery courses is one factor fueling the rise in online learning.[34] Dropouts or potential dropouts, in other words, are looking to virtual schooling/online learning as an alternative.

A recent survey conducted by the S.C. Department of Education found that the top reason students are taking online school courses in South Carolina is to graduate on time. Table 9 lists the results.

Table 9

Why Students Are Enrolling in the SC Virtual School Program

QUESTIONS AND STUDENT RESPONSES	PERCENTAGE
Heard positive things about online courses and wanted to try one for myself.	6%
Thought the course would be easier if I took it online.	5%
Need a more flexible schedule to allow me to work and take classes for high school credit.	10%
Need flexible accommodations due to homebound or hospital stays.	1%
Need the course online due to scheduling conflicts.	22%
Senior in high school and need this course to graduate.	31%
The course was not offered at my school.	22%
Unsuccessful in the regular classroom and need remediation.	4%

Table 9 indicates that nearly a third of South Carolina students are looking to an online learning model to help them graduate on time. Another 20 percent are using online schooling to take courses not otherwise offered at their school. Many of these students are presumably highly motivated and may be enrolled in rural or high poverty schools that offer a limited curriculum. Another 10 percent of students – some of which are likely potential dropouts – are using online learning courses to resolve work-school scheduling conflicts.

While kids drop out of school for varied and complex reasons, one thing is clear. Targeted, individualized instruction that focuses on concrete academic progress, as opposed to mere "seat-time," is one of the best ways to help potential dropouts. As recommended by a 2006 survey of high school dropouts: "Instead of the usual 'one-size fits all' school, districts should develop options for students, including a curriculum that connects what they are learning in the classroom with

[30] Legend: C = Successfully completed course with a grade of 70 or above; CF = Completed coursework but failed to attain at least a 70; WF = Withdrew after the 10-day drop period (per the South Carolina Uniform Grading Policy, the grade is recorded as a 61); WNG = Withdrew from the course prior to the 10-day drop period (no grade is recorded for the student). This table has been adjusted from the SCVSP table referring to retention data. Cumulative total of 14,063 includes students who enrolled the summer before the 2009-2010 school year.

[31] SREB, *Successes and Growing Pains*.

[32] National Center for Education Statistics, *The Condition of Education: Student Effort and Educational Progress*, U.S. Department of Education Institute of Education Sciences, 2010.

[33] John M. Bridgeland, John J. DiIulio, and Karen B. Morison, *The Silent Epidemic: Perspectives of High School Dropouts*, Peter D. Hart Research Associates for the Bill and Melinda Gates Foundation, 2006.

[34] Anthony Picciano, *American High Schools Increasingly Embrace Online Education*, Babson Survey Research Group Study, 2010.

real life experiences and with work, smaller learning communities with more individualized instruction, and alternative schools that offer specialized programs to students at-risk of dropping out."[35] Online schooling provides all the essentials to meet the aims of this model.

Performance

Granted that many students are using online learning to graduate on time, success rates for the South Carolina Virtual School Program are relatively high. These success rates can be calculated using different measures:

1. Number of students who completed a course with a passing grade of at least a 70 compared to all students who initially signed up for a course – that is, including course dropouts. This rate was 42.3 percent in 07-2008; 41.7 percent in 08-2009; and 46.7 percent in 09-2010.

2. Number of students remaining in the course after 10 days. (Those who drop out in the first 10 days receive no grade.) This rate was 63.7 percent; 64.5 percent; and 76.1 percent, for each respective year.

3. Number of students who completed the course and received a passing grade proportionate to all students who completed the course. This success rate was 66.4 percent; 73.3 percent; and 87.6 percent, respectively by year.

In terms of retention, as opposed to passing grades, course completion rates were the following:

1. Number of students who did not withdraw compared to all students who initially signed up for a course. This rate was 64.7 percent in 07-2008; 56.9 percent for 08-2009; and 53.3 percent for 09-2010.

2. Number of students retained through the course compared to the total number of students who received a grade. The retention rates were 96.9 percent; 88.0 percent; and 86.9 percent, for each respective year.

According to the Consortium of School Networking, the per pupil cost of delivering TWO online courses to students in Michigan's 15,000 Walled Lake School District will be 40 percent of the cost of delivering two traditional courses.

Funding for Online Learning

Funding for Full-time Virtual Public Charter Schools in South Carolina

As authorized by the FY10-2011 state budget, public charter schools in the SCPCSD received a base student cost (BSC) allocation of $1,630 per student. This amount is equal to that received by every district. For FY2010 and FY2011, the Legislature approved (via budget proviso 1.3) a $700 per student supplement. In the FY11-2012 budget, virtual charter schools received $1,700 per weighted pupil, and brick-and-mortar charter schools received $3,250 per pupil (proviso 1.89). These one-time supplements must be reauthorized each year. Over the past three years, however, BSC funding has gone from $2,578 (FY2009) to $1,630 (FY2011) to $1,788 (FY2012) per pupil.

Like other schools, charter schools receive additional funding tied to state and federal categorical funds based on specific student needs or weights. They also receive the local money other public schools receive.

All told, according to Dr. Wayne Brazell, superintendent of the South Carolina Public Charter School District, the state's charter schools received approximately $3,934 in total funding per pupil for the 2010-2011 school year. At the same time, the estimated per pupil cost at a typical virtual

[35] Bridgeland, DiIulio, and Morison, *The Silent Epidemic.*

charter school was $7,288 for the 2009-2010 school year.[36] As based on the same reporting source, the average statewide per pupil cost at a traditional brick-and-mortar public school was at least $9,161 – but likely more than $12,000 per pupil.[37]

Funding for the SC Virtual School Program

Courses offered through the SC Virtual School Program (SCVSP) are free on a first-come-first-serve basis to every public, private and home school student in the state, as well as nontraditional learners enrolled in an adult education program. Per state regulations, a student may not earn more than 3 units of credit toward a high school diploma through the SCVSP per year and 12 units of credit toward a high school diploma during his/her four years in high school.[38]

THE ABILITY TO PERSONALIZE AND CUSTOMIZE EDUCATION THROUGH THE USE OF TECHNOLOGY IS HERE TODAY.

Table 10: Funding, Allocations, Cuts, and Amounts Received for SCVSP

Fiscal Year	Source	Allocation	Cuts	Received
2007-2008 Budget	General	$3,651,198	$1,700,000	$1,951,198
2008-2009 Budget	General	$1,824,490	$782,000	$1,824,490
	K-12	$915,000	$210,450	$704,550
2009-2010 Budget	General	$847,800	$450,300	$397,500
	K-12	$878,427	None reported	$878,427

Table 10 indicates that funding for the SCVSP has been cut by $3.142 million over the past three years. Yet, during the same period, course enrollment increased from 6,029 in 2007-2008 to 14,024 in 2009-2010. This reduction in state funding has required local school districts to absorb the cost, as permitted by district policies and budgets.[39]

Funding in the Future

While it is beyond the scope of this report to make funding recommendations for online/virtual schools and online courses, it is suggested that a subsequent policy paper investigate the variety of successful approaches being implemented throughout the U.S. With the addition of technology as a financial input, an extension of the previous 2007 study of K-12 educational funding in South Carolina, authored by Hassel and Roza,[40] is a compelling place to start.

Conclusion

There is a significant – and rapidly growing – demand for full-time and blended online schooling options in South Carolina. The ability to personalize and customize education through the use of technology is here today. The question facing policymakers is how to integrate online learning to ensure that the state's educational system meets high achievement standards and responds to the challenge of providing a quality education for all students. If online learning is to be fully embraced as an integral part of the public education system, stakeholders – including the public, educators and policymakers – must be educated about the benefits, costs, opportunities and limitations of online education. Already, though, online learning is emerging as an effective option to:

[36] South Carolina Connections Academy, *Comparison of Average Statewide Per Pupil Expenditures of Traditional Public Schools vs. South Carolina Connections Academy*, South Carolina Connections Academy, 2010.

[37] In$ite data from the state Department of Education for the 2009-2010 school year is not yet available. However, data for the 2008-2009 school year indicate that once capital and out-of-district obligations are accounted for, average statewide per pupil spending was $12,207. Based on Policy Council analysis, the estimated per pupil cost for the 2010-2011 school year is $13,138 (including local bond revenue). See Simon Wong, "Behind the Myths." This could be compared to an average tuition cost of $8,549 for U.S. private schools (FY07-2008, latest data available), as reported by the U.S. Department of Education.

[38] South Carolina Department of Education, responses to questions, 2010. Table 10 is also derived from this data.

[39] Similarly, even though the SCVSP was initially allotted 8 administrative staff and 20 teachers for its operation, the program has only hired 3 administrative staff and 10 full-time teachers.

[40] Bryan Hassel and Marguerite Roza, Funding the Child: Getting Results in South Carolina through Weighted Student Funding, South Carolina Policy Council with the Thomas B. Fordham Foundation (January 2007): 1-2; available at: http://www.scpolicycouncil.com/images/pdf/79.pdf.

- Meet the needs of at-risk students not excelling in a traditional classroom setting.
- Deliver high-quality courses to students in rural and high poverty areas.
- Offer a wider array of advanced and technical courses to all students, including gifted and talented and those wishing to take AP courses.

In particular, online learning initiatives can help address South Carolina's high dropout rate, giving many potential dropouts a second chance to excel in school.

The challenge moving forward is to establish policies that enhance opportunities for online learning to be successful. Here, it is important to recognize that policies that work well in a traditional school setting might not be a good fit for a virtual school or an online course. In the end, though, it's clear online learning is one of the most important ways South Carolina can use technology to expand educational choice and give parents and students more options.

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Top 10 Myths About Virtual Schools	
MYTH	TRUTH
Virtual schools are a separate delivery system from traditional education.	There are more than 500,000 enrollments in online courses across the United States, in schools and districts, meeting rigorous state academic standards as virtual schools provide courses to students inside schools. Online courses are in nearly all, if not all, states and make it possible to offer advanced courses or instruction otherwise not available at the local level.
Online courses are for gifted and talented students only.	Online courses have worked well with students of all kinds, including at-risk students, students in urban and rural areas, those with limited English proficiency, and those with special needs. Online learning has also been used successfully as part of systemic reforms to help students performing below grade level in large urban school districts.
Online courses lack interaction.	Students typically have more one-on-one interactions with their teachers and fellow students in online courses, especially when team projects are assigned. Teachers report getting to know their students better, and students who are shy or do not think well "on their feet" tend to contribute more in online environments. Students are often actively interacting with both resources and others in online environments.
Online students are isolated and therefore will be socially disadvantaged.	In fact, students often engage actively both online and off as they complete assignments and socialize with other students and adults in their schools, at home, and in the community. Online students typically take only one or two courses online, blending their learning opportunities with traditional instruction in brick-and-mortar schools.
Online teachers have easy jobs.	Online teachers report they work much harder and spend more hours online than in the classroom, but that they love it. They do not simply "move a class online" and "put up what they teach." Online instructional design, writing, management of instruction, and communicating with students can take considerable time and be quite different from what goes on inside a traditional classroom.
Online courses have to be developed from scratch.	Many online courses already exist that meet state standards and are accredited by recognized organizations. These online resources have been developed by states, private businesses, and independent organizations. At least initially, collaborating and sharing these options may be more cost-effective and practical for school systems than developing online instruction in-house.
Online courses are easier for students than regular courses.	Most online courses are neither condensed nor easier versions of regular courses. They are aligned to rigorous state standards. They require active participation and operate in settings under supervision of state certified teachers, require students take state assessment tests, have attendance policies, and have competency-based academic progress requirements in effect.
A student is more likely to cheat online.	Cheating is no more prevalent online than in the classroom. In addition, there are many technological ways to deter and track it. In many cases, the online venue and communication enables teachers to get to know their students' idiosyncrasies and skills much better. Teachers say that student writing has a voice and that it is often easier to spot work that is inconsistent or unlike earlier communication in online environments.
Virtual schools are about technology.	Virtual schools are about curriculum and instruction for students. The "medium" is not the message because the student, instructor, content, and learning goals are key. Networks simply make it possible to provide communication, access to extended resources, and use of sound, graphics, video, text, interactivity, and other digital capabilities to strengthen instruction. Most schools have the basic technology, Web browsers, plug-in software, and access that are needed.
Online courses represent an "add-on" to already burdened school systems and teachers.	Online education does not represent an "add-on." It does represent an opportunity to take advantage of online resources, enable teachers to help students learn in ways that match students' needs and learning style, and transform schools. Online courses may or may not decrease costs, depending on how budgets are allocated and how online courses are integrated into instruction. Training and support of teachers is important.
Source: National Council on Online Learning, "Top Ten Myths About Virtual Schools."	

Mission Statement

The
South Carolina Policy Council
was founded in 1986 as an
independent, private, non-partisan
research organization
to promote the principles of
limited government, free enterprise and
individual liberty and responsibility
in the state of
South Carolina

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