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Online Learning: Exploring the Landscape

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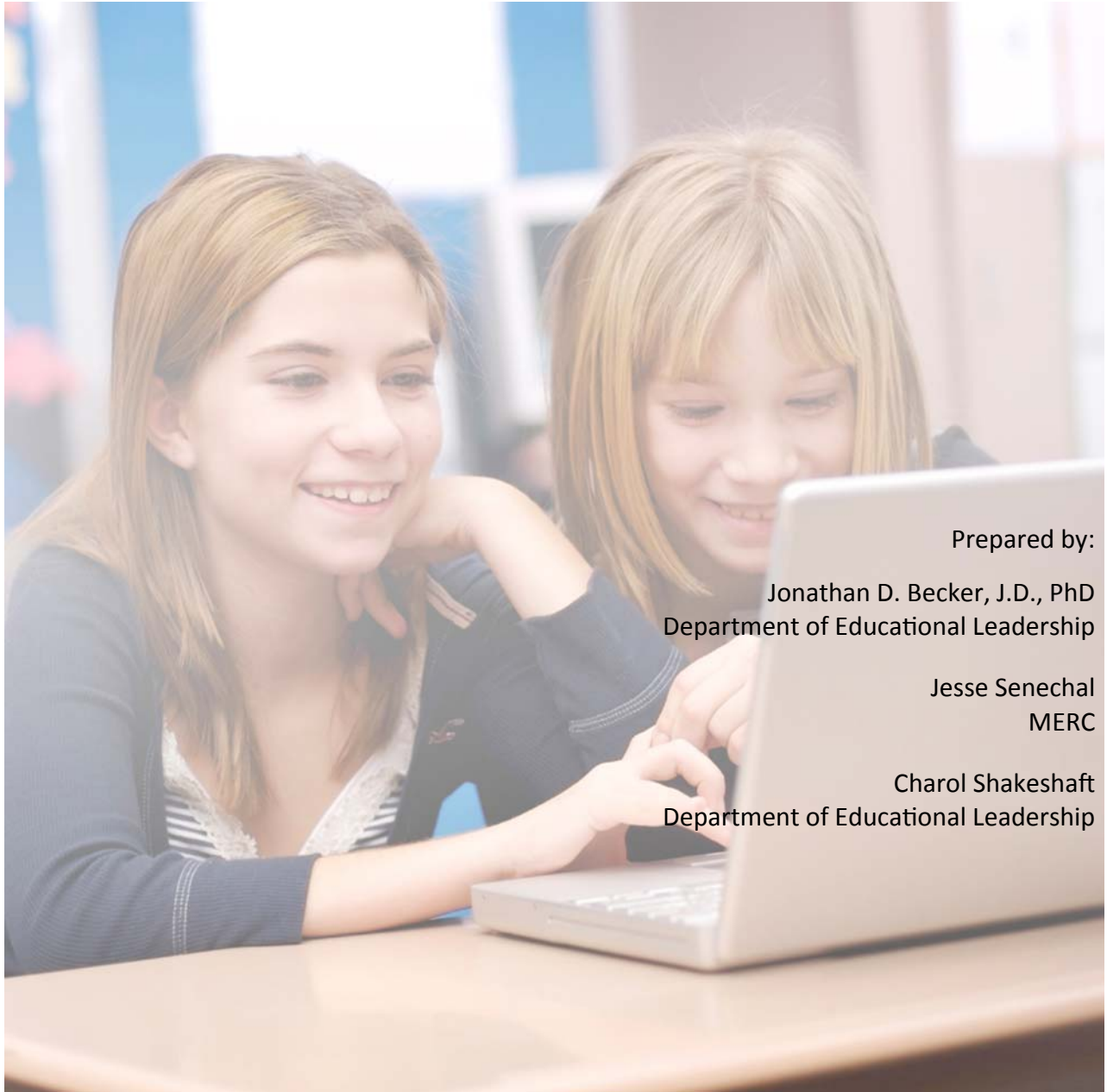
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Online Learning in Virginia: Exploring the Landscape



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Virginia Commonwealth University and the school divisions of Chesterfield, Colonial Heights, Hanover, Henrico, Hopewell and Richmond established the Metropolitan Educational Research Consortium (MERC) on August 29, 1991. The founding members created MERC to provide timely information to help resolve education problems identified by practicing professional educators. MERC currently provides services to over 12,000 teachers in eight school divisions. MERC has based funding from its membership. Its study teams are composed of university investigators and practitioners from the membership.

MERC is organized to serve the interests of its members by providing tangible material support to enhance the practice of educational leadership and the improvement of teaching and learning in metropolitan educational settings. MERC's research and development agenda is built around four goals:

- ◆ To improve educational decision-making through joint development of practice-driven research questions, design and dissemination,
- ◆ To anticipate important educational issues and provide leadership in school improvement
- ◆ To identify proven strategies for resolving instruction, management, policy and planning issues facing public education, and
- ◆ To enhance the dissemination of effective school practices.

In addition to conducting research as described above, MERC conducts technical and educational seminars, program evaluations, an annual conference and publishes reports and research briefs.

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ONLINE LEARNING IN VIRGINIA: EXPLORING THE LANDSCAPE

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INTRODUCTION

No Virginia child's future should be limited by the walls of a particular school building or the boundaries of an attendance zone. Virtual schools create additional choices and opportunities within our public education system.

*-Virginia Governor Robert M. McDonnell
June 6, 2011*

Governor McDonnell made those remarks on the day that State Superintendent of Public Instruction Patricia I. Wright announced that 13 virtual-school programs had been approved to provide instruction to students in multiple school divisions across the Commonwealth. This announcement was a major development as part of Governor McDonnell's overall educational policy platform for increasing educational opportunities for students. Called "The Opportunity to Learn," the Governor's legislative package included expanding online learning offerings as one of its pillars.

The centrality of online learning to any educational reform effort should come as no surprise. The number of K-12 students taking online courses has increased rather dramatically over the last decade, and especially over the last few years. Advancements in Web-based and computer-mediated communications technologies mean that how we think about learning, both formal and informal, spatially and temporarily will inevitably change. Opinions about those developments and the speed of change vary greatly, but one consistent concern is the lack of empirical evidence about the impact of Web-enabled learning. In a

comprehensive meta-analysis conducted for the U.S. Department of Education, Means et al. (2010) stated, among other findings, that "[a]n unexpected finding was the small number of rigorous published studies contrasting online and face-to-face learning conditions for K–12 students. More recently, Glass and Welner (2011) in a policy brief for the National Educational Policy Center assert that "[l]ittle or no research is yet available on the outcomes of... full-time virtual schooling."

The Policy and Planning Council of the Metropolitan Educational Research Consortium (MERC) at Virginia Commonwealth University (VCU) rightfully identified online learning as an area ripe for study. This report summarizes findings from both phases of the research is the first report of the study that was ultimately commissioned. After a brief review of the literature, this report includes a description of the survey research portion of the study as well as findings from the statewide survey that was undertaken and then phase 2, which consisted of case studies of four Virginia school divisions. The report concludes with a brief summary of the findings and some policy and research recommendations.

BRIEF REVIEW OF THE LITERATURE

As online learning in the K-12 realm grows, so does the body of literature around it. Books, guidance documents and empirical research in the area are proliferating. What follows is by no means intended to be a complete review of the literature. Rather, this section is intended to introduce the reader to some key concepts related to online learning and to set the policy context and the empirical justification for the study that is reported in subsequent sections. The first subsection does some definitional work. That is followed with a subsection that looks at the national context through some data and information about the growth of online learning. The final subsection is about the policy context in the Commonwealth of Virginia.

Defining Online Learning: A Tricky Proposition

Defining key terms around online learning is a tricky proposition. The International Association for K-12 Online Learning (iNACOL) undertook The Online Learning Definitions Project which is “designed to provide states, districts, online programs, and other organizations with a set of definitions related to online and blended learning in order to develop policy, practice, and an understanding of and within the field.” From that project, iNACOL defined “online learning” as:

Education in which instruction and content are delivered primarily over the Internet. (Watson & Kalmon, 2005) The term does not include printed-based correspondence education, broadcast television or radio, videocassettes, and stand-alone educational software programs that do not have a significant Internet-based instructional component. (U.S. Department of Education Office of Planning, Evaluation, and Policy Development Policy and Program Studies Service, 2010) Used interchangeably with Virtual learning, Cyber learning, e-learning.

Note the use of the word “primarily,” which allows for a definition of “blended learning” as:

...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; often used synonymously with Hybrid Learning. (Horn and Staker, 2011)

So, if a student is enrolled in a course that is conducted at least in part through online delivery it is called blended learning, but when the course is delivered primarily over the internet, it rises to the level of an “online course.” This, of course, begs the question of what the point is where “in part” crosses over into “primarily.” And, on the other end, how much of the course content has to be online for it to even be considered “blended learning?”

In surveys used to estimate enrollment trends, iNACOL states that “blended learning” is where 30 to 79% of the content is delivered online. Anything less than 30% is considered a face-to-face course where, presumably, web-based tools are integrated into the course. If 80% or more of the course is web-mediated, it is considered a fully online course.

There are no reasonable justifications for those particular categorizations; they are essentially arbitrary. Furthermore, those classifications are at the course level. What about programs? According to iNACOL, “[a]n online learning program is an organized offering of courses delivered primarily over the Internet.” How many courses or what percentage of coursework has to be online for the program to be considered an online program? That remains an open question, but, fortunately, we get some guidance from Watson et al. (2010) who, as seen in Figure 1, categorize online programs along with their usual attributes.

Figure 1. Categories of Online Programs

Categories of online programs					
Category	Organization type / governance	Full-time / supplemental	Funding source	Geographic reach	Examples
State virtual school	State education agency	Supplemental	State appropriation, course fees, funding formula	Statewide	Florida Virtual School, Michigan Virtual School, Idaho Digital Learning Academy
Multi-district	Charter or district-run	Full-time	Public education funding formula	Statewide	Oregon Connections Academy, Insight School of Washington, Georgia Virtual Academy, Minnesota Virtual High School
Single-district	District	Either or both	District funds	Single-district	Riverside (CA), Broward (FL), Plano (TX), Los Angeles, JeffCo (CO), WOLF (NV)
Consortium	Variable	Supplemental	Course fees, consortium member fees	Statewide, national, or global	Virtual High School Global Consortium, Wisconsin eSchool Network
Post-secondary	University or college	Either or both	Course fees	National	University of Nebraska Independent Study HS, Brigham Young University-Independent Study

Table 1. Categories of online programs and their usual attributes.
 Note that the descriptors are the most common in each category, and exceptions exist for each.

Beyond distinctions between online and blended learning, there are additional dimensions such as the mode of delivery (e.g. synchronous vs. asynchronous) and the level of teacher involvement that make computer-mediated learning a varied enterprise.

The Train Has Left the Station: The Growth in Online Learning

Even with... rapid growth... online courses accounted for just 1% of all courses in 2007. Not much change is on the horizon if one projects linearly into the future. But, when viewed from the logarithmic perspective, the data suggest that by 2019, about 50 percent of high school courses will be delivered online (Chrisentsen, Horn, & Johnson, 2009, pp. 98-99).

Definitions notwithstanding, the growth in online learning is impossible to ignore. “iNACOL estimates that

over 1.5 million K-12 students were engaged in online and blended learning for the 2009-2010 school year” (Wicks, 2010, p. 6). That’s up from an estimated 700,000 students enrolled in online courses during the 2005-06 school year (Picciano & Seaman, 2007). Watson et al. (2012) estimate that in academic year 2011-12, approximately 275,000 students attended a fully online school. Also, they “...count 619,847 course enrollments (one student taking a one-semester-long online course) in 28 state virtual schools in SY 2011-12, an increase of 16% since last year” (p. 5).

In other words, the number of K-12 students taking an online course has more than doubled over the most recent four year period of documentation, and enrollment in fully online schools is growing as well. Whether or not you accept Christensen et al.’s logarithmic projections, there is no doubt that online learning is a rapidly growing presence in the K-12 educational landscape. As of the 2009-10 school year:

- ◆ *31 states (and Washington, DC) had statewide, full-time, online schools. An estimated 275,000 students attended these schools.*
- ◆ *“Blended schools, and blended programs in districts, are... a fast-growing and high-profile segment” (Watson et al., 2012, p. 5). It is very difficult to know how many students are involved in these types of courses and programs, but Watson et al. (2012) estimate perhaps 2/3 of all school district in the nation are offering some online or blended program.*

◆ “The total number of students taking part in all of these programs is unknown, but is likely several million, or slightly more than 5% of the total K-12 student population across the United

States” (Watson et al., 2012, p. 5).

Figures two and three are maps of states with state virtual schools (or state-led online initiatives) and states with multi-district full time online schools.

Figure 2: States with State Virtual School or State-led Online Initiatives

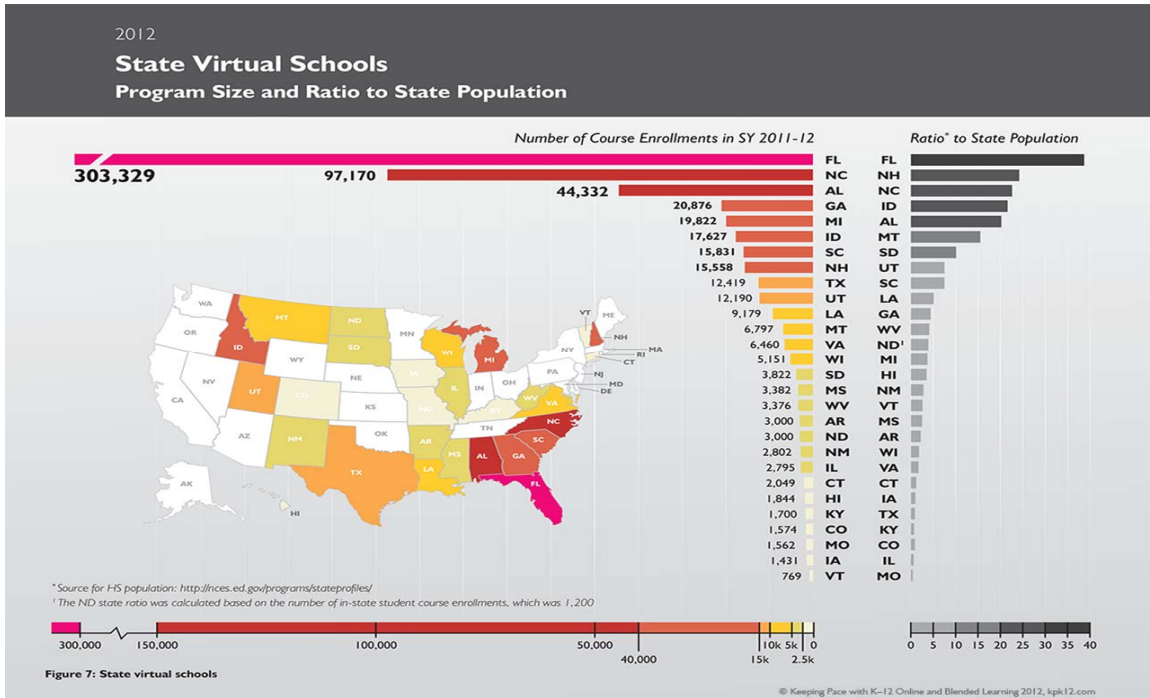
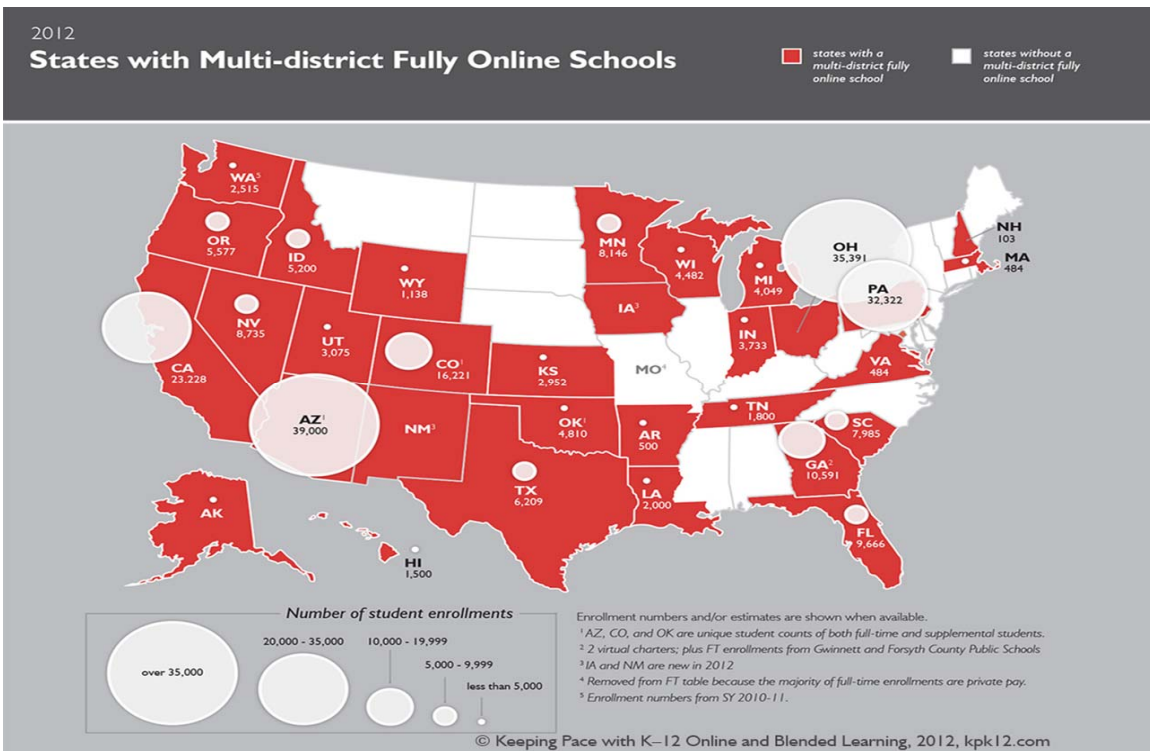


Figure 3: States with Multi-district full time Online Schools



New Opportunities to Learn: The Online Learning Policy Climate in Virginia

“Distance learning” in Virginia dates back to the 1980’s when courses were beamed by satellite across the Commonwealth. Through what was then referred to as the Virginia Satellite Education Network (VSEN), thousands of students had access to Advanced Placement (AP) courses and other courses, especially world language courses, that could not otherwise be offered in their home school or division. When delivery was transitioned from satellite to the Internet, the Virtual Virginia Advanced Placement School (VVAPS) was born. Now, effectively a combination of VSEN and VVAPS, Virtual Virginia (VVa) is a comprehensive program of the Virginia Department of Education.

Relative to other state virtual schools, enrollment in Virtual Virginia courses is about average. According to the 2012 Keeping Pace report, there were 6,460 course enrollments in Virtual Virginia in 2011-12, up over 20% from three years prior (Watson et al., 2012). As evidenced by Figure Four, that number pales in comparison to state virtual schools in Florida and North Carolina, but is considerably higher than some neighboring states including West Virginia and Maryland.

At the same time that enrollments in Virtual Virginia are growing substantially and lots of new courses are offered through Virtual Virginia, Virginia Governor Bob McDonnell made online learning a significant part of his educational policy agenda early in his first term. In March of 2010, the Virginia General Assembly passed a legislative package dubbed “The Opportunity to Learn,” Governor McDonnell’s policy platform for increasing educational opportunities for students in the Commonwealth. The pillars of that reform agenda were: the expansion of charter schooling, the establishment of college laboratory schools, and the expansion and

improvement of virtual education. In April, 2010, Governor McDonnell signed SB738 and HB1388, legislation that established the criteria for virtual school programs in Virginia.

One year later, in June of 2011, Superintendent of Public Instruction Dr. Patricia Wright announced that 13 virtual-school programs were approved to provide instruction to students in multiple school divisions. Then, in April 2012, six additional multi-division providers were approved by the Virginia Department of Education. A complete list of the approved multi-division providers can be found in the Appendix. Most of the approved multi-division online providers are private, for-profit companies. However, two of the approved providers, Chesterfield County Public Schools and York County Public Schools, are Virginia school divisions.

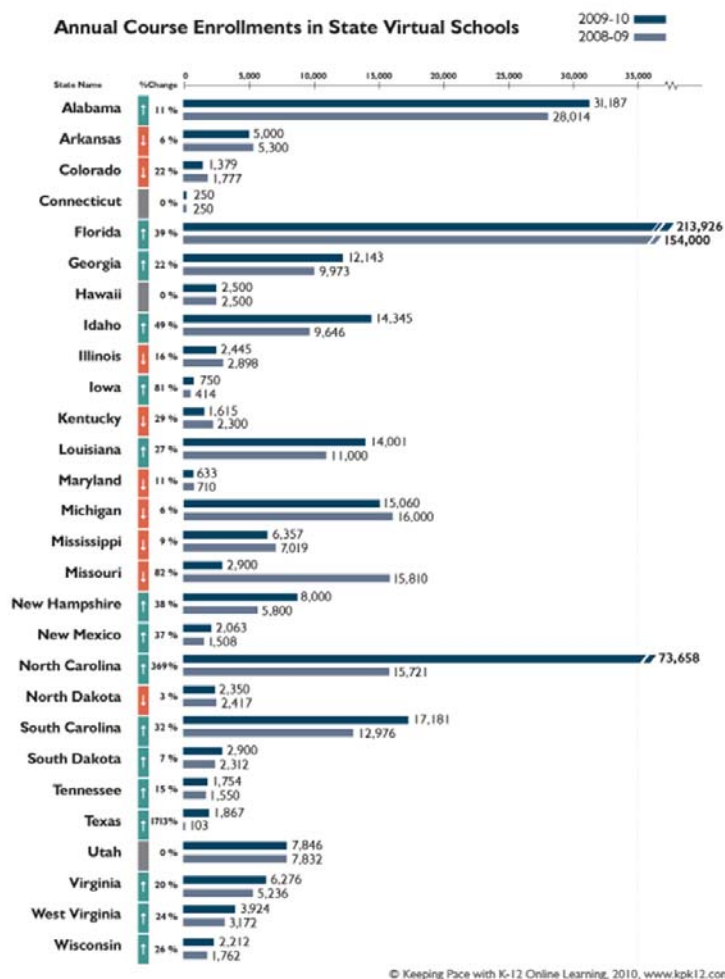
One other school division that has really embraced online learning is Carroll County. There, school officials entered into a contract with K12, Inc. to operate Virginia Virtual Academy. The school now serves around 400 students. Most students are from Carroll, in the southwestern part of the state, but there are also students from Buena Vista and King and Queen County. Carroll County provides online learning with a private organization that has been approved as a multidivision online provider, but the county itself is not considered a multidivision provider. That exempts the county from some of the regulations of such providers and has major funding implications for Carroll County. Some, including Robley Jones, Director of Government Relations for the Virginia Education Association (VEA), have expressed great concerns over the funding implications of this particular model. Jones claims that in combination with the way Virginia’s Standards of Quality funding formula, this exemption has created “a perverse incentive” for multidivision providers, especially the for-profit vendors, to establish a virtual school in poor school divisions. Jones offers the following example: “If a Fairfax County student enrolls in a virtual school in Carroll County, Carroll County receives more (\$5,697) for that student

than Fairfax would (\$2,228) if the student went to a ‘bricks-and-mortar’ school.” In April 2012, the Virginia Board of Education approved a request from Carroll County Public Schools to run Virginia Virtual Academy as a stand-alone entity. This decision allows CCPS to operate the school on its own, and it waives some requirements specific to non-virtual schools, such as the need for an on-site library and the need for students to sit in content-specific classes for specified periods of time. Also, CCPS can report the SOL scores from Virginia Virtual Academy separate from the students' home schools.

Funding concerns notwithstanding, the online learning engine chugs forward in Virginia, and now with explicit support from the superintendents in the Commonwealth. On October 12, 2011, the Virginia Association of School Superintendents (VASS) presented *Educational Reform in Virginia: Blueprint for the Future of Public Education*. This strategic plan is intended to be a pro-active effort at educational reform across the Commonwealth, and contains five key areas of strategic focus. One of those areas is “Instructional Delivery,” where the goal is to “[u]se evidence-based teaching and learning models that meet individual needs of diverse students.” The first key strategy listed under that goal is that the state should “[p]rovide funding to support virtual programs in the form of materials, hardware, software, space, and personnel to school divisions in order that all schools, regardless of size, can offer instructional alternatives to students” (p. 12).

The most recent legislative salvo makes online learning prominent in the educational policy arena in Virginia. According to SB489/HB1061 passed in 2012, beginning with 9th graders in 2013-14, all students must successfully complete one “virtual course” to earn a standard or advanced studies diploma. Relatedly, HB578 (2012) requires the Board of Education to develop licensure requirements for teachers that only teach online courses.

Figure 4: Annual Course Enrollment in State Virtual Schools



Thus, the Governor of Virginia has made online learning a significant part of his educational policy platform and the superintendents of all the school divisions clearly envision online learning as a key strategy for educational reform in the Commonwealth. As much as we know what is occurring vis-à-vis online learning in places like Chesterfield, York and Carroll Counties, the forerunners in online learning in the Commonwealth of Virginia, the current state of affairs for online learning across the Commonwealth remains a little murky. For example, obtaining enrollment data is near impossible. Per the recently revised Virginia Code, specifically § 22.1-212.25.C

Beginning November 1, 2011, and annually thereafter, the Board of Education shall include in its annual report to the Governor and the General Assembly information regarding multidivision online learning during the previous school year. The information shall include but not be limited to student demographics, course enrollment data, parental satisfaction, aggregated student course completion and passing rates, and activities and outcomes of course and provider approval reviews.

Those data and that part of the annual report will be helpful for educational policymakers across the Commonwealth, especially as road markers along the path into the future of online and blended learning. Until the report is released, though, the landscape remains unclear. Furthermore, per the wording of the Code, the report will only contain data and information about multidivision online learning.

The study reported herein was a concerted effort to try to provide a cross-sectional look at the landscape of online learning in Virginia.

RESEARCH METHODS

On June 1, 2011, an email was sent to every school division superintendent introducing the Web-based survey. That email included a brief description of the survey and a notice that an email would be sent in about a week with a link to the actual survey. Asking superintendents to participate in survey research is always a tricky proposition, but since there is not necessarily an individual within school divisions who is clearly responsible for enrollment in online learning, a decision was made to start with the superintendents and ask them to pass along the survey if need be. That is, at the end of that initial email, the superintendents were told:

*Please note that if there are students in your division who took at least one online course for credit, then there are some questions about the number of students who took these sorts of courses. **We recognize that you may not have these data readily available. So, you might choose to ask someone else for the data or you might choose simply to forward this and the next e-mail to the administrator or staff member in your division who is best able to answer questions about participation in online learning.***

On June 14, 2011, an email with a link to the survey was sent to the superintendents. The same note about passing along the survey from above was included in this email. Finally, on June 22, 2011, a follow-up email was sent thanking those who had completed the survey and asking those who had not to please do so.

The survey was a slightly modified version of a survey used by Picciano & Seaman (2009) who conducted a nationwide survey of online and blended learning practices and perceptions under the auspices of the Sloan Consortium. The survey was modified to make the language relevant to the Commonwealth of Virginia and to update some of the language given some changes in the online learning domain even since that survey was administered.

Ultimately, 26 school divisions responded in whole or in part. Given the number of school divisions in the Commonwealth, the response rate for the study reported herein is just shy of 20%. While this is a clear limitation of the study, it should be noted that Picciano & Seaman (2009), with considerably more resources to carry out the study, obtained a 5.4% response rate to their national survey.

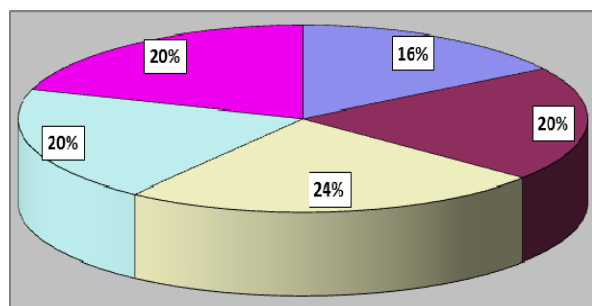
Subsequent to the survey research component of this study, a series of case studies was undertaken to provide context for and to fill in gaps in the findings from the survey. Four school divisions were purposefully chosen to be the subject of case studies that involved in-depth interviews and document review. The school divisions were chosen to represent a range of sizes, urbanicity and a priori commitment to online learning. For each of the divisions, key stakeholders were identified and interviewed. Two of the interviews were conducted face-to-face and two were conducted by videoconference. Key documentation about the school division's engagement with online learning were also identified and reviewed.

FINDINGS FROM THE SURVEY

The findings from the survey are reported in three parts. The first sub-section includes data and information related to **enrollment**. The section sub-section includes data and information about **reasons** why the school divisions do or do not offer online and/or blended learning opportunities. Finally, the third sub-section provides data and information about **perceptions** of online and blended learning.

As a bit of background, it is worth considering who the actual respondents to the survey were. In a few school divisions, it is relatively clear who the go-to person is on matters of online learning. For most school divisions, though, the “best” individual respondent necessarily varies by section of the survey. Nevertheless, the survey was sent to the superintendents and 16% of the respondents were superintendents. The roles of the other respondents were relatively varied, as depicted in Figure Five.

Figure 5: Roles within School Divisions Occupied by Survey Respondents



Legend: Superintendent (light blue), Assistant Superintendent (maroon), Technology Supervisor (yellow), Instructional Specialist (cyan), Other (magenta)

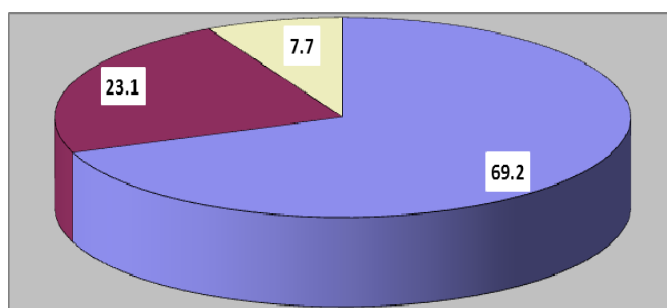
Enrollment

Until the Virginia Department of Education starts reporting enrollments in courses provided by multidivision providers, and even after that, determining the numbers of students enrolled in online and blended courses will be difficult.

Twenty-five out of 26 divisions that responded to the item indicated that at least one student took an online course during the 2009-10 academic year. Sixty-nine percent of responding divisions indicated that at least one student took a blended/hybrid course. Twenty-three percent of the divisions anticipated offering hybrid/blended courses to their students.

Question six of the survey included a table asking the

Figure 6: Percentage of School Divisions with Students Taking Blended/Hybrid Courses



Legend: At least one student took a blended/hybrid course (blue), No students took hybrid/blended courses, but we plan to offer them (maroon), No students took blended/hybrid courses and we have no plans to offer them (yellow)

respondents to enter the number of students enrolled in various forms of online learning courses, and to do so by level (K-5, 6-8 and 9-12). No school divisions reported any K-5 students enrolled in online or blended courses. Table X shows the total number of students the respondents reported as enrolled in various types of online and/or blended courses in the 2009-10 academic year.

There are a few important caveats to consider when examining the information in Table One.

- ◆ The numbers in each row of the Grades 6-8 column are almost always from a single school division. All but two of the 1,202 students in grades 6-8 reported to be in a locally developed, blended/hybrid course are from a single division.

Table 1: Total Enrollments in Online and Blended Learning Courses, by Grade Configuration, 2009-10.

	Grades 6-8	Grades 9-12
Locally developed online	15	1,552
Locally developed blended/hybrid	1,202	891
Contracted online	25	1,793
Contracted blended/hybrid	20	417
Virtual Virginia	45	577
Other	0	95

- ◆ Of the 1,552 high school students in an online course locally developed, 1,012 are from one division.
- ◆ Of the 891 high school students in a blended course developed locally, 721 are from one division.
- ◆ Of the 1,793 high school students in an online course provided by a contractor, 600 are from one division.
- ◆ Of the 417 high school students in a blended/hybrid course provided by a contractor, 200 are from one division.

Question seven of the survey asked respondent to indicate what percentage of online and blended courses taken by their students were of various types. Of the students enrolled in online and blended courses in 2009-10, the highest percentages were in “standard course offerings that allow students to complete the normal course of study in online settings” and “AP and advanced level courses” (See Figure 7). Notably, the fewest students were enrolled in online and blended courses for credit recovery.

Questions nine and ten of the survey asked respondents about their expectations for growth in enrollments in

online and hybrid/blended courses. In each case, over half of the respondents expected enrollments to grow by at least 20%.

Figure 7: Types of Online and Blended Learning Courses Offered By School Divisions, by Percentage of Student Enrolled

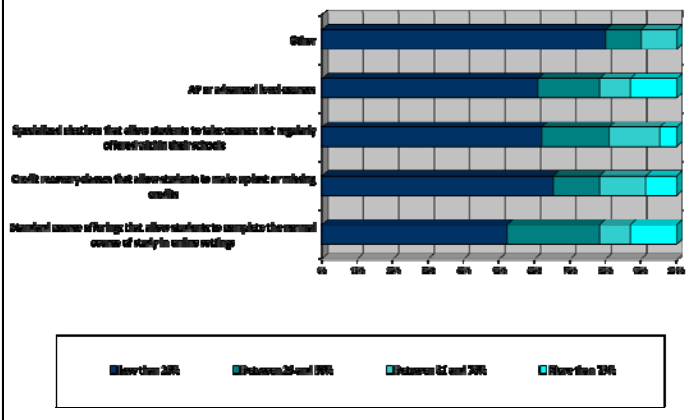


Figure 8: Projections for Growth in Online Learning

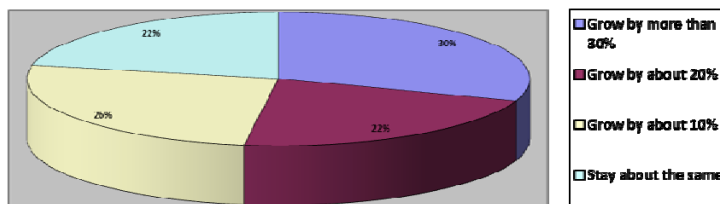
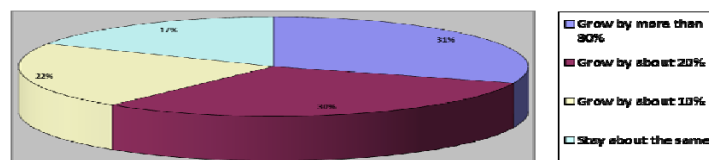


Figure 9: Projections for Growth in Blended/Hybrid Learning



Reasons For and Against Offering Online and Hybrid/Blended Courses

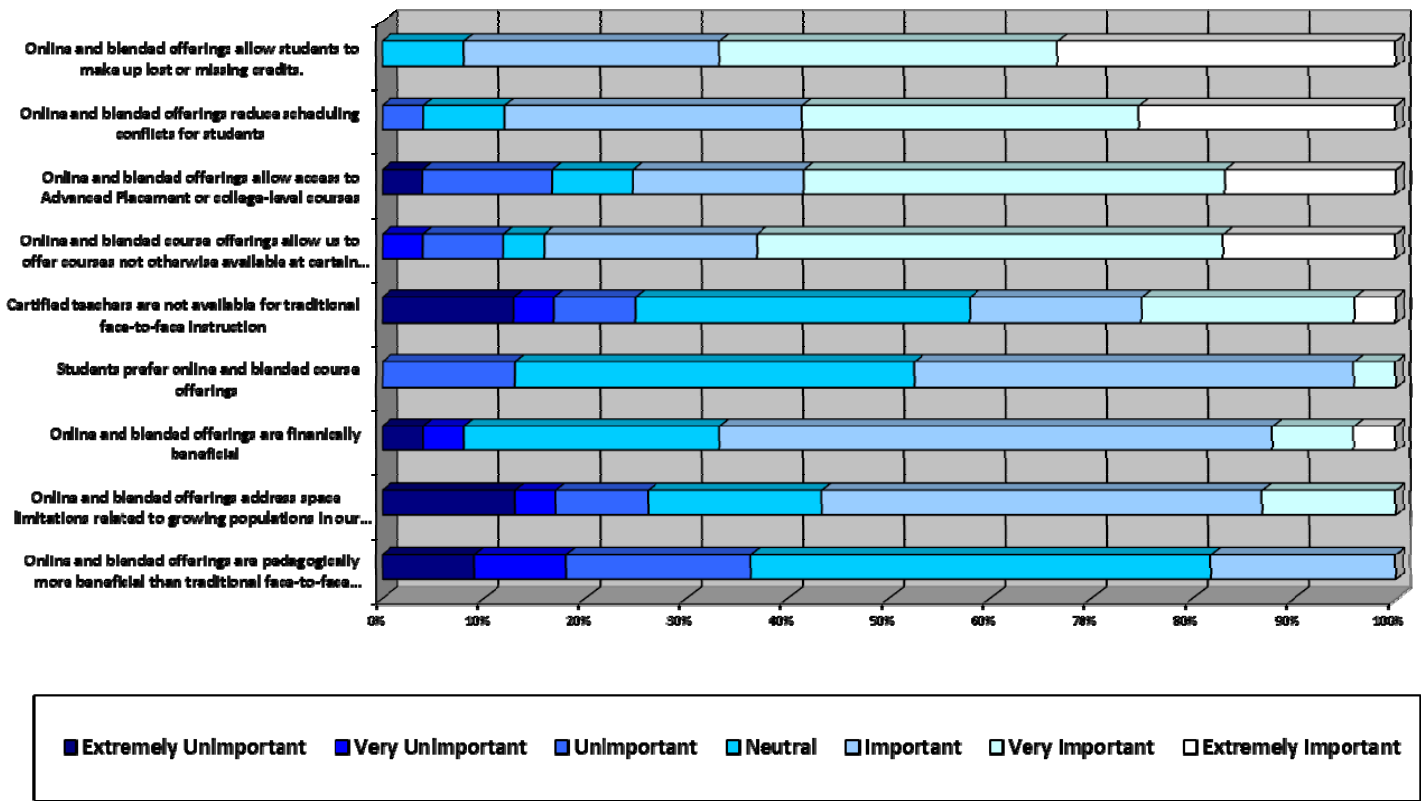
Beyond enrollment counts, respondents were asked to respond to a series of Likert-scale items related to reasons why their school division chose to offer (or not offer) online and hybrid/blended courses.

The 7-point scale ranged from 1 = very unimportant to 7 = very important. Table Two and Figure 10 depict the range of responses across the respondents.

Table 2: Reasons for and Against Offering Online and Blended Learning Courses, In order of Importance

	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>
Online and blended offerings allow students to make up lost or missing credits.	24	5.92	0.97
Online and blended offerings reduce scheduling conflicts for students	24	5.67	1.09
Online and blended course offerings allow us to offer courses not otherwise available at certain schools.	24	5.46	1.32
Online and blended offerings allow access to Advanced Placement or college-level courses	24	5.25	1.54
Online and blended offerings are financially beneficial	24	4.63	1.21
Students prefer online and blended course offerings	23	4.39	.78
Certified teachers are not available for traditional face-to-face instruction	24	4.17	1.69
Online and blended offerings address space limitations related to growing populations in our school division	23	4.13	1.58
Online and blended offerings are pedagogically more beneficial than traditional face-to-face class offerings	22	3.55	1.18

Figure 10: Reasons for and Against Offering Online and Blended Learning Courses



Here we see a slightly different picture relative to credit recovery. The divisions cited making up lost or missing credits and alleviating scheduling conflicts as the most important factors. Furthermore, the top four responses, those with a mean over five, are all about expanding learning opportunities for students.

Perceptions of Online and Blended Learning: Barriers and Attitudes

Question five of the survey included a set of Likert-scale items about potential barriers to the school divisions offering online or hybrid/blended learning course. . The 7-point scale ranged from 1 = Not at all a barrier to 7 = A complete barrier.

The greatest barriers facing school divisions are around costs and personnel (see Table Three and Figure 11 below). Especially in these difficult economic times, it is no surprise that educational decision makers face significant cost constraints. And, whether it involves compensating existing school division personnel to develop the course or paying for students to access courses offered by multidivision providers, cost issues are real. The personnel issues are very real, too. Facilitating learning online requires a different set of competencies and dispositions to teaching face-to-face and there are not yet a multitude of qualified online teachers. Furthermore, educational leaders are still in the learning stages about the potential value-add of online learning for students in the school divisions.

Table 3: Barriers to Offering Online and Blended Learning Courses in Order of Significance

	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>
Costs (for course development and/or purchasing)	25	3.80	1.78
The need for training for teachers to deliver the courses	25	3.72	1.49
The need for administrative staff with knowledge/expertise to develop and/or coordinate online programs	25	3.44	1.61
Concerns about course quality	25	3.12	1.62
Scheduling conflicts	25	2.68	1.22
Restrictive federal, state or local laws or policies	25	2.24	1.33
Limited technological infrastructure to support distance education	25	1.84	1.07

Respondents were also asked to respond to a series of Likert-scale items about experiences with and reflections on online learning in their school divisions. The 7-point scale ranged from 1 = Very strongly disagree to 7 = Very strongly agree. Respondents most strongly

supported the statement that “students appreciate the curricular options that online and blended courses offer.” The two other statements that rated an average response over five relate to online and blended learning

Figure 11: Barriers to Offering Online and Blended Learning Courses

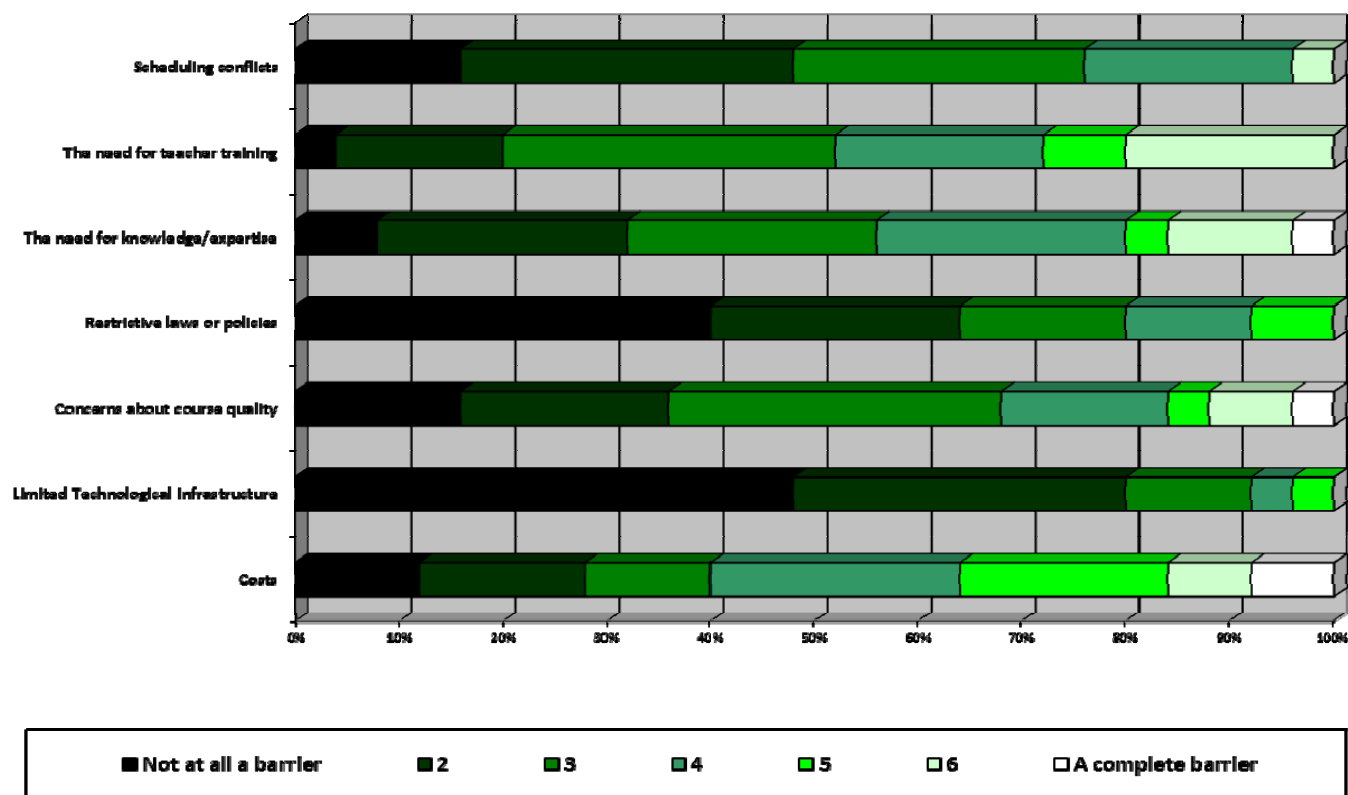
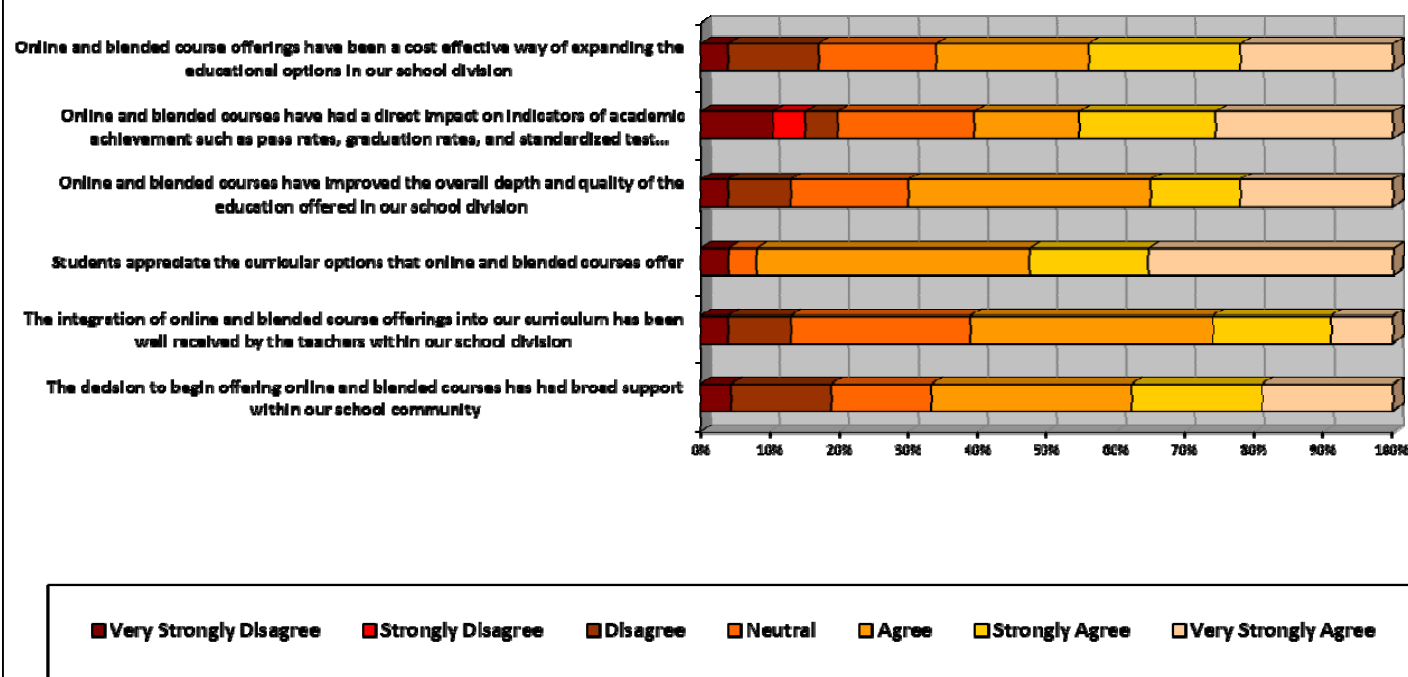


Figure 12: Attitudes Towards Online and Blended Learning



courses expanding curricular options for students. The range of responses can be seen in Figure X and Table X.

Respondents were also presented with a series of Likert-scale items aimed at eliciting data about attitudes towards online and blended learning. Table Four (below) and Figure 12 (above) depict the range of responses to those items.

Respondents generally agree that students appreciate the curricular options that online and blended learning courses offer. Also, one of the items with the second highest overall mean is that “[o]nline and blended courses have improved the overall depth and quality of the education offered in our school division.” Thus, here, again, we see the idea of options and opportunities as prominent.

Table 4: Attitudes Towards Online and Blended Learning in Order of Agreement

	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>
Students appreciate the curricular options that online and blended courses offer	23	5.65	1.40
Online and blended courses have improved the overall depth and quality of the education offered in our school division	23	5.04	1.52
Online and blended course offerings have been a cost effective way of expanding the educational options in our school division	23	5.04	1.61
The decision to begin offering online and blended courses has had broad support within our school community	21	4.95	1.60
Online and blended courses have had a direct impact on indicators of academic achievement such as pass rates, graduation rates, and standardized test achievement	20	4.85	1.95
The integration of online and blended course offerings into our curriculum has been well received by the teachers within our school division	23	4.74	1.36

CASE STUDIES

Four case studies are presented here to provide context for and to fill in gaps in the findings from the survey. Four school divisions were purposefully chosen to be the subject of case studies that involved in-depth interviews and document review. The school divisions were chosen to represent a range of sizes, urbanicity and a priori commitment to online learning. For each of the divisions, key stakeholders were identified and interviewed. Two of the interviews were conducted face-to-face and two were conducted by videoconference. Key documentation about the school division's engagement with online learning were also identified and reviewed. The cases are presented roughly in order of increasing involvement with online learning.

Pulaski County Public Schools

[Interviewee: Dr. Thomas Brewster, Superintendent]

Pulaski County Public Schools (PCPS) is a rural school district in southwest Virginia. The division serves approximately 4,600 students in five elementary schools, two middle schools and one high school. Additionally, though not exclusively serving PCPS students, the Southwest Virginia Governor's School is housed on the campus of Pulaski County High School. Also, Pulaski County Schools operate five preschool programs for four year olds. In 2011-12, 87.95% of the students were classified as White, 5.66% were classified as Black, and 3.97% were classified as of two or more racial categories. Across the school division, just about half of all students (49.6% of students) qualified for free or reduced-price lunch in 2011-12.

In August of 2012, Dr. Thomas Brewster was named the Superintendent of Pulaski County Public Schools. Dr. Brewster has been an educator for over 20 years, at every level ranging from classroom teacher to principal to university faculty member to his current position as superintendent. He has worked as a district administrator in PCPS since 2006. Dr. Brewster is very

involved in local and statewide politics and is very active in the educational policy arena; he served as a member of the Virginia State Board of Education from 2006-2010. He is a tech-savvy school leader who actively uses social media for professional networking and maintains a Superintendent's Blog that is integrated into the division's website.

Dr. Brewster's own technology savvy notwithstanding, he is the first to admit that the school division is not where they want to be with respect to educational technology and, now, online learning. Dr. Brewster reports that the division's three Instructional Technology Resource Teachers (ITRTs) are spread very thin and overworked trying to help teachers integrate technology into the classrooms. One positive interpretation of that is that division-wide, teachers are looking for support as they clearly try to use technology to improve teaching and learning. The clear downside, though, is that it is hard to make significant strides and add anything new to the technology infrastructure with a support staff that is already working so hard. Also, while PCPS does have an active installation of Moodle, which some teachers use and integrate with their classes, the infrastructure is not yet in place for the school division to develop and teach their own online or blended courses.

Within the last couple of years, PCPS entered into an agreement with K12, Inc. whereby PCPS could have a license to the K12, Inc. curriculum materials for any student. PCPS leaders had hoped that this would encourage some of the 100+ homebound or homeschooling students to, effectively, return to the division. The cost of the license is considerably lower than the per-pupil revenue that would come to PCPS by adding the student to their ADM total. Thus, the idea was that the student could remain homebound, have access to what PCPS leaders deemed a high-quality online curriculum, and, at the same time, this would actually be a slight revenue boost for the school division. Unexpectedly, though, this plan did not come to fruition.

Only one or two families bought in. Dr. Brewster speculates that most of the families that homeschool are satisfied with their arrangement and/or choose this route to teach in a less-secular way. So, the K12, Inc. option has no appeal.

A number of students who live within the boundaries of PCPS do actually attend a fully online school, though it is not a PCPS school. The Virginia Virtual Academy (VAVA) is a virtual K-8 school built on a partnership between Carroll County and K12, Inc. The school enrolls over 400 full-time students, most of whom are residents of Carroll County. However, some of the students live in other counties. These students must pay an annual out-of-district registration fee, but that is the only cost to students. Dr. Brewster notes that a few families living within the boundaries of PCPS are enrolled in VAVA, and they remain there even after the division offered them free access to K12, Inc.'s curriculum.

The only other activity within PCPS that could loosely be considered “online learning” is the use of PLATO Learning for students in an alternative school setting. These students are placed in the alternative school for any number of reasons, though largely behavioral challenges. The PLATO Learning system allows these students to learn in a self-paced, individualized system and is especially useful when a teacher with content-area certification is not available.

Despite Dr. Brewster’s honest assessment of PCPS’ lack of advancement in the area of online learning, the school division is actually poised to fairly quickly and easily take the next steps. Dr. Brewster and his administration have already looked into arrangements with Virtual Virginia and believe it is only a matter of time before PCPS students begin taking courses through VV. Also, New River Community College (NRCC) is located in Pulaski County. NRCC has an active distance learning agenda and is also available as a partner for dual enrollment which allows qualified high school

students to enroll in college coursework while still in high school. While NRCC is located in Pulaski County, it would still be easier for students to take an online course through NRCC during a regular class period than it would be to drive to the NRCC campus. Finally, PCPS is exploring options with Radford University, which is adjacent to Pulaski County, as an online learning partner as well.

Dr. Brewster and his colleagues are well aware of the new requirement that, beginning with 9th graders in 2013-14, all students must take at least one online course before graduating. And, while he notes that they would be hard-pressed to guarantee that for current high school students, he does paint a portrait of a district poised to take the next steps in online learning.

Albemarle County Public Schools

[Interviewee(s): Becky Fisher, Chad Ratliff]

Albemarle County Public Schools (ACPS) is a suburban-rural school district in west-central Virginia. The division served 13,129 students in the 2011-12 school year. Those students were educated in a wide array of schools. The division includes 16 elementary schools (PK-5), 5 middle schools (grades 6-8), one charter middle school, 3 comprehensive high schools, 1 charter high school, one STEM magnet program (grades 9-12), one Alternative Learning Center, and one Vocational Technical Center. In 2011-12, 69.64% of the students were classified as White, 11.4% were classified as Black, 9.04% were classified as Hispanic, 4.99% were classified as of two or more racial categories, and 4.5% were classified as Asian. Across the school division, 26.5% of students qualified for free or reduced-price lunch in 2011-12. In other words, Albemarle County Public Schools serves a reasonably diverse student body across a diverse set of schools.

The word that best categorizes Albemarle County Public Schools is opportunity. It is notable that the school

division is home to two of only a handful of charter schools across the entire Commonwealth of Virginia. There is also a real emphasis on choice for the students, from school choice to choices in how individual students learn. This philosophy permeates the school division and is embodied by Dr. Pam Moran, the division's Superintendent. Dr. Moran is a tireless advocate for students and for learner-centered schooling. In 2010, she was named one of 10 "Tech-Savvy Superintendents" by eSchool Magazine, and she has been leading the division's transformation into a modern, technology-rich learning organization. Several of the district administrators and teachers are active, prominent members of statewide and national technology organizations.

It is these very dynamics, though, that may have stunted growth in involvement in online learning for ACPS students. During one interview with district personnel, one administrator mentioned that there is no real demand for online learning from parents or students. There is so much satisfaction with the quality and quantity of face-to-face choices that there is no need to reach beyond the division. At the secondary level, where guidance counselors assist students and parents in making academic choices, there has not been any compelling reason to seek out alternatives beyond the offerings at the division's schools.

This is not to say that ACPS has been uninvolved with online learning. For a number of "at-risk" students and students in need of credit recovery, the division does offer courseware through Apex Learning. This program is offered at the division's Enterprise Center and each high school gets a certain number of seats as part of the license to offer students in need of credit recovery. There is also a good number of students who use Apex Learning for credit recovery and/or acceleration during the summer.

Additionally, the school division does have clear

guidelines and protocols for students wishing to pursue coursework online. The division has approved nine providers of online courses, including Virtual Virginia and nine university-based providers across the country. Gifted students have three additional approved providers available to them for online courses. According to division personnel, approximately 70 students took advantage of these opportunities during academic year 2011-12.

Currently, ACPS personnel are developing some of their own online courses. The goal is to offer an online Economics and Personal Finance course online beginning in Spring 2013. This would be part of a pilot effort at meeting two new state mandates: the online learning requirement and the addition of a personal finance course to the state Standards of Learning. Also, the division will be developing additional online courses in partnership with institutions of higher education to meet the requirements of HB1184 which is about dual enrollment.

Beyond these endeavors, ACPS administrators expressed an interest in eventually developing an ACPS online learning academy. That is, like they have done with charter schools, they would like to offer a virtual equivalent. If not a full-blown charter school, this academy would be another "homegrown" option for ACPS students. There are some governance and technical hurdles to overcome, but it sounds as if this is a viable goal given ACPS track record of choice and technological progressivism.

Goochland County Public Schools

[Interviewee: John G. Hendron, Supervisor of Instructional Technology]

Goochland County Public Schools has been in continuous operation since 1870. Today, the school division reflects the reasonably socioeconomically diverse rural community it serves and is growing. The division serves

approximately 2,400 students in three elementary schools, one middle school and one high school. Additionally, there are two centers in GCPS, one serving pre-school children and another serving students who require an alternative setting. Overall, enrollment is up over 8% in the last 10 years and the demographics of the student population are changing. In 2011-12, 71.4% of the students were classified as White, 19.9% were classified as Black, and 4.5% were classified as Hispanic. Across the school division, 25.4% of students qualified for free or reduced-price lunch in 2011-12. In other words, in this somewhat rural county, there are a number of students from very wealthy homes and also an increasing number of low-income students and students of color.

The school division currently has an Acting Superintendent (Dr. Peter Gretz) who is the third superintendent in the division since 2002. Yet, despite somewhat transience in division-level leadership, Goochland County Public Schools has been a lighthouse division in the Commonwealth of Virginia for technology integration for a number of years. There are probably a number of reasons for that, starting with the vision of Dr. Harold Cothorn, who was Goochland's first director of technology, and eventually the superintendent. Surely, though, much of Goochland's status as a high-tech school system is attributable to the work of John Hendron, currently the Supervisor of Instructional Technology. Hendron is a nationally-known and active advocate and practitioner of technology in education and an author of a well-received book published by the International Society for Technology in Education (ISTE). He is also a member of the board of the Virginia Society for Technology in Education (VSTE). His consistent technology leadership, and the support of his team, in Goochland has clearly put the county on the map as a leader in the use of technology to support teaching and learning.

That leadership shows in the various ways technology

has been integrated throughout the school division. That variety is particularly evident when examining the state of affairs with respect to online learning in Goochland. The school division hosts and maintains their own installation of Moodle as a content management system, has been fully integrated with the powerful suite of tools available through Google Apps for Education (GAPE), and is now integrating Edmodo throughout the division. Edmodo is a "secure social learning network for teachers and students" that is widely-touted for its Facebook-like approach to social learning in a safe "walled garden" environment. Students in grades seven and eight at Goochland Middle School focus on writing skills using the web-based tool called MyAccess. This tool uses artificial intelligence to assess student writing progress throughout the development of essays. Middle school students in science classes have also been engaged with online demonstrations with Goochland's membership with the Math Science Innovation Center in Richmond. This program brings live, inquiry-based instruction to member schools through Elluminate. Between Moodle, GAPE and now Edmodo, GCPS is stretching definitions of online- and especially blended learning. These powerful Web-based tools afford a range of possibilities, including extending the learning beyond the limits of classroom walls and dedicated class time.

GCPS students have taken advantage of more "traditional" forms of online learning. That is, many teachers in GCPS use Moodle, GAPE and/or Edmodo to extend the school walls and days, but GCPS students are also taking fully online courses outside the confines of GCPS. GCPS is one of the partner school divisions for the Blue Ridge Virtual Governors School. As part of that arrangement, students living in GCPS who are enrolled in the Virtual Governors School participate in a fully online course during their sophomore year. In addition, this year, there are seven students taking an engineering course developed by the University of Virginia and offered through the Virtual Governors School. These students do go to a dedicated classroom during a regular

class period and there is a GCPS instructor assigned to the class, but the course content is fully online.

Also, a number of GCPS students have taken advantage of the offerings from Virtual Virginia. This has been beneficial to GCPS students who want to take an elective that would not otherwise be available to students in a small, rural school district. For example, a number of students have taken foreign language courses through Virtual Virginia, including Japanese, German and Italian. This has proven to be a cost-effective solution for a small school division that cannot possibly hire teachers to teach those languages.

Finally, GCPS does manage an online learning program for credit recovery. Currently the school division has a contract with education2020 (e2020) to provide an integrated, online curriculum for students in the division's alternative school. The number of students actively using e2020 for credit recovery varies, and has ranged from 6-19 students.

The commitment to learning technologies in GCPS has created a system whereby teachers and students have lots of options. The flexibility for teaching and learning this affords is notable. For example, John Hendron mentions that the array of tools and platforms allows teachers to teach remotely when they cannot physically be in a classroom. This commitment to technology-mediated teaching and learning means that Goochland is well positioned to meet the new mandate of all students taking an online course before they graduate. The infrastructure is in place and the technology leadership in GCPS serves the community well moving forward.

Chesterfield County Public Schools

[Interviewee: David Rankin, Manager of Online Learning]

Chesterfield County Public Schools (CCPS) is a very large

suburban school district in Central Virginia. In 2011-12, the division served 58,674 students in 62 schools (38 elementary schools (K-5), 12 middle schools (grades 6-8) and 11 high schools that include 11 specialty centers, and one technical center). In 2011-12, 55% of the students were classified as White, 27% were classified as Black, 10% were classified as Hispanic, and 4% were classified as Asian/Hawaiian/Pacific Islander. Across the school division, approximately 30% of students qualified for free or reduced-price lunch in 2011-12.

Among school divisions across the Commonwealth of Virginia, the clear leader in online learning is the Chesterfield County Public Schools. *CCPSOnline* is "an online program offering high quality secondary school credited courses which meet the educational needs of today's students." Through *CCPSOnline*, the school division currently offers all of the courses needed to graduate with a standard diploma in Virginia. That is, courses are offered in the core areas of mathematics, science, English, and social studies as online courses. Additionally, two credits of Health and Physical Education and the required number of elective credits are also offered as online courses. All of the core courses and Health and Physical Education are offered as full year courses. The electives are semester courses equivalent to a half credit. Thus, it is entirely possible for a student to obtain a standard diploma in CCPS by taking only online courses.

The offerings of *CCPSOnline* are so comprehensive that the Virginia Department of Education recognizes CCPS as one of only 19 approved multi-district providers of online learning. Any school division in Virginia that wants to offer online courses to students living in the boundaries of another school division must do so through one of the state-approved multi-district providers. CCPS and York County are the only school divisions that are approved multi-district providers; the other 17 approved providers are private, for-profit entities. During the academic year, any student outside of CCPS who wants to take a course

through *CCPSOnline* can do so by paying an \$875 fee (\$500 if it is a summer course).

Enrollment in online courses in CCPS, across all courses, has averaged about 850 each school year for each of the last four years, with another 750 enrollments during the summer sessions. Those numbers represent total enrollments and not unique students enrolled in online courses. Nevertheless, these figures have been consistent for the first four years in which CCPS offered fully online courses. In the most recent school year, however, enrollments went over 1,000 students for the first time.

The curriculum for *CCPSOnline* is a combination of courses developed by CCPS teachers and content purchased from third-party vendors. All of the courses are delivered through Blackboard as a course management system. CCPS is managed by Mr. David Rankin, Manager of Online Learning for CCPS, and the courses are taught by ____ teachers who exclusively teach through *CCPSOnline* and a handful of other fully-certified teachers. There is also a school counselor fully assigned to *CCPSOnline*, as well as an eLearning Developer and three eLearning integrators.

One noteworthy and innovative aspect of *CCPSOnline* is the offering of Health and Physical Education course credit for 9th and 10th grade students.

The Health courses are accomplished by completing coursework in an online class, which is located in Blackboard...The Physical Education courses are accomplished by completing 70 physical activity hours in a variety of approved activities at approved fitness centers or as a part of approved team participation. Students assess their fitness level at the beginning and end of the course.

Students must complete activity logs and have them signed by a trainer, coach or other professional. They

must complete 70 hours across at least three designated areas, one of which could be team sports. In other words, a student-athlete taking P.E. through *CCPSOnline* could count participation on a team as 1/3 of the required hours of physical activity. According to David Rankin, Manager of Online Learning for CCPS, enrollments in Health and P.E. regularly account for about 1/3 of all enrollments in *CCPSOnline*. When asked to explain the popularity of online Health and P.E., Rankin said the reasons are varied. However, there are two main reasons students take this route. First, some students are uncomfortable with the public nature of the P.E. experiences. That is, they dislike the locker room culture and/or they prefer to engage in physical activity on their own. Second, for a number of students, taking Health and P.E. online frees up a class period to take an extra elective or an extra advanced placement course that would bolster their transcript as part of a college application.

CCPS is not satisfied with the status quo. *CCPSOnline* will continue to grow with new course offerings and may attract more out-of-division enrollments given their status as a multi-district provider. Also, Dr. Adam Seldow is now entering his 2nd year as the Director of Technology for the school division. Dr. Seldow is spearheading an aggressive educational technology agenda and one of the major initiatives is a move towards more blended learning. The district is rolling out Edmodo division-wide. Edmodo is a “secure social learning network for teachers and students” that is widely-touted for its Facebook-like approach to social learning in a safe “walled garden” environment. CCPS leaders are leaning on Edmodo as a platform for freeing up face-to-face time in the move to a more blended approach.

Chesterfield County Public Schools is leading the way in online learning across the Commonwealth of Virginia and all signs point to them continuing to be a beacon for educational leaders in Virginia and the nation.

CONCLUSIONS: SUMMARY AND RECOMMENDATIONS

Summary of Findings

While the results of the survey are not generalizable to the population of school divisions across the Commonwealth of Virginia, there is good reason to believe that they are reasonably representative and informative of the landscape of online and blended learning in Virginia. In fact, the process of carrying out the case studies, as well as the data yielded through that second phase of this study, confirm the key findings of the survey portion. Finally, the results are consistent with national trends and sensible given the current educational and economic policy climate. There are some major themes that emerge from both the survey and the case studies.

Enrollments are growing – while documenting actual enrollment numbers is nearly impossible, there are clear indicators that the number of students in Virginia taking online and/or blended learning courses is rising and will continue to rise. Enrollments just in Virtual Virginia (VVA) were up 20% between 2008-09 and 2009-10. Combine that with the results of the survey where over half of the respondents reported that they expected enrollments in online and/or blended learning courses to increase by at least 20% in the near term, and the upward enrollment trend is quite evident.

More “opportunities to learn” – Governor McDonnell’s educational policy platform and its associated legislative package were aptly named. Across much of the data from the survey, a major theme that emerged was the perception that online and blended learning courses expand learning opportunities for students. This is particularly evident for two distinct groups of students, likely at opposite ends of the academic spectrum. At one end, students who have failed courses or failed to obtain credit for a course for any reason at all are increasingly being afforded opportunities to “recover” lost credits via online learning. On the other end, online

learning affords high-achieving students opportunities to take Advanced Placement (AP) courses that would not otherwise be available to them. Also, for those same students, there are new opportunities to free up time to take more advanced courses during the day by taking other less-demanding courses, including physical education, in an online format.

Cost and personnel concerns – upward enrollment trends notwithstanding, there are still clear barriers to additional growth in online learning. Survey respondents cited cost concerns as well as personnel issues that need to be overcome before moving more fully down the online learning path. Cost issues are complicated by the Standards of Quality funding formula and how funding for online courses works within that formula, and until the Virginia Department of Education addresses those complications, cost will necessarily be cited as a barrier to offering more online learning opportunities. The personnel issues are essentially about preparedness; there are simply not enough educators, from classroom teachers to building- and division-level administrators who possess the necessary skills and dispositions to implement online and/or blended learning courses or programs.

Policy Implications

The findings raise a number of policy implications including, but not limited to:

Funding equity – in order to make online learning a key part of educational reform in Virginia, VASS offers as a strategy that the Virginia Board of Education should “Provide funding to support virtual programs in the form of materials, hardware, software, space, and personnel to school divisions in order that all schools, regardless of size, can offer instructional alternatives to students.” The funding implications of online learning are entirely unclear. For now, school division representatives report that costs are a barrier to offering more online learning

opportunities for students. At the same time, for enterprising school divisions like Carroll County, though, online learning in partnership with a for-profit, multidivision provider, is proving to be a source of increased revenue. Policymakers need to seriously consider all of the economic ramifications of online learning, both as implemented through the current framework of multidivision online providers and through alternate frameworks that may be more equitable.

Professional development – good teaching is good teaching, and there is considerable overlap between what we know constitutes good face-to-face teaching and what we are coming to know constitutes good online teaching. However, unquestionably, there are skills and dispositions that are unique to effective teaching in each setting. Some educators working in face-to-face settings may already have the ability to transition seamlessly to teaching online. However, as online learning expands, the demand for qualified online instructors will grow. It is incumbent on university-based schools of education to recognize this need and to figure out ways to properly prepare aspiring online teachers. The market for such preparedness consists of both those educators already licensed to teach and the next generation of educators coming through pre-service programs. Additionally, educational policymakers in Virginia (and in all states) will need to consider regulations around certifying online teachers as qualified to successfully teach in online environments.

Privatization – the National Educational Policy Center’s recent policy brief on virtual schooling was targeted specifically at concerns over the role of private, for-profit entities in the domain of online learning. Currently, other than state virtual schools, there are only a few providers that dominate the virtual learning market, and most of them are private, for-profit entities. The concern, then, of the NEPC and other is that, “[t]he privatization of K-12 public education is a new field on which the machinations of crony capitalism can be

played out, and the prize is a portion of the half-trillion dollars spent annually on public K-12 education. “ Crony capitalism has no place in the public education system upon which our democracy is founded and relies. It behooves policymakers and the public to ensure that students and learning are at the core of all policies related to online learning.

Recommendations for Future Research

There is no shortage of research questions that need to be addressed within the domain of online learning in the K-12 environment. Consider at least the following:

Cost-effectiveness – the most significant areas in need of continuous and comprehensive analysis are around finance and student learning. The meta-analysis conducted by Means et al. (2010) was a significant undertaking, but the evidence-base on the impact of online learning on student achievement is surprisingly thin. Also, the many bright minds in the field of school finance need to collectively find appropriate ways of determining true costs of providing instruction online. The more those bodies of research and analysis can be combined, the closer we come to generating the evidence we need about the cost-effectiveness of various models of online and blended learning courses and programs.

Student outcomes – Beyond just student achievement as defined by test scores, there are important student outcomes to consider in relationship to online learning. For example, online learning in the service of credit recovery is a large and growing market for online learning providers. However, there is still an open empirical question about whether this ultimately has an impact on graduation rates and other indicators of educational attainment. Additionally, attention needs to be paid to social and emotional considerations. There are legitimate questions being raised by caring educators

about the socialization of young people who, as a result of online learning, have fewer opportunities for face-to-face socialization with other young people.

Equity of opportunity – Equity is another major concern voiced by educators, policymakers and researchers around online learning. If in the current landscape there are additional costs associated with providing online learning opportunities, then we need to be concerned about the divide between the students served by local

education agencies that can afford those costs and those students served by more financially strapped schools and districts. The research community would also do well to examine differences in how students learn and how that relates to student learning. There is some evidence and lots of good reason to believe that online learning generally favors students who are more self-regulated learners. If that bears out empirically, it raises serious equity concerns as well.

APPENDIX: APPROVED MULTI-DISTRICT PROVIDERS

Apex Learning – full-time, supplemental and blended instruction for students in grades 9-12 including Advanced Placement (AP) courses; accredited by Northwest Accreditation Commission

Brigham Young University Independent Study – full-time, supplemental and blended instruction for students in grades 7-12 including AP courses; accredited by Northwest Accreditation Commission

Chesterfield County Public Schools – supplemental instruction for students in grades 9-12; accredited by Virginia Board of Education

CompuHigh – full-time and supplemental instruction for students in grades 8-12; accredited by AdvanceEd

Connections Academy – full-time, supplemental and blended instruction for students in grades K-12 including AP courses; accredited by AdvanceEd

Edison Learning – full-time, supplemental and blended instruction for students in grades 9-12; accredited by Northwest Accreditation Commission and Middle States Association of Colleges and Schools

EdOptions Online Academy – full-time, supplemental and blended instruction for students in grades 6-12; accredited by AdvanceEd

Education2020 – full-time, supplemental and blended instruction for students in grades 6-12 including AP courses; accredited by Northwest Accreditation Commission

Florida Virtual School – full-time and supplemental instruction for students in grades 6-12 including AP courses; accredited by AdvanceEd

Giant Campus of Virginia – supplemental instruction for students in grades 9-12; accredited by Northwest Accreditation Commission

K-12 Virtual Schools – full-time, supplemental and blended instruction for students in grades K-12 including AP courses; accredited by AdvanceEd

Virtual High School Global Consortium – supplemental instruction for students in grades 9-12, including AP courses; accredited by Northwest Accreditation Commission and Middle States Association of Colleges and Schools

York County Public Schools – full-time and supplemental instruction for students in grades 7-12

Providers approved in 2012:

- ◆ Accelerate Education
- ◆ American Virtual Academy
- ◆ Cambium Education, Inc.
- ◆ Glynlyon-Odysseyware
- ◆ Proximity Learning, Inc.
- ◆ PLATO Learning, Inc.

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