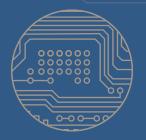
K-12 Digital Learning in Missouri: Creating Virtual Pathways to Success

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Missouri Chamber of Commerce and Industry Education Foundation John Watson and Amy Murin, Evergreen Education Group



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Economic development, more than anything, depends on a talented workforce. Developing that workforce begins with our education system. The Missouri Chamber Education Foundation serves Missouri's business and education communities by being a conduit and accelerator for innovative and entrepreneurial ideas to develop and be implemented across Missouri's workforce talent development pipeline. Since the inception of the Missouri Chamber Education Foundation, more than 10,000 students, business leaders, and teachers have participated in education and leadership programs delivered by the Education Foundation. These programs encourage students to be bold, become leaders and challenge themselves with rigorous coursework that allows for relevant career pathway development. In addition to providing education and workforce development programming, the Education Foundation also provides information and research to help education and business communities on a variety of issues central to improving Missouri's education and talent development pipelines.

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Section

Executive Summary

Missouri's Top 10 by 20 initiative, which aims to see Missouri schools rank in the top 10 states nationwide by 2020, is bold and inspiring. However, with 2020 just over six years away, Missouri has significant ground to cover. Online and blended learning support Missouri's goals, particularly the goal to see students graduate from high school ready for both college and career. Currently Missouri students have access to some digital learning options, but for the most part students across the state do not yet have access to a full range of K-12 online and blended learning opportunities. Providing these opportunities, which should range from onsite, technology-rich schools, to full-time online schools, to individual online courses, will benefit Missouri's students and help Missouri reach its educational goals. Some Missouri students have online and blended learning options— but only if they are able to pay, or are fortunate to live in a district offering such programs. The Missouri Virtual Instruction Program (MoVIP), Mizzou K-12 Online, and District's-Choice Online Learning (also known as EducationPlus), among others, all provide supplemental online courses to students. While these programs are valuable to families, they are geographically restricted (with some exceptions for students with medical challenges), and families must pay tuition.

Online and blended schools and courses represent an opportunity to provide options to Missouri's students, whether they are trapped in failing districts, or attending a district with limited course options. While virtual learning solutions are no panacea, they do offer significant immediate benefits to all students, including individualized instruction, flexible pacing, the opportunity to fill educational gaps or accelerate, expanded curriculum choices, including Advanced Placement[®] courses, access to highly qualified instructors, and equal access to high quality educational opportunities, whether the student lives in an urban, rural, accredited, or unaccredited district.

Online learning in Missouri is dictated by a variety of policies, or the lack thereof. Interviews with program administrators suggest that significant confusion about policies related to online and blended learning exist across Missouri. As of January 2014, all virtual schools / courses in Missouri must meet state curriculum standards, and abide by state and federal school requirements. They are not required to abide by seat-time requirements, and are reimbursed at 94% of the prorated average daily attendance (ADA). The state will pay for no more than six virtual credits per year (one full-time equivalent).

Polices specific to full-time online learning allow district virtual schools to serve in-district students with a fully online education. However, Missouri does not allow for open enrollment, so in general students may not enroll across district lines, except for students in unaccredited districts. No virtual charter schools are authorized; while they are allowed by law, they would not be allowed to enroll students from across district lines. Regarding supplemental online learning, it is allowed by law; districts must accept credits offered via MoVIP providers, but very little funding is available for MoVIP courses.

The bottom line is that Missouri students have fewer digital learning opportunities than students in many other states. In addition, the opportunities that do exist are not equal for all K-12 students throughout the state, both in terms of whether or not students have access to online or blended classes, and to what extent those options can be funded. Specific challenges include:

- 1. Students do not have a publicly funded full-time online school option.
- 2. Missouri does not allow open enrollment.
- 3. Rural students do not have the same access to courses as students in larger towns, suburbs, and cities.
- 4. Students identified as "recoverable youths"—young adults between the ages of 16 and 21 who are not in school and who have not completed a high school education—need an alternative path to high school graduation.
- 5. Students in many districts are restricted to taking online classes during scheduled time periods, from their school building.
- 6. Few students are allowed or able to take online classes from out-of-district providers.

Missouri has a foundation in place for digital learning in the state. The recommendations in this report would help the state to transition to eventually allowing all students in grades K-12 the option of taking single online classes or a fully online program, instead of only certain students in certain districts. The recommendations include:

- 1. Allow statewide, fully online public schools.
- 2. Allow schools to receive 100% funding for students taking online courses without requiring seat time.
- 3. Allow schools to receive funding beyond one FTE for students seeking to take online courses beyond the school day/school year.
- 4. Increase opportunities for rural students by offering fully funded courses through MoVIP and developing a best practices guide for rural consortia.
- 5. Support unaccredited and provisionally accredited districts that want to make online options available to their students.
- 6. Continue to pursue broadband access not just to schools and community centers, but in "the last mile" to homes statewide.
- 7. Consider developing policy that all students statewide should take one online course in order to graduate from high school.
- 8. Require all districts in the state not just those that are unaccredited or provisionally accredited to pay for students to take MoVIP classes.
- 9. Identify state resources for schools and districts that wish to expand online and blended learning opportunities for students.

The above policy changes will allow existing programs to grow and some new programs to open. When they are implemented, all students in the state will be able to choose from a wide array of digital learning options, including online courses and schools.

DEFINITIONS

The following terms and abbreviations will be used throughout this report:

BLENDED LEARNING:	The Christensen Institute defines blended learning as a formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace; at least in part in a supervised	ADA AP®	Average daily attendance Advanced Placement® courses
	brick-and mortar location away from home; and the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.	BOCES	Board of Cooperative Educational Services Department
	These modalities could include small group instruction, online learning, individual	FTE	of Education Full-time equivalent
	instruction, group projects, and pencil and paper assignments.	FY	Fiscal year
ONLINE LEARNING:	Education in which instruction and content		Local education agency
	are delivered primarily over the Internet. Used interchangeably with Virtual learning, Cyber learning, e-learning.	LMS	Learning management system
	Students can participate in online learning through one course (supplemental), or a fully	MOU	Memo of understanding
	online school or program.	PPR	Per-pupil revenue
DIGITAL LEARNING:	Digital Learning is an umbrella term that may	RFP	Request for proposals
	include any or all of these options.	SEA	State education agency
DIGITAL NATIVE:	Digital Native is a term coined by Marc Prensky in a 2001 article, "Digital Natives, Digital Immigrants" (available at http://www.	SY	School year
	marcprensky.com/writing/Prensky%20 -%20Digital%20Natives,%20Digital%20 Immigrants%20-%20Part1.pdf); it indicates a person who was born during or after the general introduction of digital technologies (including most of today's K-12 students), and is inherently much more comfortable with them than are digital immigrants, which most teachers are today.		

Unless otherwise noted, all definitions come from the Online Learning Definitions Project, published by the International Association for K-12 Online Learning, October 2011. http://www.inacol.org/research/bookstore/detail.php?id=27.

Section



Introduction

Missouri's Top 10 by 20 initiative, which aims to see Missouri schools rank in the top 10 states nationwide by 2020, is bold and inspiring.¹ However, with 2020 just over six years away, Missouri has significant ground to cover. Online and blended learning supports Missouri's goals, particularly the goal to see all students statewide graduate from high school ready for both college and career. Currently Missouri students have access to some digital learning options, but this is limited and for the most part students across the state do not yet have access to a full range of K-12 online and blended learning opportunities. Providing these opportunities, which should range from onsite, technology-rich schools, to fully-time online schools, to individual online courses, will benefit Missouri's students and help Missouri reach its educational goals.

Current education status

Missouri student academic success is not where state leaders — or students and parents — would like for it to be. Nationwide, Missouri ranks almost exactly in the center on ACT scores. On the number of students taking Advanced Placement[®] tests to obtain college credit in high school — a key indicator of college readiness — the state is 48th. Within Missouri, 11 districts are provisionally accredited and three are unaccredited.² Together, these 14 districts represent more than 65,000 students, leaving families with limited choices: continue to attend schools in districts that are struggling, or bus students miles away to a neighboring district. Although students in the unaccredited districts may also attend private and charter schools, these options are sometimes limited. In addition, the MSIP 5 standards, which went into effect in 2013, raise the bar even further in Missouri districts, putting more districts at risk of losing accreditation based on current numbers reported to the Department of Elementary and Secondary Education (DESE).

GOAL: Achieve 10 by 20 with expanded options and improved outcomes for Missouri's students.

ONE STRATEGY: A full range of K-12 online and blended learning alternatives available to students statewide will provide new opportunities for all Missouri families.

The law allowing students in unaccredited districts to switch to a neighboring district at the home district's expense is fraught with difficulties. For example, at the start of the 2013-14 school year, 2,640 students opted to be bussed from unaccredited districts in St. Louis County to neighboring districts.³ The policy compels receiving districts to accommodate new students with minimal lead time.

This can be stressful and unnerving to students, families, educators, and administrators. Online learning options can reach all corners of the state and can help address these issues.

Online and blended learning options for students

Some Missouri students have online and blended learning options — but only if they are able to pay, or are fortunate to live in a district offering such programs. The Missouri Virtual Instruction Program (MoVIP), Mizzou K-12 Online and, District's-Choice Online Learning (also known as EducationPlus) all provide supplemental online courses to students. While these programs are valuable to families, they are geographically restricted (with some exceptions for students with medical challenges), and families must usually pay tuition. A statewide option could provide full-time online learning to all students.

MISSOURI TRENDS

21.6%

Composite ACT score, flat for the last five years. Missouri ranks 26th nationwide.

14.1%

Students who took an AP[®] exam in 2011. Missouri ranks 48th nationwide.

56.8%

High school students with passing MAP scores in Math. (Middle school 56.4%; Elementary school 52.9%)

73%

High school students with passing MAP scores in Communication Arts. (Middle school 53.5%; Elementary school 50.5%)

55%

High school students with passing MAP scores in Science (Middle school 49.9%; Elementary school 51.6%)

85.8%

Four-year graduation rate 2011-2012

11

Districts with "provisional" accreditation status

3 Districts with "unaccredited" status

65,912

Number of students in provisionally accredited or unaccredited districts

¹ For more on the 10 by 20 Initiative, see http://dese.mo.gov/top10by20/.

² See Appendix A for the full list of provisionally accredited and unaccredited schools.

³ For details about the number of transfers and the financial ramifications, see http://www.dese.mo.gov/documents/transfer-numbers.pdf.

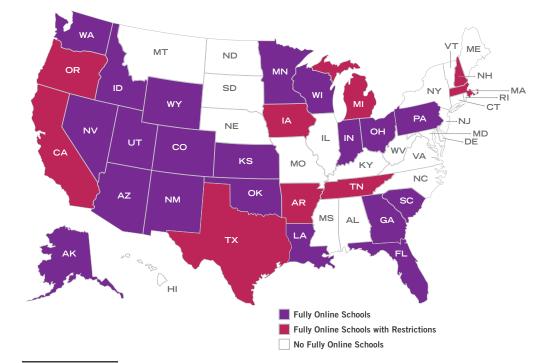
New options for Missouri families

Online and blended schools and courses represent an opportunity to provide options to Missouri's students, whether they are trapped in failing districts, or attending a district with limited course options. While virtual learning solutions are no panacea, they do offer significant immediate benefits to all students:

- Individualized instruction
- Flexible pacing
- Opportunity to fill educational gaps or accelerate
- Expanded curriculum choices, including AP® and other advanced courses
- Access to highly qualified instructors
- · Cutting edge instructional methods and technology
- Removes geographic barriers and provides equal access to a high-quality education, whether the student lives in an urban, rural, accredited, or unaccredited district.

As outlined later in this report, studies have shown high quality online and blended learning models are effective and produce similar results to brick-and-mortar schools.

Currently, 29 states allow full-time online public schools to meet students' online needs; they collectively served more than 310,000 students across the country in the 2012-13 school year (see Figure 1). Twenty-five states fund state virtual schools to provide, collectively, many hundreds of thousands of online courses to students attending local schools.⁴ In Missouri, many students are not so fortunate. Only families who can pay or convince their districts to pay can choose online or blended learning. Although some districts offer these options, they are not the norm and are not available to most students statewide.



⁴ The numbers of states making different options available were all identified in Keeping Pace with K-12 Online and Blended Learning: A Guide to Policy and Practice (2013), released in October 2013 and available at http://kpk12.com/reports.

FIGURE 1: 2013 States with multidistrict fully online schools, with and without restrictions

Keeping Pace 2013

A wide variety of Missouri groups, recognizing the lack of a full range of online and blended opportunities, are showing interest in expanding digital options for students. Representatives from many of these programs and organizations cited in this report present a clear vision that the state can improve the educational landscape for many students by creating a unified vision for digital learning that includes a full range of high-quality online and blended learning options, equitable funding, and the technology hardware and network that will allow students and schools widespread access (see Appendix B for a list of interviewees). In addition the Missouri School Board Association surveyed schools around the state in 2011 in order to determine the extent to which districts were making digital options available, and students were taking advantage of them (see Appendix C for the full text of the final report). The Missouri Association for Rural Educators is working with districts around the state to reduce fees for classes at the University of Missouri High School. Columbia College has dedicated significant resources in recent years to supporting the expansion of K-12 digital learning. The eMINTS National Center is a University of Missouri business unit that has partnered with the Department of Elementary and Secondary Education to offer professional development to help teachers integrate technology into their teaching.

Missouri has great potential to innovate and transform the way in which students learn. Realizing this potential is the task at hand. Online and blended learning options offer opportunities to both personalize learning for our students and engage them as the "digital natives" that they are. Allowing statewide, full-time online schools to be available to all students statewide will give students a different path to successfully graduating from high school. An innovative, adaptive education system that helps students succeed is paramount to reaching Missouri's 10 by 20 goals and improving the state's long-term economic development potential.

As Missouri continues its worthy quest for "10 by 20," students need immediate access to quality educational choices. Successful online and blended learning programs provide new models for teaching and learning that put students at the center and give families options.

Throughout the report, examples are included of families who have struggled to find quality education solutions for their children and how online and blended learning options would help them.

Real Missouri families. Real challenges.

Roy and Cynthia Ware, Columbia

When Roy and Cynthia Ware moved to Missouri for a job opportunity, they were shocked to discover that online learning was not free in Missouri. Their daughters, Audrey (16) and Robyn (14) had both taken advantage of free, public online education in Oregon. Audrey, the oldest, is an accelerated student who finds herself easily bored in traditional classrooms. "She's motivated and ready to go," said Roy, "Online learning gave her that opportunity."

The Ware's younger daughter, Robyn, has Asperger's syndrome, which makes it very difficult for her to navigate environments that are not ordered. "In her first five days of school here," said Mr. Ware, "she spent three days in in-school suspension." Even Audrey fell behind; by the end of her first year in Missouri, her achievement scores had actually regressed.

The Wares opted to pay about \$500 per month for each daughter to attend a private online learning program. "Not everyone learns everything in the same cookie cutter pattern. My kids have matured so much in their knowledge and in their level of responsibility," says Ware. He and his wife believe that for every year their daughters spend in an online learning program, they progress two years because of the individual attention and extra help they get in the online environment. "It's great for children. Kansas has been doing this successfully for years. Let's get on that bandwagon."

Debbie Caldwell-Miller, St. Louis

When Debbie Caldwell-Miller's son Hunter, now a 9th grade student, was a preschooler, he thrived. But in 1st grade, he quickly fell behind in the public school, where access to the teacher was much more limited. He began to act out, losing his recess time as a result. Debbie soon realized that Hunter's kinesthetic learning style wouldn't fit a traditional classroom, so they became a home school family.

Over the years as a home school mom, Debbie has investigated various curricula, including online learning programs, but cost is a big hindrance. She believes that needs to change. "It's not about me or Hunter. It's about all Missouri kids." For Debbie, online schools offer students learning opportunities that they might not otherwise have — whenever they are ready for them. "Hunter isn't ready for it yet, but that doesn't mean he won't be next year," she explains.

In fact, Debbie believes Missouri should follow the example of the six states that actually require students to take an online course before graduation to prepare for the less structured learning atmosphere of college. She also advocates for the new perspectives students gain in online learning through meeting kids from different walks of life, different areas, and different viewpoints.

Finally, Debbie is excited about the technological advantages that online and blended environments bring to kids. "Children need different modes of learning. Technology is a great tool for differentiation." Blended learning, she notes, provides another great option, giving kids a chance to meet periodically for that personal contact, but then students can go back and work at their own pace.

Recently, Debbie spoke with a single mom, whose child struggles with a disability. "She is desperate for options. The class sizes are killing him because he can't focus. We need virtual education in Missouri. For kids not to have that option when it's out there and it's proven, and it's working in so many places...is wrong. So many kids are being lost because there are just no options for them."

Section

National Overview of Online Learning Options

The digital learning landscape across the country differs from state to state, district to district, and sometimes school to school or even class to class. It is clear, however, that many states have created a policy environment that allows students a far wider array of online and blended learning options than are available to students in Missouri. Twenty-nine states allow fully online schools to serve students across the entire state, and 29 states provide supplemental online courses via state virtual schools or course choice programs.

Some states draw a distinction between single-district programs, which serve students who reside within the district providing the online courses, and multi-district programs, which serve students from multiple districts. Single-district programs may serve a small number of students from outside the home district while retaining single-district status. These digital options fall into three primary categories:5

- SUPPLEMENTAL ONLINE PROGRAMS provide a small number of courses to students who are enrolled in a school separate from the online program. Some states refer to these as part-time programs.
- FULLY ONLINE / FULL-TIME ONLINE SCHOOLS, also called cyberschools or virtual public schools, work with students who are enrolled primarily (often only) in the online school. Cyberschools typically are responsible for ensuring their students take state assessments, and are responsible for their students' scores on those assessments. Many fully online schools are charter schools, although there are a growing number of fully online district schools.
- **BLENDED LEARNING** has been defined by the Christensen Institute as "a formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace; at least in part in a supervised brick-and-mortar location away from home; and the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience."⁶ Blended learning options range from individual teachers creating "flipped classrooms" to fully blended schools.

The ways in which student numbers for supplemental programs and full-time programs are counted differ:

- COURSE ENROLLMENTS one student in one semester-long course — are used to count student numbers in supplemental programs.
- STUDENT ENROLLMENTS defined as one year-long full-time equivalent (FTE) student — are used to count student numbers in fully online schools and blended schools.

How are today's students different?

CLASS OF 2017 BELOIT COLLEGE MINDSET LIST FOR STUDENTS BORN IN 1995

Each August since 1998, Beloit College has released the Beloit College Mindset List, which provides a look at the cultural touchstones that shape the lives of students entering college.

These digital natives are already well-connected to each other. The use of smart phones in class may indicate they are reading the assignment they should have read last night, or they may be recording every minute of their college experience...or they may be texting the person next to them. Most of them will take a few courses taught at a distant university by a professor they may never meet.

Following are excerpts from the list for the Class of 2017:

- Eminem and LL Cool J could show up at parents' weekend.
- Rites of passage have more to do with having their own cell phone and Skype accounts than with getting a driver's license and car.
- · Having a chat has seldom involved talking.
- A tablet is no longer something you take in the morning.
- With GPS, they have never needed directions to get someplace, just an address.
- Their parents' car CD player is soooooo ancient and embarrassing.
- Their favorite feature films have always been largely, if not totally, computer generated.
- They have never really needed to go to their friend's house so they could study together.

Introductory text and mindset excerpts taken from: http://www.beloit.edu/mindset/2017/

⁵ Much of the information in this first section comes from Keeping Pace with

K-12 Online and Blended Learning: A Guide to Policy and Practice 2013 from the Evergreen Education Group. The full report is available for download at http://kpk12. com/reports.

⁶ This definition of blended learning from the Christensen Institute was included in its May 2013 paper, "Is K-12 blended learning disruptive? An introduction to the theory of hybrids," available at http://www.christenseninstitute.org/blended-learning-3/.

These categories of digital learning can be found in many different program types throughout the country; program definitions and some highlights are included below.

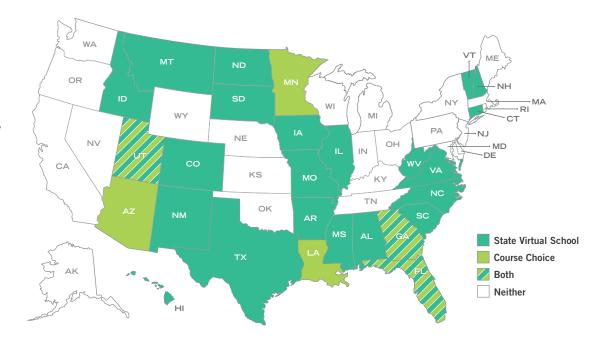
STATE VIRTUAL SCHOOLS are created by legislation or by a statelevel agency, and/or administered by a state education agency, and/ or funded by a state appropriation or grant for the purpose of providing online learning opportunities across the state. (They also may receive federal or private foundation grants and often charge course fees to help cover costs.) State virtual schools primarily offer supplemental online classes to grades 9-12 (although some serve other grades), although many are diversifying and offering fully online, blended, and professional development options.

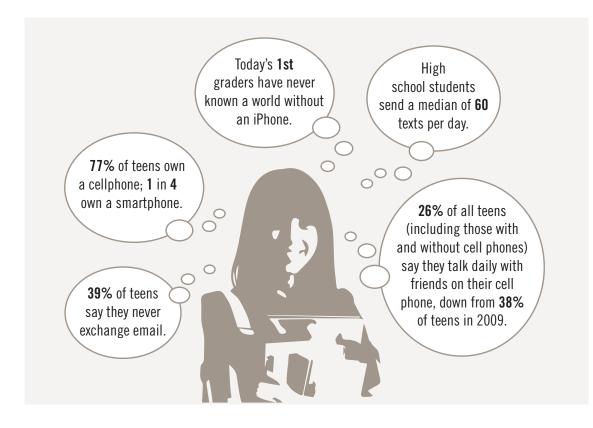
State virtual schools operated in 27 states in school year 2012-13, serving 740,000 course enrollments (see Figure 2, states highlighted in green). The largest of these is Florida Virtual School, which served over 410,000 course enrollments in school year 2012-13. Two of these state virtual schools closed at the end of last school year (Connecticut and Louisiana), leaving 25 state virtual schools operating in school year 2013-14.

The Missouri Virtual Instruction Program (MoVIP) is considered a state virtual school, primarily because of its history. However, it no longer directly offers courses, but rather serves as a clearinghouse, enabling student access to courses from multiple providers. It is profiled in more depth in Section 4.



2013 States with supplemental options: state virtual schools and course choice programs Keeping Pace 2013





TODAY'S DIGITAL NATIVE

Statistics pulled from the 2012 Pew Internet report Teens, Smartphones, and Texting, available at http://www. pewinternet.org/ Reports/2012/ Teens-andsmartphones.aspx.

States with course choice programs give students across a state the option to choose to take a supplemental course from one of multiple providers, and are also usually facilitated by the state. While there are many states that make multiple providers available, course choice programs do not allow a district to deny a student's request to enroll in an out-of district course, and allow funding to follow the student at the course level. Course choice programs are operating in seven states in school year 2013-14: Arizona, Florida, Georgia, Louisiana, Michigan, Minnesota, and Utah (see Figure 2, states highlighted in yellow). These programs are relatively new in most of these states.

MULTI-DISTRICT FULLY ONLINE SCHOOLS are the main education providers for their students, who do not need to go to a physical school to access any aspect of their education (although they may do so). Many fully online schools operate across multiple school districts and often draw students from an entire state. Multidistrict fully online schools served an estimated 310,000 students in 30 states in school year 2012-13 (see Figure 1). While the overall number of fully online students has increased each year, there are nine states that operate fully online schools with restrictions where growth is constrained. In school year 2013-14 there are 20 states operating multi-district fully online schools without restrictions, and nine states operating them with restrictions such as available grade levels, and caps on the number of students per class / school / district / state (see Table 1 for details on the restrictions). (Virginia's only statewide fully online school shifted its focus in school year 2013-14 to focus on students in two districts.)

Missouri does not have any multi-district fully online schools, although there are some fully online options offered via private pay including MU High School.

TABLE 1: 2013 Multi-distrct fully online schools Keeping Pace 2013

	Enrollments 2012-13	Annual growth SY 2011-12 to SY 2012-13	5-year growth (2008- 2013)	2013 % of state K-12 population	Restrictions
Alaska	166	+95%	-53%	0.14%	
Arizona	42,000	+8%	+40%	4.28%	
Arkansas	499	0%	0%	0.12%	One school, capped at 3,000 in SY 2013-14.
California	40,891	+76%	+289%	0.71%	Schools limited to serving students in contiguous counties.
Colorado	17,289	+7%	+49%	2.31%	
Florida	14,000	+45%	+1,197%	0.58%	
Georgia	13,412	+27%	+212%	0.89%	
Idaho	5,213	0%	+44%	2.06%	
Indiana	6,733	+80%	n/a	0.7%	
lowa	302	New in 12-13	n/a	0.07%	.018 % (approximately 900) student cap statewide for full-time schools; no more than 1% from any one district.
Kansas	4,689	+18%	+51%	1.1%	
Louisiana	2,562	+28%	n/a	0.42%	
Massachusetts	476	-2%	n/a	0.06%	No more than 2% of students statewide in virtual schools. At least 5% of students from sponsoring district or collaborative. No more than 10 virtual schools.
Michigan	7,850	+94%	n/a	0.55%	SB619 (2012) limited the number of cyber charters and their enrollments.
Minnesota	9,196	+13%	+82%	1.21%	
Nevada	10,414	+19%	+126%	2.61%	
New Hampshire	125	+21%	n/a	0.07%	Cap on number of VLACS charter school FTEs based on state appropriation.
New Mexico	498	New in 12-13	n/a	0.16%	
Ohio	38,519	+9%	+42%	2.42%	
Oklahoma	6,298	31%	473%	1.11%	
Oregon	6,637	+19%	n/a	1.27%	3% cap on the number of students in virtual schools from each district.
Pennsylvania	34,694	+7%	+56%	2.11%	
South Carolina	8,130	+2%	+310%	1.26%	
Tennessee	1,679	-7%	n/a	0.19%	Initial enrollment is limited to 1,500 students. No more than 25% of a virtual school's students may come from outside the LEA. No school shall exceed 5,000 students. Restrictions are lifted or schools closed based on school performance.
Texas	8,441	+36%	+323%	0.2%	TxVSN Online Schools serves grades 3-12.
Utah	3,336	+8%	+567%	0.63%	
Virginia	447	-8%	n/a	0.04%	Inequitable funding.
Washington	2,745	+9%	+49%	0.29%	
Wisconsin	6,721	+50%	+117%	0.88%	
Wyoming	1,377	+21%	+1,277%	1.7%	

SINGLE-DISTRICT ONLINE PROGRAMS are created by a district primarily for students within that district. While they offer a full-time online option, most provide supplemental online courses for students enrolled full-time in the district and accessing most of their courses in a physical school. They also might include a variety of blended learning options for students. In most states, single-district programs may serve a small number of students from outside the home district while retaining single-district status.

An increasing number of single-district programs offer a full suite of online options to their students, generally with few enrollments from out-of-district students. District-level activity is rapidly expanding, and blended learning in particular can now be found in traditional district schools across the country.

Missouri has a handful of single-district online programs, including Columbia Public Schools Virtual Instruction and R7 Online through Lee's Summit. More details can be found in Section 4.

A **BLENDED SCHOOL** is a stand-alone, full-time school with a school code where most of the school's curriculum is delivered in a blended form. Attendance is required at a physical site during the school year for more than just state assessments. Many of these schools are charters, allowing them flexibility in how they serve their students. However, an increasing number of these schools are traditional public schools that are changing their teaching and learning models to better meet student needs and sometimes to cut costs.

At least 24 states and Washington DC have blended schools. Hope Academy in St. Louis also fits the definition of a fully blended school, although it is not a typical high school option for students, as it serves students aged 16-21 who are at risk of dropping out of school.

CONSORTIUM AND EDUCATION SERVICE AGENCY PROGRAMS are an increasingly important online learning access point for students and a way for districts to cost-efficiently invest in online and blended programs. Consortium online programs are often developed by districts, intermediate service units, local education agencies, and counties that wish to create efficiencies by combining resources.

There are at least 75 consortium programs operating across the country, linking districts across counties and local education agencies to offer locally facilitated online and blended options to students. This includes EducationPlus (District's-Choice Online Learning, a program from the Cooperating School Districts of St. Louis), which offers supplemental online classes, allowing districts to enroll single students or purchase whole courses.

PRIVATE/INDEPENDENT SCHOOLS are non-public schools supported through tuition, grants, endowments, and other sources. Many schools in this segment are moving toward online and blended learning as a way to individualize instruction and reduce costs.

An increasing number of private / independent schools are including supplemental online courses and blended learning in their options for students. There are eight states that allow private students to take funded courses from state-supported supplemental programs while maintaining their status as private students. Missouri does not allow private students to take MoVIP courses for free.

Section



Virtual Options in Missouri

Online and blended learning options for Missouri's K-12 students are mostly determined by where students live. There are no publicly funded fully online options for students, although there are some private pay options. There is one statewide supplemental program with low and limited public funding, the Missouri Virtual Instruction Program, but all other supplemental options are limited to students within a particular district, students who can pay for classes, or students whose school can pay for classes.

This section profiles existing digital options, including the following programs:

- Missouri Virtual Instruction Program (MoVIP)
- Mizzou K-12 Online
- North Kansas City School District eCampus
- Lee's Summit R-7 Online
- Park Hill School District
- Hope Academy Charter School
- Springfield Public School
- Reeds Spring School District
- EducationPlus District's-Choice Online Learning
- CPS Virtual High School

It is likely there is additional online and blended activity happening, particularly at a district level, which is not included in this section. Missouri does not require districts to specifically report online or blended course enrollments to the state. As a result, any online programs offered only to students within a district may not be included in this list, as it is simply another way of serving a district's own students. It is more likely that programs that serve out-of-district students may be included in this list, as they are likely to be better known.

Missouri Virtual Instruction Program

The Missouri Virtual Instruction Program (MoVIP) is, in the words of Steve Schellman, Supervisor of Educational Support Services at the Department of Elementary and Secondary Education (DESE), a clearinghouse for quality K-12 online learning options in Missouri. As a supplemental program, Schellman says that MoVIP's mission is to connect districts and parents to quality online courses from kindergarten through grade 12. Launched in 2007 as a free program that operates from within the DESE, MoVIP initially saw enrollments soar to 16,000. When funding was cut in January of 2010 and the program became tuition-based, enrollments plummeted to 2,900, an 82% drop. Currently, the program serves about 1,600 enrollments per year. Tuition is paid by parents or at the district's discretion.

According to Schellman, one of the biggest challenges to getting more students to participate in online learning is a lack of awareness about the MoVIP offerings, either at the statewide or school/district level. Another challenge is a lack of understanding about the high quality experience that virtual learning can offer. Finally, tuition-based funding is an issue as it sets a gap between those families who can afford online courses (or whose districts will pay for courses) and those who cannot.

Columbia College

in Columbia, Missouri developed its first online classes in 2000, when the school ran six online sections that enrolled about 200 students. In school year 2012-13, the school ran 600 online sections that enrolled 85,000 students.

Led by Dr. Arlin Epperson, the Special Assistant to the President for K-12 Online Education, the college is looking to share its deep knowledge about best practices in online learning. It is working with teachers, schools, districts, and consortia around the state to help them build and grow great digital programs by offering a professional development class for teachers wishing to teach online, and consulting services for programs moving into the space.

MoVIP course providers

MoVIP currently contracts with eight vendors for courseware, with each course being reviewed in a rigorous vetting process for quality and adherence to standards. Providers must meet 21 criteria and must meet all of Missouri's course standards.

Currently, MoVIP's national vendors include:

- Apex Learning
- Aventa/K12 Virtual School
- Connections Learning
- Edgenuity
- FLVS Global

Three providers are Missouri-based:

- North Kansas City School eCampus
- Mizzou K-12 Online
- SE Webinar

MoVIP student demographic

DISTRICTS

According to Schellman, MoVIP acts as a coordinator to help districts solve problems such as a need for advanced courses or the lack of a qualified teacher for a required course. Districts that lack the resources or teachers for advanced courses also benefit from MoVIP, along with those that simply want to give students more choices.

INDIVIDUAL STUDENTS

Any K-12 student in Missouri up to age 21 may take a course through MoVIP, including private and homeschooled students, students wishing to recover credits or accelerate learning, students with unique medical needs, and students who want to take courses that are not available in their school or district. Students who want to attend an International Baccalaureate (IB) Program often opt to take the mandatory Algebra 1 requirements for admissions into the IB program. Likewise, students who are advanced academically or who are very involved in competitive sports, dance, or music will often use MoVIP as a way to make busy schedules work and obtain the benefit of access to more advanced courses.

Enrollments

As noted, MoVIP began as a free program in 2007 and enrollments were initially high — around 16,000. In January of 2010, MoVIP's funding saw a severe cut from state budget appropriations, so it became a tuitionbased program, with each course pricing out at \$300 per semester course. That was the year enrollments dropped by 82%. The numbers dropped another 54% in 2010-11 to just 1,335 enrollments. The 2012-13 school year saw enrollments rise slightly to 1,623, even though program funding was down to just \$390,000. Enrollments are expected to remain around 1,600 for 2013-14. Despite the slight uptick in enrollments in the last couple of years, current numbers still reflect a decline of approximately 90% from the time the initial funding was cut.

Courses

MoVIP offers about 150 courses in core academics and electives, including 18 AP® course selections, as well as Language Arts courses such as Mythology, Journalism, Creative Writing, and Speech and Debate. The roster also includes music and art courses, along with innovative and advanced math, science, and technology classes such as Probability and Statistics, Accounting, Calculus, Engineering I and II, Forensic Science, Programming, Game Design, Web Design, and more. Foreign languages include common language offerings, such as French, German, and Spanish, along with less common selections such as Chinese, Japanese, and Latin.

Elementary and middle school students also enjoy a range of core courses, along with interesting elective and enrichment options, such as foreign language, digital photography (middle school), music, and sign language. MoVIP's roster also includes test prep, career planning, leadership training, and remediation options.

A full catalog is available at http://www.movip.org/courseinfo/.

Funding

MoVIP receives funds in several ways:

- 1. Parents may pay tuition directly to the vendor. Amount varies, but the average payment is \$300 per course, per semester.
- 2. The state pays for students who are deemed "medically fragile" and, thus, unable to attend a regular school.
- Accredited districts may opt to pay for a student to take a course through MoVIP for any number of reasons, including credit recovery, acceleration, access to courses not available in the district, access to teachers where the district may have gaps, etc. Some districts have a written policy regarding online learning; other districts handle online enrollments on a case-by-case basis.
- 4. Districts that are unaccredited and provisionally accredited for two consecutive annual performance reports (APRs) must pay for tuition for those families that choose online learning. (SB 64, 2007)

In additioin, districts can be reimbursed for costs when using MoVIP for 94% of the prorated average daily attendance (ADA), based on the funding formula. That reimbursement does not come in the form of a check. Rather, the district simply claims that student, and the student's attendance, as theirs.

MoVIP as a course provider

In 2010-11, MoVIP initiated a program whereby districts can use their own teachers to teach MoVIP courses, in place of using the instructor that is provided with the course. In this sense, MoVIP has become a third-party distributor of its catalogue of courses. Districts gain full access to the learning management system and course content. Districts simply pay MoVIP's vendors for the courses.

EducationPlus — District's-Choice Online Learning

EducationPlus is a non-profit education consortium that serves teachers, administrators, support staff and school board members in 61 public school districts in eight Missouri counties and two Illinois counties. The mission of EducationPlus is to provide member school districts with high-quality and cost-effective services, resources, and leadership to achieve educational excellence for all students.

EducationPlus is designed to maximize economies of scale and increased purchasing power for educationrelated products and services. **District's-Choice Online Learning (DCOL)** is one of those products and services available to member districts. DCOL is not an online school. Rather, it functions as a clearinghouse and course provider to member districts, much like MoVIP.

District teachers receive facilitator/teacher training in order to provide supervision, or Missouri-certified online teachers who are employed by the course vendors can also provide the instruction. Member districts work together to share instructors and course seats across district lines, but districts coordinate those exchanges amongst themselves.

The following 61 Missouri public school districts are members of and served by the Cooperating School Districts of Greater St. Louis. (Note: 3 additional member districts are in Illinois):

Affton	Hazelwood	St. Louis Charter School	
Bayless	Hillsboro	St. Louis Public Schools	
Better Learning	Jefferson R-7	Silex	
Communities Academy	Jennings	Special School District of St. Louis County	
Brentwood	Kirkwood		
Carondolet Leadership Academy	Ladue	Spring Bluff	
Clayton	Lindbergh Schools	Sullivan	
Confluence Academy	Lonedell	Sunrise	
Crystal City	Maplewood Richmond Heights	Troy	
DeSoto	Mehlville	Union	
Dunklin R-5	Meramec Valley	University City	
Elsberry	Normandy	Valley Park	
Ferguson-Florissant	Northwest R-1	Warren County R-3	
Festus R-6	Orchard Farm	Washington	
Fort Zumwalt	Parkway	Webster Groves	
Fox C-6	Pattonville	Wentzville	
Francis Howell	Ritenour	Winfield	
Franklin County R-2	Riverview Gardens	Windsor C-1	
Gasconade R-2	Rockwood	Wright City	
Grandview R-2	St. Clair		
Hancock Place	St. Charles		

ILLINOIS SPECIAL MEMBERS

Belleville Public Schools District 118 Belleville Township High School District No. 201 Collinsville Community Unit School District #10

Course providers

DCOL courses are developed by professional online curriculum publishers and are updated regularly as courses evolve. DCOL courses are selected to meet district needs in regards to core curriculum, K-5, AP[®], foreign languages, credit recovery and STEM. District's-Choice uses "an extensive RFP process" to vet courses in order to ensure the highest quality. To vet the courses, DCOL used teachers, pairing them with content in their area of specialization. Today, DCOL offers more than 150 courses through K12, Aventa, Edison Learning, and Edgenuity. They also offer Edison Learning's benchmarking program eValuate[™]. DCOL particularly liked Edgenuity's certification programs, including pharmaceutical technician or computer-related certifications.

Each of DCOL's approved providers offer courses complete with a learning management system. Districts may choose to use their own teacher or purchase the course from the provider with the services of a Missouri-certified instructor. Courses must be customizable to allow districts to match competencies to district requirements. Districts often customize as needed and then rename the course.

Online student demographic

The program utilizes courses from several vendors and serves any district in the 61-member EducationPlus Consortium, which includes six districts in Illinois.

The courses are geared to all types and levels of students in grades 6 through 12, including:

- At-risk students
- Gifted and AP[®] students
- Independent learners
- Credit recovery students
- Home-bound students
- Out-of-school suspension students

District's-Choice promotes its courses as a good option for credit recovery, alternative pacing and instruction, access to AP[®] and other advanced courses, options for homebound students, opportunities for middle school students to take a high school course, and more.

Courses

A full course catalog is available at http://www.edplus.org/educational_tech/districts_choice/courses.html. In addition to courses, DCOL also offers:

VIRTUAL CLASSROOM SUITE: Course content that engages students through animations, simulations, video-based presentations, online content, vocabulary development, and exploration activities that support each lesson.

VIRTUAL TUTOR: This individualized test preparation and intervention program prepares students for standardized tests (GED, ACT, and SAT) and state assessments (exit and end of course).

WEB ADMINISTRATOR: This learning management system provides administrators and teachers with powerful tools to monitor and report student progress in real time, options to customize courses, and grading and reporting options to meet individual student needs.

Funding

Districts pay EducationPlus directly for each enrollment offered through District's-Choice, paying an average of \$250 to \$300 per class, per semester.

Conclusion

Ruth Litman-Block, Director of the DCOL program, believes that online and blended learning are tremendous tools that Missouri can employ to help meet its education challenges. For example, the consortium just sold 500 seats to the struggling Normandy district and 400 seats to St. Louis City. Both are using the courseware in a blended environment, which allows each child to work at his or her own pace, while face-to-face instructional support helps student to keep moving through the course at a healthy rate. It's a creative solution to ameliorate, at least in part, the troubles plaguing both districts. In fact, Normandy has taken things a step further by offering the same courses to parents who may never have obtained their high school diploma. "If the parents are successful, the kids tend to be more successful too," says Ms. Litman-Block.

Mizzou K-12 Online

Launched in January of 2012 through the University of Missouri's College of Education, Mizzou K-12 Online provides about 180 core and elective high school courses for students wishing to supplement their existing program and fill gaps. The program is also an option for students who want to attend full time and earn a diploma.

The full-time portion of the program was originally called MU High School. It began in 1997 and operated under the cooperative extension office. Mizzou K-12 Online recently absorbed MU High School, so both the full-time and supplemental options now operate under the supervision of the College of Education. Mizzou K-12 Online offers core courses, Advanced Placement[®] (AP[®]), languages, and many electives. In the 2012-13 school year, Mizzou K-12 Online served 7,300 enrollments.

Mizzou K-12 Online operates under the supervision of Zachary (Zac) March, Director of eLearning and Distance Education for the University of Missouri. Kristi Smalley serves as the Principal of the Mizzou K-12 Online program. The operations and websites are currently in the process of being merged. AdvancED and the North Central Association Commission on Accreditation and School Improvement provide accreditation to the program.

Leaders at Mizzou K-12 Online see their program as unique in that the courses are developed in-house. Courses are designed specifically to Missouri competencies in order to prepare students for Missouri's Endof-Course exams. "These are Missouri courses, developed by Missouri educators to Missouri standards," notes Kristi Smalley, Principal of the MU High School. In addition, Zachary March notes that Mizzou K-12 is embedded in the College of Education. The program is much like a lab school where student teachers obtain hands-on experience working online with students. Principals and Superintendents also gain opportunities to evaluate online teaching, learning, and administration. March adds, "There are certainly research opportunities as well that allow Missouri to discover and expand knowledge through our program."

Mizzou K-12 Online student demographic

INDIVIDUAL STUDENTS

Mizzou K-12 Online serves individual students throughout Missouri on a tuition basis. In addition, they serve students in other states, using revenues to partially fund ongoing development. Public, private, home school and homebound students are all eligible to take courses through their program. Students take courses either to supplement their regular school's offerings, recover credits, fill gaps, or to take advanced courses.

SCHOOLS AND DISTRICTS

Mizzou K-12 offers districts three ways to use their courses. The courses may be purchased and taught by a school or district instructor, Mizzou K-12 can provide the teacher, or a co-teaching model is also available.

Courses

Mizzou K-12 Online offers more than 180 course sections, all developed by Missouri educators, on a tuition basis to high school students throughout Missouri. All of Mizzou K-12 Online courses are one-half unit, equal to one high school semester (one course section). Some courses are comprised of a first and second unit, which is equal to a full-year course in a traditional school. Mizzou K-12 Online offers two types of courses: Semester-based and Self-paced.

Semester-based courses include 11 AP[®] courses, core courses, foreign languages (Latin and Spanish), and some electives, such as Digital Photography. Self-paced courses include core courses and unusual electives such as Mystery Fiction, King Arthur and the Middle Ages, and foreign languages that are not usually available, such as Japanese and Chinese. Planning is underway to offer middle school courses in 2014 and elementary courses in 2015.

A full course catalog is available at http://mizzouk12online.missouri.edu/courses.

SEMESTER-BASED

Semester-based courses, predominantly core and AP[®] courses, follow the traditional school schedule, but because they are offered online they allow for flexibility in when and where the student logs in to complete coursework. The courses include a calendar that guides students to the required pace in order to complete the course on time; scheduled online discussions are also part of the program. Unlike the self-paced program, students must complete the courses within the traditional school calendar and will be dropped if they have not finished their course work by the end of the semester.

SELF-PACED

Mizzou K-12 Online offers 145 self-paced courses, which students may enroll in any day of the year. While ambitious students are allowed to complete the course in about six weeks if they are able, students are allowed up to nine months to finish. Students may choose to arrange their self-paced courses around traditional school schedules, taking advantage of summer and winter breaks to get ahead. The self-paced courses are best suited for self-motivated students who can use the time flexibility to speed up or slow down as needed in order to master the material.

Funding

Mizzou K-12 Online is, according to March, seen by the state as a private school since it is a tuition-based program. "Because we charge tuition, we can't be considered part of public education. We are self supporting." By opening seats to students in other states, the program has generated revenue streams to support ongoing course development. Likewise the program generates some revenue as a course provider for MoVIP.

Fees are as follows:

HIGH SCHOOL COURSES Semester online courses: \$300 per semester Self-paced online courses: \$165 per half unit MIDDLE SCHOOL COURSES Online courses \$165 per semester In addition, there is a \$25 per course administrative fee.

Districts may pay for a student to take a course with Mizzou K-12 Online, but they typically do so only in situations where there is a staffing shortage — not for credit recovery or acceleration.

Conclusion

Online courses not only provide expanded choices, flexibility, and opportunities, they also prepare students for their post-secondary learning experiences. "One-third of all college students are getting their education through an online class," says March, "so preparing students for that kind of learning is something we need to provide in Missouri."

Program leaders see Mizzou K-12 Online as a win-win, both for students and for future teachers and educational leaders. In a recent article, College of Education Dean Daniel Clay noted the lack of opportunities for pre-service teachers and educational leaders to receive hands-on training on online instruction, assessment, and supervision. The university has made it a high priority to change that. Through Mizzou K-12 Online, says Clay, University of Missouri education majors "will be prepared to teach online in all of its forms, including blended, hybrid, and fully online."⁷

North Kansas City Schools eCampus

Launched in 2004 with 40 enrollments, the North Kansas City Schools (NKCS) eCampus program offers 36 courses as a supplemental program. Students can take one class or a full online schedule. Students typically use the program to fill gaps, fix scheduling conflicts, accelerate, or recover credits as needed. Pacing is matched to the traditional school calendar, but there is flexibility within that structure.

Initially, the program was created to serve only NKCS students, but since its inception, the eCampus program has joined forces with other districts to form a consortium for sharing resources. Each district uses its own teachers to offer a variety of online courses to member districts. Now, with the program in its 10th year, eCampus Coordinator Marla Walker sees future growth in terms of enrollments, but not in geography.

Currently, nine districts in Clay and Platte counties are members of the consortium that includes Excelsior Springs, Kearney, Liberty, North Kansas City, North Platte, Park Hill, Platte County, Smithville, and West Platte. Each member district submits the online course offerings available through their district. Walker then compiles the course offerings into a catalogue, which is made available to all member districts. Students may enroll in any course, no matter which district offers the course, as long as seats are available. Districts pay each other a set fee per enrollment, which averages about \$300 per half credit, the same as MoVIP and Mizzou K-12 Online.

Most enrollments come in the form of individual students taking courses as needed. However, there is a move toward more blended classes where students will have flexible scheduling. Currently, NKCS is considering

⁷ http://www.columbiatribune.com/news/education/mizzou-k--online-adds-courses-for-coming-semester/article_625dfead-2a09-500c-9df3-7cb6da4d41ad.html

requiring an online or blended class for all students. The district is also in the beginning stages of exploring expansion into elementary and middle school course offerings.

Course providers

eCampus builds their own courses, but other districts in the consortium also purchase courses from outside vendors. One district, for example, purchases Marine Biology from Florida Virtual School, but a district teacher provides the instruction.

According to Walker, eCampus has adopted the Quality Matters program to ensure high quality course development. Quality Matters is a quality assurance program for online education that features continuous improvement models to assure quality through peer review, professional development workshops and certifications, and rubrics for course design. "We've pushed hard to add more choice to our courseware so that the learning modalities are represented," says Walker.

eCampus is also a course provider, with several of its courses being offered through the Missouri Virtual Instruction Program (MoVIP) to all Missouri students. Through MoVIP, eCampus also generates revenues that fund ongoing course and staff development.

Student demographic

The eCampus program was initially created to serve students only within the district. However, with the development of the consortium, eCampus now also serves students in neighboring districts and around the state through MoVIP.

District enrollments are handled by school counselors, rather than through direct enrollment online, allowing eCampus to support brick-and-mortar schools. All types of students take advantage of the online courses through eCampus, including public, private, home school, and homebound students. "This is a beautiful program for 504 students," says Walker. She particularly sees the program as a great resource to students who are dealing with teen pregnancy or social issues, such as anxiety disorders.

Homebound students, who were once limited to two classes with a homebound teacher who may have no expertise in the courses, can now access subject-matter experts through online instruction. "The homebound teacher can play more of a coaching role," Walker added.

Enrollments

eCampus does not limit how many courses students can take. "We actually allow students to take a course as an extra block above the eight [district-allowed] courses per day," says Walker. The program runs approximately 750 course enrollments per semester, and about 800 students take courses through the summer.

Walker reports that they serve about 40 students outside the consortium through MoVIP. "In a year, we budget to fill 100 seats from outside our district enrollment. They aren't included in our course enrollment count."

Courses

eCampus offers a variety of courses, including AP[®], core courses, and electives. Personal Finance and Health are particularly popular courses since both are a graduation requirement in the state of Missouri. A full course catalog is available at http://www.nkcschools.org/echs/.

Funding

Courses are offered free to students within NKC Schools, which pays for the program through district appropriation. Districts within the Consortium budget for courses, and then member districts pay each other a set amount, approximately \$300 per semester course, as decided by the consortium advisory board.

The eCampus program also generates income as a provider for MoVIP. Those funds are used for ongoing curriculum design and to help fund their teaching staff. Summer school, which attracts many tuition-based students from outside the district, generates revenue for the district as well.

Conclusion

Walker is particularly excited about the consortium model. Besides expanding the resources they are able to offer students, she says it has provided some surprising side benefits, including professional collaboration, combined professional development offerings, resource sharing, and a real sense of community. She notes that there are similar consortia popping up all over the state, though most are still in their infancy.

At the same time, Walker does not see eCampus developing into a statewide program. Rather, the beauty of the consortium is that district leaders are all familiar with neighboring districts, and there is a sense of community in their ability to serve one another.

Online learning offers NKCS students new opportunities to supplement their brick-and-mortar course offerings with guaranteed quality in a flexible environment. Walker believes that online learning also plays a significant role in preparing students for college and career readiness.

Challenges

Lack of access to the Internet has been a challenge. With a high number of students on free-and-reduced lunch, paying for home Internet access is not always a top priority. District high school students are issued a laptop during the school year to use for all classes. In the summer, eCampus loans computers to students as available. They also offer labs in the summer, but many students choose to take an online course because they don't have transportation to the school, so program leaders try to provide computers as often as possible.

A lack of understanding about the quality available in online learning is also an ongoing problem. Parents are often quite surprised at the rigor involved in online learning once their child is enrolled. Walker notes that eCampus courses are continually being updated to add enhancements, fix trouble spots, and maintain state-of-the-art courses. Outdated or illogical policies are also a challenge. For example, if students take a course online in Missouri, only 94 percent of their attendance counts (the statewide attendance average), whereas 100 percent of attendance counts for a student who sits in study hall. Another incongruity is in the requirement that online teachers come to a brick-and-mortar school or administrative building to teach online. Walker argues that innovative and flexible options for students will require innovative and flexible thinking about how, when, and where instruction is delivered.

"Online courses are actually held to higher standards precisely because they are digital, making it possible for every aspect of teacher-student interaction in the course to be analyzed."

— Marla Walker, eCampus Coordinator

Park Hill School District

As part of the eCampus Consortium with North Kansas City Schools, Park Hill School Disrict's online courses are currently available only for students in grades 9 through 12. Launched in 2008 with 20 students and two classes (10 students in each class), the program is funded by the district and currently serves about 300 students each year. The district requires students to take an online course in order to graduate from high school, but the district does not fund beyond a full-time school day.

To measure success, Park Hill compares results between students' brick-and-mortar classes and comparable online courses.

Courses

Park Hill offers 21 online courses, many with multiple sections. Course development is driven by student interest, efficiencies, and by more advanced or elective courses that schools would like to offer but may not be able to afford to staff, such as AP[®] Art History. The district has taken an open approach to building their course list, opting to build some, purchase some, and lease some.

The school district also offers online classes for the community. A full course catalog is available at http://www.parkhill.k12.mo.us/Pages/OnlineClasses.aspx.

Enrollment

Park Hill serves any student in the district, including home and private school students. As a member of the North Kansas City School District eCampus consortium, they also serve students from other member districts. As noted, Park Hill is currently serving about 300 students per year, and they expect to see that number increase.

Funding

Funding for Park Hill's program is budgeted through the district, but students are not currently allowed to take a course over and above their 7.5 district-allotted hours per day. When buying or selling online instruction between member districts, as noted in the description of the eCampus, the districts simply pay one another for purchased services.

Conclusion

According to Jeanette Cowherd, Assistant Superintendent of Student Improvement for Park Hill, district leaders are eager to grow virtual learning options for their students. "Public schools can provide personalized education. We really believe a blended model is the key." Cowherd noted that the district's 1 to 1 initiative begins in the 5th grade, so learning and working in a digital environment is standard by the time students finish 5th grade. The opportunity to blend online and face-to-face learning is already in place, and Cowherd reports that the district is "already doing some incubator blended learning initiatives."

The challenge, according to Cowherd, is in helping parents, education leaders, and policymakers to understand the rigor and quality available in online learning. The district is working to educate stakeholders so that they understand not only the rigor, but also what these new instructional models mean in terms of staffing, training, facilities, and more. "We're trying to make new learning paradigms work within the current model, and we can't keep doing that," says Cowherd.

Lee's Summit R-7 Online

Launched in the 2008-09 school year, the Lee's Summit R-7 Online Program offers a handful of courses for recovery and for the purpose of providing courses not available elsewhere. The recovery courses are shorter in length and are self-paced. Non-recovery courses follow the district grading calendars.

Lee's Summit uses student surveys and grades to gauge success. They compare pass/fail rates between online and face-to-face courses as well, to ensure that the students in the online courses are performing as well or better than their brick and mortar counterparts. They also compare Exceptional Student Education scores to determine if the personalization available in online and blended environments is having an impact.

In addition, the district is in the final year of a three-year balanced assessment initiative. End-of-course assessments, for example, are being implemented for 73 courses, and online courses will be included in that process. According to Kevin Whaley, Coordinator of Instructional Technology for the District, "We would never do anything online that doesn't align with standards for any other class."

Lee's Summit online courses are all strictly online at this point — not blended. However, some teachers meet face-to-face with students on a volunteer basis for tutoring. The final exam is also administered in a face-to-face environment. Orientation used to be delivered face-to-face, but program administrators found that students who took an online orientation fared better in their online courses and were more likely to complete them.

One exception to being fully online was summer school. Teachers and students met face-to-face, but the courseware was all online and asynchronous. Students could work on their studies at home if they chose to. Blended courses were also available that allowed students to meet face-to-face only on Mondays, Wednesdays, and Fridays. The model was so successful that program leaders would like to see it expanded, but the dilemma is in how to make a truly blended model without losing average daily attendance (ADA).

Course providers

Currently, all but two of Lee's Summit courses have been created in house. Two courses have been purchased from FLVS Global Services, Geometry and Psychology.

Student demographic

Any student in the district may take an R-7 online course for free, including homeschooled and private school students, though the program currently has just one homeschooled student and no private school students. The program also serves students from other districts through Innovation Campus, a program that helps students complete a four-year degree just two years after high school graduation, with no debt. Online courses help students to accelerate or access courses not offered at their local school. Innovation Campus is a cooperative effort of Lee's Summit R-7 School District, Metropolitan Community College, and the University of Central Missouri.

In addition, Lee's Summit had a partnership with Ruskin High School in Kansas City. Several Ruskin students took Lee's Summit computer hardware systems operating courses as those courses were unavailable in their district.

Currently, only about 1-2% of Lee's Summit R-7 online enrollment comes from other districts, but program leaders expect that percentage to grow. Whaley noted that Lee's Summit is part of the "south of the river" districts in

the Kansas City area. North of the river, the Kansas City School District's eCampus has the consortium whereby several adjacent districts share online instruction resources. The districts south of the river have a desire to share resources in a similar manner.

Enrollments

Enrollments have risen steadily since their launch year, which finished out at 212 enrollments. In school year 2012-13, enrollments finished at 564, with just over half of those (374) representing summer school enrollments. Lee's Summit served 157 enrollments in the fall term 2013, an increase of 29% over last fall 2012. If spring and summer enrollments follow suit, as is anticipated, program leaders can expect to see approximately 728 enrollments for the 2013-14 school year. Students must receive approval from their counselor in order to enroll.

Courses

Lee's Summit R-7 offers just a handful of courses at this time, though program leaders plan to add a minimum of three additional courses in the 2014-15 school year. The current course list includes:

- Algebra I (alternative school only)
- Geometry
- American Government
- College Accounting (Year-long course)
- Computer Hardware and Operating Systems I & II
- Computer Applications I
- General Psychology

Three new courses will be added next year, including Database Management I, and Computers Apps II.

According to Whaley, a team is currently meeting to discuss how the program will expand from here. Leadership is seeking input from department chairs, but other factors are being considered as well, such as enrollment needs for particular courses, feasibility of a given topic for online learning, and even, to some extent, teacher amenability to the selections in order to gain buy-in.

A full course catalog is available at http://sites.lsr7.org/r7online/current-course-offerings/.

Funding

Currently, the school district of Lee's Summit pays for any courses taken above and beyond the full course load. For the majority of students enrolled, the online class is being taken in addition to their normal class load, so Lee's Summit must cover those costs. In the summer school program, they were able to receive ADA if the students attended in a face-to-face environment. The district would like to see more flexible funding for blended learning options.

In some instances, the students pay for the courses, such as when two students through the Innovation Campus wanted to take courses that weren't actual graduation requirements. They were allowed to take the courses, but the family had to cover the costs. One home school student is taking courses, and since it is a district student, there is no charge. As in the NKCS eCampus model, host districts pay the cost for their students who take Lee's Summit courses.

Conclusion

One of the district's biggest challenges is in ensuring that students understand what it takes to be successful in the online learning environment. "Online involves an equal to or greater time commitment than face-to-face," says Whaley. "Online is not a 'one size fits all' solution." Rather, he contends that the classes still need to be individualized to the student and to the local curriculum. While this sort of individualization is the beauty of online learning, it is also the challenge because it requires teachers and administrators who understand and are trained to optimize the learning environment to support student success. It also requires that students become acclimated to a new learning environment, and students must clearly understand what is expected of them in the online classroom.

Whaley also believes that education leaders and policymakers need to "get out of this mentality of having kids show up for 7.5 hours a day." He offers a different scenario where students have flexible options. For example, a science student could show up two days a week to complete lab work, while the rest of the work could be completed asynchronously in an online environment. "Instead of trying to squeeze a lab into 55 minutes, kids would be willing to come in for 1.5 to 2 hours for a lab if they can do the rest online."

Whaley also contends that educational leaders are just beginning to envision new educational paradigms. For instance, their district is currently envisioning how technology might shape the next high school to be built in the district. If online and blended learning options were widely available, district-wide, how might that free demands on physical spaces? Could students share the space at different times, rather than all students attending all week at the same time?

While Whaley admits that those kinds of leaps are difficult for many, most educators recognize that the online learning environment is already pulling students away. Educational leaders will need to develop a vision to incorporate online and blended learning in their local schools and districts, or someone else will develop the vision in their stead. "We need to meet kids where they are," says Whaley, and for Lee's Summit, that includes learning in a digital environment.

Springfield Public Schools

Springfield Public Schools is the largest accredited district in the state, serving 25,000 students. In the summer of 2012, the district initiated an online learning program with a commitment to develop courses in-house. In their first year, they piloted one course in the winter of 2013 with 20 students. They currently offer five courses and have plans to expand by about four courses per year.

Springfield's courses are asynchronous, but the students must begin and end with the district's semester calendar. The district allows students to take up to three online courses (or six half credits) in their high school careers, though Nichole Lemmon, Coordinator of eLearning, anticipates that this allotment will increase and the district is likely to eventually require an online course for graduation.

Springfield students are allowed to take one credit outside of the school day during the school year. During the school day, students can take as many online courses as they choose or to the limit that the school allows. As noted, though, the district currently only accepts six half credits total for online courses during a student's high school career. Most students are taking just one online credit.

While the pressure is on for students to take the course as part of their school day in order to receive reimbursement from the state, some schools are allowing students to arrive later or leave early to take the

course. This is a decision left to the school principals, and Lemmon reports that currently two of Springfield's five high schools allow this kind of flexibility.

Lemmon reports to an e-Learning Advisory team, which provides support in the areas of policy and procedure development, monitoring student data, and making course recommendations.

Course providers

As evidence of Springfield's commitment to create courses in house, the district now employs two fulltime course developers. Without including salaries of the developers, Springfield estimates initial course development cost at around \$500 versus \$3,000 to purchase. Lemmon reports that after reviewing several courses, district leaders felt they could do a better job developing their own courses and gain more local buy-in in the process.

Springfield is staunchly committed to district-created courseware. In fact, the district has implemented a policy that requires students to take a district course versus going outside to buy a purchased course. The only exception is for incoming students, and Springfield currently only accepts online credits from three approved vendors: Mizzou Online, Brigham Young University's Independent Study Online Courses, and MoVIP. While the district will accept credits from these programs, it will not pay for them. Springfield's motto for course development is "same course, different mode," with the idea being that their face-to-face and online courses provide the same content and quality, with instructional delivery being the only difference.

Future development is currently being planned, a process that goes through several channels, including the e-Learning Advisory Team, area principals, and area superintendents. In addition, Springfield employs student and parent focus groups, invites counselor input, and monitors data about what courses students are purchasing outside of the school district in order to weigh development decisions.

In addition, Springfield is adapting the five courses they have already created to make them suitable for credit recovery. Their goal is to eventually replace the credit recovery courses they are currently using from Plato (Edmentum).

Student demographic

Springfield offers courses to all students in their district, based on seat availability. Program leaders plan to eventually offer courses to students outside of the district but they want to ensure that their program is well underway before doing so.

Enrollments

Springfield started off with a pilot in January of 2013 of 20 students in its Personal Fitness class. In summer of 2013, they enrolled 91 students. Growth has been considerable, with the only limit being the number of sections they offer. With two sections per course, they can currently handle 66 students per course for a total of 330 for the five courses they are offering. The program currently has a waiting list. Together with summer school enrollment, they will serve 421 students for 2013-14.

"It's growing much faster than we anticipated," says Nichole Lemmon, Coordinator of eLearning for Springfield, demonstrating there is a demand for online courses in the district. "Counselors send kids, but kids can also self-select." Essentially, counselors can see the students' course selections, but counselors do not play a gate keeping role.

Courses

Springfield currently offers five courses; a catalog is available at http://www.springfieldpublicschoolsmo.org/pages/SPSMO/About/Departments/Information_Literacy/Our_Services/eLearning/Current_Course_Offerings.

- Personal Finance: 1/2 unit, Gr.11-12
- Physical Fitness: 1/2 unit, Gr. 10-12
- World Geography: 1/2 unit, Gr. 9-12
- Digital Communications: 1/2 unit, Gr. 9-12
- Liberty and Law: 1/2 unit, Gr. 11-12

Funding

As with all other districts, Springfield is not reimbursed from the state unless students take the course as part of their daily course load. However, the district budgets and pays for students to take courses outside their maximum 7.5 FTE allotment. "We are an IB district," says Lemmon, "so this gives students a chance to take courses in the evening to catch up, accelerate, or fit in more elective activities."

Conclusion

Lemmon echoes the frustration of other education leaders. "We are fighting the idea that all students need to be in school for 7.5 hours a day," she says. She also fights the idea that online learning should only be used as a drop-out prevention program that schools use for their most troubled kids.

Lemmon points to an inherent generational challenge in the expansion of e-learning opportunities for kids. Though she is only in her thirties, she already sees gaps between her comfort level in digital environments and the comfort level of today's K-12 students, "We are non-digitals leading digital natives, so that's a big part of the problem." Her vision is to see online learning be utilized in new, creative ways. "Our IB building is very overcrowded, along with another school that is not IB; but another school in the district has no overcrowding." A blended approach could help alleviate some of these issues, but we need leaders with vision. It might take parents stepping up to ask for that more often."

Reeds Spring School District

The Reeds Spring School District online program was a result of the 1:1 initiative, which found the support and enthusiasm of the district's superintendent. The 1:1 initiative launched in January 2013, and at the same time Jane Renner, former Director of Curriculum, launched the beginnings of an online program for the district.

The district began a blended learning Personal Finance class in the winter of 2013. Students attended class daily, but coursework was asynchronous and could also be accessed outside of school. Reeds Spring purchased the course from NKCS eCampus, using Blackboard as the learning management system (LMS).

In the summer of 2013, the district offered Personal Finance, Health, and Short Story. They had about 50 students take advantage of the opportunity. The first day was a face-to-face meeting and Blackboard orientation, but the rest of the course was completely online and asynchronous. The only exception was fixed dates by which chapter tests had to be completed. Three teachers monitored student progress. Renner reports that the program saw more success that its normal brick-and-mortar summer school for two reasons. First, it ran for a longer time period, through the third week of July versus only in June. Second, the online program provided flexibility so that even when students needed to travel for family vacation or other summer activities, they could work their studies around personal and family plans.

Reeds Spring offered Health for fall 2013, and they are offering Personal Finance in spring 2014. Foreign language courses are also available. The district is finding the online courses to be particularly beneficial for students who are trying to fit academics, electives, and after-school activities into their schedules.

Reeds Spring has visited with area schools in Branson, Ozark, and Nixa to talk about forming a consortium. Renner officially retired in summer of 2013, but she continues to provide supervision and direction for their online initiative on a contractual basis.

Courses

The district has developed two courses: Health and Short Story. In addition, they purchased a Personal Finance course, and students may take any foreign language through Rosetta Stone.

In addition, Reeds Spring purchased several licenses for Rosetta Stone foreign language courses. As a pilot, the district allowed several students and faculty members to take the course for free in summer 2013. Some students completed almost a whole year in the summer. One counselor made it through almost two years. The district is using the Rosetta Stone Spanish course for one of their Spanish sections during school year 2013-14.

In August 2013, the district offered the Rosetta Stone courses as part of the exploratory classes for middle school students. Each quarter, students can choose another foreign language, or they can stay with the one started.

The district is planning to expand course offerings, according to student need. They are monitoring student demand to identify courses, such as Personal Finance, that are graduation requirements that tend to fill up fast. They are currently considering purchasing Springfield's Personal Fitness course. Because their Short Story course went over so well, they are also looking at providing a course to strengthen reading and writing skills.

Enrollments

The district has about 105 enrollments right now in total due to limited offerings. Reeds Spring allows public school students to enroll in courses as space permits.

Student demographic

Currently Reeds Spring's online program only serves public school students.

Funding

Funding is from the district. Students must take an online course as part of their 7.5 classes a day. The district does allow students to take the course during the first or last period and arrive late or leave early, as long as the course is part of the student's maximum course load. Summer school students are allowed to take the courses anytime they wish.

Conclusion

Reeds Spring, Springfield, Ozark, Nixa, and Branson provide another example of adjacent districts, such as those in the North Kansas area, who may be able to greatly expand their offerings and support one another by forming a consortium. Course development demands resources that small districts cannot often provide, at least for a comprehensive list of offerings. By pooling resources, districts like Reeds Spring can offer those graduation requirements that often leave students ensnarled in scheduling conflicts. Shared resources also allow districts to expand their course offerings, in terms of electives, credit recovery, and advanced courses.

CPS Virtual High School

Courses at Columbia Public Schools (CPS) Virtual High School are offered in a variety of formats. Some are offered in asynchronous mode, where weekly assignments with fixed due dates are required, though students may work on their courses any time and any place. Some classes are offered as independent study, and they will follow either a semester schedule, where start and stop dates follow the district calendar, or a personalized schedule, where students design their own pacing guide and instructors monitor progress to keep students on pace.

Course providers

A total of eight courses created by the district are offered on the Angel platform as "CPS Angel" courses. Courses include electives such as "Creative Writing in a Digital World," "Research and Science Writing," or "C++ Programming." CPS Angel courses are asynchronous, but assignments are due at specified weekly due dates. Students are also required to post to discussion boards, blogs, and wikis, and one group project per course is common.

In addition to courses created by the district, CPS Virtual School also uses two commercial vendors, Aventa and Apex, to provide a full slate of course offerings. Through these providers, CPS Virtual High School is able to provide all core courses, electives, world languages, various technology courses, AP[®] courses, courses for credit recovery, and much more.

Courses

The program offers courses in three platforms: courses developed in-house and delivered on Angel, as well as Apex and Aventa courses. A full catalog is available at http://www.columbia.k12.mo.us/vclass/index.php/courses.

Other programs

There are numerous consortia operating within Missouri, sharing resources and joining forces for a variety of reasons, including distance learning. For some, the distance learning courses they offer are strictly delivered via interactive video (ITV), but online and blended learning options are growing. Some of these consortia operate from or in partnership with higher learning institutions, while some universities offer programs on their own.

The **T.R.E.N.D. CONSORTIUM** is comprised of 22 schools in southeast Missouri, operating from Three Rivers College. The program offers ITV resources to member schools, along with several dual enrollment (DE) offerings. Currently, only two DE courses are fully online, though other courses have been formatted for online delivery. Online course offerings are driven by student demand and district needs and, thus, vary from one year to the next.

The **NORTHWEST REGIONAL EDUCATION CONSORTIUM** coordinates ITV services for member districts, but in partnership with **NORTHWEST MISSOURI STATE UNIVERSITY**, they also offer online courses, including College Algebra, Statistics, Computer Information Technology, and Medical Terminology. The university's catalog of 21 dual credit courses is mostly offered in a face-to-face environment. However, a blended model has been adopted for some courses, using eCollege's learning management system to have students submit assignment, take quizzes and finals, view or make presentations, view videos, and find resources. Program leaders expect to see online courses increase.

The **WESTERN MISSOURI EDUCATIONAL TECHNOLOGY CONSORTIUM (WEMET)** includes 15 districts and operates in conjunction with the **UNIVERSITY OF CENTRAL MISSOURI.** Currently, their program lists nine online courses, including Chemistry, Intro to Criminal Justice, Composition I, Physics, Psychology, Spanish I and II, and more.

MISSOURI STATE UNIVERSITY offers courses that high school students can take on campus, including online and blended courses. University advisors typically recommend, though, that high school students take seated courses first before attempting a blended or online course.

The **MISSOURI SCHOOL BOARDS ASSOCIATION ONLINE CONSORTIUM**, in cooperation with the College of Education at the University of Missouri and MOREnet, offers 28 online courses, developed either by the university or by Mizzou K-12 Online (offered at a discount to member districts). Courses include AP[®] offerings, along with Latin, Personal Finance, Digital Photography, Anatomy and Physiology Honors, Algebra, and more.

Section

Existing Missouri Policy

Online learning in Missouri is dictated by a variety of policies, or the lack thereof. Current virtual education policy can now be found in Chapter 162.1250 (2011)¹ and allows part-time or full-time students to take virtual courses within or without the school facilities. Supplemental online courses are allowed, although the funding structure does not encourage it as an option for students. Fully online schools are technically allowed, however, they are not allowed to enroll students across district lines (for the most part). The exception is for students in unaccredited districts, who may choose to enroll in another district. These policies and others affecting a student's access to digital options are detailed below.

Interviews with program administrators suggest that significant confusion about policies related to online and blended learning exist across Missouri.

Online learning policy

Online learning policy in Missouri originated with SB912 (2006),⁹ which required the state board of education to establish a virtual public school for students in grades kindergarten through 12 by July 1, 2007; in response, the Missouri Virtual Instruction Program (MoVIP) was established. The legislation also determined funding for virtual classes, offering the following guidance about state aid distribution:

- The student maintained enrollment in the resident district.
- "Each virtual course shall count as one class and shall generate that portion of a full-time equivalent that a comparable course offered by the school district would generate."
- For each virtual class taken by a student, the virtual school receives 85% of the student's funding, and the resident district receives 15% of the student's funding. [This changed with SB291 (2009).]
- Schools may not claim more than one full-time equivalent (FTE) for the purposes of state aid.
- MoVIP "will comply with all state laws and regulations applicable to school districts, including but not limited to the Missouri school improvement program (MSIP), adequate yearly progress (AYP), annual performance report (APR), teacher certification, and curriculum standards."

SB912 also guided the state board of education and the department of elementary and secondary education (DESE) to ensure that multiple content providers are allowed in the state. This is being accomplished through MoVIP.

SB64 (2007)¹⁰ states that "a parent residing in a lapsed, or poor performing school district [one with provisional or uncertified status for two years or more] may enroll their child in the Missouri virtual school if the child first enrolls in the school district of residence. The school district shall include the child's enrollment in the virtual school in determining the district's average daily attendance. The board of the home district shall pay to the virtual school the amount required under current law to be paid for other students enrolled in the virtual school." Districts that are not accredited also are required to pay for student tuition.

SB291 (2009)¹¹ eliminated seat-time requirements for virtual education classes offered by a Missouri School District and allowed districts and charter schools to collect state funds for virtual classes. SB291 states "for purposes of calculation and distribution of funding, attendance of a student enrolled in a district virtual class will equal, upon course completion, ninety-four percent of the hours of attendance for such class delivered in the non-virtual program." As a result, districts can receive 94% of a student's proportional ADA. For example, if a student takes six classes through a district, one of which is online, the district will receive 100% funding for five classes and 94% funding for the online class.

The legislation requires the school board or their designate (superintendent or principal) to ensure that any online course complies with "the show-me curriculum standards and complies with state requirements for teacher certification."

- ¹⁰ SB64 (2007); retrieved November 18, 2013, http://www.senate.mo.gov/07info/BTS_Web/Bill. aspx?SessionType=r&BillID=136 and Missouri Revised Statutes Chapter 167 Section 121; retrieved November 18, 2013, http://www.moga.mo.gov/statutes/C100-199/1670000121.HTM
- ¹¹ SB291 (2009); retrieved November 18, 2013, http://www.senate.mo.gov/09info/BTS_Web/Bill. aspx?SessionType=R&BillID=683252 and Missouri Revised Statutes Chapter 162 Section 1250; retrieved November 18, 2013, http://www.moga.mo.gov/statutes/C100 199/1620001250.HTM

⁸ Chapter 162.1250: State funding for resident students enrolled in virtual program--calculation of funding--standards for virtual courses; http://www.moga.mo.gov/statutes/C100-199/1620001250.htm

⁹ SB912 (2006); retrieved November 18, 2013, http://www.senate.mo.gov/06info/BTS_Web/Bill. aspx?SessionType=R&BillID=39062 and Missouri Revised Statutes Chapter 161 Section 670; retrieved November 18, 2013, http://www.moga.mo.gov/statutes/C100-199/1610000670.HTM

It also offered 12 guidelines that school districts and charters must ensure are met by virtual providers, and allows a school district or charter school to contract with multiple providers of virtual courses or programs, provided they meet the standards. These standards are as follows:

- 1. The virtual course or virtual program utilizes appropriate content-specific tools and software;
- 2. Orientation training is available for teachers, instructors, and students as needed;
- 3. Privacy policies are stated and made available to teachers, instructors, and students;
- 4. Academic integrity and Internet etiquette expectations regarding lesson activities, discussions, electronic communications, and plagiarism are stated to teachers, instructors, and students prior to the beginning of the virtual course or virtual program;
- Computer system requirements, including hardware, web browser, and software, are specified to participants;
- 6. The virtual course or virtual program architecture, software, and hardware permit the online teacher or instructor to add content, activities, and assessments to extend learning opportunities;
- 7. The virtual course or virtual program makes resources available by alternative means, including but not limited to, video and podcasts;
- 8. Resources and notes are available for teachers and instructors in addition to assessment and assignment answers and explanations;
- 9. Technical support and course management are available to the virtual course or virtual program teacher and school coordinator;
- 10. The virtual course or virtual program includes assignments, projects, and assessments that are aligned with students' different visual, auditory, and hands-on learning styles;
- 11. The virtual course or virtual program demonstrates the ability to effectively use and incorporate subject-specific and developmentally appropriate software in an online learning module; and
- 12. The virtual course or virtual program arranges media and content to help transfer knowledge.

Missouri Virtual Instruction Program (MoVIP)

MoVIP is covered in depth in the Section 4, however, because it is a state program, it warrants attention from a policy perspective. Students have four funding options for attending MoVIP:

- Students may choose to pay tuition directly to the vendor; that amount varies.
- Medically fragile students may qualify for free tuition.
- If a student enrolls in a MoVIP class during a scheduled class period, the enrolling district will receive 100% of its state funding for that class rather. If a student enrolls in a MoVIP class outside of the scheduled school day, the enrolling district will receive 94% of its state funding for that class. The school district has the choice as to whether to allow the student to take the course, except in the instance outlined below.
- Per SB64 (2007), students in unaccredited districts may choose to enroll in a full-time virtual program through MoVIP.

In addition to the above legislation, the Department of Elementary and Secondary Education (DESE) issued guidance through 5 CSR 20-100.230¹² to establish policies and procedures for MoVIP. The rules state that:

- State appropriations will pay for no more than six virtual credits per school year for any one (1) student. A credit consists of two semesters of work for a school year.
- A school district cannot limit the number of credits a student may earn through MoVIP during a single or multiple school years.
- Students may be allowed to take MoVIP courses during the regular school day as allowed by local district policies.

The policy also dictates that MoVIP credits must be accepted by local school districts, and that MoVIP shall provide the services/accommodations set forth in a student's Individual Education Program (IEP) to enable a student to take the online courses offered by MoVIP.

The Missouri Virtual Instruction Program saw its funding drop from \$5.8 million in 2008-09 to \$4.8 million in 2009-10; however, its funding was eliminated mid-year, forcing it to charge tuition to all students in the spring semester. As a result, its enrollments dropped 83% from 15,810 in 2008-09 to 2,900 in 2009-10, and to 1,623 course enrollments in SY 2012-13. It received \$390,000 to serve students in SY 2012-13.

Charter schools

Charter schools are allowed, although restricted, across the state as of 2012. There are no virtual charters in Missouri. While virtual charters are allowed under Chapter 162 of Missouri's education statutes, they are not allowed to enroll students from across district lines because Missouri does not allow open enrollment.

Charter schools are overseen by sponsors who are authorized by the Department of Elementary and Secondary Education,¹³ the details of which are outlined in MRS 160.400. Sponsor expenses, in most cases, are defrayed by receiving a payment equal to 1.5% of the amount of state and local funding to be distributed to the charter school. Charter schools must organize as a nonprofit in the state of Missouri.

Missouri has allowed charter schools in the urban districts of St. Louis and Kansas City — although not statewide — since 1998. According to the Missouri Charter Public School Association:¹⁴

Missouri was the 34th state to authorize the creation of charter schools. Charter school legislation in Missouri was passed to address the failure of urban school districts. The State of Missouri paid a total of nearly \$2 billion to the Kansas City School District, under a 1996 desegregation agreement, to improve student achievement and bring about desegregation in the school population. The St. Louis City Public Schools were also targeted for the same reasons and received similar funding during the 1970s, 80s, and 90s. Over \$3 billion in combined funding could not help the Kansas City or St. Louis School Districts retain accreditation during this time period. Dissatisfaction with these outcomes resulted in the passage of the Missouri charter school legislation.

¹² Department of Elementary and Secondary Education Rules –5 CSR 20-100.230; retrieved November 18, 2013, http:// www.sos.mo.gov/adrules/csr/current/5csr/5c20-100.pdf

¹³ DESE Sponsor Resources; retrieved November 20, 2013, http://dese.mo.gov/divimprove/charterschools/ sponsorresources.htm

¹⁴ Missouri Charter Public School Association, The Role of Sponsorship; retrieved November 20, 2013, http://www. mocharterschools.org/wp-content/uploads/2012/03/Missouri-Sponsorship.pdf

In 2012, Missouri passed legislation to allow for charter school expansion throughout the rest of the state.¹⁵ According to the Center for Education Reform,¹⁶ the following entities may sponsor charter schools in Kansas City and St. Louis, or in unaccredited school districts statewide:

- Missouri Charter Public School Commission, a statewide independent entity;
- community colleges; or
- a four-year public or private college or university located in Missouri with an approved teacher education program that meets regional or national standards of accreditation.

Charter schools are allowed in districts that have been provisionally accredited for three years, except in districts provisionally accredited because of financial stress where chartering is decided upon by the state board of education.

Accredited districts may sponsor charter schools as well.

Funding for charter schools in Missouri is comparable to that of traditional public schools. Funds are passed through the local education agency or district, and so receive most state and local funding categories, including subcategories each student is eligible to receive. They are not eligible to receive facilities funds.

There is only one cap that applies to some charters: in districts that serve over 1,555 students, no more than 35% of a district's students may enroll in the charter.

The state legislature considered legislation in 2011 and 2012 that specifically would have allowed students to enroll in virtual courses or programs outside of their district, but it did not pass. (Students who experience "transportation hardship" due to travel time or distance may in some cases be assigned to other school districts, but the only explicit virtual enrollment option is through a limited number of seats with MoVIP.)

¹⁵ SB576 (2012); retrieved November 20, 2013, http://www.senate.mo.gov/12info/pdf-bill/perf/SB576.pdf and Missouri Revised Statutes Chapter 160 Section 400; retrieved November 20, 2013, http://www.moga.mo.gov/statutes/C100-199/160000400.HTM

¹⁶ For more information see the Center for Education Reform; retrieved November 20, 2013, http://www.edreform.com/ wp-content/uploads/2013/01/MO-Charter-Law-2013.pdf

Missouri School Improvement Program and district accreditation

The Missouri School Improvement Program and district accredidation is now entering its fifth iteration and is thus known as MSIP 5. The history of the current school improvement process goes back to the early 1990s, where there was a shift away from analyzing districts according to their resources and a turn towards more comprehensive assessment measures and a continuous improvement model. Performance standards and indicators now include:

- Missouri Assessment Program (MAP) tests
- ACT, SAT, Compass, and Armed Services Vocational Aptitude Battery (ASVAB) scores
- Successful completion of advanced courses
- College placement
- Graduation rates
- Attendance rates
- Subgroup achievement

Through the various iterations of MSIP, DESE has fine-tuned the school improvement process in order to identify the support systems and interventions required to help struggling schools and districts succeed. The final authority for accreditation classifications lies with the State Board of Education.

MSIP 5 will not officially be fully implemented until 2015, but the State School Board can opt to reclassify a district that either improves or declines sharply in performance before that time. Districts also have the right to request reclassification under MSIP 5 before 2015. The transition process to MSIP 5 is illustrated below¹⁷:

ASSESSMENT DATA	APR RELEASE	CLASSIFICATION	SB576
2011-12	4th Cycle MSIP – 2012 APR (summer 2012)	Board Classification for all remaining 4th Cycle districts	
2011-12	MSIP 5 – 2012 APR (fall 2012)	Draft MSIP 5	
2012-13	MSIP 5 – 2013 APR (summer 2013)	Year 1 MSIP 5	Year 1 APR
2013-14	MSIP 5 – 2014 APR (summer 2014)	Year 2 MSIP 5	Year 2 APR
2014-15	MSIP 5 – 2015 APR (summer 2015)	Year 3 MSIP 5 Board Classification for all districts based on MSIP 5	Year 3 APR

The 2013 APR, published in the summer of 2013, is the first MSIP 5 APR that will be used to inform district classification recommendations. According to the DESE website, "three APRs, reflecting three years of performance data, will be used for classification recommendations. This means that for the vast majority of

¹⁷ http://dese.mo.gov/qs/MSIP5.html

districts, the department will review a district's 2013 APR, 2014 APR, and 2015 APR for MSIP 5 accreditation classifications made in fall of 2015."

Currently, 11 districts have been issued a "provisional" accreditation status. Three districts have been declared unaccredited, including Kansas City, which represents 16,831 students. Hickman Mills, a south Kansas City district, was provisionally accredited, bringing the total of Kansas City students impacted to 23,180. (See Appendix A for a list of provisionally accredited and unaccredited districts.) The other two unaccredited districts, Normandy and Riverview Gardens, are in St. Louis County along with St. Louis City and Jennings. Together, these four districts represent 40,360 students. Of the 14 districts receiving provisional or unaccredited status, Kansas City and St. Louis students represent 96% of the students impacted by poor or unacceptable performance ratings.

MSIP 5 standards, which went into place in 2013, raise the bar even further. Some estimate that there would be as many as five unaccredited and 22 provisional districts if MSIP 5 standards were applied today. While there is time and hope that districts will increase their scores, a grave truth remains: Students are caught in the middle and will fall through the cracks without options for quality learning while districts work through the improvement process to meet standards, a process that will not happen overnight.

The families of these students are left with limited choices: continue to attend schools in districts that are struggling, bus students miles away to a neighboring district, or pay to attend a private or virtual school.

Accreditation challenges

The law requires unaccredited districts to foot the bill for students who opt to attend a neighboring accredited district, or choose to take an online class through MoVIP. That law has been the source of lawsuits and much contention in both sending and receiving districts. For example, at the start of the 2013-14 school year, 2,640 students opted to be bussed from unaccredited districts in St. Louis County to neighboring districts, up to 35 miles away. The policy compels receiving districts to accommodate a large influx of new students with minimal lead time.

The fiscal loss to unaccredited districts is so severe, in fact, that bankruptcy is a real threat. In fact, the state school board has officially requested some \$6.8 million from legislators to save the Normandy district from bankruptcy. Normandy was already struggling, in part because it took in students from the unaccredited Wellston district in 2007 under the same transfer law. Wellston was eventually dissolved by the state. Today, Normandy will pay a third of its budget to external districts to receive transfer students. Since some of Normandy's neighboring districts are also facing the possibility of losing accreditation, some are worried that the current transfer policy is not only unsustainable, but may also cause a "domino effect" of plummeting struggling districts into bankruptcy.

The transfer law has been hotly debated in the press, in education and policy circles, and in the courts. On December 11th, 2013, the Missouri Supreme Court reaffirmed an earlier ruling that upheld the law in a St. Louis case. The court acknowledged that the law presents difficulties, but it is not unconstitutional. The onus is now back on policymakers and lawmakers to come up with solutions that give students options without forcing districts into bankruptcy.

Receiving districts are also struggling to accommodate a large influx of students with limited notice. The entire process can be stressful and unnerving to students, families, educators, and administrators in both districts.

While online and blended learning are not a panacea for such complex challenges, online learning options can help give Missouri's families options outside of private school, home schooling, or transferring to districts that may be miles from home.

Funding

Each district defines a full-time student. The state will fund as follows:

- For districts that operate 174 days or more: 7 hours per day.
- For districts that operate between (minimum) 142 to 174 days: the state will fund up to 8 hours per day.

The state will not fund beyond one FTE, even though the FTE may vary from district to district. Anything beyond one FTE the district must fund itself, and some districts are doing exactly that, such as the NKCS eCampus.

SB291 (2009) eliminated seat-time requirements for virtual education classes offered by Missouri school districts and allowed districts to collect state funds. It stated "for purposes of calculation and distribution of funding, attendance of a student enrolled in a district virtual class will equal, upon course completion, ninety-four percent of the hours of attendance for such class delivered in the non-virtual program."

The law also states that course completed is calculated in two increments, 50% completion and 100% completion (the details of which are not included in the legislation), at which points the state distributes the allotted funding to the school district of charter school. Districts can only be reimbursed if the student taking the course is enrolled in the district. The amount received depends on three categories of students:

- 1st category: If the student is taking the course(s) at home:
 - District is reimbursed at an attendance rate of 94%, which is the state's average attendance rate.
- 2nd category: If the student takes the course(s) at school:
 - The student's actual attendance is used to figure the amount to be reimbursed.
- 3rd category: If the student qualifies as a medically fragile student:
 - The state pays the full tuition.

Funding examples

If a student is in the school building and taking a virtual course in the computer lab, then the school can count the student's attendance as they would any other face-to-face student.

If the student comes to the local school and takes physical education, art, and music for the first three hours each day and attends 96% of the time, the school would count the student's attendance at 96%. If that same student goes home after third hour and takes virtual courses at home, the school can count the student's attendance at 94%, which is the state average.

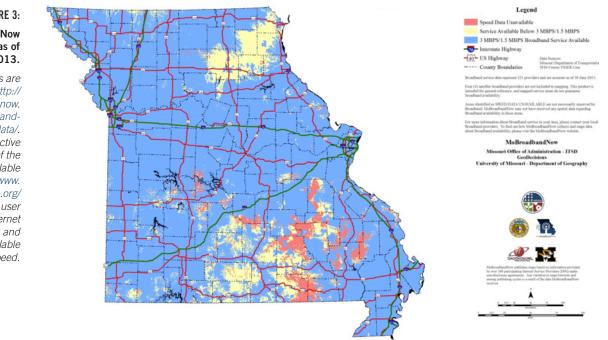
While various initiatives on funding have been proposed, the current model is the one the DESE assumes will be in place for the foreseeable future.

Broadband access

Access to high-quality online content, whether for a fully online class or for the online component of a blended learning class, typically requires a high-speed Internet connection that must be available to students both in school and at home. Dr. Ray Patrick, the Executive Director of the Missouri Association of Rural Educators, noted that, "It is the state's responsibility to make sure that all schools have the technological capacity to make those options available to students." This is particularly true in light of the state's move to adopt the Smarter Balanced online assessments aligned with the Common Core State Standards by 2015.

Interactive video (ITV) has been used by rural districts for many years to make classes available to students in multiple locations, slowing the adoption of online courses in some areas because there was a reasonable alternative for some students. However, as the state moves toward the adoption of online state assessments offered by the Smarter Balanced Consortium, it is critical for schools and districts to have adequate Internet connectivity. It will then be possible to make even more course options available to all students, not just those who are willing and able to travel to an ITV location.

Statewide efforts to improve broadband access are being coordinated by MoBroadbandNow, a five-year, publicprivate initiative established through executive order in 2009¹⁸. Multiple cooperative partners are working to expand and enhance broadband accessibility and adoption to all areas of the state, from 79% as of January 2009 to at least 95% by the end of 2014. It relies on federal funds under the 2009 American Recovery and Reinvestment Act (ARRA). Teams are working in 19 regions across the state, submitting data to produce semiannual interactive maps and reports on the status of other broadband infrastructure projects (see Figure 3 for a coverage map).



¹⁸ More about the MoBroadbandNow initiative can be found at http://mobroadbandnow.com/.

MoBroadbandNow coverage map as of June 2013.

Additional maps are available at http:// mobroadbandnow. com/maps-anddata/. A beta, interactive version of the map is available at http://www. mobbdnowmap.org/ that allows the user to search for internet service providers and identify the available connection speed. Other networks and organizations are working to enhance network access across the state. The Bluebird Network recently expanded its coverage area, working in particular across the northern half of the state (see Figure 4). It is focused on building connections to schools and libraries, which is important, but only half the battle. In its 2011 survey, the Missouri School Board Association (MSBA) asked respondents to rate from 1 (strongly disagree) to 5 (strongly agree) the extent to which a series of statements applied to online courses. When asked to rate if, "Students do not have adequate access to the technology or Internet connectivity to complete online courses at home," 85 of 167 respondents rated either agree or strongly agree (See Appendix C for the full MSBA report). In addition, there are still many schools and districts around the state that still will not have access even when the Bluebird Network's current project is complete.





MORENet is a statewide research and education network that was established in 1991 at the University of Missouri Columbia. It connects schools, public libraries, academic institutions, and state agencies to an advanced, high-speed network as well as staff training, technical support and electronic resources.

Another bright spot is the recent selection of the Kansas City metropolitan area to receive GoogleFiber. This area is in the process of receiving fiber optic connections that are one hundred times faster than broadband.

Missouri has done much to improve broadband access throughout the state, however, there is still much work to be done, particularly in terms of access for all students at home.

¹⁹ MORENet, http://www.more.net

Missouri online learning policy summary

The policy landscape has evolved over the years; following is a summary of the current online learning policy in Missouri as of January 2014.

All virtual schools / courses:

- Must meet state curriculum standards, and abide by state and federal school requirements.
- Are not required to abide by seat-time requirements.
- Are reimbursed at 94% of the prorated average daily attendance (ADA) for online courses. If all courses are taken online, the school receives 94% of full-time ADA. If five courses are taken face-to-face and one course taken online, five courses are reimbursed at 100% and one course is reimbursed at 94%.
- Can be reimbursed by the state for no more than six credits per year.
- Must make orientation courses available to students and teachers.

Polices specific to full-time online learning note that:

- District virtual schools can serve in-district students with a fully online education.
- Missouri does not allow for open enrollment, so in general students may not enroll across district lines.
 - The primary exception is that students in unaccredited districts may enroll across district lines.
- No virtual charters are authorized; while they are allowed by law, they would not be allowed to enroll students from across district lines.

Policies specific to supplemental online learning state that:

- It is allowed by law; districts must accept credits offered via MoVIP providers.
- Very little funding is available for MoVIP courses.
- Schools are reimbursed at 94% of prorated ADA for classes taken online and not from school.
- Online classes taken from school during a scheduled class period are reimbursed at the same rate as face-to-face classes.
- Some schools make agreements with neighboring districts to allow students to take supplemental classes across district lines, but state policy does not require districts make online classes available. The states surrounding Missouri offer a variety of digital options to their students.





Competitive Landscape





ARKANSAS has a state virtual school, Arkansas Virtual High School (AVHS), which relaunched in school year 2012-13 as Virtual Arkansas.* It serves online supplemental courses to member districts of the Arkansas Distance Learning Consortium (ARDL). Act 1280 (2013) implements a new digital learning provider approval process and puts in place a statewide online learning requirement beginning in SY 2014-15. The ARDL consortium served 12,000 students in school year 2012-13 with a variety of synchronous and asynchronous courses. Courses are only available to students in member districts, which pay a \$2,500 annual membership fee to schedule courses with any of the state-funded providers. There were 180 such districts as of August 2013, about three quarters of the districts in the state. The fee allows unlimited enrollment on a first-come/first-serve basis. In addition, the consortium streamlines policies and procedures statewide, coordinates a master schedule, and centralizes billing for school districts. ARDL includes five providers who serve a range of students in grades K-12.

There is one fully online statewide charter school, the Arkansas Virtual Academy (ARVA), which served 499 students in grades K-8 in school year 2012-13; its cap has been raised for school year 2013-14, allowing it to serve up to 3,000 students.

* Virtual Arkansas; retrieved November 19, 2013, http://virtualarkansas.org/index.php



ILLINOIS has a state virtual school, Illinois Virtual School (IVS), and several district-level online and blended schools, although no statewide fully online schools. HB494 (2013)* amends the Charter Schools Law of the School Code to establish a one-year moratorium on charter schools with "virtual-schooling components" through April 1, 2014. The moratorium does not apply to a "charter school with virtual-schooling components existing or approved prior to April 1, 2013." A group of districts in the western suburbs of Chicago are developing a consortium to offer supplemental and fully online options to students in their districts.

* HB494; retrieved November 19, 2013, http://www.ilga.gov/legislation/publicacts/98/ PDF/098-0016.pdf



IOWA has two partnering supplemental statewide online programs, increasing district-level online learning activity, one community college offering high school credit recovery, and its first two fully online schools, Iowa Connections Academy and Iowa Virtual Academy, which opened for school year 2012-13. The Iowa Connections Academy served 235 students in grades K-12, and Iowa Virtual Academy served 67 students in grades K-6 in school year 2012-13. Iowa Learning Online (ILO), the state virtual school run by the Iowa Department of Education (IDOE), offers a variety of synchronous and asynchronous Internet, video-based, and blended courses. It started in summer 2004 and offers courses in grades 9-12 (students in grades 8-12) with set start/end dates and accommodations for students needing slower or faster pacing. ILO had 627 course enrollments in school year 2012-13, a 27% decrease from the previous year. Some of the program's courses in science and math are offered via the statewide video-based Iowa Communication Network. Additional courses are offered by participating Iowa school districts, with ILO providing support for promotion, registration, and any associated Iowa Communications Network fees.

KS

KANSAS has 88 full-time virtual schools and programs approved by the Kansas State Department of Education (KSDE): 13 full-time virtual schools, 67 district/ building programs, and eight service center programs that collectively cover all elementary through high school grade levels. All schools and programs are approved for full-time enrollment. In school year 2012-13 the state counted 4,689 fully online K-12 students and an additional 1,220 taking supplemental and/or blended options. Online elementary and middle schools in small, rural communities often serve fewer than 100 students, with some exceptions, e.g. — the Lawrence Virtual School, the largest virtual school in the state.



KENTUCKY was one of the first states to open a state virtual school, originally Kentucky Virtual High School, in 2000. That closed in 2012; it last served 1,700 students in school year 2011-12. Students are now directed to the Kentucky Virtual Campus for K-12, which guides students to three providers that offer supplemental and fully online options. The largest provider (and one of the largest in the country) is Jefferson County's JCPSeSchool; it served 17,700 course enrollments in grades 6-12 in a competency-based curriculum in school year 2012-13. It offers end-ofcourse exams five times a year. Barren Academy of Virtual and Expanded Learning (BAVEL) served 310 students and 862 total course enrollments in school year 2012-13; students must reside in a district that has a non-resident agreement with Barren County. Kentucky does not have inter-district choice, charter schools, or charter school legislation.

NE

NEBRASKA There is little online learning activity happening in Nebraska, although students across the state participate in classes via interactive video, and increasingly, teachers and schools across the state are blending technology into the classroom through the state-led BlendED initiative. The University of Nebraska High School enrolls an average of 2,600 students (most of whom are private pay, with some paid by the district) in online courses in an open enrollment system. The Nebraska Virtual Academy is a consortium of schools offering blended courses through Moodle and videoconferencing; it reported 50 students from 10 different districts taking courses in school year 2012-13. Omaha Public Schools (OPS) eLearning, which initially was designed to meet the needs of credit recovery students in grades 9-12, has evolved into a blended learning program for all students.

OKLAHOMA has four fully online schools and two supplemental online programs operating statewide, as well as several district programs. The Oklahoma Department of Education reports 10,585 unique students took online courses in school year 2012-13 through 17 approved full-time and supplemental online providers; this number includes credit recovery and alternative education students. In June 2012, board rule* created the Oklahoma Supplemental Online Course Program (OSOCP) to establish a framework for school districts to offer supplemental online courses. That rule allows students to take up to five hours of supplemental online instruction at no cost to the student; funding is prorated to the prior year's per pupil expenditure.

Under the OSOCP, the board has approved 17 providers and seen an increase in unique students taking an online course. While each school district must adopt its own rules regarding the OSOCP, those rules must not deny a student the opportunity to enroll in supplemental online courses, although the district does have the final say in regard to choosing a provider. While each school district is responsible for paying each course provider, "payment to the provider will be based upon continued course enrollment and subsequent course completion."

* State Board rule; retrieved November 19, 2013, http://ok.gov/sde/sites/ok.gov.sde/files/ Rules-Ch15Sub34SuppOnlineCourses.pdf

TN

TENNESSEE There is relatively little online activity happening in Tennessee, although an increasing amount of blended learning activity. The first fully online school, Tennessee Virtual Academy, serves grades K-8 and reported 1,679 students in school year 2012-13. There are several district-run programs, including Hamilton County Virtual School, Memphis Virtual School, and MNPS Virtual School in Nashville, serving their own students with online and blended options. At least two fully blended schools exist in the state, Aspire Public Schools and Gestalt Community Schools. A state virtual school, the Effective Engaging E-learning Environment for Tennessee (e4TN), was funded through Enhancing Education Through Technology (E2T2) funds, but it lost funding and closed after spring 2011.

Depa in scl

OK

Section

Issues in Online Learning

Online learning has evolved over the last two decades to become a viable way for most students to learn – not just those whose needs were not being served adequately by a traditional education. This section will provide an overview of some of the myths associated with online learning, look at the evolution of blended learning and whether it is truly disrupting the current education system, and guide into a discussion of when online learning works.

Online learning: Myths and truths

It seems as if everyone has had an experience with some form of digital learning, and unfortunately many of these have been negative. While not all online experiences can be positive experiences — just as not all traditional education experiences can be positive — there are a variety of myths about high-quality online learning that are worth addressing:²⁰



Online learners work in isolation.



Most students say they know their teachers better and report higher levels of personalized attention than they would receive in a traditional classroom.²¹

High-quality online learning programs can provide a higher degree of interaction and personalization than can a traditional setting in which one teacher must simultaneously provide for the instructional needs of an entire classroom of students. 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. FLVS' live learning sessions allow students to interact with teachers and with their peers. "The Hub" is a resource for students to meet with advisers.²²



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. They may participate in field trips, school clubs, afterschool activities, and even sports at their local school.

²⁰ Information in this section derived from Top Ten Myths about Virtual Schools from the International Association of K-12 Online Learning (iNACOL); retrieved November 19, 2013, https://www.inacol.org/cms/wp-content/uploads/2013/04/ TenMythsAboutVirtualSchools.pdf and Online Learning: Myths, Reality, and Promise from Digital Learning Now!; retrieved November 19, 2013, http://www.digitallearningnow.com/wp-content/uploads/2013/07/Online-Learning-Paper-.pdf.

²¹ U.S. Department of Education. "Evaluating Online Learning: Challenges and Strategies for Success." 2008. http:// www2.ed.gov/admins/lead/academic/evalonline/evalonline.pdf

²² Florida Virtual School. "Policy Brief 2013." 2013. http://www.flvs.net/areas/aboutus/Documents/2013_FLVS_Policy_ Brief.pdf



Online / blended teachers have easy jobs.



Online / blended teachers report that they work much harder and spend more hours online than in the classroom. 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, allowing teachers to focus more on direct instruction instead of classroom management. Many online teachers report developing better relationships with their online students than their face-to-face students due to the wide variety of ways they can communicate with and work with their online students. In addition, there is a growing trend in colleges of education to provide courses and even special program emphasis that specifically address the dynamics of on-line learning.



Online courses are easier for students than regular courses.



Most online courses are not condensed or easier versions of regular courses. They are aligned to rigorous state standards, require active participation, operate in settings under supervision of state-certified teachers, require students take state assessment tests, have attendance policies, and rely on competency-based academic progress requirements.



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.



Online learning is only for motivated and well-supported, tech-savvy students.



There is no typical profile of online learners. For some, it is the best option. For students with chronic health conditions that make attending a physical school difficult, it provides improved educational options. For families that move frequently, it can provide a stable education placement. Students who were being bullied can thrive educationally when they switch to the virtual environment. For many, online learning is the only alternative to a failure experienced in a traditional school setting. Online learning also offers a personalized pathway with more choices for students who feel disengaged in a traditional setting.



Students don't receive as much attention because online learning class sizes are larger.



In fact, there are more opportunities for students and teachers to interact with each other as needed throughout the day because online learning is not bound by traditional school schedules and bell schedules. Students can email or text their teacher at any time to receive one-to-one help and additional instruction. Now more than ever, advanced technology platforms are helping to serve just the right content to each student. As a result, teachers have more time to spend with students who are struggling or who need some extra assistance. In other words, students actually can receive more attention in online learning courses.²³



Online learning is a lot cheaper than a brick-and-mortar education.



The cost to deliver an education online is similar to the cost to educate students in a brick-and-mortar building. All high-quality education programs invest in teachers and other personnel, and these costs increase in a linear fashion with the increase in the number of students.²⁴ In addition, while online programs do not have some of the same costs associated with physical buildings and transportation, there are other costs unique to online schools including hardware, online services, and sophisticated technology platforms to deliver courses and content.

There is also evidence that online learning can increase productivity — meaning that for the same costs, the same outcomes can be achieved faster. In some cases, face-to-face instruction can even be cost prohibitive, e.g., where there is low demand for a course and a district can't justify hiring a teacher to serve a small number of students. This could include English language learners, those seeking advanced classes, or those seeking career and technology education classes. In this example, the district could save money by accessing an online course instead.



Online schools skim the easiest-to-serve kids.



Most states have enrollment laws that prohibit skimming of the highest-achieving

students. Charter school laws in particular require schools to use a lottery if interest exceeds open-enrollment slots. Online learning attracts a range of students — some who are gifted who are seeking to take more advanced subjects and some who have struggled in a traditional setting and are seeking the flexibility and individual attention online learning offers. Connections Academy, which served about 45,000 students across the country in school year 2012-13, reports that about 47% of its students nationwide qualify for free or reduced price lunch programs.

²³ Carbajal, C. "5 Cool Things about Online Education." Getting Smart. February 13, 2012. http://gettingsmart. com/2012/02/5-cool-things-about-online-education/

²⁴ iNACOL website: Frequently Asked Questions: Is online learning a lot cheaper than face-to-face instruction?. http:// www.inacol.org/resources/faqs/#cheaper



There is no accountability for virtual schools.



Online schools are held to the same levels of accountability as traditional schools are. In many states, virtual schools and providers are held to higher standards through performance-based pay. They are only paid the full amount per student once students successfully complete a course — a standard that no traditional school is currently held to, although many school funding experts believe they should be. In addition, online schools that are charters have the ultimate accountability mechanism — they can be shut down just as any poor performing charter school can. School districts or nonprofit charter holders can provide online learning. Both often contract with private providers — both nonprofit and for-profit — for content and instruction. The double accountability of a contract and a charter typically provides significantly more oversight than is present for traditional schools. Providers no matter if they are private, non-profit, or other school districts should be held to high quality standards. If they don't perform, they should not have the continued right to serve students.

Is blended learning disruptive?

Defining and characterizing blended learning continues to be a main challenge to educators, policymakers, and indeed the overall field.²⁵ The Clayton Christensen Institute for Disruptive Innovation has created a useful and often-cited definition of blended learning (see Figure 5), and Keeping Pace 2012 added to the characterization of blended learning. Still, there is a large grey area of classrooms, programs, and schools that are using some digital resources, but in ways that do not clearly fall into or out of the blended learning definition.

The Christensen Institute's May 2013 report — Is K-12 Blended Learning Disruptive?²⁶ — touches on the issue that we believe is among the most important topics in online and blended learning today: whether blended learning, as conceived and implemented in many schools, will be transformative, meaning will it produce significant improvements in student outcomes. The Christensen Institute (formerly the Innosight Institute), as it so often does, provides a valuable theoretical grounding to this question.

[Some] industries experience a hybrid stage when they are in the middle of a disruptive transformation. A hybrid is a combination of the new, disruptive technology with the old technology and represents a sustaining innovation relative to the old technology... The models of blended learning that follow the hybrid pattern are on a sustaining trajectory relative to the traditional classroom. They are poised to build upon and offer sustaining enhancements to the factory-based classroom system, but not disrupt it.

²⁵ This section comes from Keeping Pace with K-12 Online and Blended Learning: A Guide to Policy and Practice 2013 from the Evergreen Education Group. The full report is available for download at http://kpk12.com/reports.

²⁶ Clayton Christensen, Michael B. Horn, Heather Staker. (2013) Is K-12 Blended Learning Disruptive? (The Clayton Christensen Institute), http://www.christenseninstitute.org/wp-content/uploads/2013/05/Is-K-12-Blended-Learning-Disruptive.pdf

The report goes on to suggest ways in which education leaders can "foster disruptive innovation," starting with 1)"Create a team within the school that is autonomous from all aspects of the traditional classroom," and 2) "Focus disruptive blended-learning models initially on areas of nonconsumption."

Many educators and policymakers believe the first step toward a blended school is providing tablets to students, or electronic whiteboards to teachers. A review of the online and blended learning landscape, however, suggests it's not clear those steps are either necessary or sufficient precursors to a blended school. Here again, the Institute provides valuable commentary:

Blended learning is a formal education program in which a student learns:



A common misreading of the theory of disruptive innovation is that disruptive innovations are good and sustaining innovations are bad. This is false. Sustaining innovations are vital to a healthy and robust sector, as organizations strive to make better products or deliver better services to their best customers.

The theory doesn't suggest that these sustaining innovations are worthless, or bad. The key, however, is that the "best customers" benefit. These changes will largely serve students who are already doing fairly well. This is a good thing, but only to the extent that it does not keep the school from also creating truly disruptive, blended schools or classrooms as well, to serve the students who are most in need.

Does online learning work?²⁷

Educators and policymakers often ask the same question about any technology integrated in teaching and learning: does this technology work? This question is important because it validates the effort and costs of implementing the technology. K-12 online and blended learning follows this historical trend. Researchers have been interested in determining whether students can learn online or how instructors teach in such an environment.

Research from K-12 online and blended courses and schools have provided over a decade's worth of evidence to suggest that teaching and learning online can work. Studies that have shown positive outcomes include the

FIGURE: 5:

Definition of blended learning

The Christensen Institute

²⁷ This section is primarily pulled from Keeping Pace 2011, and relies heavily on research from Dr. Rick Ferdig of Kent State University, who has explored the research into effectiveness of online learning. More on his work can be found at http:// www.ferdig.com.

2009 U.S. Department of Education meta-analysis²⁸ (which included a large proportion of studies looking at post-secondary students) and the meta-analysis done by NCREL in 2004.²⁹ In addition, data from and studies of specific schools have shown positive outcomes. For example, Florida Virtual School received a positive review of its performance by the Florida TaxWatch Center in 2008.³⁰ The rating was based on extensive research into student achievement, demographics, AP[®] scores, and enrollment information. Virtual High School reports that, for the 7th consecutive year, the organization's scores outpaced the national average of 59% as reported by the College Board. On average, 70.7% of students taking a VHS AP[®] course earned a passing score of 3 or higher on their AP[®] exam, an 8% increase over their 2011 score. In addition, more than 50% scored a 4 or 5.³¹

However, just because online learning can work does not mean online learning will work. As with traditional brick-and-mortar education, there are many high-quality schools, and many that fall short. Many online teachers are well-trained, while others are not. Many online courses are steeped in current pedagogy, while others are not. Determining which courses, schools, and instructional models are creating positive outcomes remains a challenge for all educators and policymakers, but particularly for online providers because they can attract students from across entire states and therefore have the potential to work at a larger scale than most physical schools.

This finding is not unique to K-12 online and blended learning. Researchers studying educational technologies, ranging from educational radio and television³² to asynchronous online environments,³³ have all found evidence of relevant studies that have shown both positive and negative outcomes. Researchers often refer to this as no significant difference. In some cases, the studies might essentially be comparing apples and oranges; in other cases, there are both good and bad examples of the actual implementation. Therefore, the challenge accepted by many researchers is to change the question from "does online work?" to "under what conditions does online learning work?"³⁴ Some of the studies and findings in this category are noted in Table 2. Additional research on online and blended learning can be found at the Research Clearinghouse for K-12 Blended and Online Learning (http://k12onlineresearch.org), managed by the Michigan Virtual University and the International Association for K-12 Online Learning.

²⁸ Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies; http://www.ed.gov/rschstat/eval/tech/evidence-basedpractices/finalreport.pdf

²⁹ Cavanaugh, C. S., Gillan, K. J., Kromrey, J., Hess, M., & Blomeyer, R. (2004). The Effects of Distance Education on K-12 Student Outcomes: A Meta-Analysis; http://faculty.education.ufl.edu/cathycavanaugh/docs/EffectsDLonK-12Students1.pdf

³⁰ FloridaTaxWatch. Final Report: A Comprehensive Report of Florida Virtual School; www.scribd.com/doc/47743217/ Florida-Virtual-School-Report

³¹ The VHS Collaborative; retrieved November 19, 2013, http://thevhscollaborative.org/follow/news/vhs-collaborative-outpaces-national-2012-ap-exam-scores-over-10-percent

³² Salomon G. & Gardner, H. (1986). The computer as educator: Lessons from television research. Educational Researcher, 15 (1), 13-19.

³³ Swan, K. (2003). Learning effectiveness: what the research tells us. In J. Bourne & J. C. Moore (Eds) Elements of Quality Online Education, Practice and Direction. Needham, MA: Sloan Center for Online Education, 13-45.

³⁴ Ferdig, R.E. (August, 2010). Continuous quality improvement through professional development for online K-12 instructors. Keynote presentation at Michigan Virtual University's fifth annual Collaboration of the Minds conference. East Lansing, MI.

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K-12 online instructors practice skills that are: a) similar to those practiced by K-12 face-to face instructors; and b) similar to those practiced by post-secondary online instructors; but c) also practice skillsets that are unique to teaching and learning online at the K-12 level.	DiPietro, M., Ferdig, R. E., Black, E.W. & Preston, M. (2008). Best practices in teaching K-12 online: Lessons learned from Michigan Virtual School teachers. Journal of Interactive Online Learning, 7(1), 10-35.	
Many K-12 online and blended schools/programs are woefully unprepared for the collection and analyses of data that is required to truly inform and transform practice.	Ferdig, R.E. & Cavanaugh, C. (Eds.) (2011). Lessons learned from virtual schools: Experiences and recommendations from the field. Vienna, VA: International Association for K-12 Online Learning.	
Professional development (PD) for K-12 online instructors has shown promise when instruction is not just focused on pedagogical content knowledge, but also on building a community of learners who can examine their practice in process.	Ferdig, R.E. (2010). Continuous quality improvement through professional development for online K-12 instructors. Lansing, MI: Michigan Virtual University.	

In order to understand when online learning can work, it is helpful to look at the breadth of issues related to quality in online learning.

Quality in online learning

BACKGROUND ON QUALITY ASSURANCE AND RELATED ACCOUNTABILITY OUTCOMES IN ONLINE LEARNING

For decades, K-12 education has addressed quality issues mostly via inputs.³⁵ Inputs provide helpful criteria and indicate critical success factors in instructional design and managing programs — but in many cases these inputs have not been correlated with improved student outcomes. Examples of inputs-based quality assurance include policymakers requiring courses meet state content standards, textbooks going through extensive reviews, and requiring teachers to have licenses and receive professional development. While it might make sense to expect that a teacher who has received more professional development would be a better teacher for students, there are limited data available to determine if this is true or not.

With the passage of No Child Left Behind (NCLB) in 2001, the federal government for the first time mandated each state create its own assessment tools to measure grade-level proficiency in math and language arts, and its own accountability frameworks based on testing students to reach 100% proficiency (on its own standards in reading and math) by 2014. Only 11 states had previously set academic standards for reading and math and had them in place. Most states targeted at least a single assessment at the end of the year, to make an annual determination of student achievement based on the state's own standards.

³⁵ This section is primarily based on a comprehensive report released by the International Association for K-12 Online Learning (iNACOL) in October 2012: Measuring Quality from Inputs to Outcomes: Creating Student Learning Performance Metrics and Quality Assurance for Online Schools, available at: http://www.inacol.org/cms/wp-content/uploads/2012/11/ iNACOL_Quality_Metrics.pdf.

The resulting accountability framework and the once-a-year, end-of-year assessment regime, is flawed in many ways. The resulting state assessments provide an annual snapshot of school accountability, but it is often not enough to tell us about student performance and individual growth in the context of college and career readiness. Availability of data is still weak for a variety of reasons. Tests are limited in grade levels, there are many non-tested subject areas and grade levels, and the current tests lack the ability to assess critical thinking and higher order skills. Most importantly, these tests rarely tell us about how much the student has learned through the duration of a school, program, or learning environment. Two national consortia are developing assessments based on the Common Core State Standards; they are likely to provide better measures for English/ Language Arts and Math in certain grades but will not assess proficiency across all the K-12 grades and subject areas. End-of-year, annual summative assessments are snapshots of a single moment, and provide little to no data on the learning trajectory that the student is experiencing.

"Systems of assessments" are needed to understand quality assurance based on outcomes. These would include:

- data upon entry through adaptive assessments showing gaps or mastery of proficiency across the K-12 continuum,
- ongoing performance-based assessments where students demonstrate mastery exhibited in their work products,
- formative assessments reflecting student proficiency and skills, and
- summative "end of unit" or "end of course" validating assessments to provide a much more comprehensive set of data to understand student learning outcomes and growth trajectories.

In addition, rolling students' individual proficiency and standards-based outcomes data up to the school level could provide a better way to assess how well students are served by a school or program.

An increasing number of states are considering and moving towards new models of accountability that are focused on measuring student growth — how much a student has learned over a period of time. Still, the usual time period is the year between annual state assessments. Ideally, these growth models would measure real learning by individual students in a way that is easy to explain and analyze. The limitations of today's state systems mean that this ideal is rarely achieved. The result is that the information we have to evaluate schools does not paint a complete picture in most states. This applies to all schools, but has specific implications for online schools.

Online schools are also challenged by a single measure end-of-year test. School accountability that judges students by age-based cohort groups, or by meeting percentiles of proficiency rather than demonstrating proficiency at a standards-based level, makes it very difficult to understand the success of schools. Schools may be moving students toward proficiency and mastery at accelerated levels of individual student growth (which will be discussed in depth later in this section), especially for students who have been behind or ahead of grade level.

THE CHALLENGE FOR POLICYMAKERS AND EDUCATORS

How can we approach quality assurance based on individual student outcomes along with inputs? Assessing a school is difficult without clear data on individual student growth — online or otherwise — to determine whether a program is actually supporting students to meet their educational goals. It is clear, however, that we need measures that show actual student learning outcomes — and we must realize that most states and schools are using a flawed assessment system that doesn't necessarily measure entry and exit knowledge across the entire K-12 curriculum. This situation makes quality assurance a major challenge for all schools in the United States.

The fact that we don't have outcomes-based quality assurance means we don't know how well online schools and courses are educating students. This leads to two types of risk: first is the possibility that online learning will become ubiquitous, but not transformative. In districts and states that are moving rapidly to expand online and blended learning, if we don't know how well the new methods are serving students we must ask: How are decisions being made regarding program implementation?

The risk on the opposite side of the spectrum is that some states are not allowing students to enroll in online schools and courses, and in some cases, are threatening to restrict existing online schools and limit student and family choice. Without better data about student performance, we run the risk that we will restrict options that would improve student outcomes, because our systems are not comprehensive enough to measure the improvements.

How can educators and policymakers address quality assurance by understanding these issues and mitigating risks? To address these quality assurance questions requires collecting and reporting more transparent data, implementing multiple measures of student performance, rethinking school evaluation, and clarifying which performance metrics are most important to create a more robust benchmarking picture of performance. These can and should apply to all schools, but the need is especially pressing for online schools as more states pass restrictions limiting their existence or growth.

EXPLORING KEY PERFORMANCE METRICS FOR STUDENT LEARNING OUTCOMES

Education leaders across the country are considering better approaches to evaluating student performance outcomes. A key starting point for evaluating online schools' effectiveness are measures of proficiency. Beyond proficiency, or how much a student knows at a distinct point of time, there are other measures of student learning that examine a student's growth of knowledge, skills, and deeper learning to prepare them for college and careers over time. Many states are moving toward formally using multiple measures of student learning in assessing outcomes and performance. The following sections present a set of measures that may be used to evaluate student outcomes more robustly than is often being done currently with proficiency alone. These outcomes-based measures should be explored more closely when moving toward quality assurance and evaluations of schools:

- Proficiency
- Individual student growth
- Graduation rate
- College and career readiness
- Closing the achievement gap

Proficiency

Proficiency is the most basic of the measures. It evaluates what students know at a point in time in a given subject, and is usually associated with a grade level. It is a necessary performance metric but insufficient, especially if proficiency data are solely based on age or grade cohorts, rather than an individual student's overall proficiency map. Understanding student proficiency is an important starting point for a robust set of indicators.

In thinking about online students progressing at their own pace based on demonstration of mastery, the role of a state in ensuring quality and proficiency requires student proficiency to be measured and validated. Ways to measure include state assessments, end-of-course exams, and national and international tests such as the National Assessment of Educational Progress (NAEP, which Missouri participates in), Programme for International Student Assessment (PISA), and Trends in International Mathematics and Science Study (TIMSS).

None of these tests covers a comprehensive range of grades and subject areas across K- 12 education. State assessments typically cover grades 3-8 plus one year of high school.

Missouri delivers the following assessments in addition to the NAEP:36

- Grade-Level Assessments are delivered annually each spring in communication arts and mathematics for grades 3-8, and science for grades 5 and 8.
- End-of-Course assessments are offered in Algebra I, Algebra II, Geometry, English I, English II, Biology, American History, and Government.
- ACCESS for ELLs (English language learners) is developed by the World-Class Instructional Design and Assessment (WIDA) Consortium. This English language proficiency assessment is for K-12 students who are identified as ELL.
- MAP-Alternate (MAP-A) Assessment is designed only for students with significant cognitive disabilities who meet grade level and eligibility criteria. Students who qualify for the MAP-A Assessment will not take any other Grade-Level or End-of-Course Assessments. Instead they take the MAP-A test in communication arts in grades 3-8, and 11; mathematics grades 3-8, and 10; and science grades 5, 8, and 11.
- The Personal Finance assessment is required for those students who receive credit for Personal Finance through an embedded course or wish to test out of Personal Finance. It is optional for those students who take a stand alone personal finance course.

Although proficiency measures are widely used, they clearly do not cover a wide range of students and courses. Many educators realize that proficiency measures often "show more about who attended each school than how well they were being taught."³⁷ Online schools and other alternative schools, which serve students who are atrisk or over-age and under credited, often do not demonstrate strong proficiency scores at grade level. In fact, proficiency measures alone will tend to reward schools whose students arrive above grade level, and penalize schools whose students arrive below grade level. This is of particular concern to online schools because they are often chosen by students who have been unsuccessful in traditional environments, are not achieving at grade level, are at-risk, over-age and under-credited, or otherwise not successful in a physical school.

In addition, how does a state deal with students advancing ahead of a traditional calendar schedule? How do we measure outcomes in untested subjects or grades?

Individual student growth

Many people interpret the current dialog on "growth models" to mean states are measuring an individual student's academic growth along a trajectory — measuring proficiency of standards at program or intervention entry and exit (often simply a "year's worth" of schooling). Ideally, growth models would measure real learning by individual students in a way that is easy to explain and provides solid data. Growth models are clearly complex,³⁸ but a few key points emerge from among them. Among these key points: "The most significant factor in selecting a growth model is how the information will be used to inform education decisions."³⁹

³⁶ Missouri State Assessment information from DESE: http://dese.mo.gov/divimprove/assess/staff.html

³⁷ Richard Lee Colvin, Education Sector, Measures that Matter: Why California Should Scrap the Academic Performance Index, http://www.educationsector.org/sites/default/files/publications/MeasuresThatMatter-RELEASED.pdf

³⁸ For additional information on growth models see State Growth Models for Accountability: Progress on Development and Reporting Measures of Student Growth from the Council of Chief State School Officers at http://www.ccsso.org/ Documents/2010/State_Growth_Models_2010.pdf

³⁹ Battelle for Kids, Selecting Growth Measures: A Guide for Education Leaders 2011, http://www.edgrowthmeasures.org/ documents/Selecting_Growth_Measures_Guide.pdf

However, not all growth models are created equally. There are wide variances in how growth models are used, just as with NCLB there were 50 state accountability models. The models may lump students into cohorts or not, some are value-add measures, and some models may take into consideration individual student growth and extensive data on a student's background and academic history. These systems must be much more transparent, particularly about whether they measure individual student growth along a trajectory as opposed to being based on cohorts.

With data on proficiency levels and individual student growth available, it is possible to analyze quality assurance along a continuum of outcomes. Students can be measured who were not proficient, but achieve high levels of growth, or alternatively, students who come in proficient, but grow slowly. Placing students in a matrix that combines growth and proficiency provides a snapshot of how well students (or a school) are performing. Proficiency or growth alone is insufficient to describe a student's academic achievement and standing, but the snapshot of both, taken together, is powerful.

This growth chart from Minnesota (Table 3), for example, uses this approach in describing schools. Students who are proficient and have achieved high or medium growth are clearly successful. Students who are not proficient and are achieving low or medium growth clearly need further assistance. It is the students at the corners of the matrix — proficient/low growth and not proficient/high growth — for whom questions remain, because it is unclear whether those combinations should be considered acceptable for determining effectiveness.

	GROWTH OVER THE CURRENT ACADEMIC YEAR		
Prior Year Status	Low	Medium	High
Proficient	Students were proficient but made low growth.	Students continued to grow.	Students made exceptional growth.
Not Proficient	Students were not proficient and made low growth.	Students were not proficient but made some growth.	Students were not proficient but made exceptional growth toward proficiency.

Missouri uses a growth model that relies on the grade-level Missouri Assessment Program (MAP) exams in English language arts and mathematics.⁴⁰ The model calculates how much students "grew" relative to predictions that are based on prior exam score and student mobility, and looks at scores both within and between achievement levels. For accountability purposes under the Missouri School Improvement Program's (MSIP) fifth cycle, growth is measured for all students tested in a given LEA over the past three years.

TABLE: 3:

The approach Minnesota uses to describe schools

⁴⁰ Missouri Growth Model information taken from DESE website: http://dese.mo.gov/mogrowthmodel/

Graduation rate

Obtaining a high school diploma or equivalent (such as a GED) represents an important milestone for students, and is an indicator of future economic and social success. Graduation rate, however, has some drawbacks that need to be addressed if it is to be used effectively as a performance indicator. Although many states are moving toward reporting that provides consistent comparisons across states, such as the Graduation Counts Compact of the National Governors Association,⁴¹ often measures do not consider student mobility and credit deficiencies when students move into a new school. In many cases, graduation rate does not include an accommodation for extended time, and in some cases schools' graduation rates are based on cohorts instead of individual students.

Using graduation rate as a key performance indicator may create a disincentive for enrolling students who are behind in proficiency, dropouts, or older, because of the negative impact if the graduation rate calculation does not allow for extra time. Alternatively, the potential exists to create an incentive for schools to work with undercredited students if graduation rate calculations account for students taking extra time, or students who achieve success through earning a GED.

College and career readiness

Definitions of college readiness vary. The U.S. Department of Education defines college ready as having "the knowledge and skills to succeed in credit-bearing courses from day one, without remediation," and career ready as "demonstrating the academic skills to be able to engage in postsecondary education and training without the need for remediation." Regardless of the specific definition, there is a growing gap between students having a high school diploma or GED and being fully prepared with knowledge, skills, and dispositions for postsecondary education or to enter the workforce. In Missouri, 36% of all students entering postsecondary institutions require at least one remedial course (this compares to 34% nationally),⁴² and only 26% (and 25% nationally) of students who took the ACT met the test's readiness benchmarks in all four subjects (English, reading, math, and science).⁴³ All schools — both online and traditional — are facing challenges in preparing students for life past a high school diploma.

"College readiness and career readiness have become important policy goals for education over the past few years. The Common Core State Standards point toward college and career readiness. However, many people contend that it is unclear what is meant by these terms. What do they mean? What are some definitions? How can college and career readiness be measured? What are the implications of various measurement approaches?" A definition of college and career-readiness: "the level of preparation a student needs in order to enroll and succeed — without remediation — in a credit-bearing course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program, or in a high-quality certificate program that enables students to enter a career pathway with potential future advancement. Success is defined as completing the entry-level courses or core certificate courses at a level of understanding and proficiency that makes it possible for the student to consider taking the next course in the sequence or the next level of course in the subject area or of completing the certificate."⁴⁴

⁴¹ National Governors Association, Implementing Graduation Counts, http://www.nga.org/cms/home/nga-center-for-best-practices/center-publications/page-edu-publications/col2-content/main-content-list/implementing-graduation-2010.html

⁴² Missouri statistics from http://dhe.mo.gov/data/hsgradreport.php; national statistics from Bruce Vandal, Getting Past Go: Rebuilding the Remedial Education Bridge to College Success, Denver: Education Commission of the States, 2010, http:// www.gettingpastgo.org/docs/GPGpaper.pdf

⁴³ The Reality of College Readiness 2013 (lowa City: ACT Inc., 2013); http://www.act.org/readinessreality/13/pdf/Reality-of-College-Readiness-2013.pdf

⁴⁴ David T Conley, Educational Policy Improvement Center, University of Oregon, Defining and Measuring College and Career Readiness, programs.ccsso.orgprojectsMembership_MeetingsdocumentsDefining_College_Career_Readiness.pdf

Closing the achievement gap

The student achievement gap pertains to disparities in academic performance between groups of students, largely based on standardized tests. It is defined by the U.S. Department of Education as "the difference in the performance between each ESEA subgroup…within a participating LEA or school and the statewide average performance of the LEA's or State's highest achieving subgroups in reading/language arts and mathematics as measured by the assessments required under the ESEA."⁴⁵ The subgroups include students who are economically disadvantaged, from major racial and ethnic groups, those with disabilities, and with limited English proficiency.⁴⁶

Closing the achievement gap between subgroups of students has become a focus of federal and state education policy since the passage of NCLB. State assessment scores, dropout rates, course and class grades, and preparedness for and enrollment in post-secondary education are all areas where the achievement gap is apparent.

States address closing the achievement gap in school evaluations by aiming for greater levels of advancement from lower-performing subgroups. In Minnesota, for example, the ability of schools to gain higher levels of growth from lower-performing subgroups than the statewide growth average for high-performing subgroups is measured and taken into account as an indicator of success. Closing the achievement gap must include quality assurance provisions to ensure all students are held to high standards of college and career readiness and provide equity and excellence for all students.

⁴⁵ U.S. Department of Education, Definitions, http://www.ed.gov/race-top/district-competition/definitions

⁴⁶ U.S. Department of Education, http://www2.ed.gov/policy/elsec/leg/esea02/pg2.html

Section

Connecting the Dots: How Online Schools and Courses can Help Meet Needs in Missouri

Digital learning is proving to be a solution for some of Missouri's students. Students are taking advantage of MoVIP's supplemental online classes, some districts are making a full suite of digital options available to their students, and some students are choosing to pay for a fully online option. However, these options aren't available to all students. While digital learning is not a silver bullet to the state's education problems, it has the ability to address some of the challenges facing Missouri's students.

Challenge: Students do not have a publicly funded full-time online school option.

Students seek out a fully online school for a wide variety of reasons. Some students are looking for schedule flexibility because they are professional athletes, artists, or parents. Other students are home- or hospital-bound due to illness, and some homeschooled families would choose a high-quality online curriculum.

For these and a wide variety of reasons, 29 states make a publicly-funded, fully online option available to all students statewide. Thus far, Missouri has not supported fully online statewide schools, whether charters or district schools, forcing students to pay for an online option if they have access to one at all. While some students may have access to a fully online option through their district's program, students are not allowed to enroll across district lines (unless their district is unaccredited), so this option is very limited.

Challenge: Missouri does not allow open enrollment.

Unless a student resides in an unaccredited district, she may not enroll in an out-of-district school, including a virtual school. While there are some single-district online programs, they are only available to students residing in those districts or unaccredited districts.

Enrollment numbers in other states have proven that when a fully online, statewide option is made available to students, they take advantage of it. Only a small percentage of students and families choose fully online schools in the states that allow such schools—typically no more than 3%--but for this segment of students and families, online schools can be the best, and perhaps only, education option.

Challenge: Rural students do not have the same access to courses as students in larger towns, suburbs, and cities.

For a variety of reasons, it is often difficult for small rural schools to offer the same breadth of course options as larger schools. Rural schools may have trouble hiring a highly-qualified teacher in particular subject areas, or there may not be enough students to justify running the class. This puts rural students at a disadvantage in terms of college acceptance and career readiness.

Many states make supplemental online courses available to students through a state virtual school or multidistrict programs in order to expand course catalogs, provide credit recovery options, and to meet the needs of higher-achieving students. Some schools and districts in Missouri are doing this through ITV or partnerships with local universities, but a funded option is not yet available to all students statewide.

Challenge: Students identified as "recoverable youths"—young adults between the ages of 16 and 21 who are not in school and who have not completed a high school education—need an alternative path to high school graduation.

One student group that tends to benefit a great deal from online learning options is adult students who seek flexibility in completing their high school degrees. "In Missouri, more than 39,000 individuals or 7.7% of this age group are considered recoverable and would benefit from educational intervention aimed at earning a diploma or other high school credential." This is particularly the case for students who aren't working, and so are likely struggling to find a job, which applies to over 68% of these young adults, many of whom would benefit from attaining a high school degree or GED.⁴⁷

⁴⁷ Missouri Department of Education Press Release, June 6, 2013; http://dese.mo.gov/news/2013/diplomas-count.htm

These young adult students may have dropped out for a variety of reasons, many of which can be addressed through online and blended options. Perhaps they simply weren't challenged in a typical high school environment, or they struggled and didn't know where to go for help. Other young adults may need to work or take care of young children, so benefit from having significant flexibility in how, when, and where they participate in their education.

Challenge: Unaccredited districts are losing significant amounts of money when students choose a school in another district.

Students in unaccredited districts may choose to attend school in another district, funded by their resident district, if they are not satisfied with the education they are receiving. Students in provisionally accredited and unaccredited districts also must pay tuition for students who wish to take MoVIP classes online. This is proving costly for districts that are on a path to improvement, and so those districts are looking for ways to keep students from leaving.

Offering students online and blended options individualizes the educational experience for each student, giving each student a better opportunity to succeed. Whether offering a full-time online option, supplemental online courses including credit recovery, or blending instruction in individual classrooms, students are given more opportunities to be successful when they have different learning paths to choose from. However, with scarce resources, adding digital learning options may not be a fiscal priority for these unaccreditied districts.

Challenge: Students in many districts are restricted to taking online classes during scheduled time periods.

While not legislated by the state, most districts require students to take online classes during a scheduled class period at the school in order to log average daily attendance for that student and claim state funding. Some schools allow students to schedule those classes for the first or last periods of the day or outside the school day in order to give the students some flexibility, but this does not appear to be common.

The primary benefit of online learning is giving students flexibility in where and when they learn, as many schools are finding by offering "flipped classes." If a student is required to be in a classroom during a scheduled class period, there is decreased motivation to take an online class.

The reason districts have this restriction in place is because they are concerned about collecting full state funding for students taking online classes. Instead of risking that portion of a student's funding, they keep students in the building during scheduled school hours to ensure funding.

Challenge: Few students are allowed or able to take online classes from out-ofdistrict providers.

Students are restricted from taking supplemental online classes from out-of-district providers for a variety of reasons. The primary reason is that Missouri is not an open enrollment state, so most students are restricted to taking courses from their own districts. In addition, there simply aren't many out-of-district providers from which to choose. MoVIP, Mizzou K-12 Online, and EducationPlus make classes available to students statewide or across many districts, but enrollment is limited because of the open enrollment policy and because funding is limited.

Once a provider is found, funding must be secured. Some districts simply work together, particularly with neighboring districts, to create a funding arrangement and allow students to take classes across district lines. Some districts will pay for online classes arranged through as MoVIP, although they may only pay for some of their students and not all, and they may require students to take the class in school during a scheduled time period. Other districts simply cannot or do not pay for any out-of-district online classes for their students.

Other states dictate funding through legislation. Florida, Michigan, Minnesota, and Utah, for example, have state-level "course choice" programs that allow students to choose from multiple providers, and allow the funding to follow the student at the course level. A student's average daily attendance (ADA) is split proportionally among providers based on the number of courses the student takes with each.

Section



Recommendations

Missouri has a foundation in place for digital learning in the state. With some shifts in policy that will allow existing programs to grow and some new programs to open, all students in the state can have the option of choosing a supplemental online class, or to go to school full-time online. The following recommendations would help the state to transition to eventually allowing all students in grades K-12 the option of taking single online classes or a fully online program.

Recommendation 1: Allow statewide, fully online public schools.

Missouri does not have any publicly-funded, statewide, fully online schools, whether district or charter. Changes should be made to allow students seeking a diverse curriculum not offered currently by their school; students not being challenged in their current school; students seeking flexibility in school attendance due to athletics, performing arts, or career pathway development; students who are home- or hospital-bound; have situations brought on by bullying or mistreatment; or homeschooled students to allow their public school funding to pay for a fully online education.

In addition, passing legislation to allow for open enrollment across the state would allow districts to expand access to existing single-district programs to students statewide.

Recommendation 2: Allow schools to receive 100% funding for students taking online courses without requiring seat time.

Different funding rules apply for students who take online classes from home versus students who take online classes during a scheduled class period. Students taking online classes not from school are assumed to be in attendance at 94% of ADA, and so are funded at about 90% of the proportional amount of ADA for that particular class. Students who take online classes from the school are counted in attendance and funding just as for a face-to-face class. As schools receive less funding for students in online classes taken from home, they may not be fully supportive. Funding laws must be changed to allow schools to receive 100% of the funding for online classes regardless of where the student logs in.

Recommendation 3: Allow schools to receive funding beyond one FTE for students seeking to take online courses beyond the school day.

Some students are looking to recover credit or graduate more quickly by taking classes beyond the traditional school day and school year. Although each district may choose how many courses equal one FTE (usually six or seven), the state will not then fund beyond that FTE. Funding additional classes would allow students who are behind in credits to catch up and graduate on time, or potentially even early.

Recommendation 4: Increase opportunities for rural students by offering fully funded courses through MoVIP and other state-approved providers, and developing a best practices guide for rural consortia.

Rural students in particular have limited access to online classes. MoVIP's funding is limited to students in special circumstances, and some schools are reluctant to allow students to take online classes because they do not receive full funding. In addition, rural schools simply cannot offer the breadth of courses found in schools in large towns, suburbs, and cities, as they do not have enough students to fill the classes and sometimes cannot find highly qualified teachers trained in specific subject areas. In its survey, the Missouri School Board Association asked respondents to identify what services would be most beneficial for their schools/districts; from a list of online and digital options, 80% of respondents chose that, "Access to online courses created by other Missouri districts," making it the most-requested item.

MoVIP can serve this need, but only if its courses are fully funded. The state can also support rural districts that seek to come together in a consortium to create more opportunities for students, allowing them to enroll across district lines and receive 100% funding for online courses. As one of the challenges in running courses is filling them with enough students to justify the cost, bringing students together from multiple districts can create more opportunities to fill those classes. Some consortia have developed in Missouri as noted in Section 4, however, opportunities are not yet available to all students statewide.

Finally, the state should develop a best practices guide to help rural consortia launch online and blended programs. The guide could include clear descriptions of state policy, references to other rural consortia from around the country, resources for developing high-quality online and blended courses and programs, and suggestions for ways to best support students in the blended and online environments.

Recommendation 5: Support unaccredited and provisionally accredited districts that want to make online options available to their students.

Students in unaccredited and provisionally accredited districts are seeking alternative education options from neighboring districts or from MoVIP, resulting in significant losses for the student's home districts. The state should support these districts in identifying partners to help them quickly create and expand digital options for their own students in order to provide alternatives that keep students in the districts. This may include fully online programs, flexible blended learning options to meet the needs of students who have dropped out, supplemental online classes to expand course catalogs, and credit recovery classes for students who have failed a face-to-face class.

Recommendation 6: Continue to pursue broadband access not just to schools and community centers, but in "the last mile" to homes statewide.

As the Broadband Now map shows, there are still pockets of Missouri where communities do not have access to a high-speed Internet connection, or it is limited in coverage and bandwidth. In addition to pushing for high-speed access in all schools and libraries statewide, it is crucial to fully implement the Missouri Broadband Now long-term plan for ensuring high-speed access to all students' homes to allow all students to have equitable access to online content and courses.

Recommendation 7: Consider developing policy that all students statewide should take one online course in order to graduate from high school.

While not all students are cut out for learning online, the reality is that all students need to be comfortable with technology, and learn how to navigate resources on the Internet. College-bound students will inevitably take at least one online course; the Sloan Consortium found that in fall 2011, 32% of all higher education students were taking at least one online course, and the number is growing steadily.⁴⁸ Students headed directly to careers after high school will find that most, if not all, jobs require some level of comfort with technology. The requirement can include a waiver for students with an individual education program (IEP) that does not recommend online learning.

Recommendation 8: Require all districts in the state – not just those that are unaccredited or provisionally accredited – to pay for students to take classes from MoVIP or other approved providers

At this time, unaccredited and provisionally accredited districts must pay for their students who wish to take MoVIP classes. However, students in accredited districts may or may not have this option, depending on district policy. While all districts are required to accept MoVIP credit, not all districts are required to pay for students to take online classes or to allow students to take online classes as part of the traditional school day, and districts are not required to accept credit from any other providers..

⁴⁸ The Sloan Consortium; Changing Course: Ten Years of Tracking Online Education in the United States. (2013) http:// sloanconsortium.org/publications/survey/changing_course_2012

Recommendation 9: Identify state resources for schools and districts that wish to expand online and blended learning opportunities for students.

Many states have an office of digital learning or a state coordinator for online learning who supports online and blended learning activities statewide. This could include offering professional development, supporting districts in building high-quality programs, maintaining a database of online and blended programs and student enrollments, and acting as a resource for schools attempting to navigate the state policy landscape. There is much confusion in the state right now around online learning, and dedicating a full-time state staff person would immediately work to eliminate that confusion.





Appendices

A: DISTRICT ACCREDITATION STATUS

B: INTERVIEWEES

C: MSBA ONLINE: A SURVEY OF MISSOURI SCHOOL DISTRICTS AND USES OF ONLINE AND DISTANCE LEARNING

Appendix A: District accreditation status

DISTRICT NUMBER	DISTRICT NAME	ACCREDITATION STATUS	NUMBER OF STUDENTS
042-117	Calhoun R-VIII	Provisionally Accredited	158
078-012	Caruthersville 18	Provisionally Accredited	1,314
097-127	Gilliam C-4	Provisionally Accredited	39
099-078	Gorin R-III	Provisionally Accredited	30
078-002	Hayti R-II	Provisionally Accredited 871	
048-072	Hickman Mills C-1	Provisionally Accredited	6,344
096-104	Jennings	Provisionally Accredited	2,964
097-119	Malta Bend R-V	Provisionally Accredited	116
040-101	Spickard R-II	Provisionally Accredited	32
115-115	St. Louis	Provisionally Accredited	25,084
085 043	Swedeborg R-III	Provisionally Accredited	55
048-078	Kansas City 33	Unaccredited	17,326
096-109	Normandy	Unaccredited State Board action September 2012 effective January 1, 2013	4,785
096-111	Riverview Gardens	Unaccredited	6,335

The following districts are listed as either provisionally accredited or unaccredited as of October 2012.⁴⁹

⁴⁹ Accreditation Classification as of October 2012 (the most recent report available), DESE; retrieved December 17, 2013, http://dese.mo.gov/divimprove/sia/msip/distclass.htm

Appendix B: Interviewees

The following people were interviewed for this paper.

NAME	TITLE	ORGANIZATION	PRIMARY CONTACT DATE
Cowherd, Jeannette	Assistant Superintendent School Improvement	Park Hill School District	12/4/2013
Dorson, Roger	Coordinator, Financial and Administrative Services	DESE	12/17/2013
Epperson, Arlin	Special Assistant to the President for K-12 Online Education	Columbia College	12/4/2013
Fuchs, Curt	Coordinator	DESE; Charter Schools	12/12/2013
Lemmon, Nichole	Coordinator eLearning	Springfield Public Schools	12/3/2013
Litman Block, Ruth	Director	District's-Choice Online Learning (part of EducationPlus consortium)	11/26/2013
March, Zac	Director of Distance and e-Learning	Mizzou K-12 Online	11/15/2013
Patrick, Ray V.	Executive Director	Missouri Association for Rural Educators	12/5/2013
Renner, Jane	Director of Curriculum and Instruction	Reeds Spring School District	12/4/2013
Schellman, Steve	Supervisor	Missouri Virtual Instruction Program (MoVIP)	11/15/2013 12/12/2013
Smalley, Kristi	Principal	Mizzou K-12 Online's MU High School	11/15/2013
Stagner, Susan	Vice President, State Relations	Connections Academy	12/11/2013
Walker, Marla	eCampus Coordinator	KCSD eCampus	11/19/2013
Whaley, Kevin	Coordinator of Instructional Technology	Lee's Summit R-7 School District	12/3/2013

Appendix C: MSBA Online: A survey of Missouri school districts and uses of online and distance learning

In February 2011, the Missouri School Board Association released a report summarizing results from a survey of districts around the state regarding online and other distance learning activity. The full paper is included below; the full survey, an executive summary, and a map of respondents are available here: http://www.msbanet.org/files/programs_services/online_consortium/MSBA%200nline%20Survey%20Report.pdf.

MSBA Online: A Survey of Missouri School Districts and Uses of Online and Distance Learning

Introduction

Online learning and other methods of distance education have been an increasingly popular topic for educators over the past five years. Schools and districts in Missouri are utilizing a wide variety of online courses and other distance learning options. Some schools purchase solutions from commercial entities while others have been developing their own online courses. Some schools participate in interactive television (ITV) or video teleconferencing distance education programs.

Based on requests from various Missouri school districts and conversations around the state over the past 12 months, the Missouri School Boards Association (MSBA) undertook the development and delivery of an online survey. The purposes of the survey included:

- To learn more about the status and current uses of online and other distance learning options by districts in the state
- To determine the level of interest districts in the state may have in being part of a consortium sponsored by MSBA and devoted to helping districts in the state with online courses and other distance learning options

Survey items were developed from multiple sources including:

- Focus groups of stakeholders and meetings with them about online courses and distance learning options including possible survey items
- Written input from various non-profit providers of online and distance learning options
- Presentations at MSBA and other state conferences that solicited issues and questions about online and distance learning from participants

A draft of the survey was created in August 2011. The draft was circulated among stakeholders and others for their input. Following the incorporation of input from stakeholders, the survey was reviewed by a University of Missouri faculty member with expertise in survey development. The survey was then formatted as an online instrument and field tested by a group of approximately 20 Missouri educators in mid-September, 2011. Adjustments were made following the field test and the final version of the 30-item survey was prepared for dissemination.

A total of 408 educators from 276 school districts and 4 charter schools completed the MSBA Online survey that was made available online from a variety of sources from September 29 through October 21, 2011. Respondents represent 53% of Missouri school districts and 11% of charter schools operating in the state. An additional 301 respondents started but did not complete the survey. Only responses from individuals who completed the entire survey are included in this report. Responses for each survey item are reported. Appendix A shows a map of MSBA regions and the survey respondents from each.

This report provides data collected on each item from the survey. Items are numbered, italicized and underlined. The data for each item is reported along with any clarifying tables to support the data. Where open-ended responses were provided by survey respondents, personally identifying information or names of specific districts that were included in the responses have been redacted for anonymity.

1. What is your title? Please select all that apply.

Individuals who completed the survey were asked to specify their position title. Respondents were allowed to choose all position titles that applied to their role in their school districts. The largest groups were respondents who indicated that they were either superintendents (24%) or high school counselors (25%) for a total of 49%. High school principals comprised the next largest group of respondents at 15%. With 64% of the respondents reporting that their positions were superintendent, high school counselor or high school principal, it is likely that the survey responses are more representative of secondary level trends than elementary trends. The remaining position titles accounted for the rest of the respondents as shown below in Table 1.

TITLE	Responses	Percentage
Superintendent	96	24%
Assistant superintendent	31	7%
Special education personnel	4	>1%
District-level curriculum coordinator	29	6%
Technology coordinator	37	8%
High school principals	60	15%
High school counselor	102	25%
Counselor (other grade levels)	34	7%
Junior high principal	12	2%
Middle school principal	16	3%
Elementary principal	17	3%
Assistant principal or other grade level configuration principals	9	1%
Other (library media specialist, teacher, career services coordinator, etc)	13	2%

Table 1. Position titles for individuals completing the survey

*Percentages add up to more than 100% since respondents were allowed to select all position titles that applied to their work.

2. Does your school or district currently use online courses of any type for your students?

Responses to this item were fairly evenly divided with 235 or 58% of respondents answering "yes" and 169 or 42% answering "no." Respondents who answered "yes" to the item were directed to a different subset of items than those who answered "no."

Responses from the 58% of respondents who answered "yes" are reported for items 3 through 16.

Responses from the 42% of respondents who answered "no" are reported for items 17 through 21.

Following the completion of the subset of items based on their responses to item 2, all survey respondents were then directed to items 22 through 30.

3. Which grade level? (select all the apply)

Responses to this item were 12 for Kindergarten through grade 5, 28 for grades 6 - 8, and 223 for grades 9 -12. Clearly, respondents reported the most usage of online courses by students at the high school level, grade 9 - 12.

4. Which subject areas? (select all that apply)

Respondents reported a fairly equal distribution across all subject areas. The highest overall usage (232) was for mathematics, with social studies (222) next, followed by communication arts (220), and then science (202). Once again, the highest numbers reported were for grades 9 – 12 with a total of 765 responses for all subject areas. Table 2 provides details about responses.

Table 2. Subject areas for online courses

Grade Level	Communication	Mathematics	Science	Social Studies	Total Responses
	Arts				
Kdg. – 5	9	10	7	7	33
6 – 8	20	22	18	19	79
9 - 12	191	201	177	196	765

5. Are courses offered for any other content areas? If yes, please specify grade levels.

All but one respondent specified grades 9 - 12 as the grade level for other content areas. Table 3 shows the list of content areas and the number of respondents specifying each one.

Table 3. Other content area courses

Content Area	Number of Responses
ACT or College Preparatory	2
AP courses	3
Art, art history or art appreciation	4
Business, marketing	4
Career education	2
Criminal justice	2
Electives (no specific course names)	12
Fine arts	11
Foreign languages	25
Health, life skills, wellness, self-development	22
Music, music appreciation	3
Physical education, life sports	11
Personal finance	13
Practical arts	8
Psychology	3
Technology, digital media	3

6. For what purpose(s) are the online courses used? (Select all that apply)

Respondents selected "credit recovery" as the main purpose for their online courses with 164 responses or 70% of the total. The next highest category was "dual credit with community college or 4-year high education institution" with 100 responses or 43% of the total. Reponses netting the next highest number of responses were "courses that the district does not have certified teachers for (e.g., foreign languages, physics, etc.)" with 67 responses or 29% and "homebound students" with 66 responses or 28% of the total. Table 4 shows the breakdown of responses by item.

Response	Total	% of Total
Credit recovery	164	70%
Dual credit with community college or 4-year high education institution	100	43%
(ITV courses)		
Courses that the district does not have certified teachers for (e.g.,	69	29%
foreign languages, physics, etc.)		
Homebound students	66	28%
Students with disabilities	33	14%
Supplement or enhance content available in district courses (e.g.,	36	15%
remediation, virtual field trips, etc.)		
As part of a blended or hybrid instructional model where students learn	32	14%
in the traditional classroom and online		
Advanced Placement exam preparation	12	5%
Other:		
Alternative school	12	5%
Students on long-term suspension	3	1%
Summer school	2	1%
Upper level advanced courses with low enrollments	4	2%

Table 4. Purposes of online course offerings

7. Approximately how many students in your school/district were enrolled in online courses during the 2010-2011 school year?

Respondents answered this item 46% of the time with the answer "1 - 10." The next highest answer at 38% was "11 - 50." Answers of "51 - 100," "101 - 150," and "more than 150" were answered at 8%, 4%, and 3% respectively. For survey respondents, it appears there are relatively small numbers of students enrolled in online courses.

8. Approximately how many students in your school/district do you expect to be enrolled in online courses during the 2011-2012 school year?

Respondents answered this item with an increase in every possible range except for the answers "1 – 10" which decreased from 46% to 41% and "101 – 150" which decreased from 4% to 3% of the responses. The answer "more than 150" increased by one percent. The remaining ranges were 11 - 50 increasing from 38% to 40%, and 51 - 100 increasing from 8% to 11%. Survey responses indicate that

districts expect to enroll about the same number of students in online courses for the 2012-13 school year as are currently enrolled as shown in Figure 1.

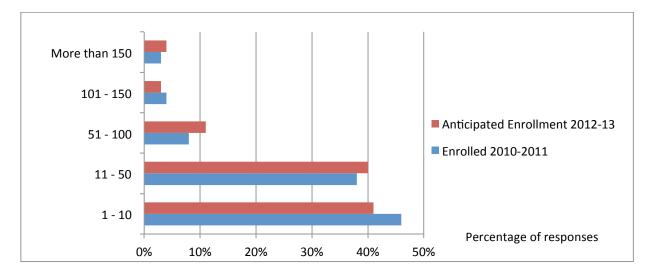


Figure 1. Percentages of responses to number of students enrolled and number expected to be enrolled

9. What is the main source of the online courses? (Select all that apply)

The source receiving the highest percentage of responses was the Missouri Virtual Instruction Program (MoVIP) at 19% followed by A+ Learning at 18%. Three other sources each received 17% of the responses: Plato Learning, courses developed by other Missouri districts, and MU High School as shown in Figure 2. Some respondents listed entities that were not providers of courses such as BlackBoard, a learning management system, and were not included. Responses related to Interactive Television (ITV) courses provided by institutions of higher education or cooperating groups of school districts also were not included since ITV is reported on in another item in the survey.

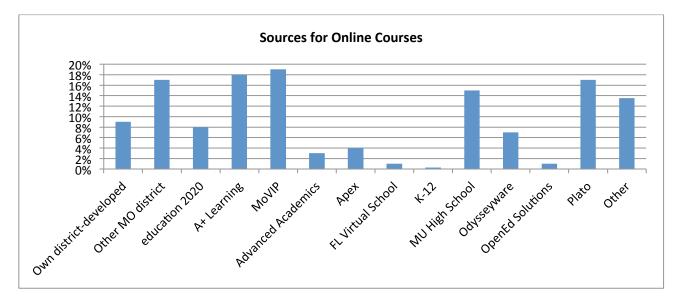


Figure 2. Percentage of responses for each source of online courses

10. For each of the sources you selected, what is the approximate number of students enrolled in online courses?

The highest number of students enrolled in online courses by course provider or source was "our own district-developed courses" with respondents listing 595 students enrolled. The next highest source was Plato Learning with 450 students. The percentage of districts using various sources as reported for item 9 are not proportional when compared with the number of students enrolled. That is, the sources used by the greatest percentage of respondents do not account for the highest numbers of students enrolled. Figure 2 details the responses received for each course provider. Providers with enrollments of 5 or fewer students were not included. Responses that listed higher education institutions or interactive television (ITV) cooperatives were not included since responses related to ITV are reported on in another item.

Several providers that were not selected for item 9 ("What is the main source of the online courses") received responses. The list of course sources or providers includes others than those listed for item 9.

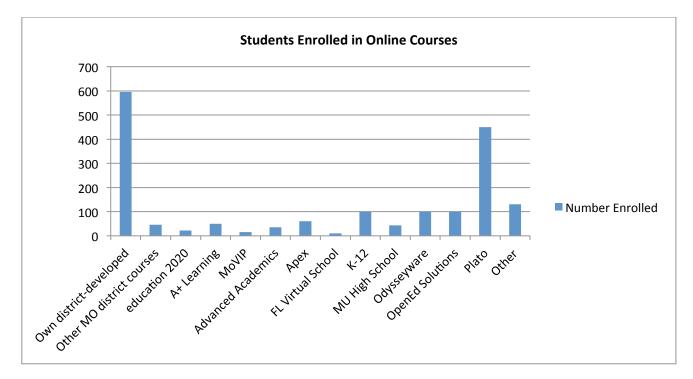


Figure 2. Number of students enrolled in online courses by source

11. How does your district select online courses? (Select all that apply)

The majority of respondents (50%) selected the response "past experience" as the method their district uses to select online courses. The next highest response was "local needs assessments of teachers, students and parents" with 39% of responses. The response "recommendations from other district personnel" was selected by 33% of. Other responses included "on-site visit from vendor." Respondents could select more than one response and responses were not weighted. Table 5 provides details.

Table 5. Selection of online courses

Response	Percentage of Responses
Recommendations from other district personnel	33%
We use the recommended vendors for MoVIP	13%
Local needs assessments of teachers, students and parents	39%
Through a local cooperative or consortium of districts	15%
Past experience	50%
Internet searches	5%
Information from conferences	25%
Information received in the mail or by email	13%
We have a set of standards we use to evaluate courses	15%
Other	13%

<u>12. Who serves as instructor for students in online courses provided by your school/district? (Select all that apply)</u>

Responses to item 12 fell into three main categories: the majority (54%) choose "our own district teachers," while 30% selected "there are no instructors – the courses are self-paced," and 26% selected "instructors provided by the organization/company that offers the courses." The remaining responses included "a combination of instructors provided by the organization/company and our own district teachers" with 18% and "teachers from other Missouri school districts" with 9% of the responses.

<u>13. What is the approximate average cost of an online course per student per semester that includes an</u> *instructor in your district (including textbooks, materials or other supplies)?*

Responses to item 13 were fairly evenly divided among response choices. The highest percentage (22%) was for "more than \$300 per student per course." When the response choices were grouped, the four choices of \$151 per student and higher received 54% of the responses. The three choices of \$150 per student and lower received 48%. Figure 3 provides details about responses for this item.

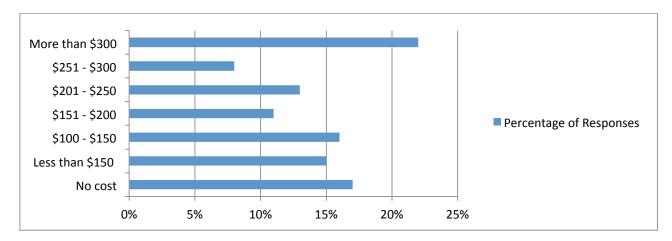


Figure 3. Approximate cost for courses with instructor included

<u>14. What is the approximate average cost of an online course per student per semester that does NOT include an instructor in your district (including textbooks, materials or other supplies)?</u>

Responses to this item were also nearly equally divided among all possible response choices. However, for this item, the lower end of the pricing range – "no cost" to "\$100 - \$150 – received the highest percentage of responses at 56%. The four choices of \$151 and higher received 45% of the responses. The total exceeds 100% due to rounding of responses with fractional remainders. Clearly, courses that do not include an instructor are priced at lower rates than those that do include an instructor.

15. Please select the learning management system(s) (LMS) your district uses. (Select all that apply)

The response receiving the highest number and percentage of responses was "our district does not use a learning management system (LMS)" receiving 120 or 58% of the responses. Since many survey respondents are those who are interested in or are using online courseware, this number is less than recent Missouri Census of Technology data showing that 95% of Missouri districts do not use a learning management system.

The next two highest response rates were Moodle with 17% of responses and BlackBoard with 12% of responses. The response choice "other – please specify" received 12% of all responses; however, many of the "other" responses were not truly learning management systems but rather restatements of the courseware providers listed for item 9 or the response "not sure" and "I don't know."

16. Please rate your agreement with the following statements regarding online courses.

Respondents were given 29 statements with possible response choices on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Statements with the highest and lowest means – those that respondents showed the most agreement on – included the following:

Agree (a mean of 3.83 or higher)

- Our school/district has had a positive experience with online courses.
- Online learning offers a more flexible pacing.
- Online courses give students a different perspective on learning.
- Students like using technology.
- Online learning makes it possible for students who cannot be in class physically to keep up with their school work.

Disagree (a mean of 2.99 or lower)

- State or local policies interfere with our ability to use online courses.
- Online learning provides personalized learning with more student/teacher interactions.
- Students do not have the self-discipline to complete the coursework on their own.
- Students do not have adequate access to the technology or internet connectivity to complete online courses at school.
- Online instructors do not contact students often enough.
- Content in most online courses does not match our curriculum.

- Content in most online courses is outdated or incorrect.
- Students in online courses are not prepared for MAP or End-of-Course assessments.
- Scheduling students in online courses is difficult.
- There is inadequate technology support for teachers and/or students taking online courses in our school or district.

Table 6 provides detailed information about the responses to each item. The number of responses received and the mean for each response are provided.

Table 6. Responses to Likert scale items

about at the right level.11111131131311313113131131311313113113113113111 <th1< th="">1111<</th1<>							
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An teoder of online courses more extensively in our curriculum.Image: Course of the c	2. The current cost of online courses it too high.	9	42	100	59	10	3.09
And quarry of number controls we have based of high in the quarry of number courses with online courses.11<	3. The cost of online courses prevents our school/district from using online courses more extensively in our curriculum.	15	61	55	59	29	3.12
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Outcome of the ourses.Image: Section of the output of the out	7. We understand state policies about online courses.	0	11	60	129	23	3.74
Advanced course work that our district cannot offer.12140139243.7310. Students can review and receive remediation in content areas that they are having trouble with.1733151313.9111. Online learning offers a more flexible pacing.1733151313.9112. Online courses can be worked on or completed at any time of the day or week.42627134343.7513. Online courses give students a different perspective on learning.1331160303.9614. Students like the interactive activities and digital resources in the courses.1680112233.66'15. Students like using technology.0116150594.1816. Online learning makes it possible for students who cannot be in class physically to keep up with their school work.1744136373.8917. Online learning provides personalized learning with more student/teacher interactions.2481664862.6918. Students and teachers like the online collaborative learning environment.3231128243.2719. Students do not have the self-discipline to complete the coursework on their own.781874562.83	8. State or local policies interfere with our ability to use online courses.	10	84	109	17	2	2.63
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12. Online forme forming online forming42627134343.7512. Online courses can be worked on or completed at any time of the day or week.42627134343.7513. Online courses give students a different perspective on learning.1331160303.9614. Students like the interactive activities and digital resources in the courses.1680112233.66'15. Students like using technology.0116150594.1816. Online learning makes it possible for students who cannot be in class physically to keep up with their school work.1744136373.8917. Online learning provides personalized learning with more student/teacher interactions.2481664862.6918. Students and teachers like the online collaborative learning environment.3231128243.2719. Students do not have the self-discipline to complete the coursework on their own.781874562.83	10. Students can review and receive remediation in content areas that they are having trouble with.	1	21	40	139	24	3.73
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13. Online courses give statistics a different perspective on learning.1680112233.66`14. Students like the interactive activities and digital resources in the courses.1680112233.66`15. Students like using technology.0116150594.1816. Online learning makes it possible for students who cannot be in class physically to keep up with their school work.1744136373.8917. Online learning provides personalized learning with more student/teacher interactions.2481664862.6918. Students and teachers like the online collaborative learning environment.3231128243.2719. Students do not have the self-discipline to complete the coursework on their own.781874562.83	12. Online courses can be worked on or completed at any time of the day or week.	4	26	27	134	34	3.75
14. Students like the interactive derivities and digital0116150594.1815. Students like using technology.0116150594.1816. Online learning makes it possible for students who cannot be in class physically to keep up with their school work.1744136373.8917. Online learning provides personalized learning with more student/teacher interactions.2481664862.6918. Students and teachers like the online collaborative learning environment.3231128243.2719. Students do not have the self-discipline to complete the coursework on their own.781874562.83	13. Online courses give students a different perspective on learning.	1	3	31	160	30	3.96
16. Online learning makes it possible for students who cannot be in class physically to keep up with their school work.1744136373.8917. Online learning provides personalized learning with more student/teacher interactions.2481664862.6918. Students and teachers like the online collaborative learning environment.3231128243.2719. Students do not have the self-discipline to complete the coursework on their own.781874562.83	14. Students like the interactive activities and digital resources in the courses.	1	6	80	112	23	3.66`
To: Online learning indices it possible for students with cannot be in class physically to keep up with their school work.2481664862.6917. Online learning provides personalized learning with more student/teacher interactions.2481664862.6918. Students and teachers like the online collaborative learning environment.3231128243.2719. Students do not have the self-discipline to complete the coursework on their own.781874562.83	15. Students like using technology.	0	1	16	150	59	4.18
In the featuring provides personanced rearring with more student/teacher interactions.Image: Student of the feature of the feat	16. Online learning makes it possible for students who cannot be in class physically to keep up with their school work.	1	7	44	136	37	3.89
learning environment. 19. Students do not have the self-discipline to complete 7 81 87 45 6 2.83 the coursework on their own.	17. Online learning provides personalized learning with more student/teacher interactions.	24	81	66	48	6	2.69
the coursework on their own.	18. Students and teachers like the online collaborative learning environment.	3	23	112	82	4	3.27
20 Students do not have adequate access to the 2 63 76 71 14 3.14	19. Students do not have the self-discipline to complete the coursework on their own.	7	81	87	45	6	2.83
	20. Students do not have adequate access to the	2	63	76	71	14	3.14

43	125	33	16	9	2.22
8	38	131	37	7	2.99
9	40	126	37	10	3.00
12	96	93	18	2	2.56
15	115	90	1	1	2.36
7	75	109	30	4	2.77
18	116	51	36	2	2.50
13	106	51	43	8	2.66
3	65	70	71	14	3.13
	8 9 12 15 7 18 13	8 38 9 40 12 96 15 115 7 75 18 116 13 106	8 38 131 9 40 126 12 96 93 15 115 90 7 75 109 18 116 51 13 106 51	N N N N 8 38 131 37 9 40 126 37 12 96 93 18 15 115 90 1 7 75 109 30 18 116 51 36 13 106 51 43	111 111 111 111 111 8 38 131 37 7 9 40 126 37 10 12 96 93 18 2 15 115 90 1 1 7 75 109 30 4 18 116 51 36 2 13 106 51 43 8

17. How likely is your school/district to use online courses for your students in the future?

Respondents who answered "no" to item 2 at the beginning of the survey (Does your school or district currently use online courses of any type for your students?), were re-directed to items 17 through 21. The data reported for items 17 through 21 is reflective of the 48% of respondents who answered "no" to item 2.

Responses to item 17 indicated that 76% of respondents answered that they were highly likely or somewhat likely to use online courses for students in the future. The remaining two answer choices were tabulated with 24% responding they were not very likely to use online courses and 1% responding that they would never use online courses.

<u>18. If your school/district were to use online courses for your students, for what purposes might you use</u> <u>them? (Select all that apply)</u>

The response receiving the highest percentage (70%) was for "homebound students." The next highest percentage (67%) was noted for "courses that the district does not have certified teachers for (e.g., foreign languages, physics, etc.)," closely followed by the response "credit recovery" which received 63% of the responses. Items listing responses to the option "Other" included a need for ITV distance learning dual credit courses, to complete academic requirements so they are able to schedule career and technical education courses, and gifted education. Table 7 details respondents' answers for item 18.

Table 7. Purposes districts not currently using online courses might use them for.

Response	Total	Percentage
Credit recovery	106	63%
Advanced Placement exam preparation	57	34%
Homebound students	118	70%
Dual credit with community college or 4-year higher education institution	93	55%
Students with disabilities	65	39%
Courses that the district does not have certified teachers for (e.g., foreign	112	67%
languages, physics, etc.)		
Supplement or enhance content available in district courses (e.g.,	66	39%
remediation, virtual field trips, etc.)		
As part of a "blended" or hybrid instructional model where students learn	54	32%
in the traditional classroom and online.		
Other	6	4%

When responses from districts that are currently using online courses were compared with responses from districts that might use online courses, it appears that districts that might use online courses saw more purposes for the courses than districts currently using online courses. It may be that the current availability of courses for purposes such as dual credit or for students with disabilities is not high. If courses were specifically developed for the purposes listed by districts that might use them, perhaps the actual use would increase. Figure 4 provides a side-by-side comparison of the two groups.

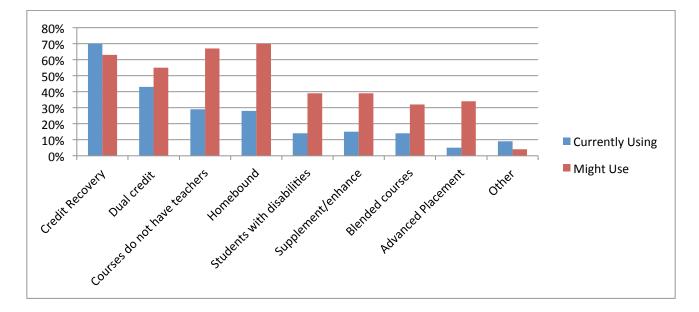
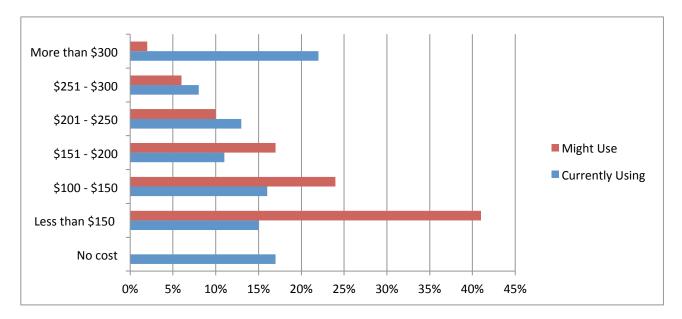
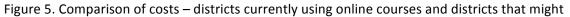


Figure 4. Comparison of purposes - districts currently using online courses and districts that might

19. What is the approximate average cost per student that your district might be willing to pay for highquality online courses that include an instructor for a semester (including textbooks, materials, or other supplies)? Responses to this item were fairly evenly divided among the first three possible response choices. The highest percentage of responses (41%) was received for "less than \$100 per student per course." The next highest percentage was received for the range "\$100 - \$150" with 24% of the responses. When the response choices were grouped or combined, the three least expensive choices of "less than \$150 per student per course" to \$200 per student received 82% of the responses. The remaining more expensive choices of three choices of "\$201 - \$250," "\$251 - \$300," and "more than \$300 per student per course" received 18% of the responses.

The responses to this item are in contrast to item 13 where 54% of respondents from districts currently using online courses selected responses in the range of \$151 to more than \$300 per student per course. It is possible that districts not currently using online courses do not have a true understanding of the cost of such courses. Figure 5 provides a side-by side comparison of the two groups of respondents.





20. What is the approximate average cost per student that your district might be willing to pay for highquality online courses that do NOT include an instructor for a semester (including textbooks, materials, or other supplies)?

In a similar response pattern to item 19, 69% respondents selected "less than \$100 per student per course," and 21% selected "\$100 - \$150." The remaining prices ranges and the response rates were: \$151 - \$200" at 7%, "\$201 - \$250" at 2%, "\$251 - \$300" at 1%, and "more than \$300 per student per course" at 0%.

21. Please rate your agreement with the following statements regarding online courses.

Respondents were given 10 statements with possible response choices on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Statements with the highest and lowest means – those that respondents showed the most agreement on – included the following:

Agree (a mean of 3.49 or higher)

- The cost of online courses is too high.
- Students do not have adequate access to the technology or internet connectivity to complete online courses at home.

Disagree (a mean of 2.35 or lower)

- State or local policies prevent our use of online courses.
- Students do not have adequate access to the technology or internet connectivity to complete online courses at school.

Respondents who indicated they currently used online or distance learning and those who indicated they currently did not use online or distance learning both disagreed with the statements "students do not have adequate access to the technology or internet connectivity to complete online courses at school" and "state of local policies prevent our use of online courses." District efforts to provide adequate technology and internet connectivity infrastructure appear to one common barrier that Missouri does not have to contend with. The item showing overall disagreement about state or local policies preventing use of online courses may not have been written in a way that was well understood by respondents. Perhaps state or local policies do not expressly prohibit the use of online courses but respondents and other stakeholders have noted that there is confusion and uncertainty about using online courses to meet graduation requirements or for funding purposes. Table 8 provides the number of responses received and the mean for each response.

Question	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree	Mean
1. The cost of online courses is too high.	3	15	64	66	18	3.49
2. Students do not have the self-discipline to complete the online coursework on their own.	5	54	32	60	16	3.17
3. Students do not have adequate access to the technology or internet connectivity to complete online courses at home.	4	34	34	76	19	3.43
4. Students do not have adequate access to the technology or internet connectivity to complete online courses at school.	51	69	19	26	2	2.16
5. Content in online courses does not match our curriculum.	5	38	99	18	4	2.87
6. Content in online courses is out-dated or incorrect.	6	56	99	4	0	2.61
7. Students in online courses are not prepared for MAP	3	30	108	20	4	2.95

Table 8. Responses to Likert scale items.

or End-of-Course assessments.						
8. State or local policies prevent our use of online	22	71	66	4	2	2.35
courses.						
9. It is too difficult to schedule online courses as a part of	16	50	60	33	7	2.79
our program.						
10. There is a lack of teachers in our school or district	9	44	55	50	9	3.04
who are prepared and qualified to teach online.						

22. Does your school/district use interactive television(ITV) cooperative arrangements with other schools/districts?

The majority of respondents (72%) answered "no" in response to this item while 28% answered "yes." For those that answered "yes," a branched item asked them to briefly describe their ITV use. The branched item produced the responses detailed in Table 9.

Table 9. Uses of ITV.

Response	Number
Dual credit from (local college, Central Methodist University, Kansas State	25
University, St. Louis Community College, State Fair Community College,	
Missouri Southern State University, or University of Central Missouri)	
College courses (English, College Algebra, Anatomy)	10
High school courses (Spanish, foreign language, ACT prep, French)	21
Description of a consortium of districts (TRENDnet, MIT-E Network,	30
Northwest Missouri consortium, WeMET)	

The following other comments were recorded:

- We also do not have enough computers to use for a total online course. We want more ITV courses for our students
- We have 54 students taking Dual Credit College Courses from CMU and UCM. This is the type of distance learning we need more of and at times that match our schedule. Our students will not take regular online courses. They love the interaction with the face-to-face professor. We have 3 ITV Labs going throughout the day at XXX.
- We use ITV six out of seven periods of the day. We belong to the WeMet consortium of school districts.
- We did use ITV arrangements within a small network of neighboring school districts until scheduling became conflictual and fewer teachers were comfortable with teaching across this format, partly due to difficulties with collecting written work from students.
- Extreme Use-approximately 60-70% of Seniors

23. Does your school/district utilize distance learning through cooperative video teleconferencing (VTC)?

The majority of respondents (90%) answered "no" in response to this item while 10% answered "yes."

For those that answered "yes," a branched item asked them to briefly describe their VTC use. The branched produced responses similar to those listed for item 22; however, there were fewer responses for each category. Some of the comments appeared to show that respondents were not sure of the difference between ITV and VTC.

24. Does your school/district use electronic textbooks or other digital tools that replace textbooks?

The majority of respondents (83%) answered "no" in response to this item while 17% answered "yes." For those that answered "yes," a branched item asked them to briefly describe their use of electronic textbooks or other digital tools. A sampling of the responses included:

- A few are used in support of the traditional text.
- Students use electronic textbooks at home. We only have classroom sets at school. (noted 6 times)
- Middle school students have access to online textbooks at home and at school.
- Just started ordering classroom sets of books and providing passwords to electronic textbooks.
- Piloting program. (noted 4 times)

Other responses included hardware such as iPads and SMART Boards as well as mention of specific programs such as eMINTS and laptop projects.

25. Does your district use any of the following digital resources? (select all that apply)

The majority of respondents (76%) selected Discovery Education – streaming video. The remaining responses were small (1 - 10%) for NROC, OER, Curricki, and cK-12 with Hippocampus receiving 10%.

Twenty-nine percent (29%) of respondents selected the response choice "other" and noted the specific programs or products detailed in Table 14. The responses in Table 10 include items mentioned at least twice. Items with only one mention were not included.

Table 10. Other digital resources.

Response	Number
Study Island	14
Learn 360	5
BrainPOP!	3
Safari Montage	2
Gizmos	2
Read and Write Gold	2
Textbook-based resources	2

26. Does your district participate in any online assessment programs?

The majority of respondents (77%) answered "yes" to this item while 23% answered "no." When asked to list the program used, the overwhelming majority (89%) listed "End-of-Course" assessments or "MAP." Approximately 15 listed assessments connected with the Study Island product and 10 listed the Acuity assessment program.

27. Does your school/district provide teachers with professional development about how to teach online?

The majority of respondents (76%) answered "no" to this item while 24% answered "yes."

28. Does your school/district provide teachers with professional development about how to develop online or blended/hybrid courses?

The majority of respondents (84%) answered "no" to this item while 16% answered "yes."

29. Would your school/district be interested in a consortium focused on the future of learning and online courses sponsored by MSBA?

The majority of respondents (83%) answered "yes" to this item while 17% answered "no."

30. What services would be most beneficial to your school/district? (Select all that apply)

The response receiving the highest number and percentage of responses (80%) was "access to online courses created by other Missouri districts. Table 11 details the responses received by response choice.

Table 11. Services most beneficial to school/district.

Response Choice	Number of	Percentage
	Responses	
1. Access to online courses created by other Missouri districts.	240	80%
2. Professional development for teachers to help them learn to teach online or in blended/hybrid situations.	202	67%
3. Learning how to create online courses.	188	62%
4. Access to a pool of teachers who are prepared and qualified to teach in online	184	61%
settings.		
5. Assistance with aligning online and distance learning to Common Core and state standards.	174	58%
6. Access to digital resources.	163	54%
7. Access to commercially-provided courses at a discounted cost.	160	53%
8. Learning how to evaluate the quality of online courses.	155	51%
9. Learning how to evaluate student success in online environments.	154	51%
10. Development of policies to support local online and distance learning programs.	132	44%
11. Access to commercially-provided resources at a discounted cost.	132	44%
12. Assistance with creating formative and summative assessments for online and distance learning.	130	43%
13. Assistance with understanding learning management systems (LMS) – for	130	43%

example, BlackBoard, Desire2Learn, Moodle.		
14. Learning how to evaluate online instructors	103	34%
15. Consultation with experts about the technical infrastructure needed to support	98	33%
distance and online learning.		
16. Forming a cooperative video teleconferencing group with others to share courses	89	30%
and teachers.		
17. Forming or learning to use a cooperative interactive television (ITV) group with	87	29%
others to share courses and teachers.		

31. Please provide any comments or questions that you have about online or distance learning.

The following comments were recorded in response to this open-ended item. When an individual's name or a district name was used, the names were redacted to provide anonymity.

- The Ozarks Educational Research Initiative has embarked on a One-to-One Technology Project involving 16 school districts in Southwest Missouri representing 75,000 students. Among the areas of focus is the topic of virtual learning/online courses. Committees are currently researching best practice in the implementation of 1:1 as well as the implications of such an initiative.
- I marked that we use cooperative video teleconferencing in the survey, but now I realize I don't know what it is. Our ITV network uses video conferencing. What's the difference?
- It is a great resource for small schools which can't offer as many courses without the use of ITV network.
- Education is best face to face. ITV is next best. Online is marginal. You cannot replace face to
 face. However, I understand online is a viable alternative due to unlimited course offerings, cost,
 etc. I think we should use ITV rather than online. Is a better educational delivery system. My
 school has used all listed above. Most HS students are not disciplined enough to fully utilize
 online.
- This is the wave of the future. We need to implement some type of online course requirement for graduation because of how higher education is evolving.
- I believe that online course can be a good tool, but I further believe that the greatest, maybe only, benefit would be for our higher performing students who wish to enhance their HS education. Some students may want to do online as a way out of the regular classroom thinking that online may be easier. A quality online program, not MoVIP, could work.
- For the St. Louis county area, how will this service support or compete with the E2020 program being developed and supported by CSD? At XXX, we are interested in learning more about online learning however our main interest would be in creating our own courses, having input into the creation of courses to assure similar rigor to XXX courses, and/or having our own teachers teaching the courses that are developed and offered. Getting over the hurdle of thinking that online courses are not as rigorous as on campus courses will be a challenge for our community.

- There is a much needed resource for our districts and has the potential to have a positive impact on student learning and motivation, as well as help control costs by becoming more efficient in our delivery methods.
- I certainly believe the future of education is in web based resources and hard copy text becoming archaic and cost prohibitive. My greatest concern is attaining the funding necessary to support technology equipment and maintenance of hardware and software before beginning a successful online educational environment.
- We have the capability of -TV, but the results have not been productive.
- Online learning differs for every student, every course, and every teacher. Students seem to either excel or collapse.
- We really have not looked at using online courses at this point but would be interested in learning more about what is available and the quality of the courses that are available.
- I do not believe that state funding should be provided to groups that develop online virtual schools or courses directly. If schools choose to purchase at the local level then it may be appropriate.
- I would like to see Dual Credit Courses offered online. This will allow more students the opportunity to access college level courses.
- XXXX would like to be an active member of this consortium to develop ITV Distance Learning Dual Credit courses for our Sophomores, Juniors, and Seniors. We are a member of the WEMET ITV Consortium but it is mainly online courses and our students will not take them. Also, we don't have enough computer labs to do online learning as we have several webbased education programs that teachers use each day for English, Reading, Math, and Writing K-12. I have alot of experience with ITV Programs and would love to help with this consortium. Thanks XXXXXXX.
- This past year we began exploring on-line eduction and would further like expand our program.
- Many questions I cannot answer based on my position and my experience in that position.
- I'm a school counselor so I was unable to answer many of these questions effectively.
- Not sure where our district is with this topic as we are limited in terms of funding. We can not say what would be most beneficial as we have not looked into the topic enough to give specifics.
- I have had a few student who attempted MOVIP and they were unsuccessful. In addition, the cost was too expensive. We mostly use MU High for Health, American Government and Personal Finance. The students enrolled in PLTW and four years of a fine arts program can't fit these state requirements into their PPOS. Occasionally, I will suggest MU for a senior English credit for students who want to graduate after seven semesters. PLATO is used in our credit recovery, Alternative School and at-risk programs. Most of these students can't afford MOVIP or MU. In addition, these students are successful at learning when the teacher lecture part is removed and they can work at their own pace. I am also using PLATO with some home bound students.
- I have strong reservations about student discipline/learning and online courses. I agree that we
 need technology in the classroom: A process that can augment instruction. Live instruction is
 invaluable. We cannot replace human interaction in the education process. Online smacks of
 replacing the hallmarks of learning: Social interaction and accountability. Online invites
 cheating, less effort and frail accountability.

- In a technological age, it is imperative we offer our students different ways of learning through technology as well as providing them the opportunity to engage in interactive learning. I work in an Alternative High School with many at-risk students. The traditional classroom often does not meet the needs of these students. Online and distance learning can provide us with the tools we need to engage these students in creative ways of teaching and learning. It is unfortunate that we have Odesseyware as, in my opinion, it lacks the kind of material and instruction we need to best meet the needs of our students to be successful and maintain persistence to graduation.
- Since we have the technology to receive ITV classes we have not pursued online classes as we want students to use classes supplied by ITV delivery.
- I do not know if our district would be interested in an online course consortium. We may be.
 We'd continue to use online courses for credit recovery, but promoting courses for enrichment that our school does not offer would be a new endeavor. Students may take enrichment classes through MU High School or other universities, but they initiate and pay for it on their own.
- Our experience at XXXX is that our students do not like the strictly online courses. In fact, they
 will not sign up to take them. Also, Adrian does not have enough computers available for our
 students to take online courses. Our students really like the ITV Distance Learning Dual Credit
 College Courses we participate in with the WEMET Consortium and in particular the courses
 taught by professors at Central Methodist University. This year we have 54 Juniors and Seniors
 enrolled in ITV Dual Credit College Courses and hope to have more during the 2012-2013 school
 year and beyond. The ITV courses are a God-send to our rural district. We only have three high
 school teachers with Master's Degrees, so we can't offer college credit with our own teachers
 being the instructor. If we didn't have the ITV courses through CMU, our students would not be
 able earn Dual Credit while in high school.
- IMO, the questions on this survey were not articulated well (in proper techy-contemporary language)....things like that and sending Word document letters attached to email seem to infer that MSBA doesn't have a good handle for online education, giving concern for their involvement. And in any context, the less top-down policy and regulation is better. "Support" is good....but "standardization and regulation" from those not on front lines is not necessarily good. Just make sure decision making groups has large % of classroom teachers with experience with online ed. Thanks. :)
- We love working with MIT-E. I'm relatively new at XXXX and don't know if there would be an interest for additional distance learning or not.
- We are a K through 8 district, but the need for online classes is here.
- I think the main obstacle for implementing online courses is the cost. School District budgets are tight and are doing well to continue to offer what we can right now.
- We are a K-8 district. I am not sure how we would use this at this time or IF we could given the economics at this time. Funding the resources needed: equipment, space and still need a teacher to supervise/monitor are also considerations for the district.
- We have utilized satellite teaching and ITV in the past. It has been several years and we have found face-to-face instruction to be more effective for our students. We have had students who are homebound or had special circumstances take MoVIP courses as well.

- We like the e2020 (Education2020) resources. Our teachers and students also use Atomic Learning to master various technology concepts through online video tutorials.
- I am not that familiar with the high school curriculum and tech use so I really don't know the answers to most of this.
- As a school counselor, I am not authorized to answer some of the questions about decisions made at the district level.
- I think it is a developing field that could enhance current learning.
- I do not know enough about on line courses to answer the questions.
- I do not know the answers to many of the questions asked in this survey. I have no idea what the actual costs of E2020 are for the district, but there are no costs to the families. However, for MU High School courses, families bear the costs of those courses.
- I am at a K-8 school so I don't think this applies to our school as much as high school. I think online or distance learning would be a very good option for quite a few students, eg. homebound, home schooled and disabled/severely health impaired.
- We have been in conversation with the St. Louis CSD regarding a local consortium of virtual learning districts. I'm not sure if or how CSD and MSBA might be working in collaboration with CSD. This would I pact our participation.
- It works great for our school. The only problem is some of the "advanced" students cannot afford to take the online classes, which is sad. It is too bad that the students with the high gpa's cannot use some of their A+ money for high school classes.

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