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DEPARTMENT OF EDUCATION
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COMMISSIONER

TO: Senator Justin Alfond, Chair
Representative Patricia Sutherland, Chair
and Members of the Joint Standing Committee on Education and Cultural Affairs

FROM: Susan A. Gendron, Commissioner

DATE: March 22, 2010

SUBJECT: Report

The Department of Education is pleased for the opportunity to present the enclosed report on An Act To Create the Maine Online Learning Program to the Joint Standing Committee on Education and Cultural Affairs. This Report was completed and filed by the Maine Department of Education in accordance with the provisions of Resolve 2009, Chapter 330, (LD 1446) An Act To Create the Maine Online Learning Program.

We look forward to the opportunity to present the bill to, and have a conversation with the Joint Standing Committee on Education and Cultural Affairs at your convenience.

A Review of Online Learning Initiatives

Spring, 2010

In response to: Sec. 5. Department of Education review of online learning initiatives; report; additional necessary implementing legislation. In establishing the Maine Online Learning Program under the Maine Revised Statutes, Title 20-A, chapter 802, the Department of Education shall review the online learning initiatives established in other states and jurisdictions, including the best practices established by these online learning initiatives related to funding, governance, approval requirements for online learning providers, teacher quality, assessment of student performance, accessibility of programs and materials for individuals with disabilities, alignment with accessible instructional materials provisions of the federal Individuals with Disabilities Education Improvement Act of 2004, Public Law 108-446, and alignment with the universal design provisions of the 1998 amendments to the federal Higher Education Act of 1965, Public Law 105-244. No later than January 1, 2010, the Commissioner of Education shall submit to the Joint Standing Committee on Education and Cultural Affairs a report that contains findings, recommendations and any proposed legislation necessary to further the implementation of the Maine Online Learning Program. Following receipt and review of the report, the Joint Standing Committee on Education and Cultural Affairs may submit a bill to the Second Regular Session of the 124th Legislature.

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Online Learning - Introduction

The popularity of online learning has never been greater, with a considerable number of students choosing to take advantage of the opportunity to learn in an online environment. Across the nation, the number of online enrollments in both higher education and K-12 education is growing at a significant pace. This report will review existing online learning initiatives within, and outside of, Maine, examining issues related to participation, funding, governance and best practices.

Keeping Pace with K-12 Online Learning defines online learning as "teacher-led education that takes place over the Internet, with the teacher and student separated geographically." (Watson, Gemin, Ryan and Wicks, 2009), and in 2009 Picciano and Seaman described a fully online course as, "A course where most or all of the content is delivered online, and typically has no face-to-face meetings."

The growth in K-12 online learning can be attributed to several factors including a desire to expand educational offerings for all students regardless of their location, and advances in communicative technologies allowing for effective learning opportunities. Coupled with online learning activities, these advances in communicative technologies can allow educational objectives to be met in a manner that provides both teachers and learners with flexibility, freeing them from the constraints of time and place. Smaller schools with fewer resources are not always able to offer the wide range of courses they would like, and online learning is often seen as a way to combat this by providing students with more choices in both the actual coursework they engage in, and the type of educational experience they have. Also, in schools where students are impacted by scheduling conflicts, solutions can be offered to accessing in-demand courses by making an online alternative available. Technological advancements in hardware, software, and networking equipment, along with more ubiquitous school access to the Internet for communicative purposes, have also positively influenced the growth of K-12 online learning.

Online learning is a not a new concept for the higher education community. As evidenced by research findings that report "more than two-thirds of all higher education institutions now have some form of online offerings, with the majority of these providing programs that are fully online."

(Allen and Seaman, 2007), online learning has been broadly adopted in higher education as a popular method to teach and learn. Complete graduate and undergraduate degrees can be obtained online, and in 2009 Allen and Seaman reported that, "For the sixth consecutive year the number of students taking at least one online course continued to expand at a rate far in excess of the growth of overall higher education enrollments. The most recent estimate, for fall 2008, shows an increase of 17 percent over fall 2007 to a total of 4.6 million online students."

Closer to home, Jim Toner, Director of Distance Education at the University of Maine, reported in 2008 to *The Maine Campus* that, "In 1996, zero percent of the student credit hours (at UMaine) were attributed to online courses, and now over 11 percent of all student credit hours are generated through distance and online learning," and in 2009 he also reported that, "The number of online courses offered at UMaine has increased from 12 courses to 277 in 12 years." Higher education administrators, both nationally and locally, have embraced distance education and online learning specifically. At the University of Maine System Board of Trustees meeting on January 12, 2010, Vice Chancellor for Academic Affairs James Breece reported "a 14 percent increase in students taking distance education classes and an increase of more than 18 percent in distance education credit hours over the previous year." University of Maine System Chancellor Richard L. Pattenaude stated that "the system (UMS) has set a goal of doubling the number of students taking online classes and programs available online..."

This increase in online learning opportunities at the higher education level has prompted Michigan and Alabama to implement legislation that seeks to improve college readiness by mandating that students in their states are provided with an online learning experience before they graduate.

At the K-12 level, the surge in popularity and wider acceptance of online learning for K-12 students can be attributed to several factors as outlined in the 2009 Trends Update of the *Learning in the 21st Century: A National Report of Online Learning.* Using *Speak Up – Project Tomorrow* survey data collected online in the fall of 2008 from more than 335,000 K-12 students, reasons cited for participating in online learning were the desire to earn college credit, to be able to work at their own pace, to be able to take a class not offered at their school, to be able to complete HS

requirements, to get extra help in a subject, to fit their schedule, and because it is easier for them to learn in an online class. In *Keeping Pace with K-12 Online Learning* these reasons for engaging in online learning were reinforced when it was reported that "The Virtual High School Global Consortium, for example, has been asking students why they chose an online course, and has found that the top two reasons given are because the course is not offered at the student's school, and because the student "wanted to experience an online course." At Florida Virtual School, more than a quarter of students report that they are taking their online course because they need the course to graduate on time."

The research evidence available illustrates that the number of students participating in online learning, both part-time and full-time, at the higher education and K-12 levels, is steadily increasing. In addition, recent evidence supports the concept of online learning being an effective teaching methodology. A recent U.S. Department of Education study concluded that, "In recent experimental and quasi-experimental studies contrasting blends of online and face-to-face instruction with conventional face-to-face classes, blended instruction has been more effective, providing a rationale for the effort required to design and implement blended approaches." (Means, Barbara; Toyama, Yukie; Murphy, Robert; Bakia, Marianne; Jones, Karla., 2009).

This report will seek to review existing literature that outlines the extent of online learning in Maine and in other states, describe the means by which the online learning opportunities are organized, funded and managed, and outline some of the ways that quality online experiences are currently being provided.

K-12 Online Learning in Maine and the Nation

Just as higher education adopted online learning as a viable option for providing educational opportunities, K-12 educators and students are increasingly viewing online learning as an effective methodology for teaching and learning. Online learning comes in many shapes and sizes, and among the challenges in determining the extent of this growth is identifying a way to accurately measure participation, and establishing how the complexities of a variety of operational procedures can best be described. In an attempt to do so, when looking specifically at the growth in K-12 online learning across the nation, the U.S. Department of Education estimates that "e-learning, or virtual school instruction, is now offered by about 25 percent of all K-12 public schools." (Edutopia, January 2010).

The Sloan Consortium surveyed school administrators around the country during the 2005-06 and 2007-08 school years. Based on these surveys, Sloan estimates "the number of K-12 students engaged in online and blended courses in 2007-08 to be 1,030,000, an increase of 47% since 2005-06." (Picciano, A. G., and J. Seaman. 2007). The reasons outlined for this growth in online learning include: offering courses not otherwise available at the school, meeting the needs of specific groups of students, offering Advanced Placement or college-level courses, reducing scheduling conflicts for students, and permitting students who failed a course to take it again.

Online opportunities in states and jurisdictions other than Maine exist in a variety of forms, each of which offer differences in scale, funding, governance and structure. State-run virtual schools, full-time online cyber-schools, district-wide initiatives, university programs, and collaborative consortiums are all existing models for online for K-12 students.

According to the 2009 Keeping Pace with K-12 Online Learning report, "State virtual schools now exist in 27 states. An additional six states offer state-led online learning initiatives that provide tools and resources to school districts across their state, while not providing the full suite of centralized services that the state virtual schools offer. Together, the state virtual schools provided roughly 320,000 course enrollments (one student taking one semester long course) in for-credit courses in school year 2008-09."

"State virtual schools and state-led online initiatives are created by legislation or by a state-level agency. They are often, but not always, administered by a state education agency, and usually funded by a state appropriation or grant for the purpose of providing online learning opportunities to students across the state. They may also receive federal or private foundation grants, and sometimes charge course fees to help cover their operating costs. Most of these programs are supplemental, offering courses for students who are otherwise enrolled in a traditional school setting, and are not diploma-granting." Examples of statewide virtual schools run by state agencies include the Florida Virtual High School, the Michigan Virtual School, and the North Carolina Virtual Public School.

Full-time online virtual schools are a growing sector in online learning. "Full-time online schools, sometimes called cyber schools, are online learning programs in which students enroll and earn credit and diplomas issued by the online school." In this type of arrangement, districts partner with online providers to offer opportunities within a district or even across a state. "The number of states with full-time online schools is growing, and there are now 24 states with these schools operating statewide plus Washington D.C., and several additional states in which full-time online schools are available to some, but not all, students in the state. About 175,000 full-time students attend these online schools; states with the largest number of full-time online students include Ohio, Pennsylvania, and Arizona." In many of these cases funding is generated through public education funds following the student to the online provider. Examples of these types of charter schools include the Minnesota Virtual High School, the Ohio Connections Academy, the Arizona Connections Academy, the Oregon Virtual Academy, and the Pennsylvania Cyber Charter School.

Limited data is available on the specific number of students participating in online learning in district-level initiatives. District programs serve students who reside within the district that is providing the online courses. "Even for states that are gathering and reporting information about the state virtual schools or full-time online schools, in most cases the data being gathered do not extend to district-level online programs." However, at a minimum, it has been estimated that in 2008-09 there were, "1.07 million enrollments from approximately 330,000 students. While this data can't be used to extrapolate to the total district level activity, it is further confirmation of the

significance of district level programs in the overall K-12 online learning numbers." (Watson, Gemin, Ryan and Wicks, 2009)

In addition to school districts offering online learning opportunities within their own jurisdiction, other district level initiatives might include consortium-type relationships that offer online courses with a local teacher, and providers who offer content developed as online courses. "School districts typically depend on multiple online learning providers, including postsecondary institutions, state virtual schools and independent providers as well as developing and providing their own online courses." (Picciano and Seaman, 2009). Most of these types of programs provide supplemental offerings, but some do offer full-time opportunities. These types of entities are generally funded from within each district, and might include face-to-face opportunities mixed with online offerings (hybrid). Examples of single-district online programs include the Los Angeles Virtual Academy (CA), the Broward Virtual School (FL), the Fairfax County Public Schools Online Campus (VA), and the Pasadena Virtual School (TX).

In addition to the type of entities already described, there are collaborative consortiums that work within districts, across states, and even around the world. A variety of funding sources including course and administrative fees support these types of organizations. The Virtual High School Global Consortium based in Massachusetts is one recognizable example of this type of online provider and in 2009 they reported a total of 11,902 enrollments.

Here in Maine, during the 2005-06 and 2006-07 school years, at least 583 Maine high school students participated in online courses. It was learned from those schools who responded to a request for information that there were at least 183 high school students who participated in online courses in the 2005-06 school year, and in 2006-07 this number rose to at least 400 students, an increase of 119%. (A Review and Assessment of Distance Learning Opportunities for Maine High School Students, Maine Department of Education, January, 2008).

Another initiative that provided online learning opportunities for Maine students between 2007 and 2010 was AP4ALL. AP4ALL was a cooperative venture between the Maine Department of Education and the University of Maine that was established to provide equity of access solely to

Advanced Placement coursework for low-income students in Maine, regardless of where they live and the resources available within their local school district. Many high schools in Maine have small enrollment figures, and quite often they do not have the resources needed to offer Advanced Placement level coursework. Over the past three years AP4ALL addressed this inequity of access to demanding, college-level courses by using online technologies to offer such courses to students in Maine at no cost. Students who participated in AP4ALL were taught by Maine certified teachers who received extensive training not only in their specific AP content area, but also in the pedagogy of effective online teaching. AP4ALL provided teachers with significant support in the areas of integrating technology, effective online communication, and all aspects of teaching and learning related to an online course. Mirroring national trends in the growth of online learning, enrollment in the AP4ALL program rose significantly from 2007-2008 when there were 6 courses with 44 enrollments, to 11 courses in 2008-2009 with 100 enrollments, and an all-time high of 187 enrollments in 14 courses during the 2009-2010 school year. It was anticipated that this growth would continue in 2010-2011, with an estimated 20 courses being offered, and a total of 250 enrollments being accepted, but AP4ALL was funded by a federal AP/IP grant that ends June 30, 2010, and the program will be suspended at that time.

Universities and colleges also provide online learning opportunities to K-12 students - many of which offer college or dual credit programs for advanced students. The University of Maine has been offering its popular Academ-e program since 2006, with approximately 150 juniors and seniors from Maine high schools participating in University courses each semester. Funding for this program has been established through the University of Maine discounting tuition by 50%, and the Maine Legislature's Aspirations Program covering the remaining 50% of costs.

The 501c non-profit Virtual High School Global Consortium is one of the most visible and recognizable providers of online opportunities for K-12 students in Maine. During the three school years 2007-08, 2008-09, and 2009-10, a total of 41 Maine schools collaborated with The Virtual High School Global Consortium to offer online learning opportunities to their students. During that three-year period, a total of 1,320 courses were taken by students in Maine, with 257 students taking VHS courses in 2007-08, 444 in 2008-09, and 619 in 2009-10 – further illustrating the growth in demand for online learning opportunities.

K12 is another nationally recognized online provider that is currently highly visible in Maine. K12 develop their own curriculum and they offer a wide array of online learning solutions for students. In the 2009-10 school year K12 started a pilot program with two Maine school districts, RSU 2 (Dresden, Farmingdale, Hallowell, Monmouth and Richmond) and MSAD 31 (Burlington, Edinburg, Enfield, Howland, Maxfield and Passdumkeag). In these programs, approximately 20-25 students per semester are participating in 19 courses that include a wide variety of content areas including Geometry, American Literature, Spanish I and II, and US and Global Economics.

Both nationally and locally here in Maine, online learning is growing and offering students an alternate option to the traditional face-to-face classroom. The most comprehensive and recent national state-level snapshot of online learning activity is from 2008-09 and available from the document, *Keeping Pace With K-12 Online Learning* (Watson, Gemin, Ryan, Wicks, 2009) sponsored by the International Association for K-12 Online Learning (iNACOL). The following two pages are excerpted from that report and provide a current overview of online opportunities specifically available, and details of significant activity around online learning, in each state.

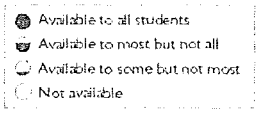
State Level Snapshots of Online Learning Activity

Keeping Pace With K-12 Online Learning. Watson, John., Gemin, Butch., Ryan, Jennifer,. Wicks, Matthew. (2009).

Table 1: State-level snapshot of online learning activity

State ratings are based on the availability of online learning options to students of all grade levels in all geographic areas of the state. Availability is in turn based on the existence and attributes of programs, policy and funding, including the proportion of the student population taking part in online courses and schools. The ratings are based on opportunities that were available in the 2008-09 school year, with limited adjustments for new programs underway in fall 2009.

	SUPPLEMENTAL		FULL-TIME		
State	Grades 9-12	Grades K-8	Grades 9-12	Grades K-8	Notes
Alabama					ACCESS is the second largest state virtual school in the country, but few other options
Alaska					At least two statewide online schools and some district online programs
Arizona					Fourteen online charter schools and district programs through 2008-09 offering full-time and supplemental options; cap now lifted and growth anticipated
Arkansas					AR Virtual High School is the state virtual school; only one statewide online charter school and it is limited to 500 students
California					Many district programs and online charter schools, all limited to provide services only in their own area and contiguous counties; University of California College Prep is a state-led initiative
Colorado					Small state virtual school (Colorado Online Learning); several online charter schools and growing number of district programs
Connecticut					CT Virtual Learning Center is funded by course fees; CT Adult Virtual High School offers adult program; consortium offers courses through the Virtual High School Global Consortium to 57 high schools
Delaware					Funding for Delaware Virtual School was eliminated due to a large state budget deficit
Florida					FL Virtual School is largest in the country; legislation in 2008 and 2009 requires all school districts to offer full-time online programs for grades K-12
Georgia					GA Virtual School and several suburban Atlanta districts have significant online programs; plus at least one statewide online charter
Hawaii					Hawaii Virtual Learning Network's E-School is the state virtual school; Myron B. Thompson Academy is statewide full-time school; online charter opened in 2008
Idaho					Idaho Digital Learning Academy is the state virtual school and among the largest relative to size of state population; several online charters and district programs
Illinois					Illinois Virtual School is the state virtual school; one full-time online charter school and one blended learning school in Chicago
Indiana					Virtual Pilot School has 200 full-time students; several statewide supplemental programs; two hybrid charter programs blend online and face-to-face instruction
Iowa					Iowa Learning Online and the Iowa Online AP Academy; few other online programs
Kansas					Forty-five district programs and charter schools enroll students statewide
Kentucky					KY Virtual Schools is small state virtual school; large district program in Jefferson County
Louisiana					LA Virtual School is state virtual school; online charter schools not prohibited by law but as of August 2009 no statewide online charter schools have been authorized
Maine					Maine Online Learning Program created in 2009 but not yet in operation; 25% of state's high schools offer courses via the Virtual High School Global Consortium
Maryland					Maryland Virtual School is small state virtual school; online charter schools are effectively prohibited by charter school law
Massachusetts					MassONE is a state-led initiative; 39% of state's high schools offer courses via the Virtual High School Global Consortium
Michigan					Michigan Virtual School is among the largest state virtual schools; first state to create an "online learning experience" requirement to graduate; some district programs
Minnesota					Many online charter schools and multi-district programs



State	SUPPLEMENTAL: Grades 9-12	SUPPLEMENTAL: Grades K-8	FULL-TIME: Grades 9-12	FULL-TIME: Grades K-8	Notes
Mississippi					Mississippi Virtual Public School is state virtual school; no online charter schools
Missouri					State virtual school, Missouri Virtual Instruction Program (MoVIP), enrolls both part-time and full-time students
Montana					New state virtual school, Montana Virtual Academy, will be in operation in 2010; supplemental district programs and an online learning consortium
Nebraska					Distance Education Council provides supplemental online courses across the state
Nevada					Online charter schools and district online programs including Clark County Virtual High School
New Hampshire					First statewide online charter school, the New Hampshire Virtual Learning Academy Charter School, launched in 2008, is largely supplemental but state-funded
New Jersey					Few online programs; distance learning is primarily through video
New Mexico					State virtual school, IDEAL-NM; some school district online programs
New York					A few online programs through BOCES; a charter school cap and past charter denials currently block online charter development
North Carolina					NC Virtual Public School is among the largest state virtual schools in the country
North Dakota					North Dakota Center for Distance Education is the small state virtual school
Ohio					Many online charter schools with a combined course enrollment of over 27,000 students in 2008-09
Oklahoma					Two statewide full-time online schools and two university programs
Oregon					Oregon Virtual School District is state-led initiative; several district programs and statewide online charter schools but growth of online charters is restricted
Pennsylvania					Eleven online charter schools and additional district programs
Rhode Island					Few online programs; 14% of state's high schools offer online courses through the Virtual High School Global Consortium
South Carolina					SC Virtual School is state virtual school; charter organization initially authorized three online charters in 2008 and five operating in 2009
South Dakota					South Dakota Virtual High School is state virtual school
Tennessee					e4TN is the state virtual school serving all 156 school districts; some district programs; 2008 legislation allows LEAs to sponsor an online charter school, but none have been authorized
Texas					Texas Virtual School Network is the state virtual school and funds online courses required for graduation; the state-led Electronic Course Program funds Grades 3-9 full-time virtual programs; some large district programs
Utah					UT Electronic High School is state virtual school; BYU offers online correspondence courses
Vermont					Few online programs although state online initiative being considered
Virginia					Virtual Virginia is state virtual school; some district programs especially in northern Virginia; no full-time online charter schools
Washington					Many district programs, often operated by national providers, serving students statewide; no charter school law
West Virginia					WV Virtual School is state virtual school; no other significant programs
Wisconsin					Wisconsin Web Academy is the state virtual school; numerous district programs and online charter schools
Wyoming					Wyoming Switchboard Network (WSN) coordinates distance learning among districts; two district programs and three statewide full-time online charters have received WSN approval

Funding Online Learning

For a considerable time, online learning at colleges and universities has been a significant part of how the higher education community has provided opportunities for teaching and learning. In order to meet the substantial and increasing demand for online courses, colleges and universities invested in their ability to provide such opportunities to their students. Teacher preparation and support, hardware upgrades, software training and marketing of online course catalogs have all been undertaken – in return, students enroll in courses and pay tuition. It is not surprising then, that this funding model translates into more higher education students participating in online courses than in K-12 education. Though K-12 education has been slower to adopt this educational methodology, it is obvious that this is changing rapidly.

Depending on the type of organization providing an online opportunity, funding at the K-12 level takes many forms, including legislative appropriations, federal and private foundation grants, public education funds, along with course and administrative fees. To date in Maine, most of the funding for online learning has been in the form of public education funds where individual schools or school districts pay fees to an online provider on a per course basis, or in the form of a membership.

Exceptions to this are the University of Maine Academ-e program where the University of Maine discounts tuition by 50% and the Maine Legislature's Aspirations Program covers the remaining 50% of costs, and the AP4ALL program for Advanced Placement coursework where opportunities were offered to students free of charge through funding from a federal grant.

The Importance of Establishing Best Practices for Online Teaching

In addition to providing students with opportunities that they might not otherwise have access to because of where they live, online learning can be much more than a solution to equity issues caused by geography and shrinking budgets. Highly qualified teachers can reach and teach their students online, all the while free from the constraints of time and place. Innovative pedagogical approaches using a myriad of digital resources and instructional content can be used to support student learning. The proliferation of powerful and easy to use digital communication tools allows for a high level of interaction between students and teachers, students and students, and teachers and parents, irrespective of physical locations.

"Through online and other digital means, students can have access to teachers with content knowledge and expertise who live in other parts of the state, the country, or even the world. These teachers, moreover, can be available at any time of the day for questions and advice. Now, time becomes a variable rather than a constant for student and educator. No longer locked into a 8 forty-five-minute class at a set time every day, students are able to learn and interact on a twenty-four-hour, seven-day-a-week basis." (Wise and Rothman, 2010).

Once seen as a methodology on the fringe, online learning has migrated into the mainstream of education, and for many it is actually seen as a potentially transformative educational option. A recent U.S. Department of Education study concluded that, "In recent experimental and quasi-experimental studies contrasting blends of online and face-to-face instruction with conventional face-to-face classes, blended instruction has been more effective, providing a rationale for the effort required to design and implement blended approaches." (Means, Barbara; Toyama, Yukie; Murphy, Robert; Bakia, Marianne; Jones, Karla., 2009). This belief that online learning has the potential to transform teaching and learning was echoed in 2009 by Patrick and Powell, "Online learning has the potential to transform teaching and learning by redesigning traditional classroom instructional approaches, personalizing instruction and enhancing the quality of learning experiences. The preliminary research shows promise for online learning as an effective alternative for improving student performance across diverse groups of students."

One often-cited concern around online learning is the perceived lack of socialization, though a recent study comparing the social skills of mainstream students in full-time, online schools with traditional public school students found, "evidence supporting the conclusion that typical, mainstream students enrolled in full-time, online public schools are at least as well socialized as equivalent students enrolled in traditional public schools with respect to social skills and problem behaviors." (Sivin-Kachala, J, and Bialo, E., 2009)

In order for online learning to truly transform teaching and learning, there are challenges in establishing what constitutes a quality learning experience that need to be met. Several organizations have developed guidelines designed to encourage better practices within the realm of online learning.

"The NEA's (National Education Association) "Guide to Teaching Online Courses" was developed in 2006 to help ensure the quality of online instruction to secondary students in the United States (see appendix B). It is meant to serve as a guide for policymakers, administrators, educators, and others engaged in selecting, hiring, training, and supporting teachers to provide quality online instruction to students, or in making policy choices affecting online education." This document attempts to outline several important components of successfully supported online education. It speaks to meeting a core set of beliefs that are specific to online learning, supporting an effective online education environment, defining credentials and skills of highly qualified online teachers, the evaluation and assessment of online teaching, and addressing the need to provide professional development for teachers, both current and next generation.

Online provider, the Virtual High School Global Consortium outlines on their web site that they adhere to these guidelines, "All VHS courses are monitored regularly, and adhere to the National Education Association's (NEA) recommended course guidelines for high quality online courses."

In an attempt to address concerns about teacher preparation for the online environment, some states have recognized the need for specialized professional development for teachers who are preparing to teach online. For example, "the online-learning bill that Wisconsin passed in 2008 requires that as of July 1, 2010, a person teaching an online course in a public or charter school

must have completed at least 30 hours of professional development designed to prepare a teacher for online teaching." (Devaney, 2008).

In the document "National Standards of Quality for Online Courses", the International Association for K-12 Online Learning (iNACOL) outlined standards that it felt should be implemented and monitored by any organization interested in providing quality online opportunities for their student population. "As a result of the research review, NACOL has chosen to fully endorse the work of the Southern Regional Education Board (SREB) *Quality Online Course Standards* as a comprehensive set of criteria. The standards as identified by SREB, already in use by sixteen SREB states, proved to be the most comprehensive and included guidelines set forth in the other criteria from the literature review." These standards go into significant detail, addressing the concepts of course content, instructional design, student assessment, the use of technology, course evaluation and assessment, and the inclusion of a variety of 21st century skills (see appendix C).

The Impact of Legislation on Online Learning

"The number of students taking online courses in a state is directly proportional to a combination of policy (whether students have the right to choose an online course) and funding (whether online programs are well-funded or funding follows students who choose online courses or schools). The states with the most online learning activity and options are those that have funded a state virtual school well and/or have created a regulatory environment in which students are free to choose online courses and schools, and to have funding flow to the online option." (Watson, Gemin, Ryan and Wicks, 2009).

Research findings report that, "more than two-thirds of all higher education institutions now have some form of online offerings, with the majority of these providing programs that are fully online." With this increase in opportunities for online learning in higher education, several states such as Michigan and Alabama have implemented legislation that mandates providing students with an online experience to improve college readiness. These initiatives also provide students with choices regarding what, when, how and where they might participate in the educational process.

In 1996, the state of Michigan implemented legislation that required all high school students to either complete an online course, or have an online experience before graduating.

> *Michigan: 380.1278a(1)(b) A school district or public school academy shall provide the basic level of technology and internet access required by the state board to complete the online course or learning experience. For a pupil to meet this requirement, the pupil shall meet either of the following, as determined by the school district or public school academy:*
>
> *Has successfully completed at least 1 course or learning experience that is presented online, as defined by the Michigan Department of Education.*
>
> *The pupil's school district or public school academy has integrated an online experience throughout the high school curriculum by ensuring that each teacher of each course that provides the required credits of the Michigan merit curriculum has integrated an online experience into the course.*

Alabama recently followed suit with a similarly worded requirement for all students:

> *Alabama: Section 290-3-1-02, Pertaining to the Alabama High School Diploma with Credit-Based Endorsement. That beginning with the ninth-grade class of 2009-2010 (graduating class of 2012-2013), students shall be required to take and receive a passing grade in one on-line/technology*

enhanced course in either a core course (mathematics, science, social studies, or English) or an elective with waivers being possible for students with a justifiable reason(s).

In 2009-2010 Florida legislation will require that each school district provide a program for full-time online students in grades K-8, and full or part-time students in grades 9-12.

Florida: 1002.45 Beginning with the 2009-2010 school year, each school district shall provide eligible students within its boundaries the option of participating in a virtual instruction program. The purpose of the program is to make instruction available to students using online and distance learning technology in the nontraditional classroom.

Florida has also published a list of requirements that online providers approved to offer virtual instruction in that state must document having met (see appendix A).

These pieces of legislation were implemented with the intention of providing students with an experience that would improve college readiness. By supporting a students ability to participate in an online learning experience, these initiatives also provide students with choices regarding what, when, how and where they can participate in the educational process.

Conclusion

K-12 online learning is growing rapidly, both nationally and locally here in Maine. In 2009 there were 27 states that had established state-run virtual schools, and 24 states plus Washington DC that had full-time multi-district online schools.

It is estimated that 25% of all public schools nationally are currently offering online opportunities to their students. It is also estimated that in the United States during the 2007-08 school year there were 1,030,000 K-12 students participating in online and blended courses. These students are enrolled in state-run virtual schools, full-time and part-time cyber schools, district and local online initiatives, statewide and global consortiums, and higher education online courses. These are estimates due to the fact that there currently is no standard and accepted definition of online learning, the different types of programs count students differently, and most states do not collect data that establishes how many online students they have. Though considered estimates, these numbers are convincing evidence of significant growth in K-12 online learning.

Once seen as a methodology on the fringe, online learning has migrated into the mainstream of education, and for many it is actually seen as a potentially transformative educational option. The U. S. Department of Education has stated that online and blended learning can be more effective than traditional face-to-face instruction. (Means, Barbara; Toyama, Yukie; Murphy, Robert; Bakia, Marianne; Jones, Karla., 2009).

By implementing *PUBLIC Law, Chapter 330 LD 1446, item 1, 124th Maine State Legislature An Act To Create the Maine Online Learning Program* and establishing a list of requirements that online providers seeking to offer services in Maine should meet, a valuable resource will be created for any school or school district interested in providing online learning opportunities for their students.

This list of requirements should provide school administrators with some level of assurance that if met, the student(s) participating in the course(s) will have a quality online experience with that

online provider. Online providers interested in providing services to Maine schools should be able to clearly demonstrate that these criteria are in fact going to be met. Developing a process that is able to accurately determine if this is actually the case will be an important part of this initiative.

It should be noted though, that if requirements deemed too restrictive are included as criteria to be met by most online providers, students in Maine could potentially be denied the ability to take advantage of online opportunities. A meaningful list of criteria should therefore be developed – one that is focused on ensuring that any online provider who offers their services to students in Maine can truly provide a quality educational experience.

In 2009, Watson, Gemin, Ryan and Wicks cautioned against establishing evaluative criteria that did not go far enough to provide schools with adequate information, "The rapid growth of online learning has created immense pressure on administrators—from parents, policymakers, and the purse—to offer their students an online option, *any* online option. Besieged by vendors dangling deals almost too good to be true, these school leaders are equipped as consumers with rather simplistic selection criteria that may boil down to: Does the content align with state standards? Are teachers certified in my state? How much does it cost? ... It is easy for low-quality, low-cost providers to say that they meet state content standards and teacher certifications. For budget-strapped administrators who must answer to school boards, it may be difficult to look past these two questions to ask whether the content is imaginative and engaging, whether it meets the online learning standards created by iNACOL and SREB, and whether teachers are able to interact meaningfully with students... critically important decisions about online learning resources are all too often being made largely on the basis of price, which can lead to poor results for individual schools and for education as a whole."

A quality educational experience for each and every student should be the outcome of any school enrolling their student(s) in the services of an online provider. Online providers listed as "approved" by the Maine State Department of Education should be able to demonstrate to those enrolling students in online courses that this in fact will be the case.

The Department of Education has attempted to engage a variety of member groups from the

educational community in a conversation around the establishment of the criteria that should be included. School administrators, teachers, technology and curriculum specialists, and online providers were offered an opportunity to provide input. Based on these conversations, as directed by PL 2009, Chapter 330, LD 1446, the Department will work with the State Board of Education to publish a set of criteria that any online provider seeking to offer their services in Maine should be required to meet in order to be included on the "approved" list.

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Appendices

Appendix A

The 2009 Florida Statutes. Chapter 1002. STUDENT AND PARENTAL RIGHTS AND EDUCATIONAL CHOICES. 1002.45 School district virtual instruction programs.

(2) PROVIDER QUALIFICATIONS.--

(a) The department shall annually provide school districts with a list of providers approved to offer virtual instruction programs. To be approved by the department, a provider must document that it:

1. Is nonsectarian in its programs, admission policies, employment practices, and operations;

2. Complies with the antidiscrimination provisions of s. 1000.05;

3. Locates an administrative office or offices in this state, requires its administrative staff to be state residents, requires all instructional staff to be Florida-certified teachers under chapter 1012, and conducts background screenings for all employees or contracted personnel, as required by s. 1012.32, using state and national criminal history records;

4. Possesses prior, successful experience offering online courses to elementary, middle, or high school students; and

5. Is accredited by the Southern Association of Colleges and Schools Council on Accreditation and School Improvement, the North Central Association Commission on Accreditation and School Improvement, the Middle States Association of Colleges and Schools Commission on Elementary Schools and Commission on Secondary Schools, the New England Association of Schools and Colleges, the Northwest Association of Accredited Schools, the Western Association of Schools and Colleges, or the Commission on International and Trans-Regional Accreditation.

(b) An approved provider shall retain its approved status for a period of 3 years after the date of the department's approval under paragraph (a) as long as the provider continues to comply with all requirements of this section.

Appendix B

National Education Association, "Guide To Teaching Online Courses."(available at: http://www.nea.org/assets/docs/onlineteachguide.pdf)

Appendix C

iNACOL – North American Council for Online Learning, "National Standards of Quality for Online Courses."
(http://www.inacol.org/research/nationalstandards/NACOL%20Standards%20Quality%20Online%20Teaching.pdf)