Surfing the CyberWave of Reform: Evaluating K-12 Virtual Schools

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Abstract

K-12 online learning environments, otherwise known as virtual schools, have made their debut in the last seven years. While their growth was slow in the beginning due to the limitations of technology, recent political and technological advances have pushed them toward the crashing wave of the Communication Age. This growth has swelled to make Virtual Schools a possible focus for research in the near future. Enrollment in online courses has doubled in the last year (Taylor, 2002), causing one to wonder if the schools will be equal to the challenge. Are virtual schools prepared to meet the needs of the students who want to utilize their services? This paper discusses the unique needs of online students, explores the existing current online curriculum, and discusses future directions research should take to ensure that online curriculum meets the needs of students.

Keywords

Virtual Schools, online curriculum, K-12 online curriculum,

Introduction

In the infancy of this new millennium, educators are surfing a major wave of change involving curriculum and how it is delivered. How many will "hang ten" and have an easy ride to the beach? The intensive shift to performance testing in the last decade of the century, caused professionals to take a new look at what students know and how they learn. As a result education has made major changes in pedagogy and assessment methods. After nine decades of stagnant teaching methods, these changes are overdue. But will the swell and eddy of this paradigm wave continue? One major influence that may keep the education reform current flowing is the advance of technology. With the wiring of 98 percent of American schools (Kalmon 2002), online learning is slowly making its way to the forefront of delivery methods for our youth. This relatively new medium has been a slow grass roots effort for several years. In the year 2000, only 30 online schools existed across the nation and only 5 percent of educators were aware of online programs (Russo 2001). According to the American Federation of Teachers, (Trotter 2002) high school students in 32 states are now taking online courses in public schools. For example, in the year 2002, the state of Colorado serves as one example of the changes occurring in states around the country, in that 33 percent of schools had students enrolled in an online course, and 81 percent of principals saw a role for online courses in their building. In addition, Kalmon (2002) points out that 90 percent of American children and teenagers use the Internet.

To be able to ride the tidal wave with success, administrators need to make critical decisions about the curriculum to offer their students to meet their needs. This paper will explore the issues administrators need to focus on to make those pivotal decisions.

Research questions to be asked

In order to explore the issue of virtual schools, several questions need to be researched. These questions include:

- What types of Online Schools are currently available?
- What are the types of online students and their needs??
- What types of curriculum are best for online learners?
- What should the future directions of online curriculum in K-12 be?

What types of Online Schools are currently available?

There are several types of online environments that exist at the present time. The virtual school trend started in 1995 with the creation of The Virtual High School in Maynard, Massachusetts. It was co-founded by the Hudson School District, and Concord Consortium, a non-profit research and development organization. The funding was provided by a five year federal grant from the government (Hammonds 1998). The Virtual High School has grown to include member schools in 28 states and eight countries. Participating schools contribute a teacher to lead at least one online class for every 20 students enrolled from their local school.
Their students in return can utilize courses provided by other participating teachers (Trotter, 2002).

In the last several years, state schools have been taking advantage of individual online courses provided by vendors, such as Class.com, for their students. State school students usually take courses at state schools, supervised by district teachers, in a computer lab. Most of the students are enrolled, and are taking other face-to-face classes within their local school. This scenario is utilized to provide special courses for advanced students, or students who need courses in a subject matter where the local school is lacking a teacher. The ability to adjust the online schedule makes this appeal to regular high school students with scheduling challenges. State schools see these courses as a way to solve the alternative education challenges for at-risk students, and sometimes as a way to bring home school students back into the fold.

In the meantime, the charter school movement has jumped onto the online surfboard. Online charter schools usually develop their own academic curriculums to meet the goals of their charter (Thomas, 2002). Charter schools offer whole programs that may be online or offline, in contrast to state schools who offer a selection of courses.

The charter schools, state schools, and some home school students, take advantage of curriculum from vendors such as Apex Learning, Classicism, and Eclassroom (Russo, 2001). A new vendor on the market is K12, Inc. founded by the former Secretary of Education, William Bennett, which currently caters to the primary market of K-7th grade.

The differences between state and charter schools raises some of the same issues that have been evident between regular education and charter schools. Those issues involve funding, curriculum, and assessment. Funding is an uncomfortable subject for state schools with budgets dependent on state and federal money allocated on a per pupil basis. Since the money follows the student, when a student attends a charter or online school, the local school loses the money allocated for them. Online schools, as well as charter schools, are utilizing that money to give students a computer for their home, as well as an Internet connection. With the loss of these funds, the local school has to tighten its belts to meet overhead costs.

Since state schools have to meet certain assessment goals before they receive the allocations, assessment is also becoming an issue for online schools. Local schools feel that online schools should be required to meet the same assessment goals. Hendrie (2003) argues that since online schools'delivery methods are totally different, testing should also be different for their students This issue will probably be a major topic of debate in the next several years.

What are the types of online students and their needs?

A wide range of students take advantage of this new environment. The traditional student who has challenges with the High School schedule or needs access to special courses for their interests and abilities have utilized online courses for several years. Taylor (2002) adds that students who live far away from the local school, or rural students, and working students have been added to the list of students using online courses. The opportunity to take online courses could be extended to include migrant worker families, or children of military parents who relocate frequently. Trotter (2002) stated that the purpose of the establishment of The Virtual High School in Maynard, Massachusetts, was to meet the needs of such students. Today, students from across the United States, who need the special courses, or the convenient schedule, attend The Virtual High School.

In addition, students with special needs, particularly those who need more time to develop skills or process information, benefit from this environment which allows them to progress at their own pace and in their own time. Included are students who are frequently ill, and therefore miss time and content in a regular classroom.

Shy students, who hesitate to answer in classes face to face, due to strong personalities of their peers, finally get heard in an online class. This voice builds their self-esteem, leading to improved achievement.

Hammonds (1998) claims that students who can adapt to higher stimulation and a faster pace also benefit. Sometimes these students feel smothered by the limitations in the regular classroom, and look for ways to interact with their compatible peers that may not be located in their local classroom. For example, those who want to extend their studies to global partners, experience awareness of other cultures, or want to study under an expert in a particular field, fit into the role of the perfect online learner.

What types of curriculum are the best for online learners?

According to Porter (2002), the content of instruction can be a strong variable that affects student achievement. During the last decade in education, achievement measured by standards has been a driving force impacting the monumental changes taking place in the education system. Guerard (2002) shared the concerns of administrators who recently attended two technology summits. The administrators strongly agreed that virtual schools should be required to offer curriculum aligned to the state and local standards of the students' place of residence. It is questionable if the alignment between standard and online courses is occurring. Some vendors offer an extensive variety of courses, however, the quality of the curriculum is questionable. Lists of courses offered are in abundant supply although the actual lessons are locked behind a password-protected wall, as are samples of online communication between students. Other vendors advertise that they encourage communication among peers, or have interactive lessons; however, it is hard for a reviewer such as a school district to "see" the curriculum before buying into the program. Even the "new kid on the block", K12.com, who caters to the youngest learners in K through 7th grade, still depends on textbooks mailed out with the program. Consequently, many school systems are choosing to develop their own curriculums to match state and local standards, rather than utilizing packaged courses from a vendor.

But how should virtual programs be developed? It seems to be a daunting task. Russo (2001) gathered advice from experts around the country about how to develop curriculums. The experts' advice included ideas such as planning carefully, thinking about education goals rather than the technology, cooperating rather than competing with other schools, and finding creative financing. Russo goes on to explain that planning should include piloting activities in a real classroom before taking them online. Linda Roberts, a technology analyst supported Russo's viewpoint stating "The starting point is education. What can technology offer?"

An issue that will become another research topic is the unrealistic expectations that will be put on teachers. Barbara Stein, a senior policy analyst in the National Education Association's teaching and learning division, pointed out that due to the 24/7 experience of the online environment, teachers' workloads will increase immensely. Therefore, collaboration rather than competition will be the key to help teachers survive this new tidal wave (Russo, 2001).

Another issue that will come to the forefront quickly is the need for creative financing. Online learning may be cheaper than operating a daily classroom with two dozen students, but it is not cheap. And it's about to get more expensive. For the most part, state and federal funds have been used thus far to support the development and early stages of online learning programs, but that arrangement is changing in some places. The Concord Consortium, for instance, is moving to a fee-based structure for its Virtual High School now that its five-year federal grant has expired." (Russo 2001)

What should be the future directions for developing online learning curriculums in K-12?

While these recommendations are good for creating programs, what should systems be sure to include in their curriculum? Suggestions come from several different sources. Hammonds (1998) described good curriculum as including "Learning to generate questions, to design and create, to work in teams, and to hone other interpersonal skills". Higher-ed experienced instructors advise that assessment and management strategies should be entwined into the learning experience. They suggest that assessment should include enabling learners to assess their own progress, reflect on their learning, and reestablish new learning goals (Meyen 2002). Berman (2002) strongly advised the use of instructional design (ID) principles to create courses. ID principles would assure that online courses provide structure, as well as meet learners' needs.

Additional experts have encouraged the creation of communities of learners by online teachers. This concept encourages online students to become friends and mentors of their online classmates. Trotter (2001) has proven this is an important concept in the success of online courses at the higher-ed level, because these students never have the chance to meet face to face. Due to the needs of the K-12 student to be nurtured, this concept will be even more important at that level.

Collaboration is a key factor to the success of online learning (Schulz 2002), so the task of developing collaborative activities that work in an online environment will become the focus of a research topic of the future.

Conclusions

Riding the wave of school reform, online learning can be utilized to solve some of education's current problems, such as overcrowding classrooms, dropout rates, and the teacher shortage. The issues of assessment, funding,

and curriculum development will need to be focuses of future discussions and research in the academic arena. These will be hotly debated, as they affect existing school systems and students. The results of the research on these issues may have as many solutions as there are types of online learners. These issues will need to be researched appropriately, and solutions delivered before online learning can successfully ride the swell of the wave of cyber learning, and land safely on the beach of education reform.

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