

The Problems and Possibilities of Virtual Schools

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INTRODUCTION: THE EMERGENCE OF THE VIRTUAL SCHOOL

Virtual schools are an alternative to the “bricks-and-mortar” schools that have been synonymous with school education for hundreds of years. Traditionally, students have attended a school building for their education where they have been in the physical presence of a teacher. There are, of course, exceptions to this understanding of education, in which students have been involved in a form of *distance education* or distance learning by correspondence, or have used technologies such as radio and television. These developments have been particularly useful for students living in isolated communities, or those unable to attend a conventional school. Virtual schools are also a form of distance education or *virtual instruction*. Typically, they use online computers, and students are able to complete their schoolwork when it is convenient for them, without having to meet with their teacher and other students in a school building.

The term “virtual school” is generic, as a number of variations can be identified. Some schools use *synchronous* communication by having lessons available on an online computer in a conventional school from a remote location at an agreed time, such as the Virtual Schooling Service in Queensland, Australia (VSS 2006a). The form of educational technology used by the Virtual Schooling Service includes asynchronous communication for Web-based resources to “enable students to access subject content and the materials of individual lessons flexibly, either from home or school, in their own time.” (Prendergast, Kapitzke, Land, Luke and Bahr, 2002, p. 19). This approach allows students to participate in lessons at school. Computer-based resources are supplemented by the use of phones:

As a virtual school student you participate in online lessons with your teacher and other students. These lessons will allow you to talk with the teacher and

other students by phone while using the computer to share information and ideas. (VSS 2006b)

Some virtual schools insist that their students are involved in face-to-face activities, while others provide an “*Out-of-School Model*” (Schnitz and Young, 1999), where computer-mediated interactions at a distance predominate. In Florida High School, “there is no Florida High School building and students and teachers can be anywhere in the world” (Florida High School Evaluation, 2000, p. 12). It is also possible to find mixed-mode examples, where some subjects are offered in virtual mode, but students are asked to visit the school on a regular basis to monitor their progress or to participate in face-to-face subjects or activities such as sport, drama, art, the laboratory component of science, and social activities.

BACKGROUND: THE GROWTH OF VIRTUAL SCHOOLS

Russell (2004) argues that the principal factors that account for the growth of virtual schools include globalization, technological change, availability of IT technology, economic rationalism, the model provided by higher education, perceptions about traditional schools, and the vested interest of those involved in them.

Globalization refers to a process whereby international businesses are able to use online technology to bypass geographic boundaries. The same concept can be applied to educational provision, and it is now possible for curriculum to be delivered remotely across state and national borders. Educational administrators can purchase online units of work for their school, and parents in developed countries can sometimes choose between a traditional school and its virtual counterpart.

The increased technological capacity of school systems is paralleled by the potential to deliver motivating and interactive curricula online. The increased adoption of broadband is likely to reduce the loading time of web

pages and other information, and enable developments such as full-motion video clips, animations, desktop video conferencing, and online music. The generation that has grown up with a range of digital technologies is likely to be less tolerant of text, or pedagogies that they regard as uninteresting.

Economic rationalism is related to the deregulation and commercialization of goods and services. Rutherford (1993) suggests that in education, the collective or government provision of goods and services is a disincentive to private provision. It is not surprising that private schools and businesses have shown interest in virtual schools. For Perelman (1992), face-to-face schools are seen as inefficient remnants of an earlier industrial that ought to be replaced with technology.

Higher education also provides a modeling effect for parents. As increasing numbers of parents complete an online tertiary course, there is a corresponding growth in the conceptual understanding that virtual schooling may also be a real alternative. The online courses provided by universities in recent years have proliferated (Russell and Russell 2001), and their availability in industrialized countries is now quite common.

Parents can also be attracted to virtual schools for their children because they may see existing schools as unsatisfactory. In some areas, schools may be seen as unsafe, because of issues such as violence, bullying, or drugs. Schools have also been criticized for not meeting student needs, providing inadequate skills for employment, or not preparing students adequately for entrance examinations and tests. In some cases, parents and students have to contend with poorly resourced schools and teacher shortages. For some parents, the range of subjects offered may seem limited, or there can be disagreement with teaching methods and philosophy. Factors such as these can lead parents to consider alternatives such as virtual schools for their children.

MAIN FOCUS: VIRTUAL SCHOOLS, PROBLEMS AND SOLUTIONS

Virtual schools problems often have their counterparts in traditional schools. Moreover, as with more conventional schools, there has been some recognition of these problems and attempts to solve them. These problems include authenticity, interactivity, socialization, experiential learning, responsibility and accountability,

teacher training, certification, class sizes, accreditation, student suitability, and equity.

Authenticity is the problem of determining whether a student has completed original submitted work. Problems can occur if students plagiarize from the Internet or elsewhere, and when others collude in the completion of the work. Virtual schools may assign students a secure password to use over the Internet, but this procedure would not preclude students from giving their passwords to a parent or tutor who completed the work on their behalf. A possible solution that may have to be considered is for independent testing of students to confirm that they have the understanding, knowledge, and skills suggested by their submitted work. It may also be necessary for online teachers to revise their tasks regularly, or to use commercial plagiarism detection software.

An interactive relationship in virtual schools involves the online environment, the teacher, and the student. Students would typically access materials on the World Wide Web, respond to them, and send completed work electronically to their teacher. The preferred way for students to become involved in online learning is for an active engagement involving a response. If a student is directed to a static Web page containing a teacher's lecture notes, learning may be less effective, unless other teaching methods are used to supplement it. The solution to this problem will be found in both the increased capability of students' online computers to operate in a rich multimedia environment, and the recognition by course designers that virtual schools should take advantage of advances in learning theory and technological capability. In the USA, the National Education Association's *Guide to Online High School Courses* (NEA, 2006) has commented on the need for online course to reflect current research on learning theory and recognise the opportunities provided by online learning environments (p.15).

Socialization continues to be a problem with some virtual schools because there is an expectation in conventional schooling that students will learn how to work cooperatively with others, and will internalize those norms and values required by society. Moll (1998) is concerned with disruption to the tradition of public education as the primary vehicle for the transference of national narratives, and humanistic and democratic values. Clearly, socialization will still occur if students use online learning supplemented by some contact with teachers, and opportunities for organized sport. Some

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