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Virtual Universities: A Current Snapshot

Thomas N. Archibald, Mark S. Nielsen,

Tory Neiwert, K. Wade Oliver, Yat-Soon Lee, and Lindy Marler

Utah State University

Abstract

With the ongoing invention of new technologies and the diverse demands of society, the university is continually looking for ways to harness the technology to meet those demands. Some of these demands include changing student demographics, location of residence, and budget. Virtual universities have come about in order to meet those demands, and will continue to multiply as needs are identified, technology is enhanced, return on investment is realized, and institutions grow. The authors' goal in this article is to provide a current snapshot of virtual universities through exploring their definition, accreditation, University of Phoenix: a for-profit virtual university, technologies involved, international perspectives, and future trends.

Virtual University Definition

The role of a university is to expand knowledge and transfer information (Hitch, 2000). A virtual university's role is the same; however the delivery methods of the instruction are different from the traditional delivery methods. The authors of current literature struggle to pin point a concrete definition of what a virtual university is (Guri-Rosenblit, 2001; Monteith & Smith, 2001; Brogden & Couros, 2002). Even the use of the term is not standardized. Online college, virtual campus, and distance education are a few of the terms used in literature to describe this new type of non-traditional higher education. For the purpose of this literature review, the term virtual university will be used to describe the aforementioned terms. At the New Media and Higher Education Conference, James Cornford (2000) presented a broad definition of a virtual university as an institution of higher learning that has no confines, using technology to connect learners, instructors, and administrators. Other authors have added that a virtual university provides education at a time and distance that is convenient for the learner (Garten, 2000; Stallings, 2000).

Students of Virtual Universities

The emergence of the virtual university stems from the unmet needs of non-traditional students and the development of technology to meet those needs. Virtual universities draw students with disabilities, family or job responsibilities, or no physical access to traditional higher education (Antonucci, 2001; Hitch, 2000; O'Donoghue, Singh, Dorward, 2001; Peterman, 2000). Just as traditional higher education has advantages and disadvantages for students, virtual universities have their pros and cons as well.

Monteith and Smith (2001), in their study of students' experience of learning in a virtual university setting, found most students preferred face-to-face instruction to virtual instruction. O'Donoghue, Singh, and Dorward (2001) suggest virtual universities do not offer students the opportunity to learn presentation and team work skills. However, virtual learning environments provide unique features for students. The asynchronous nature of virtual learning is one primary advantage for learners. Virtual university students are able to visit online libraries and travel to museums instantly (Stallings, 2000). In Robert Antonucci's (2001) research, he found students of virtual universities receive more attention from instructors than students at offline schools. Additionally, feedback from the instructor and other students is more immediate (Stallings, 2002). After interviewing students of Park University, Thomas Peterman (2000) reported that students found the virtual setting provided a better opportunity to develop relationships with their peers and instructor than in a typical lecture environment.

Instructors of Virtual Universities

Virtual universities also provide a unique opportunity for instructors. Instead of spending time traveling, in meetings, and producing research, virtual instructors are able to devote their time to students and focus on the quality of their instruction (Antonucci, 2001; Guri-Rosenblit, 2001; Stallings 2000). Leslie Hitch (2000) suggests instructors must adapt their method of facilitating the transfer of knowledge to a virtual setting. Not only must instructors have the course content knowledge, but they must understand the technologies used for the delivery of the instruction (Guri-Rosenblit, 2001). Peterman (2000) found instructors must learn to recognize students' writing styles instead of recognizing students' faces. Additionally instructors must learn to convey meaning

through text that was previously done through non-verbal means (Peterman, 2000). In a virtual environment, an instructor takes on more of a mentoring role than in traditional settings (Guri-Rosenblit, 2001).

Accreditation

Even with the emphasis on quality teaching and mentoring in a virtual university, accreditation of the university remains a major component of its success. The number of students enrolled in such distance courses nearly doubled between 1995 and 2000 (NCES, 2000-2001). This increase has necessitated that attention be more closely given to distance education programs than ever before.

The American Association of University Professors notes that there are six regional accreditation bodies, as well as other specialized groups, that create and implement standards in order to ensure the quality of the higher education experience (AAUP, 2003). Accreditation is sought for entire institutions as well as more specialized portions or programs of the institutions. This effort for accreditation is due not only to prestige and validation, but the fact that accredited status also allows eligible students to receive federal financial aid (Blumenstyk, 1999).

In March 1999, Jones International University was the first completely online university to obtain accreditation from one of the regional accrediting bodies--which caused no small stir (Stallings, 2000; Blumenstyk, 1999). The American Association of University Professors asserted through the *Chronicle of Higher Education* that perhaps accrediting agencies were not using the same standards for virtual universities as they do for traditional schools. They expressed concern that faculty for the virtual universities may not be sufficiently involved in curriculum design and management (Stallings, 2000).

In September 2000, the six accrediting bodies announced that they were in the process of outlining standards specific to distance education programs due to the fact that distance education programs access students across regional borders, and the agencies wanted to verify that similar standards were adopted throughout the country (Carnevale, 2000). By April 2001, representatives from each body finalized what they initially called testimonials rather than standards-- giving each region the ability to adapt them however they desired ("Accreditors Finish," 2001). The "Best Practices" cover five general categories that include institutional context and commitment, curriculum and instruction, faculty support, student support, and evaluation and assessment (CHE, 2001).

By May 2002 some accrediting bodies were asking online institutions to measure learning outcomes rather than simply provide faculty training as traditional institutions are asked to do (Carnevale, 2002). Upon the completion of a seminar, which consisted of a group of 16 University of Illinois professors, a report was issued which argued that distance teaching, specifically via the internet, showed both promise and peril (Young, 2000). However, many professors made it clear they feel the value of distance education is primarily for non-traditional students over the age of 22 who don't require such a personal one-on-one experience (TID, 1999.

University of Phoenix: A For-Profit Virtual University

As discussed earlier, virtual universities include those institutions that provide education for the non-traditional, age 23 and older student. While many say profit should not be made through education, the University of Phoenix is doing just that and receiving an A+ from Wall Street (Bronner, 2000; Shea, 2003; Fortune, 2003; Wahlgren, 2002; Figueroa, 2001). Investors have enjoyed an annual growth rate of roughly 25% since it

went public in 1994 (Breen, Bill and Fast, 2003). Additionally, Business Week (2003) ranked the University of Phoenix (UOPX) the ninth most profitable information technology company traded in 2003 with a 39.3% return on equity. This is exceptional for a down economy full of dot com annihilations.

University of Phoenix is showing that for-profit universities can be more efficient than tax-subsidized traditional universities (Sperling, 1998; Rachel, 2002). In 1998, the average annual taxpayer subsidy for each working adult student attending a private not-for-profit university and public not-for-profit university was $8,199 and $8,634 respectively. If the same student, however, elected to attend a private for-profit institution, the taxpayer received $101 in form of corporate taxes paid on profits (Sperling, 1998).

The traditional American university has rigidities and inefficiencies that University of Phoenix overcomes, says the university's CEO John Sperling, (1998). He states that facilities at traditional colleges are underutilized for approximately five months due to summer and Christmas breaks. Additionally, campuses are typically empty in the evenings--the time schedule that most employed students have available to attend classes. He also cites that traditional universities usually require a doctorate degree for most faculty positions, but that doctoral instructors are only economically productive if a high demand exists for their limited niche (Strosnider, 1997; Leatherman, 1998).

The University of Phoenix, however, rents facilities that are utilized year-round at peak times for working students (Bronner, 1997). Furthermore, Phoenix offers curriculum 24 hours a day, seven days a week via Internet (Schelin and Smarte, 2002). In lieu of hiring doctoral faculty, it hires professionals part-time that never receive tenure

(Sperling, 1998; Leatherman, 1998). Finally, University of Phoenix does not stock libraries but uses a virtual distribution center (Zarcone, 2002). In fact, faculty and student body are being transitioned to use all digital textbooks and course materials that students purchase. However, with Phoenix students buying more than a half-million textbooks every year, the school has greater leveraging power with publishers than most institutions (McKenzie 2002).

Founded in 1976, University of Phoenix Online is the nation's largest university with more than 125,000 students located at more than 116 campuses and learning centers in the US, British Columbia, and Puerto Rico (http://www.uopxonline.com/InfoPages /university-of-phoenix-online-campus.asp). Among the first accredited online universities, Phoenix delivers bachelors, masters, and doctoral degrees in business, technology, education, and nursing. It accepts no one under age 23 and only those who are currently employed. The cost for an MBA is $505 per unit, or approximately $23,000 for the two-year plus program (Schelin and Smarte, 2002; Rachel, 2002).

Phoenix, under parent company Apollo, started on the Nasdaq exchange in 1994 at $2. That stock is now over $70, increasing over 3500% in a decade (NASDAQ, 2003). The most recent quarter reports revenues up 35% (Fortune, 2003) and is on track to exceed $500 million in revenue for 2003 (Lifelong Learning, 2003). In a time when tax subsidized institutions are struggling from government cuts, Phoenix's business model is very appealing.

Technologies Involved

No matter how appealing a model of a virtual university may be, whether it is for business, or education, or both--one thing remains the same-- technology plays a major role in the success of the virtual university.

Technology within virtual universities is very diverse. This diversity is inherent with the different objectives and goals of the virtual university. If a virtual university's goal is to reach students mainly living away from the school location, then distance learning technologies would be chosen as the desired medium. However, if the virtual university were simply an on-campus independent study type course, then the medium could be produced on any computer- or paper-based application (Powell, 2001; O'Donoghue, Singh, & Dorward, 2001). Even though there is much diversity, a few core elements of virtual universities' technology can be found. CD-ROMS are used in training for updating businesses, taking courses, and servicing the public (Spencer, 2001). Television has been and continues to be an effective tool in reaching areas that would otherwise not be afforded the opportunity to receive instruction. Dunn (2002) even goes far enough to say that the base delivery system for universities in a distance education setting is television. However, from the studies referenced, the Internet is the primary tool for use. Sakamoto (2002) in his article presents findings that even with the use of communications satellites, the last few years have seen a rapid increase in the use of interactive distance learning through the Internet and videoconferencing. One author suggested that the web "with its ability to include a range of powerful media forms and its interactive capability, enables us to support a sophisticated range of interaction and provide a rich environment for teaching" (Ryan, Bernard, Freeman, & Patel, 2000, p. 52).

In an online environment, many of the key technologies deal with the issues of synchronous versus asynchronous learning.

Asynchronous learning does not take place simultaneously. It consists of tools such as email (DeBard & Guidera, 2000), blackboard, forums, discussion boards, and animated learning tools (Wolverton & Wolverton, 2002). The asynchronous side of learning allows students the ability to walk away from their studies and come back to them at their convenience. This is highly desirable for students who have other responsibilities besides learning (Andriole & Lytle, 1995). This also allows the students the ability to work on their material in their free time – no matter what hours of the day or night. However, asynchronous learning may need structure in order to be successful (Andriole & Lytle, 1995). The asynchronous tools can be very effective for collaborative work (Ocker & Yaverbaum, 2001).

Synchronous learning, however, takes place simultaneously. It includes tools such as videoconferencing (Cochrane, 1996), chat rooms, satellite connections (Sakamoto, 2002), electronic chalkboards, application sharing, instant messaging, and so on. The strengths of these mediums allow the instructor and the student to have a so-called face-to-face experience with one another. Whether they are built into the instruction on an intermittent basis, or whether they are the class structure themselves, they provide the valuable simultaneous interactions many students desire (Oakes & Rengarajan, 2002). Another interesting insight pointed out by Oakes & Rengarajan (2002) is the idea of choreography. In a traditional classroom setting, the instructor has the role of choreographing, at least to a certain extent, the amount of talking, discussing of ideas, and interaction which takes place in the classroom. However, in the virtual classroom

environment, the students are able to freely chat through applications such as instant messaging. They can interact completely independent of the teacher's knowledge. Swen (2001) says that students' satisfaction and perceived learning were significantly influenced in courses that were designed to include active discussion and interaction between peers and the instructor.

As virtual universities face new challenges, the technology will inevitably provide the ability to function effectively and efficiently. As technology improves, virtual universities most likely will continue to reach their target student audience, with which they are most interested.

International Insights and Perspectives

While the technology of Virtual Universities is vital to their understanding, international perspectives provide valuable insight as well. Global universities consortia such as Universitas 21 and the Global Universities Alliances comprise several member universities which pool their resources and reputations together to complement one another in order to expand and strengthen greater reaping of greater economies. Also, by providing fully online education programs, the consortia can easily overcome geographical access limitations and form a global distance education market (West et al., 1998).

There are two different approaches that a university can choose to design its global education course: globalization or internationalization of the transnational curriculum. Globalization is the process to standardize the instructions that results in students sharing the same educational experiences regardless of their locations. Specific references to local experiences and examples are deliberately removed to avoid

distracting foreign students. Instead, the curriculum now emphasizes on universal approaches that are applicable in any society and context (Kelly & Tak, 1998; McLaughlin, 1994; Wells, 1993). One major drawback that international agencies have often criticized is that the curriculum now lacks the real-world context that the students can readily refer to (Ziguras & Rizvi, 2001). UNESCO Assistant Director-General of Education, Jacques Hallak, warned that commercial organizations providing educational services in foreign countries will disregard the importance of social, cultural, and political origins of those countries through standardizing the curriculum (James, 2000).
On a similar note, Gajaraj Dhanarajan, Director of the Commonwealth of Learning, recently cautioned that the nation-building role of higher education is in danger of being undermined by different focus between globalized curriculums produced overseas and local ones that incorporate elements of building national cohesion, maintaining cultural identity, and addressing local resource needs (Guttman, 2000).

Beside the globalization approach, educators can instead internationalize the curriculum. The reason, as noted by Ziguras & Rizvi (2001), is that foreign students always tend to study their text selectively in an effort to derive meanings with respect to their own experiences and social context. To facilitate such learning, local teaching staff is often employed to conduct discussions with the aim of bridging the gap between the abstract theories and the social context that the students are in. Although local teachers in offshore campuses do not have control over the content and instructions, they do play a vital role in localizing the generic international courses through face-to-face interaction with the students, and also assist them in participating online discussion forums and videoconferencing lectures with lecturers and students from other countries.

Some governments have regulations that govern foreign education programs that conduct lessons through local branch campuses or local partners in the country. Others require any foreign fully online programs to register and be accredited locally with the purpose of gaining recognition for their degrees. For example, in Australia, due to national security concerns, regulation dictates that international students can only enroll in courses in which their attendance can be monitored. Conversely, this implies that international students may not enroll in distance education programs in Australia. (Ziguras & Rizvi, 2001). Some protectionist governments, such as Greece, even forbid any transnational programs within their borders and refused to recognize transnational qualifications for fear of reducing the nation-building role of education (Alderman, 2001).

On the other end of the spectrum, free trade oriented nations, such as Singapore, are increasingly using selective recognition of transnational qualifications in order to regulate the market (New Zealand, 2001). Also, Hong Kong does not require fully online courses to register with the education department “in consideration of the need to avoid possible restriction on the freedom of expression” (Hong Kong Education Department, 1999).

In Asian countries, distance education programs without local support tend to be less recognized by the society while transnational programs with a strong local presence such as facilities and local teaching staff are enjoying increasing demands (Ziguras and Rizvi, 2001). Thus, branch campuses that are affiliated to foreign universities enjoy higher recognition and charge higher fees than private institutions as the former base their

instructions on traditional forms of teaching instead of relying solely on more internet-based delivery and part-time teaching staff that the latter employ.

Future Trends

Through distance learning, physically challenged individuals, place bound employees and employers, prisoners, English-as-a second language populations, and place bound senior citizens will be able to update and upgrade employable skills (Van Patten 2000; Wood, 2000). Education may become available in entire towns and regions where previously it has been impossible or financially unfeasible to provide (Tuovinen, 2001; Van Patten, 2000). Computer connections and internet accessibility are necessities to make the new system work. These resources are becoming more and more common and more affordable seemingly every day (Van Patten, 2000).

The rush to be at the forefront of the distance learning movement has led to interesting promotions including cost reductions as universities rush to attract consumers. A study reported that Barnes and Noble was creating an online university for its customers as an attempt to retain and attract clientele by offering free education (Carr, 2000; Tuovinen, 2001.)

Some researchers have even considered distance learning to be a possible solution to some of the many stresses that students at traditional universities have reported. One of the stress creating situations that a student currently experiences is the transition from being a child living at home, to being an adult with responsibilities for learning. Allowing learning to take place in a comfortable familiar environment may lessen some stress factors (Partheymuller, 2000). However, with the affordances provided by virtual universities, they still undergo criticism over issues of control. The American Federation

of Teachers recently chose to oppose on-line undergraduate degrees until faculty members achieve full control over course contents. (Feldman & Schlageter, 2001; Van Patten, 2000)

The idea of using internet and other computer technologies to create an open learning environment seems to uncover a great paranoia about technological weaknesses. Computer glitches, crashes, and virus creators could all wipe out semesters' worth of work in a matter of seconds. The government's obsessive fear and need for tighter and closer security measures only adds to people's misgivings and anxiety about the possibilities for failure (Schoor, 2000).

Another criticism of the trend looking toward on-line education concerns the massive expenditures that universities seek to dedicate to technological equipment. Young (2000) calls attention to many groups' interest in the instruments of technology while they seem to ignore the uses of those instruments. Allowing the attainment of technology to become the end rather than the means of educational development ignores the original goal behind technology acquisition, the quality use of that technology (Feldman & Schlageter, 2001).

Even if technology is used correctly and effectively, there are some factors that may contribute to its impeded implementation or final failure. For example, even when a virtual university is established and students are willing and prepared to take the online courses provided, there is not currently a standard development procedure (Farmer, Sobieszcyk & Farmer, 1999). Tuovinen (2001) argues that the many differing types of development with no guarantee of any accreditation make current on-line courses risky and sometimes expensive.

Regardless of the reported dangers and drawbacks, when one takes into account the opportunities available in expanding virtual universities and distance education, as well as the interest and funding being applied toward their development, their place in the educational future is nearly assured (Van Patten, 2000). Many students currently taking online courses have reported high satisfaction with their experience, even rating their on-line courses superior in such key academic indicators as “developing critical thinking” and “rigor and scholarship” (Wisan, Nazma & Pscherer, 2001). Positive evaluations, combined with student health benefits, heightened accessibility, and competition pushing the field toward quality, safety, security, and affordability, indicate a positive future for new learning environments (Van Patten 2000).

Conclusion

Thus, the authors of this paper conclude from the evidence of the previous sections that virtual universities are becoming more and more visible in higher education settings. The student demographics are changing, technology is constantly improving, accreditation is a challenge to overcome, international issues are always being explored, and lucrative institutions are catching drift of these potential profitable investments. As Twigg and Oblinger stated even in 1996 “The main question facing educators and policy leaders is not whether higher education will change as a result of the proliferation of information technologies, new market demands, and a dramatically different set of student demographics, but rather, how do we position our institutions to operate successfully in this future environment? What do we do to get from here to there?” In the authors’ opinion if this question was soliciting attention in 1996, then it should definitely be something universities and learning institutions should consider today.

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