**Future Directions Paper**

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**The Rise of Technology in Higher Education**

**Introduction**

The expansion of technology is a trend that will greatly change higher education in the 21st century. The use of technology is convenient for students but is also a disconnect between the student’s college experience and his/her relationship with the school as an entity. Online programs have expanded where popular universities (such as Devry Institute and Phoenix University) offer entire online degree programs. The trend that I see developing is one where a student can graduate from a traditional institution without ever setting foot in the institution except to walk across the stage upon graduation if they so desire. Distance learning aims to deliver education to students who are not physically “on site”. Instead of attending courses in person, professors and students can communicate at times that are convenient to them through printed or electronic media.

As each generation evolves, technology and media seem to decrease the human connection. Currently, we are seeing the evolution of what researcher, Dr. Mark Taylor, calls “Generation NeXt” (Taylor, 2008). This generation does not visit the registrar’s office with questions, pay at the cashier’s window, or knock on their dormitory neighbor’s door. Students in this generation email or text their questions to the school’s offices or they get their information on a web page, they pay online with a third party payer the school has contracted out, and they instant message the friend down the hall because they do not feel the need for face to face interaction. In this paper, I will primarily focus on the demand and evolution of online and distance learning, but I will also investigate other facets of a student’s educational experience that once depended on human connection but is now being replaced by computers, Black Berries, iPods and videos based on the student’s wants and characteristics.

**Student Services**

Historically on-campus activities provided another source besides the classroom for connecting students to their school. Student development and student activities departments in universities employed hundreds of staff and student workers in order to make the students tenure as enjoyable, homey and comfortable as possible. Schools were once established with the purpose of sending adolescents away to learn and mature under the watchful eye of school administrators; in loco parentis (Cohen, 1998). Sports teams were created to showcase unity and school pride. Fraternities and other clubs connecting students such as language clubs, religious clubs and other organizations created a family for the traditional student, their home away from home. Learning was the main focus, but a well rounded education which included the exploration of different cultures, ideas and freedom of speech (such as in the sixties) shaped a student’s education. When asked about my own experience at my alma mater, my top moments that I remembered didn't involve the calculus class I took but rather the soccer game we barely won, the club trip we took to the local food bank, or the basketball team we watched defeat our arch nemesis at homecoming.

 The evolution of technology has made it easier for students to become less involved in student activities on campus. The first interaction a student encounters with a school is through the admissions process. Most schools now offer online admission applications, where questionnaires and often placement tests can be completed by students without them having to physically visit campus. Orientations are not always required, and students can browse a school’s website to gather all the pertinent information they need in making their decisions to attend the school. Students sometimes base their school of choice on how detailed, impressive, eye catching, and organized a school’s web page is. Every department in student development and finance at Texas Wesleyan ( and most probably other schools as well) is required to design a webpage that provides any information that a student might need which prevents them from having to call the department for questions that can easily be answered on the webpage. Some scholarship committees require essays and sometimes a phone interview instead of face to face interviews.

The typical classroom is no longer limited to four walls and set hours. The Internet allows learning to be facilitated at any location at any time. School websites are now being recognized as Web-Based Learning. The school’s website provides an instructive response to the school’s requirements and serves as an effective, organized online learning environment. With the website, one establishes relationships with regional education systems and maintains contact with parents and the community (Rotem and Oster-Levinz, 2007).

 Financial aid, one of the most difficult and convoluted animals in higher education that is often understood by only well versed counselors, has been reduced to an online process without any personal exit or entrance counseling for students. Students can apply for financial aid online through the government website (http://www.fafsa.ed.gov/). Loan counseling, previously conducted by a knowledgeable financial aid counselor, is now done online. Students are borrowing millions of dollars every year without being counseled, advised or spoken to by a personal counselor. Students only need to point and click and sign a promissory note to establish their debt with an electronic signature. Do we really know that students are reading these pages and pages of documents? Exit interviews that discuss repayment options and loan deferment and consolidation are now given online as quickly as the student can click through it.

 Gone are the days when students waited in line at the registrar’s office with a registration card completed by them and their advisors. Now, online advising is done or degree audit plans can be accessed online and students can register online from anywhere at any time. Students can pay online, often not even at the school’s website but through a portal that connects to a third party vendor the school has contracted with to handle all student payments. The students don’t even know the difference; they just want their hold removed so they are clear to continue on with their detached learning. Sometimes registration, financial aid loan application, and payments are a one stop shop through the school’s own portal. Once students meet all of their requirements for graduation, they can even apply online for their diploma, and of course, they can pay through the payment gateway.

**Evolution of Technological Students**

Online learning has radically changed education today; however, the concept can be traced back as the late 1800s. Farmers who could not leave their fields received lessons such as crop management through the mail (Peterson, 2006). This concept of learning where people can choose not to be in the same physical location as professors has not changed; only the method of how courses are delivered has changed, primarily with the creation of the Internet. According to Peterson’s guide to online learning, asynchronous learning is defined as classes or discussions that are not scheduled at a specific time. Correspondence courses are individual study courses that are delivered by mail or online from an educational institution (Peterson, 2006).

As colleges and universities see their budgets reduced, institutions of higher education are attempting to increase their enrollment without constructing physical classrooms. The initial online boom was in the early 1990s when traditional colleges depended on the Internet as a vehicle to deliver their courses. (Peterson, 2006) Slowly, higher educational institutions recognized that people of all ages were willing to pay for the convenience and flexibility of learning online. Carol Scarafiotti, Vice President Emertius of Ro Salado College writes, “The Digital Natives, Gen Xers, and the Net Generation students in the classroom will push online learning and force us to do a better job. They won’t be tolerant of text-based learning. They will want highly interactive classes. Gen Xers like online education, but the NetGen demands it” (Peterson, 2006).

Traditional four year students who live on campus might become a rarity. There are increased rates of commuter students and students opting to remain at home because there is no longer that sense of urgency to move out. Students are working part time and attending school when they can fit it into their schedule. They do not have time to become involved in school activities; they are working, taking care of families and attending classes (Taylor, 2005). The fast paced world that has been created has caused the attention span of students to wane. Students do not have the time to attend class on campus and listen to professors when they can research on their own and be self taught with the many online classes. Online learners are a diverse group which varies in age, occupation, background, interests, and computer proficiency. Examples of online users include but are not limited to working adults, retired adults, those in the military, and those with a disability.

**The “Net” Generation (“Generation NeXters”)**

“Generation NeXters” is a term used by Dr. Mark Taylor, a professor, Doctorate of Counseling, and a licensed psychotherapist with over twenty-five years experience in higher education and management. Dr. Taylor researches and creates programs to improve educational services to Generation NeXt and other upcoming generations of students. He states that there are gaps between the traits, expectations, and desired outcomes from Generation NeXt’s college experience for students and what the higher education institutions hope for the academic behaviors and outcomes. Generation NeXt, or those growing up at the turn of the millennial, exhibit specific traits that educators and administrators need to learn in order to move forward with the goals and missions of higher education. These upcoming students are extremely focused on grades and performance, yet they have all time low measures of studying and all time measures of boredom and tardiness. They expect to get good grades without much effort; they have been taken care of by their parents for so long that they have not had to exert any kind of effort in order to succeed in other areas and don’t think that college should be any different. They are close to their parents and have been led to believe that education is supposed to be entertaining, easy, and fun. These students are intellectually disengaged, however, because it is the least studious cohort of students ever (Taylor, 2005). Knowledge is not the major goal of many students; they just want to know what they need in order to graduate and move on and succeed.

**Demands and Needs of Students**

Differences in goals with respect to learning are apparent, and a serious issue remains between the initiatives that need to be in place for this new generation to succeed. According to the Department of Education, 45 percent of students that seek bachelor degrees fail to earn degrees in six years and 70 percent of two year associate students fail to do so in less than three years. Major gaps remain between the technology omnipresence of the lives of students and the realities of institutional services, especially learning services. Schools need to embrace technology and leverage it for academic and developmental means and ends rather than complaining (Delfino and Persico, 2007). There was a fear that the world might end when students registered themselves for classes online, but countless institutions have shown that registering online not only makes the student’s life easier but the staff’s as well.

 Youth have little patience for educational methods that they see as outdated like the unidirectional lecturing to rows of passive listeners. Instructors that cannot utilize technology might be viewed by students as less educated in their field than as those instructors using technology. Students want to have faith in the school that they attend. "NeXters” are wired since birth and are impatient with those that lack technological sophistication. Higher education should be the most progressive, data-based and outcomes orientated of all the social institutions that exist around the world, but they are often the most resistant to change (Taylor, 2008). Institutions need to maintain technological sophistication, because upcoming generations do not have patience for anything outdated (such as emails as opposed to text messages). They want increased flexibility in course schedules, semesters, and entry and exit. Students are juggling other responsibilities and are learning at different paces.

 Dr. Cohen states that the new technologies of the information age have created a demand for flexible higher educated knowledge workers, the “symbolic analysis” (Taylor, 2008). The experience of being in a campus environment has already become too expensive for most students. Instructional technology has held the most allure for them. Money can be saved through use of distance education “courses delivered to remote locations” (Cohen, 1998). Students demand not only technologies in the classroom with technological savvy instructors but also professors who can teach effectively online. This is a particular demand for students who are in “development” courses. The demand for effective online instruction is an area that needs to be addressed because the move to more online courses will affect the majority of students who have academic deficiencies.

**Distance Learning**

The University of North Texas (UNT) is chief example of a university that offers distance learning in order to meet the students’ demand. UNT offers not only multiple courses online for those students in other regional locations in Texas other than the DFW area but also multiple programs as well. Out of state (or country) residents can receive a degree in the College of Arts and Sciences, College of Business Administration, College of Education, College of Information, Library Science and Technologies, and the School of Merchandising and Hospitality Management, among others. As a student in the MBA program, I did not have to visit the campus in order to apply for admission, fill out all financial aid documentation, or to register. I chose on campus classes as well as online courses, but I could have completed all courses in the MBA program online. The Ed.D. program still requires some personal interaction. Although I applied online and submitted all documentation electronically, my interview was face to face. My registration, payment, and classes could be done either electronically or on campus from that point forward, however. As the older generations are phased out, will any human connection be required throughout the entire academic process?

According to the National Center for Education Statistics, distance education has become increasingly common in postsecondary education. In 2004-2005, 62 percent of public and private not for profit two and four year institutions offered distance education courses as reported to the Center. A minority of faculty served, however, appear to teach the distant learning courses. Eight percent of full time and six percent of part time instructional faculty and staff reported teaching a distance education course in the fall of 2003.

With the increasing demand and evolution of technology in higher education, what is to come of the socialization exhibited within the classroom? Many will argue that technology isolates people and online learning will only add to the problem. Traditional undergraduate students do not just attend college to obtain knowledge about their future career; they also learn social skills and how to integrate into society.

 **Suggestions for Change**

So what are the probable changes we can foresee for higher education as we navigate our way through the new millennium? With the constant ever expanding world of technology and the fast paced environment, higher education must meet the needs of its students. The new brand of student is technologically versed with a sense of urgency and efficiency. Students have busy lives and school is just one of their priorities. They want fast, efficient and effective service from administration and from the faculty. The experience of a campus environment might be too expensive, inflexible, and unnecessary for upcoming generations. The advance of technology as well as the pace of the fast moving new generation has been the catalyst for the distance education demand.

The correct use of technologies allows for more data and more recent information, and it saves valuable time by providing materials online. What institutions need to focus on, however, is what is most helpful for students. Is it just the information that helps students? Certain cultures might place more emphasis on the emotional connection to the college and the college experience; it is important with the fast paced technological environment not to disregard these groups when constructing efficient, flexible online programs and instruction. There are many pros and cons for developing online education, but the reality is that the need and demand for online education is there because of the evolution of technology; higher education must provide these services in order to remain in the hunt for a revolutionized generation of students.

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