The Manifest Destiny Of Education:
Past, Present And Beyond
The Boundaries Of Tradition

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ABSTRACT

The generation currently in secondary schools has never known the world without the Internet, has spent thousands of hours each year interacting with video games and social media, and has high expectations for the degree of control and choices they will have regarding employment, entertainment, and the education they receive. The employers of our future graduates have undergone - and will continue to undergo - profound changes in consumer behavior and technology-based marketing and value creation, while simultaneously facing intense global competition, rapid technological advances, and dynamic markets. Employer demands for increasingly flexible, self-motivated, collaborative, communicative, creative, energetic, technology savvy employees will continue to rise. These conditions are fundamentally changing consumer and employer expectations of education and driving the need for ever greater relevance, personalization, flexibility, mobility, and meaningful and relevant outcomes. In many respects, we must work toward and plan for an evolving target and, as such, we should work to create dynamic contexts as well as learning what can change and be modified as needed.

Keywords: Online; Remote; Distance; Learning Technology; Learning Models

INTRODUCTION

O nline or distance learning is defined by Bigony (2010, pg. 390) as "institutionally based formal education where the learning group is separated and where telecommunications technologies are used to unite the learning group". Distance programs come in a variety of formats - synchronously, requiring students to interact at the same time and asynchronously, when students choose their interaction times based upon facilitator-assigned course requirements. The goal of an academic institution is a graduating student who goes forth into the workforce with the skills, knowledge, and ability to be a successful member of the workplace and community.

This paper will provide a glimpse of education from 20 years ago to today, a brief overview of how learning and technology are intertwined, and finally, a high-level blueprint of online learning in the not-so-distant future. For clarity purposes, online education, distance learning, and distance education will be applied interchangeably to be defined as noted by Bigony (2010, pg.390).

PAST

From the professor's perspective, materials provided in the classroom must be informative and impart knowledge. Day after day, week after week, the professor wondered when all of this information would make sense. Folley's (2009) research has shown that the student attention span declines after 15 to 20 minutes, making the faculty learning opportunity limited in timeframe. Toward the end of the course, everything that was presented in the classroom starts to make sense to the student. For the professor, a framework was passed along - a secret recipe,

so to speak - for successfully teaching the student. What every professor was told, never to be forgotten, were three points:

1.   Tell them what you are going to tell them
2.   Tell them
3.   Tell them what you told them

How did the professor of the past impart knowledge? Students attended courses in a classroom, always sitting where they sat for hours of lectures and labs. Exams were given weekly to assess student progress and a final exam was given to determine whether the student could remember everything that was taught regarding a specific topic.

Exams were not easy. Most exams were multiple choice or fill-in-the-blanks with an occasional essay question thrown in for the demonstration of imparted student learning. Typical weekly exams consisted of 20 to 50 questions and end-of-course exams could be well over 100. A lab grade might also be included. In some cases, lab projects had to be done repeatedly until the students became proficient. To understand the past is to understand that the classroom lecture has a defined benefit as described by Duncan Folley (2009). He indicates a classroom lecture is potentially:

- an efficient and economical way of conveying complex information to large student groups in an enthusiastic and engaging way
- can provide a good structure and introduction to complex topics, with current information put into an appropriate context for the students
- can tailor-make the material for the student's needs
- can be used to provoke thought and deepen understanding
- can be used to develop independent learning (p. 93)

The course feedback process was procedural in nature and each quarter or semester, faculty members were randomly selected and evaluated based on specific criteria. The criteria and the evaluations were fairly lengthy and intense and were based on the traditional delivery method of content being delivered in writing or orally versus an online or hybrid environment (Allen & Seaman, 2009). After the faculty member finished a specific lecture or lab session, the evaluating faculty official sat down and went over the good and the not-so-good portions of the classroom lecture in detail. Part of the critique criteria included habits or actions considered unacceptable in a learning environment, such as looking at and reading the overhead transparencies as well as how to handle a pointer or other teaching aid.

All of these example activities took place in the mid to late 1980-1990s - not so long ago. New faculty members were trained and armed with the secret learning recipe and worked in teams before being allowed to instruct individually. The responsibility for their own courses and materials, self-evaluation, and a feedback process to continuously improve the curriculum came later in the professor's evolution. Looking back after all these years, the faculty members were not very student-focused, but they were proud of their work and delivery in the classroom. The quality of the learning process and the student was not at the top of the list of faculty responsibilities.

PRESENT

The nature of higher education is changing in the world today. Rising tuition fees, reduced budgets, and an increasing need for distance education are pushing educational institutions to reinvestigate how skills, knowledge and education is delivered. In line with this shifting context, e-learning is being practiced more and more frequently in higher education, providing modern and stimulating opportunities for not only educational institutions, but also students. Despite the relative benefits of e-learning, in higher education there are some challenges for disorganized, technology-concentrated institutions when attempting to put distance learning courses into practice (Hismanoglu, 2011, abstract). Maybe the trend toward online education is the new secret academic success process or maybe the ingredients just changed slightly over the past 20-some years and the recipe still retains similar properties and it just looks a little different. In order to understand the student of today, we must first understand what the student wants,

needs, or expects from their post-secondary educational institution. In 2007, Sloan Consortium (Allen, Seaman, & Garrett, 2007) evaluated six delivery modes that learners desire for their post-secondary education. The results were enlightening and provided considerable encouragement for a blending of technology, education presentation media, as well as the modeling of education to the needs of the student or workforce. The following is an extract of a portion of the study:

Consumer preference was evenly distributed across four of the six delivery modes. Seventy-six percent of consumers interested in post-secondary education stated a preference for a delivery mode with at least some online element and 81% stated a preference for a delivery mode with at least some face-to-face element.

While only 10.6% of consumers reported prior experience of a totally online program (and only 6.1% reported such experience within post-secondary education), 19% expressed a preference for wholly online programs. In terms of blended delivery, the experience and preference figures were also some distance apart. While 16.6% of consumers reported blended program experience (with an estimated two-thirds of this experience in a post-secondary setting), 32% expressed a preference for either primarily online or online/on-campus balanced programs. Indeed, as noted above, adherence to the Sloan-C definition of blended would further widen the gap between experience and preference.

So, for both online and blended delivery, consumer preference appears to significantly outpace prior consumer experience and estimates of current market size. (pg. 17)

To better understand how the traditional and online or distance education formats are moving closer together, let's review two scenarios: 1) the traditional classroom and 2) the online or distance classroom.

Scenario 1 (Traditional)

Today, even traditional faculty are armed with tablet computers and interactive application software, which are all connected to a wireless campus network or the Internet. Therefore, it is possible to communicate everywhere and at any time. When entering the classroom, the professor finds the students are already waiting and connected to a wireless network or the Internet. Once the faculty member is connected by the tablet computer into the classroom interface, he or she can immediately pull up the e-learning application on the Internet browser. The professor is very much aware of remote or distance students. The faculty will record the session activities so that the remote or distant student, who cannot attend the live session, can view the activities and class session at his/her convenience. The students intently watch as information appears on the large screen in front of them or on their monitors. Students can also log into the application from a remote location and enter the site of the e-learning classroom. The class is off and running for all kinds of activities (i.e., lectures, video clips, group discussions, and labs). It is exciting and designed to engage the learner in all course activities.

Scenario 2 (Online)

The online or distance faculty starts the course from a location (anywhere) and the students attend the course from anyplace that has Internet access. The online or distance learning environment has the benefit of archiving the activities of the faculty and student, which is not always possible in the traditional environment. The online faculty has access to all kinds of activities (i.e., lectures, video clips, group discussions, simulations, webinars, and labs). Online or distance education is very exciting and designed to engage the student in all course activities from any location at any time.

Online education is the future of academics and content delivery. A quick review of the research report "Online Nation: Five Years of Growth of Online Learning" (Allen & Seaman, 2007) addresses the adoption of online education as both a viable and credible option for academic institutions. The research report identified five online learning frameworks of which two categories - engaged and fully engaged - tell an interesting and positive story. For example, the engaged category is "A sizable set of institutions (around 800 or 18% of all higher education institutions), currently with online offerings, and they believe that online is critical to the long-term strategy of their organization; however, these institutions have not yet included online education in their formal strategic plan" (p.

10). For the fully engaged category, the results are even better - "Slightly more than one-third (35%) of all higher education institutions (around 1,500 total) are fully engaged in online education. They believe that their online offerings are strategic for their institution and they have fully incorporated online into their formal long-term plan." (p. 11) Simply stated, the future of online learning has the potential for positive growth as academic institutions, employers, and the adult learner become more familiar with the online learning model or framework.

With all the complexities and distractions available to us, more focus is being placed on customer service, flexibility, and mobility. The questions are: "What do students really need and want from their education?" "Do students learn differently than they did 30 years ago?" "Is the academic institution providing an education that will support student needs for customized or tailored presentation for each individual?" "Is the academic institution leveraging technology properly?" "Can our academic institution successfully integrate technology and content to create a student-centric learning environment?" "Are any of these the right questions?" What's really ironic is that these questions were possibly asked nearly 30 years ago when an academic institution received the first transparency machine.

In late 2008, the National Center for Educational Statistics published a projection of educational needs through 2017. The projection was specifically for degree-granting post-secondary institutions:

Total enrollment in degree-granting institutions is expected to increase between the end of 2006 - the last year of actual data - and 2017. Degree-granting institutions are post-secondary institutions that provide study beyond secondary school and offer programs terminating with an associate's, baccalaureate, or higher degree. Differential growth is expected by student characteristics, such as age, sex, and attendance status (part-time or full-time). Enrollment is expected to increase in both public and private degree-granting institutions. (p. 8)

Given the projection for enrollments through 2017, academic institutions need to be able to provide multiple delivery modes and opportunities for student learning.

One implementation strategy for the student's acquisition of needed skills and knowledge is the utilization of technology to facilitate the learning process (Gilbert & Ehrmann, 2002). The key point to remember is the learning process rides on the backbone of technology to present knowledge to the student wherever they may be at the time. Technology is the backbone for the educational experience to ride on - not the experience itself. The classroom is virtualized in structure, design, technology implementation, and the delivery method (Hannum, 2002). The classroom is no longer just walls, a whiteboard, and professor at a podium, but rather the class is on the notebook computer in a hotel room, iPod file, notebook computer in an airport, or watching an archived class presentation by the professor at home.

Technology will help with the acquisition of student knowledge and the next step will be for the academic institution to harness the need or desire of a student for an education and to make that the goal of an academic institution (Merriam, Caffarella & Baumgartner, 2007). Add to the mix the adaptability of the academic institution to blend the conventional campus academic environment with the online environment. What we now have is a student that can successfully blend their lifestyle, work demands, geographic location, and desire to acquire an academic degree, and the academic institution that can fulfill the student's need for adaptability, mobility, and the acquisition of a degree.

Students ultimately want to be successful, but added into that desire to be successful is the academic institution's implementation of technology to fulfill the mobility and flexibility desires of the student (Falvo & Johnson, 2007). Blend into the student's desire to learn is academic institution structuring of curriculum and degree programs to be adaptable to either the campus or online environment. What is really being talked about is giving the student "choices" as to how they want to fulfill their academic needs.

The faculty of today can be armed with notebook computers, Tablet PCs, iPods, interactive application software, and all are connected to a wireless campus network so that it is possible to communicate everywhere. For example, Colorado College in Colorado Springs, Colorado, has a campus-wide wireless network for use by faculty, staff, and students. When entering the classroom, students are waiting and already connected to the wireless

network. Once the faculty member is connected by the Tablet PC into the classroom interface, the professor can immediately engage the e-learning application on the Internet Browser. The professor remembers the remote or distant students, so the audio capability is energized and records the session activities so that they can view the activities and class session at their convenience.

When the professor is not in the classroom, he or she has numerous academic responsibilities to complete (Gilbert & Ehrmann, 2002). The short list consists of developing rubrics, reviewing syllabi and course objectives, mentoring students, responding to email and voice mail, and grading papers and exams. Students rarely turn in a hard or paper copy of an assignment in the online environment. The classroom assignments are nearly all uploaded to the learning management system platform and graded. There will always be a few discipline-related situations, as well as a few cheating and plagiarism issues. Students need to be cautioned that instant messaging a friend during an exam for answers is not acceptable. The student of today wants an educational experience that is adaptable to their life situation, mobility of access, flexibility of presentation, and, above all, options to gravitate between a campus setting and the online environment.

Learning Models

The Professional Learning Model (PLM) and the Applied Experiential Learning Model (AELM) take two different, but similar, approaches to promoting learning for online or distance students.

The Professional Learning Model (PLM) (Leasure, 2004) and the Applied Experiential Learning Model (AELM) (Corney, 2007) provide an academic institution with the framework for making the student a more skilled and knowledgeable member of society through the application of group- or team-focused projects and presentations. The PLM, like any model, is not the universal fix-all solution that will correct all the academic woes. It is more of a template, the applicability of which is more specific in nature and less universally applicable. PLM is more adaptable and malleable for an academic campus environment and does require adaptation for the e-learning, distance, or online academic environment. According to Roger Greenaway (1995), an experiential learning cycle is "a structured learning sequence which is guided by a cyclical model". The concept comes up regularly in work involving leadership and interpersonal skills development at Stanford's Graduate School of Business and is a central component of our "Leadership Labs," a series of experiential learning activities that are now part of the school's mandatory core curriculum.

The campus-based and online courses use the construction of deliverables as a teaching method. PLM and AELM will engage the students in complex, real-world situations that require them to organize, research, and solve problems. Essentially, it allows students to practice skills in near real-world situations. The PLM and AELM naturally answer the student question "How will I use this in the real world?" It allows students to easily establish the connection between what they learn in the classroom and real-world issues and practices. This learning method encourages students to use higher levels of thinking skills by having them look critically and creatively at problems that do not have one right answer. Students will learn about information in situations that are similar to the professional environments in which they will use the information in the future (Leasure, 2004).

PLM and AELM places students in the active role of collaborative problem-solvers and project initiators confronted with the task of producing a deliverable that mirrors a real-world context and assessment. Van Rooji's research (2010) suggests" that students learn best by actively constructing knowledge from a combination of experience, interpretation, and structured interactions with peers and teachers when using technology" (p. 210), which supports the key aspects of PLM's tenets. These key aspects of the PLM approach to teaching and learning are:

- Rapid achievement of real-world skills
- Faculty as coaches
- Classmates as collaborators
- Content as resources
- Authentic assessment

The key aspects of PLM are explained below.

Rapid Achievement of Real-World Skills

One aspect of PLM is the focus on accelerated learning and real-world skills. By situating the learning process with concrete deliverables, the students conduct their learning process and are on equal footing and recognition in the classroom with any participant, including the professor. The structure of courses reflects this understanding, thus giving students access to their fellow students, their designated small group, and their professor within the learning environment. The traditional role of the professor as the "Sage on the Stage" is eliminated. Why is the PLM approach so successful? Recent research by Duncan Folley (2009) has addressed some of the reasons which revealed that:

- The scope of the lecture can be broadened by using 'active learning' strategies and encouraging students to engage more interactively with lecture material, with the lecturer and each other in the lecture theater.
- Since individual needs differ, there is no reason why a single learning or teaching technique will work equally well for everyone. (p. 99)

Faculty as Coaches

The PLM learning shifts the roles of student and professor. The student becomes an active participant in his or her own learning; in other words, students become directors of their own learning efforts. The professor serves as the facilitator of the learning process. Instead of directing the learning, faculty assist the students in their self-directed learning. This shift in roles allows faculty to build relationships with students and facilitate collaboration among students. According to the results of Xu and Yang's (2010) research, "Teaching faculty needs to provide students with systematic guidance of team-based business simulations in order to foster a psychologically safe group environment". (p. 227)

Classmates as Collaborators

The traditional classroom can isolate the student. The clear expectation is that each student must sink or swim alone. Pascaul's research (2010) was able to determine that "maximizing opportunities for students to share their knowledge with practitioners, by joining communities of practice and increasing their intrinsic motivation by creating conditions for student's relatedness" (p. 3), students will improve their learning experience. Fellow classmates, as well, play an important role in each student's learning process since peers mentor and collaborate with one another. It is important to remember that although the academic institution is placing students into the role of problem-solvers and project initiators, students are novices in regard to this content domain. The deliverables are designed to situate student learning within a context that approximates the context students will operate in during their careers. Their projects are more defined in scope and application than those they will face later on in their careers.

The study and research by Xu and Yang revealed that "Students develop high-order knowledge and problem-solving skills by synthesizing diverse perspectives" (p. 227). The academic institution believes that students have as much to contribute as they do to acquire in the learning process. Bell's (2010) research addressed a vital thread to student-based learning success: "Students drive their own learning through inquiry, as well as work collaboratively to research and create projects that reflect their knowledge. From gleaning new, viable technology skills, to becoming proficient communicators and advanced problem-solvers, students benefit from this approach to instruction." (p. 39)

Content as Resources

PLM contrasts with the traditional classroom where content is king. As you explore the course shell and syllabus, you observe that the content is positioned as a resource to students. The emphasis is placed on the importance of learning the prescribed competency, not on knowing about something, but knowing how, when, and where knowledge can be applied. Recent research by Xu and Yang (2010) in the *Journal of Education for Business*

has found that student learning has been positively impacted by knowledge development student groups which were able to perform complex mental models successfully.

Authentic Assessment

PLM assessment is realistic and real-world focused. This means that there are no multiple choice tests. Students demonstrate their skills through the completion of real-world projects. In the real world, projects are not simple and they do not have any one right answer. Through real-world, professional learning, students experience the complexity of real-world projects and learn to select an appropriate approach to a problem that has more than one solution. PLM is structured into a scenario format. Each course is grounded by a real-world scenario that serves as the foundation for the course deliverables. The deliverables are divided into tasks. Each task includes a list of resources that provide students with the information they need to complete the task. Each student determines the approach he/she elects to take and which resources to utilize. As students work on their deliverables, they receive guidance and insight from the professor and their peers, who are their partners in the learning process. Assessment is integrated into learning by defining the professional standards of performance. Faculty, peers, and the learner use these standards to nurture the professional knowledge and skills required in today's workplace. Project-based learning allows students to become engaged in and direct their own learning. The process is supported by the student's professor and peers and allows students to practice skills that they will be able to transfer to future real-world situations (Leasure, 2004).

AELM is more a cyclical modeling approach that requires the student, through experiences or situations, to process through the problem or situation resolution steps. Figure 1 depicts the AELM cycles and provides conceptual definitions for the four cycle elements of the model.
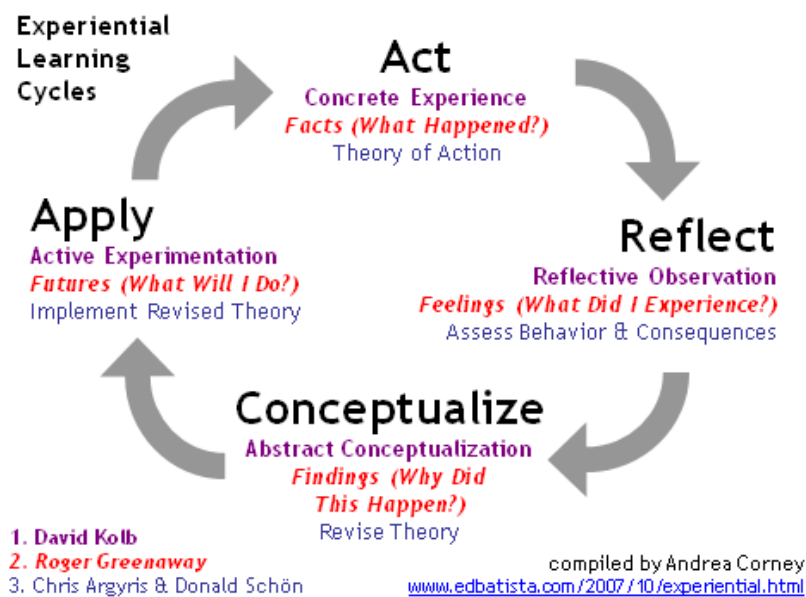

Figure 1: The Four Cycles of the AELM

Simply defined, the AELM four cycle elements are:

ACT: Do something - anything, in fact. Run a meeting, give a presentation, have a difficult conversation. (One of the most valuable aspects of this model is the way in which it allows us to turn every experience into a learning opportunity. The challenge, of course, is that we rarely complete the cycle and leave most potential learning untapped.)

REFLECT: Look back on your experience and assess the results. Determine what happened, what went well, and what didn't.

CONCEPTUALIZE: Make sense of your experience. Seek to understand *why* things turned out as they did. Draw some conclusions and make some hypotheses.

APPLY: Put those hypotheses to the test. Don't simply *react.* Instead, have a conscious plan to do things differently to be more effective - and begin the cycle again. (http://www.edbatista.com/2007/10/experiential.html)

The AELM has been refined and adapted to achieve the needs of numerous user communities which make the model an ideal candidate for application in the online learning environment. The model's greatest benefit to online learning is in its adaptability and simplicity of concept.

The ending goal of a learning model is to provide each student with every opportunity to be successful and graduate with a degree. The complexity of the goal develops as the student population and society become more mobile. Students are looking for a demanding academic experience that is attuned to their lifestyle and personal needs. In late 2008, the U.S. Department of Labor, Bureau of Labor Statistics identified that in fields such as "Network systems and data communications analysts, computer software engineers, applications, and financial analysts, the bachelor's degree was considered the minimum post-secondary educational category for 57.1%, 84.8%, and 87.1%, respectively" (p. 7). What does this tell the academic institution about its needs to establish methodologies or capabilities that allow students to gain skills and knowledge?

Technology

The key point to remember is that the learning process rides on technology in order to impart knowledge to the student wherever he or she may be at the time. The classroom is virtualized in structure and design. The technology is the delivery method for the academic information to flow to and from the student. Simply stated, students want mobility of the educational presentation in an online environment - now! To really make the student learning work effectively, "Teachers, especially, need pedagogical content knowledge which refers to knowledge about how students learn from materials infused with technology" (p. 236), as addressed in Eskrootchi and Oskrochi's study (2010). The students want to be able to work at their jobs, as well as obtain an education. The classroom is no longer just walls, whiteboard, and a professor behind a podium or desk. Education is classes on the notebook computer in a hotel room, working on a course paper in an airport, or watching an archive class presentation by the professor. Students have technological mobility all around them, so why not extend it to the academic environment?

Let's take the student's need or desire for an education and blend technology to support the student's desire to be successful. The goal of an academic institution should be to assist the student in being successful and then to add the option or opportunity to mix the more conventional campus academic environment with the online environment. What the academic institution can accomplish is to support the student who - given his/her lifestyle, work demands, and geographic location - can now fulfill his or her desire to acquire an academic degree.

BEYOND

So what's really in store for the future of learning and the academic institution? Many academic institutions believe that we are at the threshold of what lies ahead (Gumport & Chun, 2005). Online education is still in its infancy. Academic institutions continue to debate and integrate the technology with content to deliver solid and meaningful programs.

Academic institutions must implement and use an integrated suite of technology. Voice, video, and data must come together and must be absolutely easy to use. If we believe that e-mail, voice mail, iPods, iPhones, and the like are going to disappear, we're fooling ourselves. Along with integrated technology, academic institutions must develop and provide rich content and simulations. The academic institution must find ways to work this into the curriculum and not just inundate students with massive slide presentations and exams.

The academic institution must provide relevant and to-the-point training. Programs, courses, content, and objectives must be threaded and meaningful, and not just be busy work. The institution must also accommodate those with busy lives and schedules. Online delivery is an essential implementation solution to accommodate these students. Remote access is not going to fade away; therefore, providing course availability anywhere, anytime, and anyplace must mature and become the standard. The educational experience must also provide more hands-on activities. Slide presentations are great for some situations and now mastered, let's put them away and get the students working and participating.

The next five years will continue to be an era of technology integration and developing a framework of anywhere and anytime learning. Figure 2 depicts the direction of educational institutions over the next several years.
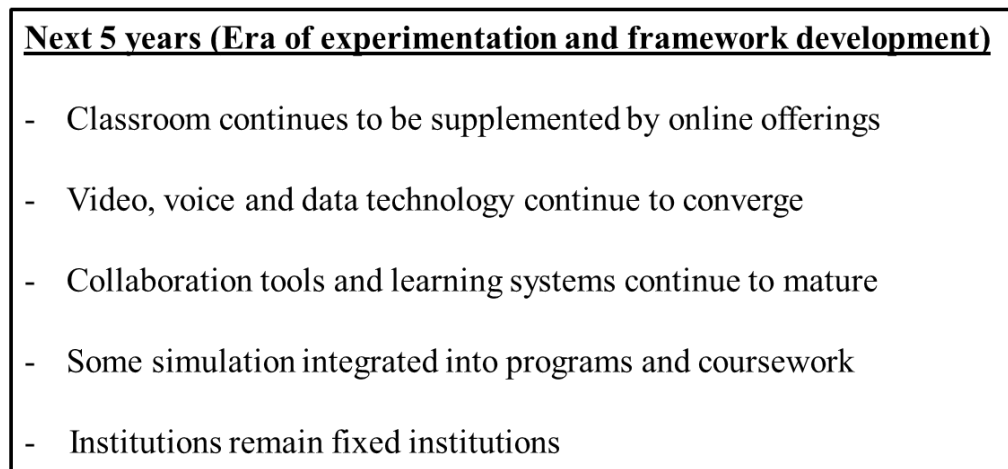

Next 5 years (Era of experimentation and framework development)

- Classroom continues to be supplemented by online offerings

- Video, voice and data technology continue to converge

- Collaboration tools and learning systems continue to mature

- Some simulation integrated into programs and coursework

- Institutions remain fixed institutions

Figure 2: Direction of Education for the Next 5 Years

The next decade is perhaps the most critical. It is the era of transformation for education and institutions. During this era, academic institutions must partner with industry. Industry should and must be an integral and active part of our advisory boards. Friedman (2007) explains, "The muscles workers need most are portable benefits and the opportunities for lifelong learning. Why those two? Because they are the most important assets in making a worker mobile and adaptable" (p. 383).

Students will require access to courses, materials, platform, and mentors around the clock. Also, the student does not have to be in the classroom to get the same experience as being in the classroom. The notion here is that the student spends less time in a classroom, thus becoming an education-seeking learner that is guided by mentors, communities of learning, industry experts, and alumni. The education experience will provide the flexibility to customize the material, courses, assignments, portfolio, and communication providing the student a more personalized environment. Content, courses, portfolios and tools can be put into immediate action and integrated into their current lives and activities. This includes all media, textbooks, and best fit resources to enhance the entire education experience.

Over the next decade, education and institutions will experience an almost unprecedented transformation and collaboration journey. Education will begin to integrate with technology, learning communities, and, most importantly, begin to expand socially. Figure 2 depicts the transformation of education over the next decade.

Next 10 years (Era of collaboration and transformation)

- 80 percent online and 20 percent classroom (primarily labs)

- Learning communities and projects

- Learning systems replaced by combination of collaboration tools or learning systems that integrate these tools

- Simulations becoming the norm

- Some industry integration to further utilize external and global resources

- Student learning and work portfolios

- Tailored learning rather than mass market concept begins

- Work graded by peers as well as mentors

- 50 percent anywhere, anytime, anyplace learning (availability of tools and remote services)

- Institutions begin to expand globally rather than regionally

- Education as a social business concept begins

Figure 3: The Transformation of Education Over the Next Decade

As an academic community, we need to find ways to mentor and focus student learning to make the student a self-motivated lifelong learner. Nuangchalerm and Panasan's (2010) research identified that "Students will be engaged and express their feelings of how a learning environment will be incorporated. They are continuously building and rebuilding understanding and need to reflect on their knowledge and experiences as well." (p. 253) The academic community has to develop new and ever-evolving methodologies to harness student self-learning.

The professor's role must change to be more of a shepherd, or even a steward, of the learning process. Faculty must set the vision and direction by permitting students to get more engaged with defining their education and activities in both local and global communities. Communities of learning will integrate the student into a much broader and richer scenario than just in the classroom. This concept supports both local and global notions where students, mentors, alumni, and industry experts provide a much wider breadth of experiences for the individual, thus introducing them to real-world events and activities. The professor will take on a much different role than a stand-up presenter. This role must become more of a partner and a roadblock remover, as well as serve as an integrator between learning communities, alumni, industry experts, and other students. Figure 4 depicts the destiny of education. The turbulent transformation will begin to settle into communities of learning and self-forming and directed organizations.

Next 20 years (Era of learning communities and self-forming organizations)

- High-schools integrated into learning communities

- Social networks become learning networks

- Nearly 100 percent anywhere, anytime, anyplace learning

- Self-organizing and continuous learning communities

- Global collaboration and learning

- Instructors replaced by mentors and support groups

- Industry integration into learning communities

- Self-grading and evaluation

- Customized programs and learning

- Education level determined by portfolio, projects and collaboration efforts

- Institutions selected by global influence and learning communities

- Education operates as a social business

Figure 4: Direction of Education for the Next Twenty Years

SUMMARY

Learners of the 21st century will be seeking an education that is adapted to their lifestyles, work commitments, and life events. They look to the academic community to effectively embrace and implement technology, while insuring the presentation of the learning experience demonstrates quality and value. To achieve student-centered success, educational systems will need to constantly and continuously adapt their learning platforms, while providing the mobility the student needs to be successful. Technology has changed, is changing, and will continue to change and evolve rapidly. We, as educators, must adapt to these changes and present students with the best possible educational opportunity so that they can fulfill their needs.

Academic institutions should determine how they will adjust their processes and assessments to synch up toward this direction. For those who have not even implemented technology, you are already behind the power curve and your primary focus will be in making technology work and integrating the solutions.

As a collective group of academics, we still have to ask ourselves a number of questions: 1) Are we just fine-tuning over and over what we already do? and 2) Are we really innovating and changing the very fabric of how we learn and educate or are we being pulled in that direction? We truly have some tough challenges ahead. Tough questions and their responses might be even tougher to accept and implement.

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