In my end is my beginning: Elearning at the Crossroads

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ABSTRACT
The increasingly popularity of eLearning does not refer to a specific educational method of instruction nor method of delivery. The design can have different meanings depending on the sophistication of the educational method employed, the resources made available, and the educator's skills. Unfortunately the application of technology in education does not necessarily equate to effective forms of learning. The literature does not always provide clarity in defining a framework for educational technology initiatives. This paper suggests that such a taxonomy is necessary to establish distinct categories of eLearning between industrial models, bottom-up innovation and top-down institutionally-led changes.

Keywords: eLearning taxonomy, Learner-centered learning, education delivery, interactive learning, online instruction

INTRODUCTION

"In my end is my beginning" the quotation from T.S. Eliot's "Four Quartets" (1943) illustrates that the impasse that eLearning has arrived at is an opportunity to glance backwards to see where it had gone wrong and to choose a path which, having learned from the mistakes of the past, does not repeat it. To call up from another era a repeated slogan, it is ultimately the end-user that is the student, and not the administrator, nor the product developer who decides on the future of eLearning, and that is decided by what is delivered against promises made. Higher education has seen a proliferation of new models in response to growing market demands. For-profit universities, massive open online courses, and competency-based pedagogies have all vied for a piece of the pie. It could have been written over a decade ago, and promised as much, but it came out in June 26, 2014 in the highly esteemed *Times Higher Education* entitled "Beyond the limits of traditional learning":

> Adaptive learning systems, experiential learning, competency-based approaches, programs that offer alternative credentials, courses that are accessible on mobile devices and educational partnerships with employers all personalize higher education. They allow students to tailor their learning to fit their needs, their learning styles – and, just as importantly, their budgets. While the residential campus remains a superb model for education, it's expensive, place-based and unsuited to the lives of many non-traditional learners. New teaching and learning innovations push past these limits. Because they make higher education more customer-centric, they have the potential to increase student retention, graduation rates and overall attainment (Aoun, 2014).

There were numerous articles published a decade ago at the turn of the century, proclaiming much the same demise of traditional learning institutions and valorization of eLearning as virtual universities bringing to an end the brick-and-mortar campuses. At the start of eLearning, its technology still primitive , it was asserted with available studies necessarily of short duration how electronically mediated learning technologies (1) have a positive impact on course delivery and student learning, (2) are effective at achieving greater student participation and student interest, and (3) allow opportunities to improve critical thinking (Saundercook and Cooper, 2003). The words commonly used then and still much in use include "explosive", "unprecedented", "amazing" and even greater praise directed as primitive instrument, the blunderbuss, in a scattered fashion aiming at anything that moved electronically.

The press release is astonishingly like many troubled and unsuccessful trends in business and industry, most especially the Knowledge Management (KM) trend to which we shall pay attention at some length to establish the danger of identifying eLearning indiscriminately across distinct categories. Business and Industry has to be by definition motivated by profit, whether or not its products are employed to increase the productivity of industry or that of education. Globally, the market for eLearning products in all areas reached US$42.7 billion last year, and is projected to reach US$53 billion by 2018, according to the research report by United States-

based international research company Ambient Insight. While the US leads sales, Asia is the second largest market with revenues from eLearning products in Asia projected to reach US$12.1 billion in 2018, up from US$7.9 billion in 2013. Revenues will more than double in a dozen of the 21 Asian countries analyzed and triple in nine of them, in part boosted by a huge amount of private investment going into learning technology companies in Asia, the report predicted (Adkins, 2015; Dutta and Mia, 2009). Superficially, it is a win-win situation where there is a benefit both to the vendor and the buyer. Only the buyer may not be an educator and the goal may be cost saving, not greater learning which has little to do with efficiency and productivity as a measure of success.

Vendors of eLearning platforms generally deal with administrators of highly centralized governments who are making decisions for poorly paid educators. Most teachers and professors in Africa don't get to fly to eLearning trade shows, enjoy an expense account while negotiating to buy the products of increasing sophistication designed for Chief Learning Officers, not College Deans. This trend is just beginning in developing countries whose adapting eLearning platforms is sure to increase the 'digital divide,' a term of such rising urgency that President Obama had need to intervene in his State of the Union Address in 2010 (Obama, 2010). That is why we need to study eLearning projects in distinct taxonomic categories that focus first of all on 'learning', not the platform, nor the pedagogy, the students' actual learning as a measure of achievement.

VAST PROMISES OF REVOLUTIONIZED LEARNING

Not only does the business and industrial model need to be studied for its lessons for the academic world and then firmly set in its place, we need to look skeptically at how it looks from the administrative level in the school, college and university systems, to uncover an exchange of considerable importance and increasing creativity taking place at a different level, on the front lines, between educators and students in the classroom, online and increasingly in a combination of face-to-face and electronically managed environment to which the term "blended" had become attached. It is this last category, educational institutions which are strictly delimited in this study so that accurate assessment could be made and a healthy, untroubled unfurling of eLearning programs managed. We pause therefore yet again at the rhetoric of eLearning ventures that seem appealing to administrators and arouse grave suspicion and fear among educators of troubled colleges and universities. Professors fear, perhaps rightly, that a strategic direction towards eLearning will employ the promise of constructivist educational language to plug expensive products and platforms that may, and often does, reduce salaries and cost jobs in an age when administrators are hired to balance the books of troubled educational institutions.

The following is typical of the rhetoric repeated without variation since the turn of the century which was marked; it will be remembered, by an unreasonable hysteria concerning the millennial meltdown globally of all computer systems. A recent press release may be repeated annually for many years to come, year after year burying the old fashioned, campus and lecture-based education in its irresistible advance:

> ELearning refers to the learning facilitated with the help of electronic media. It comprises all forms of electronically supported learning and teaching tools, and is widely adopted by educational institutions, especially for higher education. ELearning service providers deliver learning solutions through the latest tools and technology, thus providing users with rich media and graphic-based learning. Since this form of learning is cost-effective and helps enhance employees' efficiency and productivity, many organizations across the globe have completely replaced their traditional forms of training with eLearning (TechNavio - Infiniti Research Ltd., 2014).

There is a rhetorical turn in the passage cited above from higher education to the language of industry with troubling words to educators, for 'efficiency and productivity' are notoriously difficult to measure and perhaps even absolutely inappropriate except as a basis for cutbacks and budget trimming. From that point of view, the coming of sophisticated electronic tools may be welcomed as the weavers of cottage industries welcomed the great factories and their machines during the Industrial Revolution. The latest products such as SnagIt, the new LMS with deeper integration with current technology of web-based tools like SoftChalk, TechSmith Relay, Camtasia Studio, Civitas (predictive analytics), Web 2.0 tools, Moodle, Google Apps, Big Blue Button, Microsoft Lync, Skype, MOOC (Massive Open Online Courses) and still more devices may not have an attractive sound to elderly professors whose salary grew over the good economic years and now worry that 'productivity' and willingness to embrace change will become a measure of their worth.

Only by demonstrating not just the equivalence but the superiority of eLearning as a medium of education at the classroom level in a transaction between educator and student that a genuine eLearning revolution will take place centered as it should on learning, not the learning platform. If that were the case, that is, if it is demonstrated that eLearning is superior in areas like reading and writing in K-12 classes or improving research and report writing

in colleges and universities, a case can be made for professors stuck in their ways to step aside. But that requires a strong case, not rhetorical tricks and platitudes.

It may be acceptable around the year 2000 to build a strong case on slender evidence, say a project in a single class, and with sufficient qualifications employing 'could,' 'should,' 'might' and 'may' present it as evidence for the glowing future of eLearning which may transform learning in positive ways, resulting in an increase in the quality of learning experiences (Garrison and Anderson, 2003; McKnight, 2001). In particular, online electronic resources as they existed at the time, may be employed successfully to facilitate the development of argument formation capabilities, improve written communication skills, develop greater complex problem solving abilities, and increase opportunities for critical and reflective thinking (Abrami and Bures, 1996; Garrison, Anderson, and Archer, 2001; Hawkes, 2001; Winkelmann, 1995).

STUDENT-CENTRED TECHNOLOGY

It is not hard to find recent studies which proclaim much the same success, almost always with qualifications. Still too often the loudest proclamations of success are from limited short term, seldom longitudinal studies, and almost never at the student-teacher end of the transaction. The gap between what administrators of eLearning programs believe and what teachers and students experience is vast and troublesome. A survey of college administrators was asked, as an example, to state on a scale of 1-12 the challenges they face in establishing eLearning initiatives. Student acceptance of eLearning as an educational medium ranked in last place among challenges seen from the point of view of college administrators (Michigan Community College, 2014).

That is why, rare as they are, we need urgently to heed empirical findings of recent vintage to respond to a challenge posed by the title of an empirical study by Kaznowska, Rogers and Ushr (2011) entitled *The State of E-Learning in Canadian Universities, 2011: If Students Are Digital Natives, Why Don't They Like E-Learning?* ELearning has become as a feature of education, whether or not it was positively regarded as of benefit. "*A large majority of participants (73.7%) found that the virtual learning environments in their classes were either fairly important or very important to their overall education experience…,"* it was found. "*In other words, even if students were not especially impressed by the e-Learning resources available to them, they were likely to say that the presence of such resources did materially alter the nature of their education*" (Kaznowska, Rogers and Usher, 2011, p.11).

The conclusion of the Canadian team's study is evident in the title; though there is an exception to the general ill-will that eLearning was held which is worth pursuing:

> As the level of available e-resources increases, the proportion of students saying they 'learned more' drops significantly…Students were not actually more likely to say they had learned less in their courses with advanced e-resource availability…, but they were more likely to say they had 'learned about the same' in those courses as in other courses they were taking. While there were some variations by field of study, the only field in which the largest 'learned more' percentage was associated with the highest degree of e-resource availability was engineering (Kaznowska, Rogers and Usher, 2011, p. 20).

These distinctions are worth pursuing to explain what there was in engineering education which made eLearning attractive, just an example of the kind of student-centred question that is asked too rarely. There are a multitude of studies which demonstrate that a course with eLearning components is comparable to an old-fashioned lecture-based courses, a discovery presented positively to extol eLearning when the grudging acknowledgement of equivalence may have been given, as above, in resignation, with an unstated implication that eLearning as many students experience it is just 'good enough.' The most important question is the pedagogy, specifically whether eLearning was chosen as a means of teaching or, more likely, thrust upon the educator.

There are a multitude of such student-centred questions that require leaving aside the hopeful rhetoric at the turn of our century for a sober assessment of what is out there, thereby demarcating the student-centred parameters of this investigation. The Canadian study challenged the notion of a new student-type demanding technical tools that they had grown up with for their college and university education. Clearly, social networking, online gaming and music downloading has little to do with liberal arts, the sciences or engineering delivered as credit courses. That raises many interesting questions. Although increasing numbers of young people have access to a wide range of IT technologies during their leisure activities, little is known about this impact on their learning. Much of the research evidence to date of students' formal and informal uses of eLearning is about the growing number of eLearning courses or the frequency that WebCt/Angel or Blackboard is employed regardless of the setting, which is a great mistake. It is rather dreary to find after all the hype that those who usually are dedicated to face-to-face courses are also dedicated to logging to online courses and following them. On the other hand, what a surprise, students who do not display such dedication for normal face-to-face course, neither do they display such dedication to online courses (de Vega, McAnally-Salas and Lavigne, 2009, pp. 95-112).

UNPRECEDENTED OPPORTUNITIES IN EDUCATION

To be sure, to cash strapped college and university administrators, the decision to invest in eLearning makes sense. Beginning in 2008, the National Center for Education Statistics recorded a steady rise of distance education courses and the numbers of students enrolled in them (Parsad and Lewis 2008; Allen and Seaman 2010a and 2010b). At the same time, there is an almost equivalent loss of enrolment in full time studies suggesting that is not so much the scholarly benefits but an economic crisis through this period which has driven the growth of online education and eLearning in general. It may be proposed that with the advent of hybrid classes employing eLearning and face-to-face components together, it is not so much eLearning that has changed education, but the campus very much still in place had transformed the field of eLearning by its constant adaptation and remodelling of the available tools according to changing technology and growing financial constraints, especially after the severe economic downturn of 2008.

The '2014 MCCVLC Distance Learning Administrators Survey Results,' specifically addressing distant learning administrators, allows us to assess educational delivery of electronically mediated instruction at our colleges and universities as it exists, far from the delirious prophecies of campuses disappearing into virtual space, and quite different from developments in corporate training, education in poor and developing countries and in medical education, to cite the categories which give an optimistic but very distorted view of eLearning as it is actually designed and delivered at our educational institutions. For instance, a situation which is unimaginable in the world of hospitals or the corporate world, only 24 percent of the colleges reported that their eLearning initiative was developed out of a comprehensive business and educational plan (p. 7) which means that fully 40 percent of the eLearning courses were developed on the initiative of interested professors who were given the freedom to develop their own website and use authoring and communication tools at their own expense, with some proprietary rights and creative freedom spelled out (p. 40). Blended and hybrid formats outnumber entirely online courses by a ratio of 9 to 1 putting an end to dreams of a disappearing campus (p. 8).

The above leads us to think that there is found on every campus a substantial number of educators who choose to employ online tools as a choice and not a cost-saving administrative measure reluctantly undertaken. We shall soon turn to how teachers share information in their educational journals and thereby create an eLearning path by walking it, given that administrators generally fail to provide a roadmap for the development of eLearning, though increasingly it is senior administrators who are in charge of eLearning initiatives and the allocation of funds. Meanwhile, it is in educational journals sharing favourite assignments where we will find imaginative uses for online tutoring, mobile learning, video/multimedia technologies.

As online instruction and associated eLearning systems continue to mature, universities which have seen a continued decline proclaim much the same advantage for online learning today as they always have relied on data from the turn of the century or from the corporate world to support their enthusiasm. The field desperately needs once again "a taxonomy" to establish distinct categories of eLearning as a field which has consistently changed its focus and breadth over the last decade as a consequence of changing technologies and changes in educational and corporate policies and practices. Looked at from the corporate profit nexus, all forms of eLearning may be collapsed into a single sector of the economy with valuable corporate training and eLearning components working together in an ever expanding market. How different the two sectors are may be gauged though from the '2014 Global eLearning Salary and Compensation Report' of the corporate oriented eLearning Guild, which based on responses from 5,923 eLearning Guild members internationally, corporate trainers who provided their salary and compensation information as part of eLearning Guild general membership data. Salaries in this sector held steady in the United States and slipped slightly around the world in 2014 with the average global salary at $76,530, and the 2014 average US salary at $78,932 (eLearning Guild, 2014).

By comparison, the 'MC Horizon Report on Higher Education' in 2014 identified in an essentially optimistic assessment of the continuing expansion of higher education six key trends, six significant challenges, and six emerging technologies across three adoption horizons (Johnson et al. 2014). Only in passing does the report come to key challenges, above all 'the low digital fluency of faculties' and 'the relative lack of rewards for teaching.' Oddly, in a field which is undergoing varied assessment and surveys, it is this last sector, the students' appreciation of eLearning in its current forms and available technology which suffers the greatest neglect. To cite just one example, a major study on eLearning by the Pew Research Center was unveiled to considerable fanfare in the United States, but while it presented results of a survey of the American public and of U.S. college presidents, it did not bother to get the students' perspective on how students use eLearning technology, though that only 35 percent of the public who have taken online courses praise the experience is worth noting (Parker, Lenhart, and Moore, 2011).

TECHNOLOGY SUPPORTING TEACHING AND LEARNING

Many studies of eLearning programs have concluded that the key to ensuring successful outcomes is to blend more traditional classroom approaches with those that use technology. But educators need to learn how student learning changes with eLearning, and how to alter their teaching methodologies with pedagogical approaches that take advantage of the opportunities afforded by-learning. A blended approach mixing face-to-face classroom methods with technology-mediated activities seems to provide the highest learning outcomes, but precisely what takes place in the interaction between educator and student through the mediation of technology and how it is changing the pattern of teaching and learning in colleges and universities has been greatly neglected. It is not whether technology is used (or not) which makes the difference, it may be argued, but how well the technology is used to support teaching and learning. Before we leave aside the question of blended learning as an important category of this taxonomy, we would do well to look at its possible, and yet to be proven advantages.

Using blended learning it is proposed benefits the learner, the training staff and the organization's bottom line. Focusing on the technology first and then the pedagogy is a very great mistake. Blended learning allows organizations to gradually move learners from traditional classroom practice to eLearning in small steps making change easier to accept. Working in a blended environment furthermore enables instructors and instructional designers to develop the skills needed for eLearning in small increments. Moreover, eLearning professionals can move small sections online as they develop the needed eLearning skills. Cost and resources are also a driving factor. By beginning small, there is assurance that the needed investment is supported by the community of users who perceive the need for the technology as the necessary next step in building a truly serviceable learning platform. Still, the perspective of the learner, is rarely, if ever, the subject of research into the effectiveness of blended learning. We find addressed instead forms of instruction, teaching, or at best, pedagogies, not a true measure of what is achieved their impact on pupil learning outcomes. The challenge eLearning faces is not only in providing the appropriate infrastructure, customizing the design and content for a local context, and overcoming social inequalities of the 'digital divide,' but also to be effective there must also be an investment in teachers as facilitators rather than as lecturers, or deliverers, of content. This requires some new skills, particularly in the effective use of technology and reinforces thereby the longstanding principle that good education requires a significant investment in building the competencies of teachers, not just the infrastructure and its content. It follows that we should peer over the shoulders of designers and vendors of eLearning tools or the administrators who purchase these tools and think so highly of them to how they are actually employed by teachers and students.

As an example of how it looks from the above, a review commissioned by the World Health Organization (WHO) and carried out by Imperial College London researchers concluded that eLearning is likely to be as effective as traditional methods for training health professionals. Drawn from a total of 108 studies, the team reported that students acquire knowledge and skills through online and offline eLearning as well as or better than they do through traditional teaching. The authors suggest that combining eLearning with traditional teaching, that is blended learning, might be more suitable for healthcare training than courses that rely fully on eLearning. Such programs could potentially, it was hoped, help address the shortage of healthcare workers by enabling greater access to education, especially in the developing world where the need for health professionals is greatest (WHO, 2015).

It is not quite clear what such studies actually demonstrate, however grounded they may be empirically. For when after the heavy investment of eLearning initiatives, it is repeatedly found equal to face-to-face teaching, it follows that there is no urgent need to introduce eLearning unless there is another proven advantage beyond the improvement in the quality of the teaching and the increase in learning that makes the project valuation. Again, the blended approach for all its advantages makes it extremely difficult to tell whether it is the new technology or the old fashioned face-to face lecture that accounts for the program's success. When it is proposed, as an example, that the shortage of medical practitioners in third-world countries may be overcome by eLearning initiatives, it should not be overlooked that there is, among other inequalities of our world a digital divide to be overcome, most especially in access to computers, internet connections, and learning resources. In sum, it may be the privileged in the many countries where injustice is the norm who alone benefit from the heavy investment in online education not to those living in areas of Africa which are contemptuously called 'the bush'.

UTOPIAN DREAMS LACKING EMPIRICAL FOUNDATION

Emerging technologies and eLearning are perhaps providing incredible opportunities and transformations. However, these opportunities are largely confined to those aspiring to the middle class who are already educated and well-connected. The barriers that keep individuals from accessing the educational infrastructure that is already in place are the same ones that keep the majority of people from participating in the eLearning revolution. Digital divide separates the Internet 'haves' from the 'have-nots:' those who are online from those

who would like to get online, but are prevented based on the availability or affordability of access. Digital gaps in education, employment, race, and gender have already become worldwide issues and the educational divide is getting wider between developed countries and developing countries, between cities and rural areas, and between the rich and the poor. Not even comparatively wealthy countries are immune. Even in America, according to an NTIA report, *Falling Through the Net: Defining the Digital Divide,* black and Hispanic households are only 40 percent as likely to have home Internet access as white households are. In addition, whites are more likely to have access to the Internet from home than blacks or Hispanics are to have access from any location. A survey conducted by The Public Policy Institute of California found that even in California, where technology-use is widespread, only 39 percent of the state's Hispanic people accessed the Internet compared to 65 percent of white people (Baldassare et al., 2011). Barack Obama has pledged to close the digital divide, and in 2010 the president unveiled a national broadband plan with the aim of giving "every American affordable access to robust broadband" by 2020. But the new figures from the Census Bureau, which collected data on internet use at a sub-state level for the first time in 2013, show how hard it will be to hit that target in the next five years. There are still 31million households in the US without a home or mobile broadband subscription.

The start-up cost of an eLearning service is expensive and the cost of production of online training materials is very high. We should be confident that the extra costs are balanced with the benefits of delivering a course online. Yet, many very poor countries of late had invested very heavily in various eLearning initiatives. Asia is in fact the second largest market with revenues from eLearning products in Asia projected to reach US$12.1 billion in 2018, up from US$7.9 billion in 2013. Seven out of the top 10 countries with the highest eLearning growth rates in the world are in Asia, with growth in these countries above 30 percent, the report said. The main buyers of eLearning products are, predictably enough, government agencies and sales are heavily concentrated in the academic sector.

Several online institutions are now enrolling very large numbers of online students, and enrolments are accelerating, the report said. For example, ChinaEdu in China has over 311,000 online students in both degree and non-degree programs - the second-largest online student population in the world after the University of Phoenix, which has not exactly distinguished itself for its excellence. In December 2013, ChinaEdu reported a staggering 211,000 students enrolled in their online degree programs, a 14.5 percent increase over the year before. Korea National Open University has more than 200,000 online enrolments and is the largest university in South Korea in terms of enrolments. In addition, by September 2014, 24 cyber-universities were operating in South Korea. The Open University Malaysia has more than 90,000 online students. The Open University of Japan is the largest online education provider in that country, with over 85,000 students enrolled (Adkins, 2015). Here again, we see the need to make distinctions. A virtual university entirely online, an educational support program for high school and university students, an online training program for nurses may all belong in a general sense to eLearning defined as the learning facilitated with the help of electronic media and comprising all forms of electronically supported learning and teaching tools. Still, if distinctions are not made, there will very quickly follow concerns about whether that investment of money could be better spent in other ways when seen from the point-of-view of students. Many eLearning websites, even free-of-charge platforms, have told *Tuoi Tre* (Youth) newspaper in Vietnam that the number of Vietnamese people using their services for studying is small and unstable. One site began with a million visitors in its first three months only to lose a staggering 300,000 visitors and the number of registered students fell from a height of 40,278 at its height to 5,399 within months making it uncertain how much longer the website could sustain such losses. Interestingly, Khan Academy, which introduces lessons in the form of entertaining videos and does not require fixed learning schedules, expressed optimism over the situation with 150,000 learners and growing each month by 20,000 additional learners (Tuoi Tre News, 2014).

As an aside, there is evidence that online education has to pay attention to a generation which connects electronic media with entertainment suggesting that such devices as games with their visual, quasi mythological avatars that young people are fond of could be built into effective learning platforms to teach mathematics whose abstractions can be baffling and made easier by concrete representation that is the advantage of the electronic media. But all that is hypothetical and, sadly, untested.

It takes time for robust evidence to emerge in education, but surely after at least two decades there need to be an alignment joining creatively and profitably the educator, the educational institution, the eLearning tools or platforms, the student and what is to be learned. It is the pedagogy of eLearning as student-centred technology that is of interest, but to this end we need first to severely delimit our particular area of investigation from adjacent areas, for in eLearning, as we have seen, it is all too easy to lose perspective and proclaim utopian dreams lacking empirical foundations and leading to the kind of failure that is associated with Knowledge Management (KM) in the world of corporate learning. Once again, to demonstrate the urgent need for an

eLearning taxonomy we will narrow the immediate object of our inquiry specifically to 'learning' from the students' point of view, not administrators and vendors who may focus on what seems, looked at from above, infrastructure, customizing the design and content for a local context, and overcoming the barriers the accreditation bodies may set for what has not yet proven itself as an effective form of learning. Forms of instruction, teaching and pedagogies are left to a later stage or worse up to the educators who may include in their number many who fear the technology and may be inept at it.

KNOWLEDGE RULES

Again and again we find in areas of education, whether in medical education, education in poor and developing countries no less than in the United States K-12 system, the quality of the eLearning program assessed by the quality of the platform and its content. It seems self-evident but often forgotten by a formalist approach, sometimes masking itself in constructivist language, that eLearning is not only about investing in good learning content and the latest in learning technology. As well, there need be teachers as facilitators rather than as lecturers, or deliverers of content. This requires some new skills, particularly related to the ease and creativity of use by the educators, which reinforces the longstanding principle that good education requires a significant investment in building the competencies of teachers. In a field which changes with astonishing speed as ever new technologies or start-ups flood the market, what is lacking once again, is an accurate measure of the cost and sophistication of educational technology intervention with its impact on pupil learning outcomes. The world of business and industry where productivity and efficiency urged upon teachers rules serves as an example of the danger facing education if the profit-minded vendors and not teachers and students are consulted with systems accommodating their needs rather than asking that they accommodate systems thrust upon them.

Business practices have over the years, constantly required extensive changes to the corporate culture from many directions. In the 1990's, one of the most important of these changes involved the discovery and emergence of tacit, hidden knowledge in the organization's depths as a great value to be cherished, developed, protected, and turned to overt and useful knowledge. It was promoted to glory and extolled like 'virtual universities' and suffered much the same fate. Knowledge Management (KM) involves identifying, protecting, developing and making good use of an organization's knowledge base in a much wider sense than originally conceived in database management. In the course of a working day at all levels of an organization of any kind, whether designed to lend books, serve hamburgers, direct traffic or save lives, every single employee meets and overcomes challenges and thereby gains some knowledge of a very pragmatic nature. That knowledge, in theory, could be mined and sifted to find what is of value for the organization as a whole and called 'social capital' to identify its relation to profitability (Nonaka, 1991).

Concealed in databases, documents, policies and procedures or the experience of individual workers who are the first-line contact of customers and vendors, the public face of the company, knowledge was identified with power in a discourse found commonly extolling the promise of eLearning, setting up the field for failed expectations in its inability to meet utopian goals. Software firms quickly realized the potential of Knowledge Management for lucrative projects. Just like we don't use all of our brain-power, they explained, we make too little use of all the resources lying idle in our own organizations. It mattered in theory very little whether it was a fast-food franchise, nursing station, the town library or the factory floor, if an organization could increase its effective knowledge utilization by only a small percentage, the results promised were greater efficiency and profitability, as well as in better employee decisions made under conditions of improved organizational performance.

It takes a great deal of capital in investment to build a knowledge system to mine 'social capital' of employee knowledge and turn it to code, just as an eLearning platform is able to support multiple courses. Throughout the 90's when K.M. was most popular, living experience of workplaces was transferred and stored in varied forms of electronic repositories and embedded in the different locations 'campuses' where managers challenged to build 'learning organizations' came to be open later to all manner of eLearning initiatives. But while all people have the capacity to learn, the organizational structures in which they have to function are often not conducive to reflection and engagement about daily experience or sharing what was learned, however valuable the knowledge so gained may be. It is comparatively easy to create a knowledge portal that can serve as a central repository for documents, discussion boards, and information of use that can be installed in different workstations, but very hard to get employees to see in a very expensive system the benefits of making use of it, as it is getting students to appreciate eLearning. That may be the reason that soon into our new century grim reports began to emerge of the failure of great many K.M. projects designed at great expense, launched with great fanfare and hopes of the enormous gains promised in profitability and efficiency, only to discover that in the end the K.M. systems couldn't pass safely through crises and solve the bottlenecks.

The growth of information communications technology (ICT) and with that a knowledge-based economy leads us to forget sometimes that it is human beings in the end, employees or students and teachers who decide whether a project, K.M. or eLearning is successful or not. Effective acceptance and utilization of new technologies is not as easy as data to input and requires factors entirely human in nature, such as attention, motivation, commitment, creativity and innovation. Knowledge in our human sense, as Socrates and Plato understood it, need be factored into the business or eLearning plans for ambitious learning projects from their inception side-by-side and of equal importance with automation of functions, rationalization of workflows and redesign of business systems.

There is accurately described a "vendor feeding frenzy" (Kay, 2003, p.683), which developed as software vendors attempted to exploit the new and potentially lucrative market for knowledge management. It may be that very large-scale organizations with billions of dollars in play, and a great many colleges and universities are guided by managers who are like their employees human beings in the end, and so susceptible to flattery, delusion and a false sense of grandeur when approached by specialists who proclaim a new economy where 'knowledge rules' and a system of education outside of the expensive brick and mortars of post-secondary campuses. It takes only for a few very big companies already running globalized systems of production and distribution to start an avalanche of projects to mine profits lying idle among their own employees and the vast databases that record, like the human mind, everything that happens. Only, there is no need for any of us to harness our whole brain-power with every problem, but only a sector and that one needs constant updating and exercise to be relevant. There are very successful knowledge management systems like Wikipedia and countless websites that we consult to get information and make decisions. What's their secret? Everyone profits in gaining and giving genuine knowledge, not the bill of goods very smart business leaders bought into to their loss of face and money.

ELEARNING INITIATIVES

At this point, we have identified the very lucrative industrial model of education only to set it in its own category within the incredibly promising field in considerable disarray for many reasons, most prominently the confounding of the seemingly successful industrial model with our troubled and underfunded educational system.

The field of learning is marked by a mixture of old pedagogy and new technology. Some of the key challenges eLearning faces are in providing the appropriate infrastructure, customizing the design and content for a local context, and overcoming social and gender inequalities. These are all key to enhancing eLearning and making sure that it does not lose the benefits of face-to-face learning. We need in order to meet these and still more challenges more than a fragmented approach to studying the opportunities and risks of eLearning that we have in place. For there is a huge gap between the dream that will transform educational transactions as taking place within an ideal community of learning and the cold light of day, what is taking place on the ground, between the start of an initiative raising great hopes and at least the first barriers that may be faced. In this context, we would do well to select three separate categories identified from two directions, top down and bottom up, from what it looks like as administrators see it and as how end users experience it (figure 1). The aim continues to be to demonstrate that high levels of learning are dependent not only the quantity of interaction, but also on the quality, or substance, of interaction.

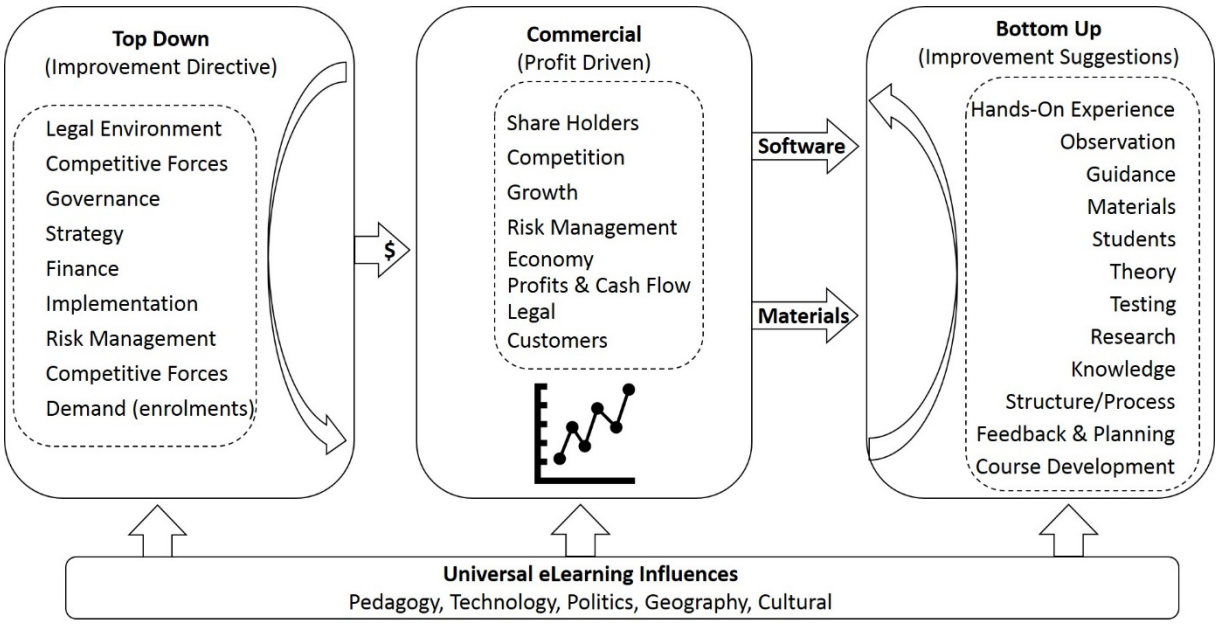

Figure 1: Towards a Taxonomy of eLearning Initiatives: The model details three separate identified eLearning categories and their major influences.

CONCLUSION

Evidence bearing upon whether, and to what extent, learning management systems (LMSs) and similar eLearning technologies achieve the pedagogical goals for which they were designed has not been well-grounded in theory-based evaluation measures and instruments, nor in sound methodological practice. To be sure it is often proposed without concrete evidence that students who grew up with, and are literally attached to, digital devices would differ from those of previous generations in learning patterns. As such, the challenge educational practitioners and designers face, it was said reasonably enough, is to recognize these differences and to develop educational offerings appropriate for their learning patterns, characteristics and behaviors. Students of this generation were said to face more flexible environments where self-initiated education is possible, enabling them to be engaged in learning throughout a lifetime, and fostering thereby appropriate online pedagogies and installing a rich learning environments employing technology as an instrument of the currently trendy constructivist learning theory.

As it was conceived not so long ago in Blomeyer's words, "online learning or e-learning isn't about digital technologies any more than classroom teaching is about blackboards. E-learning should be about creating and deploying technology systems that enable constructive human interaction and support the improvement of all teaching and learning" (2002; p. 19). Smith, Clark & Blomeyer (2005) studying knowledge transfer and knowledge sharing processes through the development of elearning systems imagined a decade ago how with the coming of online technology, a student observes how another individual solves a particular problem (interpersonal interaction). This student then constructs his/her ideas (intrapersonal interaction) based on the observed interpersonal interaction. In a social constructivist learning environment, the facilitator interacts with learners, builds scaffolding for specific topics, and promotes the type of interaction that expensive brick-mortar campuses deliver at a fraction of the cost, at least after the initial investment setting up an infrastructure. Decision-makers running colleges and universities leapt on new ways of learning that are more cost efficient than traditional learning strategies and which allow students to better control the process of learning because they can decide when, where and how fast to learn.

Reality, which has a way of over-turning illusions like the 'paperless office' and 'knowledge management systems,' has not been kind to the promoters of the idea that university structures would be overturned with the advent of the new learning systems. Over the last two decades, many higher education institutions have adopted a wide range of eLearning tools into their educational delivery and support processes which have stimulated an agenda of bottom-up innovation, rather than one of institutionally-led changes in educational delivery processes. ELearning has consequently primarily been evolutionary and not revolutionary, bottom-up, incremental change from within led by a very small number of technologically inclined educators through which the use of eLearning is increasingly integrated in old and existing practices in hybrid forms of learning.

Such communities of practice among technically-minded educators need to be rewarded and organized into working units. Technological advances have transformed the education landscape. However, educational devices are no substitute for good teaching. Colleges and universities need to find better ways to integrate technology. That is a complex, multi-faceted process that involves not 'just the technology' but also curriculum and institutional readiness, plus long-term financing. Above all, there need be created a network of educational support from those who see the value of online learning tools and make creative use of it. There cannot be specialization without specialists.

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