

Preface

Teaching and learning in a digital format as an international phenomenon represents two sides of the same coin. Whether this phenomenon takes place in Sweden, the United Kingdom, Australia, China, or America, the goal is the same. Reposition and transform learners into agents of change so they can adapt to ever changing complex global labor environments. The history of career and technical education has its roots with the founding days of the United States. The history of higher education evolved with the needs of an expanding social infrastructure. Somewhere around 1636-1850, early New England settlers which included alumni from the royally chartered Cambridge and Oxford needed a place of learning for their clergy. The idea was to transmit American values such as independence, property ownership and economic development. Privileged White men needed to understand documents such as those found in the, *Federalist's Papers*, therefore education was valued as a means to an end, to develop leaders in the church, state and business. Education taught these men business civics and how to be moral people, and it was the great equalizer for men. In an address at Antioch College in 1859, Horace Mann said, "You should be ashamed to die unless you have given something back to society" (Williams 1991, p. 240).

The difference between English, German and Scottish models of higher education were the English system was based on a 4-year model which focused on liberal arts, residence and curricula; the Scottish system added hierarchy, linear progression of pathways, undergraduate degrees which led to a graduate degree and involved free thinking; the German system focused on research; the American system combined them all—undergrads focused on liberal arts, and at graduate school the focus was on research.

Fashioned predominantly after British colleges and universities the new colonial colleges were built to educate the clergy in puritan religious matters and instruct privileged White men toward civil leadership. Naturally private, church-chartered institutions sprung from the virgin ground of new America where only the wealthiest white males were allowed to attend. Each college was affiliated with a particular sect, or religious denomination.

As time labored on, and societal needs began to change, eventually higher education became non-denominational and more secular. Established in 1865 as the land-grant institution for the state of New York; Cornell University was founded by Ezra Cornell of Ithaca and Andrew Dickson White of Syracuse. Cornell competed with other colleges within the state for the title, "Founded as a non-sectarian school." Cornell was also the first institution to admit women. Then around the 1800's, expansion of America (1820s and beyond) created the need for teachers, and the "appropriate" job for women were teachers as they were the caretakers of children, family and the community. Women garnered cheap wages (as teachers, women received 1/3 of what men made). Then the need for nurses arose during the Civil War. Toward the 1860s, the fabric of society was impoverished with immigration squalor, and it was once more "appropriate" that women made up the nursing force (variation on the same theme). During the

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periods 1870-1944, a huge transformation emerged as the result of modern industrialization. Reconstruction of the South after the Civil War, gave rise to growing corporations. All this affected the university and college offerings.

Career and technical education as we know it today had its roots in these early years of the United States. *The Morrill Act*, gave the government a foothold in higher education. Money was set aside for vocational education such as in the fields of agriculture and mechanic arts. Another government intervention, the *Service Readjustment Act* of 1944, or the GI Bill, made sure eight million vets received access to higher education. Then the Great Depression caused the retooling of education and the workforce. The focus was service to the community, higher education would be a product people would pay for, and people would be educated towards the work market. And then more changes came. The United States system of higher education changed after World War II; as the U.S. had 50% of the world's wealth. War was a huge stimulus to the economy. Prior to WWII education was a gentlemen's club for the elites.

Then the agriculturally independent economy moved into the industrial revolution. The workers were blue collar common folk exploited by low wages, poor working conditions and felt like slaves. After WWII and as a result of the industrial revolution, a new ideology moved into America's urban centers, according to Chomsky (2015), it was a "new spirit" of the age—gain wealth at the expense of everyone else. With the capitalist and industrialist mind-set everything became a commodity in the "new spirit" age—progress meant gain wealth at all costs. Marketing became fashionable, fashioning human consumption for our wants instead of human need (marketing is 1/6 of the nation's economy) became the fad (Chomsky, 2015). The spirit of triumphalism after WWII abounded, the message howled through the nation's television, "shed old world baggage such as resourceful-individuality, independence, and conservation of resources." Former, late educator, Boyd Packer, summed up the pragmatic realities of this dying era well in this epigram, "Use it up, wear it out, make it do, or do without" (Packer, 1997).

Conversely, the new spirit of consumerism led the world into a new era. The state and economy functioned differently, during which the U.S. stole technology (steel, and textiles) from Europe, and inaugurated the industrial revolution. Massive funding for industry and technology came first from the pentagon (through science and technology funding) then filtered down to private ownership.

Then around the early '60s, the mission of higher education changed. The 1960s saw rapid expansion in higher education, in part from the GI Bill as the result of the war. In the 1960s civilization was changing—activism civilized the nation, it brought a consciousness towards human rights. Everyday people wanted more control of their lives. The Evolution of curriculum and instruction came during the '60s, with the rise of community colleges, with one college opening per week. The Office of Civil Rights emerged and President Johnson opened government financial aid options.

Higher education shifted from Pentagon funding to corporate funding. Corporations existed to commodify every aspect of our lives. The mission of higher education moved away from elitism toward mass access. The California Master Plan, formally titled the *Donahoe Higher Education Act* was signed into law on April 27, 1960. This Act proposed to distribute high school graduates among the University of California (UC) campuses, the California State University (CSU) campuses, and community colleges. The goal was to balance the competing demands of fostering excellence and guaranteeing educational access for all.

In the postmodern era, social theory begun to stress free will, individual choice and subjective reasoning. The social justice era created a generation of "free thinkers." Women's Studies was birthed in the '60s, modeled on American and ethnic studies. The first accredited Women's Studies course was held in 1969 at Cornell University.

Title IX of the Education Amendments of 1972 was created to protect students (women) from discrimination based on sex, in education programs and activities that receive federal financial assistance. Then for the first time in American history, in 2011, American women surpassed men in gaining advanced college degrees as well as bachelor's degrees. Adults 25 and older, 10.6 million women had master's degrees or higher, compared to 10.5 million men. Measured by shares, about 10.2% of women had advanced degrees compared to 10.9% of men—a gap steadily narrowing in recent years. The consciousness of the powers that be was that education would solve the nation's poverty and social ills.

But recessions, immigration and poverty has not been distributed evenly; today 24% of Hispanic women live in poverty, 26% of Black women, 28% of Native American women, while 10.6% of White women live in poverty. Surprisingly only 24% of those intending to go to college meet all four ACT benchmarks of college readiness in English, math, reading and science. Approximately 60% of community college students take at least one developmental education course. In 2012, one particular county on the west coast—high school students were tested in which 79% were placed into developmental math, 83% were placed into developmental writing. Adding to the crisis, we are seeing unprecedented amounts of students dropping out of college, exiting with huge burdens of financial aid debt and no degree.

Reasons for education must be guided by practical interests that have concrete implications for daily life in the real world (Dewey, 1933). American higher education has consistently wrestled with the difficulty of balancing the practical with the impractical, the common with the elite, the applied and the theoretical. The challenge of teaching is not merely to convey information but also to encourage students to ask questions they never imagined asking (Taylor, 2010). Knowles, Holton and Swanson (1998, 2005, and 2011) defined education and learning as emphasizing the person in who change occurs or is expected to occur. They defined education as emphasizing the change agent who influences changes in others. Other scholars (Boyd et al., 1980) consider learning as the act or process by which behavioral change, knowledge, skills, and attitudes are acquired. Gagne (1985) defined learning as a process that leads to a change in a learner's disposition and capabilities that can be reflected in behavior.

Likewise the German social theorist, Habermas (1971) suggested that human beings have different interests or needs in life: to control their environment, to get along with others, and to be free from oppression and constraints. Each of those elements led to the acquisition of knowledge in order to satisfy human need. Habermas further indicated that human beings render learning through instrumental knowledge, practical knowledge and emancipatory knowledge. Instrumental knowledge allows us to manipulate and control the environment, predict observable physical and social events, and take appropriate actions via empirical research or teacher directed education.

INTRODUCTION

The curricula in many institutions of higher education are still teacher-centric; but the educational need is learner-centric. For example this attitude of teacher-centric pedagogy is revealed in the survey of teachers. According to the Pew survey, which was conducted in conjunction with the College Board and the National Writing Project, nearly 90% of 2,462 teachers surveyed, agreed that digital technologies were creating “an easily distracted generation with short attention spans.” Similarly, of the 685 teachers surveyed in the Common Sense project, 71% said they thought technology was hurting attention span “somewhat” or “a lot.” About 60% said it hindered students' ability to write and communicate face to face, and almost half said it hurt critical thinking and their ability to do homework (ICEF, 2012). The

authors argue the opposite. The students are bored and can handle multilayers of inputs and stimuli. Today's students—digital natives are inventing a new society and new jobs because of their social and economic need to be linked into each other.

THE NEED TO INNOVATE TOWARD TECHNOLOGY

Colleges and universities have been slow to deliver digital student-centric learning in a way that suits the customer. Today there are some innovative educators that are more than just tech savvy, posting classroom lectures online; they employ multiple platforms and interactive tools that in some ways engage and challenge students. Because online platforms can be accessed anywhere, at any time, they can accommodate many more students than a standard classroom session, and at lower cost.

For America to be competitive in our interdependent, complex, global workforce environment we cannot just rely on the brainpower of an elite few, rather inclusivity is needed. Just hoping that our research one institutions will keep us at the cutting edge of innovation does not work anymore (Senge, 1990). In an era of job outsourcing, economic uncertainties, cutting edge technology, and porous borders, America has no choice but to focus on increasing the educational levels of all groups of Americans. The workforce cannot afford to have large populations of Americans at a pre-collegiate level of knowledge and lacking relevant work skills. Nevertheless, today's young students and nontraditional students need to be unleashed to be creative and free to innovate in order for present systems to align with their reality, which is today's reality. Today's students are stuck in yesterday's programs: 50% of college graduates can't find work, and 65% of today's grade school kids will end up in jobs that are not even created yet (United States Department of Labor, 2014). Therefore, the designers and leaders of education must make learning relevant for today's digital students living in a multiverse society.

The idea of fundamental literacy—information, technological, critical thinking, communication, higher knowledge, and other specialized skills, is what is needed for everyone in the workforce in the 21st century, and not just for the privileged. Therefore we must include marginalized populations and figure out how to raise their education level.

Colleges are not there yet—many things need to change (AACC, 2012; Diamond, 1999). The aforementioned issues are among some of the challenges that must be solved in higher education if American colleges and universities are to reposition and transform learners into agents of change so they can adapt to ever changing labor environments. America's educational outcomes are an embarrassment both on a domestic and international level. According to the American Association of Community Colleges (2012), 60% of students leaving high school and entering community colleges required remedial education and 76% of high school graduates do not meet ACT college readiness benchmarks. Twenty-six nations outperform the U.S. in science. Seven nations' fifteen year olds outperform the U.S. in financial literacy; and twenty-four nations outperform the U.S in reading literacy (OECD, 2011).

The U.S. Department of Education's ambitious goal of increasing college degree attainment by 60% of adults ages 25-34, obtaining an associate degree or higher by 2020, lays heavy on the shoulders of community colleges and universities. Add to this context, the fact that community colleges serve the highest majority of students of color and other under-represented groups as well as many under-prepared students. In the United States, community colleges serve 46% of the undergraduates.

Another big change investment that is critical for administrators in higher education is to assess, evaluate and analyze the many ways students are learning. Investments toward student success are necessary for positive change.

Cutting-edge, rigorous and relevant Career and Technical Education (CTE) prepares adults and young adults for a variety of high-wage, high-skill, high-demand careers.

As CTE practitioners struggle to define their field in the United States a few recurring themes emerge: *transitional identity* as the field tries to distance itself from the stigma of vocational education; *purpose of CTE* reflecting the tension between narrow and broad preparation for work; and *perspectives on new directions* in the field viewing CTE as an integral component of education for all students aligned with calls for more rigorous integration of academic and CTE. Students involved in CTE are engaged, perform and graduate at higher rates. The skilled trades are the hardest jobs to fill in the United States, with recent data citing 1,019,000 jobs open in the trade, health care occupations, many of which require an associate degree or less, make up 12 of the 20 fastest growing occupations (ACTE, 2016). Science technology engineering mathematics' occupations such as environmental engineering technicians require an associate degree and will experience faster than average job growth. Middle-skill jobs, jobs that require education and training beyond high school but less than a bachelor's degree, are a significant part of the economy. Of the 55 million job openings created by 2020, 30 percent will require some college or a two-year associate degree (ACTE, 2016). CTE programs are articulated, including implications to develop coherent and shared consensus regarding the purpose and mission of the field to provide programmatic direction and vision (ACTE, 2016).

THEORETICAL UNDERPINNINGS IN ADULT EDUCATION

Examining and applying evidence based theories of education helps to improve educational outcomes. Theories provide a road map in which to design curricula, and formulate teaching philosophies that keep the process of education focused. Theorists such as Jack Mezirow, Ian Baptiste, Herbert Marcuse and Bell Hooks are among the theorists that have provided educators with content that produce investments of positive change. For example, Mezirow's Transformative learning is a process that describes how learners transform a habit of mind by redefining a problem and examining their assumptions, content, or processes for problem solving (Mezirow, 2012). When asking learners to think "outside the box," they are being asked to redefine a problem and reexamine their own assumptions—the content or process for problem solving. In other cultures, they might say, "think above the thinking process," which essentially means the same as thinking outside the box. Learners who progress through a transforming event critically reflect on their assumptions and examine their points of view to determine how they approached solving problems presented by that event. Schutz (1967) argues, "I live in my Acts and by reflecting upon them" (p. 51). Once we do this, we begin the process of meaning-making in our lives. Jarvis (2001) claims that "throughout our lives, many of the experiences are encountered and incorporated into our biographies" (p. 49). Boud, Keogh, and Walker (1985) produced a model of the process of meaning-making (see Figure 1), which leads to new perspectives on experience. The basis for meaning-making or transformative learning is one's experience. Without the experience, we build inferior constructions similar to the temporary nature of sandcastles. Such constructions, however elegant, are drastically subject to the next wave of change. It is very consistent with what Rousseau profoundly believed: Experience is the best teacher, and everything possible should be taught by actions (Bott, Slapar, & Wang, 2003, p. 32). The

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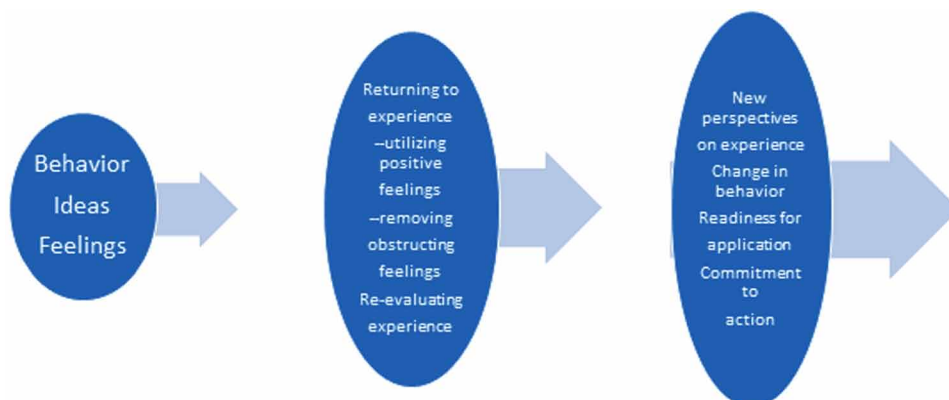
key in this reflective learning process is experience(s). Without experience(s), reflective processes are not possible. The reflective process leads to outcomes in learning (Merriam, 2004).

Figure 1 depicts the process of meaning making in three stages.

Likewise the theory of andragogy contend that adult learners tend to be self-directed learners, who learn from their experiences, as such they tend to take more online courses than younger students because of their multiple responsibilities as full time employees, parents and community leaders (Wang, 2006). The education of adults using Western methods of educational instruction is known as andragogy because it is viewed as the art and science of helping adults learn (Knowles, 1970, 1973). The praxis of teaching adults—andragogy is characterized by student-centered learning because adult learners are believed to be self-directed, focused on independent, and cooperative learning. Because these adult learners are self-directed, teachers have to assume the role of being learning facilitators. A learning facilitator does not control learning. Instead, a learning facilitator may negotiate curricular priorities with his/her students at the beginning of a semester. Andragogy presupposes a facilitator may give his/her students a learning contract, base assessments on portfolios, and facilitate collaborative learning environments (Merriam, Caffarella, & Baumgartner, 2007; Taylor, 2008). A facilitator is also a co-learner in the learning process (Price, 1999; Wang & Storey, 2015). And so, a facilitator considers him/herself a peer with their students. Not only does andragogy presuppose adult education in Western educational contexts is viewed as the education of equals (Jarvis, 1987), but most importantly, Westerners believe learners have the potential to become self-motivated and self-directed; rational and empathic, to participate in collaborative discourse and to become capable of exercising individual agency and to act reflectively (Mezirow, 1991, 2000; King & Wright, 2003; Merriam, 2004).

On the other hand, Grenadian born adult educator Ian Baptiste (2000) takes a different stance to andragogy; the adult educators according to Baptiste, often function as persuaders and organizers but choose not to acknowledge this. In Baptiste's view it is naïve, and empirically inaccurate, for adult educators to insist that their job is not to take sides, not to force an agenda on learners. Like it or not (and Baptiste believes most of us do not like to acknowledge this) adult teachers cannot help but be directive in their actions, despite avowals of neutrality or non-interference. One of the most contentious aspects of Baptiste's writings is his insistence on the morality of coercion. His refusal to tell students the 'proper' way to think—in effect, to refuse to comply with their request for the right answer—appears to contradict the condition of responsiveness.

Figure 1. The process of meaning-making



One theorist who has explored this dynamic is Herbert Marcuse (1965). Marcuse argues that it is educationally crucial that learners be exposed to alternative, often dissenting, ideologies and perspectives, even though they do not see the necessity for this. To him this is the practice of liberating rather than repressive tolerance. Marcuse argues that without knowing of the full range of options, viewpoints or ideologies surrounding an issue, students cannot make a truly informed judgment as to which directions they wish to explore more deeply.

The African American feminist bell hooks also has much to say on the way in which a concern for being responsive to students' wishes brushes up against the inevitability of teacher power. For her the exercise of teacher power is often unavoidably, even necessarily, confrontational. In her judgment the teacher's position "is a position of power over others" with the resultant power open to being used "in ways that diminish or in ways that enrich" (hooks, 1989, p. 52). She freely admits that sometimes the exercise of power to force people to confront their own uncritical acceptance and practice of dominant ideology is fraught with risk.

ABSORBING KNOWLEDGE ELECTRONICALLY: THE POWER OF ELECTRONIC LEARNING

No matter which theoretical lens one uses to teach from, empowering learners and using powerful techniques are prominent elements in the discourse of adult and vocational education. But what constitutes the elements of what might be considered as powerful teaching? This book examines the way educators talk about power and then proposes elements that lie at the heart of powerful teaching. Power teaching uses the work of Mezirow, Baptiste, Marcuse and Hooks to explore some of the problems involved in adult teachers attempting to work in the democratic manner endorsed by the adult education tradition.

Power teaching for critical thinking evolved over time. A long time ago, Medieval education was a Trivium, which represented a systematic method of critical thinking which was to derive factual certainty from information perceived from the five senses—sight, sound, taste, feel, and smell. In the medieval university, the Trivium was the lower division of the seven liberal arts, being comprised of grammar, logic, and rhetoric. Back then the ultimate value to education was to arrive at truth not research. The core process of critical thinking—ferreting out assumptions and exploring how this process differs according to the context of what is being taught and the different intellectual traditions that inform teachers' own backgrounds is an essential aspect of authentic learning (Brookfield, 2004). It outlines a basic protocol of critical thinking as a learning process that focuses on uncovering and checking assumptions, exploring alternative perspectives, and taking informed actions as a result. This book explores some of the aspects on the theme of thinking critically; assumptions are defined, and the teaching methods and approaches that most help students to think critically. Narratives that examine how critical thinking can be experienced as a socio-technical learning process, and how important it is for teachers to model the process for students should be a teaching tool for educators (Brookfield, 2006). Along the critical thinking pathway the learner encounters deep and informal learning.

Power teaching leads to power learning. Aspects of power learning, deep learning and informal learning can be an outcome of interfacing with technology is a universal current phenomenon of learning via participation, experience, or learning via student-centered knowledge creation. It stands in stark contrast with the traditional view of didactic teacher-centered learning. Online education can be regarded as a positive and self-directed form of informal learning. Whether or not deep learning takes place for

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the online learner is a controversial topic for many educators. In this century more education has been delivered in digital platforms than in any other time in history. For most providers of education to remain highly competitive, they must engage in electronic education of some form by moving beyond the brick and mortar of the traditional classroom. Informal learning has become the impetus resulting in the extensive and intensive application of digital education.

Online learning and active learning go hand-in-hand in the process of power learning. There are many definitions of learning, all reflecting the academic specialties from which each discipline is conducted: It is the process and the sum total of acquiring knowledge, skills, attitudes, values, beliefs, and emotions. However, active online learning is also defined as methods by which learners actively participate in the learning process (e.g., online discussion groups, problem-solving, experimentation, and the like). Many Web 2.0 platforms help promote active as differentiated from passive learning in which learners are unparticipatory learners. Active learning can take place online. It is widely believed that active learning may lead to the creation of new knowledge and new skills needed by learners. Because of this belief in active learning, both educators and practitioners have been avidly promoting active online learning since Web 2.0 Technologies were used for online teaching and learning. Lifelong learning has become the impetus resulting in the extensive and intensive application of electronic education in which learners learn in a kinesthetic environment.

Powerful teaching and learning is facilitated by examining technology as a form of kinesthetic learning that involve the body and the physical realm which offers learners another avenue for deep learning and active learning. Interfacing with technology encourages kinesthetic learners to engage with the learning process. Various phone apps, video, YouTube and platforms such as Canvas, Blackboard and Moodle provide the cognitive springboard for student engagement. The point is that the user assigns specific meanings to the materials to illustrate some sort of kinesthetic process or relationship.

In addition, kinesthetic learning can be a form of experiential or practical learning that seeks to contribute to an understanding of questions regarding on-the-job vocational learning, power, and technological change in the context of dynamic notions of knowledge economy. It seeks to explain the emergence of difference between the on-the-job vocational learning of newcomers and experienced workers. Structural changes to economies, sectors and organizations, often revolving around new forms of advanced technology, may initiate a process of contestation, appropriation, accommodation and consent that must be actively accomplished by inter-generational dynamics amongst workers within activities.

The need for imagination and creativity is another side of power learning, it is evident in adult education instructional design both online and face-to-face. It defines both imagination and creativity as well as provides an overview of the history of instructional design. It provides an examination of imagination and its application in educational settings. Suggestions are presented for promoting creativity in instructional design as well as overcoming obstacles to creativity when creating classes. The examination of how creative activities in both online and face-to-face classes can contribute to successfully meeting learning objectives in adult education is a powerful teaching process leading to transformative outcomes.

For example, practice story exchanges and their creative invitation to informal learning divulges how members of a collaborative group interested in promoting convivial civilization in human society can benefit through *exchanging practice stories*—stories of doing something or seeing something done—in order tacitly to create an informal learning environment where practices of such a welcoming informal backyard-type civilization could seem normal, desirable and do-able. Practice story exchanges are an

attempt to ‘tell the truth but tell it slant’ as Emily Dickenson put it, to work tentatively and collaboratively avoiding too much direct confrontation and rigid debate. The theme of practice story exchanges, discusses the work of creating conviviality to redress an over emphasis on productivity in society; of the nature and importance of informal learning and its links with story exchanges and how this is pursued in the work of institutional culture. Powerful learning can take place as digital technology intersects with cognitive elements such as story exchanges. Not only can powerful learning can take place as digital technology intersects with story exchanges but the interfacing of digital technology with mental elements such as problem-based learning also provides another approach to robust learning.

Digital technologies interface with Problem-Based Learning (PBL) by focusing on the impact on learning processes when digital technologies are integrated into PBL oriented distance training. Based on socio-cultural perspectives on learning and a comparative distance-campus online learning evolved towards a more individual, real-life and literacy-oriented problem-solving process with supervising instructors and self-directed learning among students. Extended technology integration can result in both phases of dissemination and normalization, in that the development in online PBL affects both the course design and educational talks throughout the training. PBL intensifies learning because once the learner solves a specific problem he/she will likely never forget how they arrived at solving the problem; it increases retention of learned knowledge.

No matter how students learn, online education and lifelong learning is a mixed bag that contains both benefits and challenges. Due to de-institutionalization and more access to open systems, it is inappropriate to equate education with a mono-modality format. In this century, education has been delivered electronically to accommodate lifelong learning. It has become a reality that the four walled classrooms have been used to complement and supplement E-learning. No need to argue that online education has become the norm for most universities and organizations including governmental agencies. For most providers of education to remain highly competitive, they must engage in online education and at times engage in the community of some form by “breaking down” the four walls of the traditional classroom.

CTE PARTNERSHIPS

One of the most powerful tools CTE education provides the learner is the partnerships with the community. Public Partnership Principles (PPP) applied to industry-school partnership to support technical and vocational education is increasingly used by governments, industry, community organizations and schools in supporting their daily activities. Similar to the terms ICT and learning, partnerships are now ubiquitous in policy discourse.

The subject of opening doors for career advancement program participation is a weighty theme as it tries to: uncover the decision making factors which potential adult learners consider in their determination to enroll in programs; explore their unique program experiences; and identify anticipated outcomes. One of the most significant partnerships an educational institution can create is that of an international nature.

There are more and more international students flocking to CTE programs. The demand, content and entrance criteria of operations management programs under the context of internationalization as Operations Management Programs (OMPs) are among those teaching provisions attracting a substantial amount of international student enrollment, in contemporary Higher Education Institutes (HEIs). With the current situation that the government is reducing its funding input, the UK HEIs’ financial balance relies more than before on the international students who pay higher tuition fees; meanwhile, with the

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increased number of the international students, the economy of the U.S. will be indirectly benefited from the increased consumption capacity associated with them. Thus to have more overseas students is not only educationally meaningful but also economically significant. In order to increase the international student number in HEIs, it becomes more critical to have a thorough understanding of the stakeholders' demand of operations management professionals and/or preference on such an education program's content and its graduates' competence. No matter if international students seek educational opportunities from abroad or learners learn in a domestic environment digital learning is here to stay.

CONCLUSION

To create a digital classroom depends on not only distance learning technologies, but also the global education community and institutional and individual stakeholders. First and foremost, the technicians, instructional designers/faculty and administrators must have a solid foundation regarding how students learn. In other words, without any knowledge of andragogy, nobody is in a position to design effective learning packages delivered online for preadults or adults. This raises an important issue for accreditation bodies throughout the world. In North America, some accreditation agencies are not equipped with reviewers who are well versed in either web 2.0 technologies or instructional strategies. However, they are the ones who offer directives or accreditation to institutions of higher learning and other organizations.

The growth in the practice of powerful learning requires institutions of higher learning and some non-educational providers to develop digital classrooms. Salient issues such as andragogical issues, organizational issues and institutional issues must be solved before launching a successful digital classroom. As Shrum (2000, p. 103) suggested, "as a community of scholars and educators, we must create more avenues for sharing of experiences and research among all the international players, be willing to describe difficulties, and take feedback from learners. The challenges are substantial, but the potential rewards are worth the efforts."

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