TEACHING, LEARNING & USING TECH IN THE ONLINE CLASSROOM

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ABSTRACT

As higher education evolves to meet the needs of the 21st Century learner, often with technology in an online classroom, relevant questions related to course content and delivery inevitably emerge. This paper explores some of those questions. Specifically, the researchers consider: How much is too much when it comes to cutting edge technological developments within the online classroom and learning platforms? Does the quality of education truly depend on an instructor's expertise in using the newest technologies in the classroom? Do technologies assist in reaching the diverse learning needs of students? Do online 'bells and whistles' really motivate learners to learn? Finally, which technologies work best for learning considering modalities, styles and outcomes?

Keywords: learning styles, classroom technology, online learning platform, innovative technologies, experiential learning.

INTRODUCTION

In today's fast-paced education industry, the use of multitude of classroom technologies is a constant that educators, students, and administrators learn to expect, anticipate, and at times embrace. However, relevant question of how much technology is too much in the online classroom setting remain unanswered. How important is it to infuse the latest technological advancements into online learning? Do technological 'bells and whistles' necessarily enhance the quality of online education? This paper attempts to evaluate whether innovative technologies within the online classroom truly provide appropriate tools for enhanced students' motivation and learning. Further, the paper considers relationships between online classroom technologies and students' learning styles.

MAGIC OF CLASSROOM TECHNOLOGY

Williams (2010) reflects on the financial costs of

classroom hardware and software that some institutions have purchased without a clearly shaped vision and a clear purpose-driven approach to online learning. Williams (2010) posits that many educators expect technology to replace lecture-driven approaches and/or altogether. To date, no technology, regardless of its impressive design, has changed teaching and learning at its core, but the use of technology can make the process of teaching more efficient and geared towards specific learning styles. Baker and Hall's (1997) early study found that, "Compared with students enrolled in conventionally taught courses, students who use well-crafted computermediated instructional (CMI) materials generally achieve higher scores on summary examinations, learn their lessons in less time, like their classes more, and develop more positive attitudes toward the subject matter they're learning" (p.32).

But, how does online learning technology impacts the educational process in general especially in reference to learning styles of individual learners? There is a fine line between the use of technology as a motivational and efficiency tool and a tool that replaces teaching in general. For example, the No Child Left Behind legislation promoted use of technology in k-12 classroom settings, but it did not really address the inadequate use of technology within many courses due to poorly trained teachers' inability to successfully use the technology in question (Rosenfield & Martinez-Pons, 2005).

According to Fortems (2011), by 2016 approximately 60% of higher education will take place online. With such a drastic rise in usage of online platforms, the need for ensuring the appropriate use of technology is of crucial importance. One cannot help but wonder if technological advancements in education benefit students when both educators and students often struggle to stay current with the newest developments in addition to course content and their roles as course participants. Staying current with technological developments is not always a linear progression within the online classroom. Sometimes faculty members are not adequately prepared to lead students as both content and technology subject matter experts. In fact, at times, students are far more adept at technology literacy

than their faculty counterparts. Sometimes the unequal knowledge dynamic certainly favors the learner which impacts the educational experience for all.

THE CHANGING EDUCATIONAL EXPERIENCE

Technology enables faculty members to teach in a completely different venue, often distant from the onground classroom experiences that they and generations of other students had in the past. Technological advancements provide diverse educational experiences through utilization of online platforms, but there is a significant gap in the literature regarding how online platforms accommodate students' different learning styles and modalities, especially among adult learners. Collins (2009) asserts that, "Learning styles and their interrelationship with technology and adult learners is as important today as initial learning style research was in the six decades after its beginnings in the 1940s". The Sloan Consortium found that the number of online students doubled in two years between 2002 and 2005, with 63% of higher educational institutions offering undergraduate courses online (Peltier, Schibrowsky & Drago, 2007). The old notion that students will embrace the online learning process regardless of the platform being used is not always accurate. (Peltier et al., 2007), report that students' dissatisfaction was related to technology issues, course content, teachers' training, and lack of proper communication within the online format. Therefore, choosing the proper technological tools can truly be one deciding factor for many faculty members. However, if the use of technology is intended to enhance the learning process, many ingredients must be considered as parts of the learning process.

LEARNING: THEORIES & STYLES

Some of the beauty of teaching in an online environment lies in the possibilities for instructors to bring the course content alive for students in an engaging manner. Adjusting course delivery to accommodate learning styles of individuals is not an easy task.

Experiential Learning Theory

Kolb's (1971) experiential learning theory advocates individual-centered learning focus instead of a group oriented action approach. Using Kolb's (1971) model in an online environment, Collins (2009) considers, "Kolb's Learning Style Inventory (LSI) rates learners on a bipolar scale, which indicates the learner's preference for active experimentation (doing) versus reflective observation (reflecting) and concrete experience (experiencing) versus abstract conceptualization (thinking)" (p.50-65). Notably, Kolb's basic premises emphasize a 4-part process of

creating meaning from continuous phases of learning experiences. Collins (2009) interprets Kolb's experiential learning theory by evaluating how each phase of the experiential learning cycle relates to the learning process from the perspective of, "Diverger, Converger, Assimilator or Accommodator" (Kolb, 1971, p.50-65).

Divergers and Accomodators craving for hands-on or kinesthetic activities may benefit from certain online activities such as games and simulations? (Collins,2009). These games and simulations would provide the much needed hand on experience which would reinforce new material and require learners to apply newly learned concepts through some additional practice. On the other hand, Convergents and Assimilators require more abstract concepts, understanding the theoretical background of a particular area, which can be accommodated online through presented material quite well matching the traditional delivery methods.

In an online setting, measuring whether a learning experience is meaningful and if students can apply learning effectively may be more difficult to assess than in an onground classroom environment. Akella (2010) emphasizes that Kolb's (1971) focus on experience should be almost equally applicable and exercisable in traditional and online settings. Li, Mobley, and Kelly (2013) state that experiential learning is "a holistic process of adaptation to the world, which involves the integrated functioning of the total organism" (p.35). This process of adaptation is one that each student undergoes on his/her path to understanding, accepting, and potentially embracing the online educational experience. However, Akella (2010) doubts if one can measure the transformative patterns of learning equally in on-ground and online classrooms. As one follows Kolb's stages of learning, the specific measurement as to which stage of the process is best equipped for the online learning: Concrete experience, Reflective observation, Abstract conceptualization, or Active experimentation (Akella, 2010).

Additional research is needed to measure which of Kolb's (1971) learning styles most readily adapts to various technologies as employed in the online classroom. However, one may conclude that active experimentation would likely pose the biggest challenge and possibly the most suitable learning style for many simulations. It is important to note that no student stays static in one of the learning modes without being able to move through the stages while learning in the online environment. Each learner's life experience, personality type, and learning history will also impact how he/she approaches the learning process.

Self-driven Approach

Within the online setting, a student's learning is dependent on self-efficacy and inner drive. The self-driven approach to learning can be described as the students' inner

desire to learn as self-regulated and encouraged by the instructor. Kreber, Castleden, Erfani and Wright (2005) explored this learning approach as a two way street impacting both educators and students in an online setting. Whether technology can help or hinder self-regulation may be a difficult question to answer. Technology can enhance course delivery and it can assist students with learning related tasks. However, technology in itself does not motivate and enhance the concept of self-regulation which is of a crucial importance in an online learning setting unless, as Miller (2013) asserts, learning online is made to be fun. New technology can de-motivate and impact the student's drive while one learns how to use and apply it. However, once the new technology becomes familiar, the self-regulation process is still what one should rely on heavily in order to ensure the outmost success of a learning process.

Interaction

Interaction is truly a multi-directional street in an online setting. Generated by faculty members, a meaningful interaction is impossible without students seeing a great value in exchange of ideas, opinions, and thoughts within a particular learning platform. There are mandatory interaction platforms, such as, discussion boards, which are sometimes considered only as an additional task versus a truly meaningful activity. The burden of setting the bar for making those threads engaging, rich in content and substantial addition to the covered material is truly on the shoulders of faculty members. Therefore, if faculty does not facilitate other ways of interacting with students, the great opportunity to replicate a traditional classroom discussion in an online setting may be lost. Announcement chains which allow for students' responses, audio/video files posted with an opportunity for students to comment and add their thoughts are only some of the ways of promoting a substantial interaction within an online classroom which can only enrich the learning experience and promote students' higher thinking skills.

Social Interaction and Social Learning

Moving away from the learner as an isolated individual within the online educational process, Cranton (2005) explores how social interaction impacts the learning process. This is consistent with Bandura's (1977) social learning theory wherein individuals learn from observing the behavior of others in social groups. During discussion boards and other activities, such as learning and gaming in teams, social interaction can inspire students to learn from one another as well as from the instructor. The instructor can use various means of technology to transcend classroom walls and create a sense of learning in community that promotes social interaction both in and beyond the classroom. Many technological tools are available to enhance the group's ability to communicate

through voice, video, presentation, blog and other means that can compensate for more traditional face to face classroom engagement in an on-ground classroom setting.

Brady (2013) emphasizes the concept of engaging faculty members who are not afraid to experiment with different classroom tools as they are educating themselves at the same time and changing behavior on both sides of the learning spectrum. Consistently, faculty members who demonstrate that they too are learning in the online classroom are modeling lifelong learning and trust in the group, as well as trust in the learning process. They are examples of social learning that students can look to in the online classroom.

One of the more recent questions which are connected to the use of newer technologies in a classroom setting focuses on question of social connectivity and whether or not online platform can satisfy the concept of "social nature of learning" which was introduced by Piaget, Bruner and Vygotsky (Morgan & McKenzie, 2003, para.6). New technology is not necessarily addressing students' isolation. However, proper use of the technological advancement in a classroom with assistance of good facilitation is addressing the concept of online "loneliness and isolation". Online arena can be a lonely place if instructors are not properly setting the stage for the productive social engagement which can only benefit the learning environment. The issue of online relationship is quite relevant since it is directly tied to the concept of student successful completion rates and ultimately student retention.

ONLINE COURSE DELIVERY

A fascinating discussion of how learning styles impact student's educational experience may be quite different within the traditional versus online classroom. Speece (2012) discovered that there was insufficient research regarding online classroom models and learning styles. Speece's (2012) empirical study did not show significance between learning styles and online models; it did demonstrate that students sought the online course delivery model that best matched their style of learning. McLawhon and Cutright (2012) emphasized the quality of student/ faculty interaction as a primary aspect of student retention and satisfaction; study implications were that this interaction was more important than course delivery or method learning styles. Notably, reciprocal communication between students and learner can make or break the course experience for both of these stakeholders in the online classroom, just as they can on-ground.

Zacharis (2010) compared students' success in online and on-ground classrooms, considering their learning styles in each venue. Zacharis (2010) discovered that students exploited through Moodle LMS online platform because they had more flexibility and options to go through a lecture delivery methods and hands on exercise in comparison to their peers in a traditional setting. An

interesting finding in all of the above mentioned studies is that if students are self-driven, or self-regulated, the preference of those students is to select their own lecture delivery and exercise methods through an online delivery vs. a more traditional setting. Those students who are deemed as less independent learners are more inclined to go with a more traditional educational setting (Zacharis, 2010). One of the best features of online courses is their flexibility of design with a multitude of options geared towards different learning styles. This is not always achievable in a more traditional classroom setting.

While authors are aware that there is not a great body of knowledge comparing online and on-ground classroom environments and considering diverse student learning styles, there are a number of studies which explore relationships between the level of student satisfaction in both traditional and online learning environments. Rhoads and Post (2009) concluded that online learning is equally effective in comparison to a face-to-face model evaluating course learning outcomes. If one assumes the equality within different educational arenas, the use of technology in each needs to be further evaluated and then some meaningful comparison can be made.

Greener (2010) reflects on Roger's 1969 book Freedom to Learn which emphasizes the online education variation as an added benefit to both learners and teachers as both parties seek their own path to teaching and learning. The key is not only in variation but also flexibility. If one stands in front of the class in a face-to-face setting, he/she may try a few different delivery methods but it is physically impossible to try more than a few methods with one particular concept or one particular course area at the same time. The virtual classroom offers unlimited possibilities within this same scenario. One of the course delivery methods may enhance learner's understanding and the learner himself/herself can select an activity and/or method of delivery at their own pace. This flexibility and convenience may help students adjust the method of learning to their own individual learning style. One also needs to be aware that flexibility and convenience may be attractive at the beginning of one's educational path. What keeps students learning is the quality of coursework, applicability of curriculum to a real life setting, and quality of instruction. Technology can assist in these processes, but it is a tool which can only assist in providing high quality educational experiences.

The literature is slim regarding comparisons between student satisfaction and other learning outcomes in traditional and online settings. There are many recent studies or the ones still in works which are exploring this phenomenon but sufficient body of knowledge on the topic is still lacking. Lu, Jia, Gong, and Clark (2007) attempted to relate Kolb's (1971) learning styles and online learning to increase instructors' success rate in reaching out to their online students in a manner which would lead to successful accomplishment of learning outcomes. The result of their study indicated that instructors in online setting should take

advantage of the model's flexibility to recognize students' learning styles diversity (Lu et.al, 2007). Lu and his fellow researchers presented one additional interesting finding which leads to a conclusion that there was not a significant impact on learner's retention and learning outcome success rates observing different Kolb's learning styles in two different teaching settings, online and traditional (2007). This may be due to the fact that many institutions do not have the perceived luxury of evaluating students' learning styles beforehand. Furthermore, one can speculate that this finding was a result of not having enough participants in a study and/or not enough comparison variables, as well as online learning have been in its infancy in 2007.

INNOVATIONS, PLATFORMS & TECHNOLOGY

Some educators. unlike their cyber-phobic counterparts, pursue the latest technologies without thoroughly considering why it would work well in their particular online classroom. "Along with emerging tools such as classroom video capture, earbud coaching (in which teachers receive real-time coaching via an earpiece while they work), virtual classroom simulations, and online tutoring," are only some of the new technologies being used by educators as they try to improve their teaching skills and enhance educational experience for their students (Hirsch, 2012, p.22). Answering the question of what it takes to truly push the online experience one step further in order to ensure it is properly adjusted to different learners' styles cannot be an easy question to answer but it is one that innovative technology may help with.

Does new and/or advanced software always contribute to students' success? Of course not, but the knowledge base can be expanded by analyzing how some colleges who are taking advantage of online platforms to reach nontraditional students who would not be back in school if this new venue of educational pursuit was not available. For example, South New Hampshire University uses a software tracking system in order to predict students' success using variables such as the length of their discussion board posts, or teacher's online activity (Kamenetz, 2012). These measurements and actions assisted with student retention as demonstrated by the increase of first year undergraduates who signed up for a second year to double from 35%-69% (Kamenetz, 2012). McKeowen and Heritage (2012) indicated that recent advancements in online technologies are making an online experience more fulfilling and rewarding and eradicating the image of traditional schools as a more optimal environment for students' success.

As simplistic as it may sound, the online educational platform is better equipped for experimenting with many innovative technologies which enable educators to modify classrooms and adjust curriculum to serve diverse student populations and a variety of learning styles. The profile of a new learner utilizing and taking advantage of the new

innovative technology emerges as "Users of Web 2.0 tools (Students 2.0) are self-learner, self-searcher, fast communicators, self-publishers, self-motivated." (Sangeeta, 2012, p.256). Therefore, use of some form of a Web 2.0 cloud technology is associated with the concepts of self-regulation, previously explored in this paper, and a specific profile of a student whose learning style is geared towards independent approach to education. The new learner in accordance to this philosophy is in a driver's seat versus passenger seat reserved for learners in a more traditional model.

There is a significant difference between traditional schools trying to implement some forms of online innovative technologies, as part of their course delivery methods, versus online schools pursuing the only possible delivery of course content through the use of online technology. The point one may make is that traditional schools can build upon their core course lecture-driven delivery through use of some supplemental online techniques. The online schools have a choice to use many different online techniques to provide their students with much needed variety which speaks to their different learning styles and learning preferences. Therefore, using technology as a supplement versus using it as the main lecture delivery engine is a vastly different and any comparison drawn between the two should be conducted with some caution.

As with anything, a one size fits all approach can be misleading when it comes to a university's choice of online learning platform. For example, several educational platforms, such as, X-stream, Blackboard, Webet, Moodle, VLE and other learning web systems were evaluated by Rai whose assessment in general indicate that students require some advanced IT competencies in order to get one of these educational platforms to work for them in a successful manner (2011). If the universities pursue online learning due to cost effectiveness, the cost of training students to ensure their tech skills are compatible to the learning platform being used should be taken into consideration. However, many universities are pursuing online educational platforms without proper research, due to the direction and preference of their student body providing them with the greater variety and flexibility which is truly matching some of the increased demands of a new "virtual-oriented" generation. Universities should be quite careful not to jump to conclusions that younger generations are so computer-savvy that they can adjust to just about any online modalities with no questions asked. A learning curve should be anticipated, regardless which modality is selected.

Casanovas (2013) compared learning processes at two universities, one in Sweden and one in Argentina. She found that there were similarities between teacher's attitudes towards the innovative online education used as a supplement or one of the main delivery methods in their classrooms. Both groups of faculty stated that online education was beneficial only once they themselves were at

a comfort level with the new technology (Casanovas, 2013).

Transition from one online delivery model to another can be equally challenging. The assumption that online educators are already quite comfortable with innovative technologies adjusting with an apparent ease to another online model is often false. Many universities use different online platforms. Without a solid orientation training, many teachers are left without the ability to use new technology to its fullest potential. The pursuit for the newer/better technology, does not necessarily translate into a better experience for both educators and students, which clearly defies the purpose of the technological pursuit in a long run.

Casanovas (2013) considered institutional support when the traditional to online transition takes place. Although the transition is necessary for course delivery, many senior university leaders consider it an "unavoidable evil" and a direction in which universities have to go through without truly believing in the value of the new educational platform. Such an attitude makes leading by example difficult, at best. The absence of strong institutional and leadership support impacts many middlelevel university leaders and ultimately leaves teachers to "figure the new technology out" on their own. In these types of circumstances, the learning style of teachers also plays a pivotal role. Not surprisingly, those who are more self-motivated, independent and self-driven will be more successful with the new platform, very much mimicking what their students with the same qualities go through. Finally, those educators who are without leadership support and not as independent and "self-regulated" can be less likely to familiarize themselves with the new educational platform. Out of fear and/or frustration these teachers may end up being the biggest critics of the new "online wave" of technology, advocating against it and deeming it a less worthy educational experience. While the above mentioned struggles are often suffered in silence, their criticism is often incredibly vocal and quite obvious to administrators, university leaders, and ultimately their students.

Regardless of some criticism, which does appear to be less prominent, online educational platform revolutionized educational area creating a new academic setting which is still a very much uncharted territory waiting to be fully explored. Endless possibilities in the area of technology are pursued. At the same time, comprehensive research of the benefits of this innovative online movement is still to be conducted considering that this field is still relatively new and underexplored.

Distance learning is not a new field; it is just further developed through the online learning platforms. Hiltz and Turoff (2005) explored correspondent courses, video recordings, physical mail courses, prior to "jumping" into the area of pure online platforms which provides so many different venues to communicate from collaborative knowledge systems, to wireless devices and asynchronous and synchronous learning networks. Their findings

indicated that only about 10-20% of students preferred face to face setting which is a stunning statistic considering that this study was conducted eight years ago (Hiltz &Turoff, 2005).

Some researchers focus more on the flexibility and convenience of the online model more so than any of its other features staying away from a conversation pertaining to which teaching model appears to be more meaningful and successful in reference to achievement of a particular course's learning outcomes. In spirit of open access emphasis, some researchers hope that online education may close the global educational gap making education more accessible even to those students who would never be able to attend traditional school settings (Geith & Vignare, 2008). With that said, this perceivable "open access" does come at a cost, which is often not comparable to a traditional setting due to the investment which universities have to make upfront in order to upgrade their existing systems to accommodate the new technologies. Geith and Vignare are emphasizing the human right to education but at what cost this right is given remains open (2008).

With "open access" education comes a responsibility of assessing readiness of students who are either transitioning from a face-to -face to online modality or are simply starting fresh on their degree which is fully provided online. Assessing this readiness is of a crucial importance as one embarks on a journey of establishing a successful link between online learning and students' success rate or talk about any sort of comparison between online and traditional learning methods in reference to students' learning styles. An interesting finding related online structure with students' readiness and inclination to do well within an online program (Kaymak & Horzum, 2013). Therefore, as much as one may advocate the vast variety of activities provided in an online setting, the structure of those activities and its logical flow will impact students' retention and success within the program.

Reflecting back on the learning style discussion, not all students share the same definition and vision of a structured online learning approach. However, a common link between the online organization and structure on one side and students' self-motivation and ability to organize on the other is quite noticeable. The question which should be posed as different technologies are evaluated is if one online technology in particular offers more successful and structured approach to an online learning versus the other.

HOW MUCH IS TOO MUCH?

Having reviewed online education as related to students' learning styles, as well as evaluating online education as an option in comparison to other educational platforms, one has to wonder if the excessive pursuit of newest technologies in online setting is necessary and truly needed to enhance students' learning experiences. Sabramowicz (2013) points out that the course delivery

software as the elephant in the room, "...distracting you and confusing the e-learning industry" (para.1). When technology is a distraction hindrance in an educational process as opposed to a productive tool enhancing the students' learning experience, online educational platforms quickly suffer the consequences unless immediate change takes place.

Online platforms should be considered for effectiveness, quality of delivery, and students' success versus cost which can sadly supersede other concerns in many university settings. The most impressive technology is not always the most effective at many schools. Whether new technology can deliver the desired content in a manner that is easily understandable, applicable, and connected to the learning concepts all must be considered.

Face to face settings are still providing one clear advantage when it comes to learners' assessment. Getting an instantaneous feedback, assessing class' level of grasping of the new material immediately upon the lecture, addressing questions as they come in are all related to social cues that are exchanged in a traditional classroom setting. Technology cannot do everything an adept teacher – online or face to face – can do. Software doesn't provide meaning and it can only go so far with application. However, proper use of software features can enable course developers to create meaningful activities which can help students with the application of learned content and ultimately provide teachers with assessment tools and strategies.

Some well-established traditional universities started experimenting with a concept of free online courses in hope to promote and make education more accessible and enable learner's collaboration at a higher level than ever before. "Initially, "free" and "open" as in Linux and Apache opensource software or Wikipedia as a user-generated encyclopedia came with the assumption that users would participate and contribute to the accumulating knowledge or technology base in a way that was cost-effective and of high quality" (Cusumano, 2013, p.27). However, the content is as good as the developers in such user-generated applications. The universities that have engaged with these types of educational platforms have faced many costeffectiveness dilemmas and core issue questions as to who educators currently are and who educators should be. Software is a tool, which cannot replace an actual teacher no matter how advanced and how well-designed it is. This type of an online setting, not managed, observed, and/or regulated by either professors or facilitators, allows students to access rich databases of material with questionable quality of content. In open access classrooms, Cusumano (2013) found a 90% dropout rate after the first course.

The pursuit of the latest and most advanced technology on behalf of many online universities is aligned with efforts to attract more students than their competitors by featuring newly acquired innovative technological features. Considering the time pressures and budget concerns these types of activities involve, many universities report they do not have the "luxury" of "picking and choosing" the technology used in an online setting. Instead they focus on the "proven technologies or the "newest-coolest" ones. This approach can backfire in the vast majority of cases (Cusumano, 2013).

One of the more recent questions which are connected to the use of newer technologies in a classroom setting focuses on question of social connectivity and whether or not online platform can satisfy the concept of "social nature of learning" which was introduced by Piaget, Bruner and Vygotsky (Morgan & McKenzie, 2003, para.6). New technology is not necessarily addressing students' isolation. However, proper use of the technological advancement in a classroom with assistance of good facilitation is addressing the concept of online "loneliness and isolation". Online arena can be a lonely place if instructors are not properly setting the stage for the productive social engagement which can only benefit the learning environment. The issue of online relationship is quite relevant since it is directly tied to the concept of student successful completion rates and ultimately student retention (Kaymak & Horzum, 2013).

No technology can create a meaningful online studentfacilitator relationship. Certainly, some platforms afford better communication tools which can mimic aspects of the face-to-face experience. The majority of online learning platforms currently available provide flexibility, for convenience, and options multi-directional communication, thereby potentially creating a place for classroom community, promoting the concept of social engagement, and eradicating the fear of online isolation.

Can online instructors truly reach out to individual students in the online classroom? Are weekly announcements, emails, audio announcements, video clips truly going to satisfy the students' needs for presence and engagement that are essential for a meaningful learning experience? Can too much technology alienate students and make them feel even more isolated? Should technology ever overshadow the true purpose of education? Is technology enhancing or hindering one's educational progress and experience? The answers to all of these questions truly depend on the quality of instructors and their desire to connect and to teach. Choosing an online venue for learning does not mean that students do not crave contact with instructors and other students. The need to connect, brainstorm, collaborate is still desirable in an online setting.

If one reflects on the isolation which student may feel in a lecture hall, sitting there with hundreds of other students without ever being able to exchange one single sentence with his/her instructors, the natural conclusion is that the connection is not guaranteed in a traditional setting either. Many of these students only get attention if they take an initiative and generate communication. Should it be that way in an online setting? The answer is probably not since classes are smaller, students must engage and

instructors have many opportunities to communicate with students, even if they never meet face to face. Technology in an online setting is available for students and faculty alike. They both need to get comfortable in the environment and the group, and take advantage of whatever "bells and whistles" they choose to use in their environment.

DO "BELLS AND WHISTLES" REALLY MOTIVATE MY STUDENTS TO LEARN?

Do technological "bells and whistles" motivate learners in an online environment? Under which circumstances can such classroom technology be motivating? Technological advancements are impacting human life at unprecedented rates. In fact, some educators have even referred to technology as related to learning as 'edutainment' (Mirriam-Webster.com) or learning that is fun. While learning should be fun for many reasons that are beyond the scope of this paper, one has to wonder, how many bells and whistles belong in an online classroom. What is enough and what is too much? Bosch (2012) asserts that "technology may serve as a savior, bringing down costs, personalizing the learning experiencing, and improving student outcomes" (para.2). Technology is not a salvation in itself but it can "save" the educational experience depending upon its appropriate use within a classroom setting. In addition, as students' use of technology continues to increase outside the classroom, why would faculty want to use no "bells and whistles" and compete with other mobile device apps and other forms of edutainment that are constantly available for learning?

McNeeley (2013) emphasizes social interaction as one classroom dynamic that can be created through experimentation, hands-on, innovative activities and sustained in the online classroom. McNeely (2013) asserts that technology has the potential to push both educators and students much further than more traditional venues are capable of doing. McNeely (2013) cautions that, "Before curricula can be created to challenge the Net Generation, though, faculty must know how Net Geners learn and interact with each other, with technology, and with life in general"(para.6). Interaction is the key! Technology does not interact in itself- individuals interact, regardless if this interaction is between students and instructors or students amongst themselves. Technology should therefore be utilized in a manner in which interaction is lifted to a higher level in the classroom and beyond.

CONCLUSION

In conclusion, this paper explored some of the innovative trends in online education, as this is a dynamic area for streams of research that are appropriate for ABSEL dialogue. The evaluation of technological impact was

attempted as related to individual and group learning. Furthermore, the paper touched upon some of the technological "traps" online arena may end up being caught in if technology is "overused" and/or not appropriately used. The authors reflected on online classroom innovation as it relates to students' motivation questioning if the technological "bells and whistles" are properly researched and analyzed up against students' learning outcomes, motivation, and learning styles.

The authors of this article are not advocating against the pursuit of newer technologies in the online setting. Both authors agree that technology is of a crucial importance since it enables instructors to effectively reach out to their students providing the course content in an efficient, engaging, and meaningful manner. However, the authors feel that pursuit of the "newest technologies" as one of the "cool initiatives" on behalf of some universities without previously conducting a proper research if the use of a particular technology is truly warranted is to put it mildly costly and unnecessary, and at its extreme borderline negligent.

The benefits of online technologies are vast if utilized properly and at a certain degree of moderation. The pursuit of technology for its own sake is not beneficial to students and educators alike. Proper alignment of technology with course learning outcomes and students' learning style is a special craft not that many online universities achieve. In order for the technology to be successful in an online setting, careful evaluation of its features is necessary and careful review of the "necessities" of each "bell and whistle" should be performed.

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