EMERGING TECHNOLOGIES, BENCHMARKING, AND VALUING: THE DILEMMA OF THE BANDWAGON

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Abstract :

Given continuous exposure to the idea of being an emergent culture, the technology bandwagon of today is left to open criticism – more negative than positive. The environments, framed wherein tech-based or tech-supported teaching/learning mediums are created, continue to be observed for effectiveness. My input would be to question what kind of measurement is being applied to the assessment to benchmark for effectiveness. Rhetorically, what makes for a decision of effective benchmarking? The benchmark is considered effective in relation to what or in relation to whom or in relation to when? I believe benchmarking the mediums as effective may only happen when the observation addresses the way the tech is used. The purpose of the paper is threefold. The first purpose is to address the major "emerging technologies" to advance what they are briefly, ground them and discuss their effectiveness as tools to enhance learning and as means to enhance the methodology of teaching and of learning. The second purpose is to address the value of the "emerging technologies" to enhance learner centered teaching/learning environments, such as active learning, exploratory learning, discovery learning. The third purpose is to question what is/are the determining force(s) that warrant(s) the use of such technologies in the mediums. Given that present in the mediums are the educational leaders – administrators or educators--and the technologies, be they used for tech-based or tech-supported purposes. It is concluded that educators must make conscious decisions as to how and what the "emerging technologies" are doing to add value to the any given teaching/ learning environment. Educators must act accordingly.

Keywords: Culture, Computer Assisted Language Learning (CALL), Web 2.0

Given continuous exposure to the idea of being an emergent culture, the technology bandwagon of today is left open to criticism – more negative than positive. For the past two decades, the West has significantly increased in its use of technology in education (Sabieh, 2008; Good 2007; Maloney, 2007). It is a World where emerging technologies "spank trends that spawn and evolve at nearly the speed of light, so the evolution […] is very much in flux, and the ultimate form they will evolve into is hard to predict" (Waters, 2008, p. 7). Emerging technologies, according to Tim O'Reilly, the key player in the creation of Web 2.0, is what he terms the 'bleeding-edge information age movement' that is revolutionizing the way the internet today is to be used making it no less than a global platform for everything to tie together collective mental diversities (Good, 2007).

Setting a stage

We live in an area of the world given the label of an emergent culture. By definition, culture is communication and communication is 'culture behavior' learned to give definition to a way of life (Culture, 2008a; Culture, 2008b). Social science researchers note that people are what they learn. Cultural determinism places no limits on human abilities to do or be whatever they want,

and what that is can only be perceived by them as being right. Cultural awareness of the diverse environments allows the communities to decide on the practices or ways and commitments. Thus, the perception of what is right is relative to the society and this perception becomes central in negotiating or adapting to change if it is to happen (Culture, 2008a). Yet the label of emerging or emergent cultures continues to be applied. Does the justification of being given such a label automatically set forth for us the need to reformulate and mark out the oneness with the rest emerged cultures. Ikegami (2000) notes caution is needed. Sabieh (2003a) advocates we need to ask ourselves, to what degree do we share our beliefs, ways, acts with the others in the world – specifically the West? To what degree do we live and think like the others? To what degree do we social interact with the others, exchange and use the symbols they do? To what degree has all of this become internalized due to conscious or unconscious learning of habits and ways of thinking and doing? Is it taken for granted that we have, and is it natural for us to do what is being done in the West? So, being alluded to as an emergent culture, the technology bandwagon we are on today may be left to open-criticism – such criticism is usually more negative than positive. Our thinking is not the same . Our values, habits, and customs are not the same

To what degree are our educational framework, philosophies and methods of teaching the same as others in the West? Given this, to what degree can the use of technology as the West uses it be the right use in our environment even though learning is seen as a social process integrating "socio-cultural-techno" influences (Stahl, 2000) on what is learnt?

Deciding to Benchmark on Effectiveness

I believe the education environments, framed wherein tech-based or tech-supported teaching/learning mediums are created, continue to be observed for effectiveness in any setting – East or West (Sabieh, 2002). As more and more technologies are used in the education set ups, change in the ways of thinking, teaching and learning are to happen (Maloney 2007; Sabieh, 2003b). Technology to be used to deliver the content is a fact of the past. Educators and students use the technology of tools to enhance and support course management and learning. To most, especially in our culture, this course management frame is wherein the learning acquisition, not putting the students at the center, lies. Accommodating the diverse learning styles is what Web 2.0 – the latest evolution of the web, does today (Maloney 2007; Read Write Web, 2003). Since this is taking dominance in the West, does this make the grounds for us to follow them? Is this what globalization means? All cultures of the world become one – following the West? (Sociocultural evolution, 2008).

Are we creating virtual communities in education settings when we use technology in the classrooms? Are we creating a cyber-culture because of the social conditioning being created due to the continued computer use (Cyberculture, 2008) or are our network users within and among the others preserving their existence as defined entities? According to Petrides (2002), K-12 and universities are concerned with this issue and with what is being created due to the influence of technology in education. My input would be to question what kind of measurement is being applied to the assessment to benchmark for effectiveness. Rhetorically, what is effective benchmarking? I believe that the benchmark is considered effective in relation to what it measures or in relation to whom it measures it on or in relation to when it is doing the measuring? In other words, the benchmark should be made in relation to the educational setting. The benchmark should be made in relation to who is the user of the technology – the educator or the students. The benchmark should be made in relation to where the technology is to be used – be it education setting or home use.

I believe benchmarking the medium of teaching/learning as effective may only happen when the observation, or the observer benchmarking, addresses the way the tech is used (Sabieh, 2003b). Petrides (2002) looked at the ways technology – specifically web based technology – was used as a tech-support tool in the classroom. Observing that the use of the technology can not be a delivery tool as such, the technology had to be used to create support in the environment to make the teaching/learning focus purposeful, holding an active place in the students' learning process (Petrides, 2002).

Advancing the Purpose

The purpose of the paper is threefold. The first purpose is to address the major "emerging technologies" -- to advance what they are briefly, to ground them and to discuss their effectiveness as tools to enhance learning and as means to enhance the methodology of teaching and of learning. The second purpose is to address the value of the "emerging technologies" to enhance learner-centered teaching/learning environments, such as active learning, exploratory learning, discovery learning. The third purpose is to question what is/are the determining force(s) that warrant(s) the use of such technologies in the mediums.

Purpose 1: Advancing Emerging Technologies

Emerging technologies may have come about to be used in the educational settings, according to Wallace (2008), because educational foundation realized their students were not responding to the technology with motivation to act; they realized the need to make the students exhibit on task focus by making the tech communication platform interactive, yet still controllable by the foundation. Emerging technologies had already infiltrated the realm of the business work for a minimum of four years (Web 2.0 in education, 2008). Web 2.0 needed to turn the education tech support based environment into what the students and educators would feel became a personal space – be it for learning or teaching, centering the user in the process (Waters 2008). Even with the educator in control, these new technologies would give the students more responsible control of their learning. This is what most education sets ups attempted to do (Sabieh, 2006; 2003b).

The draw of Web 2.0 in education settings was the element of connectedness. Waters (2008) noted that a study in August 2007 started as a small pilot study of six teachers grew to 495 teachers, 1908 students, 88 online courses and 33 online collaborative groups by early 2008. The Web 2.0 features, such as social networks, blogs, wikis, folksonomies and mash up tools, provided a platform to combine and transform knowledge in a way to make the medium a powerful learning space showing achievement (Waters 2008).

Educators when discussing web based or teach-supported learning effectiveness tend to bring up issues related to cost-effectiveness, access, flexibility and delivery (Sabieh 2007; Petrides, 2002; Fetterman, 1998, and Rumble 199desitnation 8, n.d.). These are important; however, the focus needs to be on the what the technology enables the educator to measure, making it a facilitator of learning (Sabieh 2007; Petrides 2002). All new technologies are to be used—as platforms--by all persons in all diverse real-world locations (Cyberculture, 2008), mediated through the use of ICT. They are, according to Cyberculture, 2008; Dodge, n.d.; Stahl, 2000; Sabieh 2007, to be used through the creation of cybercultures, promoting cognitive and social boundaries, not geographical, by joining similar minded interplay, interaction, collaboration, and connectivity. The students become responsible and centered for learning on their own (Petrides 2002, Sabieh 2007).

Web 1.0, the World Wide Web as it is known, is a tool of endless information and features. Web 2.0 is what is known as the new emerging technologies or as the Read Write Web (2003). It is important that technologies are identified briefly to ground them to understand what they are to show what function the tech-tool has to enable creations of more effective teaching / learning mediums. Its creator, O'Rielly (2005), saw the new technology as possessing the power to promote creativity, collaboration, and information sharing as central features to linking and contributing to global unity.

Web 2.0 has three defining elements: Users of the technology are able to create and share content they put together; users are able to connect and collaborate in tech supported environments at any time, and users work within no boundaries, integrating, connecting and collaborating individually or in group. Content creating and sharing, sharing and making connections with others, and making connection within a content and context allows Web 2.0 features such as wikis, blogs, CMS systems, social bookmarking, social networking, media sharing platforms, mash-ups, and podcasting are popular in education. Defining a few features will put the power of Web 2.0 into perspective.

Wikis, simply put, are collaborative web spaces in which users can actively shape content through gathering and editing content and revising without formal editing procedures (WikEd, 2008; Skiba, 2006; Read Write Web, 2003; Blog, 2008). Wikis are used as a collaborator tool to create and collect ideas. One popular example is Wikepedia (Wiki, 2008).

Weblogs --blogs or microblogging – are topical websites that are kept like a journal by a person or a school / organization (WikEd, 2008; Blog, 2008; Read Write Web; 2003). Blogs enable users to post links, images, video using simple web interface; it also allows then to discuss and comment on other work. Blogs may be personal, corporate, blogshare blog, journals. Examples include Blogger or Wordpress. Through journal format, students will be encouraged to keep records of learning curve and time.

CMC Systems stands short for content management systems (O'Reilly, 2005; Skiba, 2006). These systems are tools that are used to organize the various or different forms of content into interrelated and organized webspace. This tool is very popular in education since it allows the educators or the students to gather info from different and varied resources and put them together to support the author's focus. Examples of such systems are Plone, Moodle, Sakai and Drupal.

Social Bookmarking, such as del.icio.us, Digg, Diigo, Rebbit, enables the user to make bookmarks on topics of interest and share or collaborate the resources with other users. Through the use of key word categorizing, the user works within URLs and online resources, enabling group or individual search applications (O'Reilly, 2005; Skiba, 2006; Social bookmarking, 2008; Read Write Web, 2003). This will aid the user to enrich searching and compiling material with added trace value.

Social networking sites are platforms that provide online activity space that engage users by connecting them together through email, chat, profile sharing and broadcasts, games, and news sharing (WikEd, 2008). Popular networks include Facebook and MySpace. Elgg (Read Write Web, 2003) is a social network created for educators. Basic issues of concern today, since it the platforms are social network providers, are privacy and cyber-bullying.

Media sharing platforms are sites that distribute and spread media and information. A popular platform is YouTube; this platforms allows users to upload, download, share, comment and vote

on music and videos. Flickr is great for photosharing and educators are able to share education material on TeacherTube and Instructibles.

Another important feature for us would be to identify possible platforms to make content connections. Mashups or portal architectures and podcastings are two such examples. Mashups or portal architectures allow users to find, use or view information and tailor it the way they want to share it with other users. In other words, the users are able to tailor the information by manipulating it to promote their views on the subject matter. An example of a mashup would be Google Maps. All the features on Web 2.0 can do this. The user is able to surf and take information from a diverse number of sites and mesh it together to provide new meaning on one site. The storing of data allows other users to then use it and manipulate it also (WikEd, 2008; Social bookmarking, 2008; Waters 2008)

Podcasting also similar, enables the educator to put the educational material into a context to give the students a feeling of an audience (Podcast, 2008; Read Write Web, 2003; 25) .

Given Web 2.0, education settings need to determine how to best accommodate the features into the system as it stands at present if educators and administrators see value in the adoption. Educations systems need to be assessed to see what they stand for and what they expect of their students in relation to the methodologies they are using. These assessments will pave a realistic look into the bandwagon should or can be followed.

Purpose 2: Questioning the Value of Emerging Technologies to Enhance the Settings

As educators we tend to want to provide rich learning environments for our students irrespective of what type of education methodology and philosophy we function in. Thus, in this case, it would go without saying that the value of the "emerging technologies" to enhance learner centered teaching / learning environments must be addressed. Research studies point out that the emerging technologies reinforce and promote users to practice active learning, exploratory learning, discovery learning – to name but a few-- opportunities.

As stated above, the use of emerging technologies in the West is on the rise (Sigala, 2008), and we in our part of the world want or always feel the need to adopt such trends into our Educations environments. However, we need to be aware that research, to date, has unsuccessfully identified pedagogical theory, conditions, styles or models to prompt, support and maintain the exploitation of Web 2.0 as such – partially or completely as an integral or support mode within the educational endeavor (Sigala, 2008; 15). Petrides (2002) examined ways higher education classes, supplemented by web based technologies, looked at learning issues and learner centered education. The key word here is learner centered education (Sabieh, 2001b). Unless we have that, we can not or should not bring in the emerging technologies into our system since it will call upon the users of these technologies to do things their educational environments do not promote or build on.

My advocacy on the topic is based on my reading and my exploring of Web 2.0 features for evaluative use in my educational settings at both undergraduate and graduate levels. Whether for educator use or student use, it does warrant integration if, and only if, the education environment is flexible, the teaching methodology is learner centered, and the learning is active, making the students central in the teaching/ learning set up.

For example, Godwin-Jones (2007), discussed online reading – a once passive activity that has become on many sites active. Readers not only read, but also comment, collaborate and critic; that is they have become consumers, producers and participants at the same time. Add to this the

reading passage now has added features that enable animation, pop up windows and annotations to bring the material to life. All this has great value, if the user has a language base, the skills and critical know how to contribute. To the language learner or educator this may be overwhelming in the quest to learn or teach the language. They both need to work in relation to level of language skill and the need to build meta-cognitive skills to develop the how to learning and how to improving the learning endeavor (Godwin-Jones, 2007). Given our educational environment, will such a scenario add to the success of the endeavor? There is no such guarantee of success in the West (Godwin-Jones, 2007). What will ours be?

I believe emerging technologies do enhance learner-centered teaching methodologies. Students will be expected to become active learners, explorers, collaborators and discovers, as they take on responsible roles in their learning quest.

Simply put, active learning moves students from passive learners to active beings in the teaching /learning set up. It prompts students to become engaged in the topic, activity, environment at hand. The students are acquiring for self – doing for self – through the discussions, observations and collaboration with others (Fink, 1999). Learning becomes the responsibility of the student (Active learning, 2008), making recall, behaviorist or cognitivist, of information a derivative of active engagement with the material (Bonwell & Eison, 1991; Bruner 1961; Mayer 2004; Active learning, 2008; Active learning, 2003). To name a few successful strategies, this is best accomplished through class discussion, 'think pourshare', learning by teaching, self guided learning and worked example effect (Clark, Ngyyen & Sweller 2006; Active learning, 2003; Active learning, 2008). Such approaches when applied on the net, makes the students even more engaged (Dodge, n.d.).

Likewise, exploratory learning is the approach to learning that anticipates and gives confidence that the students find out and discover relationships. Such learning does not necessarily need to have educator guidance – it may or may not. Exploratory learning is highly recommended for general teaching ventures and skill building. It does not work well with environments that expect students to memorize (Usability glossary, n.d.).
Also, discovery learning stems from the idea that learning is inquiry based. This is excellent to teach problem solving since it forces the students to draw on their own experiences and prior knowledge to discover new facts to solve the dilemmas (Clark, Jan. 22, 2000).

The new technologies give the students a new release in building knowledge in their realm. To date, positive value assessment of the new technologies outweighs the negativity.

The negatives are seven in number. One negative is that the new technologies call on the students' discussion and sharing to be less structured than what would be expected in an educational set up, yet this allows the students to be more open to receive and reflect on other viewpoints to consider in relation to their stance – a positive value. The second negative is the challenge put on the students to keep up with the amount of information provided by the sources and by other users at any one moment. The third negative is the fact that students feel the pressure to depend on themselves to becoming experts and decision makers on the topic exploration as opposed to depending on the educator's expertise and guidance. The fourth negative has to do with the students' reaction to the fear of not receiving the feedback of virtual communication they are so used to receiving in a face-to-face setting that it hinders the students form wanting to become actively involved in the use of the new technologies (Sabieh, 2004). This means that the fifth negative has to do with the need to get students used to the new ways of learning and teaching. The sixth negative has to do with the fact that the educator's role of involvement changes to become more and more of a facilitator since the learning process is more and more

student centered. The last negative has to do with computer support and frustration – students may not have computers available to them for use outside the education setting or the tech set up may include a slow modem. Such negativity may defeat the students attempt at using the technologies since they may feel overwhelmed before actually reaping the reward.

I advocate 20 positives for promoting the use of Web 2.0 in the education setting. The positives are not listed in order of importance. These positive points I call "value". These points of value, in my opinion, all stand equal; thus, making the power of the new technologies in the e-learning community live up to the so called "boom" technology in the West has witnessed (Maloney 2007). With the new technologies, the first value to identify has to do with the fact that it provides the students with more diverse and distributed learning opportunities, promoting a learner centered versus teacher centered medium of learning (Petrides, 2002). Value number two is that students are provided with opportunity to experience diverse opinions across time, topics and assignments (Petrides, 2002). This leads to value number three in that students will have a lot of ideas to work with and contribute to the making of their focus, to their initiating collaboration and inquiry beyond what they bring with them to the web (Petrides, 2002). This is a key component in the students' feeling of building a repertoire of knowledge, creative in nature to address their thoughts about the topics and assignments expected of them. Value four has to do with the increased opportunity of exposure to different channels of communication and mediums enables the students to better understand the material, students' ideas and positions. Value number five has to do with the posting of information for distribution, commenting, examining, and reflection in forum like platforms (Petrides, 2002). Students are able to raise questions, issues and feedback not defined within the boundary of time, like in a class setting. Students are exposed to multiple-loop learning, enabling cyclical answering, reflecting and in depth growth to happen; the students reflect–learn-reflect–learn, etc… As this happens, value six would enumerate the fact that the students are able to bring in their own experiences and own opinions to the platform limitlessly, unlike the class face to face interaction (Sabieh 2007).

Value seven has to do with participation. Students here are not forced to interact with others; however, by getting the students involved and on task, the topics are thought of more in depth calling for less shallow but more exploring and responsible learning. This may not be the case in the class (Petrides, 2002). Value eight grows out of value seven in that learning with different students in different setting broadens their reading of views, thinking of diverse thoughts and reflecting on their own views. This opportunity gives them value nine, which is their personal choice of writing the expose online in a selected form to continue communication online or prompt face to face communication, bringing with it a sense independence and trust (Petrides, 2002).

Value ten points out that the uses of such technologies take place in a non-traditional educational set up, where security, confidence building and protection of well being are central. Value eleven notes that such technologies provide students with opportunity of interaction comfort in relation to face to face communication (Petrides, 2002). As mentioned before, value twelve has to do with reflection and exposure in a less structured, visually responsible format, but comfort zone, making value thirteen perceives are being less fearful of the technology and more motivated to want to be more involved in the making and collaborating as a way of learning (Sabieh, 2004). Value fourteen emphasizes the way the technology is used. The educators may still guide and be taken into account, but the students are the ones to experience and provide opinion to make the learner center teaching endeavor measurable, a fact the software designers must account for (Petrides, 2002). Thus, the time spent on doing the work, project, or learning is defined by personal learning goals and it is not dictated by physical presence or boundaries. Flexibility and feelings of wanting to continue and collaborate in such time frames enables the students to re-schedule work formulas to suit their perusal of knowledge – this is value fifteen (Petrides, 2002).

Values exist for educators also. Value sixteen points out that educators together through blogs ad wikis help each other within the teaching endeavors, subject matter or professional development. Value seventeen would be the idea that web site no longer are the product of the programmer solo, but the work of a user, creator and programmer to build a learning platform of learning and collaboration (WikEd, 2008). Thus, bring in the idea that the internet is not longer isolated information (Good 2007) but bound together through the new technologies – value eighteen. Value nineteen reinforces the fact that the technologies open-up the opportunities for writing and rewriting on the web continuously. All 19 values will lead to the ultimate point of value – value 20 --which is that the users will have created identities of their own – their own personal spaces, active and cyclical in direction (Good 2007; Sabieh 2007). Sharing online with communities, carrying out projects, seeing info, editing info and modifying documents collectively (Waters 2008) enrich the cyclical growth process.

To sum up, it can not go unnoticed, given the twenty values outlined above, that Web 2.0 is having a dominant influence (Sigala, 2008) on the way students and educators may use the technology to search, to collaborate, to develop to, share and to influence (Waters 2008) whereby the spotlight Web 2.0 is occupying has to do with user innovation, creation, collaboration and collective building of knowledge to deliver, manage, and interact beyond mere content sharing (Maloney 2007). Does all this warrant its use in our setting, given the education setting we have (Sabieh, 2006)?

Purpose 3: Determining what warrants use of emerging technologies

The third purpose of this paper is to question what is / are the determining force(s) that warrant(s) the use of such technologies in the mediums. From what has been advanced so far, the first determining force that warrants consideration is that it can be said that emerging technologies can be defined as having three essential features – collection, selection and reflection (Waters 2008), through connectivity and interactivity. Irrespective of the type of education system we have, the fact remains that Web 2.0 is social in nature and promotes formal and informal learning together.

The second point of warranting is the need to compare teaching methods – traditional and new and decide where it is that we fit on the continuum of change (Sabieh, 2001a). To claim to have incorporated new strategies into the education system means to have moved the teaching/learning set up from a passive to an active environment (Sabieh, 2006; 2001b) The traditional learning environment has teacher centered instruction, has a single sense stimulation, single path progression, single media, isolated work, information delivery, passive learning, factual, knowledge-based learning, reactive response and isolated artificial learning/teaching contexts. The new learning environment has student centered instruction, multisensory stimulation, multipath progression, multimedia, collaborative work, information exchange, active, exploratory, inquiry based learning, critical thinking and informed decision making, proactive or planned action and authentic, real world learning / teaching contexts. The most effective learning environment molds the two together to facilitate the learning in relation to individual need. Students need to become self directed learners, communicating within a variety of media and formats. They need to access and exchange information in a variety of ways and to collaborate and cooperate in team efforts. They need to compile, organize, analyze and synthesize information to use in appropriate ways to get ahead. Where do we fall along this continum? Our educational systems are more traditional in framework. We provide information and tasks more than guide our students in the learning process. Facilitation and guidance – key components in a learner-centered setting —are not central within the learning process (Sabieh, 2006). This is true in most emerging cultures. Is this not true? Change is eminent, but slow; it will come with time as

more and more educators acknowledge need for reform and become comfortable with the steps needed to make change.

The third point of warranting is the need to compare the technologies and what they have to offer then and now. For example, to name a few: Web 1.0 provides the use of personal websites while Web 2.0 offers blogging; Web 1.0 offers Britannica Online while Web 2.0 offers Wikipedia; Netscape versus Google; publishing versus participation; directories versus tagging; content management systems versus wikis. Web 2.0 has taken on a more active way to 'harness collective intelligence', making hyperlinks, add-ons, editing, interactivity key players in the connectivity and sharing game (O'Reilly, 2005).
With existing technologies – the old and the emerging ones – curricula may be modified to create engagement and motivational challenges for the students (Yoder, 2006). The educator is able to provide grounds to rouse thoughts, promote creativity, and push forth imagination in outcome products (Yoder 2006); however the education system must support such methods of teaching.

Do the education system we follow and the technology-support availability for use as emerging technologies allow us to see compatibility for use and integration in the present system? Given our educational environments – school, university, private, public – can we claim to be able to use Web 2.0, with what it calls for students to do, successfully, enhancing the teaching /learning environment to warrant a claim to producing or molding students with critical and responsible spirits? Many jumped on the bandwagon for the ride of the moment. The leap may have proved to be ambitious, especially if it was decided upon consciously. However, if education mediums decided to take the plunge because others were, then therein lies the problem, Being blind to a situation does not enable institutions to overcome the blindness and cope with the sudden change. There had to be no close examination of the positives in relation to what our education setting provides for us – as educators—to work within and with our students. It may have been that we were blinded by the boom the technology made in the West and assumed we could experience the same vigor technology has on the setting.
The West, Waters (2008) notes that "light speed change will transfer the way K-12 students interact academically just as it has permanently altered the way they interact outside of school, but not without the support of teachers, who have been reluctant to embrace and exploit Web 2.0 technologies for their academic use […] What is approaching here isn't so much a convergence as a big bang. A paradigm shift towards progressively richer learning environments […]. And educators are not ready for it. We haven't made the shift yet to teach the kinds of students that a personal-learning-environment represent."

My question, to all of us, is: Are we ready for it? Can we, as the key players in the education setting, be that blind that we can not see our limitations in the system?

Deciding on who plays the needed role

The educational leaders – administrators or educators—are concerned with the students learning outcomes. The technologies are there to be used for tech-based or tech-supported purposes to work within the teaching/learning settings. The commitment on behalf of the educators to integrate the technology – be it Web 1.0 or Web 2.0 – is to ensure active learning and interactivity is present making it at least two dimensional in direction (Active learning, 2003), and centering the student in the learning equation (Sabieh, 2006; 2008). Both the administrator and the educators carry the burden of decision making (Sabieh, 2001c).

Change has to take place within the education set up. The base of change has to be around five pivotal points: Critical thinking, responsibility, learner-centering, interactivity and active

learning. Once there is quality and effective change along those five pivotal points, the integration of technology – Web 2.0 directly – will be possible.

At present, educators and students may argue that adaptation Web 2.0 into the system is possible now. The technologies are no doubt user friendly and easy to use, through self exploration or guidance. The key issue here to be cautioned is not the possibility of use, but the benchmarking effectiveness of its use vis a vis our education setting as it stand now to promote the making of life long students. Blind adoption of web 2.0 in isolation can happen. But blind adoption of Web 2.0 is wrong. Education systems need to understand the technology users – be they educators or students (Good 2007). The emerging technologies need top "carve out for the self" (Read Write Web, 2003) a niche to call its own.

Recommending the move

Emerging technologies are here and will continue to emerge as time evolves. It is important for us to get on the bandwagon to make change happen, but this can not happen with out in parallel making change within the education setting.
My recommendations are four. First, it is important that educators be willing to make curricular change. Integrating another tool into the teaching set up must be incorporated for and that means accommodating new ways of thinking, new ways of teaching and new ways of looking at learning. Second, it is important that the education setting itself creates ground to have role shifts happen in relation to responsibilities and teacher / student centering. Third, in bringing the technology into the system, it must first come into the classroom taking the role of tech support and then gradually shift to take on the role of being tech based (Sabieh, 2007). This may not always need to be the case, however, the point is the technology can not and should not be used tech based if it has not been used as tech support by the students and teachers. Fourth, it is highly recommended that educators and students become familiar with the diversities of thinking and doing in a teaching environment, learning environment and tech based environment. There are styles of acting that must occur and comfort zones must be established for effective use to happen.

The beginning of a conclusion

We must build platforms to critically engage with others, to hear and appreciate ideas and views of other, to better formulate our ideas to turn them into advocacy points. This is true in physical or virtual environments. Globalization expects this of us. As educators we are expected to facilitate teaching and learning to ease the ways of communication and make it interactive and multidimensional. As it stands now, there is no room for online teaching with emerging technologies. Educators need to grow and experience with students, redefining the use of the technology in the environments to ensure the element of active is present (Sabieh, 2007). Technology is not a delivery system only (Sabieh 1998), it is a motivator to provide grounds for interactivity. The internet platform allows students to be less intellectually distant from each other. Communication must be active and the education culture needs to change to encompass this concept a hundred percent. Learning must be active, and the culture we live in must reinforce it.

The challenge of the West is to figure out how to incorporate the new technologies into the teaching and learning endeavors (Maloney 2007). The Web 2.0 gives us the power to trace one's thinking process in a way that can only be beneficial to one's growth process. The challenge is to put the educator into a working framework to contribute to make the tech supported school or

tech based learning endeavor posses the ground to encompass and engulf such profound action (Maloney 2007; Sabieh, 2007).

Are we able to create education environment s to encompass students controlling their own learning space? The spaces would be platforms to keep record of their learning and striving to reach their long term endeavors. Are they, if given the freedom or direction to make the needed connection, capable of depending on themselves, collaborating with others to build and maintain their own learning spaces? Are we as the educators ready to do this for them when we have not done this for ourselves? It is concluded that educators must make conscious decisions as to how and what the "emerging technologies" are doing to add value to the any given teaching/ learning environment. Educators must act accordingly.

One wise instructor designer once said, (Destination 8, n.d.), about striving to continually find the cutting edge of technology. "just stand back and watch the wagon a while, and when you're sure what direction it's going, jump on, grab the reigns and shout, 'Follow me!'"

This is what we need to do. We need to stop, look at what we have, measure, benchmark, modify, rectify, and embrace the new….

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