

THE IMPACT OF THE WEB CULTURE ON EDUCATION

Maria Victoria G. Pineda
Information Technology Department
De La Salle University-Manila
Philippines

Abstract

With the progress of the web, many new solutions are also developed to allow every individual to be able to participate. The active ones see the need to create solutions that are free and accessible. Web 2.0 technologies and its contemporaries like Google and YouTube permit open collaboration and sharing, providing free and accessible solutions, the campaign of copying or retrieving, absorbing or reusing solution materials. This has now become part of the web culture. The web culture gives leverage to young people and students of enjoying more freedom, having so much resources and having a comfort zone. This leads to a more preferred reality compared to the imperfect physical reality. What are the implications of web culture now to education?

Web Trends

Web 2.0

The advent of Web 2.0 brought radical changes to the way programmers develop their solutions and applications; academics have befriended the web as a reliable haven of research and reference materials, students have become the topmost producer and consumer of new media and businesses have started making a leap again because of social networks.

Web 2.0 introduced many new working principles in the Internet — self-service approach, collaboration, participation, decentralization, collective intelligence, rich user experience, the expanded open source idea, reusable applications and peer to peer networks (O'Reilly, 2008). Tim O'Reilly, the Web 2.0 guru, must have imagined the leap web will do but not a triple leap with a somersault perhaps. It was originally thought of as a business model but has now moved to all types of industries.

It is a promising idea whether as a business model or a web framework. It gave hope to end the digital divide evident in many places and spaces. Wikipedia, for instance, the most popular information collaboration site, has 2,695,205 articles and 75,000 active contributors (Singer, 2009). Facebook, a late entrant in social networking, founded in 2004 has more than 200million active users and more than 660,000 developers and entrepreneurs (Facebook, 2009).

Free and Open Source Software

When the idea of the open source software gave birth in the early 80s through the efforts of Richard Stallman (Wheeler, 2003), the user support was very low because there were few experts in the field of software development, there were limited development, and application tools and users do not care much about the computing environment.

It is in this new millennium that free software, open source software, shareware and other related ways of using, sharing and reusing gained strong campaign. It is because primarily the web allowed small and big players have leverage in the web enabling the progress of the free and open source software. The model was adopted and given the availability of electronic solutions that free and open source software gained upper hand from being the marginalized entity in the computing industry. Examples will be Mozilla Firefox and Apache web server. From 2006 to the present, Mozilla Firefox is the most preferred browser (W3schools.com, 2009) and Apache has consistently been the preferred web server system since 1996 and was confirmed by the April 2007 survey (Netcraft, 2007).

The Free Software Foundation claims that Free software “is a matter of the users' freedom to run, copy, distribute, study, change and improve the software” and it can be enjoyed by the user if he enjoys certain freedom such as — “to run the program, for any purpose; to study how the program works, and adapt it to one's needs; access to the source code is a precondition for this; to redistribute copies so you can help your neighbor; to improve the program, and release your improvements (and modified versions in general) to the public, so that the whole community benefits” (Free Software Foundation, 2007).

Creative Commons Licenses

Led by the group of Lawrence Lessig who believes that intellectual property and copyright are both restrictive and that copyright curtails creativity (Wikipedia, 2009), Lessig advocates “free culture” and started the Creative Commons Licenses.

Creative Commons released its first set of free, public licenses in 2002. One of the fundamental license issued is attribution, a license that allows others to distribute, reuse or build upon the original work as long as due credit is given to the original author or creation be it for a commercial or personal use. (Creative Commons, n.d.) “Creative Commons' content pool has at least 40–60 million items attributed to the anti-copyright/pro-piracy attitude as a contributing factor for the growth of Creative Commons in some developed economies” (Cheliotis, 2007).

Google and YouTube

The Google as the most popular engine now (Sullivan, 2006) has become a virtual, universal query facility of knowledge and data of all web visitors. YouTube on the other hand has turned to become the virtual expression of those who do not have opinion; the audition hub of the unnoticed artists and non-artists; and the free, ubiquitous gallery of various media or video works. In 2008, 78.3 million videos were uploaded with an average of 150,000 videos uploaded per day (Wesch, 2008). Top three countries in terms of uploads were USA (34.5%), UK (6.9%) and the Philippines (3.9%) (Wesch, 2008).

Emanating Web Practices

The Web 2.0 technologies like the blogs, the RSS, the free software, the torrents, the rich new media like the videos, mp3, podcasts and online news gave hope to address the need for solutions and resources of students and teachers. The present technology tools allow easy transformation of knowledge from a codified to an explicit form (Pineda, 2008). Academic institutions are not tied anymore with the lack of development tools, renewal of software licensing, limited instructional materials and the dependency on the limited number of experts in their schools to teach the technology. Everything a student and a teacher would need becomes self-service, as upheld by Web 2.0.

Students' Practices

Students have become more digitally literate, can basically perform multi-tasking and are commonly computing multi-skilled. This means they can produce a video, a song or music or publish online anytime they wish. These students are the so-called "millennial learners", those born after 1982 that have wide exposure to interactive media and information and communication technologies. (Dieterle et al., 2006) All the development tools and software they need are available in the web including rich media. The students will search and retrieve the resources or they create and share their works in the web.

What Educators are Doing

With good intentions and the desire not to curtail learning, educators have sought various ways to allow transformation of students and ensure learning will take place. Instructional technology systems, ICT and web equipment, learning management systems, teacher ICT capacity building, creation of computer laboratories and placement of web and other wifi infrastructure are taking place everywhere. Education has continued to ascertain its role in the development of the student and to prepare him or her for a meaningful role in the society.

Paradigm Shift of the View of Reality

Aristotle's theory says that to comprehend reality it must be categorized as a substance, quality, condition, action, determined by time and space and its reason for being. (Freedictionary.com, 2009). And these characteristics of reality will be applied to physical reality as "there are real things, facts or real events" (Dictionary.com).

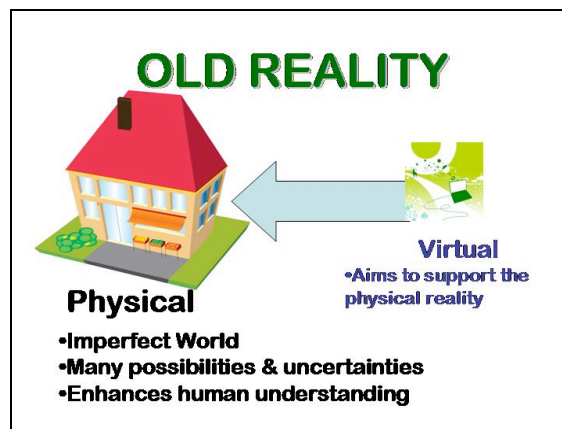
Physical reality may be resembled to a house. A person who needs to enter the house will have to knock first or will have to use a key to be able to enter the house. Inside the house there are places for specific activities- the bedroom, the kitchen, the living room or the dining room. And an individual who is inside the house takes a peek of what is outside through the window. It explains that there are certain ways to stay in the house. But at the same time, many things, even unexpected and unplanned events can happen inside the house.

Physical reality is also a very imperfect world with many uncertainties. It is the imperfect nature of the physical world that makes people explore or chart possibilities and enhance human understanding (Gardner, 1999).

Old Reality

Figure 1 illustrates the web being envisioned as a mechanism supporting the physical reality. The web became a virtual reality. "Virtual reality is best described as an illusion of reality created by a computer system" (Sharpened glossary, 2009). "Virtual means existing or resulting in essence or effect though not in actual fact, form, or name" (Sharpened glossary, 2009). And the web is aimed to support the physical reality in its goal to solve human problems and inefficiencies and to make the physical world a better place.

Figure 1: The Concept of Old Reality



Education played a major role to enhance better understanding of how to shape virtual reality and address distance barriers and communication. The web together with other technologies such as the e-mail, information systems, multimedia made a difference in the physical reality of human beings.

Present Reality

In this decade and the onset of the new millennium that a new revolution took place, the web revolution. The web revolution spun from the information age and made the world “flat” as Thomas Friedman phrased it. The “leveling of the playing field” takes place, small and big individuals have a chance to participate (Friedman, 2006). The web revolution became a very liberating take off point to so many ideas and technologies that everyone and every idea have to be connected in the web. There is e-learning, e-commerce, e-marketing, e-scriptures, e-governance, e-services, e-society and so on. Web revolution is one of humans’ best accomplishments.

The web gave education a leverage to become more dynamic, more progressive and more encouraging. And with the group of Tim O’Reilly’s introduction of Web 2.0 technologies (O’Reilly, 2008), the hope of bridging the issue of the digital divide have better chances. Collaboration and sharing in blogs and wikis empowered humans to contribute and participate to generate knowledge and information. The same principles of collaboration coupled by self-service ideas are also employed by torrents. As a member in a torrent shares something, she becomes a seed whereas if she gets only what she needs in most occasions, she is considered a leech (Kayne, 2009). It is a good model of participation. All of these led to creation, generation and distribution of web knowledge, information and resources.

Table 1: Comparison of the Physical Reality and the Virtual Reality

Physical	Virtual
<ul style="list-style-type: none"> • Valued resources • Old media • Intellectual property/authorship • Formal & leveled collaboration &/or cooperation • Accountability • Creativity 	<ul style="list-style-type: none"> • Free resources • New media • Attribution/ Re-user & Re-creator • Open collaboration, sharing & participation • Little or no liability • Lesser thinking & rethinking

Physical reality and virtual reality now coexists. In the virtual reality, there is abundance of free resources in the form of data, software, research materials, application tools and other information; new media resources like music, videos, podcasts and images; and other web services. In the physical reality, the similar resources are available for a price or good value. The old media are still very much limited to TV, news, and print.

Authorship and ownership of ideas are very much embraced in the physical world. On the other side, reuse, recreation and distribution of works are very common that practical attribution as recommended by Creative Commons has now become a de facto standard to many countries trying to protect and share their work especially for media files. Flickr for instance, a popular photo site claims to host 36 million Creative Commons' licensed photos and images (Cheliotis, 2007).

Figure 2: Physical Reality and Virtual Reality Coexists



The present reality now exhibits a more mechanistic world with less freedom and more rules and procedures (as shown in Figure 2). Virtual reality is having more freedom and everything is free — information, knowledge, self-service learning, new media and all the resources needed to learn and develop. Education becomes a facilitator of learning as learning becomes self-service.

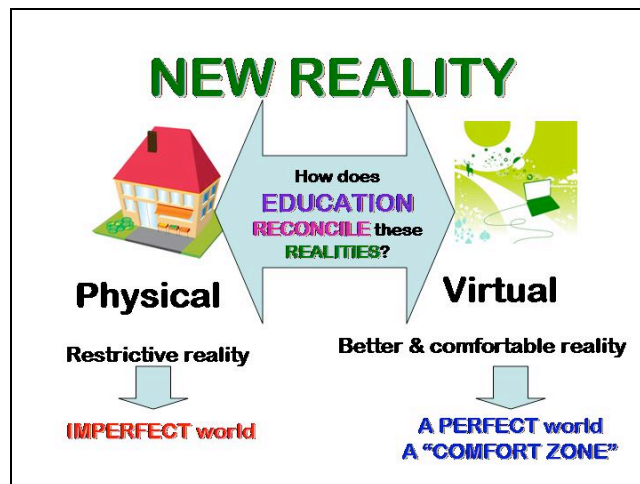
New Reality

We observe now two faces of reality — the physical and the virtual. It used to be just the physical reality. It may be perceived that the virtual reality is a deconstruction of the physical reality.

The present virtual reality experienced by everyone is very good. It is too good that it is becoming a better, comfortable and preferred reality for many people. This virtual world has become “a comfort zone” when just a few decades back, virtual world is just a pigment of film imagination.

Allan Kirby noted the Internet as a phenomenon of pseudo-modernism, where pseudo-modernism is an ideology that “makes the individual’s action the necessary condition of the cultural product”; “a globalised market economics raised to the level of the sole and over-powering regulator of all social activity”(Kirby, 2006). And that “pseudo-modernism *takes the world away*, by creating a new weightless nowhere of silent autism” (Kirby, 2006). When Kirby made these statements he is referring to the web culture that is taking place now. And this pseudo-modernism state puts people in a trance that they are all swallowed by the web, a “comfort zone.” (Refer to Figure 3.)

Figure 3: The New Reality



Issues faced by education. As virtual reality becomes an incidental deconstruction of the physical reality, education is now facing some issues. First, with physical and virtual realities coexisting what happens to people or young students when they view the virtual world as a better world, as a comfort zone and a preferred reality? A hypothetical case scenario like this can happen. College students and young, working people spending a minimum of four hours a day in the web where they engage in social networking, watching videos or news, or

playing online games. First, online engagement is perceived to be physically safe and economical. Second, they do not have to be responsible by purchasing a newspaper, a music CD or video for personal consumption because they can get these items for free. And these are just some of the things that become the general opinion perpetuated by the comfortable “virtual reality”.

Second, how does education reconcile these physical and virtual as both physical and separate realities and not the virtual as an extension of the physical? And that the virtual is not an ideal simulation of the physical? Another hypothetical case scenario is this. A little boy is taught at home that lying and cheating are bad things and that he should always be honest. But when it comes to playing video games in the computer or the web, he can actually download quickly and for free a set of cheat codes for his games. Everyone is able to get hold of the cheat codes for free including his classmates. And no physical harm is done. Does this mean that it is alright to cheat and maybe lie virtually to get the cheat codes but not in the physical world?

Third, as these two realities coexist, how does education sustain enhancing humans’ capability to understand the world or these worlds, to address the problems of these realities independently? With the convenience of getting information in one’s fingertips, people and even young students are becoming less critical, less creative, less resourceful and maybe less responsible. Everything they need can be easily retrieved from the web. When they get the answers, will it be just a matter of selecting which reality should be addressed? And when they do not get the answers, will they know where and how to get the answers?

Scrutinizing the two realities. Emmanuel Levinas, a Lithuanian born with Jewish parents and who later became a French citizen, had made analysis of metaphysics as directed towards “elsewhere, the otherwise or the other.” He claimed that people are “entities living in a concrete world of experience but driven by the desire for the other” (Edgar & Sedgwick, 2002). People will have this metaphysical desire and satisfaction is derived from this desire. The metaphysical desire aims for “the other” and this other refers to goodness beyond anything that can complete it. The desire deepens and strives for goodness.

Driven by the great desire of the physical reality to solve its human problems and the desire for a more “free” world and the virtual reality becomes the “other.” The virtual reality is a metaphysical desire of the physical reality.

Figure 4: Illustration of Levinas' the Self and the Other

The Self and The Other



Figure 5: Another Illustration of Levinas' the Self and the Other

The Self and The Other



In Levinas' theory, to preserve the "other", the other cannot become an object of knowledge or experience within the totality of one's personal ego system. The person is "living from" which uses up the other in order to fulfill its own needs and desires (Robbins, 2000).

Conclusions

As this essay moves to its conclusions, the issues posted in the previous section will not be answered but a mindset will be used to guide educators in setting directions to address the issues.

The physical and the virtual realities are not two different entities. The virtual reality may be viewed as the desire state of the physical reality in the past. There might have been a subconscious, conscious or even an unconscious desire for such virtual state or condition.

The virtual reality becomes an object of knowledge or experience for the physical reality at some point. But that condition has progressed.

Such desired condition is different from the physical satisfaction experienced by most people like having a sumptuous dinner or a walk in the park. It is a “metaphysical desire” as Levinas would put it. (Edgar & Sedgwick, 2002) And the intention of this metaphysical desire is goodness.

So evidently, the human desires such as freedom, openness, sharing, social interactions, communication, ubiquity, and abundant resources are now present in the virtual world. All of these were made possible by technology, by the web and primarily, by the physical reality.

As the virtual reality now occupies space, it also enjoys freedom. But a relationship exists between the two. The physical is responsible to the virtual without mutual reciprocity. As the physical becomes responsible, it should benefit from the virtual as “a source of satisfaction and happiness” in Levinas’ context. This means the benefits harnessed from the virtual world should address the inadequacies, the needs, the obstacles of the physical world. And these should result to the virtual becoming a source of euphoria, gratification, and content.

With this mindset, education will now be in a better disposition on how it should dispense its efforts and energies to guide the students, especially the young generation and the audacity to face the dynamism of web culture.

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