

Conference Paper

YouTube, Learning, and Transformative Critical Pedagogy

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ORCID:*Achmad Tohe*: <https://orcid.org/0000-0003-4516-4466>**Abstract**

Fundamental changes that have taken place in the realm of information technology—particularly with the emergence of the Internet—have altered significantly ways by which people communicate, interact and exchange information. Similarly, in the realm of education, the same events have changed the ways by which teaching and learning were conducted. Indeed, the integration of technology into learning has made the learning process more interactive, collaborative and experiential. However, any innovation in the education, as a result of advances in technology, is not an end in itself, but one that must be based on scientific research. This study was a library research, seeking to evaluate some of the existing efforts in integrating YouTube into learning and review a series of critical examination of such practices from the perspective of transformative critical pedagogy. The study showed that the majority of learning that has made use of YouTube demonstrated a high access to the material, a more successful learning, and an increased motivation of students to learn even further by searching more relevant videos. Nonetheless, for YouTube's integration into learning to be transformative, it needs clear philosophical and pedagogical foundations. Otherwise, it may serve as the fulfilment of capitalist consumerism.

Keywords: technology, integration, learning, YouTube

1. Introduction

Fundamental changes that have taken place in the realm of information technology—particularly with the emergence of the internet—has altered significantly the ways by which people communicate, interact, and exchange information with each other. In the realm of learning, the breakthrough of information technology has changed the ways by which it is conducted. Learning in class has become more interactive with the aid of technology. What had previously been a physical class has now transformed into a remote classroom, combined classroom, and even a purely online classroom, especially during the Covid-19 pandemic (Teräs et al., 2020). The learning materials can now be accessed electronically online, regardless of wherever the students are (Cheung et al., 2017).

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In short, digital education has today been widely promoted in the world, especially in developed countries (Allen et al., 2007). Such online learning community has provided a space for both students and teachers to communicate with each other using the internet that results in an independent acquisition of knowledge and enables them to exchange values, expertise, and understanding of the learning materials (Keengwe et al., 2010) (Kim et al., 2006).

Many lecturers and teachers have taken advantage of YouTube and other social media sites to circulate information, or to integrate the available content into learning process (Haase, 2009) (Jones & Cuthrell, 2011). Known as “pedagogy 2.0” (Mcloughlin & Lee, 2008), such learning activity has offered opportunities for participation (collaboration, connectivity, and community), personalization (learners’ choice and adaptation), and productivity (creativity, innovation, and contribution toward knowledge). It is further suggested that learners using Web 2.0 tools have more chance to be competent in some or all of the following skills: digital competence centred on creativity and performance, meta-learning strategy (such as learners-designed learning), inductive thinking models and creative problem solving, creation of user-based content and collaborative knowledge development, as well as horizontal learning (from friend-to-friend) and contribution to learning community (Mcloughlin & Lee, 2008).

Today, learners seem to have been well prepared to participate in this digital era. Youth, known as “digital natives” (Prensky, 2001) or “millennial learners” (Howe & Strauss, 2000), spent much of their time for browsing the internet with different purposes, including learning. Digital technology and social media have played an important role in their daily lives, permeating almost all of their social, extracurricular, and leisure activities. Robert and Kidd (2017) suggested that millennial learners believed technology must be used in the classroom, for it suited their style and capability to understand and memorize information. Indeed, technology integration into learning has made the learning process more interactive, collaborative, and experiential (Oblinger & Oblinger, 2005) (Skiba & Barton, 2006). More importantly, however, any innovation in the educational world, as a result of advances in technology, is not an end in itself, but one that is based on the scientific research, and, in this respect, the use of social media in learning, is promising (Mallia, 2014).

That being said, combining learning system and technology requires a comprehensive approach with regard to its adoption, pedagogy, and assessment. Researchers, educators, learning designers, technological experts, and learning professionals must therefore collaborate with one another to collectively overcome challenges. Any counterproductive factors against technological integration into learning must be seen as

challenges, rather than problems, particularly considering the positive impacts that technological advances have to offer.

2. Method

This study was a library research, which reviewed a wide range of studies that had been undertaken with regard to efforts made to integrate technology, especially YouTube videos, into learning. In so doing, the researcher had attempted to include the latest studies published regarding the use of YouTube videos in classroom learning, and also elaborated on how such a technological integration should be executed in order to achieve the best results. A wide range of research, from science to art learning, which had touched upon YouTube's integration into learning, were then confronted and elaborated to arrive at the general views with regard to its viability and productivity.

3. Result and Discussion

3.1. Internet-based learning

One of main goals of the higher learning is to sustain a learning society by inspiring and enabling individuals to improve their capability, as well as possible, throughout their lives and improving their knowledge and their understanding of that knowledge to take advantages—economic, social, and so forth—from its application in society. One of the best strategies to realize it is by making learners interested in the subject matter, regardless of any technics being used, inside or outside the classroom. Once learners interested in what they are studying, and are able to see immediately what they are gaining from learning, the learning process will become intuitive and enjoyable (Yang et al., 2015).

One of the strategic ways to attract students' interest in learning material is by making them relevant to their lives. John Dewey (2004), for instance, once challenged educators to “meet students where they are.” In this respect, the use of information technology in learning, particularly videos, is acknowledged as having a promising potential, especially nowadays when the use of the internet has dominated the space for information exchange, especially among the youth (Siegle, 2009).

Many studies have shown successful learnings as a result of technological integration, especially online videos. Provided, technology integration into learning is almost unavoidable. Students' lives have been to a great extent dependent upon online

sources. Students' interaction with printed materials have become much less. When they need information, they can now access it very quickly through their handphones and laptops that are constantly connected to the internet. As such, internet has become a virtual library that provided not only answers to most of their questions but, more importantly, also are accessible quickly and easily. Furthermore, more than passive users, some students have also contributed to celebrating the online world, by uploading their writings and videos of their own production. YouTube, for instance, provided two billion videos daily (Dreon et al., 2011). The sheer number of online videos available has been a valid justification for making them as learning material (Chtouki et al., 2012).

The majority of learning that has made use of YouTube, both as media and learning sources, demonstrated a high access to the material. Students felt encouraged to search for more relevant videos, in addition to those provided by teachers (Chtouki et al., 2012). This suggested that learners found YouTube's integration into learning was as productive as it was stimulating that they were willing to learn more about a subject matter by voluntarily searching other relevant videos. Furthermore, the use of YouTube had demonstrated a significant transformation in students' perception and attitude with regard to the learned material (Chtouki et al., 2012). Watching videos had provided students with knowledge in terms of the immediate implications of what they were studying in their lives.

3.2. Millennial generation and learning styles

The younger generation of students today were born and grew in a digital world (Duffy, 2007). From early on, these young people had been introduced to technology that had shaped their cognitive and emotional development. In addition, the use of technology has also built their capability for decision-making and problem solving (Couse & Chen, 2010) (Jones & Cuthrell, 2011). As a result, many educators have actively integrated various technologies into learning in class, and, at the same time, these technologies have enabled them to adapt the learning according to various students' needs (Ghavifekr & Rosdy, 2015). Based on existing research, for example, spatial-visual learners gain a great benefit from visual tools presented in class, such as photos, icons, and videos (Rapp, 2009).

Mullen and Wedwick (2008) believed that the digital era leads to an educational revolution that will eventually change the face of learning, and provides a space for both learners and teachers to channel their voice. Nowadays, both teachers and students entered a classroom bringing with them technological products that can be exploited

be for learning purposes. Students were however of different types, and they had different learning styles, which impacted their academic performance. Considering that technology has taken over some aspects of students' learning, which influenced their personality, including their attitude and approach to learning, it is also necessary that teachers improve both knowledge and skills in using technology in their teaching (Taghizadeh & Yourdshahi, 2019). It is part of the responsibilities of educational institutions to provide them with technology-based professional development programs, in addition to a greater investment for technological tools needed.

Using technology in class, these millennials felt in control of what they were learning and allowing them to use—moderately and under a strict guidance—what they have used a lot outside the classroom, such as texting, instant messaging, and social media, would create some flexibility in learning. Researchers were convinced that the use of technology in education is beneficial to learners, as long as the approach used to learning is one that is student-centred (McCarthy, 2015). It is precisely this feature that has distinguished what was called “Montessori education or approach” from a standard class learning. In the Montessori system, task-undertaking, be it individually or in a group, was executed in a manner that expected students to invest for his/her own development, attempting to achieve or maintain deep concentration, and finding some enjoyment therein (Cossentino, 2006).

The integration of mobile learning in class can also improve critical thought and thinking skills, because students continue learning, not only inside but also outside the classroom. In the mobile learning, learners are responsible for their own learning, while teachers merely act as consultants and facilitators, learning with them, improving their motivation, and assisting them to remove the obstacles they are facing (Ozdamli & Cavus, 2011).

3.3. YouTube and some challenges

We have so far learned that YouTube offers a great potential for innovative learning, as an educational tool for delivering information and presenting something, and as a forum to conduct critical analysis and offer comments. Different subject matters, such as literature and math, began to use YouTube (Mayora, 2009) (Niess & Walker, 2009). When learning history, more than reading about past historical events, students are now witnessing themselves when those events were unfolding (White, 2009). Likewise, more and more teachers started producing videos for teaching (Haase, 2009).

Schuck and Kearney (2008) suggested that teachers could reinforce a culturally authentic and responsive teaching when they made use of videos. They also found out that the use of videos had resulted in a high achievement, which in itself was far more valuable than the cost spent to access the technology. Berk (2009) offered the same view with regard to the effective use of videos as learning media, because they seized students' attention, create their anticipation, and improve their memory of the delivered content. Moreover, the possibility to be able to watch such videos repeatedly suggests that the same experiences can be re-walked more than once, without any resort to memory. Videos can do something that other media cannot or do it only with some difficulty.

Many universities are now uploading their lectures online and even cooperate with YouTube to build their own channels, registered under YouTube EDU. Such channels have allowed users to have a free access to more than hundreds lectures from hundreds of universities (Sherer & Shea, 2011). Equally, students are now much more dependent on YouTube as a reference in finishing their assignments. This could be part of the reasons that have made YouTube the most well-known video-hosting service in the social media domain (Balakrishnan & Griffiths, 2017).

The use of YouTube in learning, however, has posed some challenges (Hobbs, 2018) (Mullen & Wedwick, 2008) (Hunt, 2007). **First**, as an open social networking site, YouTube's integration into learning requires a critical ability of its users to select relevant material that has clear educational values, for it contains both valuable as well as garbage contents. Therefore, users will have to examine critically its contents' credibility, accuracy, and support to learning goals. **Second**, the availability of YouTube content for access. There are, for instance, institutions that ban YouTube from access, primarily due to the consideration of some of its inappropriate contents. **Third**, there is a possibility that the same contents cannot be found anymore, at a certain time, for they have been removed by their uploaders due to a number of reasons. **Fourth**, copyright infringement, which has often been one of the main reasons why many YouTube videos had been deleted. Illegal videos have routinely been uploaded to YouTube, and they are routinely removed on the request of their copyright holders.

3.4. YouTube and transformative critical pedagogy

Regardless of these challenges, however, educational experts and practitioners, in general, insisted on YouTube's educational values and regarded these challenges as something to overcome. In a more philosophical perspective, especially with regard

to critical pedagogy, the burst of information technology such as YouTube has been understood as providing a set of opportunities for many people, which they did not have before, in order to criticize the structure of existing educational power and to participate in taking control of education (Kellner & Kim, 2010). The monopoly of knowledge and educational institutionalization has been questioned by new technological media, which eventually allows for the decentralization of interactive communication and participatory as well as democratic cultural mode. As such, alternative voices emerge and the information now spreads much widely and, at this point, education and democracy meet. Ultimately, two-way dialogical communication and many-to-many collective communication have been in place since the advent of the internet and social networking sites. Thus, technological advances have strengthened voluntary individual participation in mutual education through the mushrooming new voices and visions, which give way to knowledge democratization (Trottier & Fuchs, 2015).

YouTube has enabled individuals to undertake mutual pedagogical practices, instead of reproductive educational mode, in line with the idealized vision of Habermasian public sphere, that is, a shared space built upon the idea of “communicative rationality” that stands on mutual understanding and persuasion (Habermas, 1991). Habermas believed that every individual has to seize his/her personal autonomy and exchange ideas openly in order to build a consensus in a universal discourse situation in a public space, within which the best arguments prevail.

In a broader perspective, the internet has afforded individuals opportunity to reclaim education as a space for self-fulfilment and personal autonomy with no restriction imposed by standardized institutions and curriculum. In order to do this, the internet and new media have to be conceptualized in their relatedness to political economy, social relations, and political environment in which they are reproduced, circulated, and accepted, so that their socio-political potential and limitedness can be better elaborated. If not, such new media and technology will only lead to social reproduction and serve as part of social domination apparatus (Giroux, 2011b) (Kvasny & Truex III, 2000).

In this context, Kellner and Kim (2010) argued that the new media such as YouTube, if combined with transformative critical pedagogy, can help realize the internet’s potential for democratization and transformative pedagogy, while admitting its limitations. Critical pedagogy offers a discourse of plurality, difference, and multi narratives that are able to explain the domination mechanism and emancipation dynamics (Giroux, 2011b). Taking advantage of any opportunity that the internet media offers, individuals are able to organize and use new strategies for self-education and social transformation.

Believing that public pedagogy represents moral and political practice, rather than simply a technical procedure, Giroux (2011a) is convinced about the transformative potential of the new media for education. In addition to practical political intervention, many pedagogical discussions on YouTube also took place in some videos made by individuals. Such dialogues and discussions among YouTubers are clear moments of learning by doing, learning as a process, and learning as communication in a public space through the internet media. The video clips production, to a certain extent, is a realizing moment of human agency by developing a narrative that brings further the transformative potential of this new media's pedagogy. Thus, by producing and uploading video clips on YouTube, as a form of public pedagogy, these individuals were participating in mutual transformative pedagogy through dialogue and felt the force of such performative pedagogy for social transformation.

The idea of lifelong education is closely related to the pedagogical values of learning by doing. The true educational value, according to Rousseau (1764/1979) and Dewey (1916) is self-realization, and which cannot be accomplished in the classroom (Kellner & Kim, 2010). In respect to YouTube, as long as people have access and are willing to access it, the opportunity to upload and watch videos is unlimited, and the learning process, therefore, continues to take place, in a learning by doing mode. As part of a lifelong renewal process and self-realization, education is an ongoing communication between members of society through participatory dialogue and also self-reflection. Furthermore, learning as communication is a fundamental component of problem-posing pedagogy, which prerequisites a dialogical communication between learners and teachers in which both are equally learning and teaching each other mutually.

In the context of the significance of mutually dialogical communication between its constituents in learning, Freire (1970/2006) stated that one must live with others in solidarity. He/she cannot force him/herself to do so, or "simply" live with other people. Solidarity (for learning and self-emancipation) requires a true and real communication. Although communication via YouTube is virtual, it enables a dialogical communicative dialogue (Freire, 2005).

Along with the decentralization of the structure of the internet technology, individuals have a wider space to participate in the public sphere. YouTubers have demonstrated the pedagogical power of learning by doing, learning as communication, learning as self-fulfilment, and learning through reflection. As such, YouTubers can develop agency and actively participate in an interaction space in terms of actual issues in an actual place and of alternative views of an occupied environment (Kellner & Kim, 2010).

Criticizing the reproductive role of education in a capitalist society that is inegalitarian, Marcuse (1968) stressed the importance of education for emancipating humanity from exploitative social relations. Such transformative education suggests that educational practices are not value-free and merely technical in nature; instead, it is an ethical involvement for political justice and transformation. In the Marcusean vision, individuals have to implement “the application of knowledge for the improvement of human condition, and for thought and body liberation from aggressive and repressive needs (Farr, 2019).

Therefore, concrete forms of YouTube’s use by its users are important, because its actual effect depends on specific practices and goals. Thus, YouTube’s practical application with certain socio-political intention help realizes its pedagogical potentials. For this reason, it is significant to support the use of the internet media that is more emancipatory for social transformation. It is the responsibility of educators and individuals to use YouTube in a progressive and politically responsible way. YouTube’s future is open for all of the different uses, and it is a contested area, as any other established forms of media and culture in society. Practitioners of critical pedagogy should take advantage of YouTube in order to construct alternative internet culture and, eventually, promote certain values with respect to the human agency, grass-roots democracy, and socio-political reconstruction.

As a communicative medium, YouTube can be a potential model for a Deweyan pedagogy, regarding “learning as communication.” For Freire, the revolutionary potential of communication that liberates the oppressed can be facilitated by the internet. YouTube can serve as the birthplace of critical, communicative pedagogy in a multimedia society. For Rousseau and Wollstonecraft, education is to improve the rationality of individuals for realizing an autonomous human agency (Kellner & Kim, 2010). Displaying and responding to videos on YouTube are fundamental activities of self-realization of the users for they have invested time and energy to think of the topics, organize the ideas, and produce the videos. Through the production of the videos, YouTubers are undertaking a crucial pedagogy in terms of critical human agency, becoming a subject in Freire’s perspective. Commonly, the oppressed have no tool to express themselves, and such self-expression via YouTube is consistent with the emphasis put by people like Wollstonecraft, Toni Morrison, and Freire: the empowerment of the oppressed.

The explanation above ultimately suggests that YouTube requires a critical awareness and active involvement of its users in order to take advantage of it, pedagogically and politically. Regardless of huge potential in terms of progressive pedagogical opportunity that technological innovation such as YouTube has to offer, it is the users that

eventually determine its practical possibilities for transformative pedagogy and social transformation. Kellner and Kim (2010) posited that the progressive use of YouTube and the internet technology supports the important values of critical pedagogy, namely learning-by-doing, learning as communication, learning for an agency, and learning for social transformation. But without a valid vision of critical pedagogy, YouTube can easily be degenerate into a toy for the “advantaged” and an instrument of individual pleasure and expression.

Furthermore, Kellner and Kim (2010) argued that YouTube’s future very much depends on its concrete usefulness for its users. Considering individuals’ active involvement with it, however, both were convinced about YouTube’s bright future because it is centred on the learners, as a manifestation of learning by doing pedagogy. Dewey (1916) stated that a progressive society is one that treats variation and difference as something valuable, for it contains elements that are important for its development (Dewey, 2001, 2004). Variety of views and ways of expression of YouTubers have contributed toward sustaining a democratic public sphere on the internet. By producing and sharing videos, YouTubers have created a boundaryless society, a place for people to share what they are feeling through videos, not only texts. In so doing, they are actually creating YouTube’s future. As there are people who make use of YouTube to debate, exchange ideas, and learn, as long it will survive.

Burgess and Green (2018), viewed that YouTube has the potential to create a new model of culturally cosmopolitan participation with the space for involvement and community formation that it offers. These are new forms of empowering communicative rights but also are dependent upon certain communicative contexts. Tolson (2010) posited, while YouTube is indeed a new form of the manifestation of communicative rights, it does not automatically offer wider democratic practices. YouTube may also create another space for consumerist culture, which characterizes capitalism, indicated by the vast amount of products’ advertisements promoted via YouTube. This is why, as Turner (2010) proposed, there is a need for a historical perspective to control digital overoptimism. Nonetheless, Tolson (2010) remains convinced that YouTube, and other similar sites on the internet, offers something different accessible to wider circles of people.

4. Conclusion

It has now been understood that YouTube has a lot to offer in terms of liberative and participatory education. However, the approach to and the use of YouTube must

be based on clear philosophical and pedagogical foundations. Otherwise, YouTube will only be used for pleasure and recreational purposes, which may bring students away from the academic world. Likewise, without clear pedagogical and political goals, YouTube will merely serve as the fulfilment of capitalist consumerism. In that case, we might have won the battle, but lost the war. “Technology is not a neutral tool with universal effects, but rather a medium with consequences that are significantly shaped by the historical, social, and cultural context of its use” (Light, 2001). Without a clear liberative, pedagogical vision, more use of media and technology does not necessarily beget better learning or critical engagement (Funk et al., 2016).

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