

Critical and Innovative Pedagogies for Social Change (ICT Based Pedagogies and Related Teacher Education)

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Abstract

Our world is changing dramatically and drastically. In the modern world of widening horizons, it is almost impossible to keep going with the technology and pedagogies of the past. Therefore, we need to come up with host of new approaches which employ modern technology. Oliver and Herrington (2003) rightly point out that emergence of new technology goes side by side with emergence of new pedagogies. This is a reflective paper based on author's observation, experience and review of the related literature. This paper looks deep into the modern complex context and comes up with some innovative pedagogies and approaches which can be practised in any context of the world including marginalized classes of society. Innovative pedagogies based on ICT can be a passport for social change. It is very easy to shift to ICT based pedagogies because ICT is everywhere and anybody even the person who is nobody can access internet and be in touch with the world. This paper focuses on the modern innovative pedagogies and gives details of the pros and cons of these pedagogies. Furthermore, this paper highlights another issue as far as the uses of innovative ICT based pedagogies are concerned. As Alexander (2001) points out that e-learning works in a very complicated system where failure of only one part, can affect the whole procedure. Many issues come to forefront. Teachers' training is one of them because no computer-mediated learning can be successful unless teachers' own ICT skills are polished (Kirschner et al, 2006). Teachers need to be educated so that they can further change their own approach. They should be comfortable in using innovative technologies if they want to shift to new pedagogies. This paper will suggest some ways which can help teachers to look towards technology as normal not as something remote.

Introduction

This paper addresses the readers in developing countries in general and Pakistani readers in particular. This paper will make the readers realize the importance of e-learning or the use of ICT in education. Firstly, I will present my research focus and a short discussion about results which justifies the use of ICT in education. The result of this research will be followed by different definitions of e-learning from the contemporary literature. This will lead me to present my own understanding of e-learning which will underpin teaching with modern resources and ICT based pedagogies in the Pakistani context. Secondly, I will give description of some of the features which can be helpful for teaching and learning in Pakistan. This section will also highlight the importance of the resources which can be easily embedded in our existing education system. Thirdly, it will foresee the possible issues which teachers can encounter in the process of introducing blended mode of learning. This section highlights the importance of teachers' training. This section will lead to the conclusion of this paper.

Research Focus

The focus of my research was the students of university at undergraduate level. As far as research methodology is concerned, the students were interviewed individually and focus group discussions were held to find the merits and demerits of blended mode of learning. A short survey was also conducted which proved very helpful in determining the trends of our young generation.

Result and Discussion

In the research process, it became crystal clear that more than 85% students at undergraduate level use internet and 100% students use mobile phones. All the internet users at undergraduate level use social networking sites to communicate with friends. YouTube videos are watched by 92% internet users. The results shown above exhibit contemporary trends of our youth. These trends can be employed for the benefit of the young generation. They can be taught how to learn while using internet and their time spent online can be made fruitful by the teachers. Teachers can modify their traditional teaching style because blended mode of learning is less expensive and needs just extra efforts on the part of teachers. First of all, I will define e-learning and then I will give different ICT based pedagogies which can be adopted by the teachers to make this blended mode of learning a success.

What is E-learning?

The term e-learning has been defined in a variety of ways over the years. It is a rich term with host of varying connotations which may change with the context. According to Monahan et al (2008), in the past, the term e-learning referred to any method of delivery which involved electronic delivery method. But advancement in technology has revolutionized the concept of e-learning. Technology is becoming an important factor of education at all levels. Chen (2009, p. 1) considers it a natural result of rapid development of internet technologies that 'computer-based learning is gradually moving towards web-based learning.' E-learning has become complicated with the rapid development in internet technologies. Now, it can be described as a system which facilitates acquisition and transmission of knowledge and skills through social web based interaction. These days, social interaction has been facilitated by web 2.0 tools which 'allow people to collaborate, to get actively involved in creating content, to generate knowledge and to share information' (Grosseck, 2009, p.1). However, I am of the view that web based interaction using social networking sites, blogs; wikis etc is helpful in creating knowledge. All the participants construct knowledge through collaboration and complement each other in so many ways.

Teaching Philosophy in the Pakistani Context

Being a teacher in Pakistan, I can draw upon constructivist's approach to teaching and learning. Constructivism has been named as 'liberating pedagogy' by Pegrum (2008, p.2). Collaboration through web-based interaction has become an integral part of e-learning. Learning takes place when knowledge is constructed and refined by different participants. Web 2.0 tools appeal to modern teaching and learning just because they are the basic channels which allow knowledge to flow irrespective of time and space. Being teachers, we have to deal with the students who have grown up playing with play stations, internet, iPods etc. They have been termed as 'digital natives' (Prensky, 2001). They challenge teachers' authority as a person who knows everything. They want to explore everything themselves. According to Gutl and Chang (2008), these 'digital natives' are very comfortable in using technology. They rely on technology for communication, learning and entertainment. They are adept in 'multitasking'. Therefore, they need to be dealt with differently by their teachers. It is also a fact that, most of our students in Pakistan are not exposed to most of the modern gadgets but most of them use at least mobile phones and computers in one way or the other. If they do not have computers at home, they can access computer and internet in their school or college labs. For the youngsters, computer and internet is like an addiction and they try to access from their own home, labs or some internet café.

Blended Mode of Learning and the ICT Based Resources

I want to highlight the importance of blended learning because we are destined to shift to the blended mode of learning and it is far more useful than the traditional teaching. Peter and Barrett (2007, p.7) explain its importance in this way:

A blended-learning course is greater than the sum of its parts, and positive learning outcomes are most apparent when clear roles are assigned to the teacher and to the technology.

Blended learning is termed as a process which was destined to evolve from a traditional knowledge-transmission method to a more active, focused and organized mode of learning (Thorne, 2003). Blended learning is not something new but with the advancement in technology, its importance has been refocused and its inclusion into everyday teaching has been highlighted (Cooney et al, 2000; Lim, 2002). Current onslaught of technology has created curiosity among teachers and their familiarity with ICT is an added benefit for them (Donahue, 2001). Pegrum (2010) further argues that it is because of advantages and disadvantages of both e-learning and traditional learning that many educationists are exploring and following blended mode of learning so that they may 'capitalize on their complimentary strengths'.

As far as ICT based resources are concerned, everybody in a group can influence each other's approach. Collaboration and discussion opens new venues and possibilities for teachers. This imperceptible process will normalize technology for the teachers and as a result for the students too.

Blogs & Wikis

Blogs and wikis can go a long way to help teachers overcome their hesitation in using technology or in other words, it will make technology appear normal to them. In addition, they will also realize that their teaching is 'driven by the pedagogy and supported by the technology' (Peter & Barrett, 2007, p.14). Group blogs or wikis can be introduced at class level. Teachers can give freedom of experimenting with a whole new world to their students and students will also find it exciting to add their own material or edit the posts sent by their class mates. It will help them in generating new ideas and a culture of sharing will be automatically developed.

Discussion Boards

Asynchronous discussion boards are important part of this blended mode of learning. It also liberates students and teachers from a narrow class room environment. Though there is a room for comments in blog post themselves which provide a base for discussion but separate discussion boards can be introduced for the convenience of the teachers and students.

YouTube Videos

Students should be encouraged to watch related YouTube videos. It will enable them to learn while enjoying. They can be encouraged to make and post videos to YouTube it is possible for them.

Twitter

Twitter is a micro blogging site and one of the most popular platforms to keep you updated. Teachers can encourage their students to follow their tweets. This will develop the habit of following others' tweets and posting their own tweets in the long run.

Social Networking Sites

Social Networking sites are becoming an integral part of our life in general and life of our young generation in particular. Most of the students use social networking sites to stay in touch with their colleagues or friends. Therefore, it is desirable to make use of this platform for teaching and learning.

E-learning and Teachers

Trigwell's (cited in Alexander, 2001) model of e-learning emphasizes on the importance of contact and then teachers' thinking, planning and strategies because dream of e-learning cannot be realized unless teacher understands its spirit and they know how to employ suitable strategies according to the context.

The Concept of Normalization and Teachers' Training

But this kind of shift even to blended mode of learning has a lot of hurdles on the way. The use of blended learning will improve when teachers are well trained and their own ICT skills are polished (Kirschner et al, 2006). The major hurdle in the adoption of blended mode of learning is attitude of teachers themselves. It is even difficult for teachers themselves to be adept in using and integrating e-learning with the traditional learning. Usually, they take e-learning as a burden because it is difficult for them to embrace changes and following traditional style of teaching seems a smooth sailing. No dream of e-learning or blended learning can be realized unless teachers feel comfortable in embedding tools of e-learning in their teaching and it is just another routine task for them. Experiments with web 2.0 tools in teaching and learning and embedding them in traditional mode of transmission can be an added benefit. This kind of experiments may open new venues of learning for teachers themselves but they are hesitant in using these easily available tools. Most of the teachers use these tools for personal communication. Therefore, it needs only a little effort on their part if they want to use web 2.0 tools for education of their students. Chambers and Bax (2006) have already pointed out that education cannot be enriched with web 2.0 tools unless teachers are comfortable in using them and technology appears normal not something novel to them. Stephen Bax (2008) expands his argument of normalization by stressing on the point that there is different kind of normalization ranging from individual to institutional and social level.

Professional training of teachers is important in every context and setting and at every level but it becomes even more important when it comes to e-learning because technology has eroded traditional mode of learning and it has to be adopted and embedded in teaching and learning irrespective of teachers' choice. Teachers might be familiar with the use of technology but according to Pegrum (2008) teachers should be concerned less with technology and more about its pedagogical use. He further argues that knowledge of pedagogical principles is more important than knowledge of technology itself. In this scenario where integration of ICT practice within the whole curriculum has become unavoidable, teachers need to know how to benefit from modern social web and how to convert it into learning and teaching medium.

A review of UNESCO suggests that 'For education to reap the full benefits of ICT in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies'(UNESCO,2002,p,13). Teachers should also know how to mobilize students themselves and how to play the role of facilitators. So, it is a dire need of the day that teachers should be trained so that it may become easy and enjoyable for them and they can exploit young generation's interest in social web. Unwin(2004, p.19-20) gives a comprehensive roadmap of teachers' training with the help ICT. He recommends the development of a culture in teachers' training where they can communicate and share through the use of e-mails, text messages and social networking sites. He suggests that teachers' training programs should be built on the skills which the teachers already have and gradually, teachers will become habitual of using ICT.

Conclusion

It is need of the hour to embrace blended mode of learning even in developing countries where basic infrastructure in the institutions is not available. It is not an uphill task but it needs a little bit extra effort on the part of teachers and head of institutions. Teachers should be trained because teachers are the torch bearers of any change in the society. They can mobilize students by using ICT. Teachers' use of innovative ICT-based pedagogies can pave way for a positive social change. If teachers are well trained and technology starts appearing 'normal' to teachers and students, they will be able 'to extend, enhance and enrich learning activity' (Chang & Uden, 2008, p.1).

References

- Alexander, S. (2001). E-learning developments and experiences. Technological Demands on Women in Higher Education: Bridging the Digital Divide, Cape Town.
- Bax, S. (2008). *Bridges, chopsticks and shoelaces*. Plenary paper presented at WorldCALL 2008, Fukuoka, Japan, 6-8 Aug
- Chang, V. and Uden, L., 2008., Governance for E-learning Ecosystem, 2nd IEEE International Conference on Digital Ecosystems and Technologies Conference (DEST) Proceedings, Phitsanulok, Thailand, February.
- Chambers, A., & Bax, S. (2006). Making CALL work: Towards normalisation. *System*, 34(4), 465-479.
- Chen, C.-M. (2009). Personalized E-learning system with self-regulated learning assisted mechanisms for promoting learning performance. *Expert Systems with Applications*, 36(5), 8816-8829
- Cooney, M., P. Gupton, et al. (2000). "Blurring the lines of play and work to create blended classroom learning experiences." *Early Childhood Education Journal* 27(3).
- Donahue (2001). "Florida Junior College Pioneer Blended Learning." *Distance Education Report* 5(10).
- Grosbeck, G. (2009). *To Use or not to use web 2.0 in higher education?* Paper presented at the World Conference on Educational Sciences, Nicosia, North Cyprus, 4-7 February 2009 - New Trends and Issues in Educational Sciences Retrieved September 22, 2009, from http://www.sciencedirect.com/science?_ob=ArticleListURL&method=list&ArticleListID=1019488532&sort=r&view=c&acct=C000050221&version=1&urlVersion=0&userid=10&md5=678fa8b7ad2c39365e14fcefdd41954
- Gutl, C., & Chang, V. (2008). Ecosystem-based Theoretical Models for Learning in Environments of 21st Century. *iJET*, 3(3'(ICL2008)), 50-60.
- Kirschner, P. A., J. Sweller, et al. (2006). "Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching." *Educational Psychologist* 41(2): 75 - 86.
- Lim, C. (2002). "Trends in Online Learning and Their Implications for Schools." *Educational Technology* 42(6): 43-48.
- Monahan, T., McArdle, G., & Bertolotto, M. (2008). Virtual reality for collaborative e-learning. *Computers & Education*, 50, 1339-1353.
- Oliver, R. and J. Herrington (2003). "Exploring Technology-Mediated Learning from a Pedagogical Perspective." *Interactive Learning Environments* 11(2): 111-126.
- Pegrum, M. (2008). *Essential conversations: 4 visions of CALL*. Paper presented at [World CALL](#), Fukuoka, Japan, 6-8 August. [[handout](#)]
- Peter, S. and B. Barney (2007). Blended learning: an introduction Blended learning : using technology in and beyond the language classroom Oxford, Macmillan p. 7-15
- Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon*, 9(6), 1-9. Retrieved September 22, 2009 from <http://www.marcprensky.com/writing/default.asp>
- Thorne, K. (2003). Blended learning: how to integrate online & traditional learning United States, Great Britain, Kogan Page Limited.
- UNESCO (2002). Information and Communication Technologies in Teacher Education: planning Guide.
- Unwin, T. (2004). "Towards a Framework for the Use of ICT in Teacher Training in Africa." *The Journal of Open and Distance Education* (For Special Issue of Open Learning in Less Developed Countries