

Digital Pedagogy

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ABSTRACT

Digital pedagogy is using digital tools to enhance teaching and learning experience.

It offers the possibility of enabling more interaction among students and instructors and increasing student academic success. Educators who incorporate digital pedagogy in classroom re-creates the contemporary worlds which their students encounter every day. This paper provides a brief introduction to digital pedagogy.

Keywords: digital pedagogy, pedagogy in cyberspace

INTRODUCTION

Digital technologies permeate every aspect of our life – education, communication, culture, government, banking, marketing, health, corporate organizations, logistics and transport, etc. Some of these are taken for granted - automatic tellers, smart phones, email, digital camera, social networking, and GPS navigators for cars. Digital technologies and media have affected the education community, how we teach and how students expect to learn. They are transforming our classrooms and empowering students to become researchers in their own right.

PEDAGOGY IN CYBERSPACE

Digital technologies have caused a knowledge explosion and changed learning environments. These changes pose significant curricular and pedagogical challenges [1]. Regular pedagogy is the field that deals with the theory and practice of education [2]. It encompasses what we teach, how we teach it, and why it matters in our societies.

Digital pedagogy refers to using digital technologies to change teaching and learning. It is using ICT (Information and Communications Technologies) to enhance teaching and learning. It is teaching within and beyond classroom. It may take the form of using power point in the classroom to offering online education. It enables effective learning, which is active, creative, and for life. It promotes distributive learning, complex inquiry, and accountability [3].

Digital pedagogy involves using classroom technologies, instructional design, web development, collaborative maps, course blogs, lecture capture, multimedia assignments, online courses, online journals, collaborative text, and visualization projects. Digitally able educators are characterized by their comprehension of the subject and enabling connections.

ISSUES WITH DIGITAL PEDAGOGY

Digital technologies offer new opportunities and challenges for educators. However, incorporating these opportunities into curriculum and instructional practice poses a significant challenge for educators and policy makers [4]. The ways in which these tools are adopted and implemented appear to be ad hoc, rather than systematic. The impact of digital technologies of pedagogies has received mixed and often polarized reactions among educators.

First-order barriers to the integration of ICT in teaching and learning include lack of resources, time, access and technical support. Second-order barriers are educators' beliefs in ICT and their practices in the classroom [5]. Younger educators who grew up in the digital age ("digital natives") are at the cutting edge of implementing all sorts of technologies in the classroom and are at loggerheads with the older educators who barely use technology and are skeptical about it. Some critics think that we have taken digital pedagogy too far. Although students are constantly on the move (tweeting, texting, listening music, networking, playing games, and answering to emails and messages), one is not sure if they are retaining anything. The illiterate of the twenty-first century will be those who cannot learn, unlearn and relearn [6].

CONCLUSION

The digital era has introduced a networked world and allows access to knowledge from any location at anytime. This access will continue to move faster than we can keep pace.

Digital pedagogy provides educators with several opportunities to use technology to facilitate and improve teaching and learning. Interest in digital pedagogy has grown significantly in academic community with the rise of workshops, conferences, and journals. Teaching in the 21st century requires technological knowledge in addition to content knowledge. The higher education providers are duty-bound to ensure that graduates from our institutions are adequately prepared to be effective teachers for the digital generation [7].

REFERENCES

- [1] "Pedagogy," *Wikipedia*, the free encyclopedia, <https://en.wikipedia.org/wiki/Pedagogy>
- [2] T. M. Weis et al., "Digital technologies and pedagogies," *Social Justice*, vol. 29, no.4, 2002, pp. 153-167.
- [3] M. Paranandi, "Making ripples: rethinking pedagogy in the digital age," *International Journal of Architectural Computing*, vol. 11, no. 4, 2013, pp. 415-436.
- [4] L. Casey and B. C. Bruce, "The practice profile of inquiry: connecting digital literacy and pedagogy," *E-Learning and Digital Media*, vol. 8, no. 1, 2011, pp. 76-85.

- [5] S. Prestridge, "The alignment of digital pedagogy to current teacher beliefs," *Proceedings of Digital Diversity Conference*, Melbourne, Australia, April 2010.
- [6] I. Palaiologou, "Children under five and digital technologies: implications for early years pedagogy," *European Early Childhood Education Research Journal*, vol. 24, no. 1, 2016, pp. 5-24.
- [7] C. Kivunja, "Embedding digital pedagogy in pre-Service higher education to better prepare teachers for the digital generation," *International Journal of Higher Education*, vol. 2, no. 4, 2013, pp. 131-142.

