

Benefits and Challenges of Digital Technology

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1. Introduction

In recent education the question how to use digital technology in the classroom. Digital processing systems that encourage active learning knowledge construction, inquiry and exploration on the part of the learners and which allow for remote communication as well as data sharing to take place between teachers and /or learners in different physical classroom locations. This is an expanded notion of technologies that recognizes their development from more information delivery systems and also clarifies their role in classrooms in contrast to their role in classrooms in contrast to their wider use across schools and learning centers. It is important to base our conclusion on perceiving learning of knowledge, creation, rather than emphasizing more knowledge acquisition. 21st century skills are integral parts of learning. The knowledge practices of digital natives are different from previous generations, even though there is no assume that their cognitive system is profoundly different from ours. They have just extended their minds differently with new kinds of tools.

2. Digitalization

Technological and computer skills of teacher educators are important dimensions for digitalization of education. Technology in Education is a comparatively new phenomenon most expert teachers are not technologically skilled when they entered the profession yet to effectively expand the range of instructional opportunities that can be offered to students, teachers must reach and maintain a certain degree of technological competence but when these teachers are provided the opportunity to learn new technology skills and techniques. It appears that they avail themselves of the opportunity with a resulting increase in their competence because computer literacy has been described as a basic skill required for success in many academic areas and career fields. Teacher lack of computer skills and knowledge in particular make them uncomfortable in front of class and add extra time preparing teaching material and resources. This indicates that teaching with computers requires more time and effort from teachers.

3. Benefits of Digital Technologies

Digital technology can often also be exciting for learners and offers a potentially more engaging alternative. At the same time it is important to be aware that some learners may be less confident in learning with digital technologies and steps need to be taken to ensure equality of access.

Dialogic practice is that in which students are active, engaged and empowered participate in a conversation from which learning emerges for example learners working on a math's modeling programme can start to have conversations about what they see on a computer screen without having to

rely on terminology that they may not yet have the teacher can then add the appropriate language in to the conversation as the project develops.

Emancipatory practice is that in which an individual student's ideas go beyond the learning prescribed by the teacher/syllabus as they draw on knowledge gained outside formal education to construct understanding. For example in music lessons learners can use their own knowledge and expertise of playing instruments or using technology to construct their own recording environments. (perhaps using their mobile phone). They can then bring in ideas that they have created at home or in instrumental music lessons.

4. Challenges of Digital Technologies

A lot of time and resources are currently being invested into technologies and applications that have yet to be proven to be efficient when compared to more traditional classroom learning contexts teachers and schools need to think carefully about when why and how to use technologies as well as evaluating their efficiency and effectiveness.

There is a digital divide the divide between those who have access to digital technology and the internet. Those that do not implement and then maintaining technology is costly particularly as systems can quickly become out of date. There may be problems with the existing infrastructure for examples internet connections may be inconsistent and / or slow. Safety for students and teachers is a key challenge with prevention of bullying or the hacking of personal information access to illegal or banned materials and directions from learning (such as social networking and mobile phone use) all being high on institutional agendas.

References

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