

The Necessity of Educational Technology in Teaching Methods: Why Educational Technology in Teaching Is Important?

Ali Mohammed Zubaidi

 <https://orcid.org/0000-0003-1597-9648>

Wasit University, Iraq

Shanmugaraj Velusamy

Madurai Kamaraj University, India

INTRODUCTION

The systematic and structured application of contemporary technology to raise educational standards is known as educational technology (efficiency, optimal, true, etc.). It aids in the implementation of contemporary educational teaching approaches and provides a systematic framework for thinking, planning, carrying out, and evaluating the educational process, which includes both teaching and learning. It involves teaching aids, working procedures, and relationship structures, or the conduct of all individuals involved in the educational process. Although they are not interchangeable, the term “teaching resources” is frequently employed (Pedagogiki leksikon, 1996). The Greek words “techno” and “logos,” which translate to “science,” “word,” “learning,” and “mental condition,” respectively, are the roots of the English word technology. The phrase “educational technology” is a misnomer. Terms and synonyms used in different nations include “educational technology,” “educational equipment,” “AV resources,” and “the technology of instruction. Terminological distinctions typically arise because of how one approaches technical aspects and how one uses current tools, rather than because of how those tools are really used to educate, or how they are used pedagogically. There are various viewpoints among educators in the social and technological sciences as a result of this. Therefore, using educational technology effectively necessitates knowledge in a variety of fields, including pedagogy, psychology, didactics, computer sciences, and informatics. As a result of this variety. There are various definitions of educational technology used by various authors, each of which defines it in light of their own requirements. Because of a lack of funding for critical school supplies and teacher preparation requirements, educational technology is still not being used to its full potential in classrooms. Three areas of application exist for educational technology: as a tutor (a computer delivers instructions and guides the user), as a teaching instrument, and as a learning tool. Depending on the application and advantages, Lowther et al. (2012).

Research indicates that despite their suggestions, educational technology has not yet replaced traditional methods. This is likely the driving force behind the social company’s statute. Children in less affluent communities hardly ever utilize the Internet as a learning aid, according to Leu et al. Children today use current technology from a young age, so when new instructional tools are introduced at school, there won’t be any issues (Gutnik et al., 2011; Rideout 2011). Studies (Greenhow et al., 2009) show that more pupils are using cutting-edge technology. Kaufman (2004) and Lee et al. (2008) did thorough research on the impact of educational technology on cognitive processes.

DOI: 10.4018/978-1-6684-7366-5.ch033

This article, published as an Open Access article in the gold Open Access encyclopedia, Encyclopedia of Information Science and Technology, Sixth Edition, is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

When utilizing educational technology, we should be primarily concerned with the tools' educational value, their suitability for knowledge acquisition, if users engage with the tools, and whether using them has good impacts. According to several experts (including Clements and Sarama (2003), Glaubke (2007), and Dynarski et al. (2007)), we ought to concentrate on the following five aspects of the software that could have a significant impact on kids' learning:

1. The program's educational worth;
2. It's the capacity to keep kids interested in what they're learning; and
3. Program usability,
4. A child's interaction with the programs,
5. The potential for a computer program to keep track of the child's development.

The finding is that Classroom technology is growing. The new generation of youngsters is ready to use these new technologies, which are vital to their learning and cognitive development, demanding the introduction of educational technology into future curriculum. Educational technology boosts cognition. New technology is accelerating learning, especially on mobile devices.

Teachers use new technology. When new technologies are developed and employed, concerns concerning instructors' training grow. Two issues exist. Does the school have enough current tech and can teachers use it? Despite extensive study, we still need to find the best ways to integrate instructional technology into the classroom.

The Aim and Purpose of the Chapter

This study aims to

1. This study tries to show the importance of technology in modern life.
2. How is it necessary to educate teachers through the use of new technology? Using various apps or modes could help teachers or students improve themselves.
3. Also, in this chapter, the researchers use different strategies, showing the advantages and disadvantages, to show how technology is important in teaching.

RESEARCH METHODOLOGY

This section provides a description of the methods used in this research. Methods of qualitative analysis are used to highlight the significance of technology in the modern world. In this section, we'll talk about the value of technology in today's world, as well as the pros and cons of utilizing today's technological advances. It is expected that the methods used to accomplish the study's goals will be detailed in this section.

The sample for this study was collected from students in my Google Classroom presentations at Wasit University who had experienced a pandemic coronavirus outbreak. In order to highlight the significance of technology in education, it is vital to highlight the relevance of this particular piece of educational technology. Another factor in favor of these tools for education and of Wasit University in particular is the flexibility they offer in terms of "linguistic choice," or the language chosen to conduct the instruction. Any information gathered on the Google Classroom platform at Wasit University during the coronavirus pandemic (September 2020 - September 2021) will be used in the pandemic.

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-necessity-of-educational-technology-in-teaching-methods/320651

Related Content

Global Information Systems Quality: Key Issues and Challenges

Klara G. Nelson (1996). *Journal of Global Information Management* (pp. 4-15).

www.irma-international.org/article/global-information-systems-quality/51284

Analysis of the Cross-Cultural Dimensions of National Web Portals

Sajjad Zahir, Brian Dobingand M. G. Hunter (2003). *Managing Globally with Information Technology* (pp. 36-49).

www.irma-international.org/chapter/analysis-cross-cultural-dimensions-national/25802

Identifying the Group Differences in the Impact of Haze on Residents' Low-Carbon Travel: Evidence From a Large-Scale Survey in China

Bin Zhang, Zhen Xuand Liran Sun (2022). *Journal of Global Information Management* (pp. 1-19).

www.irma-international.org/article/identifying-the-group-differences-in-the-impact-of-haze-on-residents-low-carbon-travel/309980

Gender Issues in HCI Design for Web Access

Stefania Boiano, Ann Borda, Jonathan P. Bowen, Kristine Faulkner, Giuliano Gaiaand Sarah McDaid (2008). *Global Information Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 3203-3216).

www.irma-international.org/chapter/gender-issues-hci-design-web/19171

Implementation of a Network Print Management System: Lessons Learned

George Kelley, Elizabeth A. Reganand C. Steven Hunt (2006). *Cases on Information Technology and Organizational Politics & Culture* (pp. 311-329).

www.irma-international.org/chapter/implementation-network-print-management-system/6317