

Chapter 7

**EMERGING TRENDS AND PROSPECTS
IN THE USE OF TECHNOLOGY IN
TEACHING AND LEARNING**

Abubakar Mohammed Idris, PhD
and Aliyu Mustapha, MD*



Department of Industrial and Technology Education,
Federal University of Technology Minna, Niger State, Nigeria

ABSTRACT

The significance of technology is, to a certain extent, confirmed from an educational standpoint. Nevertheless, the radio/television, textbooks, film and chalkboard have been used for teaching and learning purposes over the years, and none has impacted more on educational development than technology. This chapter highlighted the emerging trends and prospects in the use of technology in teaching and learning.

Keywords: opportunities, trends and technology

*Corresponding Author Email: aliyu21m@gmail.com.

Complimentary Contributor Copy

INTRODUCTION

The role of technology in teaching and learning is swiftly fetching one of the bulks of important and extensively discussed issues in current education guiding principles (Rosen & Michelle, 1995; and Thierer, 2000). Nearly all authorities in the realm of education granted that once appropriately used, technology holds a huge promise to advance teaching and learning in addition to influential workforce opportunities.

EMERGING TRENDS IN THE USE OF TECHNOLOGY IN TEACHING AND LEARNING

In the milieu of issues concerning technologies in teaching and learning, the annual New Media Consortium (NMC), Horizon Report (2017) identified emerging technologies that will have a significant impact on education in the short term (research data management and valuing the user experience) by 2018, mid-term (patrons as creators and rethinking library space) by mid-2019, and long-term (the cross-institutional collaboration and evolving nature on the scholarly record) by mid-2021. To cap it up, the following are five key trends impacting education over the next few years to come. These include:

- i. An increasing shift to blended learning, online learning, and technology-driven collaborative learning;
- ii. The growth in the potential of social networks to allow teachers to engage students online;
- iii. Openness of educational resources and technology as “becoming valuable”;
- iv. BYOD becoming more common as the cost of technology drops for students; and
- v. The role of the educator being challenged as resources become more accessible on the Internet.

Complimentary Contributor Copy

PROSPECTS IN THE USE OF TECHNOLOGY IN TEACHING AND LEARNING

There are plentiful and excellent prospects for the use of technology in teaching and learning. The following key areas advocate the relevance that technology can serve teachers and students.

- i. Technology can improve educational effectiveness. For example, scores of teachers are by now teaching outsized classes of students. Concerning these circumstances, students no longer obtain the preferred individual support. In addition, it is promising to use cautiously organized technology (computer programs) to guarantee that students are correctly and methodically instructed. Furthermore, the technology can boost problem-solving talent of the students centering attention on thinking skills.
- ii. Technology can provide managerial purposes. That is, it can substitute the lengthy exercise of filing papers in shelves and cabinets where records collect dust over a long period of time. Another administrative application of technology (computers) is their ability to facilitate financial management, writing emails and reports, testing and scoring tests, and assigning students to classes as well as reporting students' progress, which helps out to lessen paperwork.
- iii. Technology can be used for individualized learning. As a result of outsized classes and distinction in individual learning style and pace, technology will make steps forward possible to the student at his/her own pace, giving them process evaluation criticism and recitification for mistakes made. In this way, technology allows the growth of individualized relations and partner-like interaction with the user. Technology also plays the task of the teacher and gives the student a range of symbolic modes and contents.
- iv. Technology can modify contemporary educational practices which depend on the conventional lecture method. It is unanimously

Complimentary Contributor Copy

- acknowledged that technology allows independent discovery, more individually modified activities, teamwork, and less informative instruction. The role of the teacher, as a result, varies from an information dispenser to that of an information executive, from a reliable source of information to a director of self-propelled exploration (Smith, 1989).
- v. Technology will offer the teacher enhanced teaching skills in the procedures of research. The burdensome exercise of searching by hand via the library's card periodical indexes or catalogue can be made uncomplicated by typing a small number of keywords related to the research topic into a computer, and the researcher can be given a wide list of interrelated foundations of articles in books and journals.

REFERENCES

- NMC (2017). *Trends accelerating technology adoption academic and research libraries*. Retrieved from <https://www.nmc.org/nmc-horizon-news/announcing-the-nmc-horizon-report-2017-library-edition/> accessed 20th October, 2017.
- Rosen, L., & Michelle, W. (1995). Computer availability, computer experience and technophobia among public school teachers. *Computer in Human Behaviour*. 11, 9-31.
- Smith, D. (1989). Microcomputers in schools. In M. Eraut (Ed.), *The International Encyclopedia of Educational Technology*, Oxford: Pergamon Press, 170-175.
- Thierer, A. (2000). *Divided over the digital divide*. Washington, DC: Heritage Foundation.