

Chapter 10

Instructional Technology an Effective Panacea for Dynamic Education Transformation in Learning: Disseminating Tools for Learning

Ogunlade Bamidele Olusola
Veritas University, Nigeria

ABSTRACT

The chapter appraised the effectiveness of instructional technology in learning environment. The application of instructional technology will impact positively in a group context within given environment to satisfying the needs of the learners. Thus, the integration of Facebook, Twitter, and YouTube in teaching and learning of general studies. A sample of 120 students were drawn from the students in Veritas University Abuja using simple random sampling techniques. One research question and three hypotheses were stated to guide the study. The instrument used was instructional technology on students performance test (ITSPT) to collect data. Descriptive statistics were used to answer the research question, while ANOVA and ANCOVA were used for hypotheses. The study revealed that when lecturer used instructional technology in general studies this will significantly enhance their understanding of general studies. It is recommended that to make learning meaningful, a lecturer should always integrate instructional technologies in their classroom to enhance the understanding of general studies effectively.

INTRODUCTION

Technology is already transforming the educational process from the instructional delivery, management and assessment with the adoption of various tools and strategies. It is ideal to go further in explaining the term instructional technology. Instructional technology is not a specific entity, but a diverse array of technological devices and technology-based activities and practices (Selwyn, 2013). Initially, Instructional

DOI: 10.4018/978-1-5225-9746-9.ch010

Technology (IT) was recognized to be audiovisual communications which is the branch of educational theory and practice concerned with the design and use of messages which control the learning process. It undertakes: (a) the study of the unique and relative strengths and weaknesses of both pictorial and nonrepresentational messages which may be employed in the learning process for any reason; and (b) the structuring and systematizing of messages by men and instruments in an educational environment. These undertakings include planning, production, selection, management, and utilization of both components and entire instructional systems. Its practical goal is the efficient utilization of every method and medium of communication which can contribute to the development of the learners' full potential. (Kurt, 2013)

Education incorporates digital technology encompass the use of these interest-connected computing devices such as laptop, tablet computers and smartphones as well as the institutional uses of these technologies in the form of virtual learning environments, electronics smart boards and so on. These technological devices could be used in the educational systems to support a diversity of forms of educational provisions across the educational subsectors and the work-based training. Within the institutional context of school and university, much effort is put into the classroom instructional processes along the use of blended forms of online and offline provisions of teaching as well as fully virtual provisions.

Consequently, according to Richey (2008), defined instructional technology as the theory and practice of design, development, utilization, management, and evaluation of processes and resource for learning. Instructional technology encourages classroom teachers, media specialists and technology facilitations to collaboratively design instruction that can intentionally create challenging and exciting learning experiences.

Students learn to use technology, easily and creatively as part of information problem solving process to achieve greater success in the classroom. It is imperative to state that the potentials of IT can only be fully unlocked where there is full application of technological devices in education, such that every aspects of learners activities are captured and recorded, these is inclusive of all contributions made in class, assignments submitted or not submitted; questions answered and the time taken; even learners moods and inter relationships among peer groups are all under the instructional technology radar (Cope & Kalantzis, 2016). Morrison-Lowther (2010) affirmed that integrating learning system provides instructional content, feedback, mastery-type practice and assessment, there has been an increase in students' performance on mathematics and reading learning system.

Walsh (2012) found that today instructional technology emerging from the seemingly endless array of tools and concepts that are out with different application and ideals to best position learning to its normal place in enhancing, engaging and impacting knowledge. The use of available instructional technology in education will make education real. Even twenty-first century technologies can enable different instructional approaches and delivery systems. It is important for educators to adapt and use technology to engage and instruct learners to learn appropriately. Notably, learners using Facebook, twitter, YouTube, texting, the internet and other social media and mobile devices. Social media refers to online services, mobile applications, and virtual communities that provide a way for people to connect and share user-generated content and to participate in conversation and learning. Educators can use Facebook, which has become a major source of interactive discussion to interact with the student usually on the content of classroom discussion.

Moreover, educators can reach out to learners through YouTube to compliment the source of teacher on classroom activities. Educators and learners can use twitter as a channel of instructions where the users can brainstorm, share resources and promote educative discussion that are more sensible in a learning environment.

9 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/instructional-technology-an-effective-panacea-for-dynamic-education-transformation-in-learning/235813

Related Content

Emerging Technologies: Perspectives From Metacognitive Teachers

Victoria M. Cardullo, Nance S. Wilson and Vassiliki I. Zygouris-Coe (2018). *Information and Technology Literacy: Concepts, Methodologies, Tools, and Applications* (pp. 203-223).

www.irma-international.org/chapter/emerging-technologies/188944

Shifting of Paradigm in Buying Behaviour of Digital Natives

Shee Mun Yong (2023). *Digital Natives as a Disruptive Force in Asian Businesses and Societies* (pp. 44-81).

www.irma-international.org/chapter/shifting-of-paradigm-in-buying-behaviour-of-digital-natives/325854

Enhancing ICT Application in Science and Mathematics Education: The Malaysian Smart School Experience

Suan Yoong and Lee Yuen Lew (2010). *Multiple Literacy and Science Education: ICTs in Formal and Informal Learning Environments* (pp. 142-164).

www.irma-international.org/chapter/enhancing-ict-application-science-mathematics/39399

School in the Knowledge Society: A Local Global School

Birgitte Holm Sørensen and Karin Tweddell Levinsen (2013). *Digital Literacy: Concepts, Methodologies, Tools, and Applications* (pp. 959-975).

www.irma-international.org/chapter/school-knowledge-society/68490

Digital Inequality Among States at a European Level

Dario Pizzul (2021). *International Journal of Digital Literacy and Digital Competence* (pp. 1-19).

www.irma-international.org/article/digital-inequality-among-states-at-a-european-level/291969