

Chapter 14

A Critical Analysis of the Use of Mobile Devices in the Classroom and Its Implication for Teaching and Learning

Theodora Dame Adjinn-Tettey
University of Professional Studies, Ghana

Vincentia Abui Akrobotu
University of Professional Studies, Ghana

ABSTRACT

The use of mobile devices, especially, by teens has been looked at with much apprehension and suspicion with some saying that it can be used to acquire information which can be detrimental to their social and psychological growth. Some teachers complain that it affects teens' studies as these teenagers stay up late in the night browsing, chatting, watching movies and playing games which cause them to sleep in class or pay little attention because of tiredness. In Ghana students in public schools up to Senior High School are not allowed to use personal mobile phones, laptops and other mobile gadgets in school because of implications such as those enumerated above. On the other hand, some, including those in prominent positions in government, have called for a rethink of such a directive by the Ministry of Education. This chapter critically looks into previous literature on the use of mobile devices in the classroom and suggests ways in which it can be effectively used to advance academic work in the classroom.

INTRODUCTION

This chapter critically examines mobile device usage in the classroom situation. It precisely strives to assess how these devices are incorporated into teaching and learning at all levels of the educational ladder and the notable drawbacks while proffering suggestions as to how to make its use in teaching and learning more effective.

DOI: 10.4018/978-1-5225-2706-0.ch014

BACKGROUND

Mobile devices are also known as handheld computers. These devices are portable chiefly because they are characteristically compact and lightweight. Mobile devices can almost function just like larger personal computers (technopedia, n. d.). Examples of mobile devices are tablet computers, digital cameras, media players, netbooks smart-phones, gaming consoles, in-car satellite navigation and personal digital assistants (PDAs). The main attribute of mobiles devices is that they are computing devices that are portable or transportable.

Ownership of these devices is very common among students. Not only do they often own more than one device and use them, these students also invest significant financial and non-financial resources selecting, buying, customising and exploiting them (Traxler 2010). The use of mobile devices, according to Traxler (2010), depicts their values, personality and affiliations. Mobile devices are pervasive and ubiquitous although they are taken for granted by most students (Traxler 2010: 3). This assertion could be true as, on the surface, many students are seen using these technologies for gaming and entertainment-based activities with less use for learning, thereby, limiting their use and essentially not recognizing how tremendously these devices can support learning as well.

Traxler further deliberates on the many benefits mobile devices bring to the table of academia. He highlights the fact that students do not need to involve in educational content and academic discussions at a particular time of the day, but can do so while engaging in other activities at any place and time of the day using their own mobile devices (Traxler, 2010). This development brings about a change in how students communicate with one another. Content and conversation facilitated by mobile technology leads to a change in how students relate to learning and education. In effect, Traxler (2010) says it “offers a transformation of the relations between education and society and gives substance to inclusion and innovation” (p. 4).

When one uses mobile technology for the purpose of learning, it is referred to as mobile learning. Attewell & Saville-Smith (2005) define mobile learning as learning through hand-held, wireless technological devices that can easily be used. Kukulska-Hulme & Traxler (2005) say the devices support learning that is more practical and contextualized within particular academic areas. They also offer the opportunity to create and use current and reliable content. This expounds boundless benefits that come with the use of mobile devices for learning (Kukulska-Hulme & Traxler, 2005).

Nonetheless, mobile devices are not considered solely for academic purposes in view of their diversity, transience and incoherence (Traxler, 2010). According to Traxler (2010), the unique features of mobile devices which are made up of various operating systems and applications indicate that the devices are developed and designed for various niches and corporate markets rather than for learning, thus, making educational technology parasitic (Traxler, 2010). Two clear examples being the desktop computer and present-day mobile devices which were originally made for corporate business customers and also for individual lifestyle customers. Incidentally, these have found themselves in educational institutions for academic purposes, making many scholars advocating the integration of mobile devices for teaching and learning (Traxler, 2010).

There, however, is a seeming disagreement even among education providers on the use of mobile devices in schools. Groups opposed to the use of mobile devices argue that they promote limited learning, plagiarism, visiting of inappropriate websites, sexting and is a major source of distraction to pupils

13 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/a-critical-analysis-of-the-use-of-mobile-devices-in-the-classroom-and-its-implication-for-teaching-and-learning/186182

Related Content

The Pedagogical and Technological Experiences of Science Teachers in Using the Virtual Lab to Teach Science in Rural Secondary Schools in South Africa

Brian Shambare, Clement Simuja and Theodorio Adedayo Olayinka (2022). *International Journal of Technology-Enhanced Education* (pp. 1-15).

www.irma-international.org/article/the-pedagogical-and-technological-experiences-of-science-teachers-in-using-the-virtual-lab-to-teach-science-in-rural-secondary-schools-in-south-africa/302641

The Mechanism of Flipped Classroom Based on Cognitive Schemas

Wangyihan Zhu (2023). *International Journal of Technology-Enhanced Education* (pp. 1-12).

www.irma-international.org/article/the-mechanism-of-flipped-classroom-based-on-cognitive-schemas/325077

Pairing Leadership and Andragogical Framework for Maximized Knowledge and Skill Acquisition

Viktor Wang and Kimberley Gordon (2023). *International Journal of Technology-Enhanced Education* (pp. 1-14).

www.irma-international.org/article/pairing-leadership-and-andragogical-framework-for-maximized-knowledge-and-skill-acquisition/330981

The Medium, the Content, and the Performance: An Overview on Media-Based Learning

Hans W. Giessen (2016). *Revolutionizing Modern Education through Meaningful E-Learning Implementation* (pp. 42-55).

www.irma-international.org/chapter/the-medium-the-content-and-the-performance/157774

Educational Games as Software Through the Lens of Designing Process

Mifrah Ahmad (2021). *Handbook of Research on Modern Educational Technologies, Applications, and Management* (pp. 179-197).

www.irma-international.org/chapter/educational-games-as-software-through-the-lens-of-designing-process/258769