

BOOK REVIEW

Pedagogical Applications and Social Effects of Mobile Technology Integration

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*Pedagogical Applications and Social Effects
of Mobile Technology Integration*

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In recent years, the rapid growth and development in mobile technology devices such as mobile phones and tablets has had a significant impact on society, and has brought amazing changes various fields, including education. For example, the popularity of mobile technologies that support collaborative learning has been extensively argued (Echeverría et al., 2011; Hwang, Huang & Wu, 2011; Koole, 2009; Rambe & Bere, 2013). Some may not support, even resist,

using technology, but computer devices are now relatively universal in schools (Blackwell, Lauricella, Wartella, Robb & Schomburg, 2013; Gray, Thomas, & Lewis, 2010). The progress of mobile technologies has enabled educators to send instructional messages in flexible ways (Kim, Rueckert, Kim, Seo, 2013). From the view point of Educational Sciences, mobile devices have remarkable features which can create more effective learning environments for traditional classes (Kert, 2013). It is worth noting that different learners can try to use different learning materials and facilitate their learning processes (Uzunboylu & Ozdaml, 2011). Therefore, learners should make active use of electronically-supported learning tools to provide real benefits in their learning processes (Sánchez-Franco, Peral-Peral & Villarejo-Ramos, 2014).

The book is based on new trends of educational technologies that have been carried out by the authors. In addition to the preface, there are 17 chapters, which cover seven main topics including: (1) global learning environments, (2) mobile computing, (3) mobile learning technologies, (4) pedagogical frameworks, (5) social implications, (6) social media/networks, and (7) ubiquitous technologies. The purpose of the book is to introduce and illustrate the use of mobile devices, educational content, and methods, in an attempt to provide direction for the future applications of educational technologies.

The first chapter introduces a pedagogical framework for teaching using e-readers, meanwhile provides a practice-oriented model that assists teachers and educators to support learners. Chapter 2 presents the mobile learning device - iPad - and three implementation cases, including multimedia database, digital story creation, and new classroom activities applications it makes available. Chapter 3 introduces the new concept of integrating iPad into elementary classrooms to help students learn. Chapter 4 points out that assistive technology has been widely used in the special education field, such as iPad being used to help learners with disabilities to learn. Chapter 5 mentions that incorporating the game of Geocaching into mobile learning devices can be regarded as a new pedagogical application and best practice that can also promote student's learning motivation and willingness to engage in learning. Chapter 6 focuses on how teachers design curriculum by applying mobile technologies so that students can use their mobile devices such as smart phone, iPad, or laptops immediately to acquire knowledge, and create a more effective learning environment.

Chapter 7 illustrates how innovative technology can be used in place of traditional equipment in STEM classes. It is noteworthy that the benefits of using mobile technologies are adaptability, cost effectiveness, and support for educational equity. In view of the importance of mobile technologies in education field, Chapter 8 reveals that pre-service teachers should obtain both prior knowledge and addi-

tional pedagogical knowledge on technology integration, as well as teaching and learning concepts related to the first day of school during their teacher training. Chapter 9 indicates that 1:1 laptop implementation begun in secondary education can bring some positive experiences, but findings shows student distraction, some operation skill problems and inappropriate uses of technology. Chapter 10 provides a case study of professional development using new technologies for Asian languages' teachers in Australia; it also discusses the important concept of learning curve. Moreover, mobile technologies have also been used in health professions education. Chapter 11 applies several criteria to review selected articles, presenting target groups, phase of learning, theoretical framework used, and reported outcomes. Chapter 12 presents the findings about the Studio-Based Learning (SBL) model, and shows that culturally relevant content can improve students' learning outcomes. In this context, one result reveals that mLearning Design Studio (mLDS) can improve and raise students' SBL experience.

As mobile technologies become necessities in daily life, Chapter 13 concludes that mobile learning can be viewed as part of a new learning landscape, has the potential to improve efficiency in the education domain, and can balance teachable opportunities in remote areas. According to teachers' and students' viewpoints, Chapter 14 explores the classroom setting, constructivist pedagogy, HTC tablet use in two higher education classrooms, and then gives suggestions. This chapter also describes the use of the tablet both in class and out of class as well as the barriers associated with tablet use when embedded in a higher education course. Interestingly, a new concept "iMentor" is proposed in Chapter 15, through which virtual mentoring is conducted to assist students' learning via social media. This new educational technology may create a new era of education. Chapter 16 introduces a theoretical framework for literacy practices that use mobile technologies (such as blogging, social networking, and other shared and collaborative media spaces), conceptualizing current and future literacy

practices, while also building on Web 2.0 literacies. In the last chapter, the author provides six case studies about international mobile Web 2.0 projects from 2008 to 2012 to analyze the advantages and disadvantages, and describes the potentially transformative impact upon pedagogy from mobile learning used within the context of global learning environments.

Assisted learning tools such as mobile devices have been increasing due to the popularization of computers, smart phones, and networks. This book is rich in content, as out of the real situations of teaching, the authors share about the use of laptop computers iPad and mLearning devices to assist teaching. A valuable contribution of this book is that the authors describe new concepts in teaching methods such as “iMentor”, and using a blended learning model and how to use mobile devices to flip classrooms. *Pedagogical Applications and Social Effects of Mobile Technology Integration* is a highly recommendable book that is compact, well-integrated and well-organized. In addition, the contents, examples and notions are presented in simple and comprehensible language, through a logical train of thought. The extracted snippets illustrate the wide range of real-world cases that will inform readers, teachers, educators and government in finding a comprehensive spectrum of current trends and revolution in teaching.

REFERENCES

- Blackwell, C. K., Lauricella, A. R., Wartella, E., Robb, M., & Schomburg, R. (2013). Adoption and use of technology in early education: The interplay of extrinsic barriers and teacher attitudes. *Computers & Education*, 69, 310–319. doi:10.1016/j.compedu.2013.07.024
- Echeverría, A., Nussbaum, M., Calderón, J., Claudio Bravo, C., Infante, C., & Vázquez, A. (2011). Face-to-face collaborative learning supported by mobile phones. *Interactive Learning Environments*, 19(4), 351–363. doi:10.1080/10494820903232943
- Gray, L., Thomas, M., & Lewis, L. (2010). Teachers’ use of educational technology in US public schools: 2009 (NCES 2010-040). Washington, DC: National Center for Education Statistics, Institute for Education Sciences, U.S. Department of Education. [Accessed 08.07.14], Retrieved from <http://nces.ed.gov/pubs2010/2010040.pdf>
- Hwang, W., Huang, Y., & Wu, S. (2011). The effect of an MSN agent on learning community and achievement. *Interactive Learning Environments*, 19(4), 413–432. doi:10.1080/10494820903356809
- Kert, S. B. (2013). Using j-query mobile technology to support a pedagogical proficiency course. *Journal of Educational Computing Research*, 48(4), 431–445. doi:10.2190/EC.48.4.b
- Kim, D., Rueckert, D., Kim, D. J., & Seo, D. (2013). Students’ perceptions and experiences of mobile learning. *Language Learning & Technology*, 17(3), 52–73.
- Koole, M. (2009). A model for framing mobile learning. In M. Ally (Ed.), *Mobile learning: transforming the delivery of education and training* (pp. 25–47). Athabasca, AB: AU Press, Athabasca University.
- Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. *British Journal of Educational Technology*, 44(4), 544–561. doi:10.1111/bjet.12057
- Sánchez-Franco, M. J., Peral-Peral, B., & Villarejo-Ramos, A. F. (2014). Users’ intrinsic and extrinsic drivers to use a web-based educational environment. *Computers & Education*, 74, 81–97. doi:10.1016/j.compedu.2014.02.001
- Uzunboylu, H., & Ozdamli, F. (2011). Teacher perception for m-learning: Scale development and teachers’ perceptions. *Computer Assisted Learning*, 27(6), 544–556. doi:10.1111/j.1365-2729.2011.00415.x

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