Introducing ubiquitous education

Although many would argue that there's resistance in introducing ubiquitous education, I think its adoption has greater impact in transforming access to education.

Cope and Kalantzi (2009) present an argument reflecting the authority that technological advancement has had in instigating changes in our everyday life (ubiquity technology), yet there's been no or if little change in the way we approach classroom learning has not changed over a century. Even though this is the case, the authors further highlight that some features of ubiquitous learning were not new, for they've been occupying prominent place in the history of modernizing learning and teaching, which stretches back well before the recent upsurge of modern technologies.

Crowe (2007) states that "ubiquitous computing allows us to envision a classroom in which the teacher remains focused on his or her field of expertise (e.g., math or social studies) while still utilizing technology to enhance student learning" (Crowe, 2007, p. 129). This is supported by Cope and Kalantzi (2009) argument that the fundamental values and views that are followed (in ubiquitous education) still describe a norm for what it means to be educated. i.e. teachers still aim to ensure that children can read, write, ...

I think the adoption, or the introduction of ubiquitous education has greater impact in transforming access to education. Let's take Crowe (2007) example of "The Evolution to Ubiquitous Learning" – he explores handheld computers as a key component of ubiquitous learning. Furthermore, lots of studies concerning handheld and mobile devices are denoted as ubiquitous learning (Rochelle & Pea, 2002). The proliferation of mobile technologies which include smaller and lighter laptops, tablets, smart phones have, just like what Cope and Kalantzi (2009) argued regarding the everywhere technology has gained authority and has changes our everyday living, indeed liberates us from the limitations of the brick and mortar typical classroom.

Besides, the way information is deiminated in today's world is crossing lines, with the use of computation as the main source of communiqué. We are informed from our smartphones by social media, or closed digital groups, all accessed anytime, and anywhere.

Figure 1 illustrates these conceptual shifts from e-learning to m-learning then to u-learning.

	E-learning	M-learning	U-Learning
Physical devices	Wired	Wireless	Disappeared
Computation & communication	Distinctive	•••••	Blurry
Learning	Confined to the single de	esk	Dynamic/flexible
Figure 1 Comp	arisons and flow of a learn	ning milearning and ulearni	

In conclusion, in this exercise I attempted to introduce and define ubiquitous technology and how it impacts in our daily lives. I also sketched its characteristics parallel with e-learning. I have considered the challenges that may be faced in adopting new technologies for learning and teaching due to cultural inertia to education development over a period of 100 years. Even though I did not go deeper with my theory, I do know that there's more literature that goes deeper into different types of mobile learning activities.

I have revised some works restricted to a few examples from the rapidly growing body of research on mobile learning.

Reference

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Example of ubiquitous learning

Park, Yeonjeong (2011) A pedagogical framework for mobile learning: Categorizing educational applications of mobile technologies into four types IRRODL,Vol. 12, No. 2. <u>HTML</u> License: <u>http://creativecommons.org/licenses/by/3.0/</u>

Cope, Bill, and Mary Kalantzis, editors. *Ubiquitous Learning*. University of Illinois Press, 2009. *JSTOR*, www.jstor.org/stable/10.5406/j.ctt1xcnks.