Using iTunes U for learning Geography

Chew-Hung Chang
National Institute of Education, Nanyang Technological University
Singapore
chewhung.chang@nie.edu.sg

Abstract
A reflection on using iTunes U as a platform for teaching and learning Geography will be presented. Arising from an altruistic interest in exploring the affordances of new technology, as well as balancing the pragmatic needs of developing innovative approaches to conducting eLearning lessons, the author developed one of the first iTunes U courses for the National Institute of Education, Singapore - a topic on atmospheric circulation. Available free on the iTunes U store, the free-access course has been subscribed by the public in the order of threefold the number of students in the author’s class. This exposition will consider the issues of the rationale for developing the iTunes U course, the design considerations in relation to the affordances of the technology, and most importantly the limitations and recommended improvements. The presentation will also include a very short demonstration on the functionalities of using iTunes U for learning Geography.

Keywords: Geography Education, Affordances, Mobile Technologies

Introduction
This is an exposition piece on the reflections arising from using iTunes as a platform for teaching and learning Geography. The intention of the paper isn't to provide empirical evidence for how well iTunes U can be useful for teaching and learning geography, but rather to provide the successes and learning points as so that other teachers can use this reflection to guide their own design of using iTunes in teaching and learning Geography. The paper will provide a rationale for why the author has used iTunes U followed by some of the considerations in the design off the course.

As part of the requirement in the curricula structure of teacher training at the National Institute Of Education, there is a requirement for one of the semestral weeks to be conducted as eLearning. To this end, the author considere dusing Ituens U as an alternatie to static web-pages for this purpose. Being an educator who has personal interests in trying out new technologies and coupled with the reequirement for eLearning, the author has decided to use iTunes U as an innovative approach to augment and supplement the learning activities in the course Elements of Physical Geography for a topic on Atmospheric Circulation. Consequently, this paper becomes a means to share the successes and challenges of this endeavour.

Affordances of Technology

iTunes U is an application that resides across three operating system platforms, namely, the Windows, Macintosh and iPhone/iPad. The service was created by Apple to manage, distribute, and regulate access to educational multimodal content for learners within an institution such an university as well as the public through the Internet. Each member institutions manages a iTunes U site through the Apple’s iTunes Store infrastructure. Typically, the content includes course lectures, lessons and activities, lab demonstrations by degree-granting, public or private colleges, universities, elementary, middle, and high schools in the world. To some extent, it resembles a
Content Management System (CMS), but lacks many of the more sophisticated functions such as grade tracking and communication or chat applications. It may be more like a course library where it acts as a repository of course materials. Given the limitation just outlined above, there is a possible danger that the technology will be just another fad. This calls for caution to which the author raises the discussion in relation to Clark and Kozma media debate in the 1990s.

Clark 1994 posits “media are mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition”. To illustrate, it is irrelevant if a bicycle or a truck is used to deliver your milk as it does not affect the quality or satisfaction that arises out of consuming milk delivered by these two different media. However, Kozma (1994) argues in a rejoinder “Media possess particular characteristics that make them both more and less suitable for the accomplishment of certain kinds of learning tasks”. Indeed, when one sees a round doorknob, it is almost intuitive that one needs to turn it while a vertical door bar invites it to be pulled. In the analogy of the milk delivery bicycle and truck, a refrigerated truck would certainly preserve the freshness of the milk much more than the bicycle delivery. Hence there is a need to examine the affordances of the technology rather than the technology itself.

Hence the author identifies some key features that provide positive affordance to teaching and learning. Firstly, iTunes U is highly customizable as it is more fluid and less structured than a CMS. It allows materials to be stored in a repository without a definite structure. One can always append instructions to the course should one require the materials to be read or viewed in a particular sequence.

iTunes U is also multimodal in that it aids geographical visualisation, especially for concepts of process and equilibrium. Videos are highly effective in elucidating the processes that cannot be well described by textual means. The technology in question is also highly modular and easily sharable, providing the flexibility that other CMSs do not. Finally, the technology is portable and almost ubiquitous making it more accessible for use.

**Learning Points**

The key area for improvement is to design the course with a more explicit focus on the geographical nature of the topic. At present the key affordance of visualisation has been used to support the understanding of physical environmental processes but the author, can for example, consider using spatial concepts in the development of the content. It is also pertinent to consider that the tool is only as good as the content and pedagogy that is designed with the materials. Certainly much more can be done with this experience if only more time can be spent on this. Finally, there is a need to consider the needs of students who have a serious objection to using certain brands of technology devices and to consider the social economic background of the learners who may not be able to afford the mobile devices.

**Conclusions**

In all, the experience of using iTunes U has been enlightening as it forces the author to be cognisant of the learning process of the students. In considering the affordances and the pitfalls experienced in this pilot study, the technology can be used more effectively in future iterations of the similar endeavour.