Clark N. Quinn. The Mobile Academy. mLearning for Higher Education. Jossey-Bass, 2012. ISBN 978-1-118-07265-3. 120 pp.

The advent of ubiquitous mobile devices has started a fundamental revolution in society, commerce, and interpersonal relationships. No wonder education has recently developed an ever increasing interest in them, and quite a number of various publications on applications of mobile technology in teaching and learning have ensued.

How does the book by Quinn differ from many other books dedicated to the issue of mobile learning? Most importantly, the audience it is intended for has been specifically targeted by this kind of publication for the first time. The book focuses on higher education and is intended for higher education instructors and those who support them as instructional designers and administrative services. Also, structurally, it is not set around specific devices and/or applications but provides the foundation for the academy to go mobile, followed by the administrative ways mobile can facilitate learner experience. The latter, in its turn, is broken into three components: the content around the learner activity; the meaningful tasks or practices in which the learner engages; and social learning. The reasoning for such an approach of the author is grounded in the fact that by the time the book is printed many appliance and implementations will be out of date, therefore principles and concepts need to be discussed rather than the specifics of implementation.

Talking in the first chapter about the mobile revolution and its significance for higher education, Quinn points to well-known facts that mobile networks are now available to 90% of the world population and young adults (the major clientele of higher education) are the largest group among mobile technology users. Internet access is available almost everywhere, still campuses have been slow to adapt to the mobilized students. While other arenas, such as corporate market, various industries, even undergraduate education, have been empowered by mobile devices, universities, surprisingly, are "good at resisting disruption from new technologies." This needs to be changed; learning needs to be revisited as college experience is becoming of lesser use in everyday life, and mobile, while not a cure, is a catalyst for change.

Charter two is also of introductory nature. It is about foundations of mobile devices and the essential components of this technology, such as various kinds of input, output, connectivity and sensing, as well as basic functions mobile devices are used for: content (accessing various input), capture (producing content), computing and communication. Having outlined the reasons while mobile devices make us smarter, Quinn comes, in the next chapter, to another foundations, those of learning.

This chapter can be viewed as a crash course on the principles of pedagogy: the author talks about setting objectives, providing adequate practice, models of introducing concepts and supporting them with examples, delivering meaningful introductions and summaries of the learning experience. His seven C's (choose, commit, create, crash, converse, copy and collaborate) do not really add much to the components of learning experience mentioned above. However, certain heuristics that Quinn suggests are noteworthy, especially in the context of mobile learning. For instance, he advocates competency-based performance over normative one and believes that in teaching the focus should be made on the decision that learners will

Reviews of Books

be able to make that they cannot make now. Practice should be spaced to ensure more persistent retention, and in practice/assessment activities, games and challenging multiple-choice questions are very effective. Communication of concepts should be done in multiple ways, where text recitation is better coupled with a diagram or animation. Summaries and introductions should be connected with the associated emotional experience. Also, alternative pedagogies should be considered beside the traditional ones, and social learning is one of the ways to achieve this. In the Practice part, which ends each chapter, he encourages the readers to consider how mobile technologies can assist and enhance the objectives outlined in the chapter.

In chapter four, Quinn looks at administrative tasks related to formal learning and outlines the ways mobile technology can enhance various areas of performance support. Providing a broad picture of institutional involvement with student experience and outcome, a so-called environmental scan, the author lists the factors or components of the environment surrounding a student in an educational institution. The analysis of those with regard to mobile should be guided by two principles, according to Quinn. The first is to make mobile-accessible features that are already delivered via technology; and the second is capitalizing on mobile capabilities to consider new opportunities. All possible administrative interactions, from the perspective of the student (Quinn lists ten of them, such as registering, getting grades, applying for financial support, etc.) are grouped around four Quinn's favorable C's. These are content (campus maps, access, transportation timetables, etc.), compute (various tools, like choosing appointment time), capture (surveys, collections of photos and videos on campus events), and communicate (providing contacts with offices, faculty members, other students). Channels to be considered here are text or voice messages, infrastructure for delivery – any institutional learning management system, like NUCB BlackBoard. The most important principle in handling this issue is thinking through the students' goals, or user-centered design.

Moving from administrative to learning mobile opportunities, Quinn once again comes to his first C pillar, *Content*, and looks at the ways learning content (introduction, concept, example, practice) can be put onto a mobile device. With the same two channels of delivery available on mobile, text and voice, he suggests a clear way of matching media to message in two modes – static and dynamic. Contextual in these modes may be photo or video; conceptual – graphic or animation; and linguistic – text or speech. Since the main benefit of mobile is quick access, but not capacity, he emphasizes that the content developed and delivered for mobile consumption should be minimized. Further, Quinn suggests some effective tools to make the access to educational content and content itself mobile and suggests a *Content Form* and a sample of a completed form as a practical guidance.

Addressing practice, as a core of effective learning, from the point of view of mobile, the author stresses that in universities meaningful application of knowledge is lagging behind recitation. He believes that technology gives tools to make more meaningful tasks, while mobile technology makes the delivery of those tasks more flexible. In the sixth chapter on practice, he dwells on interactivity and assessment, and rightly points to the fact that abilities to track and report learner responses as part of his/her record are still evolving. The principle of design here is that interactions are small and simple, navigation is not an issue and response options are clear. Quizzes (multiple-choice, short-answer questions, etc.), e-mail, text messages, scenarios, simulations and games are just some suggestions to support practice with mobile. The ability of the mobile devices to capture can play an important role in meaningful practice as learners can capture instances of the concept in context or record their thoughts or performance.

Chapter seven, *Going Social*, the key point of which is getting learners interact around the concepts, stresses the importance of formal and informal social learning. It is about the fourth powerful C – *Communication*. All known social networking platforms can be a good tool for learner-instructor and learner-learner interaction. Since this is the most developed direction of mLearning, Quinn doesn't want to dwell much on the issue and the chapter is rather short. One thought that deserves attention is the following: do not assume that learners know how to work well together – they need explicit guidance both on the content

of interaction and behavior during cooperative work.

By the end of the book, Quinn addresses the area of cutting edge mobile applications, which he has coded as "A*realities": augmented reality, alternate reality and adaptive delivery. Essentially, it is about creating a sophisticated mechanism of pushing relevant information to a particular learner, rather than making information available. An example of augmented reality that he provides is GPS; like GPS, mobile devices are capable of providing location- or situation-specific information to a learner. Though such systems are not in use yet, the underlying concept, as described by Quinn, is quite realistic. Alternate reality is, however, an existing experience since this concept refers to various artificial simulations, such as role-playing games or emergency training exercises, where participants use mobile devices to communicate and coordinate their actions. The ideal of adaptive delivery is personalized performance support and learning with the help of system-generated content that Web 3.0 can provide. This part of the book is for the most advanced participants of mobile learning, but it ends with an appeal to any reader: "Mobile technologies give us the tools to start distributing learning in space and time, and we should be taking advantage of it."

The last chapter makes practical provision for this appeal by looking into organizational issues of development, deployment, management and policy of mobile learning. To start these processes the readers are encouraged to return to the environmental scan of their institutions, suggested in Chapter Four. In brief, the design should be simple, elegant and participatory, that is, user involvement is essential. In development, the primary recommendation is to build the mobile option into content development process: BlackBoard, for instance, has such an option. With implementation, designers of mLearning need to keep in mind a learner's perspective, answering the fundamental question on how mobile devices complement the desktop or classroom activities to create a full learning experience. Institutional policies on mobile delivery may be already in place, with the need, perhaps, to enhance them with certain mobile etiquette recommendations.

The ultimate goal of Clark N. Quinn with his book is to inspire faculty to consider the benefits of mLearning and start mobilizing them. For this, his final advice is: "You gotta be in it to get it." The steps of "getting into it" are straightforward: push your own use of mobile devices and start appreciating and utilizing their potential to the full; talk to other people, students in particular, to get inspiration for new ideas; follow current developments, which are happening in mobile performance and learning; and finally, always look for new opportunities. After all, with the current enthusiasm for mobile, the mLearning initiative can become a good marketing tool for the institution, to say nothing of the enriched learning experience of its students.

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