Language in Action: Applying Mobile Classroom in Foreign language Learning

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Abstract

The quickly evolving world of mobile telephony communication and mobile devices technology make mobile learning feasible and effective. Speaking and listening comprehension are two critical elements for foreign language learning, and they can only be achieved by frequent practice. The latest mobile devices with Third Generation (3G) mobile networks can provide mobile users with the capabilities to record their voices, send multimedia messages with pictures and sound, and enable video conferencing through handheld mobile devices. In addition, mobile learning allows learners to better utilize their downtime and to participate in learning activities anytime and everywhere. The paper explores the delivery mechanism of Mobile Classroom (MClass) and its application in foreign language learning.

1. Introduction

Distance education can be enhanced by integrating mobile communication and related services to increase its learning effectiveness. Most distance learning systems use Web-based platforms, and often they are inefficient for group collaborative learning because they offer fewer chances for online learners to fit into each other's time schedules. Mobile technologies and devices (Pocket PC, Tablet PC, PDA, Smart phone, etc) can provide learners with "wearable" computing features such as sending emails with captured pictures or video clips and recorded sound, accessing mobile Web and WAP (Wireless Application Protocol) sites for information, reading e-books, etc.

The Mobile Classroom (MClass, created by the author) is a mobile Web system to provide online learners with a mobile learning environment which allows them to access online course content on the Web and to participate in collaborative learning activities anytime and everywhere with their mobile devices. This paper attempts to illustrate that the Mobile Classroom is an effective and comfortable platform for teaching and learning a foreign language.

2. Mobile Communication and Services

Wireless communication technologies are available for both local area network such as WiFi and WiFi5, and wide area network such as Wideband Code Division Multiple Access (WCDMA, or UMTS in Europe) and EV-DO. These 3G mobile communication systems offer both voice and data services with high data rates, up to 2 Mbps in a stationary wireless environment and 384 Kbps in a mobile environment. The greater the networking bandwidth, the more online learning applications are feasible, e.g., video conferencing. These emerging high-speed mobile communication technologies create the delivery infrastructure for mobile learning. Reliability, security, and coverage become critical issues when this delivery mechanism in online course design is adopted. It is obvious that mobile technology is playing a key role in facilitating online learning communities with the dynamics of enhanced expression and added convenience in distance learning.

3. Delivery Mechanism of the Mobile Classroom

Mobile Classroom (MClass) is a wireless Web system that serves as a mobile teaching and learning environment via wireless networks accessed by most mobile devices. Developing applications for mobile learning needs to overcome some challenges such as devices have different form factors and capabilities, and different markup languages are necessary for different devices. Therefore, it is critical



to be able to build a single, mobile Web application that can deliver appropriate markup language for a wide variety of mobile devices. Mclass is the system that overcomes incompatibilities of mobile devices and is independent of mobile carriers, shown at Figure 1 - MClass system architecture.

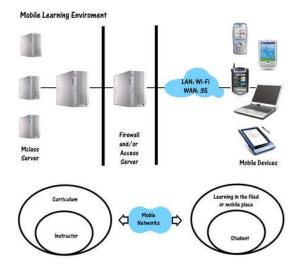


Figure 1. MClass system architecture.

MClass is composed of a mobile Web site (http://www.mclass.tv) with backend supporting systems such as a database system and an e-mail system. It provides the platform for those who want to incorporate mobile learning activities into their existing distance learning systems. Mclass is designed to use learners' time efficiently, to focus on improving online collaborative and transformative learning, and to support online learners' group activities at the level of brain-storming, synthesis, and survey evaluation. The workflow of MClass begins with creating an appropriate mobile learning activity which is then sent to learners as text, audio or video messaging. Learners can collaborate with peers to complete learning activities. Then, feedback and statistical results can be viewed right away.

4. Foreign Language Mobile Learning

Consider a traditional online classroom: most language learning is by reading text, listening to audio clips, and seeing graphics. The active "speaking" mode is often done through writing, e-mail, and text chatting. A sound card with appropriate player software is required on the learner's computer to be able to play sound files or to talk online. Learners are limited by

the time and space factors. Here we see the inefficiencies of using a traditional online learning platform to learn a foreign language.

MClass offers a different learning experience for second-language learners, who can practice language learning through audio or video messaging and conferencing. The AskOxford.com Website lists tips for language learning, e.g. to "work at your own pace" and to speak frequently. How can language learners study at their own pace and practice speaking and listening as often as they can? MClass provides the answer. In this teaching and learning environment, learners can work with their mobile devices for audio voice recording, pronunciation messaging, comparison, and audio or video conferencing with peers. They can even communicate with native speakers via mobile VoIP anytime, anywhere (TechWhack, 2005).

Even more important than classroom activities is the future application of MClass to daily life when learning a foreign language. For example, if a person is on a business trip in a foreign country, MClass can provide just-in-time help with business dealings as well as with leisure activities such as shopping or deciding on entertainment.

5. Conclusion

Teaching methods that create authentic learning and knowledge construction through collaboration reflect current education theory. MClass is compatible with these methods. It offers a convenient alternative approach for learning a foreign language by using latest technologies and services from mobile carriers to provide online learners with both synchronous and asynchronous environments. MClass facilitates a variety of learning styles in a timely and interactive manner, whether in class or in daily life. It is about to bring forth a new shift of paradigm to conventional foreign languages learning. The increasing learning outcome from Mobile Classroom is undeniable.

References

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