Chapter XXII

Listening Comprehension of Languages with Mobile Devices

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ABSTRACT

The use of the mobile devices in language learning has been developed at a very high speed in the last years. Thus, we are witnessing many research and development projects set in universities and distance learning programs. However, the interest in research related to listening comprehension competence remains relatively low. Our proposed research examines mobile devices such as MP3 players, laptops, PDAs, and cell phones in a mobile learning environment for studying English as a foreign language at a French university. One focus is on pedagogy; therefore, a major part of our research is on developing, evaluating, and analyzing listening comprehension activities, and then composing activities into a curriculum. The chapter starts with the presentation of mobile learning, language skills, and listening comprehension. It then presents our approach of the use of mobile devices for learning English as a second language. Finally, a learner evaluation methodology is presented. The chapter ends with the conclusion and future trends.

INTRODUCTION

As computers and the Internet become essential educational tools, the technologies become more portable, affordable, effective, and easy to use. This provides many opportunities for widening participation and access to the Internet. Mobile devices are much more reasonably priced than desktops and therefore represent a less expensive method of accessing the Internet.

This chapter describes a mobile learning approach in which mobile devices are used for educational activities. The main focus of this chapter is on listening comprehension of foreign language. A new approach on the use of mobile technology and how it was used in language
listening, especially listening comprehension, is presented.

One of the main goals in our research is to explore what the best mobile learning practices and activities are in terms of assisting and supporting learning to become a more meaningful process. Another goal is to explore from a pedagogical perspective the innovative future learning practices, which are related to mobility and the new forms of studying (Buck, 1998).

**BACKGROUND**

Mobile learning (m-learning) refers to the use of mobile and handheld information technology devices in teaching and learning. These mobile tools often travel with the learners (Kadyte & Akademi, 2003). Among these tools, we can quote the telephone (Attewell & Savill-Smith, 2003), personal digital assistants, or PDA (Kneebone, 2003), pocket PC (Holme & Sharples, 2002), tablet PC (Mock, 2004), laptops that have wireless capabilities (Willis & Miertschin, 2004), portable MP3 players (Bayon-Lopez, 2004; Djoudi & Harous, 2006), and so forth. Mobile devices can be used in many educational settings and accomplish many educational tasks. Most mobile devices are useful in education both as administration, organization, and teaching aids for practitioners, and also as learning support tools for learners.

The term “mobile learning” is used to cover a complex array of possibilities opened by the convergence of new mobile technologies, wireless infrastructure, and e-learning developments. As with any emerging paradigm, there are many attempts to define its essence. In order to do this, let’s consider the following:

1. M-learning is the intersection of mobile computing and e-learning: accessible resources wherever you are, strong search capabilities, rich interaction, powerful support for effective learning, and performance-based assessment eLearning independent of location, time, or space (Quinn 2000).

2. Three ways learning can be considered mobile “learning”: it is mobile in terms of space; it is mobile in different areas of life; it is mobile with respect to time (Vavoula, O’Malley, Sharples & Taylor, 2005).

3. M-learning is a development from e-learning, which for its part originates from d-learning (distance education). The rapid growth of information and communication technologies makes it possible to develop new forms of this education. Today’s learners’ knowledge of mobile devices makes the entrance of mobile learning possible (see Figure 1) (Georgiev, Georgieva & Smrikarov, 2004).

M-learning has now emerged as a new wave of development based on the use of mobile devices combined with wireless infrastructure, and much of the current literature on m-learning reveals all the strengths and weaknesses associated with the more mature e-learning communities. There are, of course, close links between e-learning and m-learning, and it can be argued that they represent a continuum based on the deployment of ever more sophisticated technologies.

The question is to know how these technologies affect the learning environment, pedagogy, and continuing education (Mifsud, 2002). According to Bryan (2004), mobile technologies and their adoption by the younger generations are going to transform education. It is a question of “modeling learners as creative and communicating participants, rather than passive consumers” and to “describe the world like a service on which one can read and write.” The article adopts a broad definition of mobility. It is interested in continuous connectivity, the dynamic combinations of wired and wireless devices, and learners and their environments.

From recent work in the field of mobile learning (Cohen & Wakeford, 2005; Keefe, 2003;