

5. What was the least effective aspect of this course?
6. What advice would you give to a student considering the MCDCL course for the first time?
7. What suggestions can you provide to help strengthen the MCDCL course?

[Top](#)

Reflective practice

English in class and on the go: Multimodal u-Learning

Soraya García-Sánchez
**Departamento de Filología Moderna, Universidad de Las Palmas de Gran
Canaria, Spain**

[msgarcia @ dfm.ulpgc.es](mailto:msgarcia@dfm.ulpgc.es)

Abstract

This article aims to analyse different ubiquitous learning (u-Learning) platforms used when learning English as a Foreign Language (EFL) as part of the Modern Languages Degree at the Universidad de Las Palmas de Gran Canaria (ULPGC). The combination of face-to-face lessons with multimedia content and digital mediated learning allows today's native students to enhance their independent learning abilities when it best suits them. Successful u-learning takes place when ULPGC students have access to different interactive activities, content videos, screencast presentations and automatic evaluation systems that contribute to improve learners' language learning skills. Students are especially immersed in an EFL learning environment when accessing the Moodle-based Virtual Campus, Prometeo and Picasst multimodal virtual learning environments. The subject considered in this study, English Language II, allowed learners to access authentic cultural and language content not only by means of face-to-face classes but also through reinforcement activities via u-learning platforms.

Keywords: CALL, e-Learning, digital mediated learning, English as a Foreign Language, interactive, u-Learning, virtual learning environments.

1. Introduction and literature review

Today's students are called 'digital immigrants' or 'digital natives' since they speak the digital language of computers on a daily basis not only for learning but for social and entertainment purposes (Prensky 2001: 10). Overflowing e-learning tools are adapted to university degrees in order to encourage learners to be autonomous and successful. E-learning spaces have moved traditional learning environments to approaches that meet the expectations for our digital native students, so that blended learning (b-learning) can take place. Mobile learning (m-learning) has also been a subject of concern for some scholars, such as Uzunboylu, Cavus and Ercag 2009, who have highlighted that portable learning implies that users have an Internet connection and access to digital audio-visual aids via different types of m-learning devices such as a smart phone, a notebook or an iPad (Hwang, Kuo, Yin and Chuang 2010).

Ubiquitous computing (UbiComp), coined by Mark Weiser in 1991, is well-thought-out as the third movement in computing. It implies that one person has access to many computers or virtual devices which are becoming cheaper, smaller and suitable to have in one's pocket or bag (García-Sánchez, Guerra-Artal and Afonso-Suárez 2012). Bill Cope and Mary Kalantzis underline that 'Ubiquitous computing is interactive' because there is a conversation between users and the machine (p. 5). Ubiquitous learning (u-learning) implies that learners adapt their time to their needs. U-learning promotes the sharing of knowledge and culture (Cope and Kalantzis 2010: 11). U-learning is, therefore, constructive, individual, collaborative, creative, interactive and embedded in our everyday life (Bomsdorf 2005: 2).

The way learning English as a Foreign Language (EFL) is achieved is diverse and has been acknowledged thus over the years. The purpose of this paper will be to consider how learners access English language, culture and literature from anywhere and at any time through different multimodal e-learning, m-learning and u-learning spaces that improve their face-to-face learning as Nadire Cavus and Dogan Ibrahim (2007) also argued in their study. We intend to demonstrate that multimodal e-learning environments such as Prometeo, Picasst and Moodle allow learners to become more persistent and skilful when learning a foreign language. Not only do students attend and participate in an EFL class but they develop independent learning skills through the web in a natural way.

2. Multimodal u-Learning: Prometeo, Picasst and Moodle

This study takes into consideration not only face-to-face interactive lessons in which students improve different language and cultural skills individually or in pairs/groups, but also an analysis of how learners are encouraged to participate in e-learning activities implemented via the University's Moodle-based Virtual Campus, its tool to create and publish didactic contents for digital whiteboards (*Picasst*) and its interactive content manager and authoring tool (*Prometeo*), accessed from any portable device (m-learning) anywhere and at any time (u-learning).

Prometeo, *Picasst* and *Moodle* encourage not only electronic learning (e-learning) but also u-learning, which implies that students can access the content and activities at the time, place and way that best suits them. Today's university students are surrounded by computers and portable computerised devices. Because the majority of today's students are linked to ubiquitous computing, they are provided with the most sophisticated machines such as laptops, mobile phones or iPads that have a Wi-Fi connection and outstanding applications. These portable devices are being used anywhere at any time. Students do not need to be in a class to acquire new knowledge, they can choose when, where and how they wish to get connected and do some u-Learning in the right place and at the right time. As Michael Twidale (2010: 77) highlighted: 'Something as seemingly benign as video recording a lecture, drawings, and text question-and-answers can be a great enhancement to learning by enabling students to concentrate on the rich picture and allowing more focused review'.

Prometeo, *Picasst* and *Moodle* enable students to access content by means videos and screencast presentations, and by carrying out interactive activities that deal with comprehension questions relating to the clips or activities previously worked on. With *Prometeo* students are working at their own pace since they can pause and continue later, go back to the beginning, write down any notes on the virtual notebook, and post any question to their teachers. With *Picasst*, students can watch presentations of previous face-to-face classes, especially those dealing with general feedback, that have been uploaded with the teacher's voice with the intention of reinforcing the work done in class. With *Moodle*, students focus on the face-to-face teaching plan, content and activities that are to be handed and completed as part of the continuous assessment criteria. Moodle also supports students in their independent and collaborative learning skills with self-evaluation activities and discussion forums or group dictionaries, respectively.

These virtual learning platforms (VLPs) enable students to belong to a community that goes beyond the classroom. A good classroom atmosphere and the constant engagement in these u-Learning environments foster collaboration and create a sense of learning from each other. Most e-learning stages deal with this sense of belonging to a group of contributors. Although Prometeo is mainly focused on interactive activities, content videos and screencast presentations, adapted to specific goals and content, students are asked to be conscious of their learning abilities and progress every time an activity is completed. In this regard, learners participate to complete goals for the course programme and in order to improve their independent learning skills.

Prometeo is a multimedia and interactive web platform implemented at the Universidad de Las Palmas de Gran Canaria (ULPGC) designed to allow university students to improve their competences and learning skills. The main feature that makes this platform different is its streaming media (T. Hartsell, S. Chi-Yin Yuen 2006) to deliver multimedia-rich recorded lessons (H. Samaras, T. Giouvanakis, D Bousiou, K. Tarabanis 2004 and K. Fraser 2006) and the use of interactive software applications (R. Rheeder, R. Diseko, G. Lautenbach 2007). There are subjects from different areas participating in Prometeo and English Language II has participated for two consecutive years.

Picasst is software that can be used by any teacher at ULPGC. It only requires access to a computer and a microphone. At present Picasst Beta is open to the public by registering on <http://picasst.com>. The site comprises a powerful and versatile tool that allows one to record their classes, explanations or presentations on-line, with great ease and speed. Once finished, students can access this content instantly. With Picasst teachers can record their classes using any digital means (smartboard, a word document, a picture or a PowerPoint presentation and publish it on the platform, or even embed it onto their personal websites or Moodle platforms. Teachers can decide if everyone can view their classes or just their registered students. Students, on the other hand, can instantly watch and listen to the class as many times as they wish. They may also pose open questions to their lecturers or open a discussion with fellow students.

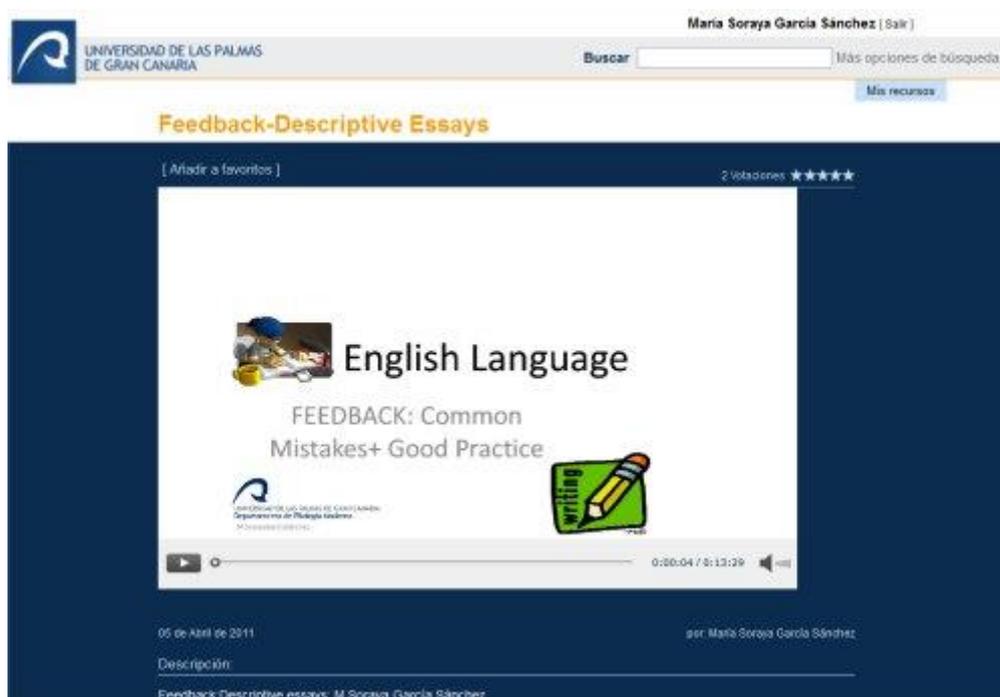


Figure 1. A sample Picasst class. Providing General Feedback on Good Practice and Common Mistakes when writing a Descriptive Essay.

Moodle is the VLE that has been implemented at the University of Las Palmas de Gran Canaria (ULPGC). The Moodle-based Virtual Campus is presented as a learning platform

that consolidates face-to-face teaching at ULPGC. It is the virtual world that engages learners in lifelong learning and community building. Alan Craig et al. (2010: 138) highlight that these 'mentally immersive, massively multiperson, online environments (MMOLEs)' provide better ways of learning since students can have access to 'experiential learning, collaborative learning and creativity'. If experiential learning implies that learners take part in natural learning interactions with real experiences and situations, collaborative learning is about sharing knowledge with a community that is usually based on equality. Likewise, creative learning environments enable users to express themselves by creating and sharing content with the virtual learning community.

This article therefore aims to answer the following key questions:

1. Are EFL teachers adapting their teaching methods to digital natives?
2. Does u-learning benefit the development of lifelong learning?
3. What type of exercises did students enjoy most when accessing multimodal u-learning platforms?

3. Methodology

This study was based on the data we collected after two consecutive years using the above-mentioned multimodal virtual platforms for English Language II. The educational setting in which our research took place comprised a combination of face-to-face teaching/learning and u-learning/m-learning environments that were designed to reinforce class work and to improve lifelong learning in virtual immersive environments.

The methodology was based on the analysis and evaluation of the interfaces created for Prometeo and Moodle with regard to students' learning progress. The way Picasst allows teachers to create online classes will also be briefly presented and discussed. The type of e-learning materials created (videos, screencast presentations, PowerPoint presentations and interactive activities), and the teachers' observation of the activities which are more often used by students will also be considered to be part of the methodology applied.

4. Discussion

4.1. Are EFL teachers adapting their teaching methods to Digital Natives?

The presentation of the material created for English Language II confirms that the answer to this first question is favourable. When designing the content for our subject with Prometeo and our Virtual Campus in mind, the modules were organised paying attention to collaborative learning, independent learning skills and language learning abilities. On most occasions, the online lessons were provided by means of PowerPoint presentations, videos and screencasts which were first delivered in class and then uploaded onto Prometeo for learning reinforcement. Interactive activities were also produced in order to improve our learners' abilities asynchronously.

Class materials in Prometeo can be organised according to different criteria. Firstly, pre-class videos or screencast presentations were viewed by students before coming to class. Secondly, the class materials were uploaded for the learners' future reference. Either by watching and listening to the videos or by carrying out dedicated interactive activities dealing with grammar, listening and reading comprehension, as well as writing skills in English, students were immersed in an EFL environment that contributed toward developing their abilities in a more natural way.



Figure 2. A video sampling differences between British and American English and students' participation by posting a question in Prometeo.

The presentations were all designed following the same structure: introduction, explanation and conclusion. On some occasions, lecturers would elicit questions to their virtual students to confirm that the content was understood. A few minutes would then elapse for them to answer their virtual teacher's questions. The target content was always briefly introduced in the warm-up introduction with a short talk and one or two questions addressed to students relating to their prior knowledge about the topic. After the explanation, the conclusion followed. This last part connected with the warm-up section and with what students should have learnt after listening to the explanation. The language teachers often asked students to continue doing some further reading or extra activities presented on Prometeo.



Figure 3. Sample page from the Virtual Campus.

Further practice was offered in a number of additional activities either on the VLE or on Prometeo. Exercises with an answer key were also published on the Virtual Campus to reinforce class content especially in terms of grammar and writing. Moreover, interactive activities were created using Prometeo to consolidate the content delivered both in class and on the VLE. Most of these activities allowed students to check their learning progress by means of the self-evaluation tasks.

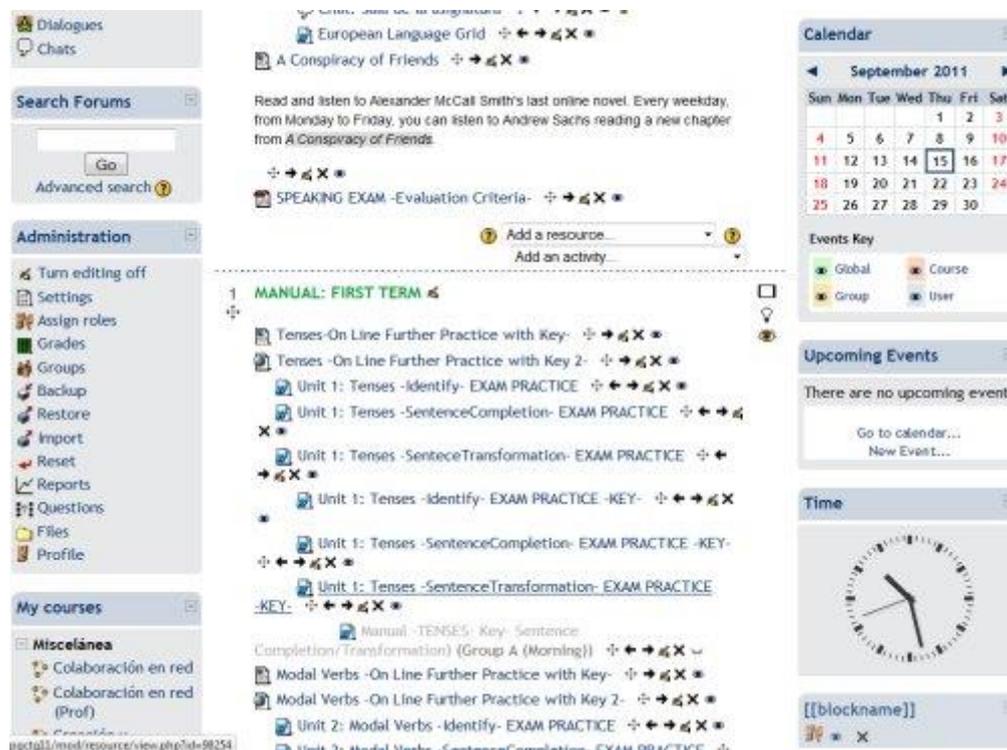


Figure 4. Activities on Virtual Campus with Keys for class reinforcement and independent learning.

4.2. Does u-learning benefit the development of lifelong learning?

The answer to the second question regarding whether u-learning benefits the development of lifelong learning is also favourable. The users of English Language II were aware of the importance of taking advantage of the VLE, Prometeo and Picasst in order to improve their independent learning skills and to consolidate their class work. Students also reported having enjoyed participating in the cooperative tasks and the self-evaluation activities as they found these the most challenging (García-Sánchez 2009: 108). U-learning does not only consolidate course objectives and content but it trains students in developing different ways of being independent lifelong learners. As a result, these virtual learning platforms, programmed according to the course syllabus, contribute to students' prospective abilities.

According to the anonymous feedback questionnaires, most of the students using the VLE, Prometeo and Picasst considered the materials appropriate for the amount of time they could devote and for their expectations in terms of content. All of the students responded favourably to statements such as: 'I have enjoyed the activities and work presented in the Virtual Campus and Prometeo', 'Prometeo, the Virtual Campus and Picasst have helped improve my learning skills' and 'I prefer interactive activities that can be redone in the future'. A total of 80% of the students used a Wi-Fi connection from their laptops, which implies that mobility took place when accessing the platforms (García-Sánchez, Guerra-Artal and Afonso-Suárez 2012).

4.3. Preferred exercises, improved language skills and motivation

Another significant question dealt with the skills students improved when using the VLE and Prometeo. They had the option of choosing among reading, speaking, listening, writing and grammar, since this was the structure of both environments. Grammar was the skill with the highest mark, followed by listening and reading. Speaking, however, was the weakest, understandably because it was the least practised skill through these platforms.

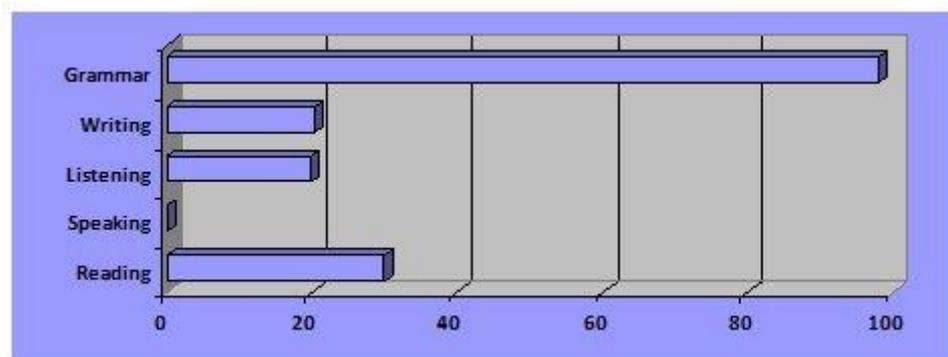


Figure 5. Diagram describing the language skills which were mainly improved by using the VLE and Prometeo.

Students highlighted the fact that the tools used were adequate for their way of learning English in a virtual environment. Moreover, with regard to the Virtual Campus, most students wrote positive comments on the use of forums that helped them discuss current topics regarding EFL culture and also, learn from each other (collaborative learning).

The last two questions focused, on the one hand, on the best feature the learners considered the Virtual Campus, Prometeo and Picasst to have and on the other, on what characteristics they thought these tools needed to improve. Multimodal u-learning users had a number of common favourable answers regarding accessibility whenever and wherever they wished or needed to work; the direct response from their teachers whenever a question was posted either on the VLE or on Prometeo; clear and well-classified grammatical explanations; a back-up of class notes, and wide-ranging interactive activities with instant answers and self-evaluation marks. The way in which the teachers provided feedback to their students first in class and then by means of the Picasst video recorded classes was also valued by our students. They especially appreciated the section on common mistakes because it helped them discover and learn from diverse types of mistakes that the group had. This feedback also helped them to revise for their forthcoming written assignments. The positive feedback underlined at the end of these Picasst videos was also praised by students, who felt that it helped them understand what would be expected of them in each written task, and also, in the final exam.

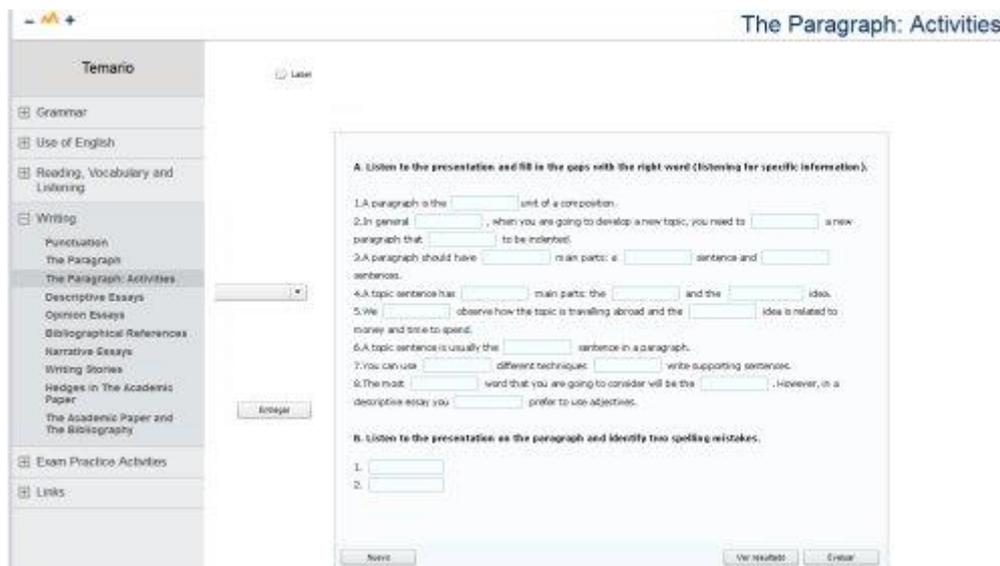


Figure 6. Interactive activity about a video on Prometeo.

5. Conclusions

The University's Moodle-based Virtual Campus, Prometeo and Picasst have proved to be m-learning and u-learning multimodal and multitask virtual platforms that enable English as a Foreign Language students to be immersed in an English language learning environment which comes as natural to them, is individual and encourages collaboration among peers. These tools facilitate e-learning, m-learning and u-learning by using different presentation modes and interactive tasks that aim to reinforce class work and to improve collaborative and independent learning skills. Prometeo offers students the opportunity to watch and listen to a wealth of content presented in videos or screencasts. By using it, learners can also assess their progress and monitor their performance. Additionally, Picasst can be used to provide general feedback focusing on common mistakes and examples of good practice once the teachers have assessed their students' work.

References

- Bomdsdorf, B. (2005). Adaptation of Learning Spaces: Supporting Ubiquitous Learning in Higher Education. Dagstuhl Seminar proceedings: *Mobile Computing and Ambient Intelligence: The Challenge of Multimedia*.
- Cavus, N. & Dogan I. (2009). m-Learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*. 40(1): 78-91.
- Cope, B. & Kalantzis, M. (Eds.) (2010). *Ubiquitous Learning*. Urbana and Chicago: University of Illinois Press.
- Craig, A. B. et al. (2010). Immersive Environments for Massive, Multiperson, Online Learning. In Cope B. and Kalantzis M. (Eds.), *Ubiquitous Learning*. Urbana & Chicago: University of Illinois Press, pp.131-143.
- Fraser, K. (2006). A Blended Learning Approach to Teaching, Introduction to Multimedia – The E Bit! *AISHE Conference proceedings*.
- García-Sánchez, M. S., C. Guerra-Artal, M. D. Afonso-Suárez (2012). Ubiquitous Learning and Prometeo for English Language Learners. *Ubiquitous Learning: An International Journal*, 4(1):65-76. Urbana & Chicago: University of Illinois Press.

García-Sánchez, M. S. (2009) Conscious Learning and Motivation: Online English and Spanish Students Interface. *Annals of Language Learning: Proceedings of the 2009 International Online Language Conference*. Florida: Universal Publishers.

Hartsell, T. & S. C. Yin Yuen. (2006). Video Streaming in Online Learning. *AACE Journal*, 14(1): 31-43. Chesapeake, VA: AACE.

Hwang, G.J. et al. (2010). A Heuristic Algorithm for planning personalized learning paths for context-aware ubiquitous learning. *Computers & Education*, 54(2): 404-415.

Prensky, M. (2001). The games generation: How learners have changed. *Digital Game-Based Learning*, 1-26. Retrieved September 2nd, 2011, from <http://www.marcprensky.com/writing/prensky%20-%20ch2-digital%20game-based%20learning.pdf>

Prensky, M. (2006). *Don't Bother me Mum, I'm Learning*. New York: Paragon House.

Rheeder, R., R. Diseko & G. Lautenbach (2007). The design of interactivity for a web based learning environment at a higher education institution, *Proceedings of the IADIS International Conference on e-Learning*.

Samaras, H., T. Giouvanakis, D. Bousiou and K. Tarabanis (2004). Towards a New Generation of Multimedia Learning Research. *AACE Journal*. 14(1): 3-30. Chesapeake, VA: AACE.

Syvänen, A. et al. (2005) Supporting Pervasive Learning Environments: Adaptability and Context Awareness in Mobile Learning. *Wireless and Mobile Technologies in Education, WMTE. IEEE International Workshop*.

The European Higher Education Area website. Retrieved February 27th, 2012, from <http://www.ehea.info>

Twidale, M. B. (2010). From ubiquitous computing to ubiquitous learning. In Cope B. and Kalantzis M. (Eds.), *Ubiquitous Learning*. Urbana & Chicago: University of Illinois Press, pp. 72-92.

Uzunboylu, H. et al. (2009). Using mobile learning to increase environmental awareness. *Computers & Education*, 52(2): 381-389.

Weiser, M. (1996). Ubiquitous Computing. Retrieved August 27th, 2011, from <http://www.ubiq.com/hypertext/weiser/UbiHome.html>

Top
