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Motivating PAU language testing candidates through mobile technology

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Abstract

Mobile learning permits combining the most motivating elements of online learning. When becoming a supplement to face-to-face education, it is likely to become a most motivating achievement in e-learning. Up to now, little interest and work has been posed in proposing mobile learning as a supporting element for language testing. In this paper, we introduce the concept of motivation for language testing through mobile telephone technology.
The purpose of this study was to explore the acceptance of objective tasks by PAU candidates in an academic context.24 students in a blended enrolled in the last high school year took a test through a mobile telephone simulator and responded to a questionnaire. Results indicate that students were genuinely interested and motivated towards independent autonomous training through mobile technology. The implications are both attractive for the different stakeholders and the educational software designers.

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1. Introduction

Mobile learning permits combining the most motivating elements of online learning. When becoming a supplement to face-to-face education, it is likely to become a most motivating achievement in e-learning. Up to now, little interest and work has been posed in proposing mobile learning as a supporting element for language testing. In this paper, we introduce the concept of motivation for language testing through mobile telephone technology. The final achievement in itself is not to use the mobile phone (although some previous experiences have proved to be positive like the Pass-9 phone based test) as a teaching model but as a supporting element for learning in the of the future. In this paper, we present a model of blended learning environment combining mobile learning and classroom teaching towards the Spanish University Entrance Examination. The purpose of this study was to explore the acceptance of objective tasks by PAU candidates in an academic context.24 students in a blended enrolled in the last high school year took a test through a mobile telephone simulator and responded to a questionnaire. Results indicate that students were genuinely interested and motivated towards independent autonomous training through mobile

technology. The implications are both attractive for the different stakeholders and the educational software designers. Motivating PAU language testing candidates through mobile technology.

2. Literature review

According to Mitchell, J. (2003), m-learning can be defined as a form of learning that is closely linked to distance learning, because like distance learning, one of its most important features is that it offers students the possibility of studying when and where they choose and on the device of their choosing. But what really distinguishes it from e-learning is that the learning is focused on mobile contexts and devices. Daoudi Najime (2008: 11) defines m-learning as the use of mobile technologies for learning. Jihen Malek (2008: 20) defines it more specifically as any learning that takes place when the student is not confined to a pre-determined site, or as training that takes place when the student takes advantage of the opportunities mobile technologies offer.

All of these definitions introduce the idea of "portability", that is to say equipment that is light enough for the students to be able to carry with them. The idea of equipment that does not require leads or cables "wireless" also appears. When communication is wireless an enormous degree of "mobility" exists (Sariola, 2001), students are able to take their devices wherever they need them. Using wireless devices to support the more conventional e-learning activities implies a series of benefits to the students, as pointed out by Kristiansen (2001):

1. SMS can be used by personnel and students to obtain information (for example, changes in the calendar) more easily and quickly than is possible by telephone or e-mail.

2. PDAs or e-books are lighter, less bulky and easier to carry than satchels full of text books, exercise books and papers. They are even lighter than laptops.

3. It has been discovered that using the digital handwriting recognition software on PDAs improves students' manual dexterity.

4. Notes can be made on the device during outdoor classes either by using the keyboard or by voice recording.

5. Using either the infrared function of a PDA or wireless technology such as Bluetooth facilitates team work as it makes it possible for students to share information with each other and the teacher.

6. The devices can be used anywhere at any time.

The students' motivation and personal commitment to learning increases if they own a device and are expected to carry it with them at all times. It also increases their sense of responsibility. If we concentrate on the possible benefits to students in higher education, whose understanding and use of new technology is more widespread and significant (Seibu, 2008: 13), we can gain some clear insights into how the use of wireless devices within the university environment is evolving:

1. Ease of access. Up-to-date knowledge is acquired as required. Access to learning materials is instantaneous, while the user is free to move around without the need to be in a fixed location.

2. Self-study options. The flexibility of m-learning allows students to learn when it is most convenient for them and at their own rhythm. Increasing the freedom they already enjoy with a desktop computer.

3. Assessment and feedback. Assessment tools can be incorporated into m-learning in order to check on the students' progress and produce detailed reports on usage. With these tools it is possible to control what the students have learned during the course, how they have learned and how much they have improved. With this information we can discover what the real benefits of the learning process are.

4. Online Access to study material. Using an m-learning system to access materials online offers a site where teachers and students can interact frequently. Students have access to course material, as well as an online digital library where they can carry out tasks and do exams, thus motivating learning.

3. The Study

Our work focuses on showing the steps taken to set up and carry out a pilot study that would serve as a validation tool for the adaptation and implementation of a particular exam for secondary school students. The exam in question is a Spanish language exam carried out on mobile devices, which forms part of the Spanish Education System's University Entrance Examination Pruebas de Acceso a la Universidad (PAU)1. In addition, the results obtained are studied to determine the impact using the new technologies on these devices has on the students (García Laborda, 2006).

The design and development of the PAU language exam application has led to the production of a specific usability survey through which we have been able to study any changes that students, during their part of the study at school, may have made to the application. This helps us to identify the most efficient functionalities of mobile applications and facilitates the creation of more intuitive environments. On the other hand, it must not be forgotten that the mobile devices have other limitations that affect their usability. These limitations must be borne in mind when designing both the application and the devices themselves (Giménez, 2009b).

3.1. Method

The purpose of this study was to explore the acceptance of objective tasks by PAU candidates in an academic context.24 students in a blended enrolled in the last high school year took a test through a mobile telephone simulator and responded to a questionnaire. These students were high school seniors who were to take the PAU test just a few months after.

3.2. Design of the usability tests

The application was tested using as a reference two view points: the formal validation of the management tool and the functional validation of the student's final telematic exam. To internally validate the tool, tests have been carried out by project researchers together with teachers with knowledge of the area (language school teachers, secondary school teachers etc...). To do this, conventional user tests were conducted using a variety of specifically created or adapted methods for analyzing telematics platforms, depending on the requirements of the validation (functionality, visual ergonomics, content management, etc…). Students had to work a few test items using the following interface:

Figure 1. Adaptation of the different types of question: Multiple selections using a drop-down menu.

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3.3. Developing the usability test with secondary school students

We conducted the test in a secondary school in the Safor area of Valencia. 26, second year Bachillerato students aged between 18 and 21 took the test. Firstly, the students were asked to complete a questionnaire on mobile use, in which important information was obtained on mobile management and environment and the general characteristics of the mobiles the students use. Secondly, a simulation language test using a mobile emulator was carried out. And finally, a test was given based on short questions about the learning experience shown in the simulation. This last test was performed by 20 students from the group.

Figure 2. Students using a mobile phone simulator.

4. Data Analysis

From this questionnaire, completed by 26 students, it can be deduced that the majority (61.5 %) have owned between 2 and 3 mobiles in the last three years, only one of them did not own a mobile and two of them had owned 5 mobiles. 65.38% (17) owned a mobile that was a year old or less. As for usage habits, 92.3% received between 0 and 4 SMS messages a day and 7.7% surpass this. And, 88.5% (23) sent between 0 and 4 SMS messages a day and 11.5% (3) more than 4.

As for the number of SMM multimedia messages students received a day; 96.2% (25) said they did not receive any and just one of them said they received three messages a day. This data can be transferred to the number of SMS messages students sent a day, 25 did not send any messages and only 1 of them sent 2 SMS multimedia messages a day.

With regard to frequency of daily mobile use for leisure, 26.9% stated that they did not use the mobile for this purpose, while 73.1% said they did. Of these, 68.4% (13) used it for less than an hour a day.

80.8% (21) of the students used the mobile for less than 2 hours a day for interpersonal communication and of these 71.4% (15) talked for less than an hour.

As for using the mobile to talk to classmates, 23.1% did not speak to each other while 76.9% did and of these 75% (15) did so for less than an hour.

With regard to the use of the multimedia resources on the devices, 7.7% either did not have or did not use the camera on their mobiles to take photographs, 92.3% did use the camera and of these 58.3% (14) took between one and three photographs a week. Furthermore, 84.6% (22) had and used video, and 18 of these made at least one video a week.

The second part of the mobile telephone usage satisfaction survey about doing the Spanish University Entrance exams (PAU) online, was completed by 20 students. As mentioned previously, the survey evaluated a variety of aspects. Learning time, time taken to complete the tasks, percentage of user errors, retention over time, subjective

satisfaction, are all aspects that allow us to make a practical evaluation. These measures are part of the efficiency and satisfaction aims included in the ISO 9421 standard. In this sense, about 85% of the students claimed that if they could, they would work towards the test in their free time, especially if the software was game oriented so they could fill times like the one used to transfer from their homes to their high school. They also mentioned that the current system could be enhanced by the use of synchronous communication devices to contact with their classmates or even communication systems that allowed competing with their classmates over the phone.

5. Conclusions

As seen in the experimentation, students would be willing to use mobile phones not only for entertaining purposes but also for learning. If motivation is one of the major key issues in learning and language development, it is evident that mobile phones may have a role in language acquisition. Besides, students will be able to use their own devices wherever they want and in this way to be able to train for the test and acquire the necessary skills to take the final online test. The implications of these finding go beyond the test since educational language games can be introduced or developed for language skills building. Overall, we still need to find if this kind of games introduce the concept of flow in m-learning (Garcia Laborda et al., 2010; Cermakova et al., 2010), if designing language testing software may be profitable for private companies, if results in the University Entrance Examination would be similar in m–platforms to e-platforms and, more important than all, whether this type of device would lead to real learning. In that sense, this paper is just a first approach and further studies will have to be done in the future.

Acknowledgements

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