MULTIMODAL COMMUNICATION IN THE 21ST CENTURY: PROFESSIONAL AND ACADEMIC CHALLENGES. 33rd Conference of the Spanish Association of Applied Linguistics (AESLA), XXXIII AESLA CONFERENCE, 16-18 April 2015, Madrid, Spain

Trialing a tablet PC based language test

Mary Frances Litzler Jerman[a], Jesús García Laborda[a] *

[a]Universidad de Alcalá , c/ Trinidad,3, Alcalá de Henares - Madrid 28801, Spain

Abstract

Designing tests is a sophisticated task due to issues such as rubrics, validation and impact. Delivery has become another key issue in recent years. Recent research projects in Spain (García Laborda et al.s, 2010, García Laborda, 2012; García Laborda et al., 2014; Bueno Alastuey et al., 2014) have been working mainly with technological devices as a means of test delivery. However, technology has changed in the last three years making desktop PCs and mobile phones less attractive due to space and practicality considerations. The use of tablet PCs for test delivery might be an effective option that combines the advantages of both devices. This paper investigates some potential difficulties that might be encountered if they are to be used for delivery of high stakes tests. In particular, it examines the perceptions of 24 future foreign language teachers based on a questionnaire. The results indicate that tablet PCs could be adequate for high-stakes tests in the 2nd and 4th years of secondary school (ESO) and the 2nd year of Baccalaureate studies in Spain. This paper addresses the rationale, our method of research and the questionnaire, and the results.

Keywords: ubiquitous learning, high-stakes testing, LOMCE, high-school, English.

1. Introducción

Research for testing of foreign languages has been rather limited in Spain. Most studies have been done in two main directions: washback (Amengual Pizarro, García Laborda) and delivery (Martín Monje, García Laborda). Additionally, some research has been done on the University Entrance Examination (henceforth PAU) (Martín Monje, Díez-Bedmar, García Laborda, etc.) and teacher education (García Laborda & Litzler). Work has also been done related to technology for testing at the Universitat Politécnica de Valencia and Universidad de Alcalá (García

---

* Corresponding author. Tel.: +34- 91 885 5041.
  E-mail address: jesus.garcialaborda@uah.es

Laborda, Magal) and to a lesser extent at the UNED. These studies related to technology have focused on delivery. García Laborda, Otero de Juan y Bejarano (2013) provide an overview of the evolution of research on the use of technology in the PAU since 2004. They indicate the fact that advances such as faster computers, improvement in the Internet flux, computer familiarization, and others led to an online test delivered through desktop computers (García Laborda, 2004) between 2003 and 2007.

Research related to technology and testing in Spain continued when the Ministry of Education announced the imminent inclusion of speaking tasks as part of the PAU. At this point, a proposal involving the use of mobile devices was designed and researched (García Laborda, Magal Royo & Giménez López). Finally, in 2011-2014, the OPENPAU project, which focuses on proposing possible testing solutions for the PAU, suggested two inexpensive ways to deliver the university entrance exam: VOIP and tablet PC's (García Laborda, Magal Royo, Otero de Juan, Giménez López, in press).

Because advances in technology take place so quickly, testing using technological means of delivery must keep a similar pace. A number of factors justify the potential feasibility of tablets as a delivery means for high-stakes tests. First of all, schools are increasingly using tablets rather than desktop PCs. This trend may be related to the fact that tablets have become so common thanks to increased brand competitiveness and lower prices. Given the current economic situation, which has had a major impact on Spain, it is vital to find less expensive means of designing and administering high-stakes exams. This is especially the case since there is a new education law (LOMCE), which has added new high-stakes exams across various years of children's schooling. The use of tablet PCs to deliver the new exams could be cheaper than the use of other means. In addition, the software used in tablets, especially the Android operating system, facilitates navigability and makes mobile devices such as tablets more intuitive than ever. Finally, tablets are easier to transport and could be used in more than one center for testing. Their use would enable administrators to be more independent, meaning each test center could select the most adequate location for test delivery.

Indeed, it might be argued that mobile phones share some of these characteristics. They too can use the Android operating system and are easy to transport. They are also common nowadays and students are familiar with them. More importantly, extensive research has been done on using mobile phones as a means of test delivery. Nevertheless, they would need to be renewed too frequently to be an affordable means for schools and school boards to use them. They continue to be developed and new generations of more sophisticated phones become available at a fast pace. Thus, for all of these reasons we defend the possibility of using tablet PC's for delivering the PAU.

2. Method

Before working with the pre-service teachers to determine their beliefs, we contacted ten local high schools to determine their capacity to offer a high-stakes exam using tablet PCs. Specifically, they were asked about the availability and location of a Wi-Fi connection on their premises and the ICT resources that they have available. This initial information is necessary in order to initiate research into the potential use of tablet PCs in exam delivery at schools.

Twenty-four 4th year students attending a Teacher Training program at a Spanish university were then asked to take part in this study. They are obviously not the target audience of a high-school leaving exam or a university entrance exam, but they are an interesting group to consider for the situation in question. On the one hand, they are prospective teachers for students who will eventually take tests of a similar nature as the recently passed education law includes high-stakes exams at the primary school level. On the other, they have received training in educational applications for language learning.

The student volunteers were first issued a mock version of language exercises that could appear on a high-school leaving test delivered using tablet PCs. The exercises were completed individually in the computer laboratory of the university where they study. Upon completion of the exercises, the students were asked to answer a questionnaire about their opinions of the

feasibility of delivering the actual test to high school students using tablet PCs. The questions sought to determine two things:

1. Is a tablet PC-delivered test operational?
2. Could prospective students adapt easily to the use of tablet PC's for test-taking? Would this delivery means be adequate to for a high-school leaving test?

3. Results

3.1 High schools and feasibility

As mentioned above, ten prospective schools were contacted in order to conduct informational interviews about their technological capabilities for delivering an exam using tablets. The results revealed that there are a number of constraints that must be considered before continuing with this area of research. First of all, access in some schools is difficult in the regular classrooms. Wi-fi access is a major part of this problem since good connectivity is a must in order to deliver a large quantity of tests; this is because of the high demand related to transferring videos and sound. In addition, most schools still do not have enough equipment (tablet PCs), so the tablets for research must be provided by the researchers. Finally, the operating system of the tablets must be changed. Initially it was thought that Windows 8 could serve as the operating system, but it was determined that tablets of this type are prohibitively expensive to consider for large-scale high-stakes exams. In the end, the tablets used were Wolder miTab EVOLUTION W2 (figure 1). Their basic technical features are 10.1" HD (1280 x 800 pixel) IPS reinforced, QUAD CORE (CPU Quad Core ARM Cortex A9), 16 GB, QWERTY BT keyboard with Android 4.4 (http://www.wolderelectronics.com/productos/150-mitab-evolution-w2#.VOMzUU05DIU). The tablets were acquired experimentally before their actual release in the tablet PC market.
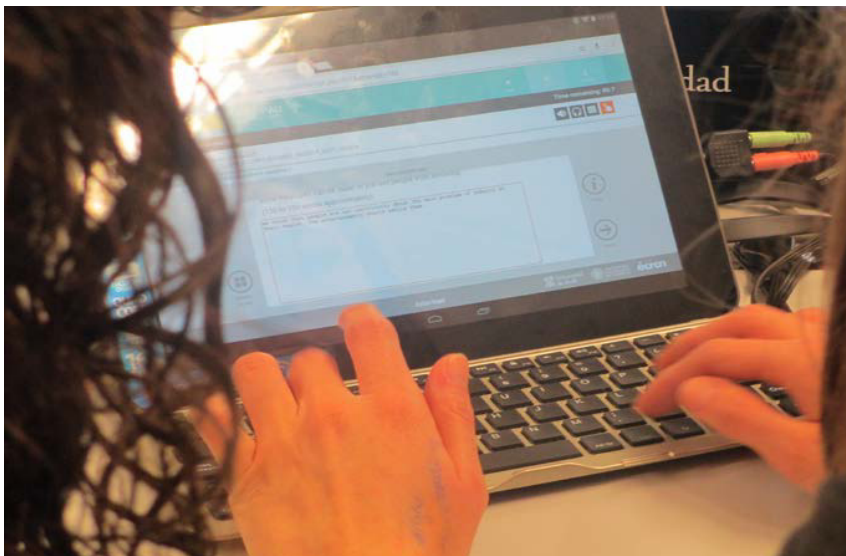
Fig. 1. Student taking the test with the Wolder tablet.

3.2 Student questionnaire results

Tables 1 and 2 show the students' levels of satisfaction with the use of a tablet PC for test exercises.

Tables 1 and 2. Results of the Pilot study of the survey of use of tablet PC's for PAU.

			Desagree ←→ Agree				Total
			0	1	2	3	
Questions	Applicability to PAU	Total	0	6	10	8	24
		%	.0%	25%	45.83%	33.3%	100.0%

			Desagree ←→ Agree					Total
			0	1	2	3	4	
Questions	Adaptation	Total	0	0	2	10	12	24
		%	.0%	0%	8.3%	41.6%	50%	100.0%

The results indicate that the pre-service teachers tend to think that the test could be implemented using tablet PCs (79.13% of the group), and they also think that it would be highly feasible for students to adapt to this delivery means (91.6%). This result is in line with Weir (2005), who states that familiarity with test delivery means is an important aspect of validation within his whole framework. Both of these results from the students suggest that they understand the potential value of the use of tablet PCs for testing and their importance for the future.

4. Conclusions

We have found the results of this pilot study to be quite satisfactory overall. In reference to the first aspect of this study, several issues arose that will have to be faced when the actual field research is done; this means that they must be resolved before continuing in the next phase of work. In terms of the second part of this research, it appears that high school students will most likely be receptive to this new delivery format for exams and they should be able to adjust to using tablet PCs in doing so. The future foreign language teachers tended to be positive towards online testing and their interest in the topic. Further research will obviously need to continue beyond the limitations of this study, such as the sample size, age and experience, the program design limitations (currently under revision), and the actual results of the language test.

Acknowledgements

References

Amengual Pizarro, M. (2009). Does the English Test in the Spanish University Entrance Examination influence the teaching of English?. *English Studies*, 90 (5), 582-598.

Bejarano, L. G., Otero de Juan, N. & García Laborda, J.(2013). Estructura, percepción, factores no-lingüísticos y cuestionamientos de entrevistas OPI en español: Una propuesta de aplicación a la Prueba General de Bachillerato. *Didáctica de la Lengua y Literatura*, 25, 67-81.

Bueno-Alastuey, M., García Laborda, J., Muñoz Alcón, A.I. & Luque Agullo, G. (2014). Setting the standards for the foreign language speaking tasks of the new baccalaureate general test. *Theory and Practice in Language Studies*, 4(9), 1763-1769.

Díez Bedmar, M.B. (2011). The English exam in the University Entrance Examination: an overview of studies. *Revista Canaria de Estudios Ingleses*, 63, 101-112.

García Laborda, J. (2012). Preliminary findings of the PAULEX project: A proposal for the internet-based Valencian university entrance examination. *Journal of Language Teaching and Research* 3(2), 250-255

García Laborda, J.(2004). HIEO: Investigación y desarrollo de una herramienta informática de evaluación oral multilingüe. *Didáctica: Lengua y Literatura*, 16, 77-88.

García Laborda, J., Bakieva, M., Gonzalez-Such, J., & Pavon, A. S. (2010). Item transformation for computer assisted language testing: The adaptation of the Spanish University Entrance Examination. *Procedia: Social and Behavioral Sciences*, 2, 3586-3590.

García Laborda, J., Giménez López, J.L. y Magal Royo, T. (2011). Validating mobile devices in the Spanish University Entrance Exam English paper. *The new Educational Review*, 25(3), 160-171.

García Laborda, J.; Gimeno Sanz, A. M.; Martínez Sáez, A. (2008). Anticipating washback in a Computer Based University Entrance Examination: Key Issues. *Proceedings of the 13th Edition International CALL Research Conference*. Amberes-Bélgica. 02/09/2008, 69-72.

García Laborda, J., & Litzler, M. F. (2011). Constraints in teacher training for computer assisted language testing implementation. *International Education Studies*, 4(2), 13-17.

García Laborda, J., & Magal Royo Royo, T. (2009). Training senior teachers in compulsory computer based language tests. *Procedia: Social and Behavioral Sciences*, 1(1), 141-144.

García Laborda,J., Magal Royo, T., Litzler, M. F., & Giménez López, J. L. (2014). Mobile phones for Spain's university entrance examination language test, *Journal of Educational Technology & Society*, 17(2), 17-30.

Martín Monje, E. M. (2013). El aprendizaje mixto en la preparación de la prueba de acceso a la universidad en lengua inglesa: Aportaciones de un estudio experimental. *Porta Linguarum,* 19, 71-85.

Martín Monje, E. 2014. Integration of web 2.0 tools in a VLE to improve the EFL Spanish university entrance examination results: A quasi-experimental study. *CALICO Journal*, 31(1), 40-56.