

Jesús García Laborda*, Teresa Magal Royo, & Emilia Enríquez Carrasco****

* Universidad de Alcalá de Henares, Madrid, Spain

** Universidad Politécnica de Valencia, Valencia, Spain

Writing Processing in a Trial Version of the Computer Based University Entrance Examination: A Way to Motivate Curriculum Change in Spain

Abstract

Since Malone advanced his theory of intrinsically motivating instruction against the backdrop of digital gaming (1981), some evidence has been put forth that serious games may increase intrinsic motivation for learning (de Freitas & Griffiths, 2007; Dickey, 2007). In this presentation, we will report on the LLINGO project, which aims to develop a prototype for language learning in immersive, game-based environments, by pitting instructional design against game design. From an instructional design perspective, we will tackle various aspects such as the need for a task-based approach, learner control and the role of learner perceptions. From the point of view of game design, we will discuss story and scripting, character development and game mechanics. Finally, we will discuss this design framework in light of the targeted users.

Short Paper

Introduction

One of the fundamental aspects of language testing is its effect in teaching. Currently, the Spanish Government is researching the possible implications of implementing an Internet based language test for the national University Entrance Examination (PAULEX project HUM2007-66479-C02-01/FILO). There are a number of issues that have concerned the project researchers in relation to what kind of tasks would be considered to show more significant differences from pen-and-paper and computer based tests. Soon in the research, the team found that their main concern should be the writing and speaking tasks. Although extensive study in relation to oral tasks has been done by testing companies such as the Educational Testing Service (TOEFL) and NCS Person e-Measurement Services (Pearson PTE), for the Spanish researchers the main concern was posed on the written tasks. This was so for two main reasons: (1) the oral tasks have not implemented in the University Entrance Examination yet (scheduled for 2012), and (2) extensive trialing is necessary and give the current funds, it may take two years to test a minimal sample to take decisions. In relation to the writing processes, the research team first addressed issues such as web design (García Laborda, 2009); ergonomics (García Laborda et al, 2010); scoring and benchmarking processes or experimental design. After doing all this previous work, in November 2009, 260 students took a computer based version of the University Entrance Examination in Valencia (Spain).

After completion of the test, the research team proceeded to two main assessments: a holistic one and an error analysis. Both analyses indicated a number of issues:

- 1) The holistic assessment indicated that the results of both the group and the individuals was not very different from the results obtained by the candidates who took the same test only a few before;
- 2) Students were happy about the testing platform and felt that it was a reliable way to measure their language proficiency;

- 3) Errors due to computer use and typos were a small percentage of the total number of errors and the average word count was also similar to the control test (the one that was used)

Computer processes: Observation results

Observation has hardly ever considered as a reliable method of research (at the most a quasi-experimental method). However, in this case, it was considered in order to observe the students' reactions to the test. Two 1 hour sessions were recorded. However, due to the Spanish rights of privacy, little material can be used actually. The writing speed and their body language expressions were also annotated (García Laborda & Gimeno Sanz, 2010). According to the observations, the team obtained three main conclusions:

- 1) Students showed no sign of additional difficulty. In general, with a few exceptions, students did not require much support to work. Most assistance, in fact, was provided to support the students with the software deficiencies (mostly due to connectivity);
- 2) Students worked regularly and typed at an adequate speed to fulfill the main written task in the time given;
- 3) Their keyboard use was adequate, at least, for the tasks they were assigned.

Educational changes associated to the trialing stage

By this experimentation, the research team obtained evidence to support the implementation of the Computer based University Entrance examination with a few premises:

- 1) It is necessary to motivate both teachers and students to accept, understand and integrate the change. García Laborda (2010) verified that although teachers may be reluctant to change at the beginning, they may also be willing to take the necessary training that may help them to understand and accept their attitudes' change.
- 2) Effective and simple applications are necessary to motivate students. The team believes that simplicity in interface and flow design may have a significant effect in students accepting the application. If writing was considered to be the most troublesome aspect in the change, as it was observed, when students feel at ease they may be prone to perform, at least, as well in a computer environment as they would in a different context (pen and paper). According to Weir (2005), delivery context may be a crucial factor in determining the validity of a language test.
- 3) Motivation should also be an important aspect to consider for the change. Since foreign language teachers in Spain tend to be reluctant to integrate computers in writing (although they may be more willing to use it with multiple choice exercises or reading activities), it is important to facilitate meaningful training.

Overall, the results obtained in the experimental stage of the project may motivate dramatic educational changes. Therefore, as observed the teachers' and students' reconceptualization may be supported by three main pillars: knowledge of the software, acquisition of working strategies (both for teaching and learning), and security that the results will be reliable and, at least, as good in the new delivery context.

Even more important could be these results in light of their institutional effects and the effects in the regular teaching (washback). Since students can adapt easily to the new delivery context, it could be plausible believing that with some economical effort computer testing can benefit economically the educational boards around Spain on the medium term.

Conclusions

If students are able to adapt themselves to the written section of computer assisted language tests without previous training, there is little doubt that they could adapt to the rest of the test. There is also little debate on whether computers can be used to improve the assessment

process while reducing the costs related to testing. This facility should motivate the incorporation of computer based testing platforms for the University Entrance examination.

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Keywords

testing, writing, motivation, volition

Bio Data

Teresa Magal is a Full professor at Universidad Politécnica de Valencia where she teaches graphic design for educational purposes and the media. She has extensively researched in interface graphic design and educational computer testing architecture. She has published in *Computers & Education*, *Eurasian Journal of Educational Research* and *Iberica The Journal of English for Specific Purposes*.

Emilia Enríquez Carrasco is a Full professor and a specialist in voice processing for computer based application for the teaching of Spanish.

Jesús García Laborda teaches English at Universidad de Alcalá and has published in some key journals in Education such as *Educational Technology & Society*.

Contact

Teresa Magal Royo

Universidad Politécnica de Valencia
Paranimf 1
46730 Grao de Gandía (Valencia)
Spain

tmagal@degi.upv.es

Jesús García Laborda

Universidad de Alcalá de Henares
Dpto. Filología Moderna
c/ Trinidad 3
Madrid
Spain

jesus.garcialaborda@uah.es