4th WORLD CONFERENCE ON EDUCATIONAL TECHNOLOGY RESEARCHES, WCETR-2014

Learner Response to Practising English Online with the *InGenio* Content Management System

Ana Gimeno[a*]

[a]*CAMILLE Research Group, Department of Applied Linguistics, Universidad Politecnica de Valencia,
Camino de Vera 14, 46022 Valencia, Spain*

Abstract

The study described in this paper is based on the process carried out to corroborate the validity of the *InGenio Online Course & Tester,* developed by the CAMILLE research group at the Universidad Politecnica de Valencia, Spain, as a suitable tool for learners wishing to take, and successfully pass, the Cambridge First Certificate in English examination. The validation process was carried out by means of a pre-course survey and a post-course survey in the form of two online questionnaires with a total of 146 learners of higher-intermediate English enrolled in various technical degrees at the said University. There was sufficient evidence to corroborate its usefulness although a number of recommendations for improvements were discovered.

1. Introduction

Due to the lack of materials that are currently available online to support learners of English for Specific Purposes (ESP) and the national requirement in Spain that students must achieve a higher intermediate level in a foreign language in order to graduate from university, members of the CAMILLE research group at Universidad Politecnica de Valencia (UPV), Spain, set forth to design, develop and publish multimedia courseware for this purpose. The courseware is called *InGenio FCE Online Course & Tester* and has been designed using the *InGenio* authoring tool and content manager. Its aim is to prepare students to take the Cambridge First Certificate in English Examination (FCE), which is equivalent to a B2 (higher intermediate) level of proficiency according to the *Common European*

[*]Ana Gimeno.Tel.: +34-963877007 Ext. 75303; fax: +34-963879981.
E-mail address: agimeno@upvnet.upv.es

Framework of Reference for Languages (Council of Europe, 2001). The group members have also systematically been conducting surveys to analyse learner responses and attitudes towards practising English language skills using the online courseware. For the past 3 academic years (2011-14) UPV students enrolled on an English language subject have taken an initial survey, intended to gather relevant information on learner profile and expectations, and a final survey after completing the course to gather information regarding their satisfaction in using the said courseware. The results of these pre and post course surveys will be discussed in the sections below with a special focus on the implications that the findings have had on courseware design issues and the aspects that have been modified in order to comply with learner preferences and requirements. To conclude, a number of recommendations for future courseware design are described.

2. The *InGenio FCE Online Course & Tester*

The *InGenio* system includes 4 modules: 1) an online authoring tool to publish multimedia language learning courseware; 2) a delivery platform; 3) a translation tool to adapt the courseware created with *InGenio* to any number of source languages, and 4) an online tutoring platform allowing tutors to supervise and monitor student performance[1]. The *InGenio FCE Online Course & Tester* was co-authored[2] by members of the CAMILLE Research Group[3] and published in 2012. The courseware aims at preparing learners wishing to take the Cambridge First Certificate in English Examination, which is equivalent to a B2 level of English according to the criteria set forth in the CEFRL. The course comprises 2 modules, each of which includes 8 "course" units and 8 "tester" units.

The activities comprising the course units typically include theory and practice geared toward practicing the language, whereas the tester units aim at helping learners assess whether their performance complies with the level of English that will be required of them when taking the FCE exam. The tester simulates the exercises contained in the FCE exam so that students may self-assess their performance. The entire module is organised and structured in accordance with the papers included in the official language examination, i.e. Reading, Writing, Use of Language, Listening and Speaking, and add up to a total of 50 activities with a varying number of items each. The overall study time allocated to the module is approximately 45 hours. The entire course therefore implies approximately 90 practice hours. Upon completing and achieving a minimum average of 5 marks out of 10, students taking the subject are awarded 4.5 ECTS[4].

3. Method

Throughout 3 academic years, students registered on the *InGenio FCE Online Course & Tester* completed a pre-course survey and a post-course survey in the form of online questionnaires administered through Google Forms. A total of 146 students submitted the pre-questionnaire but only 66 of them submitted the post-questionnaire (45.2%) after completing the whole course. Student ages ranged from 18 to 23. They were all enrolled on various undergraduate degrees at UPV such as aerospace engineering, electronic engineering, industrial design engineering, architecture and industrial management. The initial questionnaire was divided into 5 parts enquiring about the following and included 66 enquiry items based on a 5-point Likert scale plus 17 open-ended questions.

---

[1] For further information on the InGenio system, see http://camilleweb.upv.es/camille;
http://eurocall.webs.upv.es/index.php?m=menu_00&n=news_07#projects; Gimeno Sanz, A. (2008). "InGenio: A dedicated CALL authoring shell, content manager and courseware delivery platform". Aprendizaje de lenguas asistido por ordenador: herramientas de autor para el desarrollo de cursos a través de la web. Valencia: Editorial de la Universitat Politecnica de Valencia, pp. 93-117; and de Siqueira Rocha, J.M. (2012). Desarrollo y validación de soluciones tecnológicas para el aprendizaje a través de la plataforma de e-learning InGenio. Valencia: Editorial de la Universitat Politecnica de Valencia. Available from http://www.upv.es/pls/obib/sic_publ.FichPublica?P_ARM=5529.
[2] The co-authors are Antonio Martinez, Ana Sevilla, Jose Macario de Siqueira, Roberto Gonzalez and Ana Gimeno.
[3] The CAMILLE Research Group is devoted to R&D in Computer-Assisted Language Leaning (CALL) and e-Learning.
[4] ECTS stands for "European Credit Transfer and Accumulation System". For further information go to
http://ec.europa.eu/education/tools/ects_en.htm.

1. Personal data and the student's perception on how good or bad they are at learning foreign languages (FL) and how important they perceive FL to be for their studies as well as their future professional careers. (20 items)
2. The various uses and frequency in using ICT both as study tools and as leisure items. Their attitude toward technology as an educational tool. (21 items)
3. Information on their expectations and motivation to take the subject and preferences in regard to learning English. (12 items)
4. Their preferred learning styles, approaches to language learning and methodologies. (6 items)
5. Their degree of knowledge regarding the CEFRL and the FCE exam. (7 items)

The post-questionnaire was divided into 5 sections and enquired about the following using a 7-point Likert scale and 3 open-ended questions:

1. General courseware features seeking data on student satisfaction regarding the graphical user interface; ease of navigation; clarity of layout and graphics; relevance of contents; appropriateness of level; balance between theory and practice; adequacy of time allocation; degree of autonomy; satisfaction with tutor support; quality of media files, etc. (22 items)
2. Course and Tester contents: quality of instructions; usefulness of exercises to practise language skills (reading, writing, listening & speaking); clarity of grammar explanations and exercises; usefulness of vocabulary exercises; satisfaction with technical content; interest of topics; variety and originality of tasks; degree of anxiety reduction to face the FCE exam. (22 items)
3. Student self-assessment and personal comments: preferred learning styles; types of external sources used to complete activities; satisfaction working autonomously; perceived improvements in language skills; recommendations for improvements; recommendations for eliminating or making additions to the course; preferences in topics. (26 items)
4. Voluntary speaking sessions: satisfaction with tools used; quality of interactions with classmates, native speakers and tutors. (5 items)
5. Future improvements: whether they thought it would be beneficial to include more audiovisual aids; incorporate telecollaboration tasks with foreign students; incorporate virtual worlds' activities, etc. (5 items)

Each variable was composed of a number of defining items and analysed qualitatively and quantitatively.

4. Results and discussion

The pre-course questionnaire provided us with ample information with respect to the learner profile. More than half of them (61%) saw themselves as being good at learning English although 67% confessed worrying about making mistakes and 75% of them said they felt embarrassed when speaking in English even after practising. This means that there is a high degree of insecurity among our students when confronted with the foreign language in real communicative situations. Being shy, therefore, is one of the burdens our students have to struggle with. In this sense, one of our goals in designing the courseware was precisely to build students' self-confidence by providing tips and techniques to increase learner intake. However, 84% were convinced that a good command of English is crucial for their future professional careers, which is one of their main motivations for learning the language, and 95% thought that being a fluent speaker would improve their future job prospects. Other motivating factors included the will to travel (84%) and an interest in getting to know and understand other cultures (86%).

Surprisingly, students reported that although they use ICT on a daily basis and customarily use the Internet in the target language to help them with their studies (looking up terminology, finding relevant information, etc.), they had never before based their language learning on an online self-access course. This novelty, together with the fact that they thought technology-based materials provided greater variety, freedom of access and even entertainment, made them all very favourable to using the InGenio courseware in preparation to take the FEC exam and this also considerably increased their expectations. One learner, however, pointed out the importance of using an appropriate methodology:

[N44] *In my opinion, it's all about the way you present the educational materials and the methods you are applying to learn. The strong point of using technology is the multimedia capabilities that it implies, like integrating text, image, video and sound. But it won't work if the method is boring and the display is not appealing.*

Another recurring factor that was emphasised as an advantage when using technology was the possibility of receiving immediate positive or negative feedback instead of having to wait for an exercise to be corrected by a teacher and then feedback given. When asked whether they thought an online environment was less threatening than a face-to-face environment, an astounding 45% agreed that this was the case, which links to the idea mentioned above regarding their being shy, specially to speak English publicly, and embarrassed of making mistakes. 83% of them reported that speaking was definitely their weakest skill, followed by listening (13%), writing (4%) and reading (0%). Another interesting fact is that 88% of the students stated that the medium of instruction influences their motivation to learn whilst all of them reported they find learning languages online appealing, which means that their initial attitude toward using the *InGenio FCE Course & Tester* was at the outset very positive. When asked whether they preferred working individually or collaboratively in a group, opinions were split both ways with 60% preferring to work in teams and 40% individually, which could imply that the latter would be better suited to the proposed learning environment.

Regarding how they prefer to approach language learning, 41% stated that they preferred a face-to-face course with a teacher in a classroom; followed by 36% who reported preferring a face-to-face course using technology in a classroom; 19% an online course being assisted by a teacher and only 3% preferred an online self-access course working by themselves. This links to the fact that 56% stated that, given a choice, they would choose a blended-learning scenario, probably influenced by a wish to get the best of both worlds.

Regarding the variables analysed in the first section of the post-course questionnaire, we were able to determine that a vast majority of the students were satisfied with the general courseware features. As the queries were based on a 7-point Likert scale, we shall consider as positive all the results ranging from 5 (above average) to 7 (very high). The results were divided thus:

Regarding the general aesthetics
1. The graphical user interface was considered to be user-friendly by a total of 75% of the students.
2. Navigation was thought to be intuitive by 79%.
3. 77% of our students reported that it was easy for someone with minor computer skills to benefit from the courseware.
4. The graphics and symbols used seemed clear to 71% of the users.
5. The layout (use of colours, fonts, icons, etc.) was said to be appealing for 65%.

Regarding the courseware contents
6. The language input was considered meaningful and interesting by 80%.
7. The audio input was reported to be clear and loud enough by 72%.
8. The in-house made video recordings ("Polimedia" videos) were said to be useful and relevant by 68%, whilst the Course contents achieved 88% and the Tester contents, 86%.
9. The amount of theoretical contents included in the courseware to support the learner toward learning autonomously was rated adequate by a total of 86%.
10. The target level (B2 of the CEFRL) was thought satisfactory by 90% of the users.

With respect to how students interacted with the online course, the following is worth mentioning. The timeframe allocated to its completion was calculated to be between 45 and 60 hours depending on students' prior knowledge of the language. 66% of them agreed that this timeframe was sufficient although a non-negligible 21% of the students found it a strain to complete the contents according to schedule. In general terms, the time devoted to a subject at UPV is calculated by adding an extra 50% of the mandatory hours allocated to a subject as work that the student has to carry out in addition to "classroom contact hours". That is, if a subject such as this one is assigned 4.5 ECTS

(equivalent to 45 teaching hours), the student is expected to devote an additional 50%, making a total of 67.5 hours, which adds up to a sum of 112.5 study hours. That 21% of the students who reported insufficient time were, we suspect, not aware of this norm.

Interestingly, 69% reported that they had taken a look at the theory sections in each unit before starting to do the exercises which correlates with the fact that 86% considered these contents appropriate, as stated in point 9 above. However, only 58% of them said that they had watched the explanatory in-house video recordings ("Polimedia recordings") prior to undertaking the exercises, a way of approaching the contents which is not recommended by the course designers. When asked whether they thought the *InGenio FCE Course & Tester* encouraged and supported autonomous or independent learning, an overwhelming 93% agreed. This leads us to believe that the contents have been appropriately designed and implemented in order to make the learner feel confident that they are making adequate progress. One of the reasons for this is probably due to the fact that the InGenio authoring tool includes an automatic system that monitors student performance and allows registered users to access progress reports. In line with this, 81% appreciated being able to access their progress reports on demand. This also relates to the fact that 74% of the students considered the automatic feedback they got from the system useful and relevant. Additionally, 77% state that they enjoyed having the freedom to organise their time their own way rather than being subject to a fixed schedule. In accordance with the previous results, 85% of our users said that they would recommend the *InGenio FCE Course & Tester* to a friend.

As the courseware is accessed through the University's Learning Management System (LMS), *PoliformaT,* which is based on Sakai[5], registered students also had access to their tutor via the LMS messaging and chat systems. This was no doubt the reason for achieving a rate of satisfaction of 89% when asked whether they had received enough help from their tutor when needed.

The following items that were queried refer to the actual courseware contents. All of the items were awarded a percentage ranging between 70% and 86% except for the usefulness of the speaking activities which dropped to 58%. This lower rating is due to the way the speaking activities were designed according to the information provided by students in the open-ended questions when they were requested to suggest improvements for the system. As many as 10% of them advised reformulating the speaking exercises in order to include real, live interaction with a tutor, which would necessarily imply integrating the system into a blended-learning context. This finding is consistent with other surveys conducted by the CAMILLE research group (unpublished), as well as other researchers who found evidence to confirm that learners benefit less from "automated" speaking activities where they are prompted to record themselves and upload the files for subsequent assessment by a tutor than from receiving teacher input which helps students develop listening and speaking skills more effectively than when just working alone (Zou, 2013, p. 93). Naturally, the former situation deprives learners from real communicative interaction and the advantages of immediate corrective feedback. Due to current technological constraints, it is easier to programme online activities leading to practising receptive skills (listening and reading) rather than productive skills (writing and speaking). The items that proved satisfactory covered aspects such as clarity and precision of the instructions; usefulness of the exercises devoted to practicing grammar, listening comprehension, reading and writing skills; usefulness of the theoretical explanations on how to write various types of texts; appropriateness of the technical content; usefulness of the exercises to aid in vocabulary acquisition; interest and relevance of the linguistic input and the topics covered; originality, variety and relevance of the task typologies; usefulness of including a "Test your English" section allowing students to have an idea at the outset of their language level; usefulness of the tips and information provided about the FCE exam.

The students' personal perception regarding whether their linguistic skills in English had improved gave a total favourable result of 84% (highly satisfied, 17%; very satisfied, 32%; and satisfied, 35%), whilst 14% had no opinion and merely 3% were slightly unsatisfied. Similar results were returned (86% satisfaction) with regard to their level of confidence to take and succeed in a B2 level exam such as the FCE exam. However, they were of the opinion that completing the courseware did not necessarily help them to reduce the level of anxiety that taking such an exam would pose. Only 56% were satisfied with this aspect.

---

[5] For further information visit https://www.sakaiproject.org.

As courseware designers, we had planned to redesign and reconsider any variable that achieved a score below "slightly-higher-than-average", i.e. lower than 60% in order to get as reasonably close as possible to maximum user satisfaction. This implied that there were clearly 3 variables that had to be reconsidered and improved. As mentioned above, these related to a) the in-house recorded explanatory videos ("Polimedia" videos); b) the speaking activities, and c) the designers' attempt to aid the users in decreasing their levels of anxiety when facing an official language exam such as the Cambridge FCE exam. The solutions implemented since these results were obtained have been a) to highlight the need to watch the explanatory videos before undertaking the exercises by creating pointers (reminders at given points of the materials); b) to schedule specially designed face-to-face group activities to engage learners in live interactions and communication processes (12 hours' tuition in total); and c) stressing the fact that by successfully passing the exercises and activities included in the Tester units (which simulate the FCE exam papers with limitation of attempts and timed activities), students should feel confident in succeeding in the exam when confronted with the real situation. A follow-up study will shortly be conducted to this effect in order to analyse how well the learners who prepared the exam with the *InGenio FCE Online Course & Tester* did and correlate their marks to their achievements in the official exam.

5. Conclusions

The validation process carried out by means of a pre- and post-questionnaire completed by all the students who satisfactorily concluded all the activities in the *InGenio FCE Course & Tester* during 3 consecutive academic years was successful and allowed us to determine the areas which had to be improved or modified in some way or other in order to increase learner satisfaction.

The area which stands out the most in terms of required improvements is that concerning speaking practice. Out of all the activities included to practice language skills, students were least satisfied with the way the integration of the speaking activities had been resolved. In their view these activities were not stimulating enough and scarcely interactive, thus restricting their motivation. However, it is felt that student expectations were perhaps too high in this respect considering the limitations of the technology used. The "Study on the impact of information and communications technology (ICT) and new media on language learning" (Stevens & Shield, 2007, annexe III, p. 64) commissioned by the by the Education and Culture Executive Agency of the European Commission reported that in the opinion of their expert informants "many learners [are] aware of [the] benefits of ICT/new media for developing reading/writing skills, [but] fewer believe they can develop speaking/listening skills." Additionally, Zou observed in a study published in 2013 that 84% of the student respondents reported that the direction provided by their teachers helped them improve their speaking skills more than when studying alone on their computer (p. 91). This leads us to believe that, currently, the best way for us to improve speaking practice using the *InGenio FCE Online Course & Tester* is, as mentioned above, to organise supplementary speaking activities with a live tutor, preferably in face-to-face sessions or by means of video conferencing tools.

Lastly, we would like to stress the fact that the data from both questionnaires clearly supports the idea that students are intuitively attracted to technology and firmly believe in its affordances to help them improve their language proficiency efficiently autonomously.

References

Council of Europe (2001). *Common European Framework of Reference for Languages.* Retrieved from http://www.coe.int/t/dg4/linguistic/source/framework_en.pdf.

Stevens, A. & Shield, L. (2007). Study on the impact of information and communications technology (ICT) and new media on language learning. European Commission. Retrieved from http://eacea.ec.europa.eu/llp/studies/study_impact_ict_new_media_language_learning_en.php.

Zou, B. (2013). Teachers' support in using computers for developing students' listening and speaking skills in pre-sessional English courses. *Computer Assisted Language Learning, 26*(1), 83-99. doi: 10.1080/09588221.2011.631143.