# CREATION AND DEVELOPMENT OF AN INTEGRATED MODEL OF NEW TECHNOLOGIES AND ESP

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#### **Abstract**

It seems irrefutable that the world is progressing in concert with computer science. Educational applications and projects for first and second language acquisition have not been left behind. However, currently it seems that the reputation of completely computer-based language learning courses has taken a nosedive, and, consequently there has been a general closing of private schools whose main instruction tool was the use of new technologies, specifically computers and software (Yahoo España Noticias, 2003: February 5, 2003; Consumer.com, 2003: January 19, 2003). Given these circumstances, we may discuss in depth what role the new technologies play (National Center for ESL Literary Education, 2002; Lambert, 2001; Kasper, 2000) in the acquisition of foreign languages and their cultures (Osuna, 2000). In addition, we should reconsider the role of the professor and what the main difficulties may be in this situation (Hogan-Brun and Whittle, 1999). In carrying out this study we have focused on an educational innovation project using teaching and assessment methodology. This study begins by succinctly describing this Educational Innovation Project in order to later focus on the difficulties that the two professors have had to face when carrying out this project. This study is divided into the following parts: (1) Description of the Project that will show its design by highlighting all innovative aspects with respect to other university programs with the same characteristics. The data given in this section will include the sample, temporary process, methodology and assessment; (2) difficulties encountered; (3) solutions and recommendations for effective development of similar enterprises in the university setting. As in any other new subject such as the one presented here, this paper is merely a summary of an initial personal experience which two participating professors have had. The proposals are tentative with the hope that in future courses these initial results may be confirmed or disproved.

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# Creation and Development of an Integrated Model of New Technologies and ESP

Jesús García Laborda, of the Polytechnic University of Valencia, reports on an educational innovation project involving new technologies which he carried out with a group of students studying English for Tourism.

It seems irrefutable that the world is progressing in concert with computer science. Educational applications and projects for first and second language acquisition have not been left behind. However, currently it seems that the reputation of completely computer-based language learning courses has taken a nosedive, and, consequently there has been a general closing of private schools whose main instruction tool was the use of new technologies, specifically computers and software (Yahoo España Noticias, 2003: February 5, 2003; Consumer.com, 2003: January 19, 2003).

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This study is divided into the following parts:

- 1) Description of the Project. In this section we will show the initial needs that are delineated in the project. We also will show its design by highlighting all innovative aspects with respect to other university programs with the same characteristics. The data given in this section will include the sample, temporary process, methodology and assessment
- 2) Difficulties encountered. The two professors of the subject have evolved their teaching to focus on those parts which give the most problems. These are divided into two groups: technological and linguistic problems.
- 3) Solutions and recommendations for effective development of similar enterprises in the university setting.

As in any other new subject such as the one presented here, this paper is merely a summary of an initial personal experience which two participating professors have had. The proposals are tentative with the hope that in future courses these initial results may be confirmed or disproved.

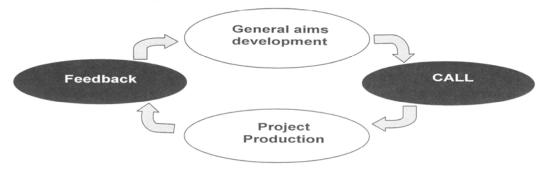
# 1. DESCRIPTION OF THE PROJECT

Between September 2001 and now different types of didactic investigations have been carried out among tourism students at the Polytechnic Institute of Valencia at Gandía. These studies sought to determine what the educational and professional needs of the students were. Thus, García Laborda and Pérez (2002) studied learning strategies for first, second and third languages; Corbacho Sánchez and García Laborda (2002) studied the use of electronic mail for these, and, finally, García Laborda (2003) studied the need for an auditing and consulting program for students and others with difficulties. Below we summarise with a brief list some

of the most significant findings:

- a) The students studied had very limited experiences with the new technologies. Not only was the learning curve very steep, but they also did not have any specific computer preparation other than in Word and PowerPoint. Additionally, they had not had any instruction in programs such as Access, FrontPage or Dreamweaver. Their experience with the Internet had been mostly for entertainment with little research. It is notable that they knew how to use Amadeus which is an Internet based programme for buying and changing airline tickets.
- b) The first year students did not have creative marketing ability for creating their own computer related materials. In effect, many of them had never made a promotional video or commercial - either with traditional media (paper or analogue video) or with computer media (digital videos, web pages and the like).
- c) Many of the students had almost never used electronic mail. Thus, many of the advertisements that the professors sent out were not opened, and therefore were not read, which led to the information frequently becoming outdated. The students used computer chat sessions most frequently but, except for the hours they were in the centre, the majority of these students neither used this resource for recorded class sessions nor for sharing information amongst themselves. Likewise, they seldom used the tutoring offered on message boards and through electronic mail (García Laborda and Corbach Fernández, 2002; Knutzen, 2000; Calderon Young, 1999).
- d) The students scarcely saw a relationship between their professional future and the use of new technologies except for on the user level.

After making these observations, the English and German professors at the University started to study a plan of action for attempting to improve this situation. This plan would be carried out using the following process:



Nevertheless, as we understood the problem at that time, it was necessary to consolidate those ideas so that, while other professors regularly taught other languages offered by the department, we requested that the nine-month Educational Innovation Project be put into practice. Although one could think beforehand that it was an excessively long period within the general Spanish university system framework, where classes tend to last for only four months, nine months allows more ambitious and higher quality projects to be completed than those which are carried out within only four months.

## 1.4 The Students

The project was put into practice for tourism students taking English II (second year). There were a total of 119 students. Among these, about 90 are completing the required projects.

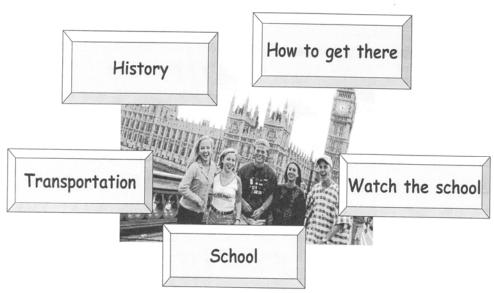
# 1.5 Elements Completed

For the projects, the students were asked to think of a general topic such as a tourist destination, a means of transport or entertainment or any valid marketing activity. Thus, the students developed the following elements related to the project

- 1) A tourist brochure made on paper and digitally.
- 2) A promotional digital video (based on the proposals by Gold and Serim, 2002).
- 3) A CD ROM or web page (McGee, 2001).

The CD ROM or web page was supposed to include all of the necessary parts for making a promotional article for possible consumers of the tourist services advertised in this medium. The suggested web page model is presented below:

# Language Tourism in London



As can be seen in the example, all of the required parts are clearly shown for the students in the overall description of the project. This model was not valid since the main requirement was not adapted to include a novel item that had not been previously tried.

# 1.6 Results of the Project

We can divide the results of the project into two main sections. On one hand, we have the results which are related to application development. However, we should not lose sight of the fact that this project was developed mainly for the English language classes and therefore we cannot disregard the fact that the results should be especially visible within this academic framework.

#### 1.6.1 Professional Results in Tourism

The students had to cooperate with several city councils with scant tourist information from the Internet, and generally on paper. We can summarise their professional achievements with the following:

- 1 Several students developed the topics for their final degree project (which generally was not related with the material in their courses with the topic being difficult to determine).
- 2 A framework business agreement between the department and the Government of the Valencian Region was made, and currently a second one is being administered.
- 3 The same council which signed the framework agreement is also considering contracting consulting services which probably will involve employing one or more students who have completed the project.
- 4 All of the students have an improved attitude towards the use of the new technologies as a professional tool which they now consider accessible. They now believe that the computer knowledge that they gained will be useful in their professional future.
- 5 Some groups also carried out simple tasks in JAVA and with other tools which were not planned for inclusion in the course (and, in almost all of the cases, were learned in addition to their course material).
- 6 Finally, the project allowed them better to understand the professional realities in the field of their project.

#### 1.6.2 Linguistic Results

In addition to the work completed regarding new technologies, the students read a graduate-level book on trading companies and entrepreneurs (Evans, 2001) and followed specific intermediate and advanced linguistic training (First Certificate in English and Cambridge Advanced Examination) which raised their level of language use to more than acceptable. Additionally, the following facts were established:

- 7 The dropout rate was approximately 25% (less than in recent years) despite the greater demands of the course.
- 8 The exam results also improved and the number of failures decreased.
- 9 This instrumental motivation favoured an increase in accompanying language requirements.

# 2. DIFFICULTIES OF THE PROJECT

Although the latest methodological trends in foreign language teaching were taken into account, this project was not particularly innovative. What is new is that the Language Department at the Polytechnic University of Valencia had never done anything like this before. On previous occasions, the students had participated in some computer research and development projects (Project Camilla and others), but up until now they had rarely had the chance to develop their own applications. Of course, this fact taken together with the workload involved produced a number of significant problems.

#### **2.1 Time**

Given that the students come in with little experience in the use of computer programs (with the possible exception of Word), it was necessary to request that a student research aide give ongoing supervision for their projects. Additionally, this last-year research student gave a total of eight class hours (for each section of the course) in Dreamweaver and Front Page. Furthermore, a professor used two class hours per section to teach how to get better results when using search engines (especially Google) and other Internet resources. Therefore, the course load was reduced by approximately 16%. In our opinion, this amount of time is especially significant if we consider that the courses are made up of 60 hours and that a notable improvement is observed after going through the entire course.

This fact, then, obliges us to take two measures which are not very popular among the students: firstly, to assign a greater amount of work to be prepared outside of the classroom (especially in grammar and reading), and secondly, to reduce the oral practice time in the classroom. If we take into account that the majority of students believe that the oral classwork is what they need the most (García Laborda, 2001), then spending so much time in teaching new technologies can come to be considered as wasted time. In addition, the majority of the students state that this work has cost them a lot of time at both the university and at home. In many cases, the students believe that this time is excessive for the amount of credits given for taking this class, and also that it reduces the amount of study time for the language.

## 2.2. Different Levels of Competence in the New Technologies

Just as the students tend to have varying levels of linguistic competence in the L2, we have also observed in recent months that there are notable differences in their computer skills. This verifiable fact has meant that some of the students have not attended the computer practice sessions with enough frequency to see any notable difference in the correlation between the number of students and available computers. The Polytechnic Institute of Valencia at Gandia has several laboratories which have between 20 and 35 computers. Absenteeism in some of the sections produced inequalities such as two students per computer in some classes and more than enough computers in others. Nevertheless, generally the facilities were adequate.

Perhaps the most significant fact has been that some of the work groups had several students who had certain acquired abilities while other groups had to rely more on the student aide in order to continue developing their projects.

# 2.3 Teacher Training

Not all of the teachers had the necessary training in computing which the experience described in this paper requires. In this case, having the student intern helped to remedy the situation but this solution would only be valid for just this one year since not all of the

educational innovation projects have the funding that this one had.

#### 2.3. Returns on Investment

The question of funding for the project is fundamental for other similar projects in other universities. Computer funding at the Polytechnic University of Valencia at Gandía is exceptional and we must be aware that this is not the case for all universities. In addition to the initial hardware needs, the human resources used have a high cost which do not seem justified by the two possible contracts obtained, or even by several students becoming interns or finding work. Therefore, despite these positive results, the project probably will not be considered worth prolonging by the university.

# 2.5 Lack of Student Participation

The numerous difficulties perceived by the students described throughout this paper have led to different behaviour regarding their projects. Some students abandoned their projects without finishing them. In one case this meant the loss of business contact with a city government in the Valencian Region which showed great interest in the activity developed in its city hall at the beginning of the course. Unfortunately, the group which worked in the area cared nothing about maintaining contact with the city hall for several months which resulted in the mayor losing interest when it came to firming up the agreement between the university and the city hall.

Another form of lack of interest could be seen when students produced low-quality work and obviously did not show personal, professional or linguistic development.

#### 2.6 Problems for the Professor

A further problem that was clearly observed was that the project took up much more teaching and tutoring time than anticipated, since not only traditional teaching was used but also correcting drafts which was an arduous task whose benefits at times were not in proportion to the effort made in correcting.

# 3. POSSIBLE FUTURE SOLUTIONS

It seems unnecessary to mention the academic, professional and motivational attractiveness of projects such as this one. Nevertheless, the problems cited in the above section have to be solved in order to improve the implementation of the activity.

For the future, we feel that this type of hard work should be promoted so that the instrumental motivation of the student becomes a powerful motor for action. In this sense, we should mention that the contacts with possible collaborating entities or those which we may work with in the future are still important for the student before leaving university. In many of the cases observed in this activity, we found that the students do not value these types of contacts, though they may mean a great professional opening when successfully completed. Additionally, the students should understand completely that everything that has been carried out is for the student's benefit and that the professors have but more work to do. We may assume that this is carried out with the hope that it will be truly beneficial because if not we would have to add the discouragement of the professor who does not see the usefulness of his or her own work.

In addition to taking care of motivation, we should also consider the order in which the elements of the project are presented. Perhaps it would be worth carrying this out in accordance with the following outline:

Webpage software training ----- Brochure ---- Multimedia

Additional information Video production

In this way, the students would be able to work in a more personal and independent way by using the elements which they consider valid according to those that they produce. In addition, if they have a clear final objective they will be able to adopt work strategies which are better adapted to the personality, style and focus of the group's work. Moreover, this allows optimisation of the visits to the city halls and entities which serve as sources of information.

# CONCLUSION

The majority of the participants, including both teachers and students, feel that the work carried out in the course which we have just finished has been worth the effort. Therefore, we encourage other teachers to take on challenges such as the one we have presented here, as the benefits more than make up for the problems encountered.

# **BIBLIOGRAPHY**

Calderon-Young, E. (1999). "Technology for Teaching Foreign Languages Among Community College Students". Community College Journal of Research and Practice, 23, 2, 161-169.

consumer.es (January 19, 2003 2003). "Miles de estudiantes de academias de inglés se quedan sin clases por la crisis que atraviesa el sector", found on April 8, 2003 2003 at <a href="http://consumer.es/web/es/actualidad/derechos\_del\_consumidor/56667.jsp">http://consumer.es/web/es/actualidad/derechos\_del\_consumidor/56667.jsp</a>

Corbacho Sánchez, A. and García Laborda, J. (2002). "El ordenador como recurso metodológico y didáctico en la docencia de Lenguas Extranjeras para fines turísticos" en Actas del II Congreso Internacional de informática educativa UNED 2002. Madrid: UNED.

Evans, D. (2000). Management Gurus. London: Penguin Readers.

García Laborda, J. (2001) "Las actitudes ante el inglés con fines específicos en el ámbito universitario" en Ruiz, José M.; Sheerin, P. H. y Estébanez Estébanez, C. (Ed.) *Estudios de Metodología de la Lengua Inglesa (II)* Valladolid: University of Valladolid. Secretariado de Publicaciones e Intercambio Editorial

García Laborda, J. and Pérez García, S. (2002). "Estrategias de Aprendizaje: Una herramienta básica para estudiar idiomas" en García Laborda (Ed.), ¿Por dónde empiezo? : técnicas de aprendizaje de lenguas para estudiantes de turismo. Valencia: Polytechnic University of Valencia Press.

García Laborda, J. (2003) "Let's Do The Right Thing: Methodological Support In Multilingual Teaching And Learning In Tertiary Education" in Andrewes, S., González Leyva, M. M. y Roldán Miranda, M. I. (Ed.) Greta 2002: Do the Right Thing. Granada: Greta. (In press)

Gold, R. and Serim, F. (2002) "MultiMedia Comes of Age: The Future Is Now in Lawrenceville, New Jersey". *MultiMedia Schools*, 9, 2, 14-16.

Hogan-Brun, G. and Whittle, R. (1999). "Specialist Foreign Language Learning with Multimedia: New Learning and Teaching Dynamics" in Hogan-Brun, G. and Jung, U. O. H. (Ed.) *Media, Multimedia, Omnimedia: Selected Papers from the CETaLL Symposium* on the Occasion of the AILA World Congress (11th, Jyvaskyla, Finland, August 4-9, 1996) and Man and Media Symposium (5th, Nancy, France, June 5-7, 1997). Bayreuth Contributions to Glottodidactics, Vol. 7. *Documento ERIC* en microficha número ED439607. available at <a href="http://www.bris.ac.uk/Depts/LangCent/forlang/german/ggomcont.htm">http://www.bris.ac.uk/Depts/LangCent/forlang/german/ggomcont.htm</a>

Kasper, L. (2000) "New Technologies, New Literacies: Focus Discipline Research and ESL Learning Communities". *Language Learning & Technology*; 4, 2, 105-128.

Knutzen, J. (2000). "Focus on the Future: Environmental Scanning at Columbia Basin College". *Documento ERIC* en microficha número ED443458.

Lambert, R. D. (2001) "Updating the Foreign Language Agenda". *Modern Language Journal*, 85, 3, 347-62.

McGee, L. G. (2001). "Building Community and Posing Projects: *Creating* "Student Pages" in Web-based and Web-Enhanced Courses". *Foreign Language Annals*, 34, 6, 534-49.

National Center for ESL Literacy Education (2002). "Uses of Technology in Adult *ESL* Education.", *Document ERIC* on microfiche number ED461306 also available at <a href="http://consumer.es/web/es/actualidad/derechos\_del\_consumidor/56667.jsp">http://consumer.es/web/es/actualidad/derechos\_del\_consumidor/56667.jsp</a>

Osuna, M. (2000). "Promoting Foreign Culture Acquisition via the Internet in a Sociocultural Context". *Journal of Educational Computing Research*, 22,3, 323-45.

Salaberry, M. R. (2001) "The Use of Technology for Second Language Learning and Teaching: A Retrospective". *Modern Language Journal*, 85,1, 39-56.

Yahoo noticias España (5 de febrero de 2003). "El cierre de academias de Wall Street en Galicia deja en la calle a 1.500 alumnos y 33 profesores", obtained on April 8, 2003 at <a href="http://es.news.yahoo.com/030205/4/2iry9.html">http://es.news.yahoo.com/030205/4/2iry9.html</a>