Technology on CALL: improving English language learning in a Spanish context.

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The acquisition of English as a second language remains a vital necessity for business in a globalized environment. Once a particularly early pioneer of e-learning, second language acquisition has not moved with current thinking on learning and rapid technological advances in terms of platforms and devices. The focus of this paper is a much needed review of "computer assisted language learning (CALL)" with recommendations for continued research and development applied to a Spanish context.

With the recent economic crisis in the Spanish economy, due to global economic pressures from 2008, there has been a dramatic drop in employment, which consequently has forced Spanish citizens to leave the country looking for work. However, the variable quality of language teaching and learning in schools has produced a deficit in skilled workers and professionals with a suitable level of working English.

These two areas of change, CALL and Spain's employability issues, mean that businesses and language academies have to tackle the deficit. This paper describes research into the potential benefits and difficulties faced by businesses and individual learners in improving English language acquisition and aims to determine whether improved use of technology could help. The global use of CALL was investigated and, within this context, research was conducted in Spain with learners of English and language academy directors to analyse the environment of computer-assisted language learning within Spain. This was a cross-sectional study using mixed methods for the purposes of triangulation of data: following a review of relevant literature, the results of a student survey and a management survey were analysed and used to develop realistic online lessons with Spanish students to test out the concepts identified in the research. The outcomes of this case study are also presented in the paper, although at this stage of the research only a very limited test has been possible. The study has focused attention on a holistic view of the environment and attitudes towards CALL from the perspective of students and managers of language academies. These issues include self-directed learning, feedback automation, English proficiency, computer competency and attitudes towards CALL. The findings are of particular importance for businesses needing a good level of English proficiency and learners and teachers using CALL.

The report concludes with recommended areas of further research into the country's potential further development and distribution of CALL. Also, it draws together the economic impact of improved English language acquisition and how Computer Assisted Language Learning could promote this positive change and attitudes.

Keywords:
Computer Assisted Language Learning, Employability, attitudes towards technology, Spain

Background

In 2008, Spain was among several countries that suffered from a severe economic recession. Five years on, the country is still recovering from the crisis and in 2013 27% of the population were reported as unemployed, equating to 6.232 million people (International Monetary Fund, 2013). A natural reaction to the saturated job market is the increase in job competition. One critical skill that many businesses in a range of sectors are requesting from

future employees is English for work purposes. Furthermore, in 2012, it was reported that 40% of Spanish people believed "the language barrier to be a significant hindrance to effective cross-border relations in the business sector" (English First, 2012). According to English First (2013), Spain ranked last in English proficiency between 2007-2009. However, in 2013, Spain has ranked higher than France and Italy. Nevertheless, Spain is still positioned 23rd on the index with "moderate proficiency" which places it 3rd to last out of the EU countries reviewed in the report. There could be many reasons why Spain has improved its level of English proficiency over the last 4 years such as: a reaction to the economic pressures of the recession; pro-English education governments that have backed changes to the education and training of English; and the change in attitudes from employers considering English as a "basic skill" rather than an "admirable" one (English First, 2013).

CALL

Computer assisted language learning (CALL) has been used generally since the 1980s but was first discussed in the 1950s (Kenning 1990). CALL now attempts to integrate second language acquisition with pedagogy and web technology. Increasingly Web 2.0 technology involving user generation is linked with social constructionist theory to provide the conceptual framework for CALL (Garrett 2009, Bin Zou 2013, Ernest 2013, Vetromille-Castro 2013, Luo 2013, Altunay 2013). This holds whether we are discussing the independent learner, the autonomous learner, the co-operative learner or the incidental learner. The literature suggests the need in CALL for learner autonomy plus either explicit guidance or scaffolding, or at least the strong presence of explicit monitoring and feedback. Self-direction and determination are vital for learners using CALL since there are rich resources available through video, global newscasts, audio pronunciation in electronic dictionaries etc, but the learner needs to find out how to navigate and practice through these general consumer communication tools (GCCTs). Bin Zou (2013) describes, for example, a study of self-correcting online tools for development of pronunciation, in which the segmental characteristics of pronunciation (phonetic and syllabic) could be improved through auto-feedback, but the supra-segmental characteristics which are needed for tone, stress and duration of a syllable, and the prosodic feature related to tone, pitch, speed and level, are not automatically corrected, although necessary for well understood speech. Widely available tools such as podcasts and video conferencing are also regularly in use for second language acquisition (see for example Lord and Harrington 2013), as are interactive games involving voice recognition and speech interactive software. Texting and micro-blogging may seem at first glance to be less than helpful for SLA but do increasingly provide authentic and naturalistic opportunities for self directed language learners.thus the development of a wide range of Web 2.0 tools for communication have driven a broadening array of tools suitable for CALL, whether through guided instruction or for the use of autonomous learners. In this paper, we attempt to find out the extent to which such tools are used in SLA in private language academies in Spain, and whether there is further opportunity to drive English language learning for work through CALL.

CALL in Spain - the study

The cross-sectional research conducted was exploratory in nature and took a more holistic view of the CALL environment and English language learning within Spain, as it was to connect technology and human interaction in terms of learning a language. Therefore, both the external and internal reality were considered through an interpretive view and explored through a mixed methods approach. A subjectivist approach was adopted for the primary

data collection (surveys and case study).The quasi-experimental study used an inductive approach for the collection of secondary and some primary research (survey), as it was used to build assumptions to explore within the test case study within a concurrent triangulation design of global CALL and English proficiency within Spain.

The initial student survey, which focused on individual respondents' demographics, English proficiency, computer skills and attitudes towards CALL, used a snowball sampling technique and was used to make initial contact with 153 private language academies strategically chosen for their geographic location. Each province within Spain was searched on www.google.es with the words "academia de ingles" and the contact information of the top three academies on the search were recorded into a database. Only two academies were ultimately able to participate due to the time of year the research was conducted, further contacts will be necessary to follow up this initial study. For the management survey, which focused on current presence of online services and existing considerations for potential future use of CALL within academies, an initial self-selection sample frame was used and due to limited response, a second sample was taken with an additional 218 academies contacted. Finally for the test case study, Spanish students living in Brighton were contacted to take part. The case study was undertaken to offer a CALL based English language class in order to evaluate student responses and consisted of pre-class homework that supported self-directed learning and the usability of general consumer communication tools (GCCTs) such as mobiles, blogs, podcasts, online games etc (Garrett 2009). Then the students completed an online survey, took part in a Skype lesson and finished with a semi-structured interview.

Findings and Discussion

The 165 respondents to the student survey in academies were predominantly female, at 61.3% with an age range significantly higher in the brackets of 20-29 years (58%) and 30-39 years (26%). 18% of the participants were unemployed compared to the national average of 27% (International Monetary Fund, 2013). The English proficiency questions highlighted that 82% of the academy students had been studying English for 0-5 years. This data excluded English education during primary and secondary school. Furthermore, 70% of the respondents described their level of English as below B2 (Upper Intermediate), which is the international level for 'English for work'. In addition, 60% of all respondents considered 'future work' as a reason for learning English. Thus, an attitude towards English language as a key skill for employability can be deduced from the data. Concerning the importance of various language skills associated with English proficiency, speaking (82%) and listening (30%) were considered the two most important skills, and they were the two skills that were considered to be their weakest (speaking 52%, listening 26%). Regarding the participants' computer competency, 99% of the respondents reported that they had access to an internet connection either at work or at home and only 10% stated that they used the computer between 0 and 5 hours per week, which suggests that 90% use the internet on a regular basis. In addition, all respondents answered the question regarding their competency using email and nearly 50% stated they felt 'confident' using email, Microsoft Word and Excel. However, 9 respondents did not answer the question regarding Skype. Interestingly, 42% stated they had not learnt English through a computer before but 68% said that they would in the future. 30 comments were made that described reasons for not wanting to learn English through CALL, the common responses were: "I prefer the classroom", "it doesn't support conversation" and "I prefer person (sic)". It could be deduced from these responses that personal contact and physical space are important to Spanish EFL learners. Conversely,

85% said one of the main benefits of CALL was flexibility, which is a particular benefit for business learners.

The purpose of the management survey within the academies was to evaluate the current presence of an online service and any existing considerations for potential future use of CALL within the academies. This data was collected from 16 academies across Spain with an average number of 250 students in an academy. However, 38% of academies were reported to be running at below 50% capacity and almost a third functioning between 71-80% capacity. Interestingly, only one third reported that they had an online service offering information, supplementary materials, courses, core materials and tests/exams. But 35% of the academies with the online platforms reported that 10% or fewer of students were using the services. Therefore, the data suggests that a minority of the academies is integrating CALL platforms within their services. Finally, the management were asked questions regarding any future projections for moving into a CALL platform within their academies: 87% stated they would not be offering 100% online classrooms and common reasons given included lack of technical skills, insufficient human resources, time constraints and methodological focus within the academy. When asked hypothetically which skills their academy would like to focus on within an online platform, the responses were distributed fairly evenly; however, listening scored highest with 69% of respondents choosing the skill. Interestingly, 56% chose speaking which made it the second most popular skill to focus on. Furthermore, two thirds of the academies said they would use an already established online language classroom.

In order to test out some of these findings from language academies, a small test case study was prepared and conducted using GCCTs throughout the entire process. The pre-class homework was issued in a Microsoft Word format and completed using a computer to listen to audio clips online and create maps and sent back for marking in the same format. Because the literature had suggested that auto-feedback mechanisms were still patchy in quality, being less able to correct errors in context than a teacher involved in synchronous communication, and because synchronous approaches are available via Web 2.0, the lesson was conducted using Skype video conferencing and the message box was used in a similar way to a whiteboard. Two students completed the case study with individual Skype lessons and interviews. Initially, they were asked to complete a homework task that comprised of a variety of skills taught in a typical English language course. The students were allowed to do as much or as little of the homework as they wanted. The two students competed all the homework with varying types of errors within the two pieces of work. Overall, the students had very positive attitudes towards the tasks and mostly showed understanding of the task requirements. However, without specific guidance from a teacher some errors were made in relation to task understanding. Both students fell into the most common age range of the survey results (20-29 years). Even though the students were at B2 level, one student had been studying English for 1-2 years, whilst the other student 6-8 years. The students both chose "future work" as their reason for learning English and when asked which skill is the most important both chose "listening" but one student also chose "speaking", answers which were typical in the student survey. The students' answers to the questions regarding computer competency and attitudes towards CALL also fitted closely to the survey.

Within the interview and the lesson both students demonstrated a level of self-directed learning whilst completing the pre-class homework and within their comments towards learning through a computer. Student B commented on the positive nature of self-directed learning through a computer but also highlighted the need to use the equipment properly without which it was seen to be ineffective:

"if you have a laptop, you can use the dictionary, the Internet, look at some different articles if you are not sure about a particular topic… So it is very useful if you use it properly, but if you don't it is completely useless".

She gave examples of useful self-directed tasks, such as research for a discussion and 'useless' tasks, such as an Internet translator website. The word 'usefulness' was present in both interviews. Student A highlighted the need for body language whilst communicating with people when at a lower level of English. She went on to say that if she was at a lower level than B2 then she would not consider learning English online but now that she is at a B2 level she would find online classes 'useful'? The students' attitudes towards CALL were generally positive. The students appreciated the flexibility of the class and supported this with examples:

"you can do at your home, when you can, when you are happy to do it" (Student A).

The importance of this mental change was explained in more detail by student A expressing "a more positive mind" attributed to the learning process. Furthermore, student B added a perspective of educational culture, stating, "in my country, at university and school they just give you the books and say 'here you go, go learn that' " which consequently lead onto the discussion of fully self-directed learning. Student B expressed her belief that a teacher is an integral part to the learning process and sided with the blended learning environment,

"you can't just leave everything to the laptop or some programmes. You always need a person, a teacher to explain to you where you are wrong and where you are not."

Finally, when the students were asked about the use of CALL in terms of computer competency, student A did not offer an opinion on the subject. However, student B referred back to her past education as a factor altering her attitude to the process. Throughout her education she used pen and paper to take notes and prepare work. This ingrained habit affected her outlook on the usability of the computer for learning: "I am not used to that and it is my state of mind. But I have that state of mind because of the education I had". It is possible that this area of doubt in this student's mind could be an issue for students in general and so further research into students' culturally conditioned perspectives would offer a deeper evaluation into the students' motivations towards CALL in general.

The Skype software allowed for free conversation with minimal technological issues. The major problems with communication during the lesson were the inability to make eye contact and use body language to: direct the flow of conversation, help student understanding of a concept and offer them encouragement. As the reliance on silent communication was very limited, there was a stronger focus on the 'mmm's and 'ah ha's. Also the interviewer felt that smiling was paramount as eye contact was impossible. The technological discrepancies with the two lessons were freezing and blurred screens. However, these issues did not at any point during the lesson or interview disrupt the conversation or understanding.

This study so far has shown from the survey data that the combination of local economic disintegration and unemployment in Spain has meant that English language learning has

increased in demand over recent years and is still rising due to the growing acceptability in attitudes towards English as a key skill for future employability. Public perception in this area has been reported as changing and policies made by the Spanish government within the primary and secondary education systems further supports a move to an increase in English proficiency throughout the country in the years to come. Due to a combination of factors from the research, Spain's present position in the technological arena suggests potential development in CALL. The contributing factors were: Spain's high position in the global Internet ranking. Within the student survey nearly all participants stated they have access to an internet connection and only 10% of respondents stated they spent 0-5 hours per week on the computer. All participants responding to the student survey answered the questions regarding internet browsing and email. Therefore, it could be assumed that computer access and competency is high within the country as the data shows access to GCCTs (such as Internet and related applications), which is one of the intrinsic building blocks to the development of CALL in a Web 2.0 context. Furthermore, even though the management survey from the findings is relatively small, a possible hypothesis could be deduced from the results for further research: The English Language Learning industry in Spain is not maximising its revenue by moving into a new technological gap within the market. The survey participants were not working at full capacity in their traditional classrooms. However, 87% claimed that offering a 100% CALL platform was not under consideration over the next year. This attitude towards CALL as an area of new revenue is possibly not being currently assessed by this industry. Even so, this hypothesis needs further research and therefore can only be suggested in this report.

A wide range of different types of GCCTs is being researched globally. The technological advancements in this area are developing into a wide range of platforms supporting many forms of learner styles and underpinned by a range of pedagogical theories. Whilst technological advancements are leading the CALL development, it seems that from the literature, teaching methodologies and second language acquisition (SLA) theories are 'catching up' with the research on methods of effective use of technology and learning a language. For example, automated feedback seems to still be in its infancy in terms of a sophisticated platform offering a wide range of feedback styles. Consequentially, some of the literature claims that there needs to be more in-depth research on this and other areas that link technology and learning together. Even so, technology is increasingly available to the public on a global scale and on account of Spain's membership with the European Union, this provides the nation with access to some of the fast paced technological advancements in the world. Therefore, the combination of Spain's change in attitudes towards English language as a key skill for employability and the speed at which the technological advancements are reaching the public domain, it could be concluded that the future of CALL appears set to grow.

The data from the student survey showed that even though nearly 68% of the participants would consider using CALL to learn English, there were qualitative responses that highlighted student apprehension or unawareness to the potential variety of CALL platforms available. Another popular characteristic in all the research data emphasized the importance of the level of flexibility CALL offers. In the student survey 84% of respondents chose flexibility as a criterion for motivation to use CALL. Subsequently, the case study participants connected this aspect of flexibility to a more positive mindset when working. Furthermore, the literature indicated that the term flexibility went beyond the concepts of freedom of time, location and choice. The variety of platforms also displayed flexibility in terms of diversity of uses of different learner styles, for example, through the use of sensory learning and/or culturally authentic materials. In spite of the present environment, future progression and

studied attitudes of CALL, the findings in this project raise questions as to the level of student competency within both technology and learning skills when using CALL.

Firstly, the student survey, showed that computer competency and access could be high within Spain. However, there were participants who omitted the questions in regards to confidence when using Skype. Additionally, the case study displayed that whilst both students completed the pre-class homework effectively, one of them drew attention to a potential cultural issue that students could have. During her education in Spain she was used to working with a pen and paper and so associated learning with this method of documentation. Despite this point, the homework called for the students to use a more self-directed form of learning as many of the tasks were slightly ambiguous by design. The two participants therefore, displayed this style of learner approach, which is in line with much of the literature in this report. The literature not only suggested that there needed to be some degree of self-direction when using CALL but that a learner strategy of "the life-long learner" was a positive attribute within a student.

Concluding remarks

The global development of CALL offers a potentially new form of learning for students in Spain and, although the platforms are not in popular use in Spain at present in private language academies, there is an opportunity for growth in this field. If there were to be an expansion of CALL in the country then this could offer students a variety of flexible approaches to improve their English so as to gain an increased level of employability. This method could also be conducive to a more authentic business environment due to the technological approach of international communications now used. Consequently, this could not only improve an individual's professional prospects but, if successfully executed on a large scale with wide spread English education through CALL, it could improve the global prospects of the economy as a whole by having skilled workers with an international standard of 'English for work'.

Even though CALL is not integral to the spread of English proficiency within Spain, it does offer a new method of accessibility and appears to meet a significant gap identified in this study in private language academies. On the other hand there are many factors that will affect the level of development of CALL in Spain and if a business is considering this platform it will need to take into account many issues regarding culture, technological competency, motivational attitudes, student accessibility and technological effectiveness in the current environment. Attitudes towards the importance of English have been changing, so it would be beneficial for a business to take advantage of this development and lead an already growing market into a diverse and expanding phenomenon of computer assisted language learning based on social constructionist principles and supporting self-direction in learning.

References

Altunay, D., (2013) The Role of Open Educational Resources in English Language Learning and Teaching. *International Journal of Computer-Assisted Language Learning and Teaching 40 (2) 97-107*

Bin Zou, Zing, M., Xiang, C., Wang, Y., Yuping, W., and Sun, M., (2013) Computer-Assisted Foreign Language Teaching and Learning: Technological Advance. *International Journal of Computer-Assisted Language Learning and Teaching* 3 (3) 99-104

English First. (2013). EF English Proficiency Index. English First.First, E. (2012). English First. Retrieved 11 15, 2013, from English First Website: http://www.ef.com.es/about-ef/press/release/news_25_04_2012/

International Monetary Fund. (2013, 04). Retrieved 11 20, 2013, from http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx

Ernest, P., Catusus, M., Hampet, R., Heiser, S., Hopkins, J., Murphy, L., and Stickler, U. (2013) Online Teacher Development: Collaborating in an online learning environment. *Computer Assisted Language Learning.* 26 (4) 311-333

Garrett, N., (2009) Computer-Assisted Language Learning and Teaching Trends and Issues Revisited: Integrating Innovation. *The Modern Language Journal.* 93. 719-740

Lord, G., and Harrington, S., (2013) Online Communities of Practice and Second Language Phonological Acquisition. *International Journal of Computer-Assisted Language Learning and Teaching 3 (3) 34-55*

Luo, T. (2013) Web 2.0 for Language Learning: Benefits and Challenges for Educators. *International Journal of Computer-Assisted Language Learning and Teaching* 3 (3) 1-17

Vetromille-Castro, R., Marie Moor, A., Bohlmann Duarte, G., and Hoffmann Sedres,N. (2013) From Learning Objects to Language Learning Objects: Communicative Language Teaching principles in CALL materials. *International Journal of Computer-Assisted Language Learning and Teaching* 3(2) 82-96