The Use of Technology in Distance Language Learning

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ABSTRACT

Distance language learning is a real challenge to both teachers and learners, since the students' exposure to the target language in a distance learning system is not as authentic and interactive as required. Additionally, it also entails a significant reduction in the amount of students' interaction and in the support from both the teacher and other learners, which has a negative impact on students' levels of motivation and achievement. In the hope of enhancing the distance teaching-learning process of a language and compensating for the previously mentioned drawbacks, a number of technological tools are currently being implemented. However, these technologies have also brought about new challenges that need to be addressed by

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policy makers, materials developers, teachers and students, if they are to be successfully implemented.

KEY WORDS

Distance language learning, technology, authentic materials, language acquisition, computer-mediated communication

RESUMEN

El aprendizaje de una lengua a distancia representa un verdadero reto tanto para profesores como estudiantes, debido a que en un sistema de aprendizaje a distancia, la exposición a la lengua meta que el estudiante experimenta no siempre es todo lo auténtica e interactiva que se requiere. Igualmente, implica una disminución significativa en la cantidad de interacción y de apoyo que el estudiante recibe por parte del profesor y de sus propios compañeros, lo cual tiene un impacto negativo sobre los niveles de motivación y los logros de los discentes. Con el objeto de mitigar estas desventajas, y de enriquecer el proceso de enseñanza-aprendizaje de un idioma a distancia, una gran gama de herramientas tecnológicas están siendo utilizadas en la actualidad. Sin embargo, estas tecnologías también han traído como consecuencia nuevos retos que las autoridades, los productores de materiales, los profesores y estudiantes deben considerar para que su implementación sea exitosa.

PALABRAS CLAVES

Aprendizaje de un idioma a distancia, tecnología, materiales auténticos, adquisición de un idioma, comunicación mediada por computadores.

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INTRODUCTION

Learning a second language is a very complex and demanding process, in which the learner needs support from, and interaction with both the teacher and other learners. In traditional classroom-based education, the teacher manages to provide and regulate the necessary input by means of the regular faceto-face encounters with students. In contrast, when it comes to distance language learning, these favourable interactive situations are very limited, making the teaching-learning process of the target language a real challenge to both teachers and learners alike (White, 2003; Poon, 2003). In their search for innovative ways to compensate for the lack of authentic and interactive exposure to the target language that distance language learning presents, some professionals in the field have turned to technology as the glossy solution, while others still cast a wary eye on it.

This literature review intends to analyse the constraints involved in distance language learning, emphasising on the positive aspects that the various types of technologies have brought into the field, as well as on the challenges they pose on those involved in the process of teaching and learning.

Distance Language Learning and its constraints for language learning

Distance language learning is not a new concept; it has existed for many a decade. For many people it is their only feasible option, while for others it is only a matter of preference due to its flexibility, lower cost and versatility. However, classroom-based language learning has been traditionally a long-time favourite, probably because of the need to facilitate interaction, to provide feedback, to answer questions and to make adjustments that fit the needs of the learners (White, 2003). Meanwhile, as White suggests, important aspects are changed and many challenges and limitations arise in the distance context; for example reduced opportunities for immediate support, guidance, interactivity, feedback and incidental learning. She argues that the distance language learner is faced with the task of internalizing and gaining control of the language without the same degree of input, interaction and support provided by face-to face classes.

In a cross-cultural study conducted by Hurd and Xiao (2006), which investigated foreign language students in two very different open and distance learning cultures (UK and China), students were surveyed on the difficulties with learning a language at a distance. The results showed that an average of 43% of the students considered the lack of opportunities for practice with others as one of the major drawbacks. Most authors in the field agree with this view (eg. White, 2003; Poon, 2003; Chapelle, 2001; Stempleski, 2002; Sokolok, 2001; Warschauer et al, 2000).

All these factors could in turn have an impact on students' degree of motivation, which is a key factor to achieve success in learning a second language, especially at a distance. In this type of education, the learner needs to overcome the isolation and the lack of interaction with peers and teachers, which inhibit the development of their oral skills. It has been suggested that when motivation is low, learners remain in the communicative stage only, and do not reach the integrative or expressive stages (Hurd and Xiao, 2006:253). Similarly, Gardner and Giles consider that motivation is the primary determinant of second language proficiency (as cited by Poon, 2003:89).

Taking into account Vygotsky's philosophy that language—just as all other cognitive development—is the

result of social interaction between individuals; language learners at a distance will continue to be in a clear disadvantage due to their isolation, unless language professionals in the field of distance education look for alternatives to counteract that. This literature review intends to prove that the use of technology may be a significant step in this direction, and that if appropriately used it enhances language learning in distance education.

Technology

From its very beginnings, distance education has developed hand in hand with technology; it could not have possibly happened if it had not been for the existence of at least a printing press and the traditional mail. In its broadest sense, media - specifically in the teaching and learning process- could be anything from mechanical aids such as household objects, flashcards, and magazine pictures to sophisticated technological aids such as polished audiovisual aids, computers (Brinton, 2001) and the Internet. Gradually, newer and glossier technological aids have gained a more preponderant role in the field of distance language learning, which have brought benefits to course developers, teachers and learners.

Some examples of the latest development in technological tools to enhance the learning of a second language currently being used in computer-assisted language learning (CALL) are asynchronous computer mediated communication (CMC) -which includes e-mails, video-mails or audio-mails, and Web bulletin boards-; synchronous CMC -such as chat rooms, instant messaging, multi-user domains (MUDS), multi-user domains object-oriented (MOOs), videoconferencing, and computer conferencing-; hypermedia; video-streaming and plug-in technologies (Warschauer et al., 2000; Jones, 2001; Brinton, 2001; Murray, 2000; White, 2003).

However, the use of technology also seems to have incorporated challenges that need to be researched and evaluated from a pedagogical perspective.

Advantages of technology

According to White (2003) the last decade has witnessed an enormous expansion in distance language learning opportunities, which has been the result of rapid developments in information and communications (together with societal changes). She argues that more traditional forms of distance language lear-

ning that use print, audio and visual materials are being supplemented by opportunities for interaction and collaboration on line.

Warschauer and Whittaker (2000) explain that using the Internet for language teaching is based on the rationale that the linguistic nature of online communication is desirable for promoting language learning, since it has been found, for example, that electronic discourse tends to be more lexically and syntactically complex than oral discourse and features a broad range of linguistic functions beneficial for language learning. Additionally, these researchers believe it provides an authentic audience for written communication, and increases student motivation, since it allows not only one-to-one communication, but also one-to-many, allowing a teacher or student to share messages with an infinite number of participants. The opportunities it offers for collaborative learning, collaborative materials development, and materials dissemination should not be disregarded either.

Another useful tool for distance language learners is the hypermedia, which is the combination of several interlinked multimedia resources (CD ROM for example), which

allow the learners to navigate their own path simply by pointing and clicking a mouse. It is a major component of most online courses due to a number of advantages it provides. According to some authors (Warschauer, 1996; Rogerson-Revell, 2007) hypermedia allows for more authentic learning environment, since listening is combined with seeing; skills are easily integrated, as well as task and project-based work through simulations, web quests and collaborative writing activities; students have great control over their learning since they can move forward or backwards whenever necessary; and finally it facilitates a principle focus on content, without sacrificing a secondary focus on language form or learning strategies(W arschauer, 1996).

"Streaming" and "plug-in" technologies are among the newest technologies which will probably have an impact on online language courses in the near future. They allow the delivery of good-quality audio and video to Web users in real time without a download delay -one of the main complaints students have when they use online courses and their Internet connection is not fast enough.

According to Brinton (2001) media help us to motivate students by bringing a slice of real life into the classroom, and by presenting language in a more complete communicative context. This is especially so for distance learners, since they can be provided with a density of information and a richness of cultural input (Brinton, 2001) and interaction opportunities that printed material could have never achieved by itself.

To sum up, and taking into account the views of most authors reviewed, the rationale for using media/technology in a language class can be summarized as follows:

- Due to the role media already plays in the outside world, students expect to find it incorporated in their learning process (be it in the classroom or at a distance).
- Both audiovisual materials and network-based communication tools may provide students with content, meaning and guidance. They create a contextualized, constantly updated, and interactive array of situations that can help distance learners overcome the isolation they have long endured.

- Media material can lend authenticity to the language learning process, bringing the outside world directly into the students' learning environment (documentaries, newspaper or magazine articles, authentic interviews, etc), and facilitating the socialization process so necessary for acquisition to take place.
- Since learning styles of students differ, and not all distance learners benefit by the use of written material as the main instructional aid, media provide us with a way of addressing the needs of visual, auditory or social learners alike. Additionally, stimulating student's senses can help them process information more readily.
- Teachers can expose students to multiple input resources, thus decreasing the risk of the students becoming dependent on a single dialect or idiolect.
- Media can help students build their new knowledge on existing schemata, thus maximizing their background knowledge and making the new one more significant.

Undoubtedly there is enough proof that technology can definitely enhance language acquisition at a distance. However, some other issues need to be considered.

Challenges associated with using technology

Despite the many advantages that technology has for language acquisition, there are a number of disadvantages that its implementation brings about, which still need to be researched and carefully analysed. Murray (2000: 415) emphasises on the need of research that 'critically examines either the effectiveness of instruction or the nature of human communication via CMC. Meanwhile Warschauer (2000: 527) sees distance education as a realm in which the role of technology will be a 'site of struggle' in increasing or lowering the quality of learning opportunities. One of the main reasons for this is that the growth in distance language learning opportunities using network-based communication technology seems to respond more to a commercialization need than to an educational one.

The development of online language courses has become an attractive business to many commercial computer and telecommunication companies, which already hold a leading role in this direction, and according to Warschauer et al. (2000) it 'poses a threat to traditional academic institutions and may create pressure for mass, low-quality education. There is a concern that a small number of "superstars" will develop on-line course materials and that courses themselves may be taught by untrained assistants.'

Additionally, a number of specialists in the field believe that the exciting possibilities offered by technology are nothing in itself without sound pedagogical principles to support them. Warschauer et al. (2000: 84) suggest that 'teachers need to participate in determining the direction of distance education so that on-line courses and programs are developed with teachers' and students' interests in mind. Teachers should join together to demand that distance education programs maintain standards of staffing, program quality, and assessment.'

On the other hand, the implementation of technology has equally met a certain degree of reticence on the part of some teachers and students alike, due to the complexities it implies, particularly in relation to participation in interactive online

learning environments. Technology-mediated language learning requires more self-direction, initiative and motivation on the part of the participants (White, 2003:23). It also demands special, new skills on the part of the learner, who often find themselves overwhelmed by the learning of both a second language and of the necessary skills to use the new technologies.

White (2003: 35) also suggests that one of the major consequences of the telematics revolution is that a number of services can be provided from a location that is distant from the market. While developing their online courses, many course providers do not take into consideration the socio-cultural environments of their potential customer, which may strongly mediate or inhibit learning. Some authors agree that it is imperative to take into account the cultural borders that learners need to cross, and to research on the impact this may have on their learning process.

Finally, in online distance language courses there may be a loss of social and contextual cues, which are used in face-to-face interaction to foster the social and affective dimensions of learning and to maintain engagement between all the participants.

White (2003:60) cites some authors who consider that if learners feel socially present in a mediated situation, they will feel part of a larger social context which in turn affects their motivation, attitudes and social cohesion. But in online courses students may feel uncertain about the larger social context that they are part of, and expected to contribute to, which may cause reluctance to participate or to take risks, both of which are important in language learning.

Similarly, language teachers in online environments are equally faced with unfamiliar tasks and responsibilities, which could be aggravated if not provided with the necessary training on the use of the different tools. Their workload has increased significantly, since the speed of response need to be increased, and course planning and development are now more complex as the range of options in terms of learning sources and learning spaces has increased dramatically (White, 2003:73). Jones (2001:365) argues that many teachers recognise that computers do not save or reduce the workload, and that even if they were provided with training, both technical and pedagogical, they still might not find enough time to put into practice what they learned, being so

loaded with academic and administrative responsibilities.

According to Jones (2001:365) the attitude of teachers towards technology seems to be very complex. He explains that "most language teachers are not comfortable with high technology, since unlike so many of their students, they have not grown up with computers."There is also the additional fear some teachers have that administrators may use computers to replace them, or their disagreement with administrators on the large amount of money spent on high technology rather than on books, classroom furniture, or people.

Additionally, computer illiteracy and the digital divide existing in developing countries is also a major cause of concern, since some teachers, authors and administrators consider it unfair to offer online courses at a massive scale when many students do not have easy access to a computer yet. However, this is a debatable issue that calls for innovative proposals, since ignoring the benefits of implementing technology and avoiding it on the bases of lack of accessibility, would only result in the further widening of that digital divide, thus reinforcing the unequal

pattern of development in these societies.

CONCLUSIONS

Whilst it would be impossible to underestimate the impact that technology has traditionally had on distance learning in general, and on language learning in particular, the consequences of its use in a distance learning environment still needs to be carefully analysed and researched (White, 2003).

Warschauer *et al.* (2000: 76) comment that in theory the power of computers and the Internet can allow distance education programmes to be more flexible, interactive and fast-paced, but whether this will prove to be true in practice remains to be seen.

All authors agree on the fact that technology does enhance distance language learning by incorporating a variety of more dynamic, authentic and motivating possibilities. However, throughout the literature reviewed there is consensus on the fact that it is the teacher, not the technology, who determines the quality of the learning experience (Richards, 2002; Warschauer, 2000; Jones, 2001; Brinton, 2001; Murray, 2000, White, 2003, among others). Sokolik (2001:477) argues that good

teaching methodology depends more on sound pedagogy than on access to any particular form of computer technology.

Finally, when implementing technology in our distance courses we must take into account that it is not enough to provide students with a sophisticated user-friendly system. Interactivity, collaboration and flexibility are not inherent characteristics of the medium but can result from it, given a number of factors such as course design, curricular integration, moderator roles, teachers' and students' participation patterns and involvement, close interaction between providers and learner, as well as correct assessment of markets. Only in this way is it possible to enrich the teaching and learning process at a distance through the use of technology.

BIBLIOGRAFÍA

Brinton, D. 2001. The Use of Media in Language Teaching. In Marianne Celce-Murcia(ed.) *Teaching English as a Second Language.* Third Edition. Boston, MA: Heinle and Heinle Thompson Learning.

Chapelle, C. 2001. Computer Applications in Second Language acquisition. Foundations for Teaching, Testing and Research. Cambridge: Cambridge University Press. Hurd, S. and J. Xiao. 2006. "Open and distance language learning at the Shantou and TV University, China, and the Open University, United

- Kingdom: a cross-cultural perspective." Open Learning: The Journal of Open and Distance Learning, 21:3, 205-219.
- JONES, J. 2001. "CALL and the responsibilities of teachers and administrators." ELT Journal 55 (4) 360-367.
- Li, R. and R. S. Hart. 2002. What can the World Wide Web offer ESL teachers? In J. C. Richards and W. Renandya (Eds.) *Methodology in*
- Language Teaching. An Anthology of Current Practice. Cambridge: Cambridge University Press.
- Murray, D. 2000. "Protean communication: The language of computer-mediated communication." TESOL Quarterly. 34:3, 397-421.
- Poon, A. 2003. "A Challenge for the developer: issues of interactivity and linguistic-cognitive appropriateness in English language learning." Open Learning: The Journal of Open and Distance Learning, 18:2, 135-153.
- ROGERSON-REVELL, P. 2007. "Directions in elearning tools and technologies and their relevance to online distance language education." Open Learning: The Journal of Open and Distance Learning, 22:1, 57-74.
- Sokolik, M. 2001. Computers in Language Teaching. In Marianne
- Celce-Murcia(ed.) *Teaching English as a Second Language.* Third Edition. Boston, MA: Heinle and Heinle Thompson Learning.
- STEMPLESKI, S. 2002. Video in the ELT classroom: The role of the teacher. In J.

- C. Richards and W. Renandya (Eds.) Methodology in LanguageTeaching. An Anthology of Current Practice. Cambridge: Cambridge University Press.
- Warschauer, M. 1996. Computer-assisted language learning: an introduction. In S. Fotos (Ed.), *Multimedia Language Teaching*. Tokyo: Logos International.
- Warschauer, M., H. Shetzer and C.Meloni. 2000. *Internet for EnglishTeaching*. Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.
- Warschauer, M. 2000. "The changing global economy and the future of English teaching." TESOL Quarterly.34:3, 511-535.
- Warschauer, M. and P. Fawn Whittaker. 2002.
 The Internet for English teaching. In
 J. C. Richards and W. Renandya (Eds.)
 Methodology inLanguage Teaching. An
 Anthology of Current Practice. Cambridge:
 Cambridge University Press. White,
 C. 2003. Language Learning in Distance
 Education. Cambridge: Cambridge
 University Press.
- ZIRGER, B.J.; J. Evans; M. Levy. "Effective use of video streaming for support of traditional and distance learning courses." Last retrieved 25th October, 2007 from www. oln.org/conferences/OLN2003/papers/ ZirgerOLN03.pdf.