

## **Computer assisted language learning and the internationalisation of the Portuguese language in higher education contexts**

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### **Abstract**

The internationalisation of the Portuguese language has become a priority for academic institutions of different Portuguese-speaking countries which are trying to adapt to the current context of globalisation and ubiquitous communications through digital media. In order to achieve it, several challenges should be faced, namely providing international students with resources aimed at helping them improve their Portuguese while fostering its use in academic and scientific contexts. This can be done by identifying, creating and editing high-quality teaching materials which bear in mind the sociocultural, political, economic and linguistic contexts; using the Information and Communication Technologies effectively in both face-to-face and online learning environments (International Institute of the Portuguese Language, 2010); and promoting the online learning of Portuguese as a Foreign Language in higher education settings through virtual learning environments. This paper explores the challenges brought about by the internationalisation of Portuguese and how computer assisted language learning - and, more specifically, the development of a virtual learning environment aiming at catering for the linguistic needs of international students in different institutions in Brazil, Portugal and elsewhere - could help face these challenges.

### **Key words**

Internationalisation, Portuguese as a foreign language, virtual learning environment, computer-assisted language learning, higher education.

## I. Introduction

The internationalisation of the Portuguese language has become a priority for academic institutions of different Portuguese-speaking countries which are trying to adapt to the current context of globalisation and ubiquitous communications through digital media. In order to achieve the goal of internationalising Portuguese, several challenges should be faced, namely providing international students with resources aimed at helping them improve their Portuguese while fostering the use of this language in academic and scientific contexts. Facing these challenges involves making educational, political and diplomatic efforts which can help Portuguese occupy an important position in the global context (International Institute of the Portuguese Language, 2010). This position would thus match the relatively significant economic and political importance of Portuguese-speaking countries such as Brazil.

In spite of being an international language, Portuguese has not fully achieved internationalisation. In order to achieve this, the *Brasilia Action Plan for the Promotion, Dissemination and Projection of the Portuguese language* (BAPPDPPL, International Institute of the Portuguese Language, 2010) suggests that the steps to be taken are: identifying, creating and editing high-quality teaching materials which bear in mind the sociocultural, political, economic and linguistic contexts in which they are used; and using the Information and Communication Technologies effectively in both face-to-face and online learning environments, as reported by the aforementioned document.

In this context, it is suggested that it would be beneficial to adopt a computer assisted language learning (CALL) approach to face the challenges. Following this approach, a virtual learning environment (VLE) could be developed with a view towards fostering internationalisation by means of promoting free self-access online learning of the Portuguese language in higher education settings. In this way, the VLE would contribute towards catering for the linguistic needs of foreign students in higher education settings in different Portuguese-speaking countries. The instructional design of this VLE should first focus on multimodal self-access learning of academic reading in Portuguese. Next, the possibilities to practice the four different skills of Portuguese as a Foreign Language (PFL) and of Portuguese as a Second Language (PSL) through the VLE should be further developed so as to fully exploit the pedagogical possibilities of the VLE in such a way that it can be used in self-access learning of PFL and PSL in higher education online learning settings through multimodality and hypertextuality.

The developmental process of the VLE should bear in mind the objectives set out by the BAPPDPPL with regard to the internationalisation of the Portuguese language, aiming at catering for the linguistic needs of international students in different institutions in Brazil, Portugal and elsewhere, where a growing number of foreign students are partially or fully completing a degree; while achieving the general goal of internationalisation. Moreover, the developmental process should be accompanied by the establishment of a methodology aimed at providing students with suitable contents and activities to learn PFL and PSL online in the self-access modality.

## II. Internationalisation of the Portuguese language

The internationalisation of higher education is very relevant to our current globalised context and requires readiness from all educational agents to face the challenge of helping international students in countries such as Brazil and Portugal to improve their Portuguese.

Moreover, more academic and technical-scientific texts need to be produced in this language and disseminated among PFL/PSL teachers and learners.

Portuguese is the official language of 9 countries and territories in the world, each of them having multiple and varied geographic, cultural and political situations, these countries being Brazil, Mozambique, Angola, Portugal, Guinea-Bissau, East Timor, Macau and São Tomé and Príncipe. Those 9 countries and territories are actively involved in actions and initiatives aimed at keeping peace and good relations among themselves and with the surrounding countries in which other languages are spoken. In addition, they are working together towards the internationalisation of Portuguese and towards promoting the use of the Portuguese language so that it occupies a more relevant position in the world today (International Institute of the Portuguese Language, 2010).

When facing the different tasks involved by the internationalisation processes within higher education, it should be borne in mind that, as Stallivieri (2004) reminds us, the rapid globalisation process of the last decades urged universities to try and find new spaces and higher levels of internationalisation in order to be able to compete with other higher education institutions worldwide under the same conditions. In response to this, higher education institutions should be open to debates and ready to offer solutions to face different challenges posed by international academic cooperation and the need to periodically assess the internationalisation process (Stallivieri, 2004).

The internationalisation of a language can be understood as a set of processes through which a national language such as Portuguese becomes the language of several countries or the language chosen by the citizens of a country to become their second or foreign language (Castro, 2009). In spite of the fact that Portuguese is an international language with over 240 million speakers worldwide, which makes it one of the most widely spoken languages in the world; and even though it has an official status in the most important organisations of the different continents, such as the European Union in Europe, MERCOSUR in America and African Union in Africa; the goals set out by the BAPPDPPL regarding the full integration of Portuguese in international organisations have not been fully achieved yet.

The BAPPDPPL aims at developing strategies for the promotion and public dissemination of Portuguese and for the analysis of the state of development of international agreements such as the Orthographic Agreement. This document also addresses questions related to the importance of Portuguese in the diaspora and to the participation of the civil society while establishing the following priorities regarding linguistic promotion and internationalisation: identifying and editing reference teaching materials; distributing teaching materials adapted to the sociocultural, political and economic characteristics of the Member States of the International Institute of the Portuguese Language; and using the Information and Communications Technologies (ICT) in both face-to-face and distance learning modalities (International Institute of the Portuguese Language, 2010). Furthermore, the Plan intends to widen the educational offering in Portuguese for different kinds of audiences, the language used for specific purposes being a priority. The means proposed to achieve these goals would be the provision of ICT-based teaching resources and the development of instruments aimed at disseminating and promoting Portuguese learning. Another of their objectives is to encourage cooperation in the development of shared resources which are relevant for Portuguese learning and can help create the appropriate conditions of access to scientific, cultural and artistic repositories in Portuguese or related to Portuguese in some way (International Institute of the Portuguese Language, 2010).

### III. Computer assisted language learning

The analysis of the role of ICT in the foreign language teaching and learning processes and in internationalisation should start by the interdisciplinary evaluation of the transformations undergone by education since the advent of these technologies and the emergence of a new participatory culture shared by internet users worldwide (Kessler, 2013) in which the effective use of technologies requires the development of new literacies, as new educational needs emerge. Moreover, this analysis demands studies and a theoretical consolidation grounded on solid and pedagogically-sound CALL principles (Gimeno-Sanz, 2010; Levy & Stockwell, 2006; Vinagre Laranjeira, 2010; and Kasper, 2000). ICT bring about new possibilities for learning without time-space constraints through e-learning, the three basic elements of e-learning being: subjects, pedagogy and objects (Ardizzone & Rivoltella, 2004). The interaction between these three elements in VLEs is flexible and thus it enables students to achieve different levels of autonomy which can be progressively increased through scaffolding (Bruner, 1978; Grabinger & Dunlap, 1996), within the Zone of Proximal Development (ZPD) suggested by Vygostky (1978). In this way, a VLE would be the ideal environment for the teacher to play the role of facilitator of the learning process instead of being considered as a knowledge provider (Gimeno-Sanz, 2009) who would encourage a coherent and critical use of ICT.

Collaboration and intercultural awareness are two of the most interesting possibilities brought about by the use of ICT and VLEs, as suggested by authors such as Warschauer & Kern, 2000; Belz, 2003; Mercer, 1994; and Debski, 1997. These authors adopt a socio-constructivist approach to learning based in Vygotsky's (1978) ideas and apply it to the study of activities with specific goals and to learning in different social groups and communities of practice, focusing on collaborative learning. In order to foster collaborative learning, students' active participation and involvement in their own learning process should be encouraged in such a way that knowledge results from different negotiation processes through community members. Knowledge should therefore be constructed through discussion and collaborative work between individuals who reach an agreement (Romanó, 2003). Because ICT overcome time-space constraints and connect people worldwide, they can be considered as very suitable to foster collaborative learning.

When developing a VLE for Portuguese learning, it should be taken into account that the bigger the integration into different devices, the more opportunities for languages learning students will have. An integration of a VLE into mobile devices would make it compatible with any of these devices: handhelds such as smartphones, cellphones, Personal Digital Assistants (PDAs), palmtops, laptops, tablets, etc., thus responding to the increase in the use of mobile technologies and the growing democratisation and popularity of internet access. At the same time, it would be a way to overcome the time-space constraints of face-to-face teaching modalities, enabling an easier, wide-spread "any time, any place" access to educational content. This in turn would increase the opportunities, quantity and variety of accessible teaching resources. Meanwhile, the opportunities for and the democratisation of education and social participation would increase by means of fostering linguistic and digital literacies. In the case of PFL/PSL, teaching and promoting the Portuguese language within higher education contexts would be crucial in fostering internationalisation.

The notion of literacy is another element to be considered, since it is a key element of nowadays' globalised and hyper-connected societies in which ICT have become more and more present in every individual's personal and professional life. The term "literacy" should not be understood as restricted to the definitions related to basic writing and reading skills but rather as a complex term which has evolved because of different socioeconomic, political, historical and cultural transformations. During this process of transformation, the

term “literacy” has come to refer to the development of a set of reading and writing skills that constitute social practices instead of involving just knowing how to read and write mechanically. In addition, it is becoming increasingly common to use this term in its plural form “literacies” (as opposed to the singular and less comprehensive term “literacy”), thus underlining its multifaceted character and its relation with cognitive development which in turn might be related to the use of technologies (Monereo & Romero, 2008), as social practices mediate technology use (Lankshear & Knobel, 2008). Therefore, “literacies” could be understood as “multiliteracies”, a term that better reflects the complex universe of informational and digital literacies (Soares, 2002; Lankshear & Knobel, 2008; Buzato, 2007).

One of the big challenges with regards to literacies has to do with the improvement of the performance indicators of the educational system and with the development of didactic methodologies which allow for the introduction of ICT resources into the teaching-learning processes as facilitating elements for the development of digital literacies, as pointed out by the Brazilian Centre of ICT Studies (Brazilian Internet Steering Committee, 2011). The digital advances of recent years, together with the increasing demand, seem to confirm the growth potential of blended and online teaching-learning modalities within VLEs which foster the development of learning activities without time-space constraints. The proposed VLE might contribute towards the development of multiliteracies, the normalisation (Bax, 2003, 2011) of computer-assisted language learning in educational settings, the development of new teaching-learning methodologies and the promotion of the presence and importance of the Portuguese language in international settings.

#### **IV. Multimodality and hypertextuality**

VLEs present certain characteristics which can favour learning within a digital setting such as multimodality, interactivity and hypertextuality. Both multimodality and interactivity are linked to hypertextuality: the former two elements affect the organisation of the different elements shown in a screen and the way they are interlinked by means of hypertexts. In addition, VLEs demand more autonomous and digitally-literate students capable of processing reading through those VLEs (Braga & Schlindwein, 2007).

According to Jewitt (2006), the design of multimedia resources within computer applications allows for the combination of movement, sounds, static images, moving images and written input in the same linguistic layer, which in turn fosters the reorganisation of social practices and, thus, of learning. This has to do with the emergence of a new “hyper-collaborative participatory culture that has become ubiquitous across the Internet” (Kessler, 2013), thanks to the emergence of Web 2, the Social Web. Students today have come to be considered as insiders or digital natives (Prensky, 2001), as they were born after the widespread presence of digital technologies in western societies and are therefore familiar with the use of ICT.

In this context, learning is understood as a process which is mediated by multimodality and hypertextuality. The focus shifts from purely linguistic contents to cultural contents and multimodal elements that are interconnected in a non-linear manner so as to foster more comprehensive and meaningful learning. Although the different meanings and interconnections provided by the different modes might cause tensions, it is important to provide students with this variety of modes so that their learning improves while they are overcoming those tensions or conflicts, allowing for students’ critical reflections. Therefore, multimodality and hypertextuality have a positive impact on learning, as they provide students with new opportunities to engage on learning when making meaning out of the myriad of input provided by the different modes and the construction of learning (Jewitt,

2006) by means of connecting previously-acquired knowledge with new contents and experiences.

## V. Final remarks

The internationalisation of the Portuguese language, which has become a priority for academic institutions of different Portuguese-speaking countries which are trying to adapt to the current context of globalisation and ubiquitous communications through digital media, can be approached by computer-assisted language learning in an effort to face the challenges involved.

A VLE aimed at helping learners of Portuguese improve their linguistic level could positively contribute to the fulfillment of the goals set out by the International Institute of the Portuguese Language. This contribution could be based on providing international students with resources aimed at helping them improve their level of Portuguese while fostering the use of Portuguese in academic and scientific contexts.

The current context of globalisation is characterised by the internationalisation efforts of different universities worldwide. Many of those universities are based in Portuguese-speaking countries, namely Brazil and Portugal, which receive every year a growing number of international students willing to complete their full degree or part of it at these institutions. The different universities can devise strategies aimed at enhancing the importance of the Portuguese language in the academic world, like developing VLEs and other CALL resources to help Portuguese universities match the relatively important role of Portuguese-speaking countries such as Brazil internationally, both economically and politically.

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