# Online Courses of Portuguese as a Second Language Closing the Gap with Blended Learning in Mainstream Education

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Abstract:

The main goal of this paper is to describe an on-going educational project of online courses of Portuguese as a second language (PL2) for immigrant students attending primary and secondary schools run in Portugal through a blended learning environment as an effective way to support mainstream education. Focus will be given to the collaborative work developed between institutional partners, i.e., General Directorate for Education, schools' headmasters and Ciberescola Association, in order to adequate the courses to mainstream education and to continually iron out daily practical problems. The authors will also explain the functioning of the courses tools and outline the option in matching two different services - Ciberescola platform and FM EA-TEL- as a way to tackle the educational handicap immigrant students face when they arrive to the hosting country. Particular attention will be given to describe the functioning of the materials created from scratch for this project, stressing some features shared with OER, namely (i) free use by learners and reuse by teachers; (ii) integration of all types of digital media. Eventually, an account of the current impact of the project will also be unfolded.

#### 1 INTRODUCTION

The project Ciberescola Online Courses of Portuguese as a Second Language (PL2) is being implemented with the close collaboration of the General Directorate for Education (Direcão-Geral da Educação-DGE) of the Ministry of Education and Science (www.dge.mec.pt), Ciberescola the (www.ciberescola.com) Association and headmasters of the schools involved. Ciberescola platform specialized in the Portuguese language learning by immigrant students has became the starting point of the creation of a blended learning environment in mainstream education in several schools from different regions of Portugal, as well as a platform for a free use of educational resources for both students and teachers.

This paper will present the steps taken to adapt the Ciberescola platform to the specific needs of migrant students who are attending the Portuguese national system, namely by supplying specific PL2 classes and resources to students from the 2<sup>nd</sup> grade school year to the 12<sup>th</sup> school year and to the teachers from these schools who are working with these target groups.

This paper will also present the process of building a database of PL2 learning resources, displaying full course materials, open textbooks, interactive tests, lesson plans, targeting the specific needs of immigrant students who are attending the courses as well as their respective teachers.

Furthermore, within this paper we aim to identify the main difficulties found during the implementation of the project and the means of overcoming them in every specific school context - grounded in a very close relationship between institutional partners. Methodology adopted and the impact of this project in schools are also unfolded in this paper.

The online option of this project had an immediate motivation, i.e. having the possibility to reach as many students and teachers as possible scattered all over the country. Even in schools which have already been implementing a PL2 programme as a consequence of receiving a high rate of immigrants every year, organizational problems and particular situations can occur that prevent a small number of their students from being suitably assisted in their Portuguese language learning. Therefore, the General Directorate for Education accepted the invitation addressed by Ciberescola Association in

order to create blended-learning courses that could fill this gap in mainstream education. However, due to the organizational complexity involved in the adjustment of these courses to the primary and secondary education, the implementation of these courses is running as a pilot project in some public schools from different parts of Portugal.

Ciberescola online materials, organized in several levelled courses to be used by all students and teachers associated with the project was the first step towards the shortage of these particular kind of resources. But it soon became clear that the simple provision of a set of resources, no matter how large and diverse databases were, fell short of the expectations. On one hand the big challenge relied on how to make these materials actually used by teachers in their classes and, on the other hand, how to control and regulate the adequacy of these resources to the user's needs.

Therefore, Ciberescola staff, composed of teachers and researchers post-graduated in PL2, not only produces continually new resource items but also give real-time online classes to children throughout the school year and also prepares to run professional training courses to teachers combining Ciberescola platform with FM EA-TEL service. This enables the teachers of Ciberescola to address in the same session/class, at the same time, on a regular basis, students/teachers from different parts of the country in relatively small groups previously scheduled.

While working with restrictive access to users, in the sense that students and teachers are given a login, the platform is at the disposal of the schools involved in this project – with the real-time online classes component (conditioned by Ciberescola human resources available for each school year). The Ciberescola platform, only by itself, is also available for teachers and students from all schools after receiving a login. Therefore, one can say that the project fits well the aim of OER as it provides texts, pictures, sound files and video streaming openly licensed.

### 2 CIBERESCOLA ONLINE COURSES OF PL2

# 2.1 Identifying Students' and Teachers' Needs

In the scope of mainstream education, schools have to address unique challenges whenever they need to find the best paths to make all of their students achieve the national learning outcomes. In fact, the Portuguese educational system is inclusive, so that the access to Education of all the students, namely the migrants, the foreigners and members of ethnic and racial minorities, is based on a set of educational policies that aim not only their integration in the school community but also their educational success. For this purpose, a PL2 curriculum subject was created, according to Common European Framework of Reference for Languages (CEFR).

However, to make the national policies effective, the process of choosing suitable paths towards school success demands a closer look at students' learning needs in order to ensure the implementation of effective educational measures and strategies. The application of educational policies requests therefore an active role of schools and of their teachers regarding the shaping of learning activities to tackle the students' needs.

The project concerned to answer the learning needs of students newly arrived in the Portuguese educational system non-native speakers of Portuguese and also of schools addressing the challenge of offering effective measures to promote their school success.

On one hand, immigrant students face several obstacles due to the insufficient proficiency in Portuguese, not only concerning Portuguese as an object of study, but also Portuguese for academic purposes used in other curricular subjects. These students are for that reason at a disadvantage compared to their peers.

On the other hand, primary and secondary schools have been trying to implement specific measures regarding the development of the Portuguese language. Nevertheless, teachers sometimes have difficulties offering these specialized and systematic teaching activities on PL2 for several reasons, namely the lack of a specialized qualification in PL2, which may imply that these students may not benefit from the educational measures defined for them.

In this context, it became imperative to think about how to make it possible for these students to have access to specialized PL2 classes no matter where they were or where they came from.

# 2.2 Starting up the Project Through Institutional Partnership

To implement this project, special attention was given to institutional collaboration. In fact, the invitation Ciberescola Association addressed to the DGE led to a close relationship between these two

institutions aimed at making the implementation of the project at mainstream education possible. In what concerns DGE, it was firstly necessary to choose the schools to be involved in the project as institutional partners. The project development relied on the necessity to adapt the Ciberescola learning platform to the students learning process and to the schools' needs. It was also necessary to choose the schools to be involved in the project as institutional partners. For this purpose, DGE invited two schools from different regions of Portugal to join the project. The two schools which were chosen had not been able to offer specialized teaching activities on PL2 to all immigrant students and their headmasters had a strong sense of leadership. The Internet speed and the number of devices/computers available for students were also taken into account when choosing the schools.

The strategy followed aimed at the healthy growth of the project and its increasing implementation was boosted by the important role given to each stakeholder, so that they would feel free to nurture and to support the project. Above all, it was made possible for each institutional partner to advocate the project, to treat it as its own and to become a coinventor of its implementation. In this joint process of project building, supported by a close interaction between institutions, a higher level of commitment from each stakeholder and consequently a more effective impact of the project in each context were achieved.

### 2.3 Ciberescola Website: From a Self Study Set of Materials to a Teaching Platform

Initially, in 2009, the main aim of the core-project was to offer a wide array of interactive exercises, where a server automatically grades the answers and stores the results of the exercises both for Portuguese as 1st language and Portuguese as second language. All activities were (and still are) student-centred, mainly. The student can pick one exercise by himself, do it and check out scores and correct answers.

The website was set in a simple HTML solution with a rich text option: the input has specific codes for the question's spaces, which means that the question itself contains the answer within it. These codes are entered in a back office which could be a really handcrafted procedure, but it also broadens the chances of matching different local solutions - and improvise a bit.

Although the models are simple, the HTML environment allows the Ciberescola teachers to publish video, audio, images, etc. in their exercises, which means that with a bit of creativity, most types of exercises can be modelled in the engine. The score obtained for each exercise is stored in a database, so that the student can see his/her scores for all questions of the given level.

All exercises, texts and audios, apart from authentic input selected, are originally produced by the team of Ciberescola teachers and displayed under a Creative Commons Licence.

By that time the main aim had therefore become only one: to reduce the severe shortage of online Portuguese learning resources, systematically displayed, built by specialized teachers and with a recurrent core-structure. Basically, a large and consistent set of activities, a sort of a big interactive multimedia text book.

At this initial stage, two kinds of audiences were targeted: native students of elementary and secondary schools and non-native learners of Portuguese as a Foreign Language, either enrolled in Portuguese schools and universities or studying abroad. Both were supposed, at this stage, to use the website resources autonomously, without teacher guidance

Later in 2011, Ciberescola took the first step in the distance teaching realm, by opening PL2 courses addressed to adult learners living in Europe and the US. Instead of feeding a new teaching platform, like Moodle, as Ciberescola DB gathered already 1000 entries approximately, the option was to combine it with a videoconferencing service, the FM EA-TEL, from UK Open University. For that purpose, some changes were to be done on the Ciberescola platform: thereafter each HTML page displayed not just one, as initially, but a set of exercises. Each one of these webpages currently displays all the materials specifically re-organized in order to support a video-class session. Currently, when the student signs in he/she immediately has access to a list of webpages/classes corresponding to his/her course/level, where he/she also finds the links for his/her course of videoconferencing sessions/classes. FM EA-TEL is a web-based conferencing service intended for education. Unlike other video conferencing services, like Skype or Google Hangout, FM is a one-direction streaming tool, which means that one attendee speaks at a time. Consequently, oral interaction may turn out to be more artificial and time-consuming, somehow due to the milliseconds spent in turn in/off the broadcasting button. But, in return, the internet speed required is

far below that of other live streaming services, and supports up to 10 attendees. From the pedagogical point of view, the turn-determined interaction fully matches the goal of stimulating student's autonomy in undertaking the tasks assigned to him/her during the class/meeting, since teacher may intervene only when he/she is asked to. Besides, with the younger students, the interaction is much easier, since by using FM, attendees do not keep interrupting each other.

Combining autonomous activities of the Ciberescola platform with real-time interaction guided by a language teacher has proved to be a very functional solution to solve particular grammar and vocabulary issues as well as to practise punctual pronunciation and spelling problems, by using text chatting.

### 2.4 Tailoring the Project to Mainstream Education

In 2012 Ciberescola Association addressed Ministry of Education and Science an invitation in order to import its teaching model, already tested with adults, to Portuguese public schools likely to receive foreign students but not in a significant amount that could allow them to form a class. 10 students is the minimum number legally required to open a regular class of non-Portuguese speaking students for all proficiency levels. Ciberescola courses could in fact fill this gap, gathering students from each school, located in different parts of the country, in the same videoconference class. The advantages were clearcut: count on specialized professionals to provide and control the quality of the resources presented, create classes for each proficiency level, control avoidable costs.

In the 2012/2013 school year, Ciberescola courses targeting children and teens began for the first time at the school clusters of Mira-Sintra and Porto. The

Total number of students

120
100
80
60
40
20
Total number of students

2014/

2015

2012/

2013

2013/

2014

Table 1: Total number of students involved in the project.

Source: Ciberescola.

following school year the project was spread out to all the primary schools of these same clusters. In 2014/2015 the project is fully running in 5 school clusters: apart from Mira-Sintra and Porto, 3 more school clusters have joined: Arrentela, Faro and Olhão. The number of students involved in the project increase as reported in the Table below.

Students attend classes with their Ciberescola teacher during two or three hours a week using FM plus Ciberescola platform. Students are in a computer's room, at their schools, having one computer with a webcam and a headset per student at their disposal. Schools' headmasters need to allocate a school staff member to be in the classroom where video-classes take place to oversee the normal development of classes in the field. This way students and Ciberescola teachers interact in real time classes, using camera, microphone and chat, and develop all language skills - speaking, listening, reading, grammar, spelling, new vocabulary acquisition, etc. As mentioned, students are gathered according to their proficiency level and in the same class it is possible to gather students from different school clusters. DGE and Ciberescola pay a visit to each school in the beginning of the project to meet the school directors, the coordinators of the project, the school teacher's that work with the students and the students. Ciberescola also visit schools each time a test is given.

So far, under the pedagogical point of view, it is not difficult to point out the advantages of a model such as this. First of all, classes are very small - usually 5 or 7 students per class. This means that students get more attention from the teacher and have more opportunities to talk. Besides they are levelled classes, enabling the teacher to iron out similar problems across the class. Notice that regular PL2 classes can be composed by students of all levels of proficiency. Besides, as explained, by using the Ciberescola platform teachers actually develop a task-based pedagogy. What is more, students are required to develop writing tasks since the very beginning of the course, not only while filling words or sentences to complete the exercises, and later on undertaking text-structured complex tasks (also inserted in the platform by the student), but also for communicative purposes, on the chat, in order to interact with the teacher and their colleagues when they do not want to take their turn to speak, for various reasons. It is worth stressing that autonomy is highly reinforced since the teacher is seen as an assistant during the process of solving a task or a problem presented during the class. Finally, one great advantage of these online real-time classes is

having an opportunity to call an interpreter to join the class with absolute beginners. Currently Ciberescola's teachers work together with a team of interpreters, namely, Turkish, Chinese, Ukrainian and Romanian native-speakers - interpreters. The presence of these professionals is particularly useful when it comes to giving practical instructions or institutional information, or to clarify different shades of meaning of a word or an idiom, but it also has a positive emotional impact on children, who know they can count on someone who once dealt with the same language barriers.

### 2.5 DGE, Ciberescola and Schools Staff: A Broader Team

Within the implementation of the online Portuguese as a second language courses, DGE staff is responsible for the organization of the courses, as well as for monitoring their development, not only by building bridges between the different actors involved in the project, but also by regulating the adequacy of the pedagogical model adopted.

These online PL2 courses allow teachers of Ciberescola to understand better not only student's learning needs but also the difficulties teachers at schools experience when trying to tackle academic hindrances foreign students struggle with. In fact, the task is huge: teachers must make foreign students read and write fluently in Portuguese in the shortest time possible. The most difficult skills required when learning a new language are those which are immediately asked from students – even beginners – to perform, in order to catch up with their peers in the mainstream class. These performances are also required even from those students whose L1 is typically significantly different from Portuguese and with another writing system.

Recognizing that 3h a week are insufficient to tackle all these problems, Ciberescola teachers hand in various learning materials to the teachers of the schools involved, such as Portuguese for academic purposes worksheets, extensive reading materials, properly adapted, and glossaries that they may work on with their students at schools.

Furthermore, Ciberescola teachers also build a programme for each student, based on the placement test made during online classes. These programmes are the corner-stone of the entire project, in the sense that students, teachers and parents get an overview of the contents, options and methodologies implemented and by these means have the

opportunity to assess and regulate all the learning process.

Grounded in a close institutional collaboration, DGE and Ciberescola support school teachers directly, providing them with theoretical and technical information and discussing with them new effective and adaptative strategies according to each particular learning situation. What is more, DGE and Ciberescola are preparing a training online course addressed to all teachers of Portuguese teaching at schools included in the project, where the methodology is used, i.e., DGE and Ciberescola online materials combined with FM service.

# 2.6 Weighing It Up: Opportunities and Obstacles

The implementation and the results of any innovation project are unpredictable. It can imply simultaneously some risks and some good results. Therefore, the project monitoring is very important to regulate its development. In this process, all the institutional partners — each one with a specific role — are responsible for re-directing the actions when something is not right, for making the project grow with new ideas and for pointing out the successful activities or results.

Within this project, we can identify some obstacles related to IT, such as the lack of devices, low speed Internet connection and some difficulties handling video and audio devices. These obstacles can affect the normal functioning of synchronous sessions and lower students' and teacher's motivation for the project.

On the other hand, the arrangement of a timetable for all students, given that each group has different school schedules, can also hinder their integration in a course.

The implementation of this project has, however, opened several opportunities for students, teachers and schools. First of all, students from all schools seem quite engaged in the language activities presented on Ciberescola platform. Technologies are a well-known environment to students and therefore they understand their language and their ethos. This brings students closer to the learning activities offered, building bridges between formal education and the technological environments. It is also important to mention the performance of children attending the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> grades. After some weeks of online/videoconferencing classes, they are already autonomous in using the Ciberescola platform, as well as typing the words in the computer. That happens also with newly arrived

children from countries where IT are not available or with those who already began school using a different alphabet.

During the visits to schools made by DGE and Ciberescola it was possible to contact teachers, students and headmasters and witness how highly motivated students were. Additionally, teachers rate the direct and practical support that is given to them respecting all the pedagogical and evaluation process development with theirs students throughout the school year as an invaluable asset.

From the headmasters' point of view, the implementation of this project in their schools has been an important factor for teachers' professional development and for organizational development.

The project was also assessed by an external entity (Instituto de Linguística Teórica e Computacional - ILTEC) and was regarded as a highly valuable *modus operandi* in order to deliver a high quality educational service to immigrant students. It was also pointed that under the cost-benefit perspective the teaching model practiced was highly recommendable.

Test results for the school year of 2013/2014 also show a positive impact of the project.

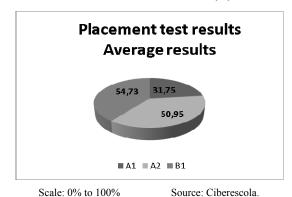
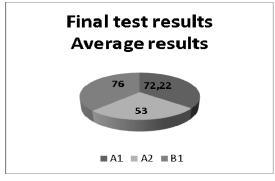


Table 2: Placement test results (%).

Table 3: Final test results (%).



Scale: 0% to 100%

Source: Ciberescola.

### 4 CONCLUSIONS

The project described in this paper shows that a blended learning environment can be a way to close the gap between students' learning needs in mainstream education and the educational measures offered. In fact, students are very engaged in the activities proposed in these courses and consequently can develop more effortlessly their Portuguese language proficiency.

This project shows that very few aspects of the language learning process are left out. Therefore, it is worth noting the general strengths of the project, namely (i) the chance to gather different students of the same proficiency level from different schools where they are asked to share their personal experiences along with language acquisition difficulties; (ii) text based pedagogy supported by interactive exercises, leading to a progressive autonomous work; (iii) writing performance continually prompted by communicative purposes.

The implementation of this project has also showed that this is just one side of the effect caused by the distance learning PL2 courses of Ciberescola. The digital literacy that its implementation promotes in students has become one major result of these courses, and consequently an important factor regarding the students' motivation for learning.

### REFERENCES

Freitas, Tiago E. 2012 "Portuguese CALL Systems", Syntactic REAP.PT. Exercises on Clitic Pronouning, Disseration for obtaining the Marter's Degree in Information Systems and Computer Engeneering, pp. 10-11.

Hampela, R., Sticklera, U., 2012. "The use of videoconferencing to support multimodal interaction in an online language classroom", Recall, Vol. 24, pp. 116-137.

Huddleston, Thomas et al. 2011 MIPEX III - Migrant Integration Policy Index, British Council; Strategic thinking, Equality and Mobility.

Marsh, D., 2012. Blended Learning - Creating Learning Opportunities for Language Learners. Cambridge University Press.

Pirkkalainen, H., Jokinen, J., Pawlowski, J., Richter, T.,
2014. Overcoming Cultural Distance in Social OER
Environments. In S. Zvacek, M. Restivo, J.
Uhomoibhi, & M. Helfert (Eds.), CSEDU 2014:
Proceedings of the 6th International Conference on
Computer Supported Education. Vol. 1, pp. 15-24.
SCITEPRESS, Science and Technology Publications.

Short, D. J.; Boyson, B. A. 2012 Helping Newcomer Students Succeed in Secondary Schools and Beyond, CAL.