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IS THIS BLENDED-LEARNING, OR ANOTHER THING?

Helena Belchior Rocha¹, Rosário Mauritti², João Paiva Monteiro³ Luís Carneiro³

¹ ISCTE-Instituto Universitário de Lisboa; Centro de Investigação e Estudos de Sociologia (Portugal)

² ISCTE-Instituto Universitário de Lisboa, Centro de Investigação e Estudos de Sociologia (Portugal)

³ ISCTE-Instituto Universitário de Lisboa; ISCTE Soft Skills Lab (Portugal)

Abstract

Currently, there are many forms of online use to support training, education and information dissemination. There have been some misconceptions about the concept of distance learning, online learning, mixed learning, hybrid learning; and we may not be able to arrive at a definitive definition of the concept. However, based on some conceptual frameworks, we hope to clarify these concepts, in the context of the development of Online Learning courses at our university. The main objective of this presentation is to be able to have a definition and a context that can frame this model, to understand the way our institution uses online content in order to promote learning by university students.

Online learning in higher education is often indicated as an alternative in a complementary model, in planning and organizing and increasing the quality of face-to-face teaching/learning activities. Even so, there is still some resistance to its adoption by some segments of teachers, partly because they are unaware and unable to operate digital technological tools, and to use them to implement pedagogical innovation.

Additionally, we identified resistance to online teaching and learning strategies associated with the fear that they might relegate the teacher's role to a secondary level, shifting the learning axis to the student.

Our university currently uses an internal platform developed for online learning, supported by short courses, which are complementary to face-to-face classes. The disciplines involved in this offer are part of the range of cross-curricular units (in soft skills), the frequency of which occurs in the first year of the degree programs.

The structure of these online courses comprises two parts: a) a set of expository video modules, which cover the main theoretical contents of each course, and b) an online questionnaire evaluation process (online quiz), which must be completed immediately after viewing one of the video modules, in order to evaluate the contents retained by the student. To transition to the next video module of the same Course Unit, the student must necessarily obtain a minimum percentage of classification in that quiz. As the third component of this model we can consider the moments of teaching and learning in person, in which both students and teachers have the opportunity to monitor and consolidate the learning process. This stage is based on the content and moments of assessment previously carried out through online tools, which enhance dynamics that stimulate and increase the construction of spaces for dialogue and debate, being supported by practical exercises.

This model proves to be particularly relevant in the development and application, by students, of soft skills highly valued in recruitment processes and in their future work contexts.

Keywords: Blended-learning, higher education, online learning

1 INTRODUCTION

Distance education started a few decades [1], in this period of time several models appeared, such as correspondence courses, the audio cassette and video cassette model, the model via radio and television. [2] Information technologies and educational technologies are in constantly evolution [3] [4] and with the internet, globalization and the goal of reaching a knowledge society, learning, teaching and research has changed and continues to change. [5]

At this moment, online teaching is an integral part of the educational scenario, reinforced by the consequence of the contingency plans created because of COVID 19. Initially, our objective for this article was to present a definition that fit the online model used by our institution and understand the way how we use online content to stimulate university students' learning. The online model implemented, in addition to being particularly relevant in its development and application, for students, of the Transverse Skills valued in the recruitment processes and in their future work contexts, ended up becoming a quick and effective solution in the face of the challenge. with which we were confronted when we were asked to draw up a distance learning plan, with the teaching team, so that in the current emergency situation, students would not be harmed.

3.1 Our institution and the Cross Skills Laboratory

Beginning in 1972, it is a public university teaching institution composed of 4 Schools, 16 Departments and 8 Research Units, 88 degrees courses including 17 undergraduate degrees, 52 Masters and 21 Doctorates with a total of around 10,000 students.

In 2009, an Organic Unit of Cross-Competences called the Soft Skills Lab was created, whose mission was to transmit generic transversal competences that, combined with the specific knowledge of the scientific areas, reinforce the ability to access and adapt to changes in work and responsible citizenship. Employers value these skills, complementary to basic scientific education, as they are recognized as essential for good professional performance.

Although this concept is not new in the area of education, regarding to higher education, it was little unexplored and our university was one of the pioneers in developing a training offer in this field. The notion of competences aims to create the training of dynamic and adaptable professionals, able to keep up with the rapid changes that occur in the daily professional life [6]. It allows the student to develop his ability to apply the knowledge acquired in different situations and contexts and institutes a change to the traditional model of knowledge reproduction to a development practice. [7] [8]

In 1999, after the signing of the Bologna Declaration, it became clear that one of the purposes of the so-called Bologna Process was to make study plans and learning periods comparable and compatible, through concepts such as levels / cycles, learning outcomes, skills and credits (ECTS). As a result, the theme of competences, in particular transversal skills (Soft Skills), has become relevant since the implementation of this model in higher education. The essential transversal skills to be developed in the context of higher education are also one of the objectives of the Tuning Project, whose approach is based on a methodology to redesign, develop, implement and evaluate programs for each of the higher education study cycles. Despite being essentially European, this is a project with worldwide validity and has been successfully tested on different continents [9] and served as a platform for the definition of reference points expressed in learning outcomes and competences:

“Learning outcomes are statements of what the learner is expected to know, understand and be able to demonstrate after completion of a learning experience. According to Tuning, learning outcomes are expressed in terms of the level of competence to be obtained by the learner. Competences represent a dynamic combination of cognitive and meta-cognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values”. [9]

According to several authors, recent graduates demonstrate a lot of technical knowledge, but most do not show the interpersonal and social skills required by the current scenarios of the labor world. In this sense, teaching should promote the development of skills, and not just impart knowledge.[10] [11] [12] There is an understanding in the literature about the importance of promoting among students the acquisition and development of a set of transversal skills that facilitate the transition from university to the job market. [13] [14]

Within the scope of our training offer, we have developed, supported by literature on the subject, a set of essential skills, of a personal and interpersonal nature, such as the capacity for reflection, flexibility, autonomy, leadership, communication, teamwork, emotional management, organizational and study

skills, decision making, problem solving, conflict management and negotiation, articulating with more specific skills, such as managing one's own career, in the search for new job opportunities, training the student for the diversity of situations that they will come across, multiculturalism, languages and computers skills, that could be projected in the future and transferable to other contexts.

2 METHODOLOGY

2.1 Transversal skills (Soft Skills and online teaching)

This type of training requires treating not only conceptual knowledge as pedagogical content, but also how to operationalize (know-how to do) and act (know-how to be). This implies changing both the methodologies, as well as the pedagogical structure and organization of the training, which includes the analysis of needs, the definition of objectives, the selection and definition of contents and the evaluation. [15]

Designing and developing skills training is (and was) a prolonged and open process, enriched and diversified, sometimes due to unique and essential circumstances, other times common and routine, because acquiring a certain competence implies an active process, framed by the context and by the time in which it is developed. Also, this requires time for students to live their experiences and analyze them, pondering and becoming aware of the association / articulation of their resources and skills and how to use them at each moment.

The notion of transversal was supported by the idea of versatility and transferability of competence (in alignment with skills for professional and personal life), therefore, we believe that transversal competences can play a very important role in the construction of who we are, in the way we face others and what we plan to be and do throughout life, that is, in our definition of the world and in our project of existence [16], justification for the reinforcing and complementing of the training for our students.

Thus, our 1st cycle students (undergraduate) in their 1st year have to complete 6 ECTS, with optional curricular courses of transversal skills (soft skills), which means an average of 3 curricular units for each student, given that each competence has 2 ECTS. The duration of these curricular units is 7 weeks and the contents are theoretical and practical. However, the evaluation of competences translates into a complex process, which goes beyond the investigation of knowledge, knowledge and behavior, requiring processes of review and reconstruction of the evaluative practice and the teaching-learning process itself.[17] However, the duration of the curricular units became short, in order to reconcile the theoretical contents and the dynamics, the debates and role-play that was intended to have in the classroom. And it was here that we felt the need of a strategy that could help us overcome this obstacle, so the idea to video record the contents of these curricular units, allowing students to have access to these materials at any time through a platform with an online course repository and dedicate the face-to-face classes to the interaction that these skills have require began to gain structure and at this moment from the 30 curricular units we have to offer, 11 are already being teach in this model

Therefore, currently we use an internal platform developed for online learning, supported by short courses, which are complementary to face-to-face classes. The curricular courses involved in this offer are part of the range of cross-curricular units (transversal competences-soft skills), and its frequency occurs in the first year of the degree programs in order to obtain the 6 ECTS mentioned before to complete the student's graduation, but these courses are open to all the university community (students, professors and collaborators) and in these particular cases, those who attend and complete receive a training certificate.

The structure of these online courses comprises two parts: a) a set of expository video modules, which cover the main theoretical contents of each course, and b) an online questionnaire evaluation process (online quiz), which must be completed immediately after viewing one of the video modules, in order to evaluate the contents retained by the student. To make the transition to the next video module of the same Course Unit, the student must necessarily obtain a minimum percentage of classification in that quiz. As third component of this model we can consider the moments of teaching and learning in the classroom, in which both students and teachers have the opportunity to monitor and consolidate the learning process. This stage is based on the content and moments of assessment previously carried out through online tools, which enhance dynamics that stimulate and increase the construction of spaces

for dialogue and debate, being supported by practical exercises also with a percentage of quantitative evaluation and at the end of the 7 weeks a final exam that can be a group or individual work, a test, a presentation, depending on the objectives the curricular unit/course.

Teachers make different uses of the online learning platform and give more or less weight to the results that come out of the final classification. The typical contents of a Curricular Unit/Course on the online learning platform consists in 10 video modules, interspersed with questionnaires to assess the knowledge retained by the student in each module. The percentage of success is defined by the teacher so that the student can proceed to the next module. Teachers have access to detailed reports of each student performance, produced by the platform, including registration date, end date and last access, to be able to follow their process.

The novelty of the system and some ignorance of the matter led to some uncertainties regarding the denomination to be used. What would this mixed model be called? B-learning, e-learning? online learning? Some even called them MOOC, such was the confusion of concepts initially.

The definition and characterization of this model is important, since from its definition we will have common terms and we will be able to better understand its characteristics. As in all investigations, there is always an initial question that leads to the need to find an answer that allows an approximation as close as possible to reality. The methodology we follow is a review of concepts in order to classify the model used in our institution, its advantages and, from there, eventually realize what future potential we achieved with its reproduction.

3 RESULTS

The universe of higher education has been more or less enticed and permeable to some passing fads for teaching. There are those who proclaim the pedagogical model based on the transmission of information in person as obsolete and prefer an approach based on doing, as not all students learn at the same rhythm.[18]

With the progressive appearance of some modalities of distance learning, E-learning, B-Learning (Blended Learning), M-Learning (Mobile Learning) or U-Learning (Ubiquitous Learning), there were changes in the way the process takes place teaching-learning, communication between teacher and students, interaction with teaching materials, among many other transformations.

Of course, each of these teaching modalities carries a set of advantages and disadvantages and we initially considered that this would be a Blended Learning model. Blended Learning is defined in the European Model for Blended Education as teaching activities with a deliberate combination of online and face-to-face activities. [19] Other authors define blended learning as a formal education program that combines the study using online content, in which the student consults these contents, deciding when, how and with whom to study, and teaching moments in the classroom, giving place for interaction with other students and the teacher. They argue that content should be created specifically for the discipline and place emphasis on personalizing face-to-face moments.[20] Blended learning, or B-learning, is a derivative of E-learning and refers to a training system where most of the content is transmitted at a distance, usually via the internet, however it necessarily includes face-to-face situations, hence the origin of the designation blended, somewhat mixed, combined, but it did not reflect what was being done with this Model so we didn't consider it.

Later these courses were called e-learning courses, the fact that they are placed on an online platform and are available to everyone, giving the possibility to anyone who completed them to have a training certificate, led to this denomination that we consider incorrect, because in fact originally, they were made for the students an after we realize that could have the two purposes.

From the various articles consulted, we can see that the definition of e-learning is linked to the advantage of having the latest technological tools for education [21], to a new generation of society knowledge-based [22], the restructuring of the educational offer and the adaptation of e-learning environments to the academic world, or considered an academic network of contents and a set of processes that interact between students, information and the promotion of learning. [23]

An online course, on the other hand, is a course made available virtually via the Internet on any system or digital channel. An online course is much more than a simple lesson recorded and made available on the Internet. It provides several exclusive benefits compared to traditional classroom teaching, normally it has a simple, practical and modern language that best serves the target audience in question. It is an interactive, dynamic and accessible learning process for anyone with access to the Internet. Online teaching assumes that students and teachers do not need to be in the same physical environment for the learning process to take place. In this case, both are united through an online learning system, also known as the e-learning platform. But we had not yet arrived at the concept that reflected the model.

Schneider et al. [24] define the flipped classroom as:

“[...] possibility of differentiated curricular organization, which allows the student the role of subject of his own learning, recognizing the importance of the domain of contents for the broader understanding of the real and maintaining the teacher's role as mediator between the elaborated knowledge and the student”. [24]

It can then be understood by an inverted classroom, as being basically the process where the content is passed on to students through a technological means, such as videos, in which the student watches at home, while in the classroom it is explored as much as possible the elements understood by the content already seen, through exercises, and other forms of expression on the knowledge acquired.

3.1 How does the flipped classroom work?

The idea is that the student absorbs the content through the virtual medium and when he arrives in the classroom he is already aware of the subject to be developed. In this way, the face-to-face classroom becomes the place for teacher-student interaction, to answer questions and build group activities, exercises, roll-plays. To justify the name flipped classroom, in addition to students consuming content through online teaching, they use the physical classroom to do exercises, tests and group work. It is as if the flipped classroom was the perfect meeting between online learning and the classroom.

The flipped classroom, in turn, provides this interactivity. Since it makes use of all the resources, functionalities and benefits of online teaching and face-to-face learning. With the flipped classroom, class time is optimized, as students have prior knowledge of the lesson through the material provided in advance by the teacher. With this, the class can be dedicated to deepen the theme and develop the most important subjects, create more enriching learning opportunities and maximize face-to-face interactions. All with the aim of ensuring understanding and synthesis of the content worked on. Thus, offline time and the student's digital experience are combined. Plus, the classroom activities involve a significant amount of questioning, problem solving and other active learning activities, forcing the student to recover, apply and expand the material learned online; students receive feedback immediately after conducting classroom activities; students are encouraged to participate in online and face-to-face activities, which are considered in the student's formal assessment. And we finally identified the closest definition for model we implemented.

4 CONCLUSIONS

We are in a time of changes, transformations and great opportunities from an educational point of view, mainly through information and communication technologies, it is important to realize that in general we have had a great evolution in the way we relate to each other and this has also profoundly changed education as a whole. Now, in an increasingly virtual world, everything can be solved digitally and the success of online education proves this theory in practice, since its demand only tends to increase every year.

Even so, there is still some resistance to its adoption by some segments of teachers, partly because they are unaware and unable to operate digital technological tools, and to use them to implement pedagogical innovation.

Additionally, we identified resistance to online teaching and learning strategies associated with the fear that they might relegate the teacher's role to a secondary level, shifting the learning axis to the student.

We do not think so, creating new forms of teaching and learning implies hours of work and commitment, this means that the role of the teacher can never be underestimated, it exists since ever and will never be replaced. But we have to adapt to the changes and demands that arise, it is part of our commitment to the knowledge, science and training of students that we place in the job market and in the training of people that we want to be able to lead societies believing in themselves, in the its value and in a sustainable future.

What turned out to be more interesting was that, imposed by the state of emergency (Covid 19) to which, like all other countries we were subjected, what was an exploratory research to test an education model, and present it in a conference, turned out to be an effective and quick solution to answer this challenge, as in one week everything was functioning, teachers and students, through platforms made available for distance learning, already used to a mixed model, maintained the quality of the exercises and dynamics, through the groups created on these platforms, the students had already created some autonomy through this model and adaptation was much easier. Which makes us want to continue investing in the development and improvement of the best interaction in the classroom and what the technologies have to offer us.

By this we mean that although this model is based on the assumptions presented, it does not mean that there are no small flaws in its construction that must be explored. This paper was essentially based on the notion of 'gap' a "blank" in the model's denomination, which does not presuppose considering it as 'the holder of the truth' in terms of forms considered 'ideal' for teaching. We have the need to carry out more in-depth studies to consider how the curricula and teaching-learning process are and / or should be adapted to this new reality, which, in addition to all the issues already mentioned, adds the need to give students the tools to make them resilient and prepared for the uncertainty and insecurity that the coming years may bring us.

It is certain that this study has limitations that must be considered, the results cannot be generalized, and consequently, it will not be possible to extend the conclusions beyond the case under the exploratory study. Another limitation is the fact that the results are essentially of a subjective nature because they derive from the express and descriptive perception of the experience of teachers who use this methodology. Despite these limitations, these clues for future research should not be ignored.

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