# DIGITAL EDUCATION IN HIGHER EDUCATION INSTITUTIONS IN PORTUGAL AND BRAZIL – CHALLENGES AND TRANSFORMATIONS

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## Abstract

This Communication aims to promote a reflection on Digital Education in Higher Educations Institutions in Portugal and Brazil, and the challenges and transformations perceived, when it is implemented, on the occasion of remote teaching during the pandemic of the new corona virus.

From this study, a greater exchange of experiences in terms of methodological proposals in relation to Digital Education could be a great positive differential. And yet, different ways of facing the different challenges to which the researched institutions were and are being submitted, tends to promote valuable cooperation between the researched institutions, promoting the necessary transformations, in the face of the adversities encountered.

In Higher Education, Digital Education is seen as a trend in education, as well as in citizenship. What reinforces the 2030 agenda of the UN (United Nations Organization), in its SDGs – Sustainable Development Goals, for a more inclusive world.

Digital Education, for some higher education institutions, was previously adopted as a beginner, today it is seen as a trend that allows broad access to higher education, expanding the notion of citizenship.

The challenges are numerous and need to be overcome, mainly because of its originality. And, as we are not in a controlled situation, neither in relation to the virus, technological conditions, nor behavioral, psychological conditions, efforts must be scaled in order to make cooperation between institutions the true legacy of this context.

In this way, it is believed that Digital Education will be increasingly fulfilling its transforming role of promoting a more inclusive society.

*Keywords: Digital education, higher education, challenges, transformations.*

## 1. Introduction

Digital Education has been seen as a strong trend towards a more inclusive Education. Reinforcing the UN 2030 Agenda, United Nations, which highlights in its SDGs – Sustainable Development Goals, the development of a better world for all.

It is quite certain that, for several higher education institutions (HEIs), Digital Education was adopted in a beginner way, only in some disciplines in certain courses, but nowadays, it is already contemplated in order to offer a more inclusive Education, being considered as a strong trend in the educational area, in addition to many others.

The numerous challenges, as well as the perceived transformations need to be overcome and analyzed, so that they become real opportunities for growth and development for the teaching-learning process. Even in a time where we are not yet free of this pandemic context, because many aspects are still being worked out. Both in relation to the virus and also the behavioral and psychological aspects of the teachers and students involved.

Thus, efforts should be directed in order to establish Digital Education as a facilitating factor for a more comprehensive, inclusive Education capable of fulfilling its role in developing people, transforming them into citizens.

## 2. Objective

This Communication aims to promote a reflection on Digital Education in higher education institutions (HEIs) in Portugal and Brazil. Through a better understanding of the challenges and transformations encountered by the agents involved, at the time of the implementation of remote emergency education, during the isolation imposed by the pandemic of the new corona virus.

It was believed that, from this study, it will be possible a greater and better exchange of experiences, mainly in terms of methodological proposals in view of the implementation of Digital Education, being this factor, considered a great differential in the scope of inclusive Education as a whole.

Also, the different ways of coping with the challenges encountered by higher education institutions in these two countries, as well as understanding the transformations that have occurred, will be of great value to promote the necessary co-operations, given this unprecedented context.

In this way, it is believed to be contributing to this UN 2030 Agenda, through the development of a Digital Education that can meet the needs for a more inclusive world, where partnerships and cooperation are the first for a more sustainable development.

## 3. Method

This research was carried out in the Postdoctoral Internship, at IE - Institute of Education of UL - University of Lisbon. And it involved Higher Education Institutions (HEIs) in Portugal and Brazil.

Ten interviews were conducted between professors of HEIs from these two countries. It is important to highlight the valuable contributions of these moments of the research, where one can better understand the context of these two countries that, despite having the same language, although with several peculiarities, have challenges now different, now convergent, enabling a relevant analysis in order to allow a better adaptation of Digital Education in the near future.

In Brazil, an analysis was performed on the different realities reported by the professors surveyed. Teachers from public and private institutions, in which they reported how the implementation of Digital Education was in their heiS, in the context of the isolation of this pandemic.

In Portugal, interviews were also conducted, in addition to face-to-face visits in the different IESs, such as universities and polytechnic institutes, enabling a renewal of professional-academic ties, expanding the interest for future partnerships and co-operations, so that digital education can be better developed, as an added value for education itself in an integral way.

## 4. Discussion

Throughout the interviews conducted, it can be seen that the implementation of Digital Education was already expected by many, in the scope of Higher Education. Although in some institutions, digital education was already being practiced, since many institutions already adopted some subjects in the format of Distance Education, it was even, at the time of the pandemic that it intensified.

It was also observed in the interviews that the appropriation of new information and communication technologies - NTICs, methods and tools, brought closer to the agents involved, the possibility of expanding their knowledge, both in the academic area and in their work outside the classrooms. The same, with the students, who, although presenting many initial difficulties, understood the added value of these tools, in their future professionals, reported the teachers interviewed.

In the interviews, although the institutions surveyed were different, it was clear that, both in Portugal and in Brazil, the process of the implementation of Digital Education at the time, that is, remote emergency education, occurred with great similarity, gradually, as needs were emerging and, according to the available resources. Through your computer labs.

A peculiar detail was in relation to the training, as well as the trainings that were made available to students and teachers. That initially went on the teams platforms and zoom and later the meet platform. They also reported that computer labs, as well as IT professionals – Information Technology, provided the necessary support to teachers and students.

In the case of some institutions, many teachers were already familiar with remote education, adding more value to the institution. Even some of these teachers also supported their own colleagues and students who demanded more attention.

In most of the interviewees, the great difficulty was in relation to the camera. That is, students generally do not open their cameras, hindering better communication between both students and teachers. Having even reported that they seemed to "be teaching classes to no one", which turned into great discomfort.

About the opening of the cameras by the students in the classes, also revealed the need for a better appropriation of the use of available digital tools, so that all resources can be used for a better experience, experience during the classes, which certainly tends to facilitate the learning of the contents presented.

Also on the students' cameras, the teachers interviewed reported the need for clear institutional rules on their use, so that everyone who is inserted in the classes has more comfort for more efficient and effective communication. So that remote-digital teaching can be more inclusive, and also with the possibility of more and better interactions, even through screens / screens. Mediated by teachers who also respect and feel respected by their students, in an environment that favors the teaching-learning process, through more dynamic and relevant classes for all.

On the other hand, in most interviews, the experience of remote emergency teaching was configured in the first fruits of a Digital Education in fact, something long demanded. Being considered of great relevance, despite the numerous adversities experienced, such as difficulty in good equipment, as well as internet, in addition to preparation for the use of such resources.

Even so, most of them showed that they enjoyed having lived such experiences, believing in the future of the evolution of education itself, through Distance Education for example. A true digital and educational transformation, many expect. Wishing that such a moment is relevant for new processes, including pedagogical, to come on the agenda for a more consistent Education from now on.

Even though it was considered a positive period by the majority, only one of the interviewees considered the experience lived negative.

Mainly because of the issue that their subjects were almost unfeasible to be taught by remote education. This is because, such disciplines required, on the part of their teacher, a follow-up of the screens/ecrâs of their students. This proved unfeasible in the context of remote emergency education. However, he said he believed that in the near future, with more resources available, these challenges could be overcome.

All interviewees made it clear that, if necessary, a better follow-up of the agents involved in Digital Education is also necessary. So that institutional actions are envisaged, for the full use of the necessary resources. Whether they are human, technological (equipment, internet), training (varied platforms), training and even psychological for the monitoring of those who demand more institutional support. Improving the mental health of all those involved in this process of digital transformation.

## 5. Conclusion

With the analysis of the interviews conducted, it was perceived the need to implement a Digital Education not only emergency, which at the time was certainly the appropriate choice for the end of the school year, for example. However, from the face of these challenges and the clarity of this necessary digital transformation, it is believed that, from now on, a new perspective is installed in the educational environment, which is to obtain a Digital Education that meets the distinct needs of each country, of each IESs, through its agents involved.

It was clearly observed a great interest on the part of the teachers interviewed, in promoting a Digital Education capable of reaching more and better individuals who, in the near past, did not even imagine attending higher education. But that, with a Digital Education of greater and better scope, it can allow such individuals to enter higher education, in addition to enabling the appropriation of new information and communication technologies, the NTICs. This tends to improve the quality of these individuals when they enter the labor market.

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