

# Higher Education Distance Learning and e-Learning in Prisons in Portugal

La educación superior a distancia y el e-Learning en las prisiones en Portugal

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## ABSTRACT

Higher Education in Europe has undergone massive changes due to technological advancements and adjustments resulting from the Bologna Process, by which learning should be accessible for all regardless of social exclusion reasons, such as imprisonment. The resulting massification of access to Higher Education requires flexible and inclusive training provision focused on the student. These are the primary aims of Distance Learning at the Open University of Portugal. The aim of this paper is to understand the viewpoints of twenty-six respondents (students, applicants to courses and senior rehabilitation technicians) on the reality of Higher Education in Distance Learning and e-Learning in a Portuguese prison. This study occurs in a context of a non-positivist paradigm, placing the emphasis on the perception of individuals through a qualitative methodology. The results obtained from interviews show that the education process has many weaknesses and limitations mostly due to the lack of facilities, educational and technological resources, and support from teachers. The conclusion is that it is essential to provide better conditions for prisoners receiving this type of education, as it can be an opportunity for obtaining professional qualification and for personal development, thus increasing their prospects of success in the future.

## RESUMEN

La enseñanza superior en Europa ha venido experimentando grandes transformaciones gracias a los avances tecnológicos y a los cambios derivados del proceso de Bolonia, que prevé la creación de condiciones para que todos tengan acceso al aprendizaje, independientemente de factores de exclusión social, como la reclusión. La subsiguiente masificación del acceso a la Enseñanza Superior exige una oferta educativa flexible, centrada en el estudiante e inclusiva: son estas las prioridades de la Educación a Distancia de la Universidad Abierta en Portugal. Este artículo tiene como objetivo conocer las impresiones de veintiséis individuos (estudiantes, candidatos a estudiantes y técnicos superiores de reeducación) sobre la realidad de la Enseñanza Superior en la modalidad de Educación a Distancia y aprendizaje virtual (e-Learning) en una cárcel portuguesa. Este estudio se encuadra en un paradigma no positivista y hace hincapié en la percepción de los individuos, recurriendo a una metodología de carácter cualitativo. Los resultados, obtenidos mediante entrevistas, revelan la existencia de enormes debilidades y limitaciones en el proceso educativo, debido, sobre todo, a la falta de instalaciones y medios, recursos pedagógicos y tecnológicos, y apoyo de los profesores. Se ha concluido que es fundamental crear mejores condiciones de asistencia a distancia en las cárceles, porque esta formación superior puede ser una oportunidad de cualificación profesional y desarrollo personal, que incrementa sus perspectivas de éxito en el futuro.

## KEYWORDS | PALABRAS CLAVE

Distance education, e-learning, higher education, lifelong learning, prisons, teaching and learning, digital inclusion, innovation. Educación a distancia, e-learning, enseñanza superior, formación continua, centros penitenciarios, enseñanza y aprendizaje, inclusión digital, innovación.



## 1. Introduction

As a result of globalization, society today is characterized by rapid and significant changes, leading to the ability to innovate and define strategies, and to transformations that can be applied in practice, affecting all social, cultural, educational, political and economic areas, and changing our way of thinking, interacting, acting and communicating. Some of the most important factors driving these changes are information and communication technologies (ITC), as they can influence varied and significant aspects of social life that have a tremendous impact on social relations, knowledge and production of goods; the way work is produced and organized, by introducing smart methods in the stages of the production process; and also influence cross-border political democracy to enable citizen participation.

The growth of ICTs has led us to a digital society, to knowledge and networks that significantly change how we are positioned and live in society through cyber culture, which Lemos and Cunha (2003: 12) referred to as “the sociocultural pattern that emerges from the symbiotic relationship between society, culture and new technologies”.

In the field of education, new ideas have appeared in order to meet the specific training needs of individuals based on the possibility of building knowledge in various ways, so as to maximize the construction and development of the educational process. This process has become much more interactive, richer and diversified, based on flows of communication supported by digital technologies. Currently, content and learning management platforms and e-Learning are important tools available to students and teachers, because they allow information to be quickly disseminated and updated, enabling the setting up of virtual learning communities, favoring individual or group communication, facilitating a more flexible access to educational materials, and supporting self-learning so that the individual can become the focal point of his or her own knowledge. Platform-mediated teaching through e-Learning has, indeed, been recognized in the last decade as an appropriate method and resource to address the challenges that the globalized world faces in terms of lifelong learning and the development of technological and social skills (Sangrà, Vlachopoulos, & Cabrera, 2012; Herrington, Reeves, & Oliver, 2010).

Given that the standards of education and training in prisons should be the same as those in normal educational institutions, DL and e-Learning can be an opportunity for individuals serving a sentence not only to develop skills and professional know-how, but also to acquire digital skills, thus improving their ICT qualifications.

In fact, e-Learning in prisons has recently been widely studied in Europe (Hammerschick, 2010; Turley & Webster, 2010). Its relevance is evident in recent EU funded projects, for e.g., “European re-Settlement Training & Education for Prisoners”, “Blended Learning in Prison, a German Approach for Using LMS in Prison”, “E-learning in Prison – the Norwegian IFI System” (E-Step, 2008; E-Learning Platforms and Distance Learning, 2010).

In Portugal, although Law 115/2009, of 12 October, and its latest update (Law 21/2013, of 21 February) emphasizes that prisoners should attend higher education courses, “(...) in particular through distance learning” (Article 38), there seems to be strong signs that Distance Learning (DL) and e-Learning in Portugal are not yet structured effectively and efficiently.

This shows how timely and relevant our study is and explains how important it is to learn more about DL and e-Learning as a strategy for qualification in a prison context.

The purpose of this study is, therefore, to understand the views of students and applicants in prisons and of senior rehabilitation technicians on the reality of HE in terms of DL and e-Learning in a Portuguese prison in Porto (EPP), e.g. in terms of facilities and equipment, educational and technological resources, and support from teachers.

### 1.1. The European Framework for Higher Education in the Bologna Process and the Role of ICTs

Globalization and technological advancements in the Information Society have obviously had an impact on Higher Education at macro level (national and international political discourses), meso level (organization of institutions) and micro level (classroom context), all of which are influential and interdependent. This is good enough reason for framing the use of e-Learning within Higher Education in a particular context, for e.g., in prisons, and for referring to the European Framework for Higher Education in the Bologna Process and the role of ICTs in this type of education.

The Bologna Process, begun in 1999 with the signing of the Bologna Declaration, made European higher education institutions undergo a series of changes at all levels, from the organization of study plans to educational issues, with the purpose of creating a cohesive, competitive and attractive European of Higher Education Area (EHEA). In terms of organization, three education cycles were adopted and the European Credit Transfer and Accumulation System (ECTS) was introduced, giving flexibility to course curricula which are divided into credit units based not only on teaching hours, but also on the student’s time and effort in attending and successfully completing them

(European Commission, 1999). From the pedagogical point of view, the changes in higher education arising from the Bologna Process concern the transition from centralized transmission teaching to valuing the learning process and development of skills.

In Portugal, these changes became official through Law 49/2005, of 30 August, which amended the Basic Law on the Education System, and through Decree-Law 74, of 2006, which relates solely to higher education and emphasizes the issue of paradigm shift:

“A central issue in the Bologna Process is the paradigm shift from a passive teaching model, based on the acquisition of knowledge, to a model based on the development of skills, which includes general skills –instrumental, interpersonal and systematic– and specific skills associated with training, where the experimental and project components play an important role”.

This context of change driven by globalization, technological advancements and, in part, by the Bologna Process forced some institutions to modernize the teaching-learning process, following which many chose to use or increase the use of a Learning Management System (LMS platforms), such as WebCT, Moodle, Blackboard, etc., to complement face-to-face classes, boosting an educational reform of the learning process.

**The prison context is very specific, closed within itself, and has unique rules. It is also important to stress and, above all, believe that it can make a difference to the education and training of prisoners. By introducing adapted and attractive technological and educational resources that can support and motivate these students, we can create opportunities for the development of skills aimed at their integration.**

## 1.2. Distance Education and e-Learning as an education means in a prison context

e-Learning is used by 96% of European higher education institutions to provide a more effective use of classroom time and more flexible teaching-learning processes (Gaebel & al., 2014: 72). These authors argue that e-Learning is threefold: technological, intellectual and social, all of which can contribute to the desired European higher education convergence under the Bologna process: “Theoretically, integrating e-learning within the ongoing development of the European Higher Education Area could underpin the Bologna Process goals of convergence in higher education, more fruitful exchanges and collaboration between institutions, and an enhanced global dimension, with Europe more visible in, and interactive with, the world at large”.

In this respect, Herrington, Reeves and Oliver (2010) state that online technology essentially applies to the increase in opportunities to access higher education, increased retention rates, and increased learning quality and result outcomes. Bonk and Graham (2006), in turn, highlight three main reasons for using e-Learning: i) pedagogical upgrading; ii) increase access and flexibility; iii) cost-effectiveness ratio.

Monteiro, Leite and Lima (2013) identified the following benefits of e-Learning in higher education: its potential to make different support material available; interaction possibilities; response to the challenges posed by the globalized world; flexibility; reduction in travel costs and environmental impact.

In reference to this Collis and Moonen (2011: 21) state that “Institutions had to make heavy investments in technology and explore strategies for change in their methods of operations in order to increase flexibility of participation”. To make the best use of ICTs for educational purposes, and at the same time to diversify training provision, develop skills in digital literacy and contribute to the professional and academic training of individuals in social exclusion, e-Learning projects have been developed in prisons throughout Europe. Some of them were funded by European Lifelong Learning programs in subprograms such as Grundtvig (adult education) and Leonardo da Vinci (vocational education), for e.g., PIPELINE (Norway, Czech Republic, Denmark, Germany, Romania, Slovenia, Sweden, United Kingdom) in 2005, and LICOS (Germany, Norway, Austria, Spain, the Netherlands and Hungary) in 2008. Others projects are in a more final form, such as Elis (Germany and Austria), the Virtual Campus (United Kingdom) and "Internet for inmates" (Norway). Lockit (2011) identified the potential and barriers of e-

Learning in prison, based on the results of a study carried out in European prisons (Figure 1).

In Portugal, two e-Learning projects in prisons are under way: the “EPRIS” project (Barros & Monteiro, 2015) and “Educação a Distância e e-Learning em Estabelecimentos Prisionais em Portugal. Desenvolvimento e Avaliação de um Modelo Pedagógico Inclusivo” (Moreira & al., 2016) [Distance Learning and e-Learning in Prisons in Portugal. Development and Assessment of an Inclusive Educational Model], under which this study was prepared.

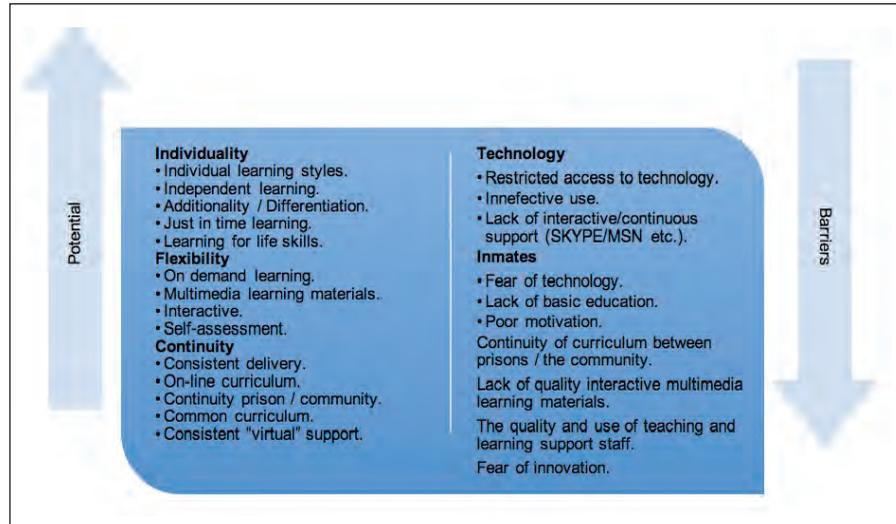


Figure 1. Potential and barriers of e-Learning in prisons (based on Lockitt, 2011).

## 2. Method

The study aims at understanding the views of individuals on the current state of distance learning in prisons. Because of the nature of this subject, it was important to conduct a qualitative study in which direct speech is used in an interpretative approach in order to contextualize and explain the views of respondents, aiming to give account of how prisoners and technicians assess and understand the reality of Higher Education (HE) in DL and e-Learning inside a prison in Portugal.

To obtain data for the study, semi-structured interviews were conducted. To analyse the data therefrom, a research technique was used to decode the semi-free and apparently mixed statements: content analysis (Bardin, 1977; Vala, 1986). Table 1 presents the objectives, categories and questions that the interviewees were asked.

### 2.1. Participants

The sample consisted of a group of eleven male HE applicants, nine male prisoners in Porto Prison (EPP) representing all the students attending undergraduate degrees in the form of DL and e-Learning, at the Open

Table 1. Objectives, categories and interview's questions		
Objectives	Categories	Questions
To identify the perceptions about Distance Education and e-Learning	Definition of Distance Learning and e-Learning	In your opinion what is Distance Learning and e-Learning?
	Conceptualisation of a Higher Education Course in Distance Learning and e-Learning	How do you envisage a course in this modality?
	Benefits of Distance Learning and e-Learning	Are there benefits of taking a distance education course?
	Integration of Digital Technologies in Higher Education in a Prison Context	In your opinion, how should digital technologies be integrated to promote significant learning according to your needs?
To identify the difficulties and conditions for the development of the educational process inside prison	Facilities and equipment	Is there a place/room suitable for studying in this prison? What about a library?
		Is there a computer room? What kind of access does this room have?
		Does the establishment provide educational supplies? What kind?
	Resources	What kind of pedagogical resources are available? Who provides them?
		Do you have access to relevant bibliography for your learning?

University and six Senior Rehabilitation Technicians (TSR), working at the EPP assisting the prisoners along their career path and improving their personal and working skills. All the Open University's inmate students and can-

didates were interview- ed. This particular pri- son was chosen becau- se it has the largest pri- son population taking distance higher educa- tion learning in Por- tugal. Tables 2 and 3 present the charac- teristics of candidates, students and TSR according to variables that give us a clear picture of the respondents' profile.

	Ages	Detention time	Detention regime	Course	Education level	Training inside prison
HE applicants (CF 01...CF 11)	From 23 to 60 years old	From 5 months to 4 years	Close (10) Open (1)	Management (3) Social Science (7) Informatics (1)	From 6 <sup>th</sup> to 12 <sup>th</sup> year	Completion of the 12th year (5)
Students/inmates (ES01 ... ES09)	From 31 to 47 years old	From 2 years to 6 years	Close (7) Open (2)	Management (5) Social Science (4)	From 10 <sup>th</sup> to 12 <sup>th</sup> year	ICT (2) Completion of the 12th year (1) Portuguese for foreigners (1) Gardening (1)

ID	Gender	Employment period	Education level
TR01... TR06	Male (1) Female (5)	From 10 years to 31 years	PhD (1) Master Degree (1) Higher education (4)

### 2.2. Procedure

The logics of the analysis of data collected from interviews was based on two alternating phases: a vertical analysis was made of each interview; a horizontal or comparative analysis was made using the “constant comparative analysis” method (Miles & Huberman, 1994) to identify common and different aspects of the representations and perceptions of respondents. These data are also shown in Tables to explain the relevance of some of their opinions. Choosing this information organizational model will allow us to study the respondents' views in a systematic and analytical way and will give us a more adequate view of their overall ideas. Finally, it is important to stress that due to the assessment method used, some of the records, codified with the acronym UR, were marked with the expressions Positive Trend (+), Negative Trend (-) and Hesitation/Undefined (+/-). The acronyms CF, ES and TR refer to Applicants to Courses, Students, and Senior Rehabilitation Technicians, respectively.

## 3. Results

### 3.1. Perceptions about distance education and e-Learning

To learn about the respondents' views on the reality of distance HE at the EPP, we need to know their views on this type of teaching and how they conceptualised a DL and e-Learning course in a prison context. Without this “diagnosis”, the wrong conclusions can be drawn about the meaning and notion of DL and e-Learning.

The first category, Definition of DL and e-Learning, with twenty items, contains the respondents' records on what they understand by DL and e-Learning (Figure 2).

By reading the results, respondents and students define DL and e-Learning as a teaching-learning process assisted by technological means, where the teacher and students are separated physically, in geographical terms

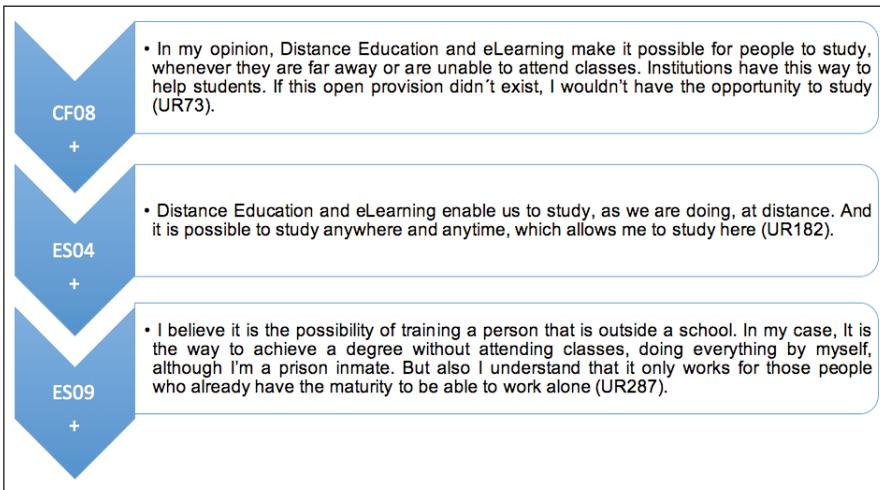


Figure 2. Definition of e-Learning and Distance Education.

and even in different time zones.

In this respect, student ES06 realizes that e-Learning at the EPP is not the same as outside prison.

- ES06: e-Learning inside prison is not the same as outside, because when I go home I have access to the platform and it's all very different!

Basically, it is a learning method for those who cannot attend regular classes but want to acquire knowledge in a particular area, managing their own time and study (RU 264).

The concept of DL and e-Learning has been discussed in great depth in order to identify the characteristics that distinguish it from other forms of teaching. This need to define the concept seems to be associated with the fact that this form of teaching is strongly under development and is taking root in our society, constantly characterized by the new information and communication technologies. This concept is part of a new educational ecology that has contributed greatly to the reconceptualization of teaching and learning (Garrison & Anderson, 2003). Because it is a recent concept, the basis and purposes of its application in educational contexts are still diverse, unstable and diffuse. While for some authors the concept is scaled down to the technological size of tools that mediate the learning process, for others it only covers the contents available online. In this respect, Sangrà, Vlachopoulos and Cabrera (2012) propose a comprehensive and inclusive definition of DL and e-Learning, stating that, today, this form of teaching and learning can represent all or part of the educational model in which the electronic resources and devices are used to facilitate the access, evolution and improvement in the quality of education and training, which is in line with the definitions given by Masie (2006) and Rosenberg (2001), mentioned before.

As regards the category called Conceptualisation of a Higher Education Course in DL and e-Learning in A Prison Context, with twenty-seven items, the answers of both student and staff respondents' show that there is a tendency to point to the existing difficulties and obstacles they have faced, saying that if the course is to be adapted to the reality of the knowledge society, it cannot be limited to just reading the recommended literature. It needs to be supported by information and communication technologies, by learning platforms, by access to the Internet, computer resources, which this prison does not have. In fact, students and technicians clearly refer to the need for an Internet connection and technological resources, such as content management platforms, and better support from teachers. In this respect, they mention:

- ES04: Being able to put my questions to the teacher, there is an exchange between students ... when I go outside on probation, I have access to the platform. That's why I am aware that we need it inside. Through the platform I know objectively what we have to study (...) and we have guidance. Ideally, we would have access to the platform and to all its contents. Either that or the university could send us a CD with those subjects so we would know what to study (RU 183).
- ES06: Being able to do video conferencing to ask questions, but it can be expensive... all prisons should have access to it. Having intranet, for example, if we cannot have the Internet (...) always have access to digital materials and to teacher tutoring (RU 226).
- TR06: If we have more contacts with the University and teaching, it could be just like for other students out there. We would obviously need an Internet connection (...) which would imply something controlled, to be used only for University purposes... (RU 410).

Digital technologies are nowadays an unquestionable vehicle of information and of access to knowledge, as stated by Herrington, Reeves and Oliver (2010). There is more and better hardware and software, leaving us a click away from anywhere in the world. It is, therefore, clear that "interactive technologies, most of all, have shown, in DL and e-Learning, what should be at the core of any educational process: the interaction and dialogue between all those involved in this process" (Moran, 2013).

e-Learning –network learning– appears as the fourth generation of DL and, in this form of teaching, written materials are replaced by multimedia digital materials. In e-Learning, learning stages are pre-programmed and divided into topics, using various resources such as e-mail, texts and scanned images, chats, forums, links, videos, among others.

Online education therefore facilitates the introduction of new learning opportunities that challenge students and "enable a form of learning that falls within constructivist paradigms and is different from other forms of distance learning" (Morgado, 2001).

In respect of DL and e-Learning, we are now experiencing a transition and evolution phase, as the teaching models directed only to the individual are being expanded to the group (to the collective), thus enabling the exchange of knowledge and experiences, promoting discussions and allowing positive results to be achieved for everyone. In a situation as specific as that of these students, it seemed to be crucial and urgent, as stressed by the TSRs, to provide safe access to content or learning management platforms, interactive or otherwise, to allow students to be closer to this fourth generation of DL.

As for the category Benefits of DL and e-Learning, with twenty-six items, the classification of records shows that

most respondents considered that there are many benefits to attending a course in this form of education (Figure 3).

The students' opinions show that the benefits are obvious, as there is no other way of attending an undergraduate degree at the EPP, and that this is a way of continuing studies at another

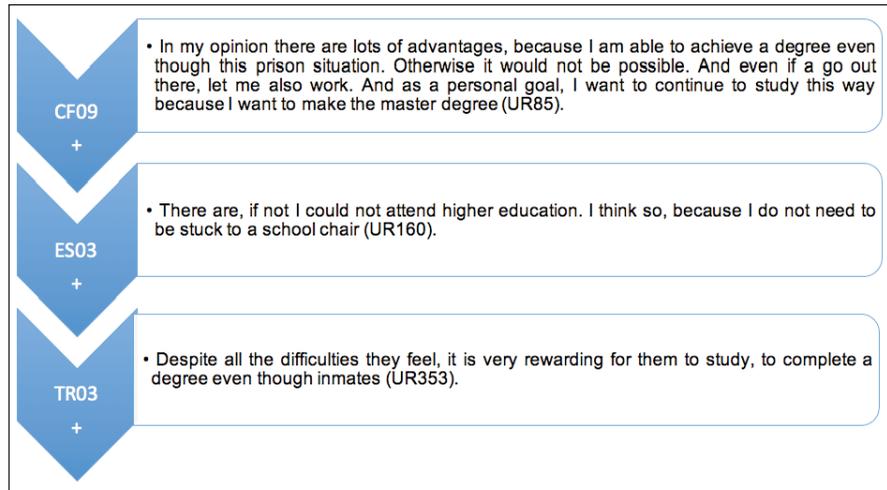


Figure 3. Advantages of distance education and e-Learning in a prison context.

prison or after being released, anywhere in the world. These findings reinforce the benefits identified by Monteiro, Leite and Lima (2013) who highlighted as main benefits flexibility in access to learning, time saving, a more personalized learning, control and evolution of learning at the student's own pace, universal access to various resources, and the increase in social equity and pluralism in access to education and sources of knowledge.

In the category Integration of Digital Technologies in Education in a Prison Context, with twenty-three items, most responses (twenty) were positive, suggested that prisoners consider that digital technologies are essential tools for the acquisition and consolidation of learning (Figure 4).

As can be seen in example record two hundred and sixty-six, student ES08 refers to the importance of technology as an enabling tool for learning and increasing knowledge. Other students share in the same opinion, referring that:

- ES04: Technologies can help a lot. If we have some work, to do this helps a lot. Now we can only go to the library to do research, but there there are limits to what can happen there. So with computers, it would be much easier. We do not have internet access, but if we had, even though guarded or barred from certain sites, it could allow us to research and to print, so that we could study better (RU 50).

- ES06: Just realize that this is a way of teaching and e-Learning and of course the computer makes up a huge lack. Technology can only contribute to an improvement of learning (RU 186).

These individuals accept the integration of digital technologies in their training because it brings something new to the prison context, and because it can actually contribute to improve the learning process. Pelizzari, and al. (2002) argue that the features included in technologies used in DL, such as computer tools, promote interaction and are constructivist, thus promoting the development of learning. Belloni (2009) adds that the pedagogy and technologies used in DL and e-Learning should not be separated from the teaching-learning process, so that the education of individuals can be fully integrated in the information and knowledge society. This approach is extremely important in understanding this process as being inseparable from the social rehabilitation of prisoners.

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### 3.2. Conditions for the development of the educational process inside prison

As for the Facilities and Equipment category, with forty items, all respondents refer to the fact that there are special learning facilities for HE students, but they do not have any computer equipment or technology to assist them in their learning process (Figure 5).

After reading and analyzing all example records, we can conclude that there is a study room for students attending HE at the school. As one of the technicians states: "TR01: There is a room where they can study. This space was created at school. They could go there three times per week (RU 318).

He says also:

• TR01: The higher education students do not have access. There is a room equipped with computers, but it belongs to the school (RU 338)".

This limits the access to digital content provided by the teachers on the different course units in each course, especially

because, as Lévy states, "technologies have a key role in establishing the intellectual and space-time references of human societies" (1993: 75).

Considering this and the definition of e-Learning already given by Sangrà, Vlachopoulos e Cabrera (2012), who speak of an educational model that uses electronic means and devices to facilitate the access, evolution and improvement in the quality of education and training, it is not possible to talk of e-Learning at this prison, but rather of a "primitive" generation of DL".

The last category of our research, which was entitled Resources, consists of eighteen items. It shows that the educational resources that students have and can access are also scarce and limited.

As already mentioned, the resources available to students at this prison bring us back to the first generations of DL, who basically relied on printed material for educational purposes. In contexts such as this one, where the digital reality is still remote, textbooks, notebooks, pens are, therefore, key resources, as they are physically tangible tools which belong to students and can be handled by them, as they are always at their disposal. But even these resources are scarce and often depend on the support of the University and technicians who assist in the educational process at the school. Figure 6 presents a summary of the participants' opinions on distance higher education in EPP.

In an increasingly digital society, in which education is supported by educational resources that include e-mail and online teaching platforms, Learning Management Systems (LMS) and Learning Content Management Systems (LCMS), discussion forums and web conference systems, (Lagarto & Andrade, 2009), according to Figure 6, the conditions for distance learning in EPP are still precarious.

#### 4. Conclusions and future prospects

The digital world has not only become a reality, but also a huge need in terms of information and interaction. From this point of view, the world has become smaller and is borderless, in such a way that exchanges and interactions are inevitable and are part of daily life. In line with the global development of the various sectors of society, digital technologies must also be incorporated the educational process in prisons, in order to promote changes and transformations in its product and process.

The combination of the many methods and learning technologies that involve the interaction between educational approaches and technological resources is essential for promoting quality education in prisons in Portugal. The greatest challenge for higher education in prisons and, consequently, for new learning and teaching models or environments is to ensure that learners in a prison context develop appropriate skills and competences for their level of knowledge.

But in order to turn this into reality it is necessary to thoroughly redesign the architecture of information systems in prisons in Portugal, providing them with digital platforms to allow the implementation of DL and e-Learning, since the reading and analysis of the views of students/prisoners, applicants, and TSR (the latter having a more institutional opinion and perhaps being closer to reality), has led to the conclusion that the current situation in Porto prison and, by extension, other prisons in Portugal, has many weaknesses and limitations at this level that need to be resolv-

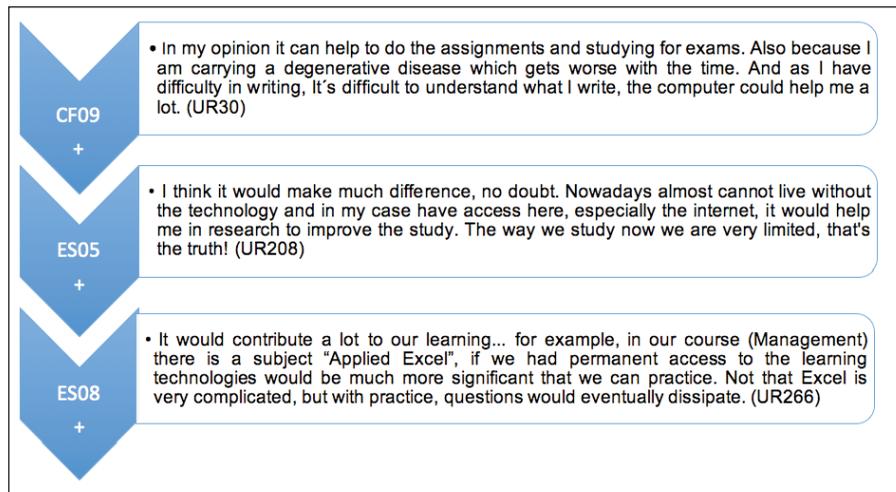


Figure 4. Integration of digital technologies in distance education.

ed as quickly as possible.

As emphasized by the students/prisoners and TSR, IT resources must be strengthened and more technological resources must be provided in the prison, e.g. a content and learning management platform, or videoconference technologies, not currently available in the prison school.

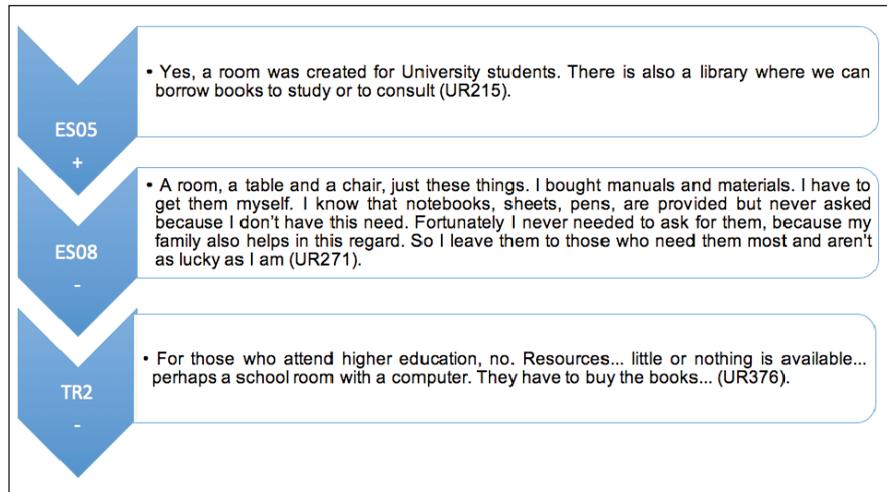


Figure 5. Facilities, equipment and resources.

Moreover, they also add the need for Internet (or intranet) and more support from teachers in educational activities in virtual classroom contexts as this is very flexible in terms of time and study plans, allowing them to also continue to study in other prisons or once they are released, anywhere in the world.

To address this challenge, and considering this framework outlined by the learner prisoners and senior technicians at the prison, the Open University (UAb) and the General Directorate of Prison Services and Social Rehabilitation (DGRSP) have recently signed a protocol (April 2016) stating in its 2nd clause the need and commitment to create and develop: "A Virtual Campus specifically designed for the prison population, with safe access and specific contents for developing activities in the field of education and training in Distance Learning and e-Learning".

Today, following the deepening of relations between the two institutions, this Virtual Education/Training Employability and Digital Citizenship Campus (EFEC@) is being designed with the main goal of building and developing an academic campus that responds to the organizational and training needs of DGRSP and of prisons.

The Virtual Campus will consist of various online services and will be supported by a technological platform that delivers e-Learning and eManagement technologies, in order to make the educational, academic, administrative and digital citizenship processes easier.

The idea of the Campus is to design an integrated information system, with e-Learning, eManagement, workflow and groupware technologies, with a view to the automation of administrative, decision-making and educational process, and to a more efficient management of resources and educational logistics.

This project is expected to address some of the issues referred to by the respondents in this study and the challenges posed today by the digital society and new technologies to DL and e-Learning, in particular in contexts of great social vulnerability, as is the case for the prison population, contributing, at the same time, to ensuring the right of access to education to all citizens, respecting the human rights of individuals, deprived of their freedom or otherwise.

The construction of the EFEC@ Virtual Campus is a complex and multifaceted challenge that requires collaborative commitment. For teachers and researchers at the Open University (UAb) there is a belief that this project will also help to fulfil the mission of UAb as a university anywhere in the world, across the political and geographical borders or prison walls, providing the conditions for everybody to have the chance to invest in their own education.

Finally, we need to add that as an instrument of an active policy of public intervention and of citizenship, the Virtual Campus EFEC@ will seek to shape a multifaceted renewal matrix. The effective role of education as an essential frame of reference for equipping citizens for the new challenges of the knowledge society aims to foster a structured culture of innovation and requalification, as a tool for the development of institutions.

One must bear in mind that the prison context is very specific, closed within itself, and has unique rules. It is also important to stress and, above all, believe that it can make a difference to the education and training of priso-

ners. By introducing adapted and attractive technological and educational resources that can support and motivate these students, we can create opportunities for the development of skills aimed at their integration.

“Education for all, throughout life, equally accessible to the specific nature of each and every one, will necessarily cover the education and training of adults and, therefore, education and training in a prison context” (Tscharf, 2009: 148).

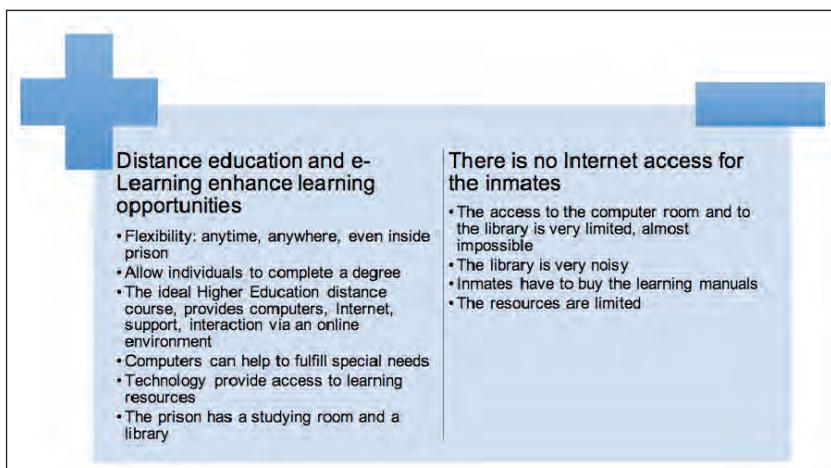


Figure 6. Participants' opinions on distance higher education in the Porto prison.

### Funding agency

The second author is funded by National Funds through the FCT, Portugal (SFRH/BPD/ 92427/2013).

### References

- Bardin, L. (1977). *L'analyse de contenu*. Paris: PUF.
- Barros, R., & Monteiro, A. (2015). E-learning for Lifelong Learning of Female Inmates: The Epris Project. In IATED (Ed.), *Edulearn15 Proceedings* (pp. 7056-7063). Barcelona: IATED. (<https://goo.gl/8w7rX8>) (2016-12-28).
- Belloni, M. (2009). *Educação a Distância*. São Paulo: Autores Associados.
- Bonk, C., & Graham, C. (Eds.) (2006). *The Handbook of Blended Learning, Global Perspectives, Local Designs*. San Francisco, USA: Pfeiffer. <https://doi.org/10.5465/amle.2008.31413871>
- Collis, B., & Moonen, J. (2011). Flexibilidad en la educación superior: revisión de expectativas. [Flexibility in Higher Education: Revisiting Expectations]. *Comunicar*, 37(XIX), 15-24. <http://dx.doi.org/10.3916/C37-2011-02-01>
- Decreto Ley 74/2006. *Diário da República* n.º 60: Serie I-A. (<https://goo.gl/NIUeiY>) (2016-10-05).
- e-Learning Platforms and Distance Learning. Taller A5 de la Conferencia Europea sobre Educación en las Prisiones, 2010. (<https://goo.gl/qYBTO1>) (2015-10-22).
- Comisión Europea (1999). *Declaración de Bolonia*. (<https://goo.gl/Rp2ZrM>) (2016-10-22).
- Comisión Europea (2009). *Communiqué of the Conference of European Ministers Responsible for Higher Education*. (<http://goo.gl/ZN32Ex>) (2016-08-22).
- Gaebel, M., Kupriyanova, V., Morais, R., & Colucci, E. (2014). *E-Learning in European Higher Education Institutions: Results of a Mapping Survey*. (<https://goo.gl/H3HxPt>) (2016-08-19).
- Garrison, D., & Anderson, T. (2003). *E-learning in the 21st Century: A Framework for Research and Practice*. New York: Routledge Falmer. <https://doi.org/10.4324/9780203838761>
- GHK (2010). *Grundtvig and Leonardo da Vinci Catalogue of Projects on Prison Education & Training*. (<https://goo.gl/MxqtDR>) (2016-01-02).
- Hammerschick, W. (2010). *Report on E-learning in European Prisons - Concepts, Organisation, Pedagogical Approaches in Prison Education*. (<https://goo.gl/gKoDLX>) (2015-12-10).
- Hamilton, E., & Feenberg, A. (2008). Os códigos técnicos do ensino. In J. Paraskeva & L. Oliveira (Orgs.), *Currículo e tecnologia educativa* (pp. 117-149). Mangualde: Edições Pedagogo.
- Herrington, J., Reeves, T., & Oliver, R. (2010). *A Guide to Authentic e-learning*. New York: Routledge. <https://doi.org/10.4324/9780203864265>
- Lagarto, J., & Andrade, A. (2009). Sistemas de gestão de aprendizagem em e-Learning. In G. Miranda (Org.), *Ensino online e aprendizagem multimédia* (pp. 5680). Lisboa: Relógio D'Água Editores.
- Lemos, A., & Cunha, P. (2003). *Olhares sobre a cibercultura*. Porto Alegre: Sulina.
- LICOS (2010). *E-learning in Prison Education in Europe: Recommendations for European Policy Makers*. (<https://goo.gl/RK4mbi>) (2015-06-01).
- Lima, J., & Capitão, Z.C. (2003). *E-Learning e E-conteúdos*. Lisboa: Edições Centro Atlântico.
- Lockitt, W. (2011). *Technology in Prisons*. (<https://goo.gl/zeCJ5A>) (2016-08-16).
- Masie, E. (2006). The Blended Learning Imperative. In C. Bonk, C., & C. Graham (Eds.). *The Handbook of Blended Learning: Global Perspectives, Local Designs*. (p. 22-26). San Francisco: Pfeiffer.

- Miles, M., & Huberman, M. (1994). Drawing Valid Meaning from Qualitative Data: Toward a Shared Craft. *Educational Researcher*, 13, 20-30. <https://doi.org/10.2307/1174243>
- Monteiro, A., Leite, C., & Lima, L. (2013). Quality of Blended Learning within the Scope of the Bologna Process. *Turkish Online Journal of Educational Technology*, 12(1), 108-118. (<https://goo.gl/H4LMTT>) (2016-12-27).
- Monteiro, A., Moreira, J.A., & Leite, C. (2016). O e-Learning em Estabelecimentos Prisionais: Possibilidades e Limites para a Inclusão Digital e Justiça Social. *Revista Diálogo Educacional*, 16(47), 77-102. <https://dx.doi.org/10.7213/dialogo.educ.16.047.DS04>
- Moran, J. (2013). *O que é a educação a distância*. (<https://goo.gl/nqNtoU>) (2015-10-23).
- Moreira, J.A., Monteiro, A., Machado, A., & Barros, R. (2016). *Sistemas prisionais. História e desafios educacionais da era digital*. Santo Tirso: Whitebooks.
- Morgado, L. (2001). *O papel do professor no ensino online: Problemas e virtualidades*. Discursos, III Série, n.º Especial, 125-138. (<https://goo.gl/b3A69B>) (2016-12-23).
- Pelizzari, A., Kriegel, M., Baron, M., Finck, N.T.L., & Dorocinski, S.I. (2002). Teoria da aprendizagem significativa segundo Ausubel. *Revista PEC*, 2(1) 37-42. (<https://goo.gl/Qt3w4j>) (2016-12-23).
- Pereira, A., Mendes, A., Morgado, L., Amante, L., & Bidarra, J. (2007). *Modelo pedagógico virtual da Universidade Aberta*. Lisboa: Universidade Aberta. (<https://goo.gl/LeQTKX>) (2016-12-21).
- Rosenberg, M.J. (2001). *E-learning: Strategies for Delivering Knowledge in the Digital Age*. New York: McGraw-Hill. <https://doi.org/10.1002/pfi.4140410512>
- Sangrà, A., Vlachopoulos, D., & Cabrera, N. (2012). Building an Inclusive Definition of E-learning: an Approach to the Conceptual Framework. *The International Review of Research in Open and Distance Learning*, 13(2), 145-159. <http://dx.doi.org/10.19173/irrodl.v13i2.1161>.
- Turley, C., & Webster, S. (2010). *Implementation and Delivery of the Test Beds Virtual Campus Case Study*. National Centre for Social Research. (<https://goo.gl/qvtDsY>) (2015-05-01).
- Tscharf, C.F. (2009). *Educação e Formação de Adultos em Prisões Portuguesas*. Dissertação de Mestrado em Ciências da Educação. Aveiro: Universidade de Aveiro. (<https://goo.gl/yYriqVV>) (2016-12-21).
- The County Governor of Hordaland (2005). *Case Study Norway Pipeline*. (<https://goo.gl/w9GTMb>) (2016-07-20)
- Vala, J. (1986). A análise de conteúdo. In A. Silva, & J. Pinto, (Eds.), *Metodologia das Ciências Sociais*. (pp. 101-128). Oporto: Afrontamento.