THE USE OF DIGITAL TECHNOLOGIES TO CONTROL STUDENT EVASION IN HIGHER EDUCATION IN DISTANCE EDUCATION

O USO DAS TECNOLOGIAS DIGITAIS PARA O CONTROLE DA EVASÃO DISCENTE NO ENSINO SUPERIOR EM EDUCAÇÃO À DISTÂNCIA (EAD)

EL USO DE LAS TECNOLOGÍAS DIGITALES PARA CONTROLAR LA EVASIÓN ESTUDIANTIL EN LA EDUCACIÓN SUPERIOR EN EDUCACIÓN A DISTANCIA (EAD)

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ABSTRACT: New technologies associated with Distance Learning (EAD) projects increase the ability to access a professional training program. Even with the increasing technological advancement in distance learning, it was not efficient to contain the number of dropouts. The objective of the study is to know the main factors that contribute to the evasion in EAD and how the use of technology to minimize this problem. The methodology that will be carried out is based on exploratory research which will carry out a survey of thesis, dissertation and scientific articles that bring to the discussion the causes of dropouts and dropout in EAD, between the years 2002 and 2021. The study will be by the qualitative method, with bibliographic research and document analysis with the purpose of better understanding the investigated object. Among the theoretical references adopted, the production of some authors such as Mill (2018), (Kenski (2015), Alves (2011) among others was privileged.

KEYWORDS: Distance Learning. Student Evasion. Technology.

RESUMO: *Novas tecnologias associadas a projetos de Ensino à Distância (EAD) aumentam a capacidade de acesso a um programa de formação profissional. Mesmo com o avanço tecnológico cada vez maior no EAD, não foi eficiente para conter o número de evasão. O objetivo do estudo é o de conhecer os principais fatores que contribuem para a evasão no EAD e como a utilização da tecnologia por minimizar este problema. A metodologia que será realizada fundamenta-se na pesquisa exploratória, da qual se realizará o levantamento de trabalhos de tese, dissertação e artigos científicos que trazem para discussão as causas de desistências e evasão na EAD, entre os anos de 2002 e 2021. O estudo será pelo método qualitativo, com pesquisa bibliográfica e análise documental com o propósito de melhor entender o objeto investigado. Entre os referenciais teóricos adotados, privilegiou-se a produção de alguns autores como Mill (2018), (Kenski (2015), Alves (2011) entre outros.*

PALAVRAS-CHAVE: *Ensino à Distância. Evasão. Tecnologia.*

RESUMEN: *Las nuevas tecnologías asociadas con los proyectos de aprendizaje a distancia (aprendizaje a distancia) aumentan la capacidad de acceder a un programa de formación profesional. Incluso con el creciente avance tecnológico en THE, no fue eficiente contener el número de evasión. El objetivo del estudio es conocer los principales factores que contribuyen a la evasión en EAD y cómo el uso de la tecnología para minimizar este problema. La metodología que se llevará a cabo se basa en la investigación exploratoria a partir de la cual se realizará la encuesta de tesis, disertaciones y artículos científicos que traigan a discusión las causas de los retiros y evasiones en EAD entre 2002 y 2021. El estudio será por método cualitativo, con investigación bibliográfica y análisis documental con el propósito de comprender mejor el objeto investigado. Entre las referencias teóricas adoptadas, se favoreció la producción de algunos autores, como Mill (2018), (Kenski (2015), Alves (2011) entre otros.*

PALABRAS CLAVE: *Educación a distancia. Evasión. Tecnología.*

Introduction

In an increasingly globalized world, based not only on costs and innovation, there is a constant demand for professional training to improve qualifications, considering better opportunities to act in the labor market. Professionals must be prepared for the challenges of change, creativity, entrepreneurial spirit and face the knowledge revolution. In having been discussing the changes in the labor and education market, with a view to industry 4.0[1], the great need to maintain knowledge within companies is placed here, as a fact that generates competitive advantage.

With the technologies available, especially the Internet, it is possible to teach through the distance model. Such technologies help to create teaching-learning environments abundant in possibilities, through which motivated and interested people have how to learn a multitude of topics, in addition to the modality of face-to-face teaching. For education to have reached the importance that is found today, it was important the emergence of distance learning (Distance Learning) [2], a model associated with the development of public policies to expand scientific production in the area and democratize access to education. As technologies expand, granting distance studies, training opportunities are created for a large number of people, transforming distance education (EAD) [3] into a form of democratization of education.

Contextualization

The EAD has been increasing every semester, attracting more attention and gaining new configurations, thus existing an opportunity for growth and development. Today it is already a reality and allows the use of synchronous or asynchronous classes, being easily accessible in the most different regions of Brazil, presenting a low cost and affordable monthly fees. Its growth opens space for new research and discussions, in which the trend is to continue growing and contributing to the provision of higher education. Table 1 shows the evolution of those enrolled in the EAD and face-to-face between 2009 and 2020 in the private network.

[1] Industry 4.0 is a recently proposed industry concept that encompasses the main technological innovations in the fields of automation, control and information technology, applied to manufacturing processes. (SILVEIRA, 2017)
[2] Teaching "is a two-way (multidirectional) technological communication system, which can be massive, based on a systematic and joint action of teaching resources and the support of an organization and mentoring, which, physically separated from students, provide the these an independent learning." (ARETIO,2001).
[3] According to Otto Peters (1973), mentioned by Nunes in 1992, Distance Education is a rational method of sharing knowledge, skills and attitudes, applying organizational principles and the division of labor. Still for the author (2006), the conceptions of open, permanent, post-industrialized and postmodern learning open possible perspectives and dimensions for the reform of distance education.

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Table 1 – Evolution of the number of enrollments in the private network, by mode of teaching - Brazil 2009-2020

Year	Face-to-Face Students	EAD Students
2009	3.764.728	665.429
2010	3.987.424	748.577
2011	4.151.371	815.003
2012	4.208.086	932.226
2013	4.374.431	990.019
2014	4.664.542	1.202.469
2015	4.809.793	1.265.359
2016	4.686.542	1.371.817
2017	4.649.897	1.591.410
2018	4.489.690	1.883.584
2019	4.231.071	2.292.607
2020	3.775.571	2.984.431

Source: Inep (2009-2020, p. 38)[4]

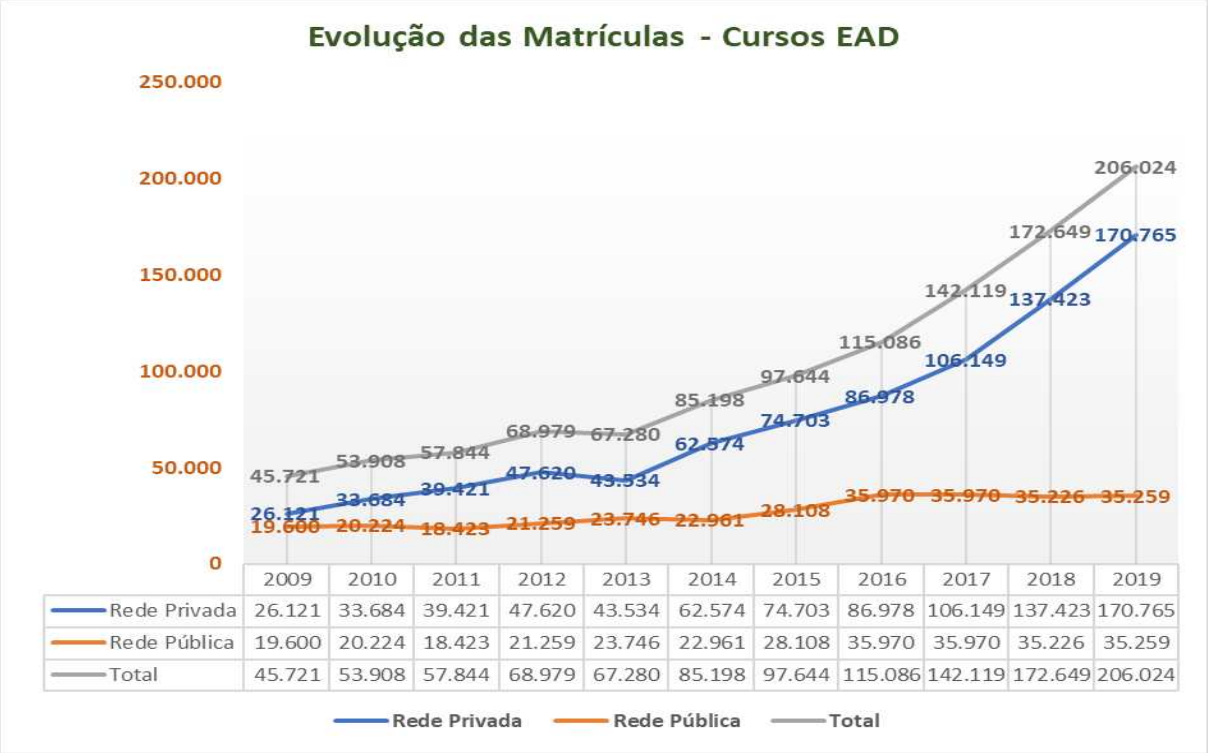
By 2020, students in distance learning courses already account for 44% versus 56% who attend in-person education in private schools. It presents constant growth and evolution, with the new technologies used, as well as developed for this area.

We can observe, in graph 1, the evolution of EAD courses in Brazil from 2000 to 2019. According to the National Institute of Educational Studies and Research Anísio Teixeira (INEP)[5], between 2009 and 2019, there was a growth of 378.9% in the number of enrollments in distance graduations, from 330,000 in 2009 to 1,590,784 in 2019 of students practicing the modality (INEP data from 10/23/2020).

Graph 1 shows the number of those enrolled in the EAD model in the private[6] HEIs of the State of Rio de Janeiro.

[4] Available: https://bityli.com/RhuzYcN. Access: 10 Feb. 2021.
[5] Federal institution bound to the Ministry of Education (MEC) which aims to promote studies, research and evaluations on the Brazilian Educational System.
[6] It is a system characterized by having private educational institutions, thus understood those maintained and administered by individuals or legal entities of private law, as established in the Law of Guidelines and Based of Education (LDB) of 1996 (MENEZES, 2022).

Graph 1 – Evolution of EAD enrollments in the State of Rio de Janeiro[7]



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Rede Privada	26.121	33.684	39.421	47.620	43.534	62.574	74.703	86.978	106.149	137.423	170.765
Rede Pública	19.600	20.224	18.423	21.259	23.746	22.961	28.108	35.970	35.970	35.226	35.259
Total	45.721	53.908	57.844	68.979	67.280	85.198	97.644	115.086	142.119	172.649	206.024

Source: Instituto Semesp (2021)

It is observed that the private network holds 82.9% of the enrollments of the EAD modality in the State of Rio de Janeiro. The jump in enrollment in EAD courses from 2009 to 2019 was 351%. In the private network, this growth was even greater (554%).

Table 1 shows us the most sought-after distance undergraduate courses by students throughout Brazil. According to INEP, Higher Education in the private network recorded an increase of 9.8% in current distance enrollment in the first half of 2021, while the face-to-face modality had a drop of 8.9% in the same period. The data are contained in the Map of Higher Education in Brazil released by the Semesp Institute (2021)[8]. The study also points out which were the EAD courses with the highest number of enrollments.

[7]Title: Enrollments evolution – Distance learning course; Blue line: Private Network; Orange line: Public Network; Gray line: Total.

[8] SEMESP - Secretariat of Specialized Modalities of Education - entity that represents maintainers of Superior Education in Brazil.

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Table 1 – Ranking of enrollment of EAD courses in the private network

Course	Registration	% Enrollment	Ticket	% Tickets
Pedagogy	515.057	22.5	278.971	17.9
Administration	251.497	11.09	160.563	10.3
Accounting	151.110	6.69	87.601	5.6
People Management	117.913	5.1	89.303	5.7
Physical education	94.842	4.1	75.003	4.8
Social services	86.391	3.8	42.050	2.7
Physical Education - Teacher Training	69.634	3.0	36.675	2.4
Business Management	62.547	2.7	43.569	2.8
Information Systems	60.510	2.6	43.569	3.0
Logistics	54.803	2.4	42.184	2.7
Commercial Management	43.106	1.9	35.583	2.3
Public Management	42.268	1.8	29.034	1.9
Marketing	39.663	1.7	34.599	2.2
Nursery	39.324	1.7	33.264	2.1
Financial management	36.837	1.6	29.904	1.9
History - Teacher Training	36.497	1.6	24.179	1.6
Mathematics - Teacher Training	30.121	1.3	22.486	1.4
Environmental Management	22.209	1.0	15.121	1.0
Production Engineering	21.672	0.9	12.791	0,8
Literature (Letters) Portuguese - Teacher training	21.505	0,9	14.470	0,9

Source: Semesp Institute (2021)[9]

With the growth of the EAD in Brazil, especially due to the increase in the offer of higher undergraduate courses, quality and cost-benefit end up being relevant factors in the choice of a course.

Theoretical Framework

Repercussions of Digital Technologies on Education

For Aurelio[10] (2010), technology is science whose object is the application of technical and scientific knowledge for industrial and commercial purposes. Together with the technical terms of an art or a science, that is, technology is the use of scientific knowledge and other forms of organized knowledge, the task of the practices of organizations composed of instruments and individuals.

> Digital Communication and Information Technologies (TDIC) are increasingly present in people's lives. Technologies such as internet, mobile phone, tablet, notebook and computer are, every day, more used by

[9] Available: https://www.semesp.org.br/mapa-do-ensino-superior/edicao-11/dados-brasil/cursos-mais-procurados/. Access: 10 Oct 2021.

[10] Available: https://dicionariodoaurelio.com/tecnologia. Access: 10 Oct 2021.

> individuals, both in the personal and professional contexts. The fast pace of the current world accentuates the need for communication through these technologies (NETO; MILL, 2018, p. 124, our translation).

The new technologies comprise a range of tools (Chats, Gamification, forum, virtual library, multimedia content, among others) and have contributed to current education, being the most impact ed to the Internet, because it has a wide space of information and resources that, for its ease and practicality, has been increasing the number of users every day.

According to Feitosa (2018, p. 14, our translation), "It facilitates the creation, editing and distribution of content. With it, it is possible to know everything that happens in the world, without leaving home."

Technology in Education emerges as a tool used to improve practices in the classroom and facilitate the exchange of knowledge. Technological resources for Education tend to stimulate creativity, logical reasoning, research execution and other skills necessary for the current moment of great competitiveness in which we are living. For Kenski (2015b), the term technology does not refer only to the computer and electronic devices, because the technologies existed at all times and in all innovations created by man. The author cites equipment, instruments, resources, products, processes and tools, as examples.

> The creative use of technologies can help teachers transform the isolation, indifference and alienation with which students usually attend classrooms, in interest and collaboration, through which they learn to learn to learn, respect, to accept, to be better people and participatory citizens (KENSKI, 2015, p. 103, our translation).

The ability of countries to generate k

nowledge and transform them into technology increasingly determines their economic prospects" The growth of the EAD is only being possible due to the evolution of Information and Communication Technologies, which democratized higher education because of its application in the process of distant participation of students, observing as a form of knowledge and learning the virtual, the Internet.

> [...] in an environment that is increasingly dominated by the proliferation of electronic media and the demands and imperatives of consumer culture, the school urgently needs to assume a more proactive role. Technology may be able to make its contribution, although it does not do so spontaneously. In a way, we need to stop thinking about these issues in simple technological terms, and start having new ideas about learning, communication and culture (BUCKINGHAM, 2010, p. 55, our translation).

Today, you can quickly access content in an interactive and innovative learning environment. Progressively in people's lives is Technology, as well as its use in Education, has been following a great trend from the expressive increase of distance model courses, in which they offer new resources and possibilities in the learning process of students. According to Bertoldo, Salto and Mill (2018, p. 622, our translation) the introduction of technologies in education came to develop existing models, and did not eliminate them:

> Obviously, to date at least, this process has not implied the elimination of other forms of storage and presentation of information and knowledge, on the contrary, it has enhanced these forms, offering a new grammar and semiology and, in education, new forms of literacy and education, reflected in the passage of the passive consumer of information to the self-employed student; from text to hypertext and hypermedia; from still images to animations and simulations; from face-to-face education to distance education; the solidary construction of knowledge to networks of interaction and collaboration; from individual to collective intelligence.

This evolution has been the great help in the EAD, being possible to have access to a large amount of information and in real time, that is, technological tools contribute to access to Education, favoring a teaching modality in which there is no distance to learn. Studying the materials at any time of the day and anywhere contributes to the student getting more learning and knowledge of the disciplines. Technology should be used as a catalyst for a shift in the educational paradigm. According to Marques e Souza (2016, p. 865, our translation), "EAD is growing, especially in the last decade, having as its main factor the emergence of new communication technologies, mediated by networked computer, more precisely, with the popularization of the Internet".

> Making use of technology in education is already a need, recognized by every teaching professional who is updated with the latest trends in the area. That said, however, it is necessary to realize that the way in which this resource should be used in the classroom is not always clear (FRANÇA, 2018, p. 1, our translation).

It is important to identify positive and negative aspects of the application of technology in education. Table 2, in turn, presents the positive and negative points of the use of Information and Communication Technologies inserted in the educational plan.

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Table 2 – Positive and negative aspects of ICT in the educational context

POSITIVE ASPECTS	NEGATIVE ASPECTS
It allows the professor to show various ways of capturing and showing the same object, representing it under different angles and means: by movements, scenarios and sounds, integrating the rational and the affective, the deductive and inductive.	There's ease of dispersion. Many students get lost in the tangle of navigation possibilities. They don't look for what's agreed, letting themselves be dragged into areas of personal interest.
It facilitates the motivation of students, by novelty and inexhaustible possibilities of research.	A strong dose of attention is needed by the teacher, because every day of so many search possibilities, the navigation itself becomes more seductive than the necessary work of interpretation.
The teacher manages to get the student to develop cooperative learning, group research, exchange results. Successful interaction increases learning	In some cases, there is excessive competition, monopoly of certain students on the group, making it necessary a greater attention of the teacher for these cases.
There is a need for continued training for teachers. As a way of supporting teachers, so that they can not only receive a new resource at school, but also to be able to know their potential and use them in the teaching and learning process.	The computer is not in itself a carrier of innovation or source of a new dynamic of the educational system. It can effectively serve and perpetuate obsolete education systems. It can be an empty instrument in pedagogical terms that values form, obscures content and ignores processes.
It offers the opportunity to quickly update knowledge, extend educational spaces, expand opportunities where resources are scarce.	Some teachers point to educational technologies as generating some malaise, such as the fear of their replacement by the machine.
In the unequal intimacy that students and teachers demonstrate through ICT, there can be a beneficial effect, because each teacher enthusiastic about learning and doing differently can associate themselves with more collaborative and supportive students.	Teachers feel that they have little time for training and action, for the use of educational technologies within the classroom.
The opportunity to be in contact, even if virtual, with communities from other and even countries, can facilitate young people to understand and accept realities, cultures and way of living different from their own.	Some teachers believe that, using the technologies in their classes, they may lose control of the situation, since students may have prior access to the material to be studied.
Shift the emphasis from a formal and impersonal curriculum to live and enthusiastic exploration by students.	The great difficulty of teachers is the reconstruction of their pedagogical practice, especially when the educational assumptions that guide the use of the

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	computer are different from the conception of teaching and learning of the shared in the school.

Source: Barreto (2004), Moran (2007, 2009), Papert (1994), Querte *et al.* (2004) and Santos (2004)

From table 2 it is possible to observe that the introduction of technology in the educational environment has become more frequent. The student studies in a virtual environment, communicates, attends video lessons, solves doubts and solves exercises.

EAD Conceptualization

Throughout history, the EAD has changed its course to gain a competitive advantage, and is even more used. We can verify the conceptualization of some authors.

Daniel Mill (2018, p.201) "EAD is a modality, a teaching mode that permeates all levels of the Brazilian educational system (basic or higher education) and can be articulated with other teaching modalities". For Maia and Mattar (2007, p. 6, apud SANTOS; MENEGASSI, 2018), "EAD is a modality of education in which teachers and students are separated, planned by institutions and using various communication technologies". Moore and Kearsley (2008, p. 2, our translation) allege that

> Distance education is the planned learning that usually takes place in a different place from the teaching site, requiring special techniques of course creation and instruction, communication through various technologies and special organizational and administrative arrangements.

It is also worth mentioning that

> Teaching - learning in Distance Education emerges as an innovative process, either in terms of pedagogical mediation or in technological terms, being more dynamic and fostering new learning theories. In this sense, the teaching activity in the EAD shows itself as challenging: new ways of teaching, new means of teacher interaction - students, new strategies, new learning theories, etc. (MILL, 2018, p. 1, our translation).

It is a teaching/learning model in which students and teachers are not normally together, physically, but can be connected, interconnected by technologies, especially telematics, such as the Internet. Being a virtual modality of education, it facilitates the life of that student who wishes to study, but for some reason does not have enough time to do so. It is also important to note that virtual teaching is as efficient as the one in person, so it has been growing and gaining space in the national scenario, managing to reach places further away from large centers.

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EAD in Brazil

In Brazil, the first experiences of the EAD took place in the city of Rio de Janeiro around 1900, where professional courses of correspondence typing were offered by private teachers, in advertisements for newspapers of circulation of the time.

> In Brazil, the history of the EAD dates back to at least 1904, when the *so-called international* schools, private institutions that offered correspondence courses, were installed. However, according to Alves (2001), in 1891, newspapers would already bring teaching advertisements by correspondence [...]. The milestone of the use of EAD in the country occurred with the use of broadcasting for educational purposes in 1936, with the installation by Edgard Roquete-Pinto of Radio Municipal School [...]. Already in 1939 was created the Monitor Institute, which offered technical-professional correspondence courses considered the oldest and most known distance courses in the country. Since then, there are records of periodic experiences, some more comprehensive, others more localized, some developed and others that were only in the project [...] (SANTOS, 2010 apud CNE, 2014, our translation).

In the first twenty years, there was only one modality, which was the face-to-face, like, by the way, of all other countries. Costa and Oliveira (2013, p. 98) state that "Roquette-Pinto's initiatives through broadcasting contributed decisively to the creation of two institutions in the late 1940s, with the purpose of promoting EAD".

Roquete Pinto was one of the initiators of the dissemination of the EAD in Brazil, which had the concern to make the media at the service of Education, in a way that transmitted through the radio waves what, in his thought, was the best of Education and Brazilian culture. Table 3 presents the entire evolution of the EAD in Brazil from 1904 until Decree No. 9,057 of May 25, 2017 (BRASIL, 2007).

Table 3 – Evolution of the EAD in Brazil

1904	First edition of Jornal do Brasil in the classifieds section, with advertisements that offer professionalization by correspondence for typist.
1923	Creation of Radio Sociedade do Rio de Janeiro with offers of courses of Portuguese, French, Forestry, French Literature, Esperanto, Radiotelegraphy and Telephony, marking the distance education courses by Brazilian radio.
1934	Edgard Roquette-Pinto installs the Municipal School Radio in Rio, a project developed for the Municipal Department of Education of the Federal District. The students had prior access to brochures and class schemes, used correspondence to contact students.
1939	In São Paulo, the Instituto Rádio Técnico Monitor is created, later Instituto Monitor, with systematic offers of professional courses at a distance by correspondence.

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1941	Start of the activities of the Brazilian Universal Institute, with systematic offers of vocational courses. The first Air University is here.
1947	The new Air University is born, sponsored by the National Commercial Learning Service (Senac), Social Trade Service (SESC) and associated broadcasters.
1959	Diocese of Natal, (RN), creates radio schools, giving rise to the Basic Education Movement (MEB), a milestone in non-formal Distance Education in Brazil.
1962	Founded by Western School, of American origin, focused on the field of electronics in São Paulo.
1967	The Brazilian Institute of Municipal Administration begins its activities in the area of Public Education, using a methodology of teaching by correspondence. The Padre Landell de Moura Foundation creates its Distance Education center, with correspondence and radio teaching methodology.
1970	The Minerva Project is a project, an agreement between the Ministry of Education, Padre Landell de Moura Foundation and Padre Anchieta Foundation.
1974	The Padre Reus Institute appears in TV Ceará begin the courses of the former 5th to 8th grades (current 6th to 9th year of elementary school), with television material, printed and monitors.
1976	Created the national tele-education system, with courses through instructional material.
1979	The University of Brasília, a pioneer in the use of Distance Learning in Higher Education in Brazil, creates courses published by newspapers and magazines, in 1989 it became the Center for Open Education, Continued, Distance Education (CEAD).
1981	The International Center for Regular Studies (CIER) of the Anglo-American College was founded with offers of Middle and Secondary Distance Education, allowing children from families temporarily living abroad to continue to study through the Brazilian educational system.
1983	SENAC develops a series of radio programs on professional guidance in the area of commerce and services.
1991	The program "Jornal Educação - Edição do Professor" is created by the Roquete Pinto Foundation
1992	Foundation of the Open University of Brasilia.
1995	Creation of the National Center for Distance Education, the Municipal Department of Education creates MultiRio (RJ), which teaches courses of the 6th. to the 9th. through television programs and printed material. In the same year, the TV School Program of the Secretariat of Distance Education of MEC was also created.
1996	Created the Secretariat of Distance Education (SEED) by the Ministry of Education, focusing on December 1996, regulated on December 20, 2005 by Decree No. 5,622 (BRASIL, 2005) repealing Decrees No. 2,494 of 10/02/98, and No. 2,561 of 04/27/98, with standardization defined in Ministerial Decree No. 4,361 of 2004 (Portal of the Ministry of Education, 2010), democratization and the quality of Brazilian education. Official start of Distance Education in Brazil, based on the Law of Guidelines and Bases of National Education N°. 9,394, of December 20, 1996).

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2000	Creation of UniRede, Distance Higher Education Network. The Center for Distance Education of the State of Rio de Janeiro (CEDERJ) was born, which inaugurated the partnership between the Government of the State of Rio de Janeiro, through the Secretariat of Science and Technology, public universities and the municipalities of the State of Rio de Janeiro.
2002	The CEDREJ is added to the Foundation Center of Higher Education Sciences at a distance from Rio de Janeiro (CECIERJ Foundation).
2004	Developed programs for the initial and continued training of public-school teachers through the EAD, implemented by MEC, among them, Proliteracy and Media in Education.
2005	Creation of the Open University of Brazil in partnership with MEC, and states and municipalities, integrating courses, research and programs of Higher Education at a distance.
2006	Decree No. 5,773 of May 9, 2006, which exposes the exercise of the functions of regulation, supervision and evaluation of higher education institutions and higher undergraduate and sequential courses in the federal education system, including distance modality.
2007	Decree No. 6,303, of December 12, 2007, which amends the provisions of Decree No. 5,622 and establishes the guidelines and bases of national education (BRASIL 2007).
2008	The State of São Paulo allows distance high school, with up to 20% of the workload may be non-face-to-face.
2009	Ordinance No. 10, of July 2, 2009, which sets criteria *for the exemption from on-site evaluation* and provided other measures for Distance Education in Higher Education in Brazil.
2011	The Department of Distance Education is extinguished.
2017	Ordinance regulating Decree No. 9,057 of May 25, 2017, with the objective of expanding the offer of higher courses in the distance modality, improving the quality of regulatory performance of MEC in the area, improving procedures, reducing bureaucracy and reducing the time of analysis and the stock of processes.

Source: Author based in Alves (2011) and Brasil (2017)

Table 5 can be seen from the emergence of the EAD in Brazil in 1904, published in the Jornal do Brasil, being the first course of correspondence typing that generated a great revolution. Today is the most sought-after modality, for offering advantages that will suit people's daily lives, being offered through Virtual Learning Environments (AVA), which use various technological tools (video classes, forum, chat, mailing list, mural, among others) in order to meet their needs, which is the search for knowledge and the achievement of a diploma, having, therefore, greater opportunity for a vacancy in the labor market.

Evasion in EAD

At any level of education, dropout is always a concern and in the EAD is not an exception, and it is surprising that many institutions know the real reasons. For a better understanding of the different concepts and knowledge about evasion, a synthesis of the ideas expressed by different authors according to the timeline will be presented. According to Silva Filho and Araújo (2017), dropout occurs when a student leaves school due to another activity, leaving the school system. Silva (2016) stresses that school dropout is equivalent to leaving the teaching environment for an indefinite period or not, and it is common to occur in students who start the school year, however, they give up during the course of this, being a major social problem, because students who leave their courses may have more difficulties in entering the labor market. Ferreira (2013) points out that the failure of social relationships is expressed in the inhuman reality that the student experiences in their daily lives. Values, information, experience, knowledge and citizenship were not absorbed by the student, often causing low grades, failure and, thus, culminating in the abandonment of the course.

> [...] identifying why the student has abandoned contributes to reviewing policies and actions, public and private. However, if we can identify/establish metrics that allow us to mitigate the evasion have a positive social impact contribution, since the financial and social cost of evasion impacts an entire project of society (SANTOS; GIRAFFA, 2017, p. 52, our translation).

According to the Union of Higher Education Maintainers (2016, p. 14, our translation)[11], "the dropout rate is calculated based on students who drop out concerning the total number of students enrolled." The parameters for calculating the dropout rate vary according to the educational institution. INEP defines evasion as "early departure, before the end of the year, series or cycle, by withdrawal (regardless of the reason)" (BRASIL, 2017, p. 9, our translation).

This definition manifests itself in the way that the evasion rate is calculation is made. It should be continuously a cause for concern to evade the distance modality and its causes throughout any educational process, but it is revealed the need to reflect and seek new meanings that permeate this modality, uniting the terms distance, space and time, which start to form new concepts for the understanding of new knowledge.

> [...] the most frequent reasons pointed out by the students for the evasion, in the analysis of the institutions, are the lack of money and time (indicated by more than half), but the problems related to the lack of knowledge of the method or its strangeness are not despicable, being cited by one third of the

[11] Available: https://www.convergenciacom.net/pdf/mapa_ensino_superior_2016.pdf. Access: 10 Feb. 2021.

> institutions. Censo EAD.br (BRAZILIAN ASSOCIATION OF DISTANCE EDUCATION, 2010, p. 9, our translation).

Distance study requires discipline, dedication and time management and some students claim they have not become familiar with the material offered by the course. Therefore, it is important to encourage the student to research and study alone with the aim that he acquires, first, more responsibility, in addition to the exchange of learning and information, as well as the ability to better organize and improve their time.

Evasion Reduction Strategies Applied to EAD

Containing the evasion is not an easy task, so it is necessary that the HEIs have the commitment to the quality of education, following the standards of the MEC. Have, in its staff, technically prepared professionals, who have conducted training on all the tools that will be used in the courses. Tutors who participate in program content, which is in total synergy with students, play an important role in the formation of the environment, giving opportunities for everyone to participate in discussions, encouraging students to share their experiences and suggestions.

Below, Table 4 presents the proposed strategies for student retention.

Table 4 – Proposed strategies to reduce student retention

Institution	Students	Educational System
Allocate more resources proportionally to the first year, a period in which the largest number of evasions occur.	Seek professional help to choose the course.	Valuing teaching and research.
Write the information in language and format suitable for a large range of potential students (ages, ethnicity, gender, special needs, etc.).	Avoid last-minute choice.	Offer scholarship.
Welcome students.	If you are uncertain, take time to mature your choice by working,	Develop a continuous accreditation/certification system.

	traveling or volunteering.	
Support students continuously from day one.	Plan your activities. The move from high school to higher education demands more independence and autonomy and requires planning your workload during the year.	Provide resources for teaching, research and community outreach.
Clearly define course expectations.	Copying the work of others is not enough. The student should develop their activities based on their individual and group efforts, in addition to the vision offered by the teacher.	Stimulate continuing education of teachers in Brazil and abroad.
Develop content based on learning theories, using appropriate pedagogical support.	Use the help of the Institution. Aid in the initial semesters does not mean weakness, but practical action aimed at minimizing any future problems.	
Develop social inclusion programs.	Adopt the objective of learning and not performance. Initial low grades can discourage students.	
Use universal design for learning to meet the uniqueness of the learner.		
Give *personalized feedback*.		
Provide 24-hour support.		
Provide the most information about the course: content, form of evaluation, labor market, time of dedication, additional costs, scheduled visits, etc.		

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Support asynchronous activities.		
Support synchronous activities.		
Provide training and support to teachers.		
Use diagnostic and formative evaluation in addition to traditional soda.		

Source: Adaptation based on York and Longden (2004)

It is important to carry out a prevention policy focused on improvements through operational support of learning and the teaching model performed. By just taking a care of the problem of evasion, you forget the main factors of the cause.

Conclusion

The trend is that the EAD continues to grow and contribute to the supply of Higher Education, however, although this number has been growing year after year, there is another worrying factor, but, quite common in the courses, which is the evasion and that, in certain cases, is very high when comparing the potential and demand of this modality. In any case, it is perceived the importance of experiences and good management practices being divided among the coordinators of different courses.

These managers share the same challenges and thus can share similar strategies to address them. Working preventively may also reside in the adequate capture of students. From the moment a student chooses a certain HEI to carry out his undergraduate course, a partnership emerges, so that it is important that universities make available and make easy access to information relevant to this moment of choice.

On the one hand, the student may have more security about the name, reputation, quality and methodology of the Institution, on the other, the Institution will have more tranquility concerning the student, which facilitates the permanence in the course.

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