


PERCEPTIONS OF EGRESSES FROM DISTANCE LEARNING UNDERGRADUATE COURSES ABOUT EDUCATION AND PROFESSIONAL INSERTION

PERCEPÇÕES DE EGRESSOS DE CURSOS DE GRADUAÇÃO A DISTÂNCIA SOBRE FORMAÇÃO E INSERÇÃO PROFISSIONAL

PERCEPCIONES DE EGRESOS DE CURSOS DE GRADUACIÓN A DISTANCIA Y INSERCIÓN PROFISSIONAL

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ABSTRACT:

In the context of the expansion of Higher Education, Distance Education (DE) has become a reality, enabling the democratization of education over the years. This article presents research results on the perceptions of former students from five DE undergraduate courses offered by a federal public institution. The study aimed to identify data on professional integration into the job market. The methodology included literature review, document analysis, secondary data from institutional assessment, and field research, online surveys, and interviews. The results indicated challenges in initial professional integration, positive evaluation of the education received, and the need to overcome obstacles to ensure quality DE.

KEYWORDS: Higher Education; Distance Learning; Egresses; Education; Professional Insertion.

Introduction

This article is part of a research that investigated the perceptions of graduates of five undergraduate courses offered in distance learning by a federal public institution to identify data on the academic trajectory, the quality of the course, and professional insertion in the labour market.

Distance Education (DE) has been present in Brazil since the 19th century and emerged from public policies that aimed to boost access rates to Higher Education. It is important to highlight that, as part of the democratization policies for this level of education, the expansion of this modality occurs with the advancement of microinformatics and the increase in internet access in the country from the second half of the 1990s onwards, in addition to aspects related to access to digital technologies and the internet.

Regarding educational policies, it is important to highlight that DE was regulated in Brazil by the Law of Guidelines and Bases of National Education - Law 9394/1996, ten years later it began to be considered a teaching modality and exercised an important

contribution to the significant evolution in the job offers in Higher Education, allowing a process of internalization of Higher Education in the country. (Brazil, 1996)

Research on DE attests that the modality in Higher Education emerged in a context of public policies and the direct action of the private sector, encouraged by neoliberal policies of free action. This strategy increased enrollment, since, in this teaching model, structural and geographical limitations are less significant. This is because this modality opens possibilities for relevant changes in space and time to guarantee a differentiated teaching-learning process (Velooso, Mill and Monteiro, 2019; Bastos, Nunes and Freitas, 2014).

Data from the 2018 Higher Education Census, carried out by the National Institute of Educational Studies and Research Anísio Teixeira (Inep- Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira), attest that in 2007, 5,252,154 enrolments at this level of education were recorded; that year, the offer of undergraduate distance learning courses corresponded to 7.04% of total enrollments. In 2018, the total number of enrollments reached 8,450,755, which represents an increase of 37.84%.

In 2018, the number of enrollments in Higher Education in the public area was only 24.6% of its total and the number of enrollments in distance learning in the public and private area reached 6,394,244, 75.50%. For the first time, the number of enrollments in the distance learning modality was higher than in the face-to-face modality. This expansion of the modality is mainly due to the private area (Brazil, 2018).

Such quantitative data highlights the evolution in the corresponding period, 2007 to 2018, about the offer of new registrations. Although census data shows important information about DE, the lack of research aimed at analyzing data and relevant information related to the context of DE, especially regarding graduates, questions about the quality of distance Higher Education were made, in which the focus should be to ensure the democratization of access, retention and learning at this level of education.

According to Arruda and Arruda (2015),

The democratization of Higher Education involves the discussion about its public character and broad and civic training. Public policies for Distance Education in the last decade have brought advances and setbacks. The expansion of vacancies for Public Higher Education, and continuing teacher training policies constitute significant advances, however, the setback and maintenance of a model make distance learning "provisional". Within this provisionality, there is a risk of building an emergency type of education, aimed at quickly resolving a demand for qualified labour (Arruda and Arruda, 2015, p. 333).

Consistent with this perspective, it is necessary to investigate undergraduate courses offered in distance learning beyond the expansion criterion; the results reveal that this modality has great potential, benefiting individuals who would hardly have access to Higher Education through face-to-face teaching.

It can be said that the construction education model is different from face-to-face education, and often has an emergency and non-institutional character. Therefore, DE demands studies, analysis from different perspectives, and, above all, investment in the modality and institutionalization to guarantee effective conditions for its operation.

In the literature review carried out on the topic, the lack of research on graduates, especially those from distance-learning undergraduate courses, was identified. Therefore, it is a relevant study that demands investment to overcome gaps in the field of Distance Education.

We can also say that surveys with graduates are sources of information not only due to the gaps in the field of evaluation but also because as graduates, they experienced academic training and listen to what they have to say about this process. Training is relevant for institutions committed to quality in the provision of education.

Given the above, this study sought to answer the following research question: how do graduates of distance learning undergraduate courses evaluate the course from the point of view of training and professional insertion? This problem has other questions: where are graduates of distance learning undergraduate courses working? Are these graduates working in their area of training? What is the level of satisfaction of graduates regarding the course? Was there any socioeconomic improvement motivated by academic training? What social impacts were identified in the region where the graduates live?

Finally, this article is organized into four sections. In the second, the methodological approach adopted in the study is presented. In the third, some notes are presented on the expansion of distance Higher Education in Brazil, regulations, challenges, and perspectives. In the fourth section, we have some considerations about the importance of monitoring graduates in the institutional evaluation process. Finally, in the fifth section, data extracted from the online survey and the interview about training and professional insertion are presented. This article ends with final considerations and references used in this study.

Methodology

This research was based on five distance undergraduate courses offered by XXXX, one of the pioneers in the implementation of the Open University of Brazil Program (UAB-Programa Universidade Aberta do Brasil), representing yet another action for the process of expanding and democratizing access to Higher Education in Brazil (Corradi, Quirino and Machado, 2013). The implementation of the program through this institution contributed to the training of more than a thousand professionals who began to work in the social and economic development of Brazil. Furthermore, the creation of distance learning courses is also part of the public policy to expand places in Higher Education, promoting social inclusion in different regions of the State. Important information about the courses was extracted from the pedagogical projects (Gomes, 2016) and the institutional evaluation report for distance learning courses (Gomes, et al., 2017).

Table 1 shows data on distance learning courses offered from 2007 to 2018 and allows identifying the number of vacancies, enrollments, and graduates per course and their respective percentage.

Table 1 - Offer of distance undergraduate courses - from 2007 to 2018

Courses	Number of vacancies	Number of enrollments	Number of graduates	% of graduates
Biological Sciences (L)	1,040	846	211	23.01%
Geography (B)	510	368	92	24.76%
Mathematics (L)	788	579	57	9.33%
Pedagogy (L)	1,150	1.108	718	62.91%
Chemistry (L)	850	529	34	6.26%
Total	4,338	3,430	1,112	32.42% (average)

Source: SIGA System (2018). Caption: Bachelor's degree for Education (L); Bachelor's degree (B).

As we can see, until the second semester of 2018, the number of graduates trained by the institution was 1,112, with the Pedagogy course having the highest number of graduates - 718, with an average of 62% of those enrolled in the course; followed by Geography, with 24%; by Biological Sciences, with 23%; Mathematics, with 9% and Chemistry, with 6%.

The analysis of Table 1 shows the total number of enrollments and the total number of graduates, a high dropout percentage was found, reaching more than 67%. This value is above the average presented in data from the 2017 EAD.BR Census, carried

out by the Brazilian Association of Distance Education (ABED-Associação Brasileira de Educação a Distância¹), in which the dropout percentage in IFES is 46%.

Based on these data, it appears that dropout is one of the main challenges to be faced by DE, especially in public Higher Education, due to the social damage. For Woodley and Simpson (2015), the Fordist model applied to distance learning would be among the main reasons for the high dropout rates. Rezende (2017) also states that the UAB Program's practices based on the Taylorist model have caused these dropouts. It is a closed model in which degree courses are serialized and

[...] students distributed by period, the requirement for change to the next period is the grade and those who do not adapt are put out of the way. In this model, we find a teacher who trains a teacher with the same conception of "lecturer", "question forwarder", "doubt answer", "book repeater" and "test and evaluation corrector", even though through new media (Rezende, 2017, p. 266).

These data are important, but they require new studies to better understand the profile of the dropping out student, since, according to the same ABED census, 59% of institutions do not know the real reasons for student dropout (ABED, 2017).

The exploratory study with a quantitative and qualitative approach involved a literature review, documentary survey, and field research whose data collection included the application of an online survey and semi-structured interviews. The link to access the survey was sent by email to 1,044 contacts, with 353 respondents returning, equivalent to 31.83% of the total, which represents a margin of error of 4.3%. The interview was carried out with 10 graduates from 7 different centers. To guarantee the anonymity of respondents, fictitious names were used, in compliance with ethical principles in research as per guidelines from the Research Ethics Committee – COEP/UFMG.

In the analytical procedures, the survey data were grouped and classified according to the categories defined in the preparation of the script, which are: graduate profile; training, insertion into the job market and institutional assessment; DE management, and professionals.

To analyze the interviews, the content analysis proposed by Bardin (2011) was used. In this sense, the study was guided by three phases: pre-analysis, exploration of the material, inference, and interpretation of results.

¹ ABED is a scientific, non-profit society and its studies cover IPES and its focus is on the activities of private institutions.

The expansion of Distance Higher Education in Brazil

The expansion of distance Higher Education in Brazil began in the 1990s, guided by the World Bank and the Organization for Economic Cooperation and Development (OECD). From the beginning, private characteristics and neoliberal aspects were emphasized. But from the first years of the 21st century, with the economy booming, increased demand for qualified labor, and young people to study Higher Education, there was a great expansion in the offer of distance learning undergraduate courses, especially in private institutions and limited offer of places in public institutions. (Nascimento, 2011; Afonso, 2013).

Faced with this scenario, the Brazilian government began to expand and implement programs and policies that aimed to democratize access to Higher Education. In this context, the Higher Education Student Financing Fund (FIES-Fundo de Financiamento ao Estudante do Ensino Superior) stands out; the University for All Program (ProUni-Programa Universidade para Todos); and the Support Program for Restructuring and Expansion Plans of Federal Universities (Reuni-Programa de Apoio a Planos de Reestruturação e Expansão das Universidades Federais), and recent policies to democratize access to Higher Education, one of which is Quota Law 12,711 of 2012.

It can be said that EaD has a relevant participation in the process of expanding Higher Education, the modality was regulated on December 20, 1996, with the text of article 80 of LDB 9,394/1996. Despite being considered innovative, the text presents a limitation regarding its applicability, which is temporal due to the technological advances recorded since its publication. Decree 2,494, which regulates the modality, was approved on February 10, 1998, and presents progress; however, its text contains confusing definitions and inconsistent concepts about the distance modality (Brazil, 1998).

With a reduced concept of distance learning and its marketing focus, the decree was revoked in December 2005, with the publication of Decree nº 5,622. The new text shows some advances by making the aspects that define the modality clearer, presenting better opportunities for its applicability.

Also in 2005, in July, the Forum of State-Owned Companies for Education was held, which promoted the creation of the Open University of Brazil Program (UAB-Programa Universidade Aberta do Brasil), regulated on June 8, 2006, by Decree 5,800. The program aims to democratize access to Higher Education through the internalization of vacancies, and expanding course offerings in places in the interior of the country that were not

assisted by face-to-face courses. It is, therefore, a program that aims to expand access to Higher Education, reducing inequalities. Article 1 of the decree explains its purpose:

Art. 1 The Open University System of Brazil - UAB is hereby established, aimed at the development of the distance education modality, to expand and internalize the offer of higher education courses and programs in the country (Brazil, p. 1, 2006).

The decree's priority objective is the offering of undergraduate courses for initial and continued training of teachers, in addition to training leaders, managers, and workers also in Basic Education through a National Higher Education System in Distance learning.

Consistent with this perspective, the UAB Program starts to operate through a partnership between the federal government, which finances the program, the municipalities that host the in-person support centers, and the institutions that are responsible for academic training. After more than a decade of existence, the UAB Program still presents a series of problems, including the high dropout percentage, the lack of infrastructure at the centers, and the type of employment contract adopted for teachers and tutors criticized by categories and researchers (Caetano, & Quaglia, 2014; Arruda, 2018).

In line with other policies on access to Higher Education, UAB increases the number of enrollments in Higher Education; Thus, its purpose was achieved for the quantitative aspect.

Table 2 shows data from the Higher Education Census on enrollment in undergraduate courses in 2007 and 2018 by network and modality, carried out by Inep.

Table 2 - Enrollment in undergraduate courses by network and modality

In-person and remotely				Remote	
Year	Private área	Public area	Total	Total	%
2007	3,639,413	1,20,968	4,880,381	369,766	7.04%
2018	6,373,274	2,077,481	8,450,755	6,394,244	75.50%

Source: Brazil (2007, 2018).

As seen in 2007, 4,880,381 enrollments were registered; that year, the offer of distance learning undergraduate courses corresponded to 7.04% of total enrollments. In 2018, the total number of enrollments reached 8,450,755, which represents an increase of 42.25%. In 2018, the number of enrollments in Higher Education in the public area corresponded to only 24.6% of its total but represents an increase of 64.26% when

compared with 2007. It was also verified in 2018 that the number of enrollments in distance learning was higher than in-person, reaching 6,394,244 (75.5%). This expansion of the modality is mainly due to the private area, which in 2018 corresponded to 91.6% of all distance learning enrollments (Brazil, 2007, 2018).

Even with the significant increase in enrollments, the rate of people aged 25 or over who had Higher Education, in progress or completed, did not exceed 19.3% until 2017 (Brazil, 2018). Despite the widespread access to Higher Education, this expansion was not enough to reach most young Brazilians who, in theory, should enter the labor market.

Distance Education and Professional Insertion

The potential of distance learning to expand access to Higher Education is unquestionable; however, the quality of its training is something that has always been doubted. However, there is no evidence of overlapping quality of training between the modalities. The fact is that distance learning has become one of the only options for those who want a professional diploma and increase their employability conditions. This is because it allows the student to study from anywhere and at any time, not depending on a physical structure as the learning objects are available on digital platforms via the internet.

In the survey carried out with distance learning students from the UAB Program in 2017, the main factors that contributed to their withdrawal were: difficulty balancing work/study (40.7%), difficulty organizing time (26.9%), distance from the center (21.7%) and lack of interaction with tutoring (19.5%) (CAPES, 2017). According to the 2018 Higher Education Census, the average age for completing distance-learning undergraduate courses is 34 years old, which represents an 11-year difference from the same average for in-person courses, which is 23 years old (Brazil, 2019).

Consistent with this result, Arruda (2018) states that reconciling study, work, and other tasks is among the main causes of dropout in distance learning. For the author, distance learning students have their specificities: most of them are in the job market but are looking for a better professional opportunity.

In addition to these characteristics, another aspect discussed is the ability to develop autonomy in studies. Autonomy is an attribute that allows the understanding of teaching content in a more independent way, which implies the student being able to establish their learning process capable of producing knowledge more easily, in addition to associating this knowledge with the context and with practice. Paulo Freire highlighted the importance of autonomy in the teaching-learning process, stating that "to teach, to know, to intervene, which makes me understand educational practice as a constant

exercise in favor of the production and development of the autonomy of educators and students” (Freire, 1996, p. 54).

If entering the job market has been required in addition to the diploma, other skills have been developed in addition to the contents of the undergraduate courses. Distance learning can be an important differentiator for graduates, as it brings skills that are also desired by the job market. Thus, “[...] given the professional’s ability to adapt to the needs and dynamics of the market, this autonomous characteristic takes on a proactive connotation of this graduating student, being a premise for the curricula desired by the market” (Santana, 2013, p. 122).

Another aspect to highlight is the Program's induction in offering degree courses focused on teaching, privileging a working-class professional category. According to Nascimento (2011) and Arruda (2018), there is a political intention in the Program that aims to maintain the working-class and provide cheap labor. In this way, it can contribute to the maintenance of social inequality.

The quality of training in distance learning undergraduate courses also stands out. In this sense, there will always be questions about the equivalence of distance and in-person courses. Since the particularities imposed in both modalities may have an impact on the quality of student training. The MEC, through article 80 of the LDB of 1996 and decree 9,235 of 2017, guarantees the non-distinction between the diplomas of in-person and distance students, but it is not possible to guarantee equality in training, as the distance learning student faces spatial limitations and temporal factors in their academic experience and, in general, they are unable to take advantage of resources that are available at the institutions that host the courses (Brazil, 1996, 2017).

These questions highlight demands for monitoring graduates of distance learning undergraduate courses to identify data on the quality of training and professional insertion, identifying socioeconomic impacts experienced by them.

The process of monitoring graduates

The reflective process of professional insertion has a tense relationship with the scientific, political, economic, and social areas. This is an issue that demands study and is a fundamental activity for HEIs.

Consistent with this perspective, the analysis of the training trajectories and professional performance of graduates cannot be seen as disconnected from the educational, social, and political impact caused by the actions of HEIs in society. (Lousada, 2005)

In addition to contributing to a better understanding of the relationship between student, state, and job market, monitoring graduates is an excellent action in the field of institutional assessment that allows identifying graduates' perceptions of their training and establishing a connection between this training and their professional occupation. (Gomes, et. al 2017)

Few Higher Education institutions in Brazil have a policy of monitoring their graduates through evaluation, unlike countries such as the United States, Great Britain, France, and Italy, which have developed this policy of evaluating and monitoring graduates for decades. Paul (2015), in research on the panorama of the different experiences of monitoring graduates from Higher Education in Brazil, concludes that,

It seems that the academic community's lack of interest, or even distrust in this approach, may have its origin in the idea, still present in some people, that the university should not worry about the economy or the expectations of employers (Paul, 2015, p. 324).

The reasons for not monitoring graduates in institutions in Brazil are diverse, but the lack of a policy that encourages this action certainly contributed to slow practices. In 2012, a survey carried out by Inep was presented at the Second National Meeting of the Higher Education Census, which had the Institutional Policy for Egress Assessment in the Improvement of HEIs as its central theme. The results of this study indicated that, of the 159 institutions surveyed, only five (3.1%) HEIs presented an instrument for data collection and analysis of results and/or evaluation of graduates (INEP, 2012, p. 11).

In this sense, the National Higher Education Assessment System (Sinaes) established as criteria for on-site institutional assessment the implementation of "Policy and monitoring actions for graduates" and "Performance of HEI graduates in the socioeconomic environment". In the internal institutional evaluation, Sinaes established the "Monitoring of graduates and creation of opportunities for continued training" as an evaluation criterion (Brazil, 2010, 2015).

Graduates' perceptions of training and professional insertion

In this topic, we obtained some data through the survey and interview about the training and professional insertion of graduates. Regarding the profile, females predominated, with 77.62%, followed by males, with 22.10%. Regarding the age group, there was a predominance of 34 to 40 years old, followed by 41 to 48 years old, which confirms that the distance learning audience is predominantly adults. According to the 2018 Higher Education Census, the average age for completing distance learning

undergraduate courses was 34 years old. This differs from the face-to-face modality, whose average was 23 years, as already mentioned (Brazil, 2019). Regarding color and race, 63.80% declared to be black or mixed race, followed by 32.18% who declared to be white. Regarding monthly income, the data shows that 58.09% received, at the time of the survey, 1 to 3 minimum wages², followed by 17.33% who stated that they received 3 to 5 minimum wages. Regarding marital status, 57.27% are married, followed by 31.82% who said they were single. As for the type of school attended in high school, according to the data, 82.77% said they attended public schools. Only 7.34% said they attended a private school.

These data reveal that more than half of the graduates chose to continue their studies, a relevant result, considering that continuing education is a preponderant factor in professional development.

When asked about the reason for choosing a distance learning course, some graduates revealed that,

I chose the distance learning course because it was more in line with my reality as a mother, wife, and daughter. My parents lived in the countryside and demanded a lot of attention as they were elderly. I wouldn't be able to afford to go to college. Making 5 hours available for in-person teaching, at the designated time [...] I saw the possibility of doing distance learning due to my condition and the possibility of organizing my schedule (Francis³, Pedagogical Coordinator, 46 years old, Counselor Lafaiete-MG).

[...] In other words, I didn't have this opportunity at the in-person public university with this flexible schedule [...] but I wanted this course. Maybe I wouldn't have completed it at the time I did it because the difficulty was too great, being public and being in this modality made all the difference (Hélio, Professor, 43 years old, Governador Valadares-MG).

The statements show the choice for the distance learning modality associated with the profile of the graduates and their socioeconomic condition. Graduates chose distance learning due to space-time flexibility, in addition to other aspects related to their routine, the possibility of reconciling work and family activities.

Table 3 shows data on the percentage of professional activity in the training area. We can see that 63.84% work in the training area, followed by 20.46% who reported not

² Values above the national average, according to the 2018 IBGE Census, per capita income (per person) in Brazil is, on average, R\$ 1,373.00 (Brazil, 2019).

³ The names are fictitious to preserve the identity of the research participants.

currently working in the area and 15.71% who reported never having worked in the course's training area.

Table 3 - Percentage of professional activity in the area

Cursos	Trabalho na área	Não trabalho atualmente	Nunca trabalhei
Geography (B)	47,83%	30,43%	21,74%
Biological Sciences (L)	59,57%	27,66%	12,77%
Mathematics (L)	61,29%	16,13%	22,58%
Chemistry (L)	80,95%	9,52%	9,52%
Pedagogy (L)	69,54%	18,54%	11,92%
General Average	63,84%	20,46%	15,71%

Source: Research data (2019). Caption: Bachelor's degree in education (L); degree (B).

Based on the data, in the geography course, graduates faced challenges to be inserted in the training area: 30.43% reported that they had already worked in the area, but not currently and 21.74% reported never having worked in the area. The Chemistry course stands out with 80.95% of graduates working in the training area, followed by the Pedagogy course, with 69.54% of graduates who said they work in the training area.

Regarding this issue, Lousada and Martins (2005) understand that it is important for training institutions to accompany graduates in their professional activities and that the exchange of information between educational institutions and professional institutions can bring benefits to everyone.

The data in Table 4 reveal a predominance of graduates working in the education area, 60.13%, followed by the administrative area, with 16.78%, and health with 11.18%, in addition to graduates in the areas of environment, engineering, and industry with lower percentages.

Table 4 - Number of graduates by professional area

Training area	nº	%
Education	86	60,13%
Administration	24	16,78%
Health	16	11,18%
Environment	9	6,29%
Engineering	5	3,19%
Industry	3	2,09%

Source: Research data (2019).

This result is closely related to the purpose of the UAB, explained in Decree 5,800 of 2006, which consists of “offering, as a priority, undergraduate and initial and continuing training courses for Basic Education teachers”, and also provides “higher education courses to train leaders, managers, and workers in Basic Education in the States, Federal District, and Municipalities” (Brazil, 2006, p. 1).

Table 5 shows data on the beginning of professional activity. There is a significant percentage of graduates, 43.52%, stated that they started during the course, 20.60% started in less than a year, followed by 9.63% who started after 2 to 3 years. It was also found that 19.27% reported, at the time of the survey, that they had not started professional activities.

Table 5 - Time to start a professional activity

Courses	During the course	Less than 1 year	From 2 to 3 years	From 3 to 4 years	More than 4 years	I haven't started yet
Geography (B)	56.52%	10.87%	6.52%	2.17%	2.17%	21.74%
Biological Sciences (L)	40.82%	22.45%	14.29%	0.00%	6.12%	16.33%
Mathematics (L)	51.52%	21.21%	0.00%	0.00%	3.03%	24.24%
Chemistry (L)	47.62%	19.05%	4.76%	4.76%	0.00%	23.81%
Pedagogy (L)	38.16%	23.03%	11.84%	7.24%	1.97%	17.76%
General Average	43.52%	20.60%	9.63%	4.32%	2.66%	19.27%

Source: Research data (2019). Caption: Bachelor’s degree in education (L); degree (B).

Mathematics and Pedagogy courses were those that had the most graduates working within one year of completing the course. It was also found that by the third year, all courses had more than 70% of graduates already involved in professional activity. Regarding this issue, Belloni (2003) states that a professional training program must be evaluated by the level of employability and the ability to generate income for its graduates.

Based on the data in Table 6, we can state that most of the graduates, 68.32%, at the time of the research, were working professionally in public sectors, predominantly in the Chemistry course with 76.19%. Mathematics course has the lowest percentage, with 57.58%.

Table 6 - Type of organization of professional activity

Cursos	Private area	Public area	Employer	Autonomous	Others
Geography (B)	22.22%	60.00%	2.22%	6.67%	8.89%
Biological Sciences (L)	10.00%	72.00%	2.00%	2.00%	14.00%
Mathematics (L)	21.21%	57.58%	0.00%	15.15%	6.06%
Chemistry (L)	14.29%	76.19%	0.00%	4.76%	4.76%
Pedagogy (L)	13.64%	70.78%	1.95%	2.60%	11.04%
General Average	14.19%	68.32%	1.65%	4.62%	10.23%

Source: Research data (2019). Caption: Bachelor's degree in education (L); degree (B).

Statements from the graduate reveal aspects of professional insertion in the education in the public sector,

After DE Pedagogy, due to my background and because I had better training [...] I passed the municipal public tender as pedagogical coordinator in 3rd place. Afterward, I worked at the Minas Gerais State Network as a pedagogical supervisor. I completely changed my career; I started working as a pedagogue in the municipal public school system. I had 1st place in the municipal public tender and have been working in the network since 2015 (Fátima, School Director, 41 years old, Formiga-MG).

When asked about the level of demand required in professional performance when compared to the training received, Table 7 - 63.92% said that it was compatible with the training obtained in the course, 24.75% said it was inferior and only 12.03% considered the level of demand higher than the training obtained.

Table 7 - Level of demand in professional performance versus course training

Courses	Compatible	Inferior	Superior
Geography (B)	48.89%	33.33%	17.78%
Biological Sciences (L)	68.00%	24.00%	8.00%
Mathematics (L)	62.50%	28.13%	9.38%
Chemistry (L)	61.90%	28.57%	9.52%
Pedagogy (L)	66.45%	21.29%	12.26%
General Average	63.37%	24.75%	11.88%

Source: Research data (2019). Caption: Bachelor's degree in education (L); degree (B).

In the Geography course, 17.78% of graduates considered that the demands in the field of professional activity were greater than the training. However, it was the course

that had the highest percentage, 33.33% in the 'inferior' category. It should be noted that this is a bachelor's degree course, and the variation may be related to this specificity.

The following statement reveals the perceptions of graduates on these aspects,

I completed my degree in 2012 and I took the public exam that same year. What I was studying was of fundamental importance for my approval that I didn't need to study because the content of the test was what I had in the courses I was taking. Today the knowledge I acquired, which is entirely in the biological area, is 100% necessary to develop my work both in the laboratory and in the teaching area. (Leila, Laboratory Technician, 38 years old, Teófilo Otoni-MG).

For Lousada and Martins (2005), training institutions must be clear about the profile of professionals they are training. This implies, among other aspects, having a training project in line with the skills and competencies expected by society.

Table 8 shows indicators that emphasize the connection between the training obtained in the courses and professional performance. The weighted average was from 1 to 5, with 1 being very poor and 5 being excellent. In general, all criteria had a high weighted average. The lowest was 3.70 referring to 'practical activities considered insufficient for professional practice'. The highest weighted average was 4.31 on the 'contribution of the course to the development of ethical awareness in the development of professional practice'.

Tabela 8 - Articulação entre formação e atuação profissional

Indicators	Geography (B)	Biological Sciences (L)	Mathematics (L)	Chemistry (L)	Pedagogy (L)	Weighted Average
The subjects studied contributed to his comprehensive training, as a citizen and professional.	4,29	4,51	3,84	4,32	4,34	4,26
The course contributed to the development of ethical awareness for professional practice.	4,29	4,53	3,91	4,32	4,50	4,31
The course favored the articulation of theoretical knowledge with practical activities.	3,57	4,09	3,35	4,32	4,30	3,92
The practical activities were sufficient for professional training.	3,02	3,80	3,25	4,26	4,20	3,70
The course provided updated/contemporary	3,86	4,13	3,61	4,47	4,26	4,06

Indicators	Geography (B)	Biological Sciences (L)	Mathematics (L)	Chemistry (L)	Pedagogy (L)	Weighted Average
knowledge in its area of training.						
The supervised internship provided diverse experiences for your training.	2,54	4,23	3,97	4,33	4,52	3,91
The content covered in the course subjects favored their performance in internships or professional initiation activities.	3,51	4,31	3,88	4,47	4,34	4,10
Overall weighted average	3,77	4,29	3,75	4,36	4,38	4,11

Source: Research data (2019). Caption: Bachelor's degree in education (L); degree (B).

According to Table 8, the Pedagogy course was the one that obtained the best overall weighted average, representing 4.38 in aspects that concern the articulation between training and professional performance. The supervised internship indicator appears at 4.52. The lowest percentage appears in the Pedagogy course for the indicator "provided updated/contemporary knowledge". Mathematics course obtained the lowest score, 3.75 in the articulation between training and professional performance. In this course, practical activities were considered insufficient for training and articulation between theoretical and practical knowledge, being 3.25 and 3.35, respectively.

The geography course presented a positive highlight in the indicator "development of ethical awareness in professional practice and training as a citizen and professional", obtaining a weighted average of 4.29. The indicator "supervised internship and diversified training experience" was 2.54. The chemistry course obtained the second-best overall weighted average, represented by 4.36, followed by the Biology course, with 4.29.

Related to these indicators, the following statements stand out:

I think that what was missing is more practice in environmental work, in research areas, for us to have more opportunities (Nelma, Professor, 55 years old, Corinto-MG).

Being a teacher, I feel that maybe if I had had it as an undergraduate, it would have helped me a lot. It is the issue of teaching in the classroom. I think that most higher education courses still lack more guidance regarding teaching in the classroom. When we leave college and go straight to the classroom, we intend to work with what we studied. Practice is different from theory. When you enter the classroom, it is different. I think that even having supervised internships 1 and 2 was

still not enough (Fernanda, Teacher, 29 years old, Governador Valadares-MG).

Based on the data obtained in the study, there was a lack of content for some graduates that would prepare them for practical action. There was articulation between training and professional performance, but it was not sufficient to meet the demands of the challenges of professional practice.

The results on the articulation between training and professional performance present relatively positive levels. Regarding the importance of this result, Belloni (2003) states that the social effectiveness of a public professional training program is directly related to the technical and social needs of the world of work. In other words, the effectiveness of each course must be evaluated in line with the level of response that the training promotes in the graduate's professional performance.

Table 9 shows indicators of the effects of training on the graduate's professional practice. The criteria had a weighted average of 1 to 4, where 1 meant no effect and 4 meant a lot of effects. In general, all items had a weighted average above 2.5. The lowest item was 2.85 regarding preparation for teamwork. The item on preparation to act in an entrepreneurial manner obtained 3.66, the highest weighted average. The item's theoretical basis, autonomy, and social responsibility had an average close to the total..

Tabela 9 - Efeitos da formação na prática profissional

Indicators	Geography (B)	Biological Sciences (L)	Mathematics (L)	Chemistry (L)	Pedagogy (L)	Weighted Average
Did you answer the demands of your area of activity with a theoretical basis?	3,16	3,58	3,47	3,43	3,57	3,44
Are you prepared to act ethically?	2,71	3,34	3,19	3,19	3,39	3,16
Are you prepared to act entrepreneurially?	3,62	3,69	3,47	3,71	3,85	3,66
Are you prepared to work as a team?	2,62	2,96	2,66	2,86	3,17	2,85
Are you prepared to act autonomously in the search for new learning?	3,61	3,66	3,50	3,62	3,82	3,64
Did it promote my professional advancement?	2,91	3,32	3,13	3,45	3,36	3,23
Did it provide innovative training?	3,02	3,46	3,03	3,25	3,54	3,26

Did it provide training to act with social responsibility?	3,58	3,70	3,39	3,38	3,82	3,57
Did it contribute to your professional, personal, and cultural development?	3,70	3,68	3,47	3,57	3,78	3,64
General Average	3,21	3,48	3,25	3,38	3,57	3,38

Source: Research data (2019). Caption: Bachelor's degree in education (L); degree (B).

Regarding the effects of training on professional practice, the Pedagogy course obtained the best-weighted average of 3.57. The items preparation to act with autonomy and training to act with social responsibility stand out, both with a weighted average of 3.82. The geography course obtained the lowest weighted average in the indicator effects of training in professional practice, with 3.21, followed by the Mathematics, Chemistry, and Biological Sciences courses, with weighted averages of 3.25, 3.38, and 3.48, respectively.

Regarding this result, Lousada and Martins (2005); and Nunes and Alves (2018), remember that with practice in the labor market and the learning acquired in courses offered by institutions, graduates become an important reference for institutional evaluation and can offer relevant information for curricular reforms that must be implemented.

Table 10 shows data on satisfaction with the professional objectives sought after choosing the course, based on the crossing of data from those who indicated the objective before training and the benefits achieved.

Table 10 - Satisfaction with professional objectives and benefits

Indicators	Objective	Objective satisfaction achieved
Got better chances to get a job/employment	61,44%	76,12%
Increased salary/income	44,83%	72,81%
Got a promotion at work	17,24%	62,83%
Improved work performance	29,78%	98,93%
Obtained new placement (on the market)	36,36%	43,03%

Source: Survey data (2019).

Thus, the indicators in Table 10 are directly related to the employability capacity of graduates, which implies, in addition to getting a job, the ability to maintain it or obtain benefits in the professional field (Fragoso, Valadas, and Paulos, 2019). The satisfaction

rate was high, except for the criterion of obtaining a new position in the job market. We highlight “improved work performance” in which more than 29% intended to achieve this objective through training, and 98.93 said they had improved work performance, while those who intended “to obtain better chances to get a job/employment”, 76.12% obtained the result. Those who wanted an increase in salary/income and/or some promotion at work, 72.81% and 62.83%, achieved it respectively.

Regarding the results presented by professional training programs, Belloni (2003) states that the evaluation criteria for these programs must emphasize the social dimensions and be focused on the interests and demands of workers. Consistent with this perspective, a program to democratize access to Higher Education will only make sense if the social and economic beneficiary is the graduate, that is, the professional.

Table 11 shows data on financial satisfaction. On average 62.05% of graduates stated that they had average financial satisfaction obtained through the course.

Table 11 - Level of financial satisfaction

DE Courses	High	Average	Low
Geography (B)	15,56%	68,89%	15,56%
Biological Sciences (L)	12,00%	60,00%	28,00%
Mathematics (L)	6,06%	63,64%	30,30%
Chemistry (L)	14,29%	66,67%	19,05%
Pedagogy (L)	14,29%	59,74%	25,97%
General Average	13,20%	62,05%	24,75%

Source: Research data (2019). Caption: Bachelor’s degree in education (L); degree (B).

Regarding the degree of financial satisfaction in training and professional performance, the Geography course presented the best percentage, considering that it was the course that obtained the highest index, 68.89% in the average degree of satisfaction, and the lowest, 15.56 % in a low level of satisfaction. In the Mathematics course, the high level of satisfaction corresponds to only 6.06% and the low level corresponds to 30.30%, which reveals a lower level of financial contentment.

According to Fragoso, Valadas, and Paulos (2019), access to Higher Education increases the chances of graduates occupying better positions; Furthermore, it generates benefits for the country, as it stimulates economic growth and boosts entry into the job market.

When asked about the professional perspective, Table 12 shows that 44.41% of graduates had good expectations regarding the area of training, 22.37% considered the

possibility of obtaining professional improvements to be reasonable and 17.11% said they had excellent prospects in the professional field.

Table 12 - Professional perspective

DE Courses	Great	Good	Average	Bad	Demotivated	I prefer not to give an opinion
Geography (B)	13,33%	42,22%	35,56%	4,44%	4,44%	0,00%
Biological Sciences (L)	11,76%	43,14%	27,45%	1,96%	9,80%	5,88%
Mathematics (L)	9,09%	45,45%	18,18%	3,03%	15,15%	9,09%
Chemistry (L)	28,57%	38,10%	9,52%	4,76%	9,52%	9,52%
Pedagogy (L)	20,13%	46,10%	19,48%	0,65%	5,84%	7,79%
General average	17,11%	44,41%	22,37%	1,97%	7,57%	6,58%

Fonte: Dados da pesquisa (2019). Legenda: Licenciatura (L); Bacharelado (B).

The sum of good and great professional perspectives as satisfactory indices for Chemistry and Pedagogy courses, indicate equivalent responses, being 66.67% and 66.23%, respectively. Graduates of these courses were the most confident about the future. Graduates from the Mathematics course were those who had the lowest professional prospects.

Final Considerations

Upon concluding this study, it is important to return to the objective of this research: to investigate the perceptions of graduates of the five undergraduate courses offered in the distance modality, identifying data on the quality of training and professional insertion.

From a socio-historical approach, we sought to verify how distance learning undergraduate courses were implemented. To this end, the regulatory path of DE in Brazil associated with political and social factors, within the scope of Higher Education, was used as a basis. It was considered fundamental for the research to analyze distance learning through the prism of public educational policies.

There are questions about the quality of distance undergraduate courses, in general, motivated by the lack of knowledge of the modality and the precarious offer by many institutions that are not committed to the quality of teaching. This study attests

that there are successful experiences of institutions committed to a quality distance Higher Education project and, therefore, in many public institutions, distance learning has meant opportunities for educational inclusion.

Finally, this research highlights the demands for new studies that will fill gaps in this field. From this perspective, it becomes relevant to investigate public policies for the democratization of access to Distance Higher Education offered by institutions subsidized by the UAB Program, to verify other successful experiences and, in addition, to identify processes of institutionalization of distance learning by public institutions.

We expect that this study will stimulate new research on the provision of distance learning undergraduate courses and mobilize investments and institutionalization of the modality, which could be an important instrument for accessing and democratizing quality public education.

References

- ABED - Associação Brasileira de Educação a Distância. (2017). Censo EAD.BR: Relatório analítico da aprendizagem a distância no Brasil 2016. Curitiba: InterSaberes. Disponível em: http://abed.org.br/censoead2016/Censo_EAD_2016_portugues.pdf. Acesso em: 13 de dezembro de 2018.
- Afonso, A. J. (2013). Mudanças no Estado-avaliador: comparativismo internacional e teoria da modernização revisitada. *Revista Brasileira de Educação*, 18(53), 267-284. <https://doi.org/10.1590/S1413-24782013000200003>
- Arruda, E. P., & Arruda, D. E. P. (2015). Educação à distância no Brasil: Políticas públicas e democratização do acesso ao ensino superior. *Educação em Revista*, 31(3). <https://doi.org/10.1590/0102-4698137133>
- Arruda, E. P. (2018). Reflexões sobre a política nacional de formação de professores a distância e o enfraquecimento da EaD pública pela Universidade Aberta do Brasil (UAB). *Educação*, 43, 823-842. <https://doi.org/10.1590/0102-4698137133>
- Bardin, L. (2011). *Análise de conteúdo*. São Paulo: Edições 70.
- Bastos, A. T., Nunes, J. B. C., & Freitas, A. A. F. (2014). Educação para a sustentabilidade em cursos de graduação a distância: Análise de uma IES pública do Nordeste do Brasil. *Revista Eletrônica de Educação*, 8(3), 147-163. Disponível em: <http://www.reveduc.ufscar.br/index.php/reveduc/article/view/1000>. Acesso em: 2 de maio de 2021.
- Belloni, M. L., et al. (2003). *Metodologia de avaliação em políticas públicas: Uma experiência em educação profissional*. São Paulo: Cortez.
- Brazil. (1996). Lei nº 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. *Diário Oficial da União*, Brasília, 23 de dezembro. Disponível em: http://www.planalto.gov.br/ccivil_03/LEIS/L9394.htm. Acesso em: 24 de junho de 2020.
- Brazil. (1998). Decreto nº 2.494, de 10 de fevereiro de 1998. Regulamenta o art. 80 da Lei nº 9.394, de 20 de dezembro de 1996, e dá outras providências. *Diário Oficial da União*, Brasília, 11 de fevereiro. Disponível em: http://www.planalto.gov.br/ccivil_03/decreto/D2494.htm. Acesso em: 24 de junho de 2020.

- Brazil. (2005). Decreto nº 5.622, de 19 de dezembro de 2005. Regulamenta o art. 80 da Lei nº 9.394, de 20 de dezembro de 1996, que estabelece as diretrizes e bases da educação nacional. Diário Oficial da União, Brasília, 20 de dezembro. Disponível em: <https://bityli.com/jOgL3>. Acesso em: 24 de junho de 2020.
- Brazil. (2006). Decreto nº 5.800, de 8 de junho de 2006. Dispõe sobre o Sistema Universidade Aberta do Brasil - UAB. Diário Oficial da União, Brasília, 9 de junho. Disponível em: <https://bityli.com/XCFxM>. Acesso em: 24 de junho de 2020.
- Brazil. Ministério da Educação. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. (2009). Censo da Educação Superior 2007. Brasília. Disponível em: <https://bityli.com/ELHr7>. Acesso em: 24 de junho de 2020.
- Brazil. Ministério da Educação. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. (2018). Censo da Educação Superior 2017. Brasília. Disponível em: <https://bityli.com/BSnPs>. Acesso em: 24 de junho de 2020.
- Brazil. Ministério da Educação. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. (2019). Censo da Educação Superior 2018. Brasília. Disponível em: <https://bityli.com/ybHES>. Acesso em: 24 de junho de 2020.
- Brazil. Ministério da Educação. Diretoria de Avaliação da Educação Superior. (2015). Sistema Nacional de Avaliação da Educação Superior: Instrumento de avaliação de cursos de graduação presencial e a distância. Brasília.
- Caetano, F. S. C., & Quaglia, I. (2014). A utilização da ferramenta Moodle em cursos presenciais em uma instituição de ensino superior. *EAD em Foco*, 4(2).
- CAPES. (2017). Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. Relatório de gestão do exercício de 2016. Brasília: MEC/CAPES. Disponível em: <https://bityli.com/kuGXy>. Acesso em 24 de junho de 2020.
- Corradi, W. J. B., Quirino, R., & Machado, M. R. L. (2013). Resultados, desafios e perspectiva do Sistema Universidade Aberta do Brasil (UAB) no âmbito da UFMG. In F. S. R. Fidalgo et al. (Orgs.), *Educação a distância: meios, atores e processos* (Vol. 1, pp. 163-182). Belo Horizonte: Editora CAED-UFMG.
- Fragoso, A., Valadas, S. T., & Paulos, L. (2019). Ensino superior e empregabilidade: percepções de estudantes e graduados, empregadores e acadêmicos. *Educação e Sociedade*, 40, e0186612.
- Freire, P. (1996). *Pedagogia da autonomia*. São Paulo: Paz e Terra.
- Gomes, S. S., Pereira, C. M., & Corradi, W. J. (2017). Relatório de avaliação institucional dos cursos a distância. Belo Horizonte: Centro de Apoio à Educação a Distância da Universidade Federal de Minas Gerais.
- Gomes, S. S., Pereira, C. M., Corradi, W. J., & Machado, M. R. L. (2016). Avaliação institucional nos cursos de graduação a distância: experiências, desafios e perspectivas. In *Anais do 13º Congresso Brasileiro de Ensino Superior a Distância e 2º Congresso Internacional de Educação Superior a Distância* (Vol. 1, pp. 1000-1014). São João del-Rei: Editora UFSJ.
- INEP. (2015). Política institucional de integração e de avaliação do egresso na melhoria da IES: Sistema Nacional de Avaliação da Educação Superior – SINAES. Brasília. Disponível em: <https://bityli.com/L5cJz>. Acesso em 24 de junho de 2020.
- Lousada, A. C. Z., & Martins, G. A. (2005). Egressos como fonte de informação à gestão dos cursos de Ciências Contábeis. *Revista Contabilidade & Finanças*, 16(37), 73-84.
- Nascimento, A. F. (2011). *Educação a distância e fetichismo tecnológico: Estado e capital no projeto de ensino superior no Brasil* (Tese de doutorado, Universidade Federal do Maranhão).
- Nunes, P. M., & Alves, R. C. (2018). Perfil de distribuição dos egressos do curso de graduação em Ciências Econômicas EaD/UFSC/UAB. *Revista Gestão Universitária*, 9.

- Paul, J.-J. (2015). Acompanhamento de egressos do ensino superior: experiência brasileira e internacional. *Cadernos CRH*, 28(74), 309-326.
- Rezende, P. A. O. S. (2017). Discursos e práticas que embaçam/embasam o Taylorismo nos cursos de pedagogia a distância na Universidade Aberta do Brasil (Tese de doutorado, Pontifícia Universidade Católica de Minas Gerais). Disponível em: http://www.biblioteca.pucminas.br/teses/Educacao_RezendePA_1.pdf. Acesso em 14 de janeiro de 2020.
- Santana, O. A. (2013). Alunos egressos das licenciaturas em EAD (consórcios setentrionais e UAB: 2001-2012), sua empregabilidade e absorção pelo mercado. *Revista Brasileira de Aprendizagem Aberta e a Distância*, 12, 119-130. Disponível em: <https://bitly.com/y1w8d>. Acesso em 24 de junho de 2020.
- Veloso, B. G., Mill, D., & Monteiro, M. I. (2019). Docência, educação a distância e tecnologias digitais: um estudo bibliométrico. *Revista Eletrônica de Educação*, 13(1), 319-335. Disponível em: <http://www.reveduc.ufscar.br/index.php/reveduc/article/view/2167>. Acesso em 1º de maio de 2021.
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RESUMO:

No contexto da expansão do Ensino Superior, a Educação a Distância (EaD) tornou-se uma realidade, possibilitando a democratização do ensino ao longo dos anos. Este artigo apresenta resultados de pesquisa sobre a percepção de ex-alunos de cinco cursos de graduação EaD oferecidos por uma instituição pública federal. O estudo buscou identificar dados sobre a inserção profissional no mercado de trabalho. A metodologia incluiu revisão de literatura, análise documental, dados secundários de avaliação institucional e pesquisa de campo, surveys online e entrevistas. Os resultados indicaram desafios na inserção profissional inicial, avaliação positiva da formação recebida e a necessidade de superar obstáculos para garantir uma EaD de qualidade.

PALAVRAS-CHAVE: Educação Superior, Educação a Distância, Egressos, formação, Inserção profissional.

RESUMEN:

En el contexto de la expansión de la Educación Superior, la Educación a Distancia (EaD) se ha convertido en una realidad, posibilitando la democratización de la educación a lo largo de los años. Este artículo presenta resultados de investigación sobre la percepción de ex alumnos de cinco cursos de grado EaD ofrecidos por una institución pública federal. El estudio buscaba identificar datos sobre la inserción profesional en el mercado laboral. La metodología incluyó revisión de literatura, análisis documental, datos secundarios de evaluación institucional y encuestas en línea y entrevistas. Los resultados indicaron desafíos en la inserción profesional inicial, evaluación positiva de la formación recibida y la necesidad de superar obstáculos para garantizar una EaD de calidad.

PALABRAS CLAVE: Enseñanza Superior Educación a Distancia, Egresos, formación, inserción profesional.