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Distance Education and the Open University of Brazil
History, Structure, and Challenges

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Résumé de l'article

Correspondence courses have been offered in Brazil since the late 19th century; in the 20th century, instructional media such as radio and television were successfully used long before the introduction of the Internet. However, distance education (DE) was officially established in Brazil only in 1996 by the National Educational Law of Policies and Bases. Several censuses conducted by the Brazilian Ministry of Education and the Brazilian Association of Distance Education (ABED) collected statistics on the number of institutions and students involved in DE in Brazil. Although higher education DE has developed in the country since then, several attempts to create an Open University failed. The institution that is now The Open University of Brazil (UAB), created in 2005, focused mainly on teacher education. However, it is not a new institution (but rather a system of older institutions). It is neither a university (but rather a consortium of public federal, state, and municipal face-to-face educational institutions), nor open (candidates should have at least finished high school and are required to pass a rigorous entrance exam). Although UAB certainly contributed to the progress of DE in Brazil, it faces many challenges and problems, such as the continuously questioned quality of its learning support centers, labor relations, issues related to hiring face-to-face and online tutors, and the structure and organization of producing content for courses. This article presents a brief history and the main characteristics of DE in Brazil, details UAB's structure, and discusses the challenges it faces.

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Distance Education and the Open University of Brazil: History, Structure, and Challenges

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Abstract

Correspondence courses have been offered in Brazil since the late 19th century; in the 20th century, instructional media such as radio and television were successfully used long before the introduction of the Internet. However, distance education (DE) was officially established in Brazil only in 1996 by the National Educational Law of Policies and Bases. Several censuses conducted by the Brazilian Ministry of Education and the Brazilian Association of Distance Education (ABED) collected statistics on the number of institutions and students involved in DE in Brazil. Although higher education DE has developed in the country since then, several attempts to create an Open University failed. The institution that is now The Open University of Brazil (UAB), created in 2005, focused mainly on teacher education. However, it is not a new institution (but rather a system of older institutions). It is neither a university (but rather a consortium of public federal, state, and municipal face-to-face educational institutions), nor open (candidates should have at least finished high school and are required to pass a rigorous entrance exam). Although UAB certainly contributed to the progress of DE in Brazil, it faces many challenges and problems, such as the continuously questioned quality of its learning support centers, labor relations, issues related to hiring face-to-face and online tutors, and the structure and organization of producing content for courses. This article presents a brief history and the main characteristics of DE in Brazil, details UAB's structure, and discusses the challenges it faces.

Keywords: distance education, higher education, learning centers, tutoring, Brazil

Introduction

When the development of distance education (DE) in Brazil is compared with experiences elsewhere in the world, some similarities and differences are apparent. Brazilian DE followed the international movement, with correspondence courses offered by private international correspondence schools in the late 19th century. Later, media such as radio and television were used successfully, through specific and often creative solutions, long before the introduction of the Internet. However, when The Open University of Brazil (UAB) was officially established in 2006 through Decree 5,800, Brazil became the last nation with population of over 100,000,000 people to create an open university (Litto, 2018, p. 31).

The evolution and application of information and communication technologies (ICT) naturally contributed to the development of distance education in Brazil. Besides the expansion of learning management systems (LMS), different media have been incorporated into DE including, among others (a) printed material, (b) radio and TV, (c) e-mail and discussion lists, (d) videos, (e) video and Web conferences, (f) social networks, (g) blogs, and (h) podcasts. A myriad of tools and resources are now available to institutions, managers, teachers, and students, enabling different types of interaction and communication (synchronous and asynchronous), often supported by face-to-face learning centers, allowing ICT to reach the most remote regions in Brazil.

This article presents an overview of the characteristics of distance education in Brazil, describes the structure of The Open University of Brazil, and discusses some of the challenges it faces. This paper is based on a review of the literature and legislative documents as well as the close experience of one of the authors as a long-time employee in the Brazilian Ministry of Education.

Distance Education in Brazil

In 1996, Article 80 of the National Educational Law of Policies and Bases officially introduced distance education in Brazil. It was not until 2005, however, that Decree 5,622 started regulating distance education there. At time of writing, the updated document is Decree 9,057 (Presidency of the Brazilian Republic, 2017).

Distance education in Brazil did not focus on primary education, due to strong resistance on the part of many educators, politicians, and society in general. Brazil does not have a tradition of homeschooling, which might at least partially explain this resistance. However, the development of DE has been noteworthy in professional education (Porto & Berge, 2008) and especially higher education.

In the last two decades, the importance of distance education in higher education in Brazil has been reflected in, among other aspects, an increasing number of enrolment spaces offered to DE students. In the 2018 Census of Higher Education (National Institute of Educational Studies and Research [INEP], 2018), more than 8 million undergraduate spaces were offered, of which 67% were face-to-face and 33% in distance education. In addition, between 2007 and 2017, the number of admissions varied positively, with 19% in face-to-face courses and more than three times that (226%) in DE courses; during the same period, enrollment (including students already admitted) in DE increased by 375.2%, while face-to-face increased only 33.8%. Although the percentage of students attending DE courses in 2007 was 15.4%, in 2017 that share was about 33%. The increase in the number of students in higher education in Brazil between 2016 and 2017 was mainly due to DE, which had a positive variation of 27.3%, while face-to-

face courses increased only 0.5%; in the same period, the number of enrollments in face-to-face courses decreased by 0.4%, while enrolment in DE courses increased 17.6%, the highest percentage recorded since 2008.

It is important to note that from 2007 to 2017, the private sector was responsible for offering 91% of these DE spaces, while federal higher education institutions were responsible for 59% of the public offerings. In 2017, 86,965 students were admitted to DE by public institutions, while 986,532 were by private institutions. However, there has been concern regarding several issues, such as the infrastructure needed to support the DE model, governmental requirements for face-to-face learning centers (even for models that do not need this structure), the precariousness of teaching work conditions, text material produced to the detriment of other didactic media, among other aspects.

In addition, there has been skepticism about the organizational model for distance education at higher education institutions in the federal public education system, especially those related to UAB, analyzed in the next section.

Open Education in Brazil

This section starts with a description of the evolution of the open education movement in Brazil. In 1989, Professor Fredric Litto was the founder and scientific coordinator of the School of the Future, a laboratory of the University of São Paulo, investigating how new information and communication technologies could support education In 1995, Litto requested a grant from American Telephone & Telegraph to create a Brazilian student virtual library (BibVirt), a digital collection of texts, videos, images, and sounds, in the public domain, suitable to provide young people with varied content for their research and essays. BibVirt began operating in 1997, hosted on USP servers and entirely free for queries and downloads. It came to have more than 10,000 works, videos, and sound records, with more than 20,000 individual inquiries per day. BibVirt is currently not available at its original address, though much content that it has prepared and offered to the public is available in newer collections (Litto & Mattar, 2017). The Brazilian Association of Distance Education (ABED) also recognized the importance of OER, and was among the first signatories of the Cape Town Open Education Declaration in January 2007 (www.capetowndeclaration.org/).

Amiel, Gonsales, and Sebriam (2018) presented a brief history and a detailed overview of the activity regarding OER in Brazil during the last decade. While in other countries there are specific funding sources and ongoing support for OER projects and actions, in Brazil foundations and funders have yet to pay sufficient attention to this area. The National Plan of Education (Brazilian Ministry of Education, 2014), however, emphasized the importance of open educational resources to foster the quality of primary education. In addition, in 2015 the Federal University of Paraná (UFPR) instituted the program called REA Paraná (OER Paraná, a Brazilian State), the first institutional policy of a Brazilian university to support the promotion and provision of OER through a teacher bonus. OER published in the UFPR Institutional Repository add 25% to a teacher's score for promotion and progression. The main goal of the project has been to disseminate open educational practices and encourage the production and sharing of OER via a digital repository. The program, which started as a partnership, has been extended to include other institutions in the region. Essential books on OER have also been published in Brazil (Okada, 2013; Santana, Rossini, & Pretto, 2012; Santos, 2013; Sebriam, Markun, & Gonsales, 2017), as well as articles, dissertations and theses, and initiatives such as Iniciativa Educação Aberta (Open

Education Initiative; https://aberta.org.br/), which unites the efforts of the UNESCO Chair in Open Education and Instituto Educadigital.

Open University of Brazil (UAB)

For decades, attempts to create an open university in Brazil failed. For example, in 1972, two years after the foundation of the United Kingdom Open University (UKOU), the Brazilian government sent a group of educators to England, who produced a reactionary and negative report.

In the middle of 2005, there were discussions about creating The Open University of Brazil system under the responsibility of public higher education institutions. The goal was to bring high quality, public higher education to Brazilian counties that did not offer higher education or offered it to an insufficient degree, as less than half of Brazilian municipalities had any institution of higher education (Litto, 2018, p. 32). As Tait (2008) suggested, one purpose of open universities is to fulfill the function of "nation-building—where a national university, as opposed to private, confessional or regional universities, need in the government's view to support national development" (p. 92).

Decree 5,800 was approved on June 8, 2006, creating the UAB system. The decree established that one or more public institutions of higher education might offer a course at a distance, with students attending in face-to-face learning centers (see Figure 1).

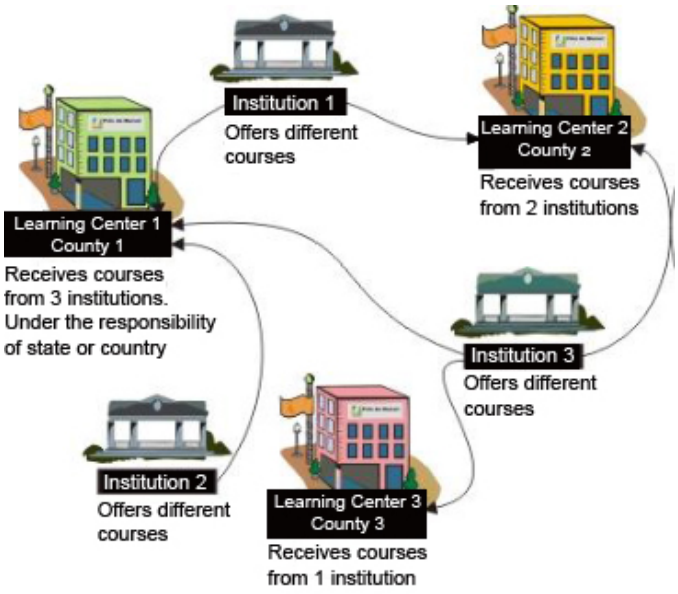

Figure 1. Structure of The Open University of Brazil. Adapted from "Panorama geral da Universidade Aberta do Brasil," by C. J. Costa, 2009 (http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=1903-celso-jose-costa&category_slug=novembro-2009-pdf&Itemid=30192). Copyright 2009 by C. J. Costa.

Designing the UAB System

According to Costa (2007), Brazil's Ministry of Education (MEC) considered four innovative projects in the Brazilian public sector for designing the UAB system: (a) in 1996, the *Pedagogy* course at the state of Mato Grosso Federal University; (b) in 2000, the CEDERJ consortium in the state of Rio de Janeiro; (c) in 2002, the Veredas project in the state of Minas Gerais; and (d) in 2006, the pilot project *Administration* course of the Bank of Brazil. MEC also researched models from other countries,

including the UKOU and the National Distance Education University (UNED) in Spain. The design of the UAB model with face-to-face learning centers followed the experience of the Foundation Center for Science and Higher Distance Education of the state of Rio de Janeiro (CECIERJ), created in 2002.

According to Ricardo (2012, p. 53), examination of the UNED model of DE inspired the structure of the CEDERJ consortium.

> One of the issues that needs to be elucidated regarding CEDERJ is its specificities that are entirely different from traditional institutions of DE. Universities such as UNED and UKOU, created following the logic of distance education directed to the masses, with the operationalization of DE in the industrial format, had their instructors involved in the development of their proposals. While UNED was born as a distance learning institution, the consortium began as an interinstitutional collaboration, without its dedicated full-time instructors to DE so that they can research, create new methodologies and, at the same time, are integrated into processes of continual professional development. (Ricardo, 2012, p. 225)

The organization of the UAB system, which initially had budgetary aid from the Brazilian National Development Bank, took place through public calls. The first known public call, published on December 20, 2005, followed a pilot project. Other calls were then published in 2011, 2014, and 2018. These involved the integration and articulation of proposals for courses presented exclusively by federal higher education institutions and proposals for face-to-face learning centers presented by the states and counties. As a result, UAB has been characterized as not a university, but rather a system of public universities and similar educational institutions aiming to provide courses in a DE format to students having difficulty entering higher education. However, it is a mandatory requirement that the Brazilian Ministry of Education accredits the public institutions of higher education that aim to participate in the UAB system.

In this sense, the UAB system was designed to foster the articulation, interaction, and implementation of initiatives, thus stimulating a partnership among the three levels of government (federal, state, and municipal) with public universities and other interested organizations. The intention was to provide alternative mechanisms for the design and delivery of undergraduate and graduate courses in a consortium model. K to 12 teachers were to have priority in attending courses, followed by K to 12 administrators and others working at public institutions.

According to CAPES, the Brazilian Coordination for the Improvement of Higher Education Personnel agency (2019), a foundation linked to MEC that coordinates post-graduate studies, in the first four months of 2018 the UAB system included 109 public institutions of higher education offering about 800 courses and 771 face-to-face learning centers. The system is maintained in collaboration with states and, especially, local counties. These learning centers guarantee academic, technological, and administrative support to teaching and learning activities. However, the federal government does not fully support these learning centers, which must therefore rely on the financial and political situations of their municipalities. Aretio (2016) pointed to a similar problem with UNED's learning centers; it was thought that financing these centers was to be entirely supported by local or regional entities (e.g., municipalities, county councils, banks). The official funding for UNED was so scarce that it was difficult to cover the expenses of the headquarters itself. Naturally, it was challenging to create this financing by the entities around the center. The UAB public call announced in May, 2018 significantly increased the

size of the system with new units from the Federal Institutes (IF), as well as the accreditation of new municipal, state, or federal learning centers on university or IF campuses.

Among the courses offered by UAB in the blended modality are the professional (or non-thesis) master's degree; currently, there are 16 such programs, called Professional Master's Programs for Qualification of Teachers of the Public Primary Education Network (PROEB). PROEB's objective is to improve the quality of teaching in K to 12 public education. Teachers at public pre-university education institutions who are active in the classroom during the entire period of the course can enroll in one of the professional master's courses at no cost.

The UAB system uses DE to reach different regions of the country, intentionally blending the experiences of UNED and UKOU in its organizational model in the following aspects: (a) learning centers (Aretio, 2006, 2016; Tait, 2003); (b) mass production of course content, as with Aretio (2006, 2016) who stressed planning the study structure and writing of teaching units at UNED; (c) training; and (d) consortium of inter-institutional collaboration. Today, UAB serves all regions of Brazil (Figure 2).

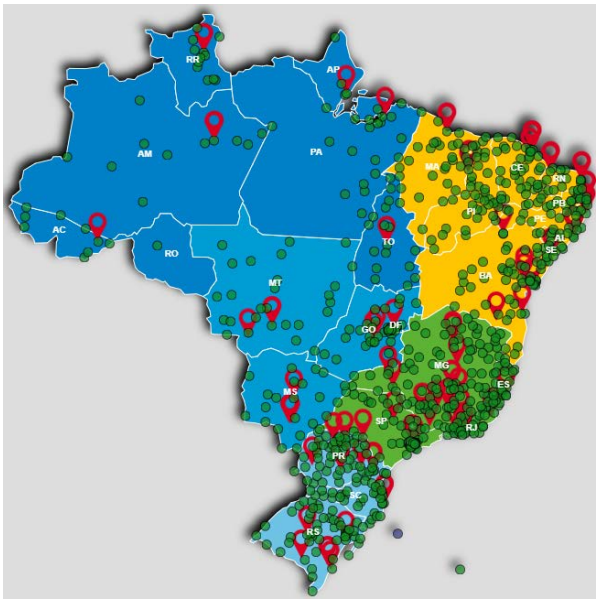

Figure 2. Distribution of UAB's institutions and face-to-face learning centers. Reprinted from "SiSUAB2," by CAPES, the Brazilian Coordination for the Improvement of Higher Education Personnel Agency, 2019 (https://sisuab2.capes.gov.br/sisuab2/login.xhtml). Copyright 2019 by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior.

Figure 2 shows that the courses offered by UAB are distributed throughout the country, totaling 649 local sponsors of active support centers in the five regions of Brazil. There are 669 active learning centers that offer distance courses in the country's regions (green circles). This data collection did not include learning centers that were either disconnected, inactive, provisional, pending, or unapproved. The data shows than the southeast region has the highest concentration of active learning centers, followed by the northern and southern regions, respectively. There are 128 institutions (red circles) from different administrative units (federal, state, and municipal) serving these regions.

These data parallel that from the Teaching Development and Information and Communication Technologies group that has studied UAB since 2011. This group's research project aims to provide increasingly open data about UAB that can be useful to both researchers and the public. The UNESCO Chair in Open Education at State University of Campinas conducted the mapping project in partnership with the Faculty of Education at the University of Brasília, with support from the Directory of Distance Education (DED) and the Brazilian Coordination for the Improvement of Higher Education Personnel agency (CAPES) Distance Education Board. Figure 3 indicates the number of learning centers per state in Brazil.

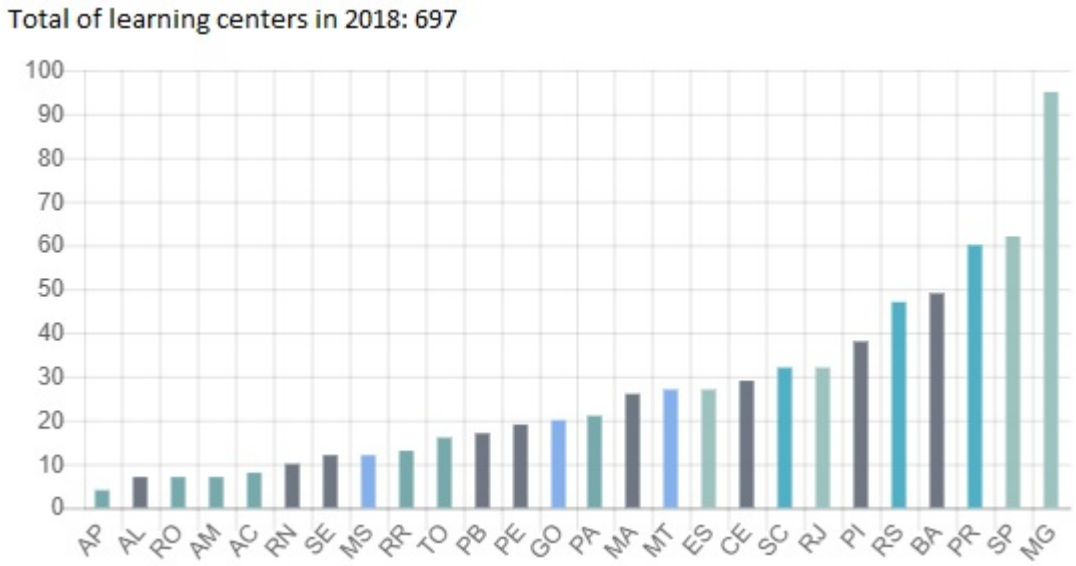

Figure 3. UAB general data: Number of learning centers per state. Retrieved from "Grupo de Pesquisa UAB," 2019 (http://uab.educacaoaberta.org/). CC BY.

The Brazilian Coordination for the Improvement of Higher Education Personnel Agency (2017) carried out national research on the UAB system to study students' opinions of the academic environment. Two questionnaires (2016 and 2017) were sent to 377,543 students who had valid Open University System of Brazil e-mail addresses. In order to determine the quality of courses and students' expectations, the questions focused on teaching conditions, infrastructure, didactic materials, and pedagogical procedures provided by the public institutions of higher education, members of the UAB system.

The research results were based on the responses from 46,459 completed questionnaires, representing 12% of the initial sample of students. It is important to note that it was not mandatory that students reply to the questionnaire. A group of 17,832 (38%) students were from the Initial and Continuous Teacher Development Program; 16,258 (91%) of these worked in public schools. Next, the profiles linked to the National Public Administration Program (PNAP) were identified, with a sample of 9,161 students, representing (20%) of the total number of respondents. Considering the two profiles, the percentage of students in the Teacher Training and Public Administration programs represented 58% of the total. In 3,593 (65%) of the counties, at least one student had already taken or was taking a course by UAB, an essential fact for DED/CAPES regarding the objective of bringing higher education into the interior of the country.

According to Brazilian Coordination for the Improvement of Higher Education Personnel Agency (2017), results from the 2016 and 2017 questionnaires showed a positive framework of student

development within UAB, in academic, tutorial, and personal aspects. As well, responses indicated that the interaction among students, tutors, coordinators, teachers, and educational resources were successful in meeting learning needs.

Aretio (2016) discussed the student assessment model followed by UNED, composed of two modalities, namely remote (and continuous) and face-to-face. It is important to note that Brazilian DE legislation requires that face-to-face assessment be given more weight on final grades than online assessment. This serves to privilege summative rather than formative assessment.

How UAB Addresses Open Education Challenges

Several variables present challenges to the organization and management of a distance education system, including (a) learner support and technological infrastructure, (b) instructional design, and (c) professional development and pay for teachers and tutors. These topics are addressed in detail in the following discussion of the challenges faced by UAB.

Face-to-Face Learning Centers

Tait (2003) stressed the importance of learning centers for the OUUK. Aretio (2016) also indicated that since UNED's early days, learning centers were considered solid components of the DE system there, in which students paid their tuition, met their tutors and peers, used a library and other technical infrastructure resources, and took exams.

At UAB, a face-to-face learning center provides the necessary pedagogical, technological, and administrative support for the teaching and learning activities associated with distance education courses and programs. This structure becomes the institution of higher education's operational and academic arm in the county where it is situated. According to legislation, the preferred location for a learning center is a medium-sized county, with between 20,000 and 50,000 inhabitants, and without a public academic institution of higher education.

There are two types of learning centers. The first has a state or municipal government as the maintaining entity, responsible for the physical, technological, and human resources (except instructors and tutors) infrastructure; the second type is maintained by a higher education institution, part of the UAB system, and is usually located on one of the institution's campuses.

To establish and maintain a UAB learning center, the interested institution must provide spaces with furniture according to its purposes, as well as acceptable conditions of environmental comfort, lighting, acoustics, and ventilation. It must also guarantee the full development of the planned activities, shared by all the working higher education institutions. However, studies such the one conducted by Martins, Nascimento, and Sousa (2018) at learning centers in the state of Ceará indicate that the institutional evaluation at the centers is minimal and out of alignment with the legislation.

The necessary infrastructure of the learning centers has three dimensions. The first are general spaces with rooms and environments for administrative and pedagogical work, compliant with legal requirements for accessibility as stipulated in Laws 10,908 (2000) and 11,982 (2009). The second are support spaces consisting of computer labs with adequate electrical installations (stabilized network), physical and/or online digital bibliographic materials, and an area for study. Finally, there must be

multi-purpose rooms for classes and face-to-face assessment, tutoring, and video/Web conference, as well as learning laboratories for courses requiring hands-on activities such as visual arts, biology, physical education, physics, and pedagogy, as necessary to meet their curricular guidelines.

Professional regulatory bodies in the health area, such as nursing, have recently launched a campaign against distance education in undergraduate courses. (In Brazil, nursing and even medicine are undergraduate courses.) There have been criticisms about the precarious conditions of infrastructure and teaching in some face-to-face learning centers—especially laboratories, libraries, and support structures for students—which do not offer conditions for even the practice of a supervised internship. The Brazilian Association of Distance Education (2017) argued that this type of criticism should be made against the institutions that offer poor quality courses (either face-to-face, blended, or online) and their supervising organizations, not against an educational modality.

On the other hand, there has been criticism from higher education institutions—not only those working within the UAB system—on the excessive time the Brazilian Ministry of Education, responsible for supervision in these cases, takes to authorize a learning center's operating permit, sometimes more than three years! This procedure significantly slows down the growth of DE in Brazil, since Brazilian legislation requires that final exams are held face-to-face in these learning centers.

Decree 9,057 (Presidency of the Brazilian Republic, 2017), however, introduced new guidelines. It became possible to set up face-to-face learning centers outside of the country. Before this, higher education DE institutions could not operate learning centers in foreign countries, so Brazilian students living abroad and studying at a distance were forced to return to Brazil (e.g., from Japan) periodically to take final exams. On the contrary, Aretio (2016) noted that UNED had an international presence since its beginning; in May 1973, learning centers were created in Paris, Berne, Brussels, and Bonn. Eventually, centers were even created in America.

As well, institutions have been given autonomy to create learning centers (and inform the government), no longer depending on the visit of MEC's representatives to authorize their operation. Depending on the institution's evaluation results, they can now create 50 centers per year (evaluation grade 3 or still pending), 150 centers (evaluation grade 4), and 250 (evaluation grade 5). The Ministry's evaluation now focuses on the main campus, automatically including the evaluation of the learning centers. Decree 9,057 (Presidency of the Brazilian Republic, 2017) also expanded the possibilities for partnerships in operating learning centers, since face-to-face activities may now take place in professional environments other than the main institution's campus and the learning centers.

Decree 9,057 (Presidency of the Brazilian Republic, 2017) also cited the option to offer online higher education courses without face-to-face activities and final exams. Institutions had complained about such face-to-face activities; while the pedagogical design of some courses might not specify them, they were, however, required by law. Tait (2003) claimed that a fundamental review of learner support at the Open University UK was necessary. The university established itself offering student support through tutoring and counseling in local study centers, as at that time there was a need to be near the students. However, the development of ICT made it possible for course teams to relate to tutors electronically, and for teachers and tutors to virtually connect to students, radically changing the division of labor. Tait (2003) pointed out that the home could serve as a campus, with resources such as digital libraries and the PC as a workstation. In this new scenario, why would the concept of a regional learning center still be needed? According to Tait (2003), re-thinking the purposes of the regional

learning centers to support student engagement represented a core task for the next 5 to 10 years, a time period that is the present day for UAB. Likewise, Aretio (2006) pointed out the role of virtual tutoring at UNED.

This more flexible legal environment naturally generated adverse reactions, especially from professional councils in the health fields, as mentioned previously. A new bill has been proposed, intended to cancel the effects of Decree 9,057. Although the scope of these new rules directly impacts the private market for distance education, they also affect UAB's functioning.

It is important to emphasize that the flexibility introduced by the new legislation does not rule out or disqualify the rich and complex system of evaluation that constitutes higher education in Brazil, but, on the contrary, takes its results into account. The Brazilian National System of Evaluation of Higher Education evaluates teaching, research, and extension, as well as social responsibility, student performance, management of the institution, faculty and facilities. It includes the following evaluation processes: (a) internal evaluation of Higher Education Institutions (HEIs); (b) on-site external evaluation of HEIs carried out by the Ministry of Education; (c) evaluation of undergraduate courses; and (d) evaluation of the academic performance of undergraduate students through Enade (a national high-stake test).

Instructional Design

The Brazilian Quality Benchmarks for Distance Education (Brazilian Ministry of Education, 2007) cover several elements, including (a) the epistemological concept of education and curriculum in the teaching and learning process, (b) communication systems, (c) teaching material, (d) assessment, (e) the presence of multidisciplinary teams, (f) infrastructure, (g) academic-administrative management, and (h) financial sustainability. These benchmarks suggest that the design and development of courseware and teaching material should follow the epistemological, methodological, and political principles evident in the courses' pedagogical project. Along with the course proposal, teaching material should be an instrument to facilitate the construction of knowledge, the mediation of learning, and the interaction between students and instructors, following a systematic process of validation and evaluation to enrich and improve the content offered.

> The pedagogical project of the course should specify the configuration of the teaching material that will be used. It should determine the multidisciplinary team responsible for this task: the instructors responsible for the content of each discipline, as well as the other professionals in the educational and technical areas (e.g., Web designers, graphic designers, proofreaders, video team, etc.). It should also specify the portion of this material that will be produced and pre-tested by the multidisciplinary institutional team before the beginning of the course. (Brazilian Ministry of Education, 2007)

In distance education, there are diverse types of interaction, not always including direct and frequent contact with the instructor. Thus, courseware and teaching materials, in their different formats, mediate student-content interaction as well as the student's learning process, thereby supporting the transformation of information into knowledge. In this sense, the challenge of designing and developing DE courseware and teaching material is to provide conditions for learning to occur. Brazilian legislation also suggests that:

> Higher education institutions, as well as organs and entities of the Public Administration, which finance or foster distance education, shall ensure the creation, availability, use, and management of open technologies and educational resources, by means of open licenses, to facilitate the use, revision, translation, adaptation, remixing, distribution and free sharing by the citizen, with the corresponding copyright being protected. (Brazilian National Council of Education, 2016)

Although this is a legal statement, in practice, the production of educational material for DE at UAB does not follow these guidelines. There is still a lack of production of OER and it is a challenge to coordinate the creation of educational content in a vast and decentralized system. In addition, each university or consortium uses government money to produce teaching materials for the same disciplines and courses. Although one should acknowledge the existence of diverse cultures in the different regions of a huge country such as Brazil, what effectively occurs is that each part of the system tries to reinvent the wheel and consequently, resources are not adequately used. The current approach is for content to be produced as OER but only for new courses or disciplines, and for materials already produced within the UAB to be converted to OER. In 2016, the EduCapes Portal (www.educapes.capes.gov.br) was created to compile those UAB materials produced with public resources.

Online Teaching and Tutoring

The quality benchmarks for DE in higher education (Brazilian Ministry of Education, 2007a) detailed the primary competencies of the professionals working in DE, from technical-administrative to teaching positions. Students should be the center of the educational process, and interaction should be supported by an adequate tutoring system as well as a computing environment especially implemented to meet the students' needs. These quality benchmarks suggest that teaching staff be linked to the institution, with training and experience in distance education. However, in the UAB system, the content instructors, tutors and other professionals act subsidized by ministerial training grants, not wages paid by the institutions, as discussed in this section.

The UAB system includes the participation of the following professionals, both at the institutions and the learning centers: (a) course instructors, (b) DE tutors, (c) face-to-face tutors, (d) administrative and technical support, and (e) management teams. However, these professionals work according to the pedagogical model and the needs of each institution. The most recent Law, 183/2016, establishes the classification of Content I and Trainer I Instructors for those who have three years of teaching experience, and Content II and Trainer II Instructors, who must have a specified minimum amount of training at a higher level as well as one-year teaching experience.

The content instructor should be involved in preparing teaching materials, as well as project development and research related to the courses and programs implemented within the system. A trainer instructor works at typical teaching activities, and participates in research projects and development of teaching methodologies in initial and continuing training of primary education teachers within the scope of the UAB system. In addition, the trainer instructors' activities include (a) planning, production, and delivery of content; (b) creating multimedia resources; (c) monitoring and training tutors' actions; (d) monitoring student performance; (e) holding weekly pedagogic meetings; and (f) course evaluation by means of the student, tutor, and assessment system records.

The importance of the distance tutor is evident in the MEC/INEP evaluation instruments used for the accreditation of DE courses and for ensuring the quality of the teaching offered, mainly by identifying, in higher education institutions, the ratio of the number of students to the number of tutors. Also, the

role of tutors was legitimized in Resolutions by the National Educational Development Fund 26/2009 and 8/2010, that established the guidelines for the payment of scholarships and research grants for professional staff (Presidency of the Brazilian Republic, 2006).

For those who prepare and implement the courses in the initial and continuing higher education programs under UAB, and linked to CAPES, scholarships would be paid by FNDE with the following criteria:

> Tutor: professional selected by the public institution of higher education linked to the UAB System for the exercise of typical tutoring activities, requiring higher education and minimum experience of 1 (one) year in the teaching of primary or higher education, or have a graduate degree, or be linked to a graduate program. (Educational Development National Fund, 2010)

Administrative Rule 183, dated October 21, 2016—which regulated the granting and payment of scholarships to participants in the design and delivery of courses and programs of initial, continuing, and higher education training under UAB—abolished the requirements for graduate training enrollment in a graduate program. In the current configuration, the tutor profile consists of higher education and minimum one-year experience teaching primary or higher education:

> III. Tutor: R$ 765.00 (seven hundred and sixty-five reais—around US$ 200.00) granted to perform typical tutoring activities developed under the UAB System, requiring higher education and minimum experience of 1 (one) year in the teaching profession of the K12 or higher education. (Brazilian National Council of Education, 2016)

These new regulations thus maintain the higher education requirement and stress the importance of teaching experience for those tutoring courses in the UAB system. Suppressing the demand for graduate training or enrollment in a graduate program emphasizes the value given to teaching experience, to the detriment of graduate training; hence, teaching experience becomes essential for one to act as a tutor. However, the new regulations reduce the level of credentials expected of those who tutor specialization courses and courses at the master's level. Thus, these regulations do not broadly address the need to attend undergraduate courses, specialization courses, and enroll in master's degrees at the same time.

Regarding actual tutoring activities, although there is no distinction between face-to-face and distance work, distance learning activities involve (a) pedagogic mediation of student activities via LMS, (b) providing feedback and follow-up on student activities, (c) supporting teaching activities, (d) collaborating and participating in the assessment process, and (e) participating in continuing training courses. On the other hand, a face-to-face tutor guides, accompanies, promotes, and stimulates the student face-to-face, as well as dynamizes the face-to-face classes that are previously prepared by the instructors.

The legislation indicates that the instructor is the professional who will teach classes or courses at all levels of education, be it in children's, primary, higher, vocational, or technical education. Hiring advertisements for UAB's tutors confirm this teaching status, mainly in how the position is described, namely teaching in academic courses of higher level at a distance. However, after 2010, hiring advertisements for UAB distance tutors described the work as tutoring in disciplines of undergraduate courses, distance modality. By analyzing the job descriptions, it is clear that depending on the

institution, tutors may combine the functions of an academic advisor, virtual tutor, teacher-tutor, teacher-monitor, or teacher-supervisor of students' final work.

In any case, regardless of how distance learning tutors in the UAB system are labelled, they teach—with the seal of state and municipal partnerships, institutions, and the Ministry of Education. When reporting experiences, guiding, discussing in a forum, assessing and grading activities, the tutor teaches at a higher education level. Lack of recognition of distance tutors' contribution adds to the precariousness of the DE teaching work throughout the country.

Conclusion

This paper has outlined the general characteristics of distance education in Brazil, focusing specifically on the structure of UAB—The Open University of Brazil, which is neither open (because a student needs a K to 12 diploma and must pass a written test of knowledge) nor a university (but rather a system of higher education institutions). Because the system is based on face-to-face universities, it naturally inherits their flaws and problems.

Since a more flexible legal environment was established by Decree 9,057 (Presidency of the Brazilian Republic, 2017), the distance education market now faces intense growth in the country, especially in the creation of face-to-face learning centers. The requirement for face-to-face activities at learning centers is now under review, as these might not be necessary for some pedagogical projects. The Decree seems an essential step to overcome the highly centralized control over distance education on the part of the Brazilian Ministry of Education (Litto, 2002). As well, institutional evaluation at the centers is another important step in the search for best teaching and learning quality practices.

There is also a structural problem regarding the production of courseware and teaching materials, with many institutions using government money to produce content for the same courses. Besides that, although this is a legal provision, the UAB system was not able to organize an OER structure to include these materials produced by the institutions, which today still consist mainly of texts and downloadable PDF, without the use of Creative Commons Licenses. UAB's material is thus not fully open nor available free for others to use, and a non-copyright policy is not clear for what is produced with government money.

Finally, UAB has not recognized the experience of tutoring as an act of teaching in higher education. Low pay and temporary scholarships prevent tutors from being incorporated into the institutions' pedagogical teams, and contribute to the precariousness of the teaching exercise.

These and other challenges show that the recent experience of an open university in Brazil is still in its initial phase, requiring natural adjustments and restructuring. Only 11% of the working population in Brazil holds a university diploma, and only 20% of those ages 18 to 24 are enrolled in higher education, while other South American countries such as Argentina and Chile reach 30%, and the US and European nations exceed 60% (Litto, 2018). These numbers stress the need for the development of distance education and UAB.

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