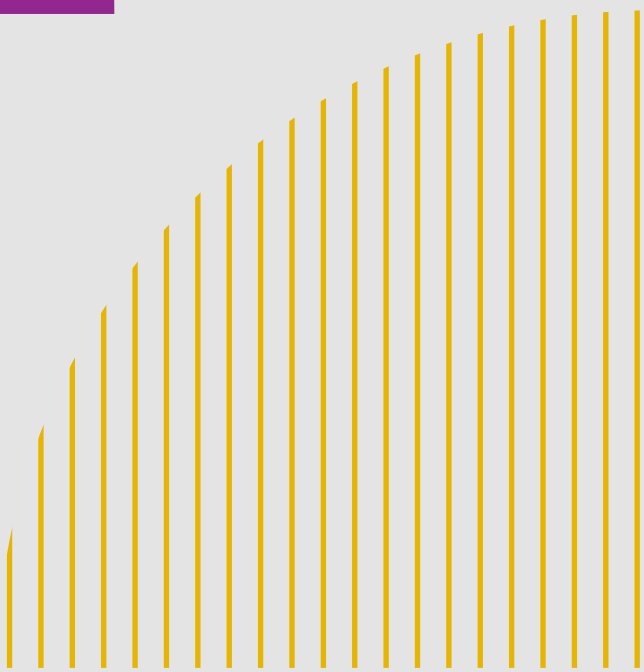
CENSO EAD.BR

2020

Analytic Report of Distance Learning in Brazil



ABED
BRAZILIAN ASSOCIATION OF DISTANCE EDUCATION
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2020 Brazilian Census for Distance Learning

Analytic Report of Distance Learning in Brazil

Brazilian Association of Distance Learning (ABED)
Rua Vergueiro, 875, São Paulo – SP. bl. 123-124
01504-001, Brasil
+55 (11) 3275-3561
www.abed.org.br
abed@abed.org.br

Editora InterSaberes
Rua Clara Vendramin, 58 . Mossunguê
CEP 81200-170 . Curitiba . PR . Brasil
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A word from the counselor

Educational institutions were closed across the country in 2020 due to the COVID-19 pandemic. Remote learning was the alternative to continue educational activities. Information about this period, about how distance learning (DL) development institutions reacted, faced, and overcame obstacles, are important for planning future actions. The Brazilian Association for Distance Learning (ABED), aware of the need for this information, despite the difficulties, carried out the 2020 Brazilian Census for Distance Learning.

The invitation to participate in the research was sent to 1,600 institutions operating in DL modality. The return was only 86 educational institutions and 22 suppliers of products and services for the DL sector. The educational institutions are public, private for-profit or non-profit, "S System", non-governmental organizations (NGOs) and public bodies from all regions of the country. Although the number of respondents is small due to the pandemic scenario, it is possible to highlight some aspects of the information for reflection and, who knows, identify trends.

Courses offer

Of the respondent institutions, 38 develop entirely DL courses, for which they did not face adaptation problems.

Most of the courses offered (80%) in 2020 were on-site and hybrid. Currently, it is possible to develop 40% of the workload with DL courses. Of the 86 respondent institutions, 24 develop on-site and hybrid courses with 20% of DL workload; 3 with 30% of DL; and 12 with 40% of DL.

Hybrid learning comprises on-site and DL parts. The on-site part, in most institutions, is developed for the application of tests, practical classes and lectures. Of the 86 respondent institutions, 28 have laboratories for practical activities, 22 have professional environments, and 31 have rooms for active methodologies. These data indicate an evolution of educational resources for on-site activities. However, with the pandemic, these spaces needed to be replaced by distance activities. This shift from on-site to DL will possibly lead institutions to increase the distance workload of on-site and hybrid courses in the coming years.

Respondents indicated that the release of high school and undergraduate education for DL modality was well accepted by the institutions. There is an intention to expand DL offers in courses at all educational levels, with emphasis on sensu stricto graduate courses.

Another significant offer is that of open courses, those that do not have any regulation or accreditation by government agencies. Among the responding institutions, 43% do not offer open non-corporate DL courses and 64% do not offer open corporate DL courses.

Regarding open courses, the largest offer is operational training courses (44%), followed by update training (19%) and improvement training (19%). The largest number of enrollments in open courses is for the professional initiation category (41%), surpassing operational, update and improvement trainings altogether.

Considering enrollments in open corporate and non-corporate courses, there are big differences. Professional initiation enrollments correspond to 57% of those carried out in non-corporate courses and 9% of those in corporate courses. On the other hand, enrollment in social/behavioral skills training courses consists of 26% for corporate courses and only 2% for non-corporate courses.

Open DL courses can be a strategy to work on skills necessary for the future professional and, although the institutions (70%) indicate agreement with this point of view, the proposal for these courses is still small. The institutions indicated that they developed open courses in the most diverse areas, such as food, health, mental health, management and music. Proposing open courses requires global analysis of the scenario, market, social networks, content and criteria for selecting the most attractive topics.

In the pandemic, even with people confined and seeking knowledge, training and creativity, the offer of open courses (corporate and non-corporate) by the respondent institutions was slender.

Adaptation

In 2020, the adaptation of on-site, hybrid and open courses to be developed at a distance, in 76.2% of the responding institutions, took approximately one month.

The training institutions acquired third-party services to attend undergraduate and graduate courses. In this sense, the main ones were solutions for the digital library, learning systems (LMS), content solutions and customized content (didactic materials). Web conferencing services for remote classes and security and data protection were also acquired. For the open courses, the main resources used were the institution's own tools, lives on YouTube, and WhatsApp.

Main difficulties

The main difficulties cited by respondents are related to the lack of connectivity for students and a policy for training teachers in digital skills. The social conjuncture of the pandemic required significant changes in the educational process and 38.1% of the respondents indicated that they started these transformations, which should materialize in the coming years.

On-site hubs

In 2020, students could not be present at the hubs and interactivity was possibly virtualized. During this period, 434 hubs were closed, against 353 in 2019 and 374 in 2018. On the other hand, 622 on-site hubs were created, against 2,538 in 2019 and 3,455 in 2018. Respondents indicated that the functions that remained active in the hubs were, mainly, the recruitment of students and administrative and pedagogical support.

Students' profile

Most students in DL courses are female, belong to classes C, D and E and are in Licentiate courses. In the Northeast, most students are black, reflecting the general indicators of the region itself.

With the pandemic, we sought to identify the provision of DL services to students of bachelor's courses who mostly belong to classes A and B and, for the most part, are on-site and hybrid courses.

Enrollments and rentability

Most respondents did not provide information regarding profitability and enrollment. The information provided indicated a 50% increase in profitability in undergraduate and graduate DL courses and a decrease in on-site and hybrid courses. Regarding enrollments, those who responded indicated that there was an increase in the total number. Specifically in graduate studies, among those who responded, 16.28% indicated that enrollments were constant and 13.95% reported that they grew by up to 50%.

Content and teaching

It is noteworthy that 27% of the content of graduate courses corresponds to themes from Enade, one of the assessment tools for undergraduate courses in the federal system of higher education. In addition, graduate courses were the least mentioned in terms of content related to development for work and professional attitudes towards research and expansion of horizons.

Undergraduate courses are the ones that most contemplate the development of skills aimed at the job market. However, open corporate and non-corporate courses also focus on these skills, as well as aspects related to professional attitudes and interpersonal skills.

Regarding teaching, in undergraduate and open courses, watching videos and reading texts are the most frequent activities. For undergraduate, graduate and open courses, other activities are also mentioned, such as problem solving, dissertation work, writing texts, participation in discussions and practical activities.

The resources most cited by respondents for undergraduate, graduate and open courses were video classes, e-books, digital texts, audio and simulators. Games were mentioned less often. Graduate courses, when compared to undergraduate courses, have fewer activities and resources. Another interesting fact is that 28% of the open courses use some type of online simulator.

Almost all undergraduate courses (94.7%) have a digital library, and 64.5% of hybrid and on-site courses have physical libraries. In the pandemic, 78% of on-site and hybrid courses were attended by digital libraries.

The virtual learning environment is present in all types of DL courses. Most respondents indicated that there is control of student performance through it, while 6.9% said they do not perform the control and 6.9% did not respond. Among those who indicated carrying out monitoring of student performance, most do so daily, with weekly monitoring in second place and monthly in third. Most respondents (92.1%) also indicated that feedback is provided to students, which allows them to compare expected performance with actual performance.

Tutoring

The tutor's role most frequently cited refers to on-site and hybrid courses, followed by undergraduate and graduate courses. The answer "Clear up questions about the content" appeared more frequently in on-site and hybrid courses. In undergraduate and graduate courses, the main and most frequent descriptions of the tutor's role are "Keep students motivated", "Give feedback on the work done by students", "Promote questions about the discipline" and "Lead discussions". The tutor's role is less mentioned in open courses (corporate and non-corporate).

Accessibility

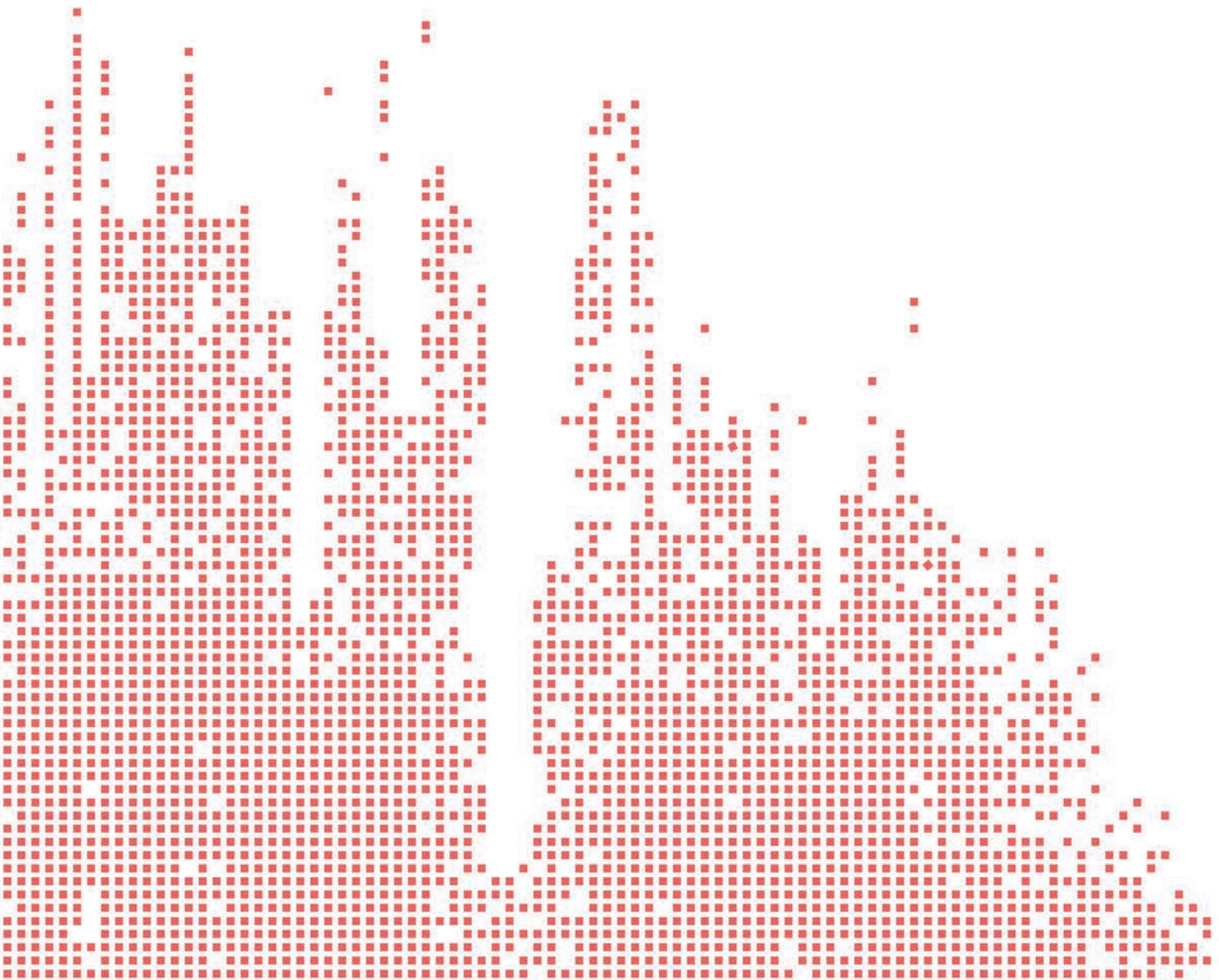
Regarding the enrollment of students who need special educational service support, the respondents indicated 5,264 students in on-site and hybrid education, 2,469 in the DL undergraduate courses, and 1,680 in the DL graduate courses. The most frequently cited professional dedicated to monitoring is the Brazilian Sign Language (Libras) interpreter, followed by specialized care professionals. The most used accessibility feature is the screen reader, followed by the Libras avatar. However, even with these resources, it is necessary to find strategies that expand not only access, but also the permanence of those who need special care.

Dropout

Respondents showed a 25% dropout rate in undergraduate, graduate and open courses, and point to the students' "financial difficulties" as its main cause. The highest rate was observed in on-site and hybrid courses, as students were transferred to DL, due to the pandemic, and many did not adapt to the new methodologies. Although there are programs to control dropout in some institutions, they have not yet been consolidated, so there is no information about the process.

Enjoy the reading!

Ivete Palange
ABED's counselor



Executive summary

The pandemic year: what happened to distance learning and how this modality has been contributing to the education sector in general

This edition of the Brazilian Census for Distance Learning is dedicated to the year 2020, deeply marked by the COVID-19 pandemic. The scenario involved the closing of all educational institutions in the country, which had to migrate to remote learning. The immense impacts of this event of global magnitude reached the number of Census respondents, who, in an atypical year, faced more difficulties in articulating to answer the questionnaire.

Furthermore, the effects of the pandemic affected the students' dropout rates, who, for different reasons, including the economic crisis that hit the country, dropped out of their courses. Thereby, businesses in distance learning (DL) and in education in general were impacted and, above all, enormous and new learnings related to remote, synchronous, asynchronous and hybrid education became possible at all educational levels and teaching areas.

This is the story that 2020 Census tells, based on responses from 86 educational institutions and 22 supplying institutions of the DL sector, from all regions of the country, of all sizes and administrative categories. Thus, we will see the trends found.

In 2019, before the pandemic, data from the Brazilian National Institute of Educational Studies and Research already revealed a preference of higher education students for entering DL undergraduate courses in comparison with on-site courses. The 2020 Census reveals in which direction the education sector is heading and what decisions have been made.

In this regard, the trend is towards the expansion of DL offers and the strong development of hybrid offers. We observed that 42.9% of the respondent institutions believe that the DL offer will be expanded, while 38.1% see the possibility of growth in the option for hybrid learning.

The offer of DL graduate courses had a significant boost. For the first time, we have more respondents offering sensu lato graduate courses (40) than undergraduate courses (38) in our Census. In addition, the possibility of offering sensu stricto DL graduate courses has been highlighted in the respondents' analyses: 21% of the institutions intend to offer courses of this type and 25% are studying course options. The expansion to primary and secondary education is also being increasingly considered; 5% of educational institutions indicate that they intend to offer courses in this modality and 20% are studying options.

The data indicate that in 2020 DL degrees continued to develop at the normal pace during the pandemic, and now offer more challenging and rich content and proposals even than the average of on-site degrees, with simulators, adaptive resources, gamified activities, among others that involve more sophisticated technologies. In fact, 68.4% of institutions that offer DL courses have an area responsible for analyzing data and learning outcomes.

Hybrid courses stand out for the implementation of richer methodologies: 31 institutions among the respondents already have active methodology rooms for their on-site and hybrid courses, which suggests a process of modernization of pedagogical projects. Also noteworthy is the fact that 22 institutions employ professional learning environments and simulators in their hybrid courses.

Regarding the increase in the offer of sensu lato graduate courses, compared to the offers of 2019, the methodological proposals have become proportionately simpler. Most courses are limited to texts, videos, discussions, and automatic corrections, revealing that the offer increase was not followed by the improvement in quality as seen in previous years for courses at this level. In this context, even graduate courses that work on undergraduate-level topics evaluated in the Brazilian National Student Performance Exam are offered.

Concerning the undergraduate enrollments, 19.77% of the respondent institutions declared the maintenance of their public, whereas 10.47% reported a growth of up to 50%. Only 2.33% declared that there

was some decrease despite the crisis related to the pandemic. We observed, therefore, that the decrease of new students in higher education, so much broadcasted concerning on-site courses, did not occur with such intensity in DL courses.

DL was also less affected than the originally hybrid or on-site offers in terms of profitability. There was an increase of up to 50% in the profitability of 8.14% of the DL undergraduate offerings and the same percentage was verified for the DL graduate courses. In on-site or hybrid courses, the highest incidence was from institutions that claimed a profitability decrease of up to 50%, referring to 11.63% of the total respondents.

In addition, the market had to readjust the supply of hubs and restructure their roles during the pandemic: there was a drastic decrease in the creation of hubs, and a significant increase in their closing. In 2020, 622 hubs were created against 2,538 in 2019, and 3,455 in 2018. There were 434 closed hubs in 2020 compared to 353 in 2019, and 374 in 2018. Regarding their roles, in 2020 hubs focused on attracting students, showing that, with the absence of on-site activities, these spaces significantly increased their marketing actions.

However, this absolutely does not mean that DL students were unsupported during the pandemic. When we analyzed the tutor's roles, we noticed that the criterion "Clear up doubts regarding the content" was more frequent in on-site or hybrid courses. Similarly, the items "Give feedback on work done by students", "Keep students motivated", "Conduct discussions", "Create situations for students to apply knowledge", "Create discussion topics", "Promote questions about the discipline", "Promote collaborative work" and "Follow up collaborative work" were frequently mentioned by respondents in relation to DL courses. In addition, the institutions also provided support for skills development as well as financial, psychological and career-related issues for their students.

In 2020, students with special educational needs were mainly in on-site and hybrid learning (5,264), followed by DL undergraduate courses (2,469) and DL graduate courses (1,680). This justifies why there is a greater concentration of specialized areas to support students with special educational needs in on-site and hybrid courses.

Among the analyzed modalities, it is possible to verify the predominance of a dropout rate of up to 25%. Another fact that draws attention on this topic is that, for the first time since the Brazilian Census for Distance Learning was created, dropout rates in on-site courses are higher than in DL courses in the undergraduate segment. In this context, 5% of on-site courses showed a dropout rate of more than 25%, while 3% of DL courses registered the same rate. These data are possibly directly related to the COVID-19 pandemic, which interrupted on-site activities and led higher education institutions to promote abrupt changes in the methodologies used in their courses, virtualizing their processes.

Regarding dropout control strategies, regardless of the segment, most higher education institutions are in the development phase of their programs. This allows us to affirm that the topic of dropout is part of the daily life of at least 60% of the higher education institutions participating in the research.

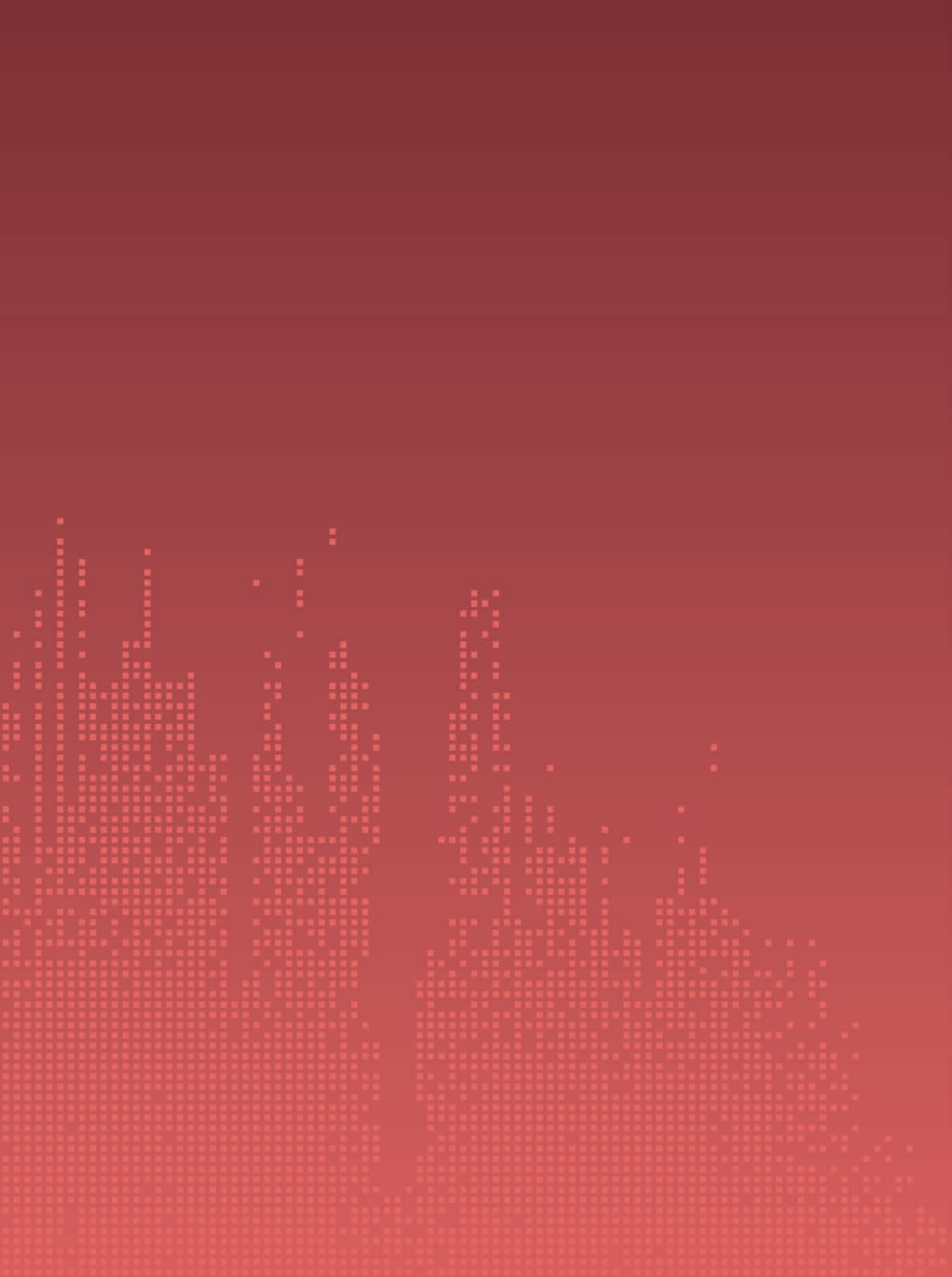
Considering enrollments related to corporate and non-corporate open courses, enrollments for professional initiation courses represent 57% of those carried out in non-corporate courses (largest share in this regard) and only 9% of those carried out in corporate courses. On the other hand, social/behavioral skills training courses represent 26% of corporate courses (second largest share in this regard) and only 2% of non-corporate courses. This possibly reflects the interest of the corporate market primarily in operational and social/behavioral skills trainings, as these courses are more focused on professional activities.

Regarding the services demanded by institutions in 2020, web conferencing solutions stand out, mentioned by 49 respondents, followed by digital libraries, learning systems – virtual learning environment/learning management system –, and content solutions, probably to face the pandemic demands. In addition, institutions ordered services related to the Brazilian General Data Protection Law as of this law came into effect in the period.

Most of the supplying institutions operate in just one of the following segments: consulting agency and services in digital marketing; advertising agency; press office; pedagogical and educational consulting, content development for DL; editorial (production of

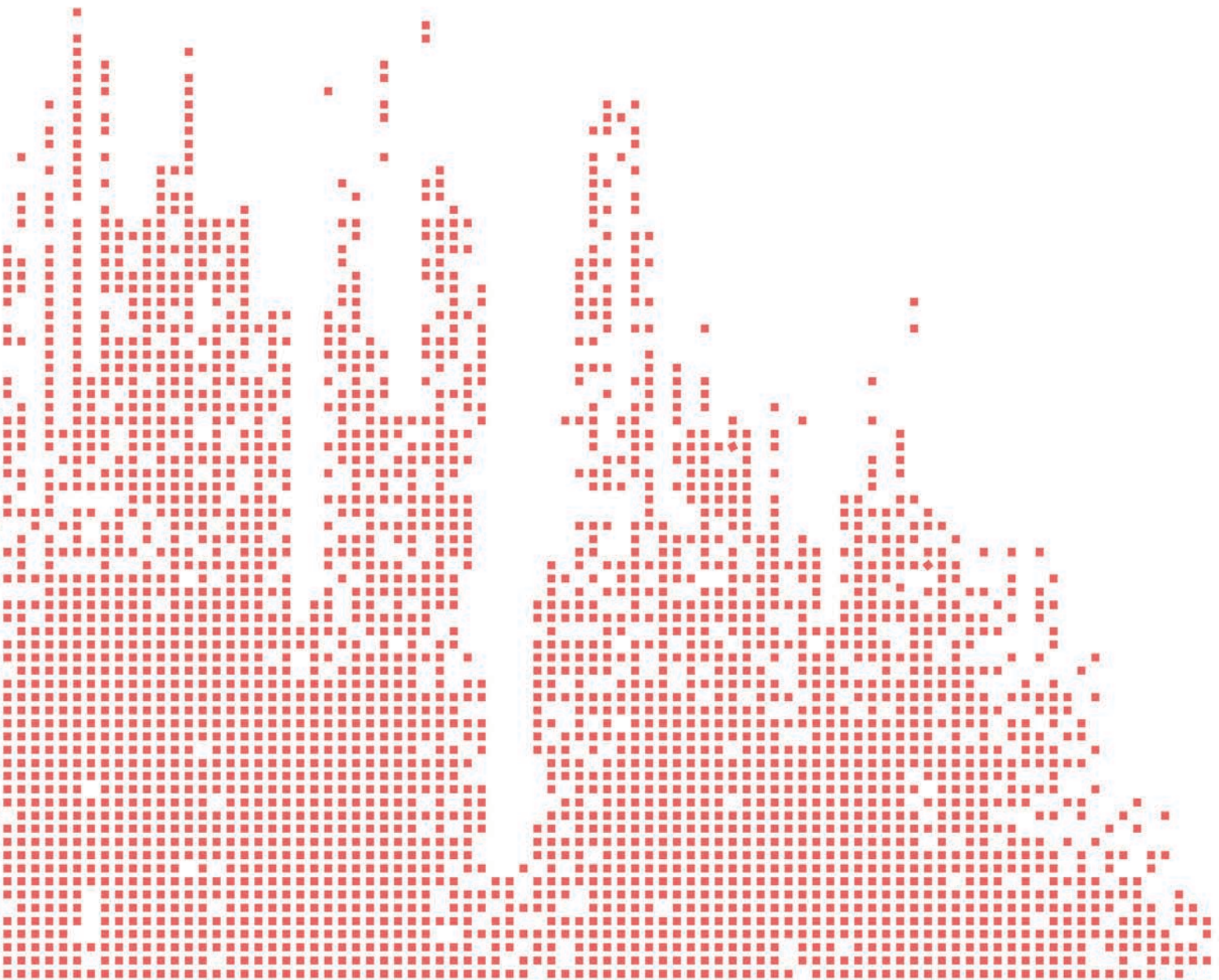
printed or digital and/or multimedia textual content); printing/graphics; audiovisual production; didactic resources for active methodologies; educational simulators and games; information technology (hardware). In this context, services related to attracting students stand out, probably due to the more competitive environment in which DL finds itself today.

The year 2020 was difficult, and social inequality was certainly accentuated as a result of school and college dropout. But DL, which still has a lot of room for improvement, revealed a great capacity for adaptation and flexibility to serve its public. Regardless of the specifics of such a difficult year, the DL sector maintained its pace of exponential expansion in the courses offer and investments in innovation, also applying strategies to attract new students and reduce dropout rates.



Part 1

Overview of the 2020 Brazilian Census for Distance Learning



1.1 Objective and scope

The Brazilian Census for Distance Learning, currently in its twelfth edition, consists of a map of the scenario of distance learning (DL) in Brazil and its main trends in this industry.

In this edition, relating to the year 2020, the Census provides quantitative and qualitative information concerning the DL activities in Brazil, covering all educational levels of the formal education system, informal teaching initiatives and activities of institutions that supply products and services in this industry.

Because institutions have chosen to participate voluntarily, the survey that feeds this document seeks to be comprehensive but does not intend to establish an exhaustive map of DL in the country. Its analyses aim to present a picture of market trends in regard to the categories of institutions that operate in the DL modality, the types of courses offered, the audience they reach, the execution of the DL, and their administrative organization.

1.2 New ways for presenting the Brazilian Census for Distance Learning

Following the 2019's edition approach, this instrument is dedicated to the DL trends' analyses and has multiple contributing authors. Each chapter was under the responsibility of an author, from the proposal of the questions to the analysis of the answers, addressing sensitive topics to the current moment of DL in the country, including the effects of the COVID-19 pandemic on the sector.

1.3 Topics approached in 2020

The topics approached in this edition are as follows:

1. Distance learning extent in the first year of the pandemic
2. Hubs: growth and roles
3. DL's future and trends
4. Business in DL during the COVID-19 pandemic
5. What is taught and how it is taught
6. Support services for students with special educational needs
7. Tutors, teachers and coordinator roles in students services
8. Dropout and support
9. Characteristics of hybrid learning
10. Open courses
11. Services, equipment and structures
12. Data analysis and DL results
13. Distance learning in informal training
14. Students' profile
15. DL evaluation

1.3.1 Criteria for participation in the survey

The participation in the Brazilian Census for Distance Learning is not conditioned on ABED membership, since the survey's main goal is to identify DL trends in Brazil, making no distinction between member and non-member institutions.

Were invited to participate in the 2020 Brazilian Census for Distance Learning:

- institutions accredited by the Brazilian National Education System in all educational levels: primary, secondary, technical, undergraduate and graduate;
- formal and informal educational institutions that offer open courses;
- institutions operating in corporate learning.

These institutions develop the following direct actions in DL modality:

- **Accredited full distance courses**: DL courses offered by institutions accredited or authorized by a federal, state or municipal regulatory body. In this report's edition, we separate the questionnaires referring to undergraduate courses from those concerning graduate courses sensu lato.

- **Hybrid courses**: in this Census, we asked institutions that offer on-site courses their digitalization rate; in the analysis, whether they offer 20% or 40% of the curriculum online, we considered these courses *blended* or *hybrid*. Courses that do not have online workload, but that use technology, continued to be considered on-site, but allowed us to observe how much higher education institutions are already incorporating technology into their on-site courses, even before the pandemic.
- **Open non-corporate DL courses**: DL courses not accredited by an educational body freely offered to the general public.
- **Open corporate DL courses**: DL courses not accredited by an educational body designed to meet the training needs of employees or clients of an organization.

1.4 Invitation to institutions and participation rates

The participation in the Brazilian Census for Distance Learning is voluntary and depends on the collaboration of each institution surveyed. The association works with the available sample, whose data establish the limit of the analysis.

1.4.1 Invitations sent

ABED contacted 1,303 institutions operating in DL via e-mail newsletter. Another form of contact was via an open invitation published on the association's website. ABED also made the selection of institutions contacted to compose the 2020 Brazilian Census for Distance Learning. The survey of the organizations who operate in DL modality was based on the sources listed as follows.

1.4.1.1 Educational institutions

- Educational institutions accredited by the Brazilian National Education Council to provide DL courses at undergraduate and graduate levels.
- Institutions accredited by State Education Councils to provide DL courses at primary and secondary, youth and adult education and professional education.
- Institutions that offer DL courses cited in the Educational Census.
- Institutions partnered with federal projects of the Open University of Brazil, the E-TEC Network of Brazil and institutions partnered with the Open University of the Brazilian Unified Health System.

1.4.1.2 Corporate entities

- Companies with notorious projects in corporate DL.
- Companies cited in recent academic studies as being involved with the DL modality.
- Companies listed by the Brazilian Ministry of Development, Industry and Foreign Trade for having projects in corporate learning.
- Companies recommended by professional associations, such as the Brazilian Association of Corporate Learning and the Brazilian Association of Human Resources.

1.4.2 Monitoring the registrations

The registrations were monitored daily, as well as the responses obtained, in order to avoid the duplicity of responses. All forms sent by institutions were analyzed prior to data processing (identification of the information's coherency and the consistency). The responses that had questions were examined promptly.

In cases of inconsistencies, an e-mail was sent to the respondent pointing out the specific issues detected and requesting the rectification and resubmission of the form for a new examination.

1.5 Survey methodology

The survey methodology of the 2020 Brazilian Census for Distance Learning, regarding the study of the reach of DL, is similar to that used in previous editions.

1.5.1 Raised data for 2020 Census printed version

Similarly to previous years, the survey was created in Google Forms. It was kept the format of the core questions the same as in the previous years. The respondents were invited to answer the same questions regarding full DL courses, blended courses (over a new definition of this modality), open non-corporate courses and open corporate courses.

Questions relating the practices observed in on-site courses were also maintained, however the raised data only served for a comparison with DL. The other questions presented in the survey are cyclical: the questions about the costs of the courses and the age of DL students were maintained, as well as the study referring to the types of contents and resources offered to the students and concerning the state of business; the analysis of the accessibility practices was expanded; and a sequence of data related to the institutions practices in order to achieve quality in DL modality.

1.5.2 Data analysis method

The same subjects data, albeit at different levels, were gathered in spreadsheets from which the respondent's identification was excluded. Afterward, the ABED's members analyzed each topic. The result of this collaborative study is presented here, signed by its respective authors.

1.6 Commitment to participants privacy and confidentiality

An agreement was signed with all participants regarding the commitment to keep confidential the identity of each participating institution. Participants identified themselves, but no results may be specifically associated to any institution participating in the 2020 Brazilian Census for Distance Learning.

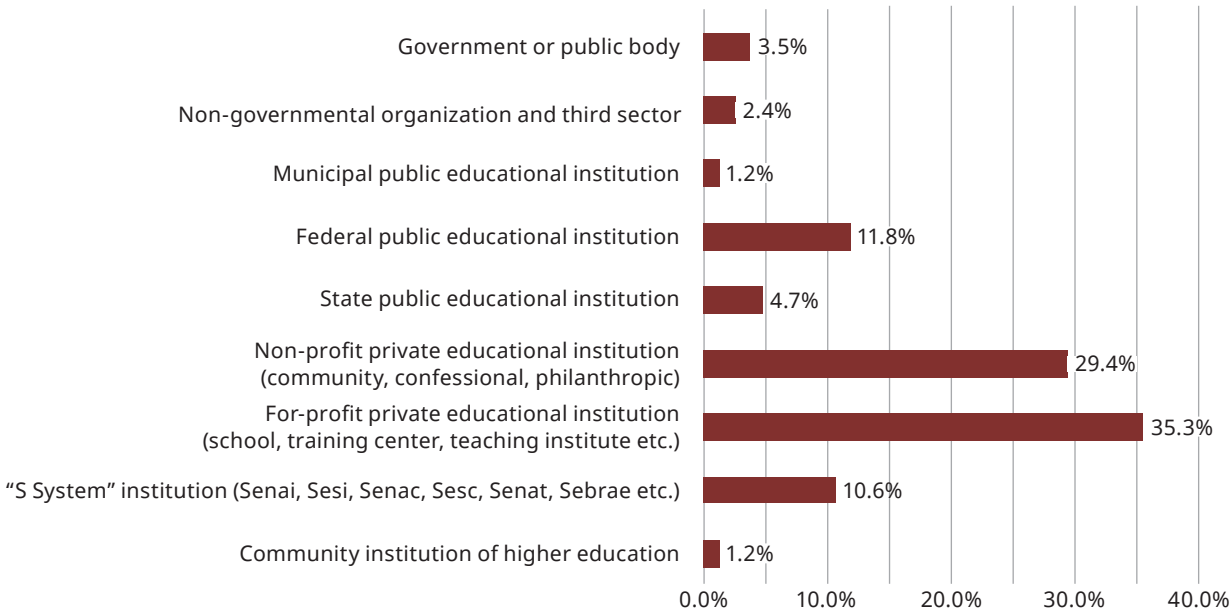
1.7 Data analysis

Márcia Aparecida Figueiredo

1.7.1 Distribution of respondents by administrative category

The Chart 1.1 shows the distribution of respondents by administrative category. The categories with the largest share of participants are for-profit private educational institutions (35.3%), non-profit private educational institutions (29.4%); federal public educational institutions (11.8%) and "S System" institutions – Senai, Sesi, Senac, Sesc, Senat, Sebrae, etc. (10.6%). These institutions correspond to those most active in the offer of DL in Brazil.

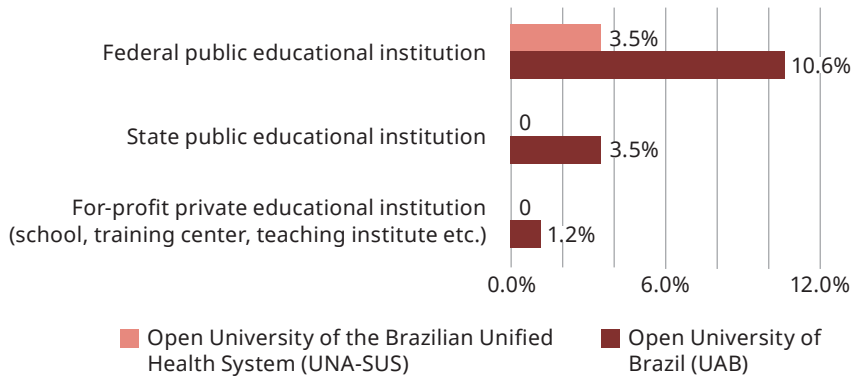
Chart 1.1 – Percentage of respondent institutions by administrative category



1.7.2 Participation in Open University of Brazil and Open University of the Brazilian Unified Health System

Regarding the respondent institutions that participate in Open University of Brazil programs, we found approximately 10.6% of federal public educational institutions, 3.5% of state public educational institutions and 1.2% of for-profit private educational institutions. As to the Open University of the Brazilian Unified Health System, we have approximately 3.5% of federal public educational institutions.

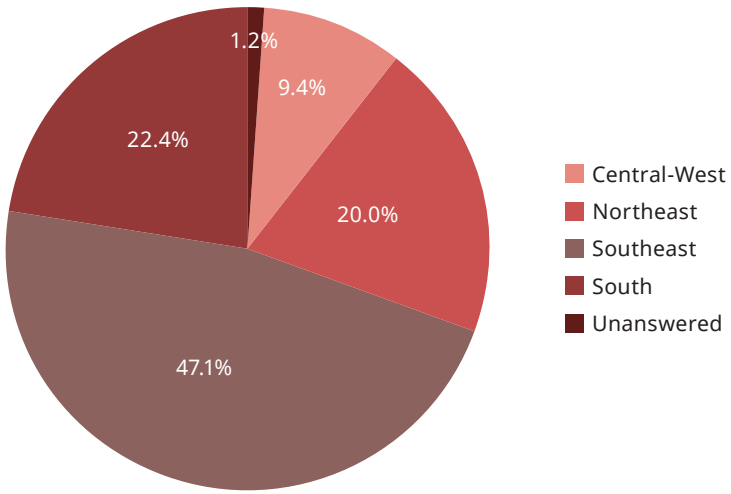
Chart 1.2 – Public institutions' participation rate in open university systems



1.7.3 Geographic distribution of respondents

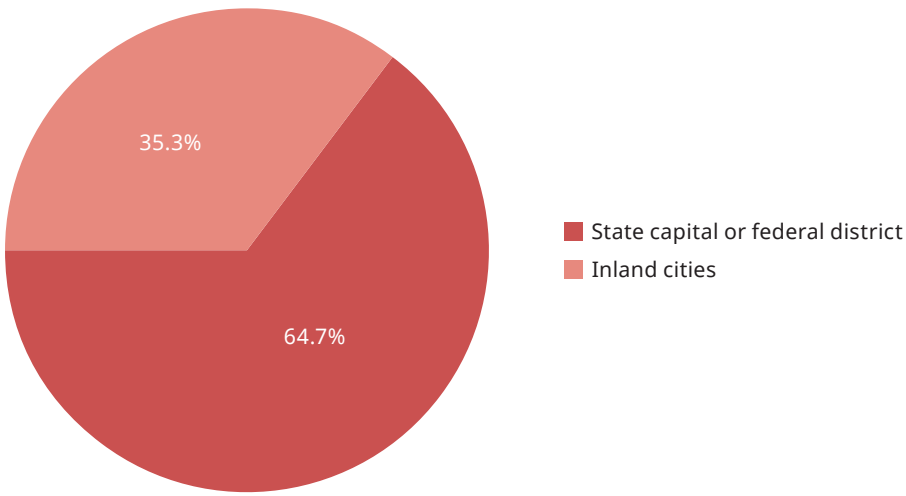
This Census' respondents come from four regions of the federation (Chart 1.3). However, there is a larger concentration of headquarters in the Southeast (47.1%). Next, we see the following descending order: South (22.4%), Northeast (20%), and Central-West (9.4%).

Chart 1.3 – Educational institutions' percentage change by region



The Chart 1.4 outlines the data on the location of the headquarters in capitals or federal district (64.7%) and in inland cities (35.3%).

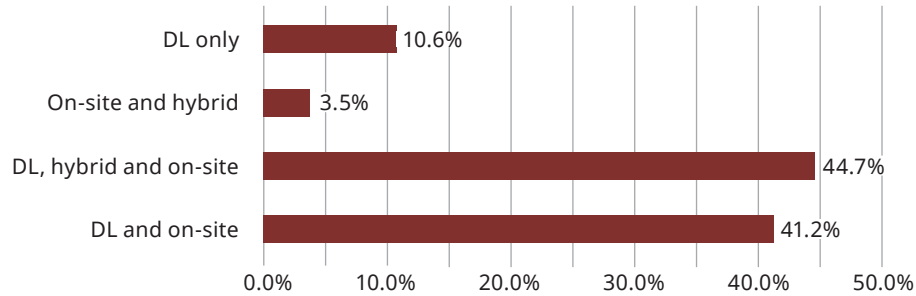
Chart 1.4 – Percentage of headquarters located in state capitals or federal district and inland cities



1.7.4 Modalities offered

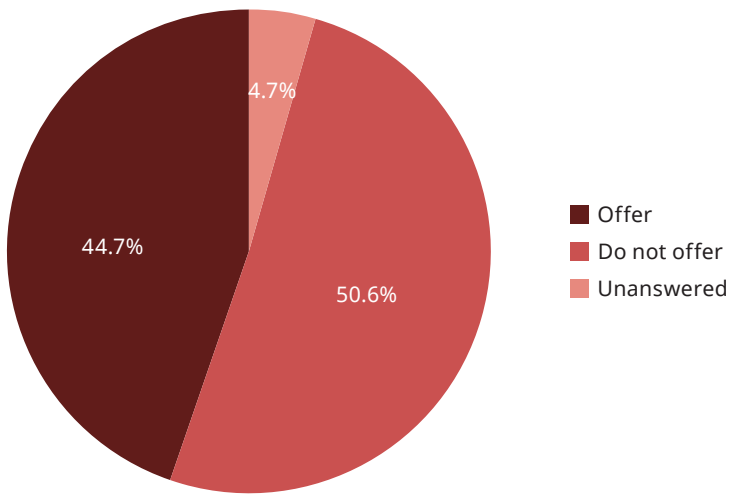
In general, institutions offer more than one modality (Chart 1.5). The combination of DL, hybrid and on-site courses is the most frequent, with 44.7%, followed-up by the blend of DL and on-site courses, with 41.2%. We observed that 10.6% of the institutions only offer DL courses, and 3.5% only offer on-site or hybrid courses.

Chart 1.5 – Modalities offered by respondent institutions



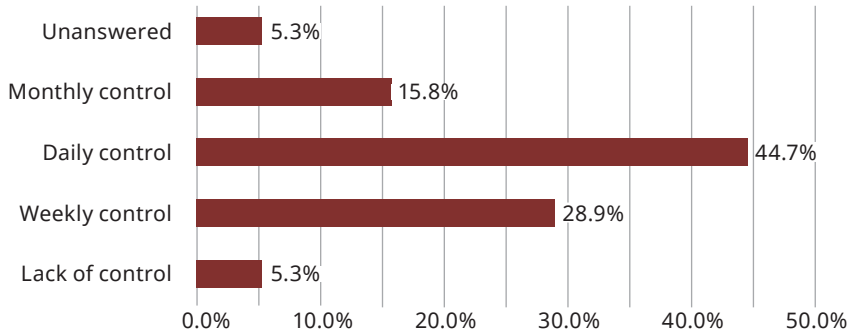
The new regulation of DL in the country, through Decree No. 9,057/2017, among other determinations, allows higher education institutions to expand the offer of DL undergraduate and graduate. This legislation also enables institutions to exclusively offer DL courses without the simultaneous offer of on-site classes, as was determined by the previous rule. As shown in Chart 1.6, 44.7% of institutions offer accredited full DL courses.

Chart 1.6 – Accredited full distance learning courses offered



Available in the majority of DL courses, the virtual learning environment (VLE) is an essential tool for promoting student access control. It was found, as shown in Chart 1.7, that the control of students' access in the VLE is divided, among institutions, as follows: daily control (44.7%), weekly control (28.9%), monthly control (15.8%), and lack of control (5.3%); 5.3% of the respondents did not answer the question.

Chart 1.7 – Control of students' access to the virtual platform in distance learning modality

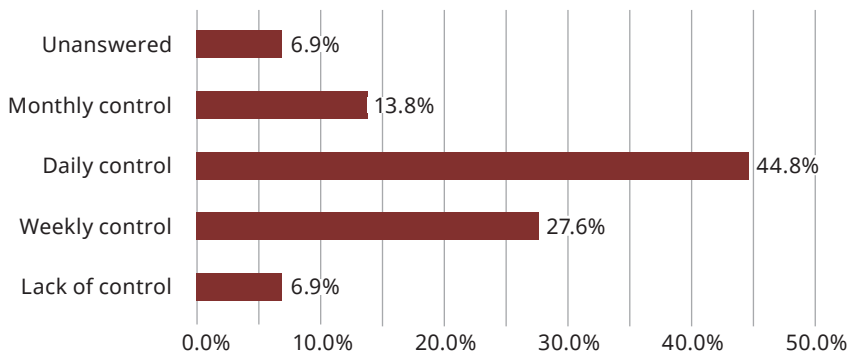


Hybrid teaching has significantly expanded the teaching-learning process. The Brazilian Ministry of Education issued Ordinance No. 343/2020, in which it determined the suspension of on-site classes at all educational levels. Subsequently, through Ordinance No. 345/2020, the department instituted technology-mediated learning, allowing the development of theoretical subjects through virtual classes.

The teaching modality mediated by information and communication technologies (ICT) was praised by means of repairing the impacts of the pandemic in the school semester. Ordinance no. 544/2020 covers the replacement of on-site classes to those in digital media while the COVID-19 pandemic lasts. The publication also revokes Ordinance No. 343/2020, Ordinance No. 345/2020, and Ordinance No. 473/2020.

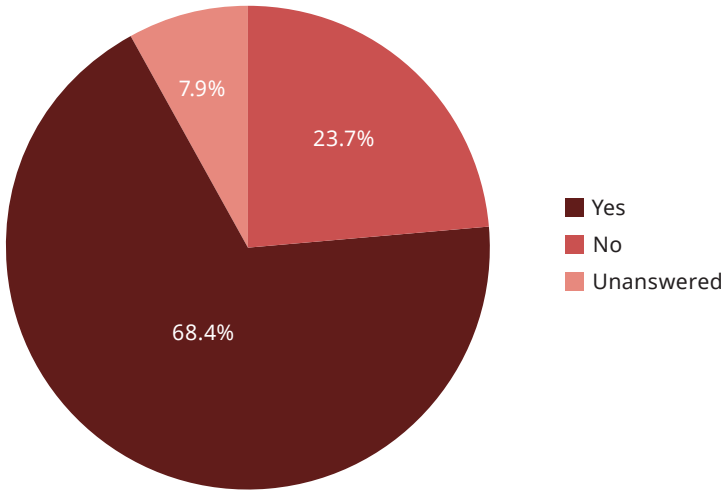
Chart 1.8 shows the numbers associated with control of students' access to the virtual platform in the hybrid modality, with the following values: daily control (44.8%), weekly control (27.6%), monthly control (13.8%), and lack of control (6.9%); 6.9% did not respond either.

Chart 1.8 – Control of students' access to the virtual platform in hybrid modality



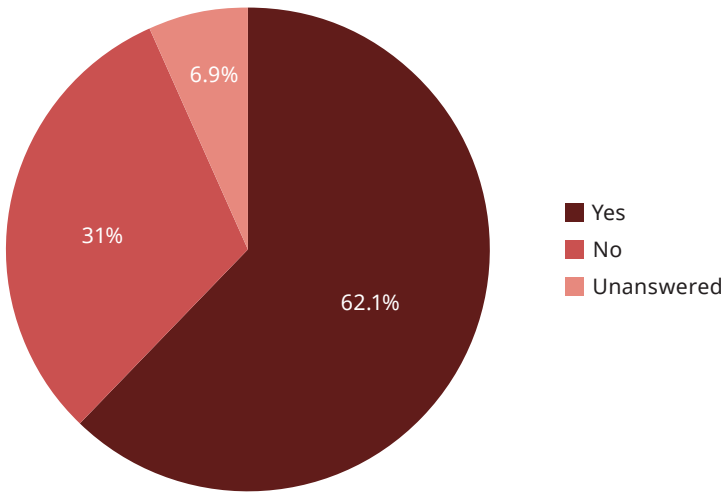
Referring to a responsible area for analyzing data and learning outcomes, institutions that offer DL courses answered: 68.4% have such a department, 23.7% do not, and 7.9% did not reply to the question.

Chart 1.9 – Existence of an area for data and learning outcomes analysis



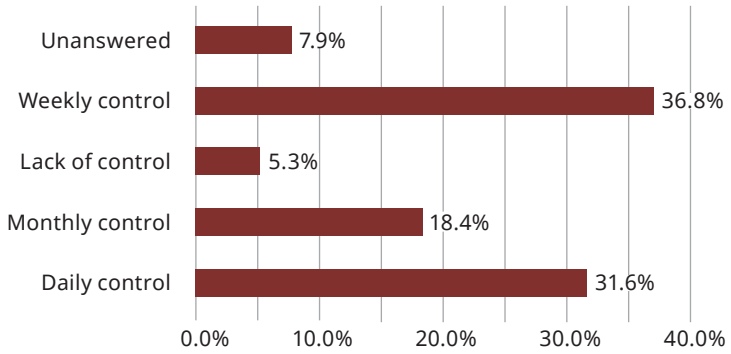
For institutions that offer hybrid courses, the percentages are as follows: 62.1% have a data analysis and learning outcomes department, 31% do not, and 6.9% did not respond.

Chart 1.10 – Existence of an area for data and learning outcomes analysis in hybrid modality



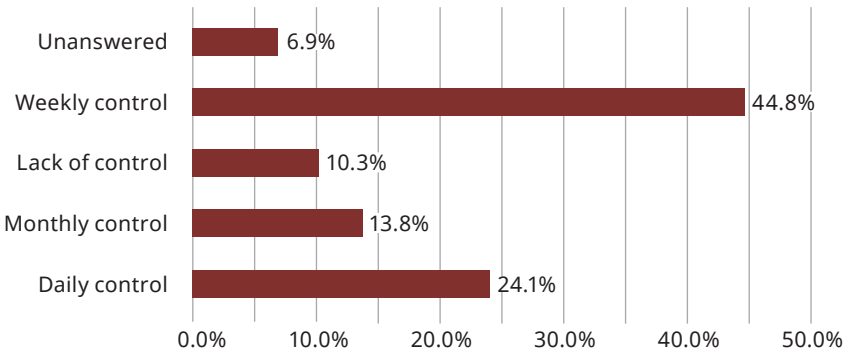
VLEs provide several educational resources in their databases for storing students' interaction and academic performance. In institutions that offer courses exclusively in DL modality, the results found were (Chart 1.11): monitored weekly (36.8%); daily (31.6%); monthly (18.4%); it is not monitored (5.3%); 7.9% did not answer the question.

Chart 1.11 – Monitoring students academic performance in distance learning modality



In 2020, the COVID-19 pandemic and its consequences for public healthcare, such as the need for social distancing, meant that teachers and students were forced to use technological resources to continue the teaching-learning process. Thus, institutions have adapted to offer courses remotely. In this context of hybrid education, the following results were obtained: monitored weekly (44.8%); daily (24.1%); monthly (13.8%); it is not monitored (10.3%); 6.9% did not respond.

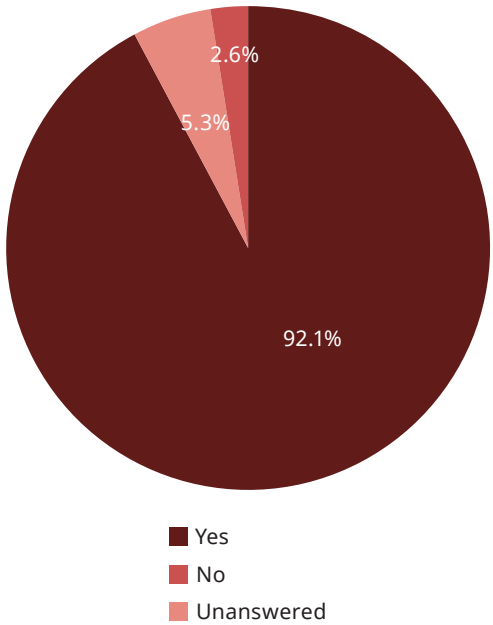
Chart 1.12 – Monitoring students academic performance in hybrid modality



According to Mory (2004)[1], feedback can be described as any procedure or communication performed to inform the learners about the accuracy of their response, usually related to an instructional question. It can also allow the learner to compare their current performance to the standard or expected. In computer-assisted instruction, feedback is information presented to the learner shortly after any input to shape their perceptions. Regarding this aspect, the following values were observed, shown in Chart 1.13: 92.1% of the institutions offer feedback on the results obtained in learning, 5.3% do not, and 2.6% did not answer the question.

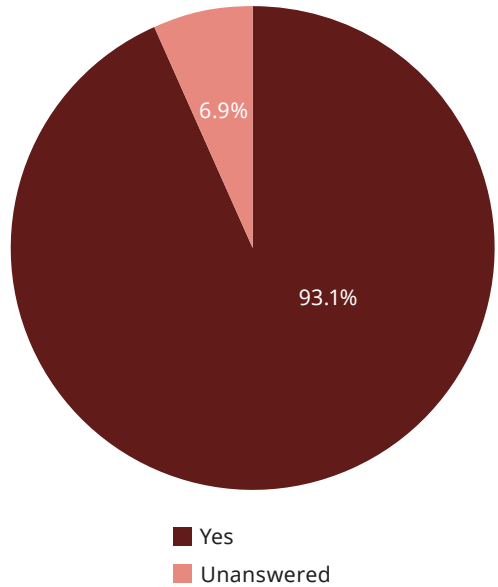
1 MORY, E. H. Feedback Research Review. In: JONASSEM, D. (Comp.). **Handbook of Research on Educational Communications and Technology**. Mahwah: Lawrence Erlbaum, 2004. p. 745-783.

Chart 1.13 – Feedback on distance learning results offered



In Chart 1.14, it is possible to verify that, in hybrid learning, 93.1% of the institutions offer feedback on the results obtained in learning, and 6.9% did not respond. The information provided in the feedback interacts with prior knowledge, promoting learning (Ausubel, 1968[2]; Bruner, 1990[3]). Through it, teachers understand how they should behave, interact, say, reason, and do something in each environment to achieve the proposed objectives.

Chart 1.14 – Feedback on hybrid learning results offered



Understanding the data generated by the VLE is essential to identify the students' profiles. On this point, student academic performance data are compared by profile or clusters for accredited full DL courses in 47.4% of institutions and are not in 44.7%; 7.9% did not answer the question.

2 AUSUBEL, D. P. **Educational Psychology**: a Cognitive View. New York: Rinehart & Wilson, 1968.

3 BRUNER, J. **Acts of Meaning**. Cambridge: Harvard University Press, 1990.

Chart 1.15 – Are student academic performance data in distance learning modality compared using cluster analysis?

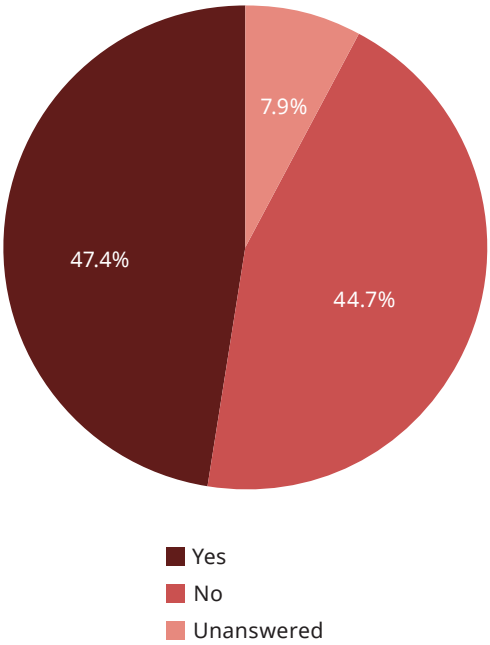


Chart 1.16 – Are student academic performance data in hybrid modality compared using cluster analysis?

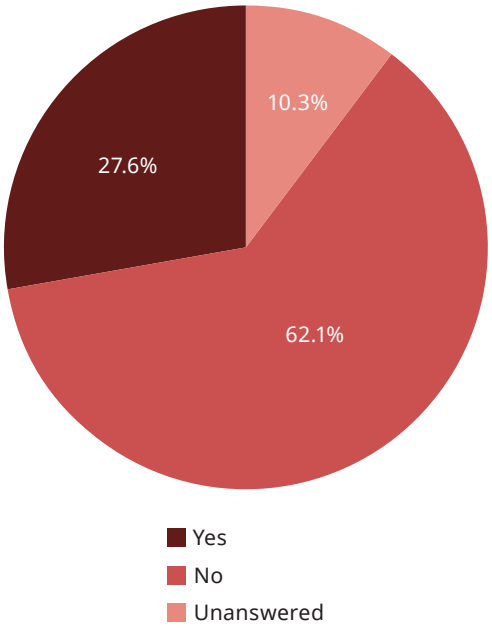
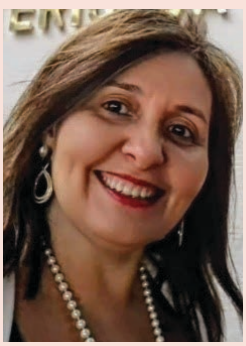
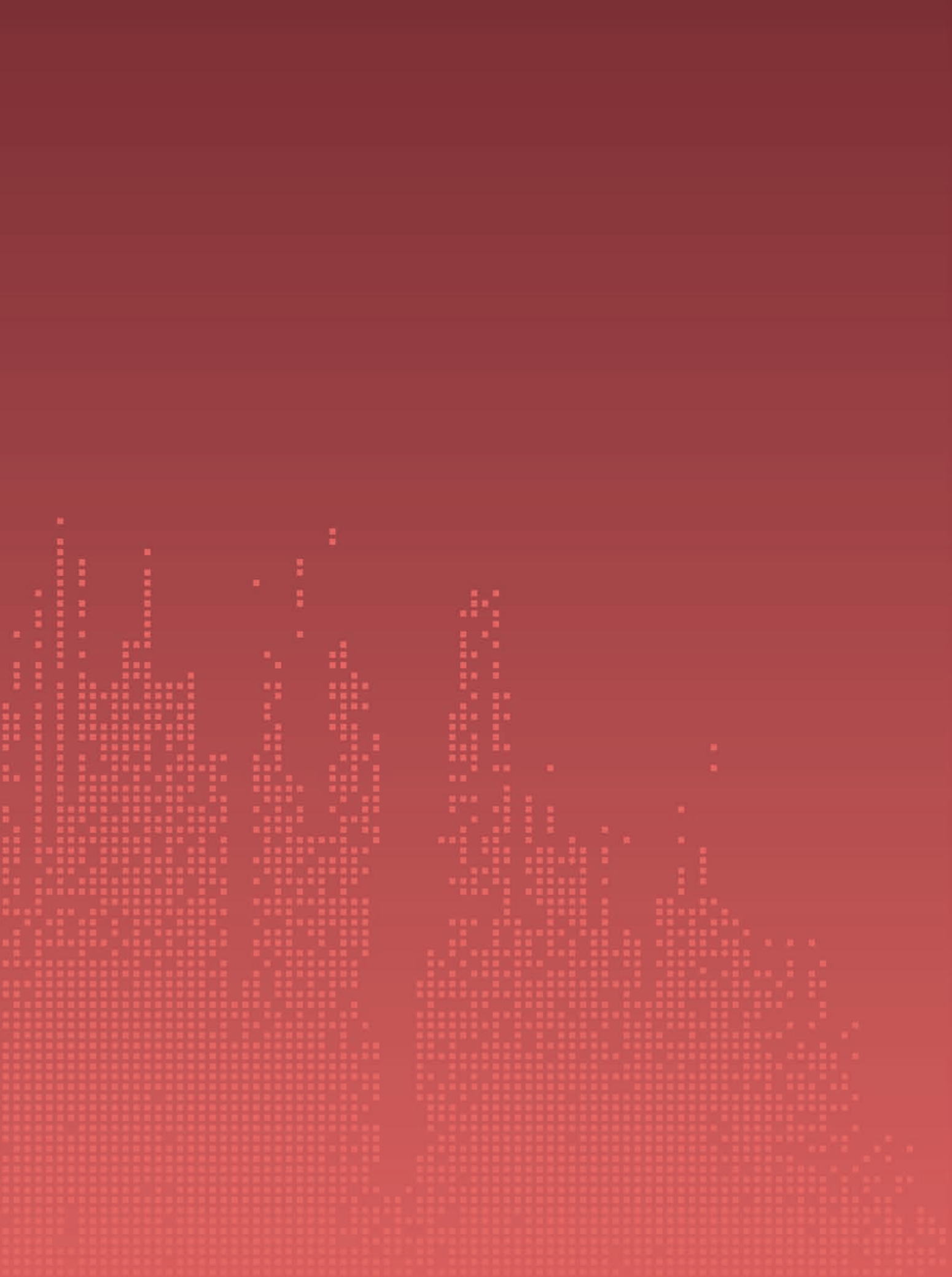


Chart 1.16 extends the analysis to the hybrid modality, indicating that the comparison occurs in 27.6% of the institutions and does not occur in 62.1%; 10.3% did not respond.

About the author

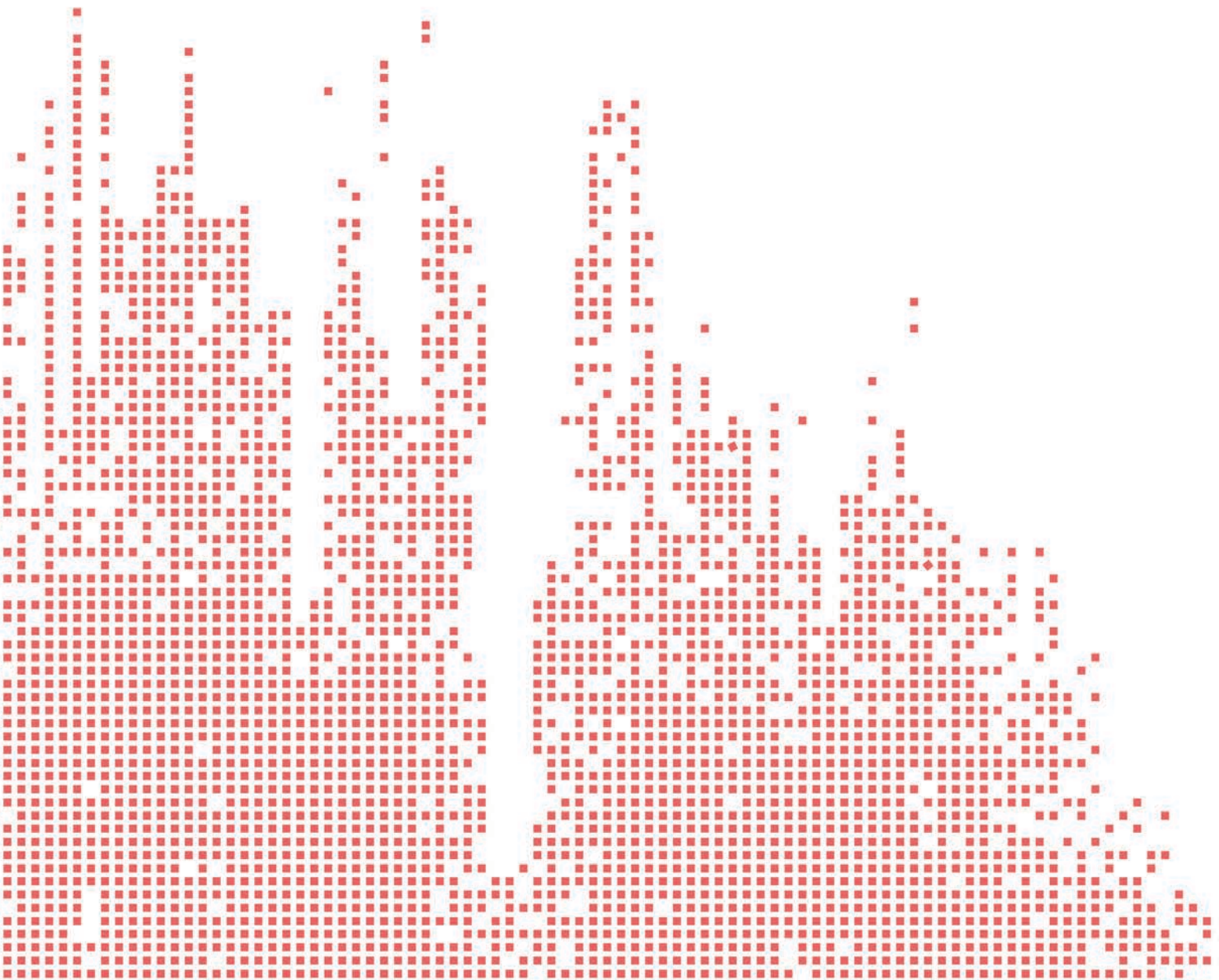


Márcia Aparecida Figueiredo holds a master's degree in Fundamental Nursing from the University of São Paulo (USP), with the thesis *Distance Learning in Health Information: Teaching EPI Info*; a specialist degree in Information System from the University of Franca (Unifran), and a specialist degree in Planning, Implementation and Management of Distance Learning from the Fluminense Federal University (UFF). She attended the Executive MBA in Project Management at Barão de Mauá University Center in Ribeirão Preto; and a bachelor's degree in Pedagogy and in Mathematics. In addition, she is a supervisor at the Secretariat for Regulation and Supervision of Higher Education (Seres/MEC), a DL consultant, and a member of the Ribeirão-Pretana Academy of Education (ARE). She participates in several national and international congresses, presenting works in the areas of educational technology and DL.



Part 2

Distance learning extent in the first year of the pandemic

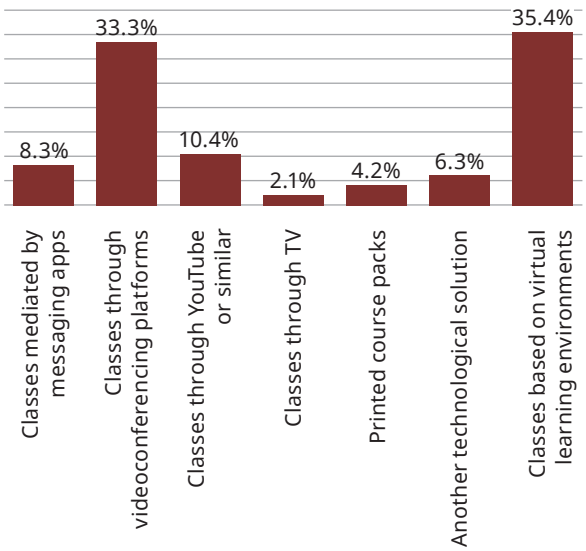


José Augusto de Melo Neto

The public health crisis triggered by the COVID-19 pandemic still has consequences for the whole society. In the overwhelmingly impacted educational sector, the elaboration of an analytical report such as the Brazilian Census for Distance Learning is essential for the qualitative evaluation of distance learning (DL) numbers, revealing social consequences that cannot be disregarded in the contextual analysis.

In this scenario, one of the first diagnoses highlighted is directly connected with the main technological solutions adopted by the respondent institutions to maintain the classes during the pandemic after the suspension of on-site teaching.

Chart 2.1 – Technological solutions for continuity of classes during the pandemic

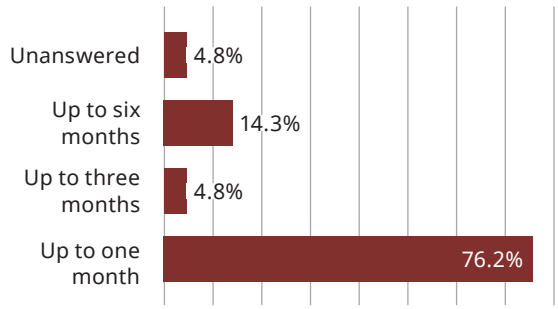


As shown in Chart 2.1, the culture established in classic DL, based on virtual learning environments (VLE) such as Moodle, initially appeared as the main alternative in 35.4% of cases. However, the data indicate a proximity to the trend that was consolidated with the extension of social urgency: classes through videoconferencing platforms.

This can be seen with the growing use of videoconferencing services – such as Zoom, Google Meet, and Microsoft Teams – in education, at all levels and modalities, as of the second quarter of 2020. This trend is being followed up for classes on video-sharing platforms such as YouTube, and for the complementary use of instant messaging applications, for example, Telegram and WhatsApp, as service alternatives.

The answers obtained in the survey also revealed that the migration from on-site to remote classes was relatively fast, with 76.2% of institutions adapting to the change in the first 30 days, according to Chart 2.2.

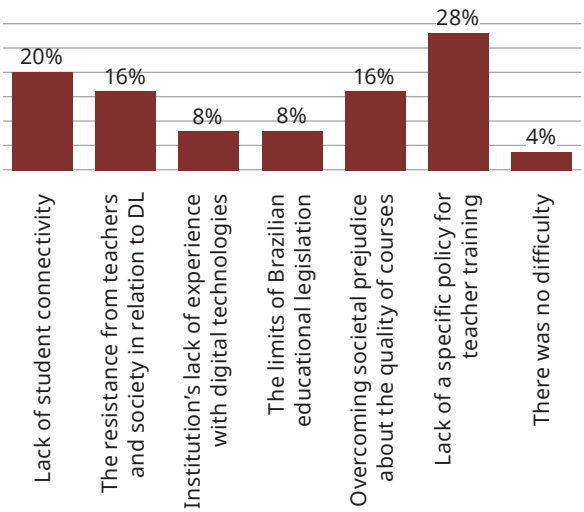
Chart 2.2 – Migration time from on-site to remote classes



To broaden the debate, it may be questioned whether this agility in the response reflects only the technological aspects. Among the consequences of the disruption was the methodological difficulty, whose dimension cannot be disregarded, whereas the technical environment quickly presented itself as an alternative to enable the continuity of classes.

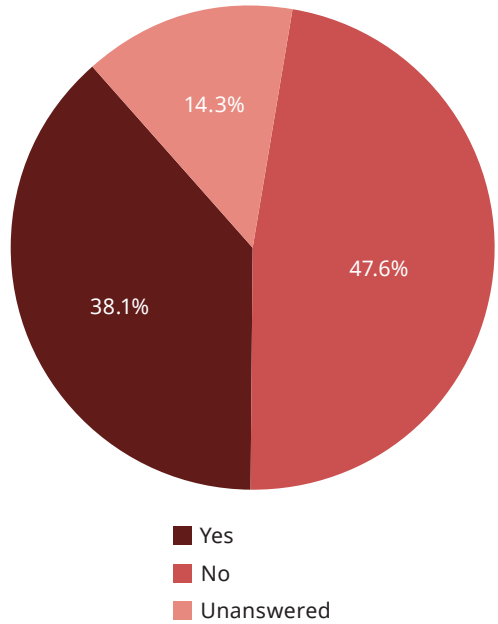
One way of understanding this complexity lies in the analysis of obstacles to expanding the offer, which highlighted the lack of a specific policy for teacher training. In addition, the lack of student connectivity is representative and cannot be ignored, as well as resistance from teachers and society in relation to DL and the limits of the institutions' digital competencies and skills.

Chart 2.3 – The biggest difficulties in expanding the offer of distance learning during the pandemic



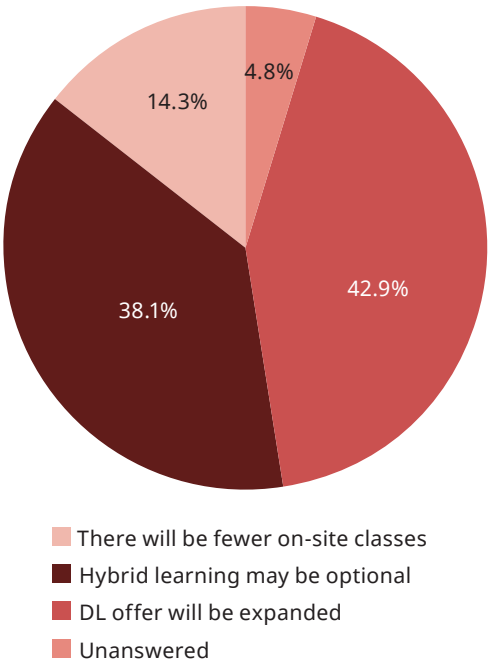
On this basis, it can be said, through the analysis of the social situation, that the pandemic has brought indications of a change in education, which must include teacher training, methodological review, and updating of technological resources, among other steps. In DL, it is noteworthy that 38.1% of institutions have already indicated the beginning of this process, as shown in Chart 2.4.

Chart 2.4 – Answers to the question about transformations in distance learning during the pandemic



The process of change itself anticipates trends and is related to the future of education. In this regard, Chart 2.5 shows that 42.9% of the institutions consulted believe that the offer of DL will be expanded, while 38.1% see the possibility of growth in the option for hybrid learning.

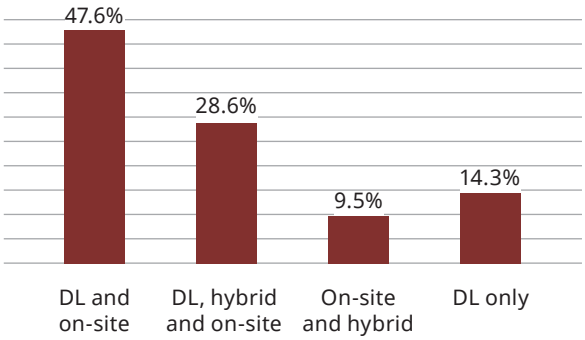
Chart 2.5 – Visions on the future of post-pandemic education



Hybrid learning has been reconfiguring by education systems, presenting itself as the predominant solution for the staggered return of post-pandemic students through the mix between on-site and remote classes. This methodology's use must increasingly intensify in educational institutions, with the integrated planning of activities and the challenge of overcoming the limits of connectivity in Brazil.

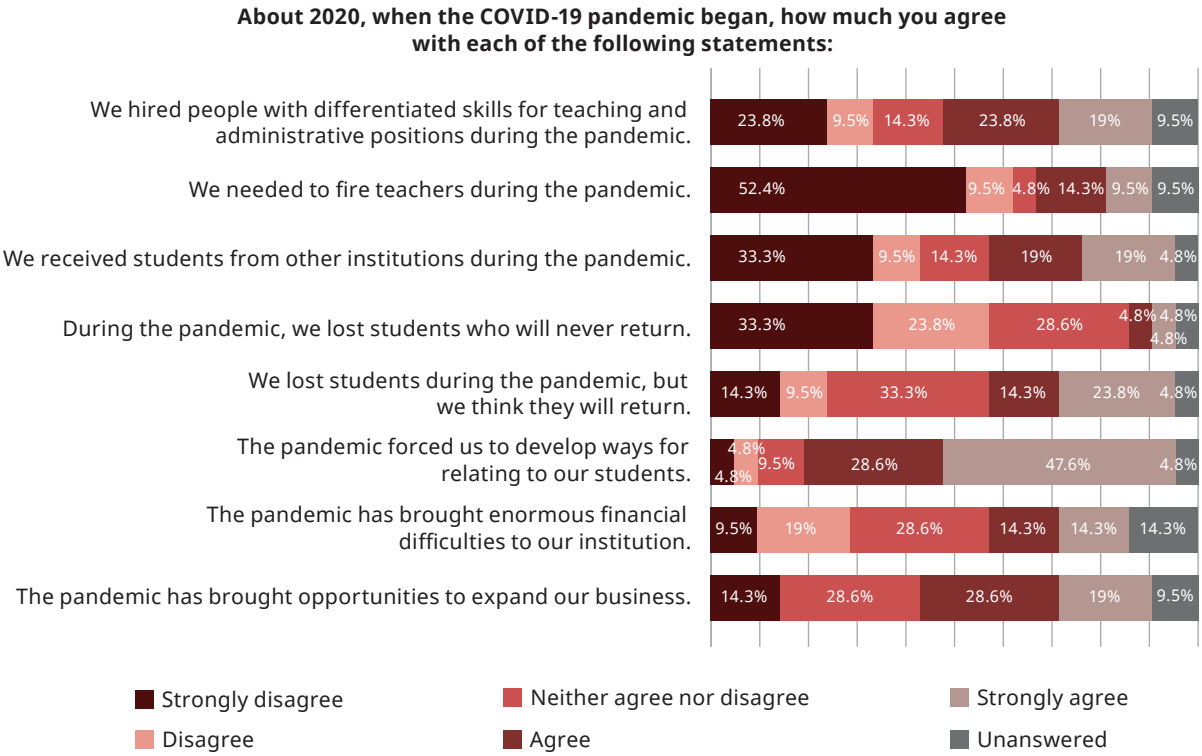
Chart 2.6 shows that the data provided by the institutions participating in this Census confirm this trend of expanding the offer of DL and hybrid learning in relation to the modalities offered.

Chart 2.6 – Modalities offered by respondent institutions



Another relevant aspect, in the view of the institution's managers, corresponds to how the health crisis demanded new forms of relationship with students. In this context, on the one hand, opportunities arose, but on the other hand, financial difficulties had to be overcome, as shown in Chart 2.7.

Chart 2.7 – Financial impacts of the pandemic



In addition, even considering the Brazilian economic and demographic concentration, the profile of the institutions that responded to this survey was not able to include all regions. In Chart 2.8, it is noted that 71.5% of the responding institutions are headquartered in the South and Southeast of the country, while the North had no representatives. Another piece of information to be considered in the analysis, represented in Chart 2.9, is the majority participation of institutions headquartered in state capitals compared to the ones located in inland cities. This can generate a partial result when reproducing standard models in different contexts.

Chart 2.8 – Distribution of respondent institutions by region

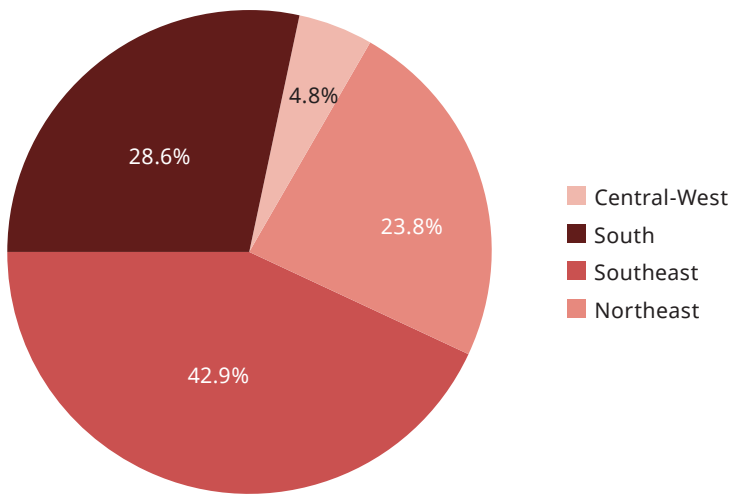
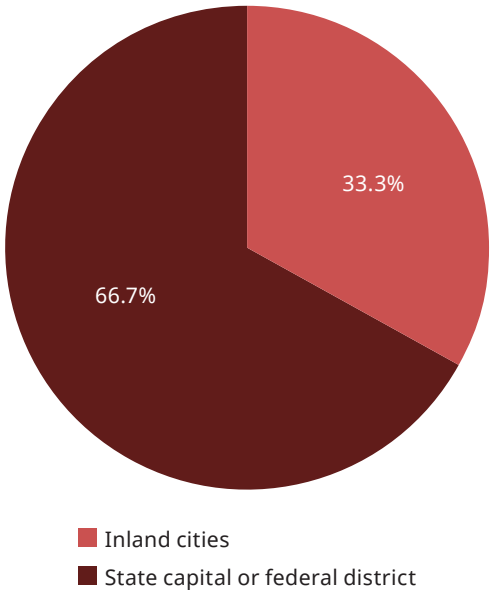


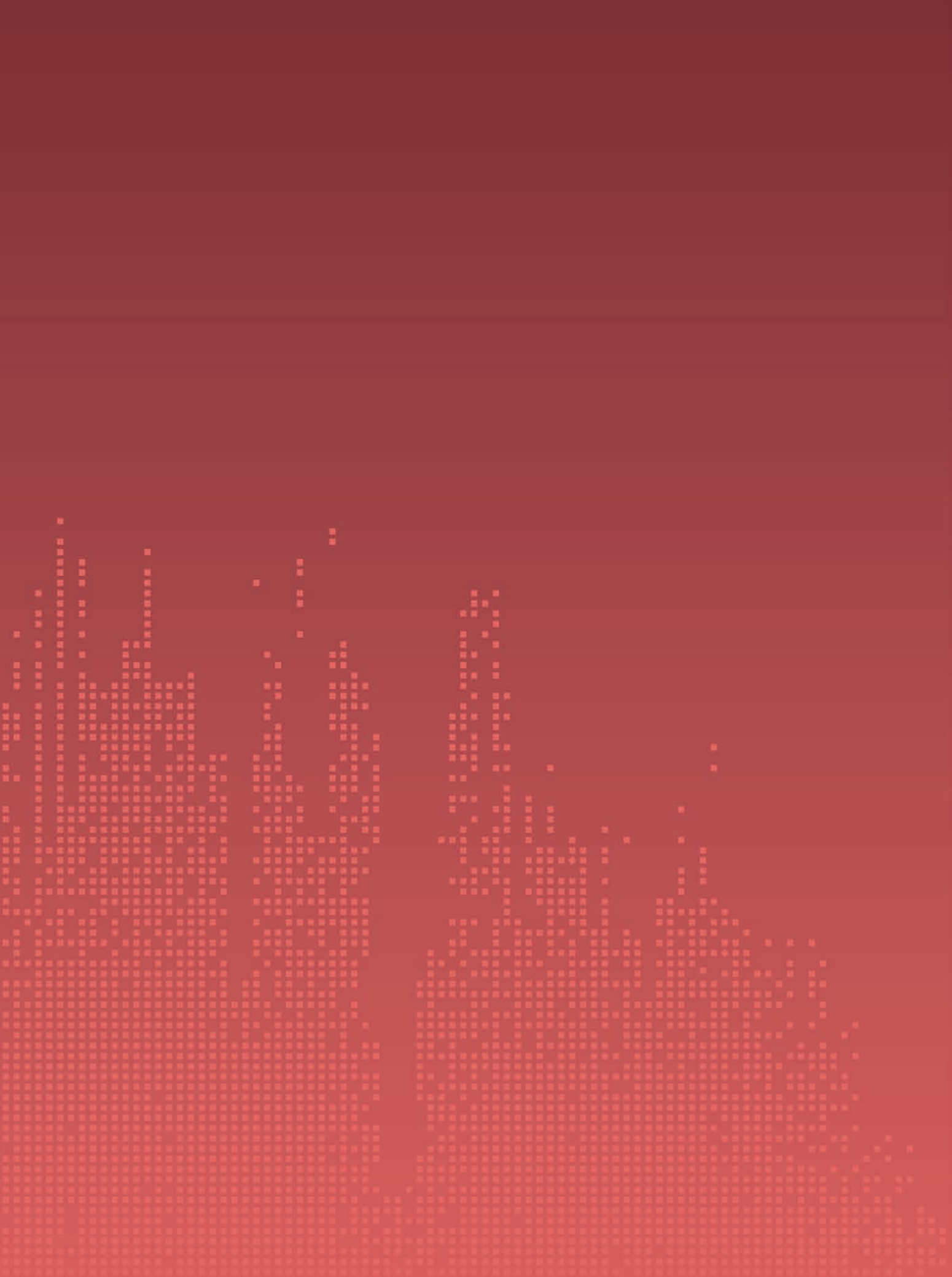
Chart 2.9 – Characteristics of the city where the institution is headquartered



Finally, the importance of holding another edition of the Brazilian Census for Distance Learning is reiterated, which fulfills its role in describing and critically analyzing data on DL in Brazil. In an atypical year, this challenge was magnified due to the impact of an unprecedented social crisis. This event significantly transformed all educational systems around the world. Thus, the analysis of this document – which contemplates the trends in the field of education, the reconfiguration of assistance in DL, and the re-signification of the roles of educational agents – may serve to confirm or deconstruct preexisting concepts. In this way, we are moving towards a latent future in our daily lives, and education expands its social responsibility.

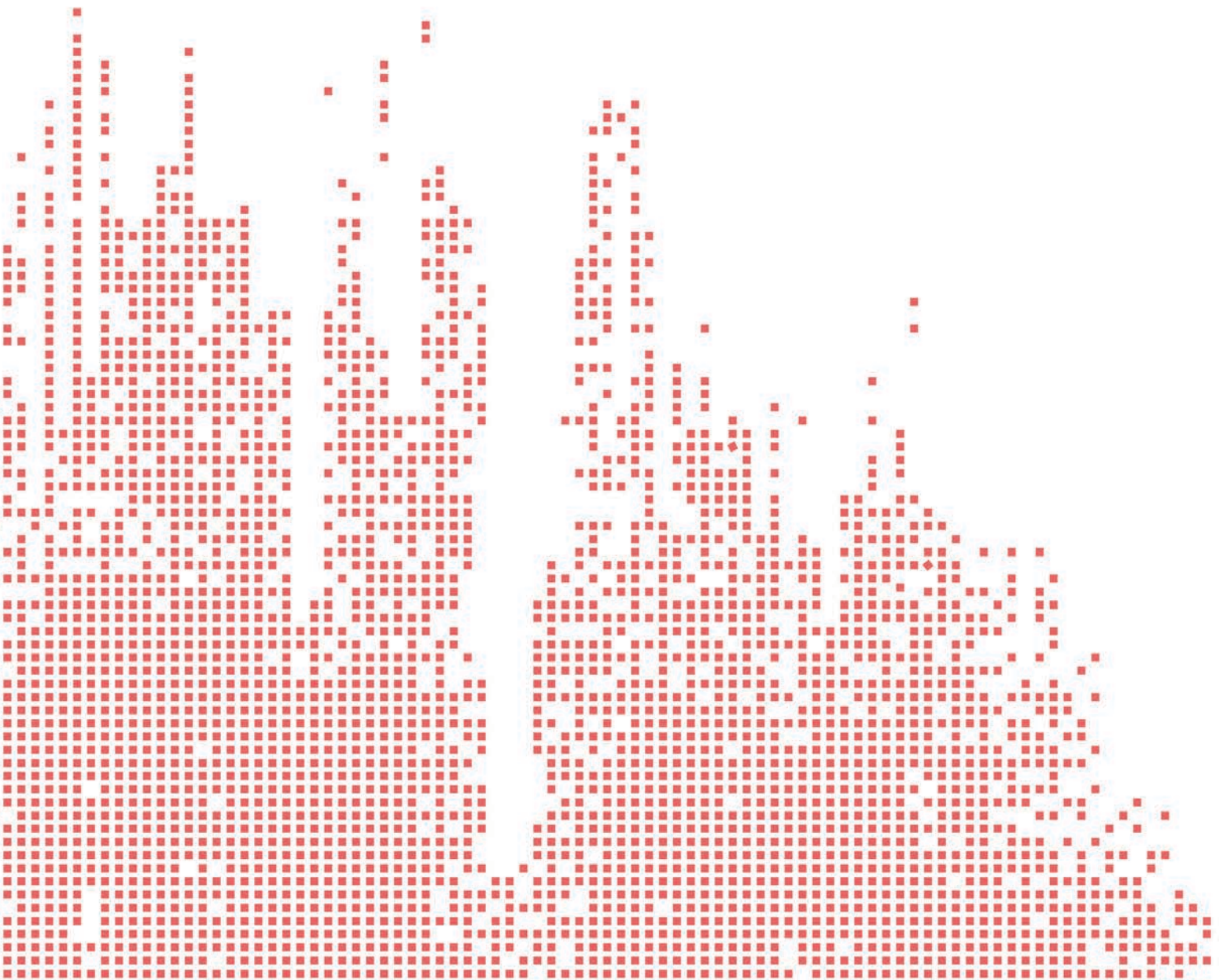
About the author

José Augusto de Melo Neto holds a PhD in Education, Public Policy, and Regional Development from the Federal University of Amazonas (UFAM) and a specialist degree in Project Management and Educational Technology. He is currently the CEO of the Amazonas Technological Education Center (CETAM).



Part 3

On-site support hubs



Roberto Michelan

The data collected on the 2020 Brazilian Census for Distance Learning once again provides a reliable portrait of institutions during the year of the COVID-19 pandemic. It was evident that the institutions were focused on working to overcome their difficulties, so there was a significant decrease in the number of respondents in this edition.

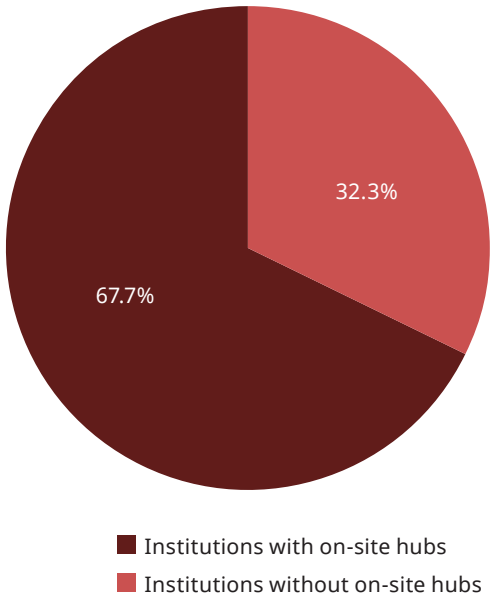
In this setting, the on-site support hubs temporarily lost their representativeness, given the necessary concessions made by the Ministry of Education (MEC) ordinances, which reduced the requirements of on-site courses in general. In this way, the historical line of the Census is also marked by this very peculiar moment in education. In future editions, this will allow a new vision about the importance of the hubs, given the boost caused in distance learning (DL) by the conditions of study during the pandemic.

Thereby, this study will analyze the percentage in comparison with the previous Census. In this edition, it is important to look back at the number of hubs closed in 2020. The atypical conditions boosted closures, which showed higher numbers compared to previous years, with an important detail: of the overall amount closed, approximately 99% belonged to private institutions. This movement demonstrates side effects of the flexibilities allowed by the MEC and, eventually, is the result of the business model in which the hub is – in many cases, based in small schools that also closed their doors in the last year.

3.1 Institutions with or without on-site support hubs

Regarding the existence of hubs, a natural movement can be seen accompanying the growth of DL in general, so that the year 2020 brought the recovery of the percentage of institutions with hubs (67.7% of respondents), practically returning to the same level of 2018, which was 70%, and surpassing the 61.8% of 2019 (Chart 3.1).

Chart 3.1 – Institutions with or without on-site support hubs

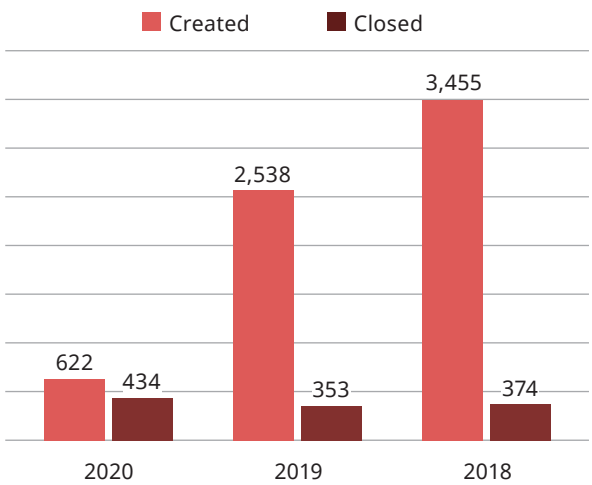


3.2 Hubs creation analysis

The creation of hubs, in this edition, was completely out of the loop, given the exceptional national scenario. In 2019 (11,008), 2018 (10,317) and 2017 (11,108) Censi, there was a small variation in the total number of hubs, with a recovery trend. However, in the 2020 data, it is interesting to evaluate the percentage in relation to the number of hubs created and closed.

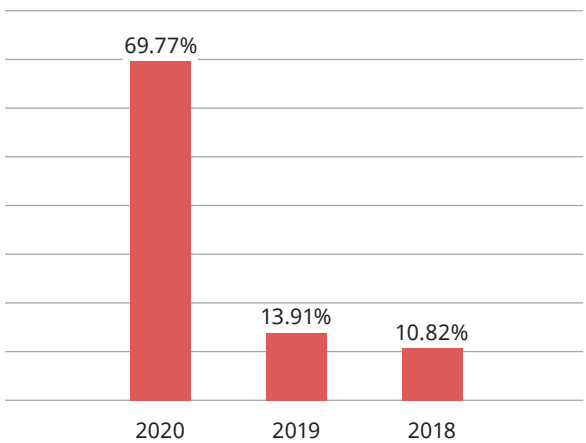
As mentioned, looking at the number of hubs closed in 2020, especially private institutions (for-profit or non-profit), is an interesting indicator of the business model used for expansion, which comprises, for the most part, the partnership with schools and/or other entities instead of investing in their hubs. The numbers show that there were 622 hubs opened in 2020, against 2,538 in 2019, and 3,455 in 2018. The closed hubs were 434 in 2020, 353 in 2019, and 374 in 2018 (Chart 3.2).

Chart 3.2 – Hubs created and closed



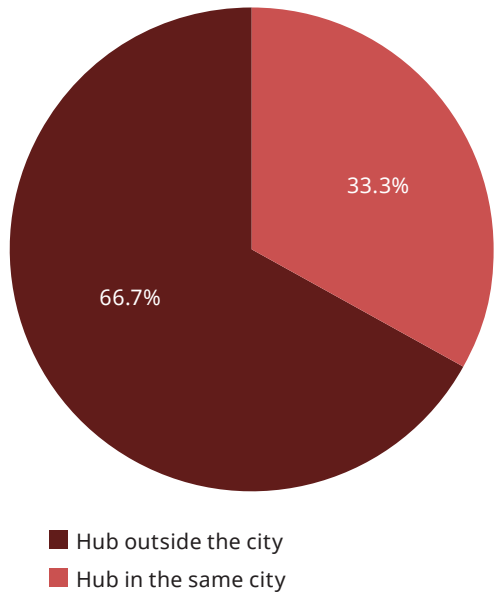
As a percentage, the closing of hubs in 2020 was completely different from previous years. The number of closed hubs in relation to the created ones corresponds to 69.77%. It is noteworthy that, of the closed hubs, approximately 99% belonged to for-profit private institutions (Chart 3.3).

Chart 3.3 – Percentage between hubs closed and created



Another important analysis comprises that the expansion's percentage, considering the hubs created in cities where the institution did not operate, remained practically the same, at around 67%. This indicates that institutions continue to seek new places, given the growth of DL, and that most of the new hubs created are in cities where the institutions did not yet operate (Chart 3.4). Thus, the trend of increasing dispersion of the hubs of institutions in regions where there were already other offers remains and the growth of competition continues.

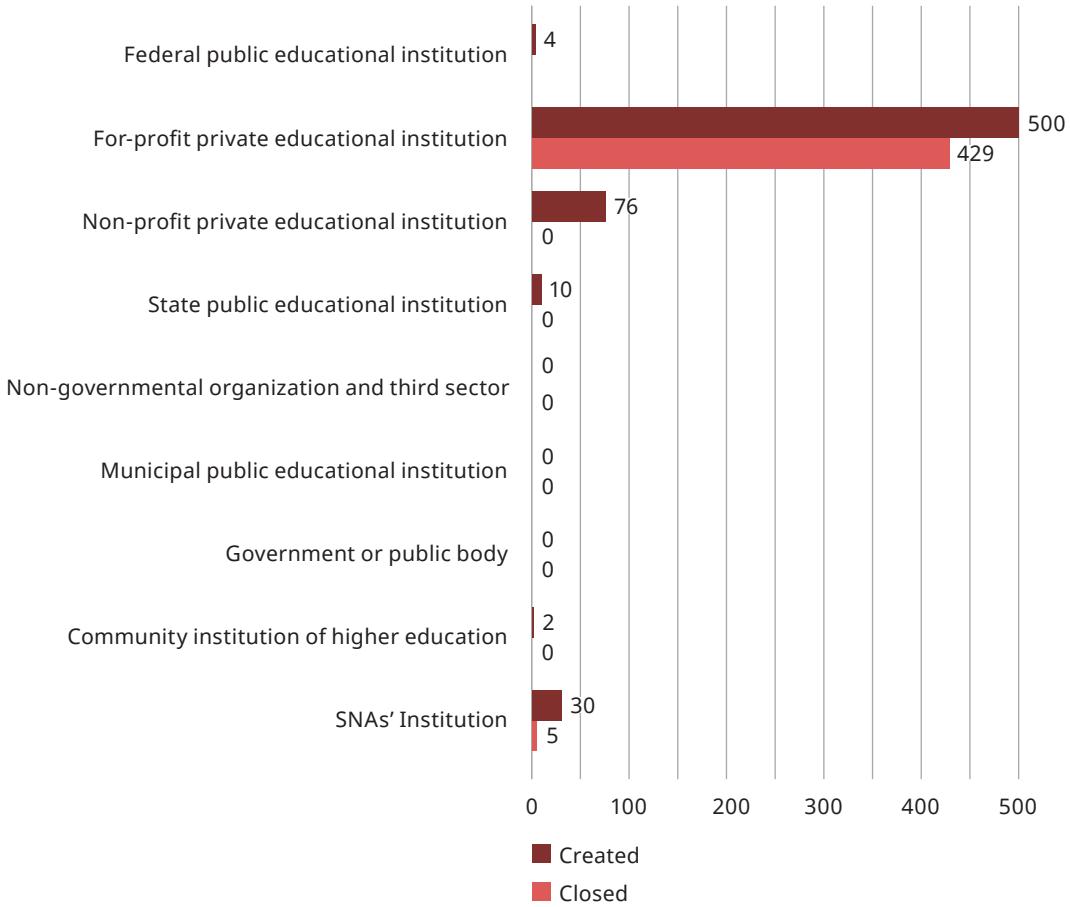
Chart 3.4 – Hubs created outside the cities where the institutions were already operating



3.2.1 Hubs creation by administrative category

In this edition, there is an interruption in the expansion movement of state and federal public institutions that, in 2019, created 242 and 922 hubs respectively and now kept their numbers practically unchanged. Concerning private institutions, what Chart 3.3 exposes is reiterated: they are notoriously the ones that most end activities in hubs in 2020. Even so, for-profit private institutions continue to be the ones that invest the most in the growth of the network of hubs, with 500 new more spaces. As for the non-profits private institutions created 76 hubs. A detailed analysis is expressed by Chart 3.5.

Chart 3.5 – Hubs created and closed by administrative category in 2020

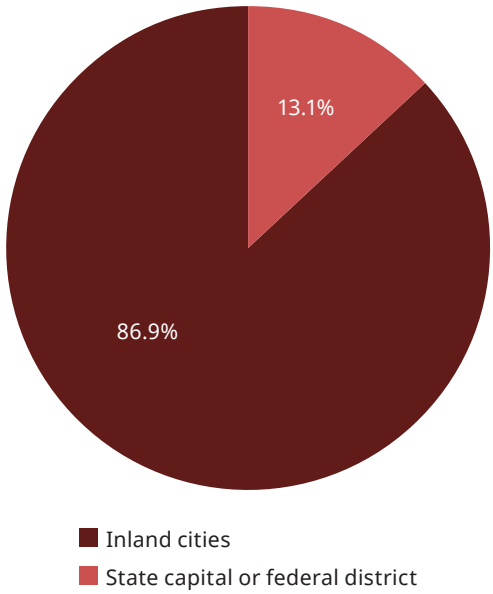


Another analysis concerns the "S System" institutions (Senai, Sesi, Senac, Sesc, Senat, Sebrae, etc.). In 2020, 30 hubs were opened – and 5 closed –, while in 2019 there were only 8.

3.3 Location of hubs

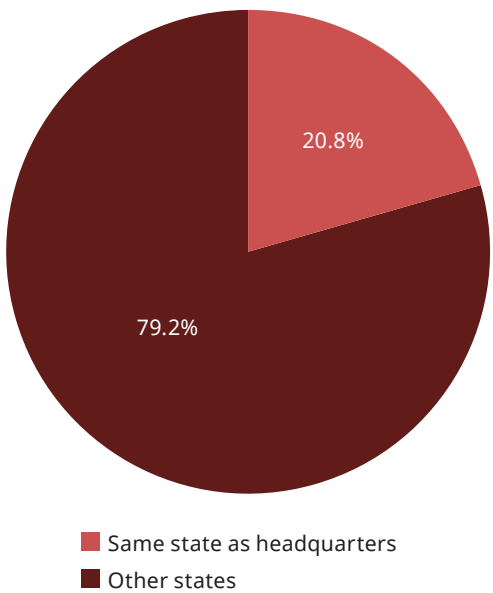
The location of the hubs in relation to state capitals and inland cities remained at the same percentages. In this edition, there are 13.1% of the hubs in state capitals and/or federal districts compared to approximately 15.5% in 2019. The hubs in inland cities summed 86.9% in 2020 and 84.5% in 2019, which may indicate the continuation of the expansion trend towards these municipalities (Chart 3.6).

Chart 3.6 – Location of hubs in state capitals/ Federal District or inland cities



Among the respondents to this edition, the location of the hubs in relation to the institutions' headquarters suffered a contraction: 27.8% of the hubs were in the same state as the headquarters in 2019, against 20.8% in 2020. Thus, it is verified the tendency for institutions to break down geographical barriers and act outside their states continues.

Chart 3.7 – Location of hubs considering the headquarters



3.4 The role of hubs

The hubs' role evaluation in 2020 is hampered relatively by the conditions of the pandemic scenario. Among the answers, there was information about the temporary closure of the hubs, a fact that is public knowledge due to the actions taken by municipalities throughout Brazil. However, the activities carried out in hubs remained practically the same, with the recruitment of new students highlighted as a role of hubs in 60.87% of the institutions in 2020 – in comparison with 43% in 2019, and 45% in 2018. With the absence of on-site activities, the hubs significantly increased their marketing activities.

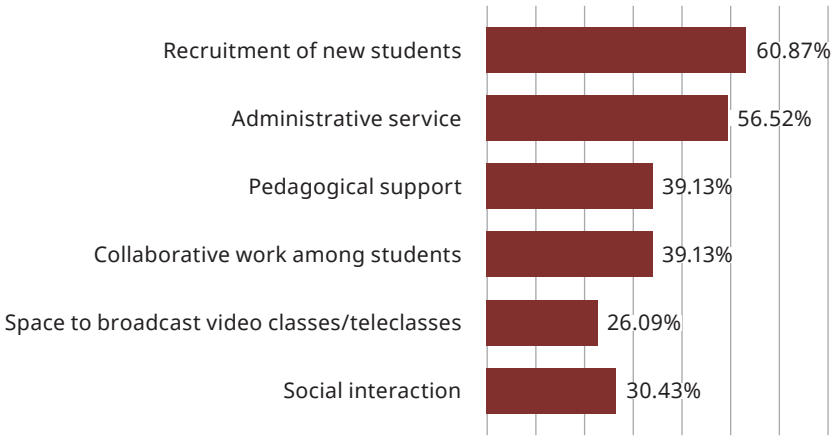
Administrative service continues as one of the main activities, with approximately 57%, the same rate as in 2018 and close to 50% in 2019. Pedagogical support, in its turn, deserves attention, as it reached the mark of 39.13%, maintaining a downward trend compared to 46% in 2019 and 50% in 2018. This may indicate that pedagogical models are changing and reducing the role of the hubs.

Social interaction also recorded a decrease and marked 30.43%, a reduction of approximately 15% compared to 2018 (45%) and 13% to 2019 (43%). Again, course models may have interfered with this function, demanding even less attendance.

Similarly, collaborative working was reduced to 39.13%. Despite the slight difference from 42% in 2019 and 44% in 2018, this downward trend indicates once more that students are less present at hubs. On the other hand, the development and improvement of platforms may have virtualized these activities, which does not necessarily entail a loss of quality.

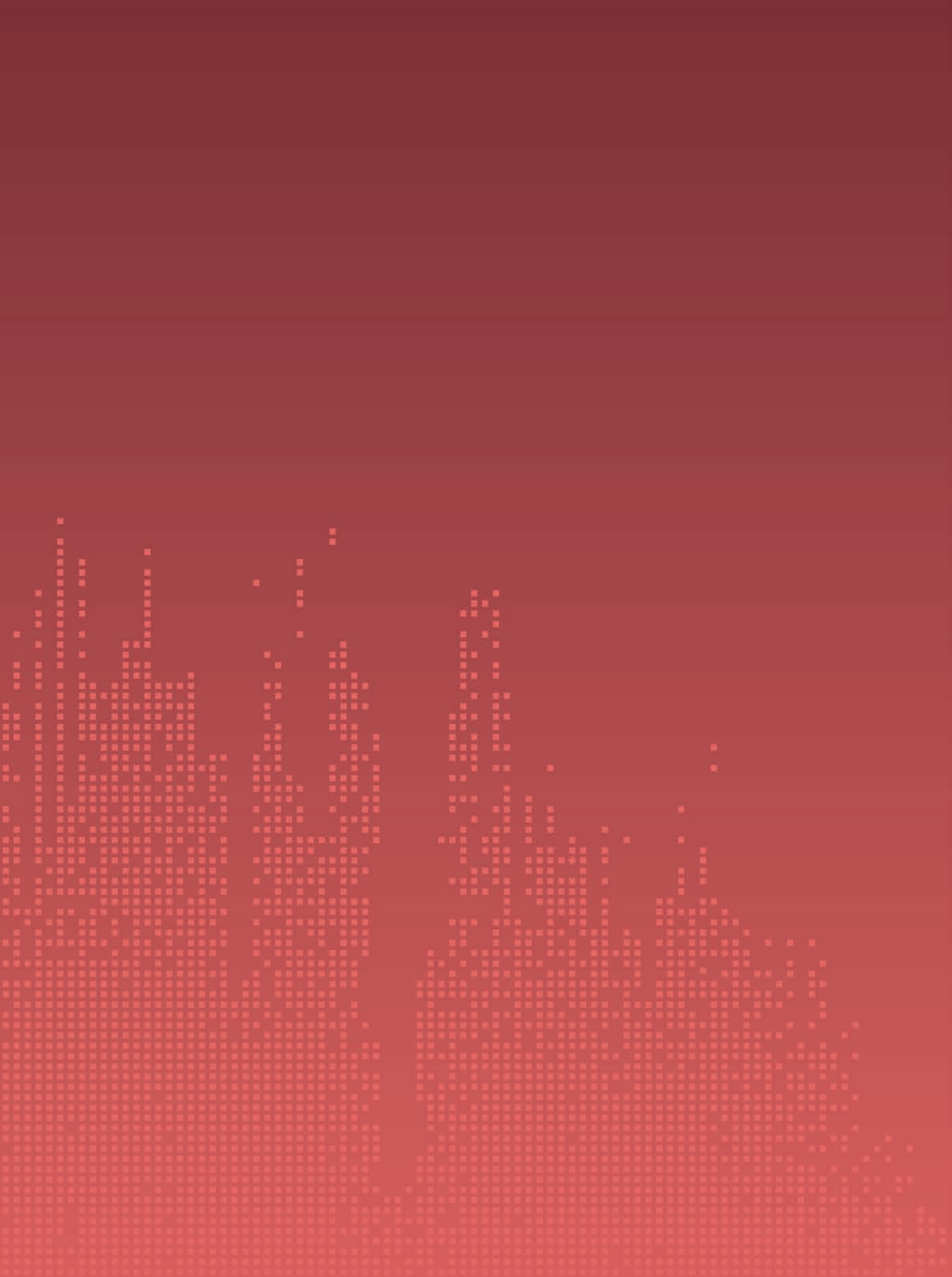
In Chart 3.8, you can see the percentages of each activity.

Chart 3.8 – Activities carried out in hubs



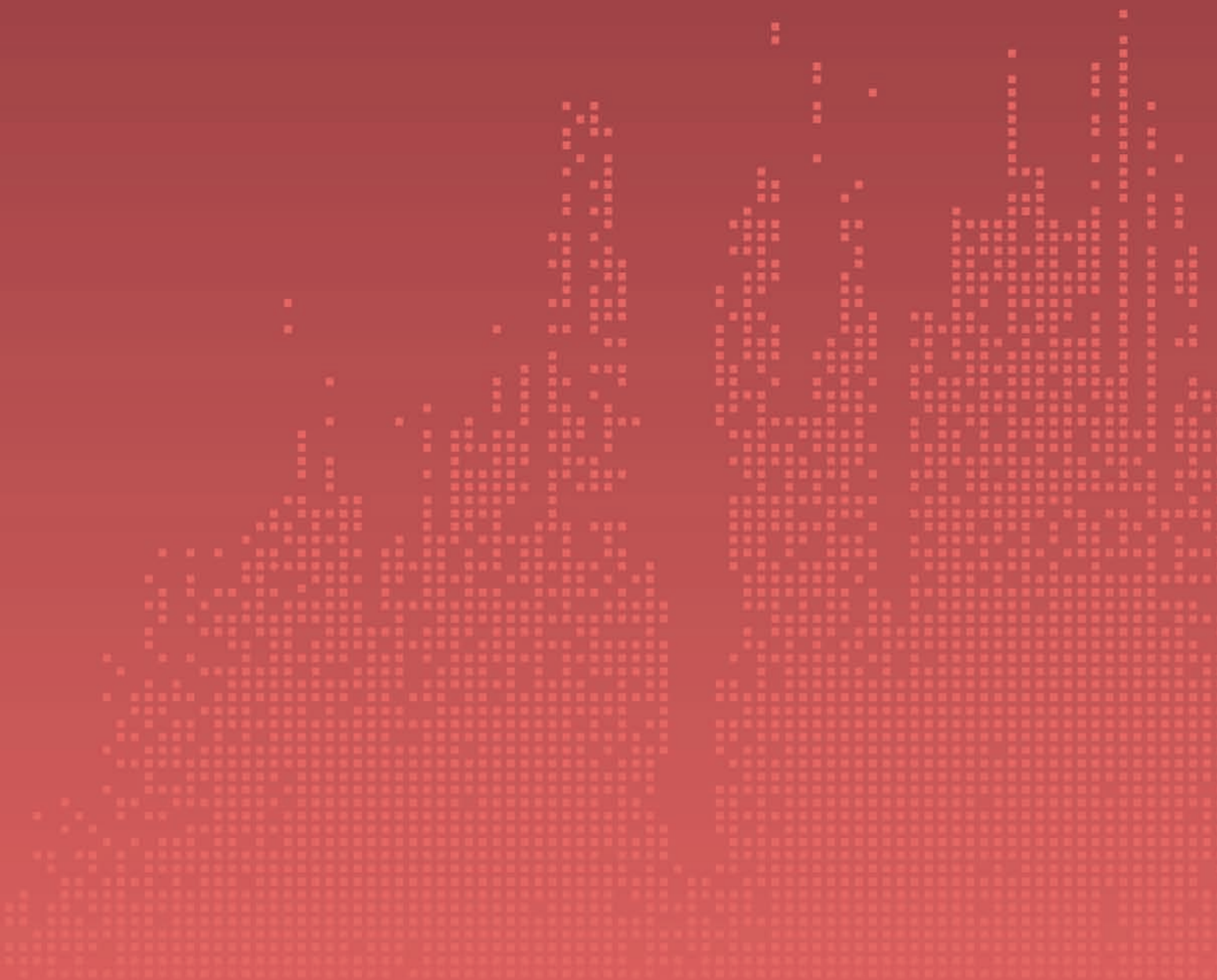
About the author

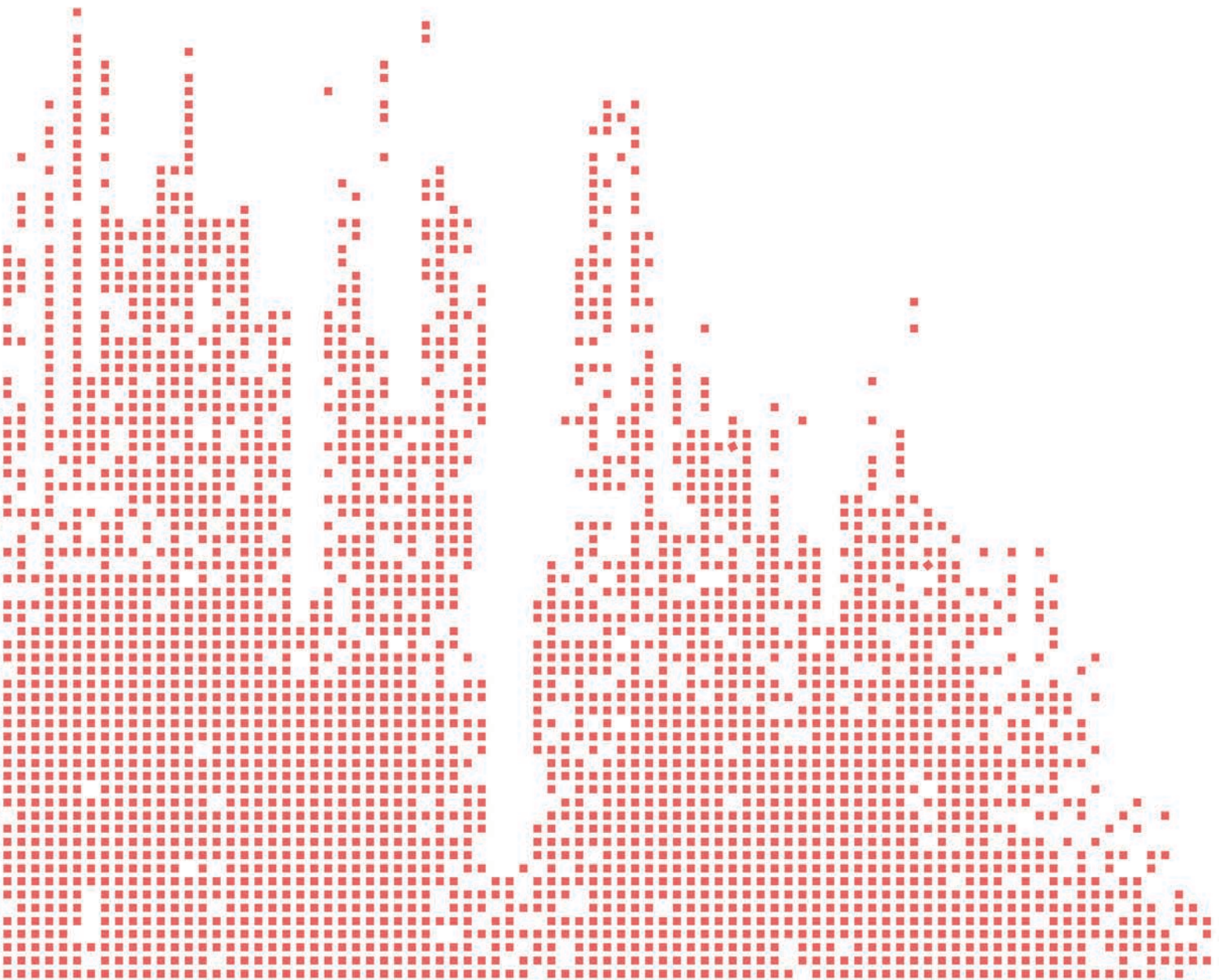
Roberto Michelan holds a bachelor's degree in Computer Science from the State University of Maringá (UEM) and a master's degree in Electrical Engineering from the State University of Campinas (Unicamp) in the area of Artificial Intelligence. He made a career as a professor and as course coordinator and director at private higher education institutions. In 2018, he participated in the 21st Century Educators Extension at the Tampere University of Applied Sciences (TAMK) in Finland, where he studied active methodologies and the Finnish Education System, developing innovative pedagogical practices. He works as a consultant in DL and educational technologies and as head of IT at a private institution in São Paulo.



Part 4

Where is distance learning going to?



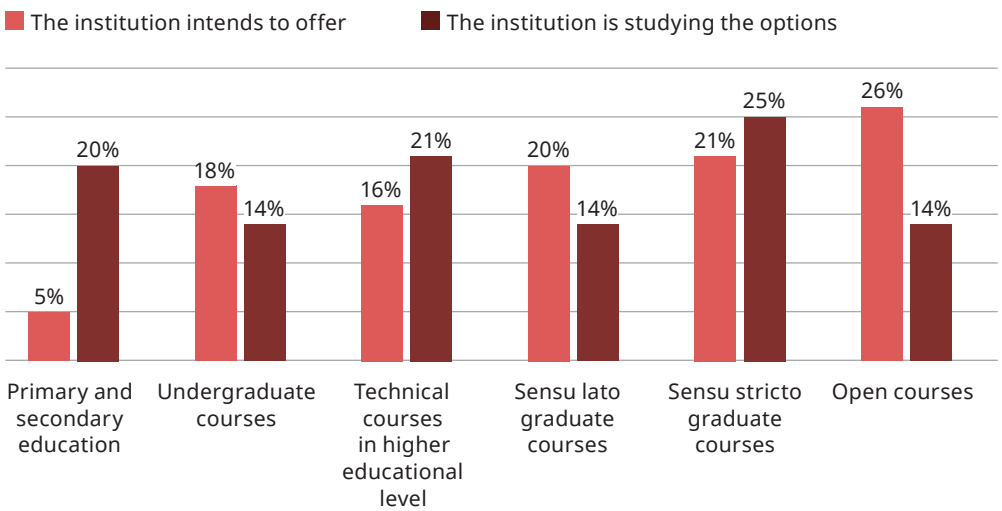


Jocimara de Lima Mauer

In 2020, the educational segment faced challenges, and several changes took place in the journey of educational institutions. These challenges caused a readjustment of the current models applied, which can be seen in the data analysis of one of the questions from the 2020 Brazilian Census for Distance Learning shown in Chart 4.1.

There was a growth in the studies of educational institutions for the expansion of courses at all educational levels. It is worth noting that this movement is very significant for the educational segment since lifelong learning has never been talked about so much. Students are increasingly demanding, such that updating new courses and new levels of education is essential for educational institutions to keep in line with the demands of the job market.

Chart 4.1 – Do institutions intend to start offering distance learning courses at what educational levels?



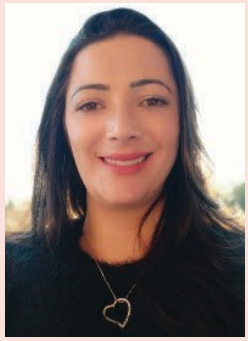
The 2020 Census shows that the recent release of DL for sensu stricto graduate courses and high school was very well received by educational institutions. When analyzing how they are organizing the expansion of courses, it is observed that the sensu stricto graduate courses are drawing respondents' attention: 21% of the institutions intend to offer DL courses, and 25% of the institutions are studying courses options. The same happens with the expansion in primary and secondary education: 5% of educational institutions indicate that they intend to offer courses in this modality and 20% are studying options – a considerable increase in relation to the previous Census.

It is worth emphasizing that these data were collected during the pandemic, therefore compared to the 2019 Census the interest of institutions in expanding at different levels of education has grown considerably.

Some regions are more interested in expanding DL at certain levels. For example, 32% of respondents from the South prefer to expand to sensu stricto graduate courses and another 21% are studying options, whereas sensu lato graduate courses are more attractive in the Central-West, where 25 % of respondents intend to offer it and another 25% are studying options. Regarding primary and secondary education, even though the percentage of "intends to offer" is conservative (5%), all regions are studying options, especially the Southeast, with 28% of respondents, followed by the South, with 16%, from the Center-West, with 13%, and from the Northeast, with 12%. However, will this movement towards primary and secondary education be maintained over time?

Finally, the expansion of undergraduate courses continues to grow, showing that educational institutions without DL modality realized this is a necessary movement in the educational segment.

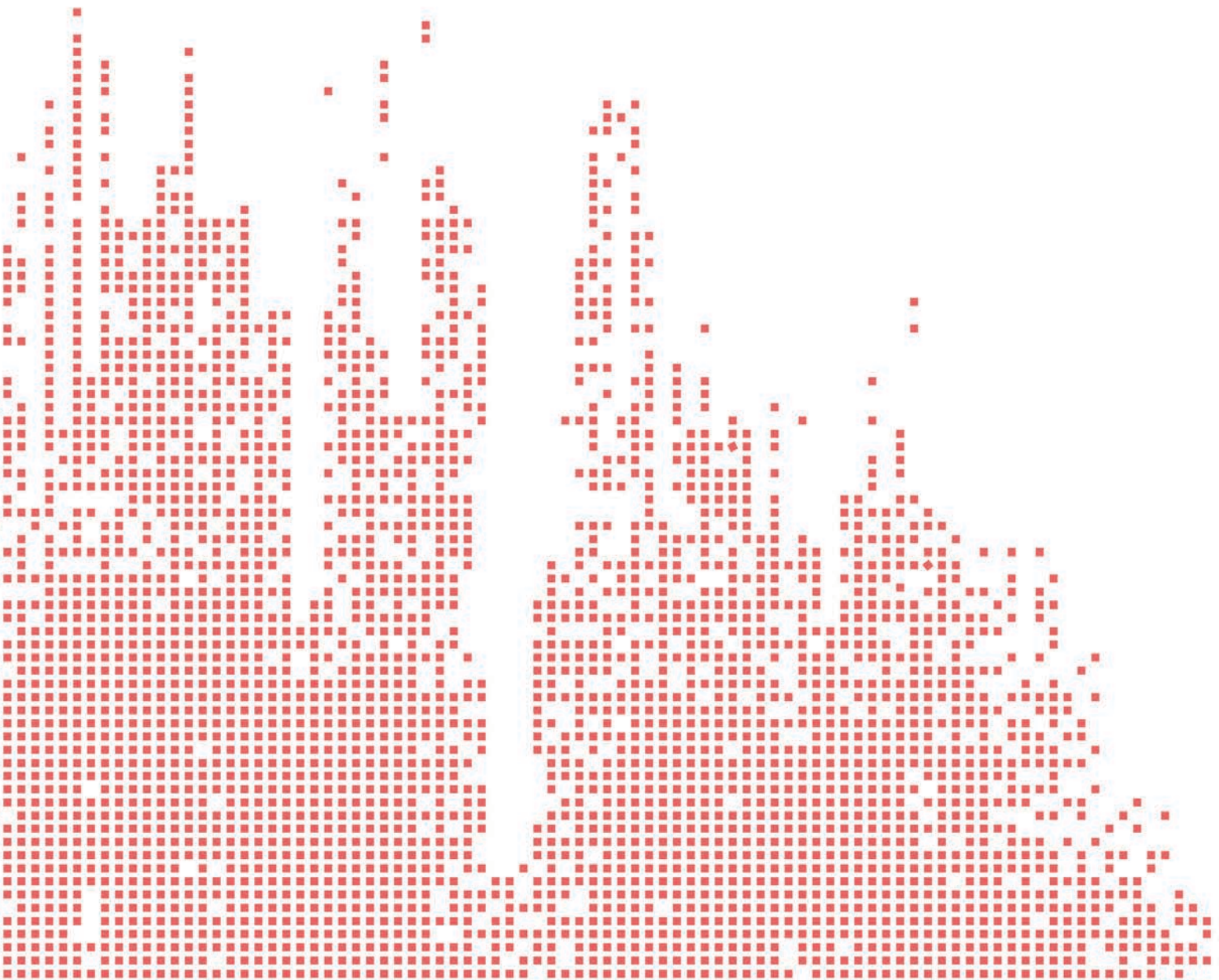
About the author



Jocimara de Lima Mauer holds a master's degree in Administration. Partner and CEO of the Edtech Gomining and innovation counselor of the ABED. She was a professor of Administration, Business Management and Entrepreneurship. She has experience with on-site, hybrid and distance learning.

Part 5

Business in distance learning during the COVID-19 pandemic in 2020



Jair Santos Junior

The Brazilian Census for Distance Learning, once again concerned with monitoring the movement of business generated around the distance learning (DL) modality, took care of particularizing the issues to evaluate the COVID-19 pandemic's impacts.

This year, the sample was quite representative, with 86 responding institutions distributed across four of the five regions of the country (22.09% in the Central-West, 19.77% in the Northeast, 47.67% in the Southeast and 22.09% in the South). Similarly, for-profit (34.88%), non-profit (43.02%) and public (22.09%) institutions participated. The regional profile maintained a significant representation, with 65.12% of institutions headquartered in state capitals or federal district and 34.88% located in inland cities.

Chart 5.1 – Respondent institutions by administrative category

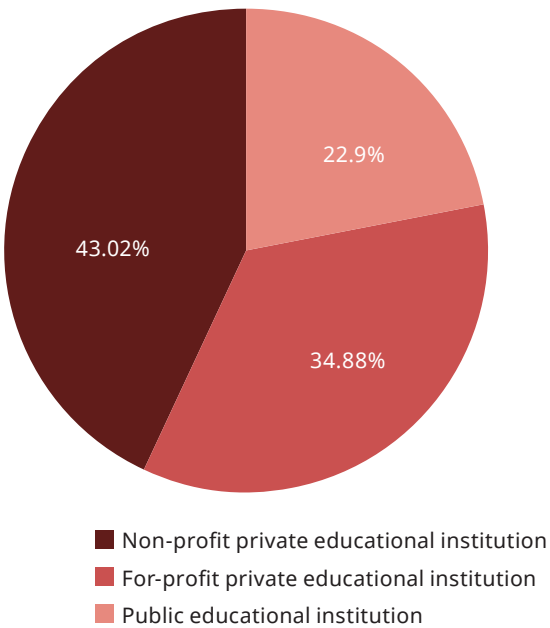
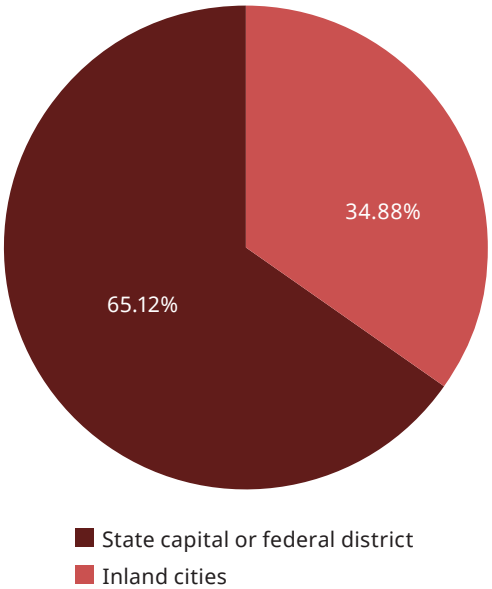
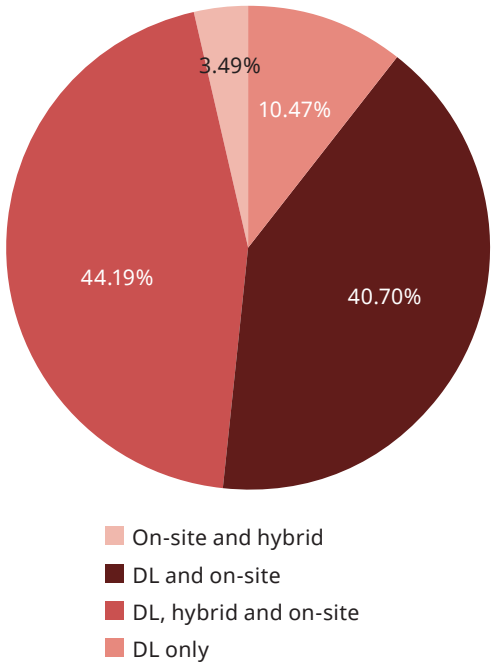


Chart 5.2 – Location of respondent institutions' headquarters



Still about the general profile of the institutions, among the participants, more than 84.88% offer different products that include the on-site and DL modalities in some combination. Only 3.49% offer a combination of on-site and hybrid, that is without full DL courses offered. Curiously, just 10.47% reported that they offer all of their courses only in DL.

Chart 5.3 – Course modalities offered



Among the types of courses offered, we observe the following profile of responses: 50% don't offer undergraduate courses and the same number is repeated for graduate courses; 48.84% offer open non-corporate courses and only 26.74% open corporate courses. In addition, 75.58% offer on-site or hybrid courses.

Chart 5.4 – Distance learning undergraduate courses offered

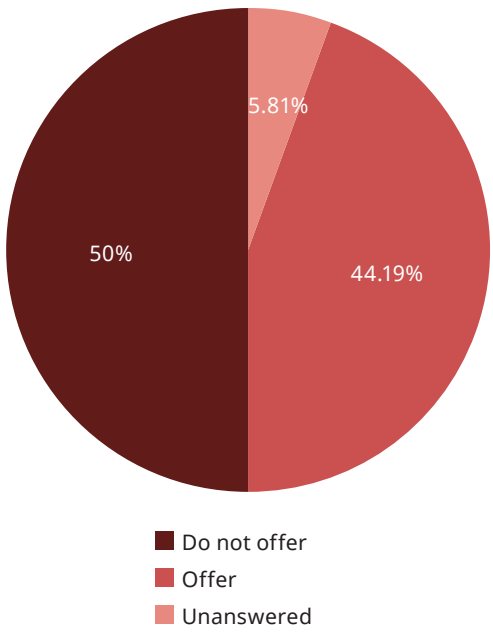


Chart 5.5 – Distance learning graduate courses offered

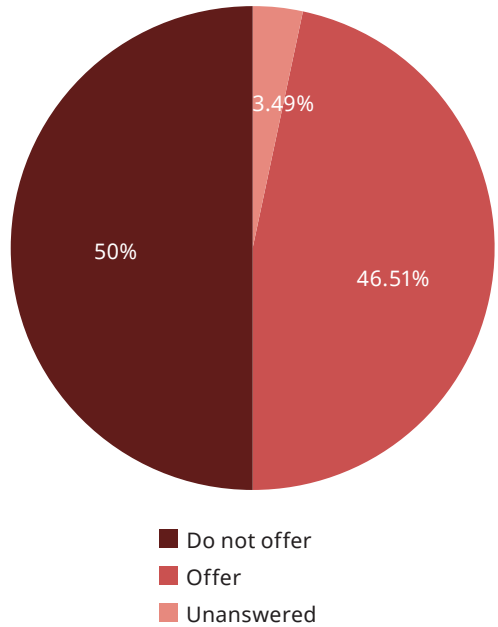


Chart 5.6 – Open non-corporate distance learning courses offered

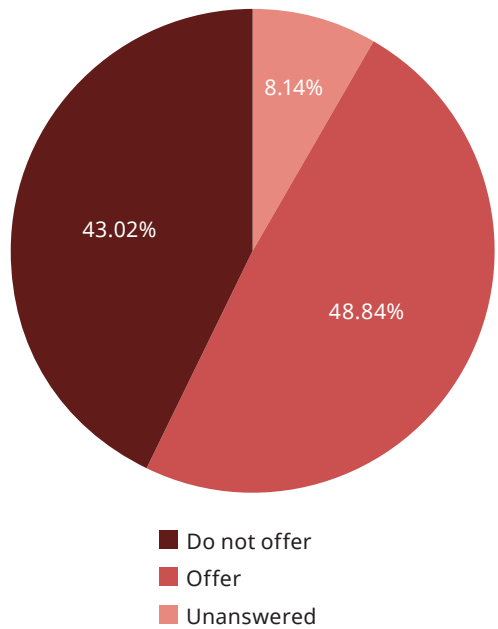


Chart 5.7 – Open corporate distance learning courses offered

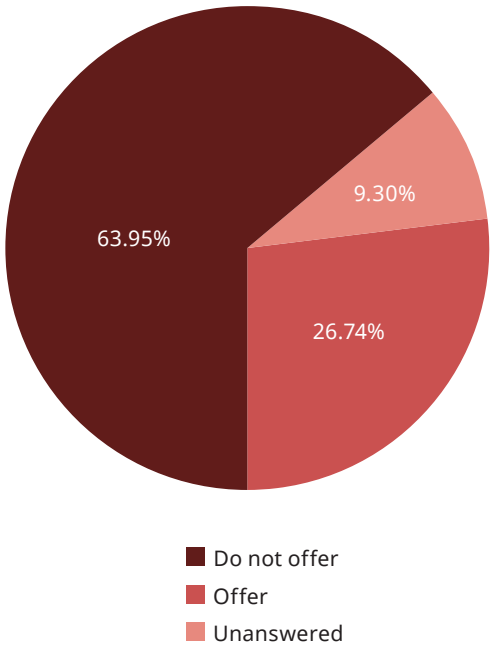
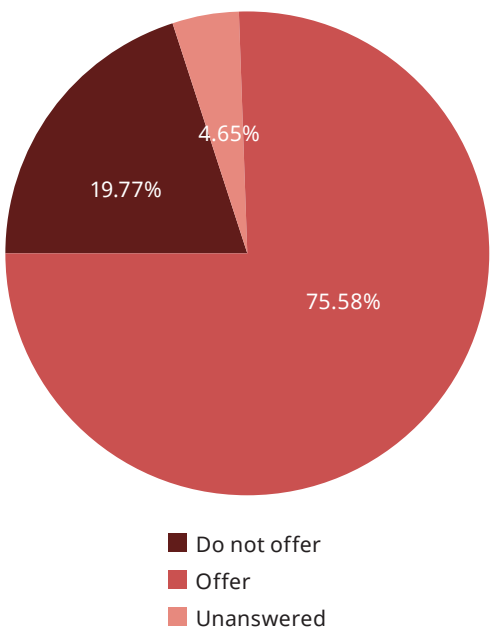


Chart 5.8 – On-site or hybrid courses offered



This scenario draws attention because, even in 2020 with the pandemic scenario, three quarters of the participating institutions showed a predominance of the offer of on-site and hybrid courses. In addition, more than 80% work with a combination of on-site and DL.

It is surprising that, in a market survey with institutions that participate or are on the records of the Brazilian Association for Distance Learning (ABED), there is a predominance of the on-site modality.

In the questions about enrollments and profitability, unfortunately, there was a fear of declaring more precise information. In general, between 60% and 80% of the participants did not respond or stated that they did not have the information. Even so, the main answers obtained are detailed below.

An increase of up to 50% in the profitability of DL courses was found in 8.14% of undergraduate offers, repeating the percentage for graduate courses. In on-site or hybrid courses, the highest incidence was of those who claimed a reduction of up to 50% in their profitability, making up 11.63% of the total respondents.

Chart 5.9 – Profitability of distance learning undergraduate courses in 2020

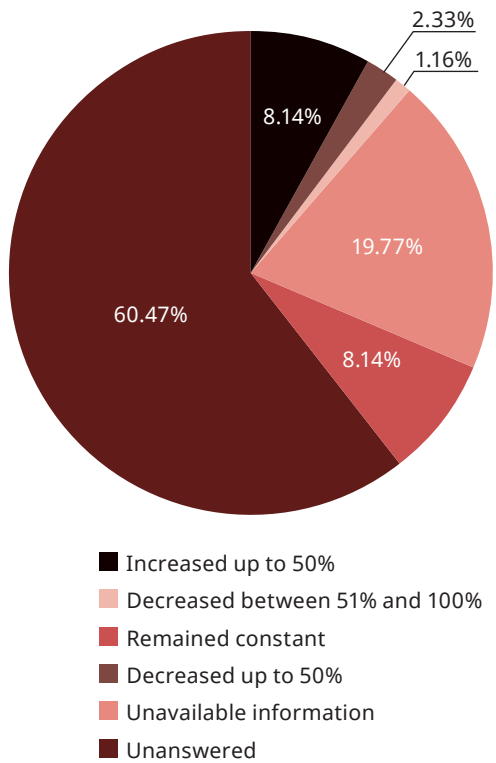


Chart 5.10 – Profitability of distance learning graduate courses in 2020

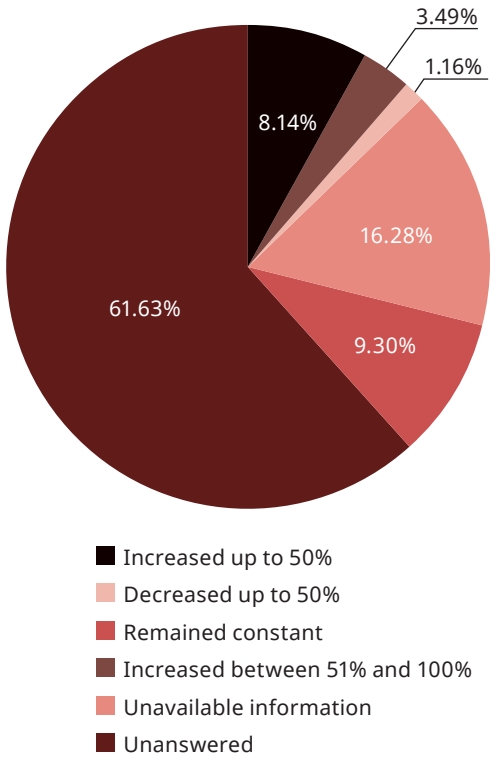
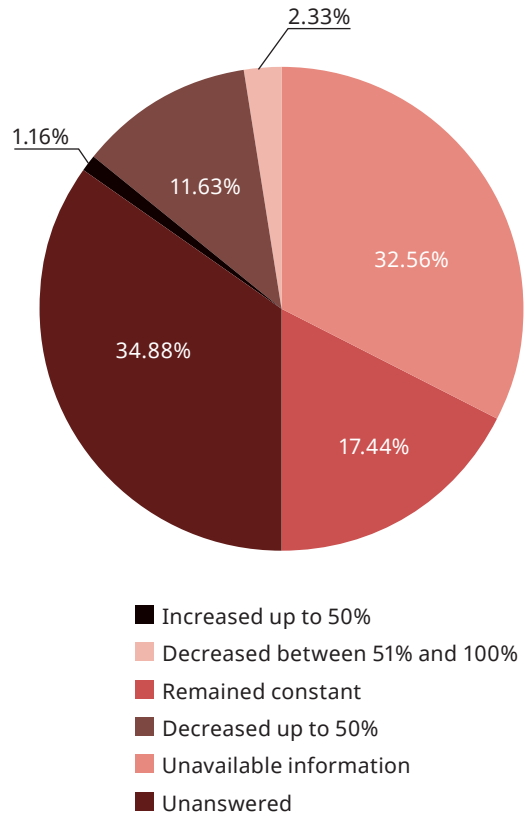
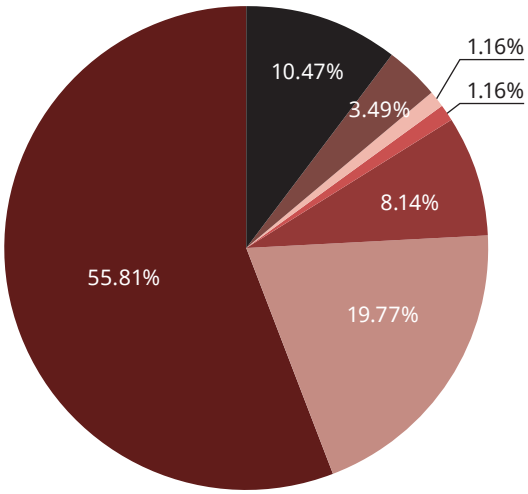


Chart 5.11 – Profitability of on-site or hybrid courses in 2020



When we look at undergraduate enrollments, 19.77% of respondents declared that the public was maintained, while 10.47% reported growth of up to 50%. In this group, only 2.33% declared that there was some type of reduction. These data draw a lot of attention, since, in general, the analyzes observed in the press, throughout 2020, stated that there was a flight of students. However, 63.95% of the participants did not contribute data, declaring that they did not have the information or not even responding (55.81%). Thus, either the analysts were wrong, or the hidden answers would reflect the real drop in enrollments in DL undergraduate courses in 2020.

Chart 5.12 – Enrollments in distance learning undergraduate courses in 2020



In the case of graduate studies specifically, enrollments remained constant at 16.28% and grew by up to 50% to 13.95%. In the diversification of modality, 26.74% stated that they work with graduate studies only in the DL modality.

Chart 5.13 – Enrollments in distance learning graduate courses in 2020

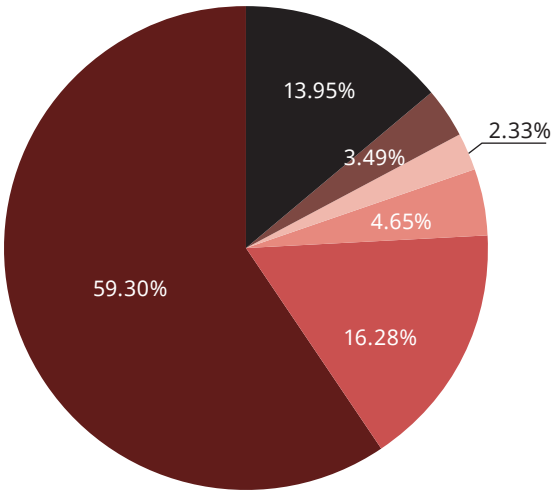


Chart 5.14 – Modalities offered in graduate courses

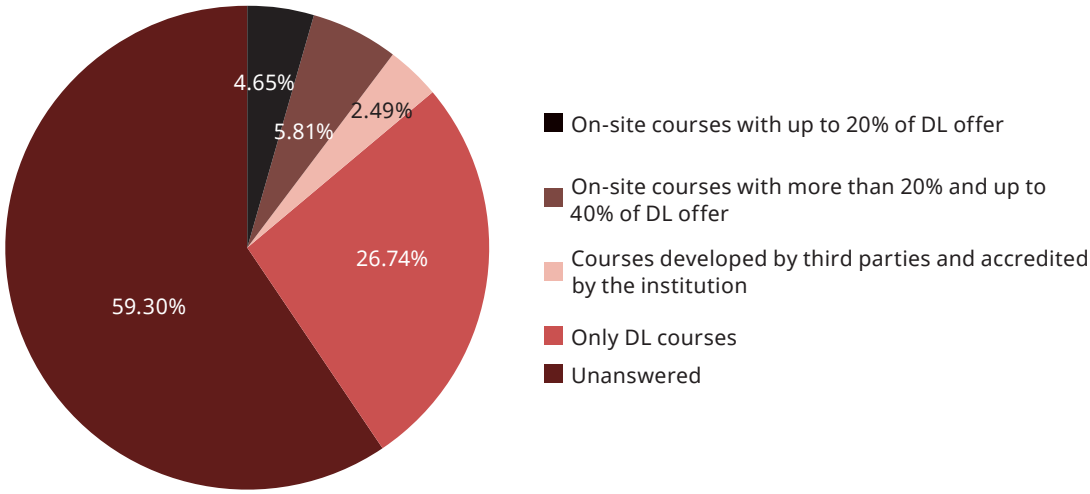
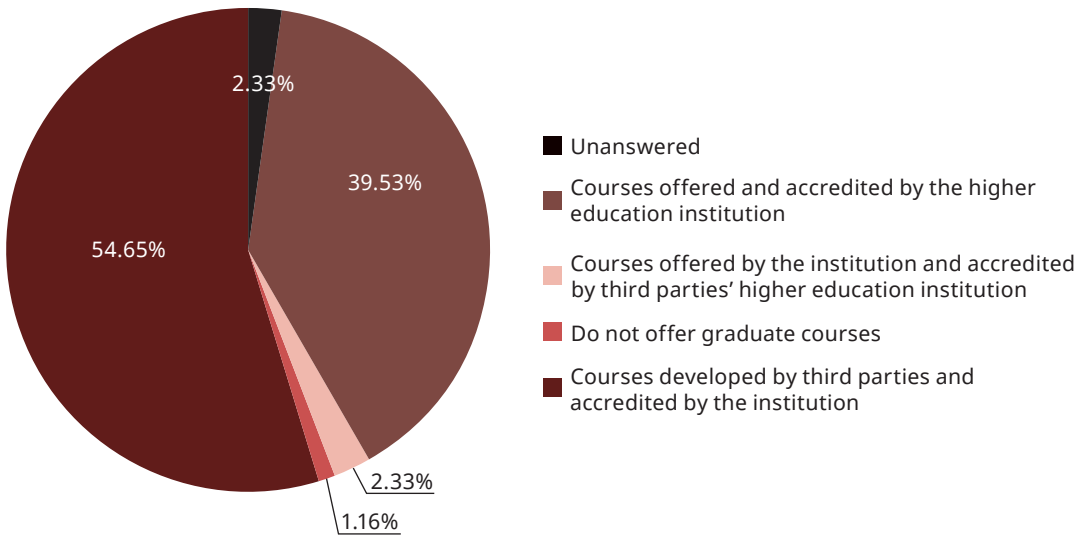


Chart 5.15 – Offer of distance learning graduate courses



Regarding open non-corporate DL courses, 6.98% stated that there was an increase between 26% and 50% in the number of enrollments and exactly the same proportion reported an increase of 100%. In this segment, 9.30% reported the constant number of enrollments. Interestingly, among the open corporate DL courses, the same 6.98% reported a 100% increase in the public and only 5.81% reported that the number of students enrolled remained constant.

Chart 5.16 – Enrollments in open non-corporate distance learning courses in 2020

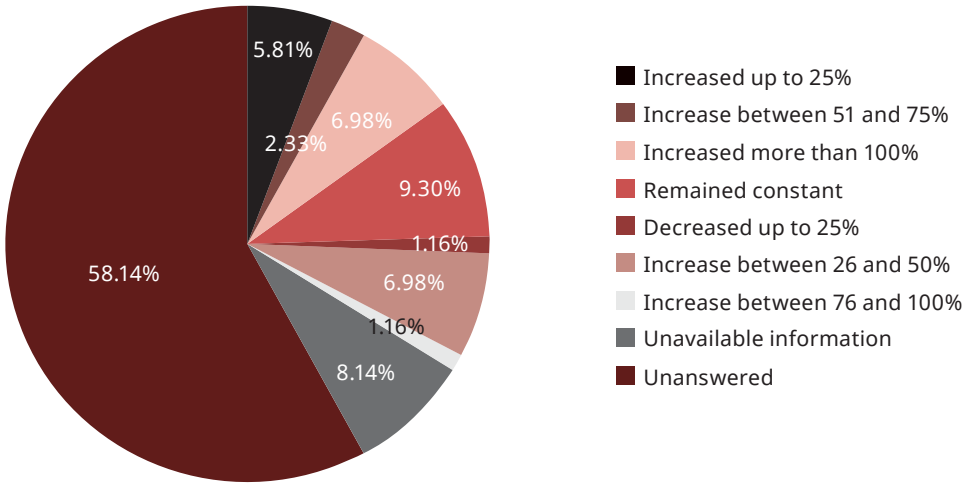
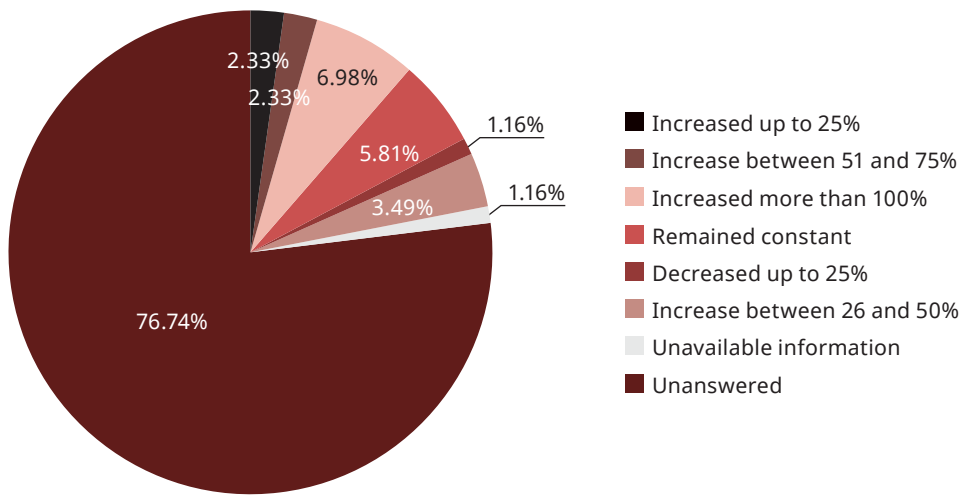
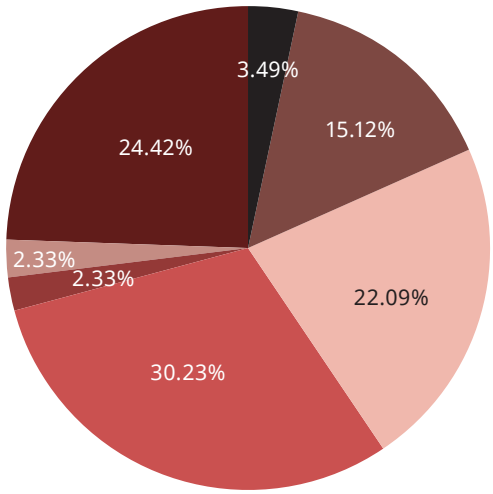


Chart 5.17 – Enrollments in open corporate distance learning courses in 2020



In the universe of the on-site offer combined with hybrids, we have 24.42% reporting the maintenance of enrollments, but 15.12% reporting a decrease of up to 50% in the number of students.

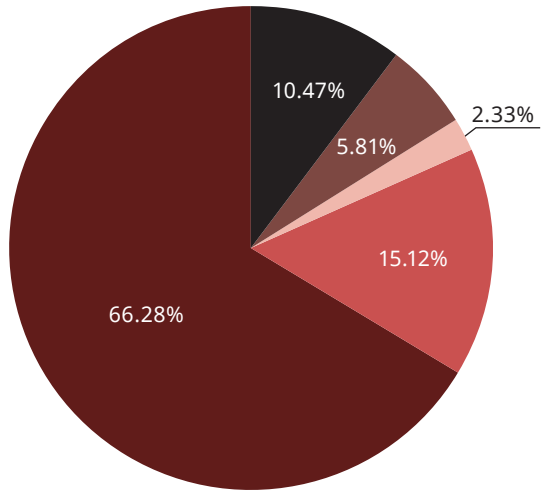
Chart 5.18 – Enrollments in on-site or hybrid courses in 2020



- Increased up to 50%
- Decreased up to 50%
- Unavailable information
- Unanswered
- Increase between 51 and 100%
- Decreased between 51 and 100%
- Remained constant

Finally, we highlight the combination scenario between the degree courses in the on-site and DL modalities, that is, hybrid courses. Only 15.12% reported offering only DL courses. Already 16.28% reported that they practice on-site courses with up to 20% (10.47%) or between 20% and 40% (5.81%) in the DL modality. In this context, only 2.33% offer only on-site courses, however, unfortunately, 66.28% preferred not to respond.

Chart 5.19 – Modalities offered in undergraduate courses



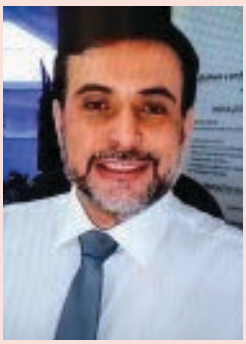
- On-site courses with up to 20% of DL offer
- On-site courses with more than 20% and up to 40% of DL offer
- Courses developed by third parties and accredited by the institution
- Only DL courses
- Unanswered

After evaluating the responses, it is sad to see the need for greater public awareness regarding the importance of participating in Census and, in addition, declaring effective information on the evolution of its business. Education entrepreneurs need to understand that serious research such as those carried out by ABED preserve the data of the respondents and, above all, that these institutions are exempt and promote knowledge that can, in a unique way, allow entrepreneurs and entrepreneurs to have access to statistical data to guide your business strategies.

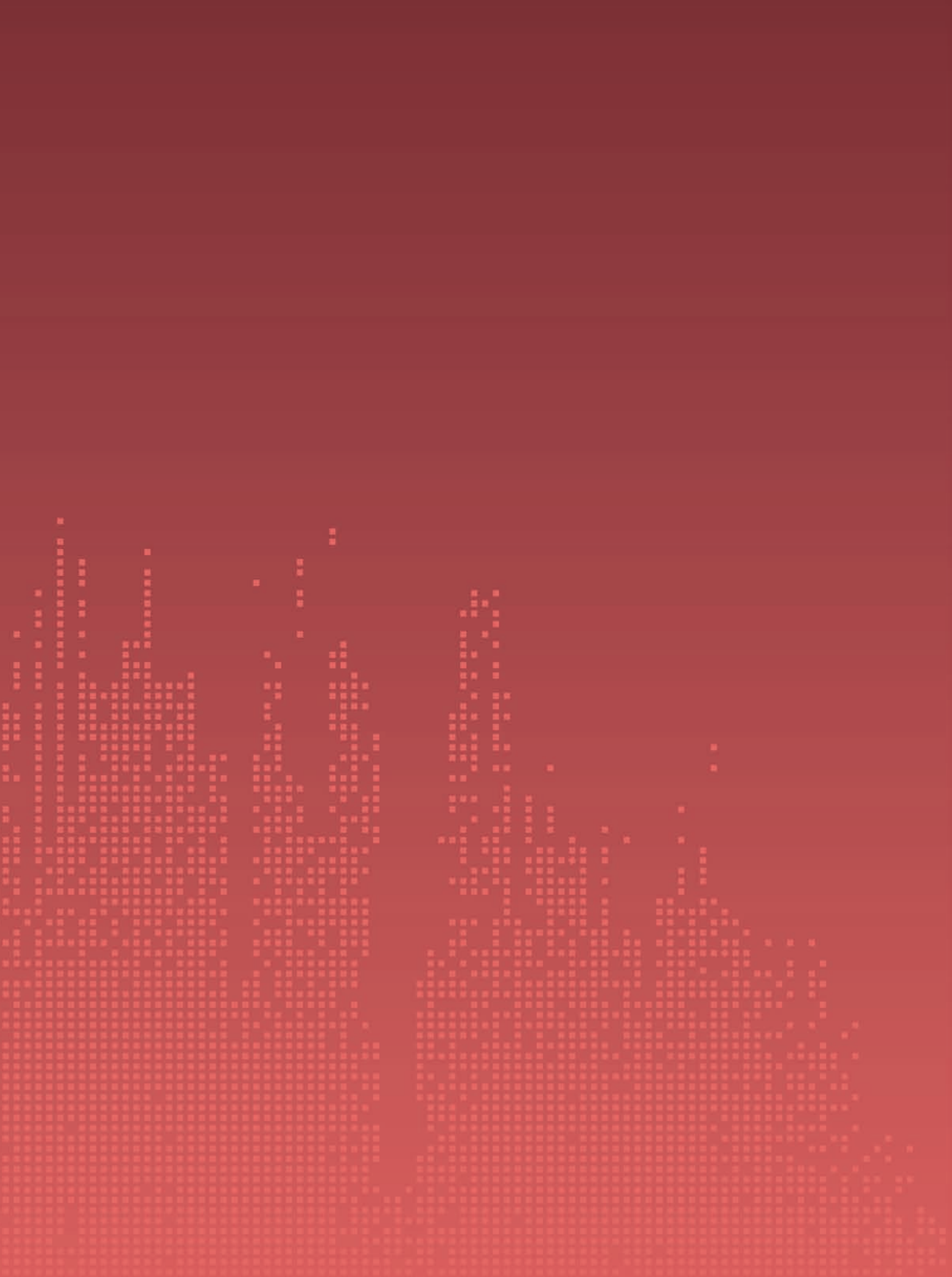
In relation to the data actually declared, what stands out the most is the even more significant predominance of on-site courses. It is curious that, even in times of a pandemic, with the abrupt and unplanned use of remote teaching, institutions mostly declare themselves to offer on-site courses. We, active and even militants in the DL modality, need to be clear that there is still a vast territory to be explored and a range of diverse products to be created. Ultimately, it is noteworthy that 50% of respondents do not offer graduate DL courses, 43% do not offer open non-corporate DL courses and 64% do not offer open corporate DL courses.

Thus, in our research in this segment, the "no's" teach more than the affirmative or effectively stated answers.

About the author

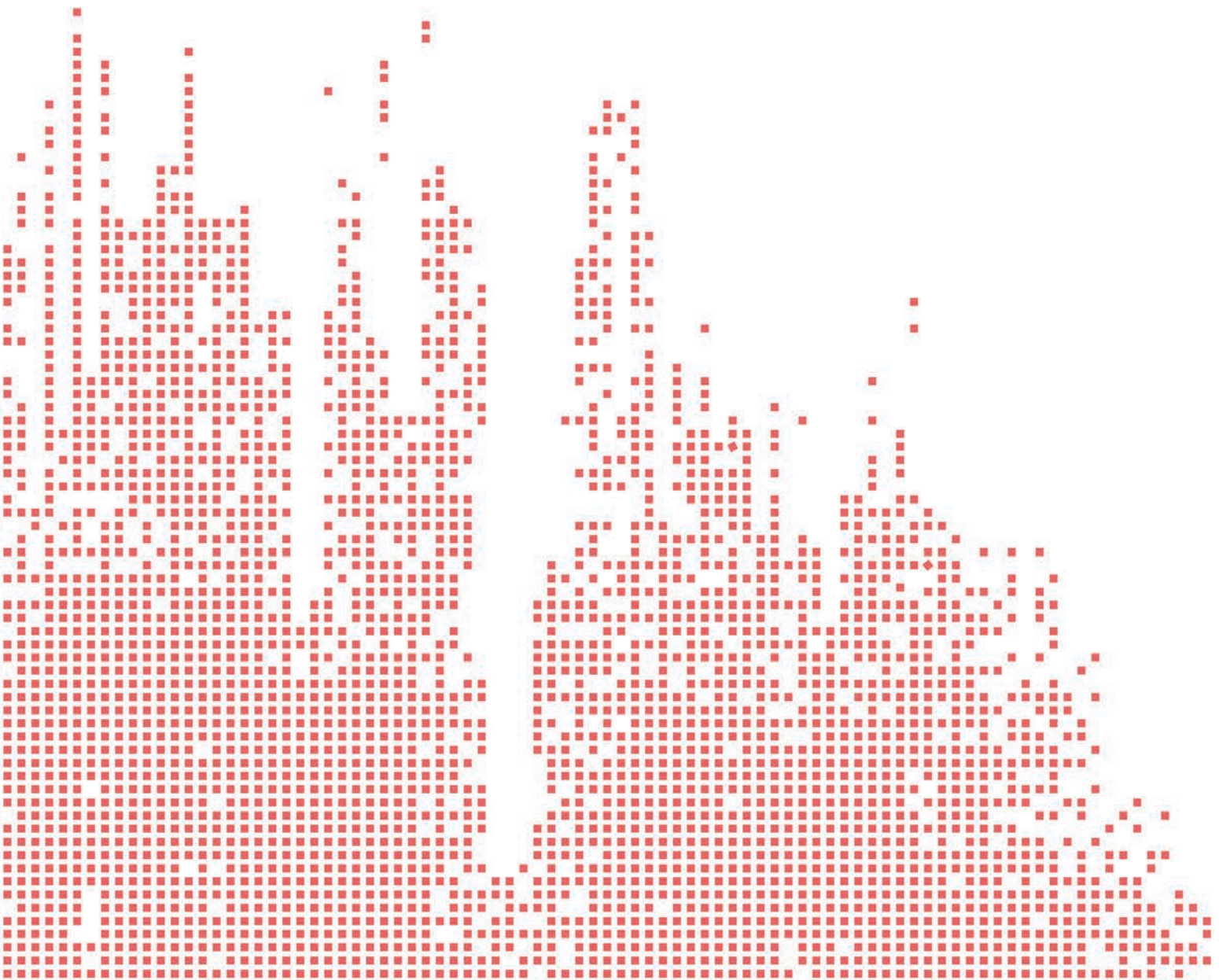


Jair Santos Jr. is ABED's counselor and partner at SANTOS JR Consulting.



Part 6

What is taught and how it is taught



Betina Von Staa

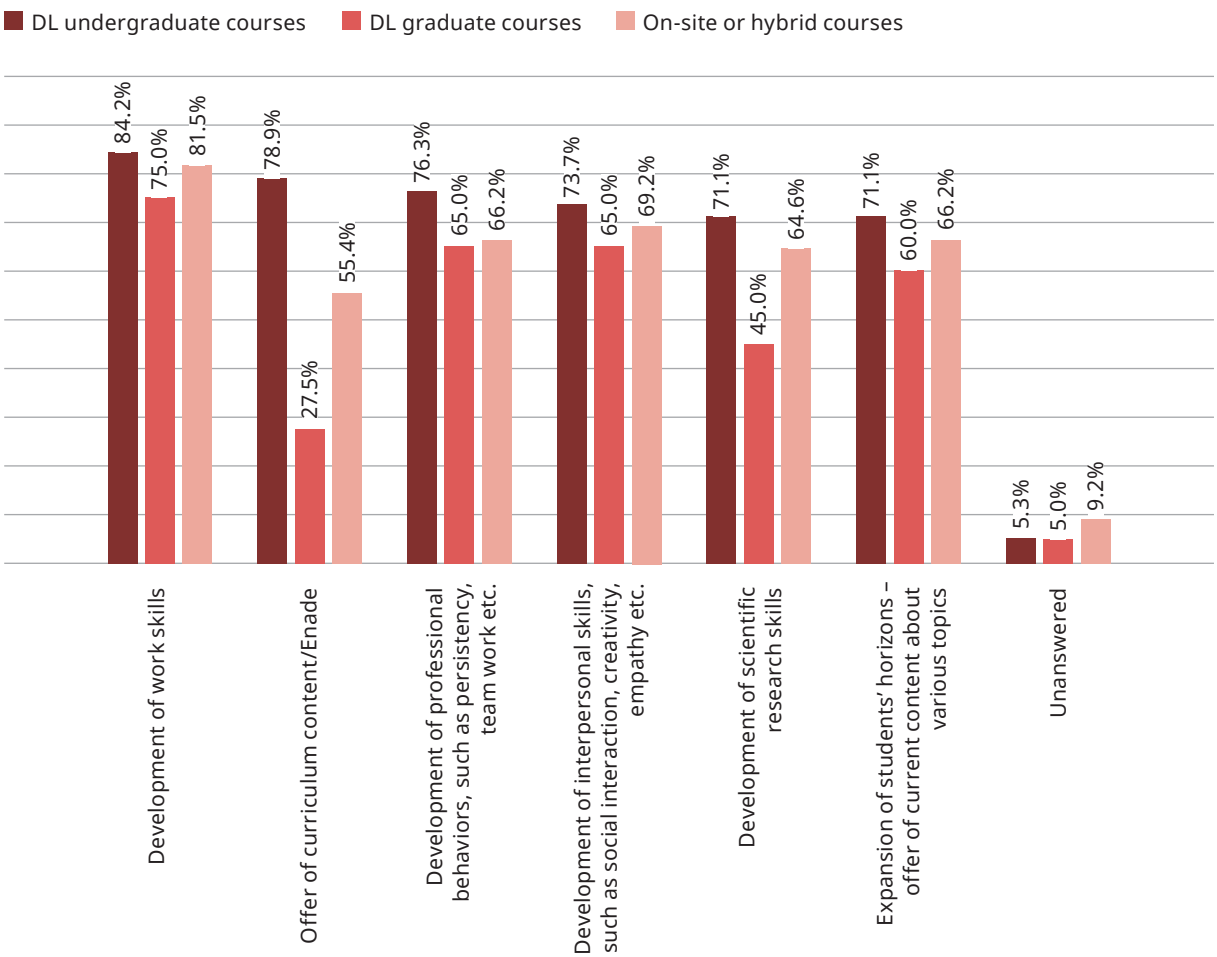
In this chapter, we will observe how educational institutions are offering education mediated by technology in distance learning (DL), on-site and hybrid undergraduate and graduate courses, as well as in open corporate and non-corporate courses.

Currently, there is a huge range of resources that can be offered to students; learning actions that they can be invited to perform; and definition of skills and competencies that one intends to develop.

In terms of skills and competencies developed in accredited education, those aimed at the job market are the most frequent, revealing that the courses, despite being academic, tend to have a very practical content and focus on the needs of the professional world. Skills of expanding horizons, or developing general culture purely and simply, are the least frequent, although present.

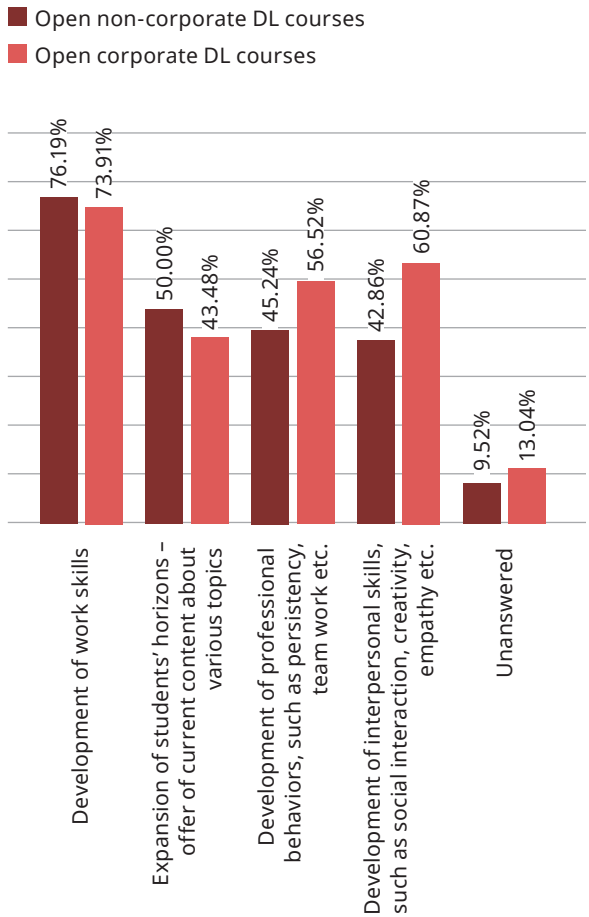
Some aspects of Chart 6.1 draw attention, such as the fact that 27% of graduate courses cover topics that are evaluated in Brazilian National Student Performance Examination (Enade), an undergraduate evaluation. In addition, in all the analyzed items, graduate studies are mentioned less frequently in relation to the development of work skills, professional attitudes, research and the expansion of horizons.

Chart 6.1 – Contents, skills and competencies developed by institutions



Open courses also stand out for the development of skills aimed at the job market. This suggests that students who are freely seeking education also seem to have the world of work as their biggest concern. However, among the corporate courses, the development of attitudes and interpersonal skills stands out, revealing what the job market is effectively seeking to develop among its already hired employees.

Chart 6.2 – Contents, skills and competencies offered in open distance learning courses



Regarding learning actions, watching videos and reading texts are the most frequent, and in graduate courses, the offer of texts is even more frequent, with 92% of institutions offering this type of content.

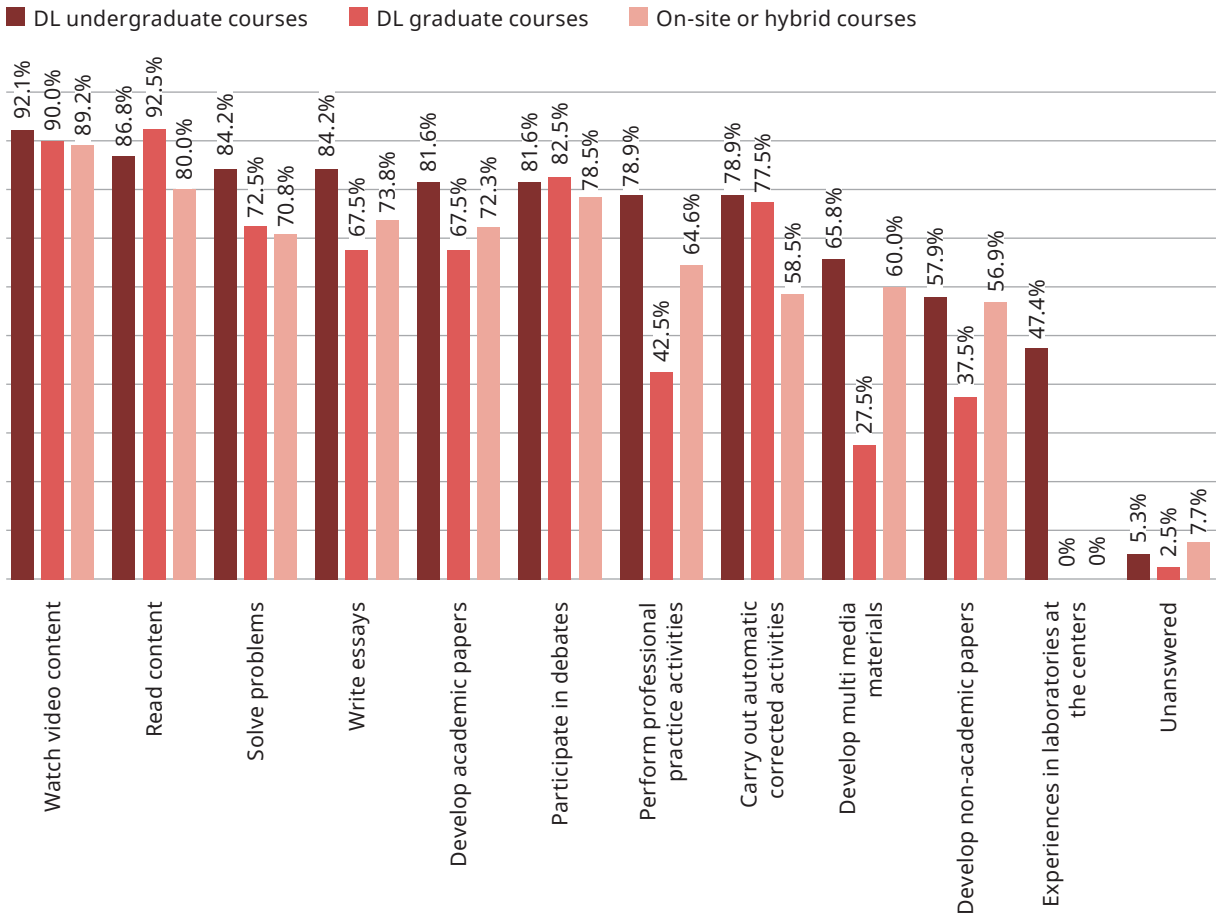
It is worth mentioning, however, that although automatic correction activities are also very frequent in undergraduate and graduate distance learning courses, with almost 80% of institutions proposing this type of action, undergraduate courses have other proposals that are becoming even more frequent: develop problem solving, carry out dissertation work, prepare academic texts, participate in discussions, and carry out activities of their professional practice.

In general terms, it seems that undergraduate courses have richer proposals than graduate courses and even on-site courses.

The creation part is, on average, the least frequent, with 56% to 65% of institutions requesting multimedia materials and non-academic texts in DL courses, on-site or hybrid. In graduate studies, 27% to 37% of institutions respectively request this.

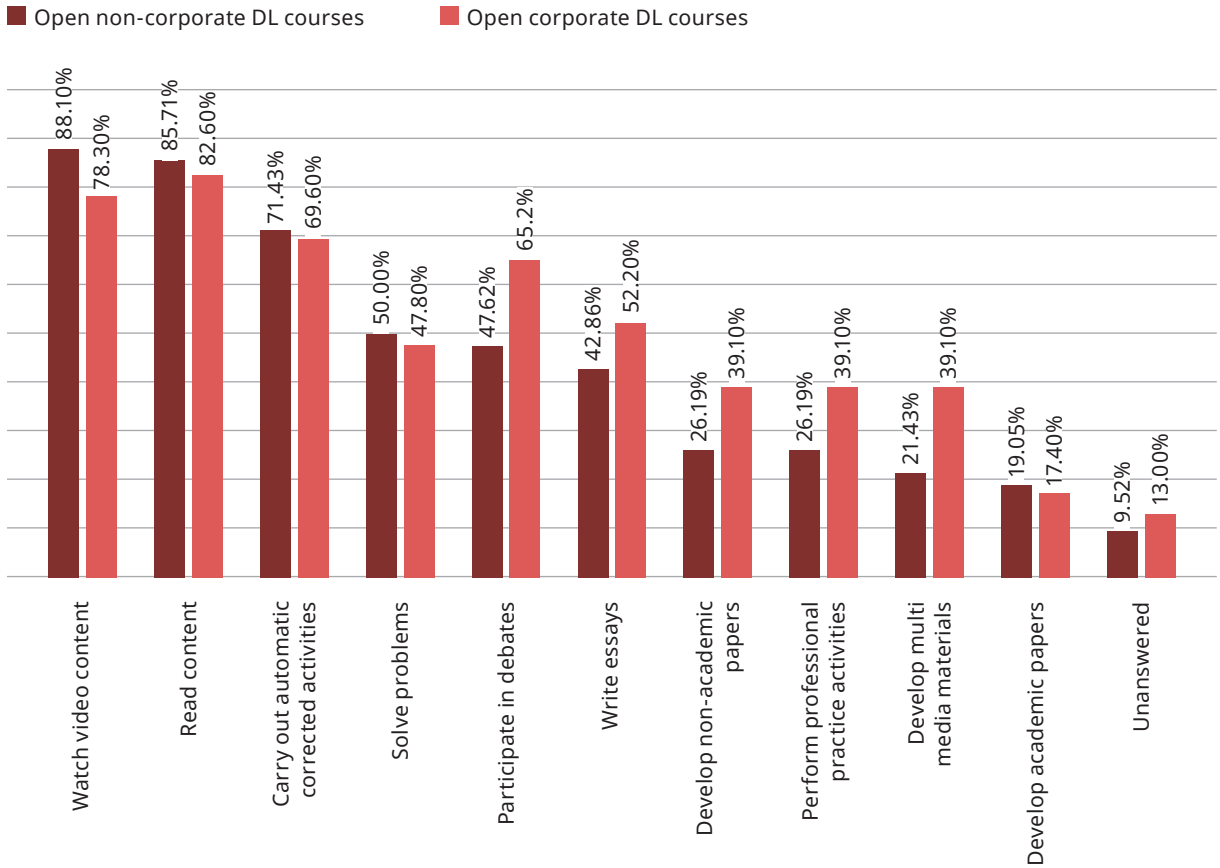
In 2020, the year of the pandemic, only DL undergraduate courses offered activities in the laboratory.

Chart 6.3 – Learning activities offered to students in undergraduate and graduate courses



Open courses, in general, present an even smaller wealth of diversified proposals for their students, focusing mainly on video, text and automatic correction activities. Corporate courses stand out for requesting more discussions and creative activities in general, between 39% and 65% of institutions make this type of proposal.

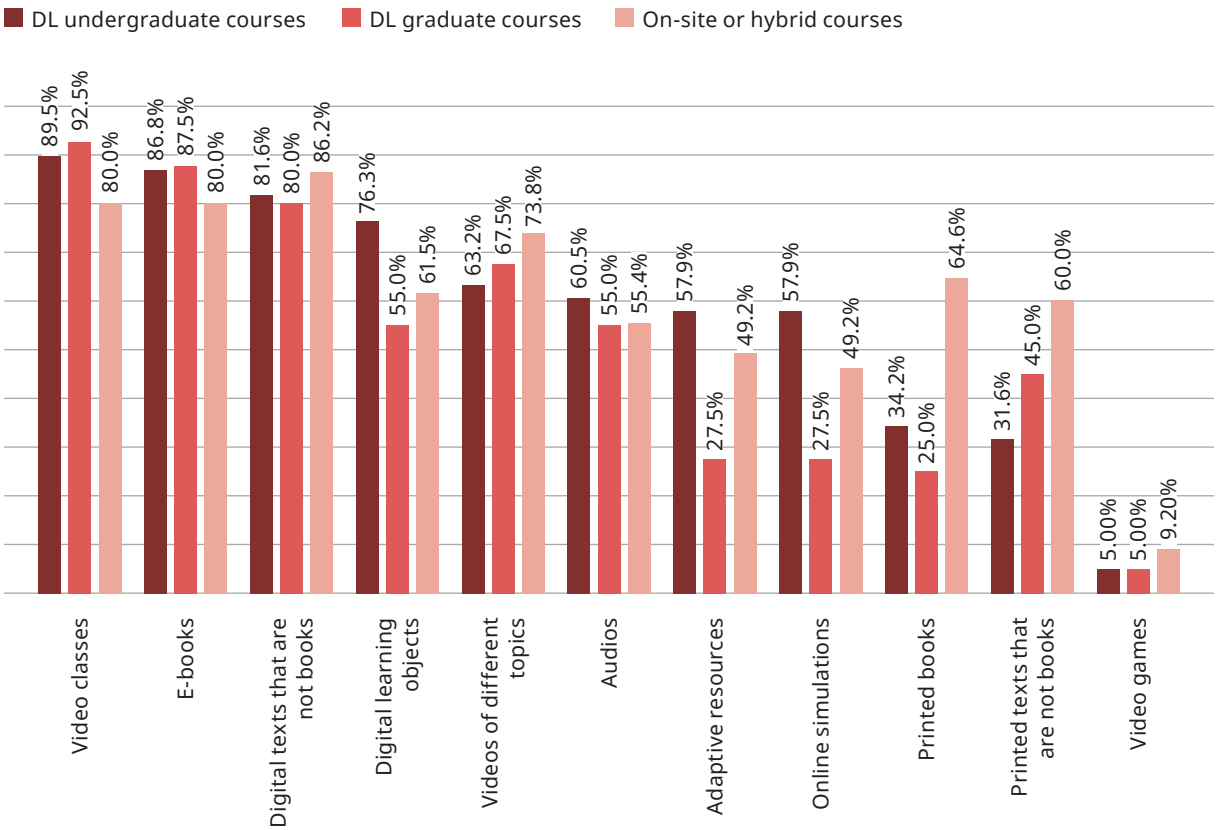
Chart 6.4 – Learning activities offered to students in open distance learning courses



Regarding the educational resources offered to students, text and video are, in fact, the great champions, with on-site and hybrid courses working more with printed materials (more than 60% compared to 31-34% in DL courses). It is worth taking a closer look at the leap that DL courses have made in terms of the adoption of adaptive resources and simulators: 58% compared to 46% to 49% in on-site courses and 27% in DL graduate courses. This type of resource had already been growing in previous censuses, but perhaps motivated by the pandemic higher education institutions (HEIs) have accelerated their adoption in DL degrees and a little less in on-site and hybrid degrees.

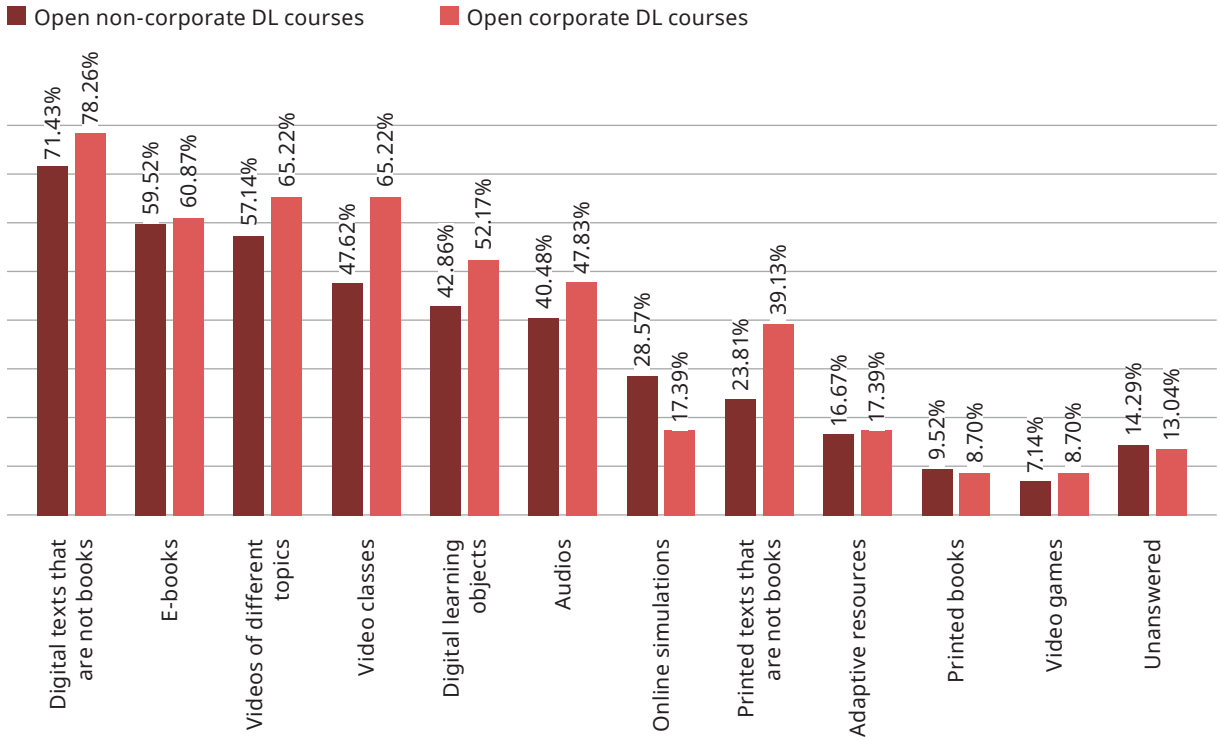
There is a feeling that, in 2020, the diversity of resources has expanded more in DL than in on-site courses.

Chart 6.5 – Educational resources offered in undergraduate and graduate courses



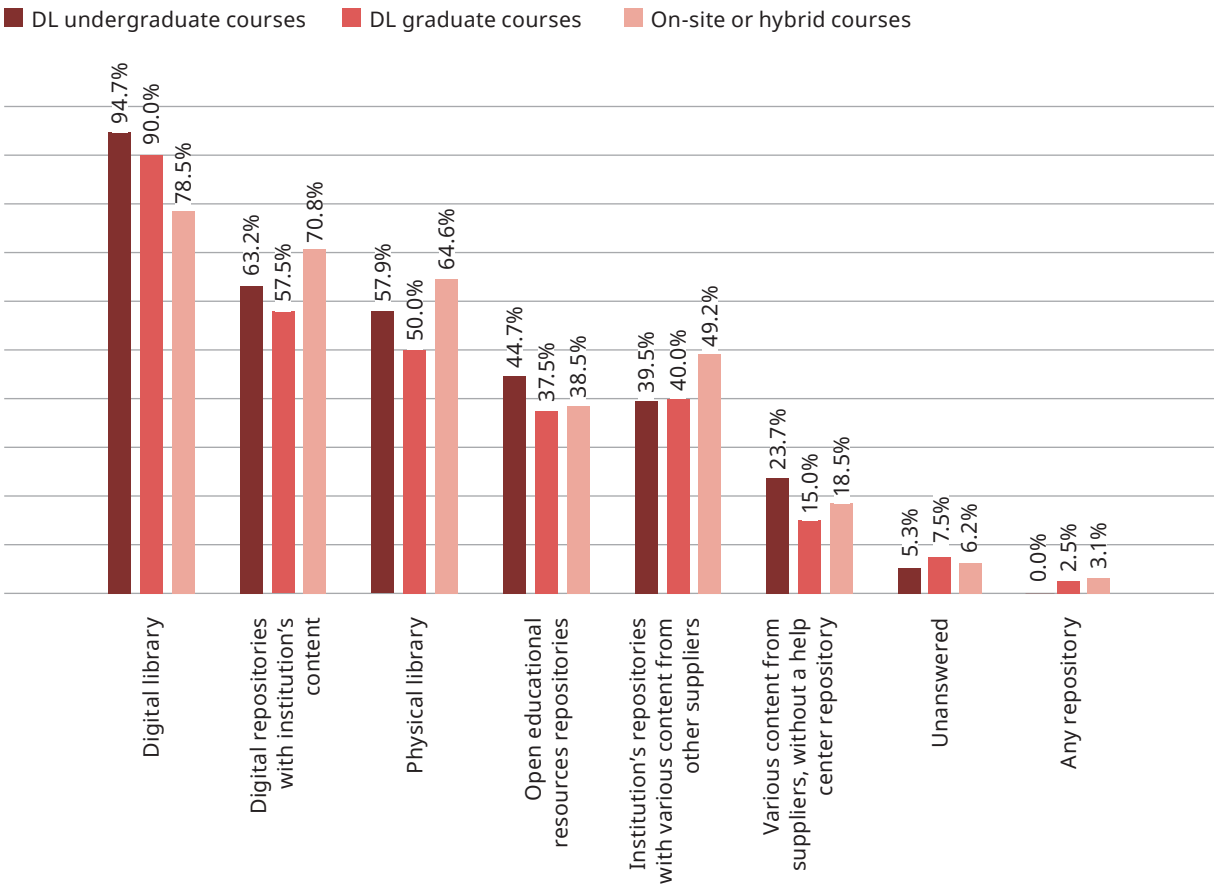
Open non-corporate and corporate courses seem to maintain the text and video structure, but 52% of open corporate courses use learning objects and 28% of open non-corporate courses use some type of online simulation.

Chart 6.6 – Educational resources offered in open distance learning courses



As for repositories, 94.7% of DL undergraduate courses have online libraries and 64.5% of on-site and hybrid courses have physical libraries. Only 78% of on-site and hybrid courses are served by online libraries, even in the pandemic. Once again, graduate courses tended to be less served by varied resources compared to undergraduate courses. In addition, the minority of institutions, between 15 and 23.7%, invest in different repositories in a single search system.

Chart 6.7 – Content repositories offered by institutions



What do these data reveal?

The separate analysis of DL graduate and undergraduate courses was carried out for the first time in 2019. Until then, the offer of graduate courses in DL was not so expressive as to deserve a separate treatment in the Census.

In the 2019 Census, it was possible to detect an offer of courses at this level, in general with more complex demands than undergraduate courses and offering richer resources. The 2019 graphs reveal greater diversity and richness always in DL graduate and on-site courses.

In 2020, two important movements took place: there was the pandemic and the offer of DL graduate courses exploded. For the first time, there are more respondents offering courses of this modality than undergraduate courses in the Census. However, it seems that this offer took place with simpler content and approaches: text, video, discussions and automatic correction, revealing that this quantitative growth was not accompanied by an increase in quality. We even found courses to work on Enade themes in graduate courses, as we saw in this chapter.

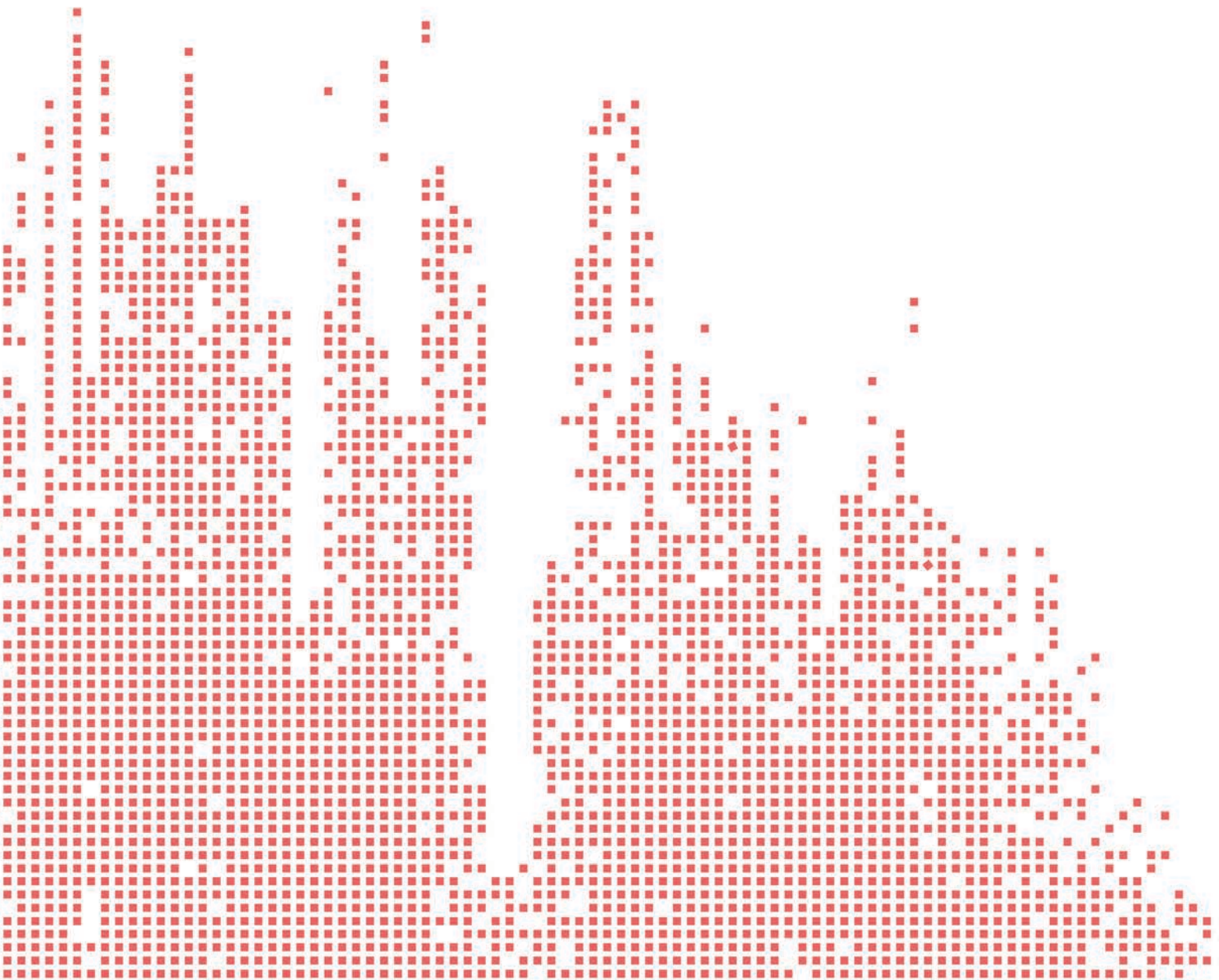
On the other hand, on-site courses, which normally received more attention from HEIs than undergraduate courses, seem to have stagnated and have not reached the level of richness of digital resources that DL courses already offer. And DL degrees seem to have continued to develop at their normal pace during the pandemic and, at this point, seem more challenging and richer than the average on-site degrees.

About the author

Betina Von Staa holds a PhD in Applied Linguistics from the Pontifical Catholic University of São Paulo (PUC-SP) and is a consultant for the development of innovative educational practices, leaning to the demands of a rapidly changing world. She is B2B manager for RoboGarden in Brazil, and a member of the Council for Academic Updates at the InterEdTech. She coordinated the development of Pearson's digital literacy and programming series Tecnológica Mente, and Wizard's Digital Mindset program. She is the author of the creativity and innovation program TransFor.Me by MacMillan – with Portuguese and English versions –, and the sections of reading, writing and interdisciplinary project in Richmond's English collection English and More!, approved by the Brazilian National Textbook Program (PNLD). She produces teacher training materials for FTD and Editora Moderna. She contributed to the elaboration of the NEXT learning method for DL in higher education for UOL EdTech and is coordinator of the Brazilian Census for Distance Learning of the Brazilian Association for Distance Learning (ABED). She is responsible for the distribution of RoboGarden in Brazil and brought D2L to the country.

Part 7

Support services for students with special educational needs



Karina Nones Tomelin

The progression of students with special educational needs in primary and secondary education favored their entry into higher education, with the help of policies to democratize access such as the University for All Program (Prouni), the Financing Fund for Higher Education Students (FIES), the Law of Social Quotas, the Brazilian Law on the Inclusion of Persons with Disabilities and the Brazilian National Policy for Special Education. In the last five years, according to data from the National Institute for Educational Studies and Research Anísio Teixeira (Inep), the increase in general enrollments in higher education in on-site courses and in distance learning (DL) was 7%, while the growth of enrollment of students with special educational needs was 27%.

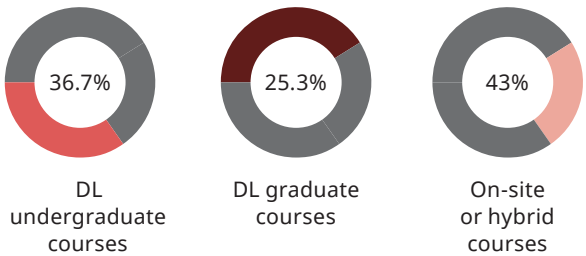
Unfortunately, the entry or integration of these teachers does not necessarily mean inclusion in the teaching and learning process. With the COVID-19 pandemic in 2020, this scenario became more evident, as many digital resources still do not understand inclusive tools, making the teaching and learning process more complex.

Since 2018, the Brazilian Association for Distance Learning (ABED), through the Brazilian Census for Distance Learning, seeks to map the actions of institutions and share their results. In 2020, the mapping was again carried out observing three modalities: undergraduate DL courses, graduate DL courses and on-site or hybrid undergraduate courses.

The 2008 Brazilian National Policy for Special Education considers the target audience for special education to be the person with a disability, one with long-term physical, mental or sensory impairments, which, in interaction with various barriers, may restrict their full participation and effective in school and society.

According to data reported by the respondent institutions in 2020, most students with special educational needs are in on-site and hybrid courses (5,264), followed by DL undergraduate courses (2,469) and DL graduate courses (1,680). This also justifies the fact that the presence of specialized areas to support students with special educational needs is greater in on-site and hybrid courses (Chart 7.1).

Chart 7.1 – Institutions with support areas for students with special educational needs



The existence of an exclusive area for student support service is not a requirement for undergraduate courses, but the evidence that student support is carried out through welcoming and permanence actions and methodological and instrumental accessibility corresponds to a legal requirement present in Inep's evaluation indicators.

The fact is that professionals dedicated to monitoring these students are essential to ensure their permanence and completion, recognizing their needs, supporting the teaching and learning processes and guiding the pedagogical team.

Through Charts 7.2, 7.3 and 7.4, it is possible to compare the presence of support professionals for students in different modalities. It is observed that the most present professional is the Brazilian Sign Language (Libras) interpreter, followed by professionals from specialized educational services.

Chart 7.2 – Support professionals in distance learning undergraduate courses

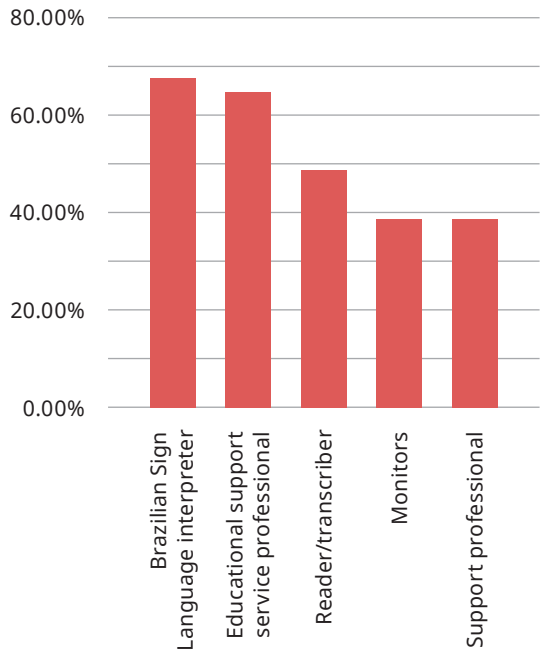


Chart 7.3 – Support professionals in distance learning graduate courses

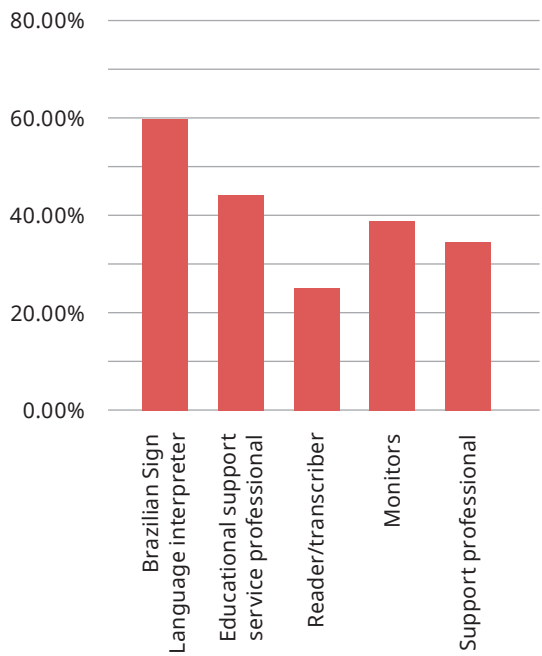
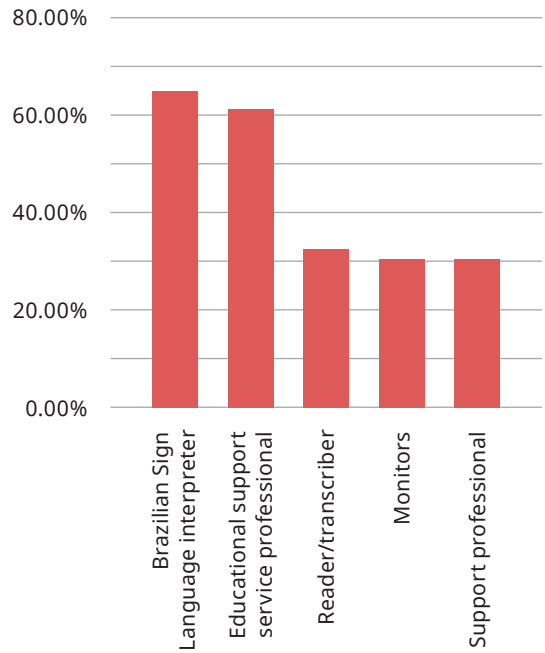


Chart 7.4 – Support professionals in on-site and hybrid courses



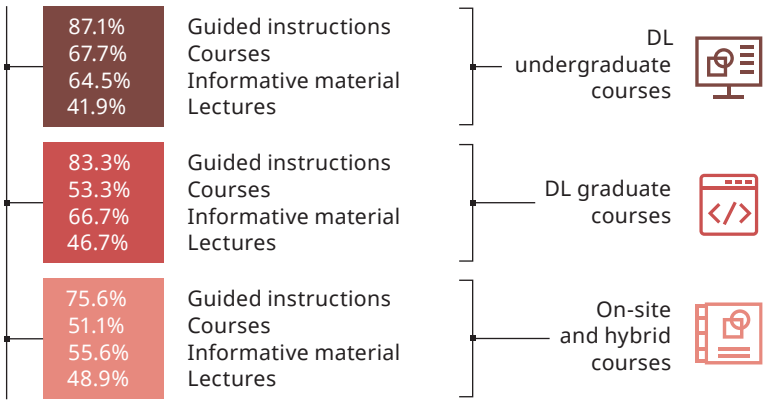
Identifying the specificities mapped by the institutions allows us to understand the strategies of actions carried out. It is observed, then, in the case of DL undergraduate students with special educational needs, that most of them have some type of disability. We check, in descending order: pervasive developmental disorders (such as autism spectrum disorder), functional disorders, high abilities and mental disorders. It is worth mentioning that functional or mental disorders are not considered a target audience for special education by the 2008 policy but are attended by institutions according to demand.

The mapped specificities also make it possible to understand the types of training or guidance offered by institutions to their teaching staff. It appears that, regardless of the modality, directed guidelines correspond to the most performed practice, followed by courses or informative materials.

Table 7.1 – Specificities mapped in distance learning undergraduate courses

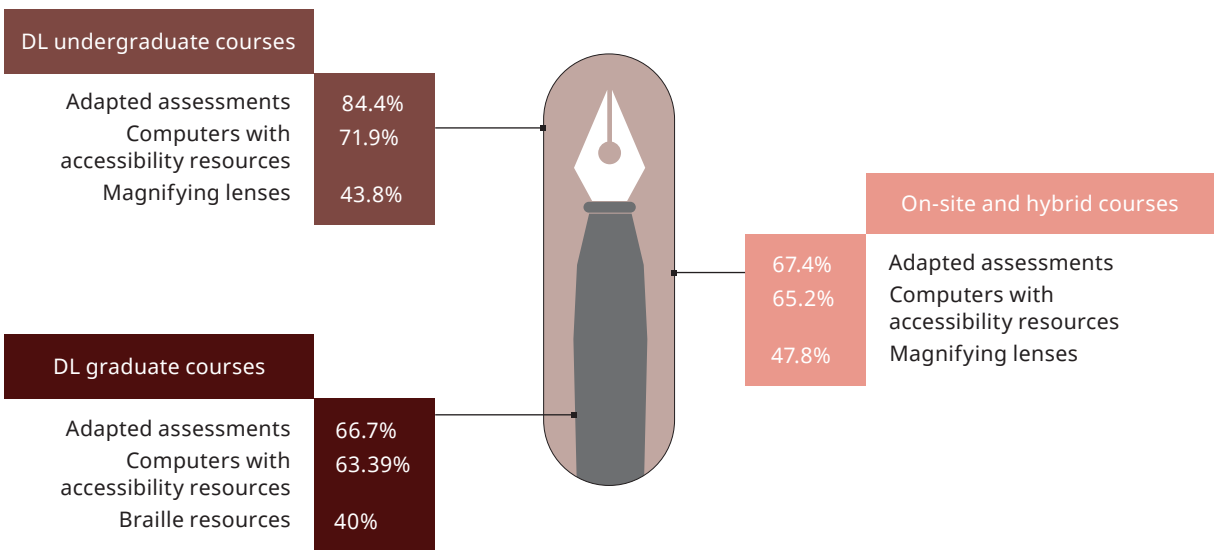
Deficiencies	82.8%
Pervasive developmental disorders	51.7%
Functions disorders	48.3%
High abilities	27.6%
Mental disorders	17.2%

Image 7.1 – Training or guidance offered to the teaching staff



In addition, mapping allows predicting resources and adaptations to the learning process. In Image 7.2, it is observed that the assessment adapted to students with special educational needs is the most common resource offered by higher education institutions (HEIs), followed by computers with resources, magnifying glasses and lenses and materials in Braille.

Image 7.2 – Resources offered by institutions



Another extremely relevant point in 2020, due to the COVID-19 pandemic, was the presence of accessibility resources in the virtual learning environments (VLEs) used by institutions. In this case, the most used resource was the screen reader, followed by the Libras avatar.

Table 7.2 – Virtual learning environment and accessibility resources

Resources	DL undergraduate courses	DL graduate courses	On-site and hybrid courses
Screen reader	83.3%	70%	51.1%
Brazilian Sign Language (Libras)	66.7%	60%	57.8%
Image description	40%	46.7%	33.3%
Color contrast	56.7%	53.3%	48.9%

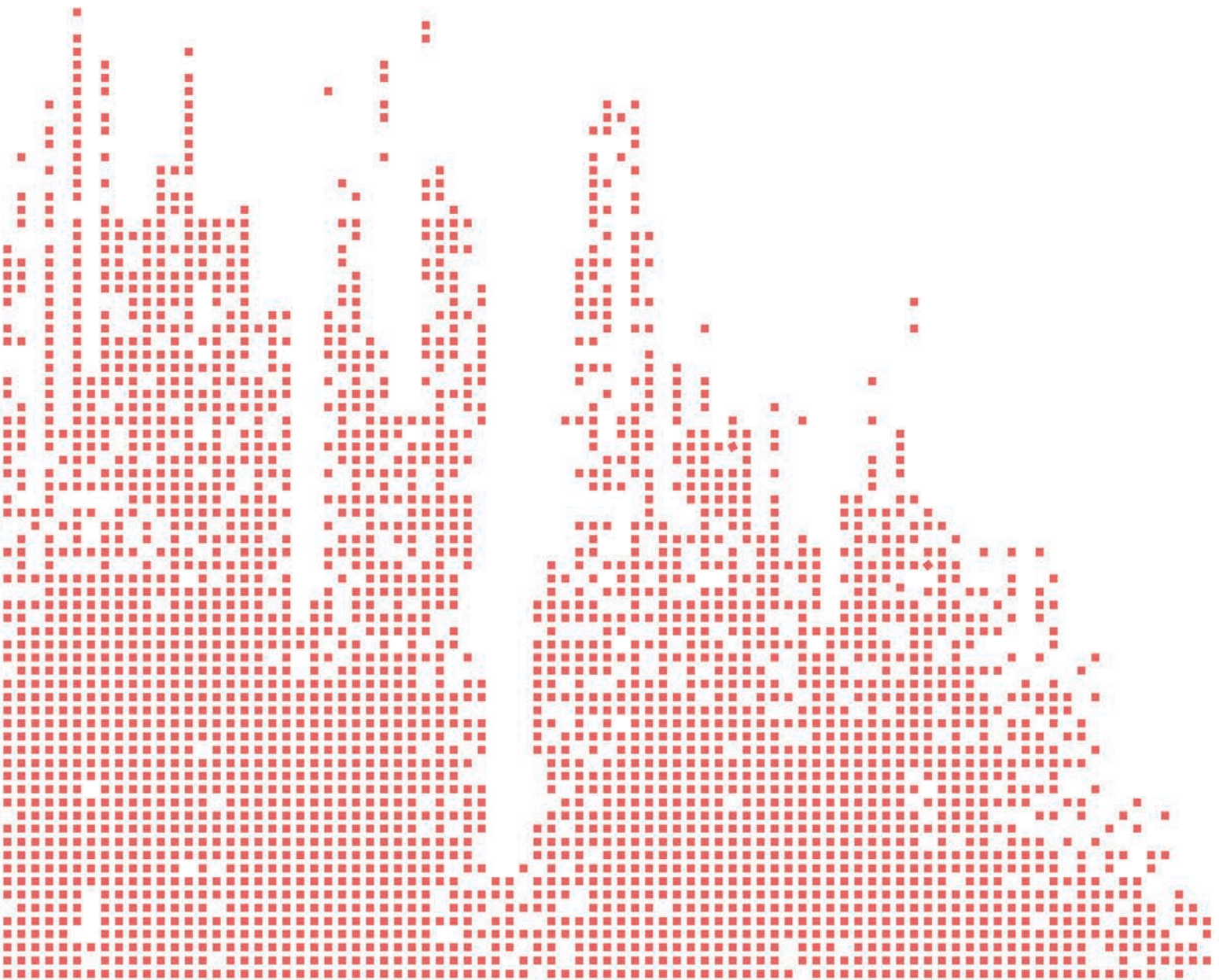
There is still a lot to be done when it comes to the inclusion of students in higher education. In addition to digital accessibility resources, architectural barriers, the challenge of teacher training, the development of support strategies and the reception of peers are some of the challenges. The data gathered in this report presents statistics with potential for improvement. It is necessary to find strategies to expand not only access, but also the permanence and completion of courses by these students.

About the author

Karina Nones Tomelin is director of innovation and quality at B42 and creator of EducaBox. She holds a master's degree in Education and a bachelor's degree in Psychology from the Foundation University of Blumenau (FURB) and a bachelor's degree in Pedagogy from the Anhembi Morumbi University (2016). She is a counselor at the Brazilian Association for Distance Learning (ABED).

Part 8

Student service: tutor/teacher/ coordinator roles



Rosana Amaro

In this chapter of 2020 Brazilian Census for Distance Learning, data regarding student service will be presented, considering the roles of tutors, teachers and coordinators.

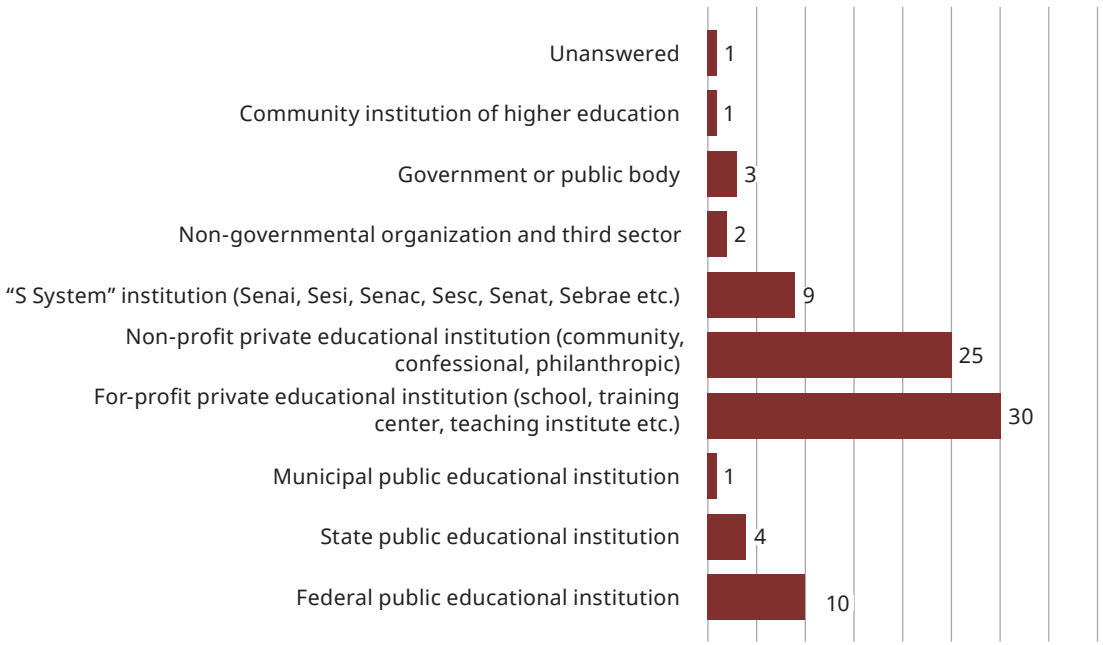
The data collected refer to different administrative categories of educational institutions in the federal, state and municipal public spheres; the for-profit (schools, training centers, teaching institutes) and non-profit (community, denominational, philanthropic) private sector; "S System" (Senai, Sesi, Senac, Sesc, Senat, Sebrae, etc.); in addition to non-governmental organizations (NGOs) and the third sector and public or government agencies.

Institutions were identified by region and by the nature of the municipality where they are located (state capitals/Federal District or inland cities). Respondents were also asked whether they were linked to the Open University of Brazil (UAB) or to the Open University of the Brazilian Unified Health System (UNA-SUS). Likewise, we sought to identify which courses offer courses in the following categories: only distance learning (DL); DL and on-site; DL, hybrid and on-site; hybrid only; and on-site and hybrid.

Data collection considered different segments such as accredited full DL undergraduate courses, full DL graduate courses, open non-corporate DL courses, open corporate DL courses and on-site or hybrid courses.

Chart 8.1 presents the results related to the characterization of respondents regarding the administrative category.

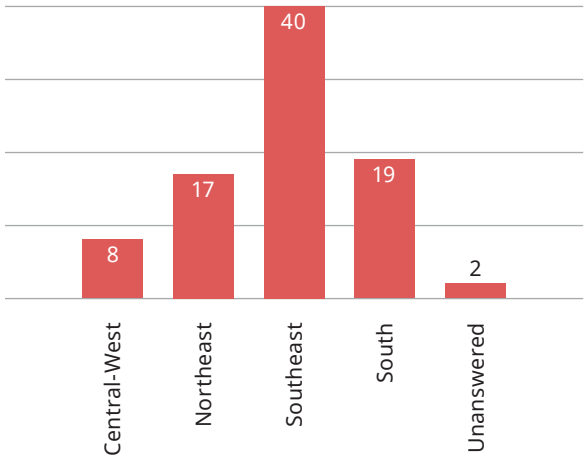
Chart 8.1 – Respondents by administrative category, in absolute value



There was a greater participation of for-profit educational institutions (schools, training centers, teaching institutes), followed by non-profit private institutions (community, confessional, philanthropic). In addition, it is noteworthy that only one institution was characterized as a community institution and only one did not declare its administrative category.

Regarding the location of the institution's headquarters, there was a greater participation of institutions located in the Southeast (40). Following, in descending order, are the South (19), the Northeast (17) and the Central-West (8). Two respondents did not inform the location of the institution.

Chart 8.2 – Institutions' location, in absolute value



According to the data, 13 institutions participate in the UAB System and 70 do not. Three participants did not provide a response on this topic. In addition, 81 respondents declared that they do not participate in the UNA-SUS, 2 did not respond and 3 declared themselves to be participants.

Chart 8.3 – Participation in Open University of Brazil System

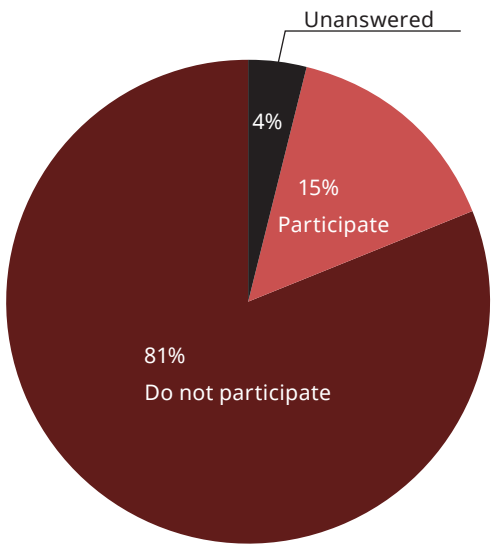
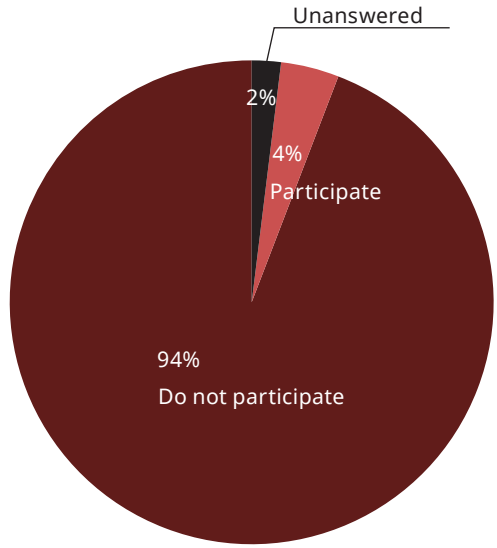
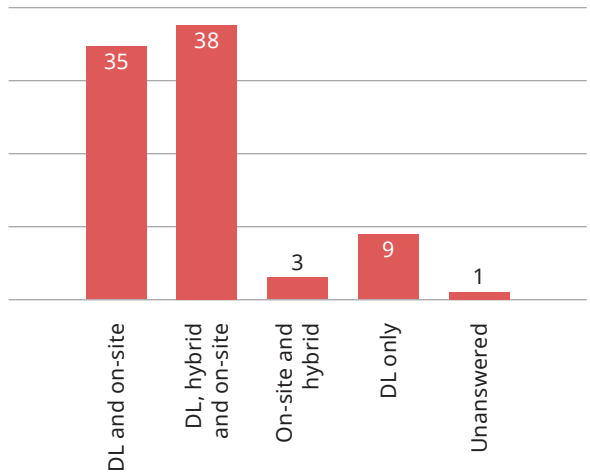


Chart 8.4 – Participation in Open University of the Brazilian Unified Health System



Regarding the modalities offered, it was observed that the categories "DL and on-site" and "DL, hybrid and on-site" had a higher incidence among respondents. The characterization "only DL" appeared in 9 responses and "on-site and hybrid" in 3. In this case, only one respondent did not inform the data.

Chart 8.5 – Modalities offered by the respondents, in absolute value



We observed the composition shown in Table 8.1.

Table 8.1 – Type of courses offered by the respondents, in absolute value

	Accredited full DL undergraduate courses	Full DL graduate courses	Open non-corporate DL courses	Open corporate DL courses	On-site or hybrid courses
Offer	38	40	42	23	65
Do not offer	43	43	38	55	17
Unanswered	5	3	6	8	4

Considering the data declared by the respondents, there was a greater adherence to on-site or hybrid courses.

Regarding the support provided to students in terms of content understanding, skills development, and financial, psychological and career-related aspects, the data shown in Table 8.2 were verified.

Table 8.2 – Student service goals

	Accredited full DL undergraduate courses	Full DL graduate courses	On-site or hybrid courses
Specialized educational support	–	–	42
Content understanding	35	33	54
Skills development	32	29	47
Students did not receive specific support	–	3	4
Financial issues	20	24	37
Psychological issues	20	15	35
Career-related issues	30	27	45

The criterion “specialized educational assistance and monitoring” was declared only in on-site or hybrid courses. In addition, for the items “content understanding”, “skills development”, “financial issues”, “psychological issues” and “carrer-related issues”, there is a predominance of on-site or hybrid courses in relation to the other two categories (column 1 and 2). Chart 8.6 presents these data in another format.

Chart 8.6 – Student service goals

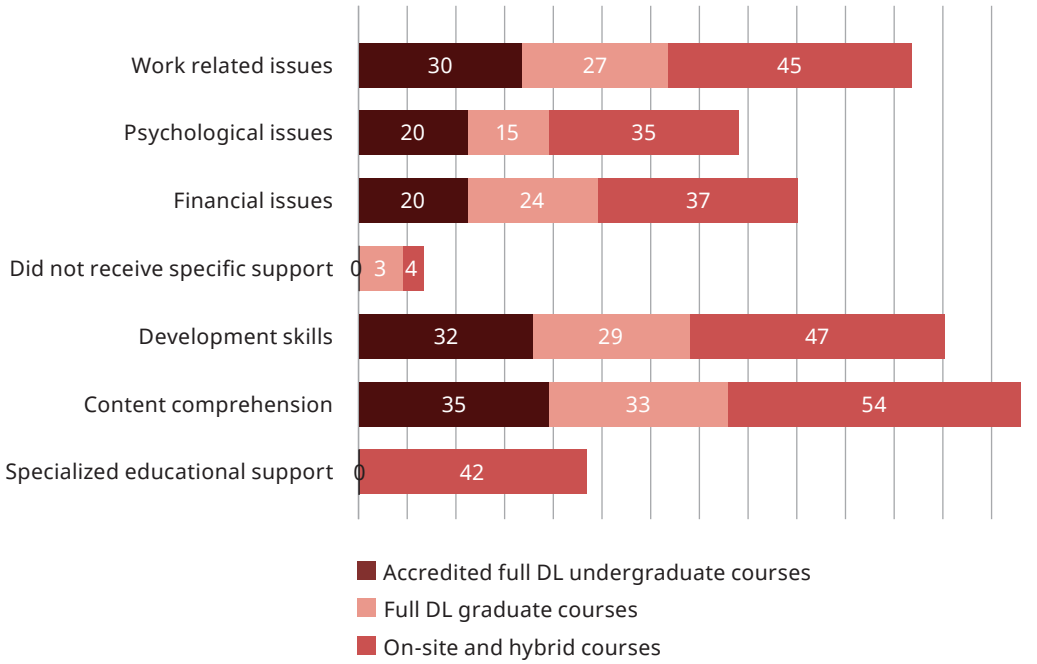


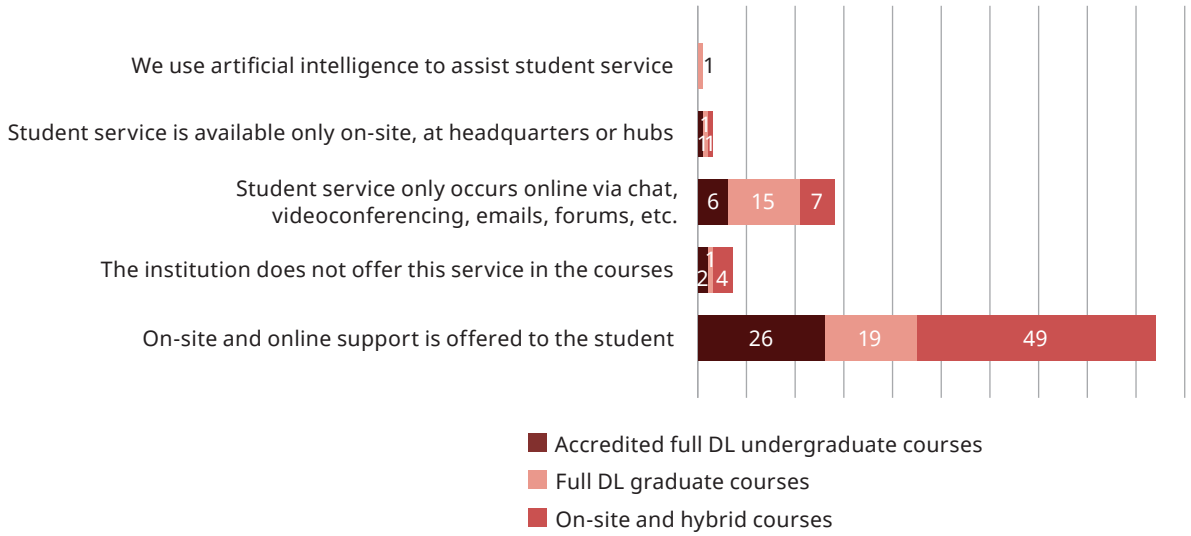
Table 8.3 presents the data related to the forms of assistance to students in terms of content and skills development.

Table 8.3 – Student service: contents and skills development

	Accredited full DL undergraduate courses	Full DL graduate courses	On-site or hybrid courses
On-site and online support is offered to the student	26	19	49
The institution does not offer this service in the courses	2	1	4
Student service only occurs online via chat, videoconferencing, emails, forums, etc.	6	15	7
Student service is available only on-site, at headquarters or hubs	1	1	1
We use artificial intelligence to assist student service	–	1	–

In this case, there was a higher incidence of participation in the criterion "On-site and online support is offered to the student", respectively, in the categories of on-site or hybrid courses, accredited full DL undergraduate courses and full DL graduate courses. In the other criteria, in general, low participation was observed. These data are presented in Chart 8.7.

Chart 8.7 – Student service: contents and skills development



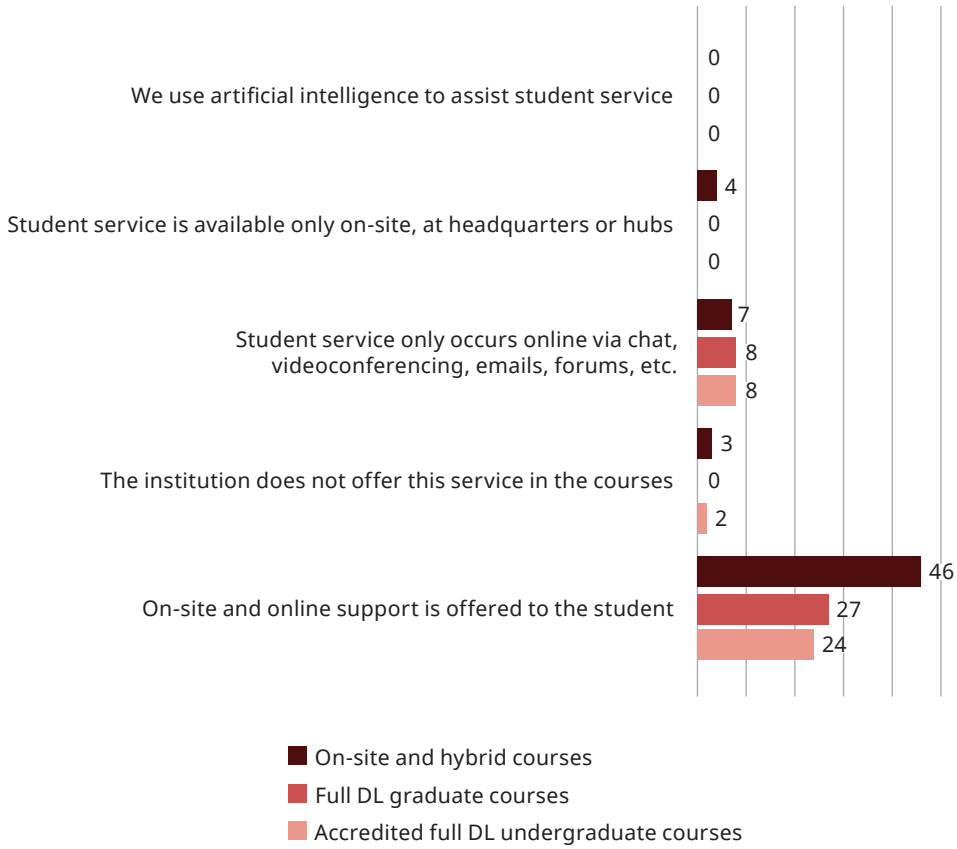
About student service regarding administrative and financial issues, responses were collected as indicated in Table 8.4.

Table 8.4 – Student service: administrative and financial aspects

	Accredited full DL undergraduate courses	Full DL graduate courses	On-site or hybrid courses
On-site and online support is offered to the student	24	27	46
The institution does not offer this service in the courses	2	–	3
Student service only occurs online via chat, videoconferencing, emails, forums, etc.	8	8	7
Student service is available only on-site, at headquarters or hubs	–	–	4
We use artificial intelligence to assist student service	–	–	–

Regarding student service in administrative and financial aspects, the data showed that the criterion "On-site and online support is offered to the student" was more prominent in on-site or hybrid courses, followed by graduate courses and finally by the full DL undergraduate courses. The other criteria questioned were answered with a lower incidence. It is noteworthy that the criterion "We use artificial intelligence to assist student service" was not indicated by any respondent (Chart 8.8).

Chart 8.8 – Student service: administrative and financial aspects



Regarding the role of the tutor, including the professors who have direct contact with students during the course, regardless of their career level, payment and title in the institution where they work, the data shown in Table 8.5 were collected.

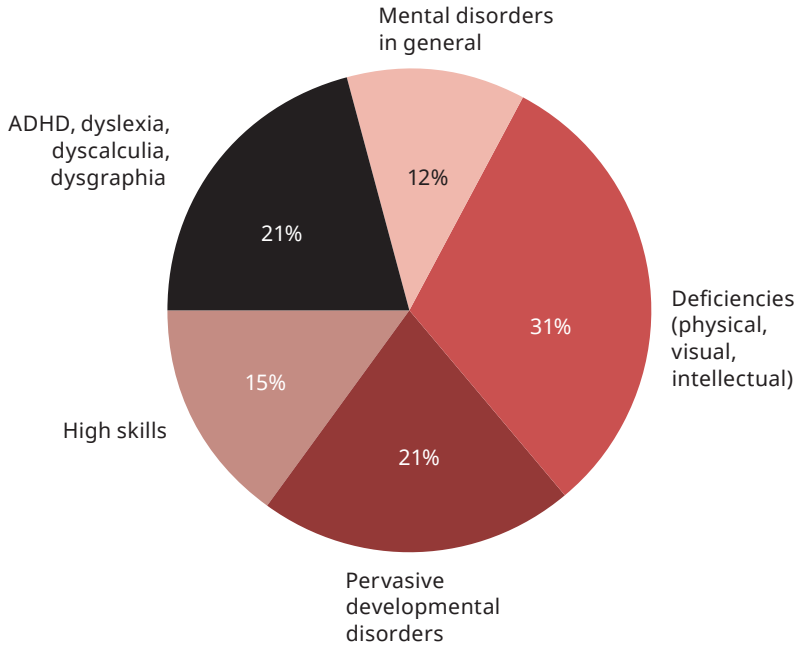
Table 8.5 – Tutors roles

	Accredited full DL undergraduate courses	Full DL graduate courses	Open non-corporate DL courses	Open corporate DL courses	On-site or hybrid courses
Follow collaborative work	28	22	15	14	44
Lead discussions	30	29	18	15	48
Create situations for students to apply knowledge	24	28	17	16	48
Create discussion topics	29	27	16	15	48
Give feedback on work done by students	34	30	23	16	51
Keep students motivated	35	35	25	18	49
Promote questions about the discipline	32	30	20	16	47
Promote collaborative work	29	25	16	15	45
Clear up doubts about the content	34	35	30	18	53

In the analysis of the data, the criteria “clear up doubts about the content”, “give feedback on work done by students”, “keep students motivated”, “lead discussions”, “create situations for students to apply knowledge”, “create discussion topics” ”, “promote questions about the subject”, “promote collaborative work” and, finally, “follow collaborative work” stand out in on-site or hybrid learning compared to the other categories. The accredited full DL undergraduate courses and graduate courses were more prominent when compared to open DL courses in general. The data demonstrate that these aspects are developed in the tutoring role in all types of courses.

Finally, Chart 8.9 presents the specificities of students mapped by higher education institutions (HEIs).

Chart 8.9 – Specificities of students



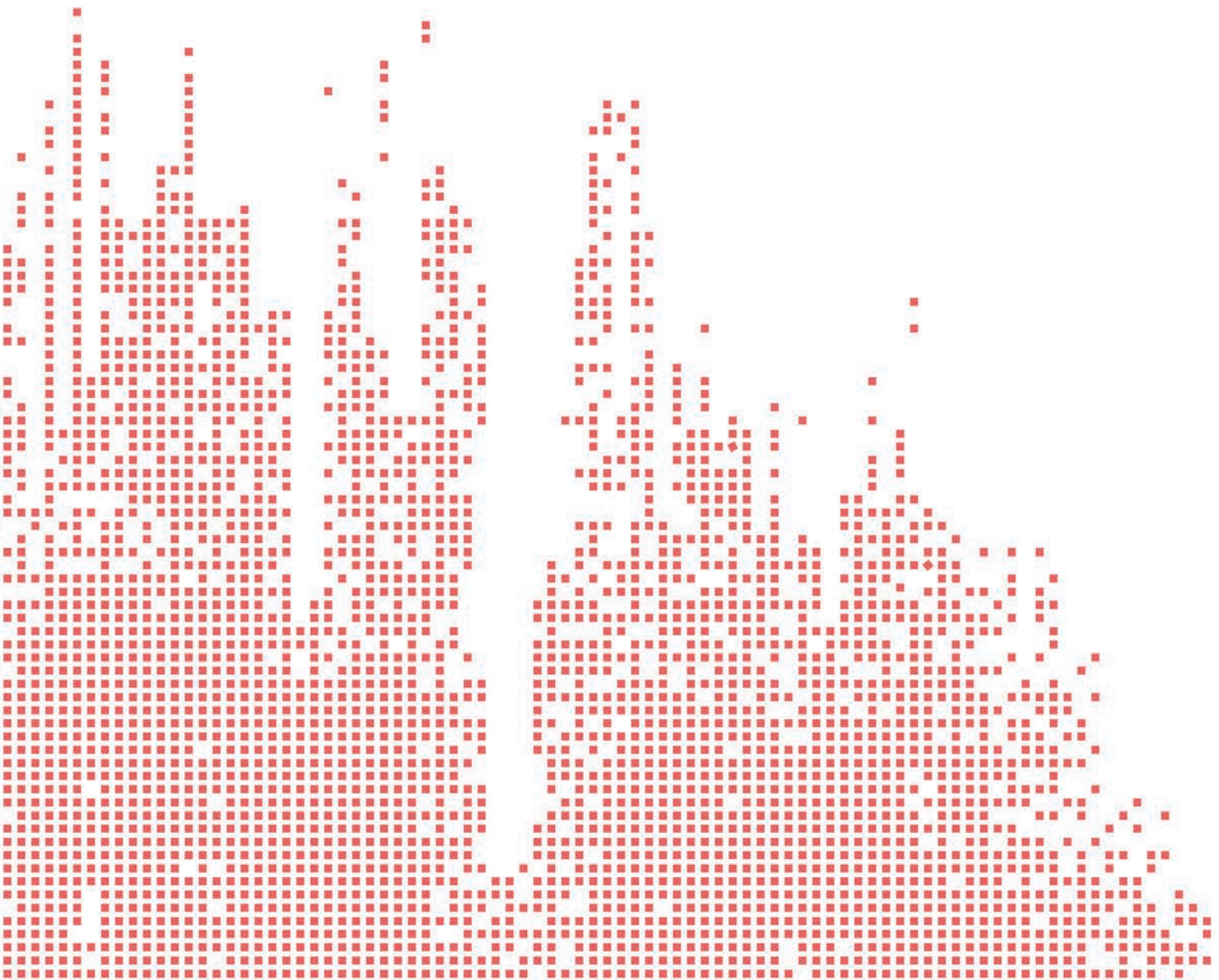
The HEIs indicated that, in this case, the most frequent specificities are disabilities (physical, auditory, visual, intellectual), followed, respectively and in descending order, by global developmental disorders (including autism spectrum), by specific functional disorders (attention-deficit/hyperactivity disorder – ADHD, dyslexia, dyscalculia, dysgraphia), due to high abilities and, to a lesser extent, mental disorders in general.

About the author

Rosana Amaro holds a doctorate and a master's degree in Education, in the Education, Technology and Communication (Etec) line of research; a specialist degree in DL; a bachelor's degree in Physical Education; and a bachelor's degree in Pedagogy. She is an adjunct professor at the Faculty of Physical Education of the University of Brasília (UnB), a teacher in different DL subjects, and an instructional designer. She worked in pedagogical coordination; tutoring coordination; and management of the DL bachelor's degree in Physical Education at the Faculty of Physical Education. She has extensive experience in online teaching and tutoring (UnB, Cead, Procap, and other institutions) and is interested in the following topics: online teaching, tutoring, instructional design, education and technologies, and online education.

Part 9

Dropout: rate and causes



Evandro Luis Ribeiro

The expressive growth of distance learning (DL) in Brazil observed in the data of the last editions of the Brazilian Census for Distance Learning show that this type of education is going through an important moment of consolidation, evolution of methodologies and improvement of academic processes and services. In this context, the topic of dropout indicates an important and challenging commitment of higher education institutions (HEIs) to mitigate the significant rates observed in the modality.

The 2019 Census, in the section that refers to dropout and students service, revealed a scenario in which a considerable part of the HEIs did not obtain management actions and information on the topic of dropout. Similarly, in the data obtained for this edition, it was possible to observe a similar situation.

The research universe is represented by 85 HEIs, which offer courses in DL, on-site and hybrid modalities, in these segments: accredited full DL undergraduate courses; accredited full DL graduate courses; open non-corporate DL courses; open corporate DL courses; and on-site or hybrid courses. The findings made possible by the data regarding the themes of dropout and attendance to students, by segment, are described in the following sections.

9.1 Accredited full distance learning undergraduate courses

Of the 85 respondents, 38 offer accredited full DL undergraduate courses, 43 do not offer and 3 did not respond to the question. Of the universe of 38 HEIs that offer full DL courses, 33 know the reasons for dropping out, 3 are unaware and 2 did not respond to the questioning. Regarding the dropout percentages, in the universe of these 33 HEIs, in 23 rates are up to 25%; in 3 above 26%; and 7 did not respond to the questioning. Among the reasons for evasion, financial difficulty predominates.

9.2 Accredited full distance learning graduate courses

Of the 85 respondents, 40 offer accredited full DL graduate courses, 8 do not offer and 3 did not respond to the question. Of those 40 HEIs, 29 know the reasons for dropping out, 8 are unaware and 3 did not respond. Regarding the dropout percentages, in these 29 HEIs, in 18 rates are up to 25%; in 2 above 26%; and 9 do not have this information or did not respond to the questioning. As in the previous segment, among the reasons for evasion, financial difficulty predominates.

9.3 Open non-corporate distance learning courses

Of the 85 respondents, 42 offer open non-corporate DL courses, 37 do not and 6 did not respond. Of the 42 that offer, 17 know the reasons for dropping out, 18 are unaware and 7 did not respond. Regarding dropout percentages, considering the universe of 17 HEIs, in 11, the rates are up to 25%; in 4, above 26%; and 2 do not have this information or did not respond to the questioning. As in the previous segment, among the reasons for evasion, financial difficulty predominates.

9.4 Open corporate distance learning courses

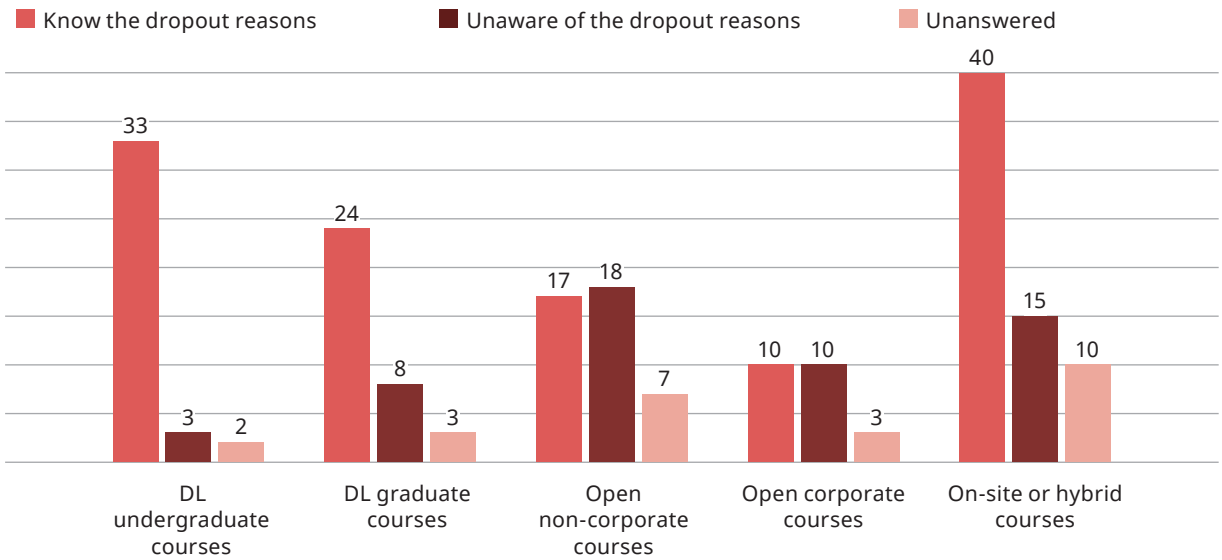
Of the 85 respondents, 23 offer open corporate DL courses, 55 do not and 7 did not respond. Of the universe of 23 HEIs, 10 know the reasons for dropping out, 10 are unaware and 3 did not answer the question. Regarding the dropout percentages, considering the universe of these 10 HEIs, in 6 rates are up to 25%; in 3 above 26%; and 1 HEI does not have this information available. As in the previous segments, among the reasons for evasion, financial difficulty predominates.

9.5 On-site or hybrid courses

Of the 85 respondents, 65 offer on-site or hybrid courses, 15 do not and 10 did not respond. Of the 65 HEIs that offer, 40 know the reasons for dropping out, 15 are unaware and 10 did not respond. Regarding dropout percentages, considering the universe of 40 HEIs, in 24 rates are up to 25%; in 5 above 26%; and 11 do not have this information available. As in the previous segments, among the reasons for evasion, financial difficulty predominates.

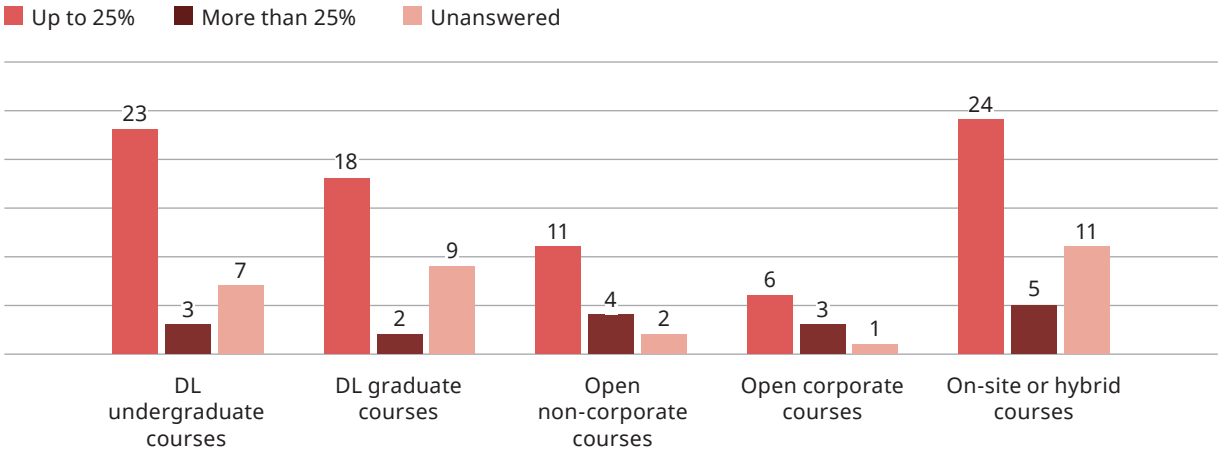
Charts 9.1 and 9.2 represent the quantitative referring to the management and control of dropout and the percentage of dropout of the HEIs divided by the categories used in the applied questionnaire.

Chart 9.1 – Dropout management and control by type of course



In a comparison of the perception of dropout, as illustrated in Chart 9.2, it is possible to observe the predominance between the segments of up to 25% dropout, which allows us to say that, regardless of the segment, dropout is similar. Another fact that calls attention to dropout is the fact that, for the first time since the Census was created, dropout in on-site courses is higher than in DL courses in the undergraduate segment. This data is directly related to the COVID-19 pandemic, which interrupted on-site activities and led HEIs to promote an abrupt change in the methodology used in the courses, virtualizing their processes. Of the 29 HEIs that monitor student dropout in on-site courses, 20 of them identified the lack of adaptation to remote learning as a factor that led students to drop out of their courses. In the DL undergraduate courses, the reason that prevailed in the dropout of students is, as indicated, the financial aspect.

Chart 9.2 – Dropout rate by type of course



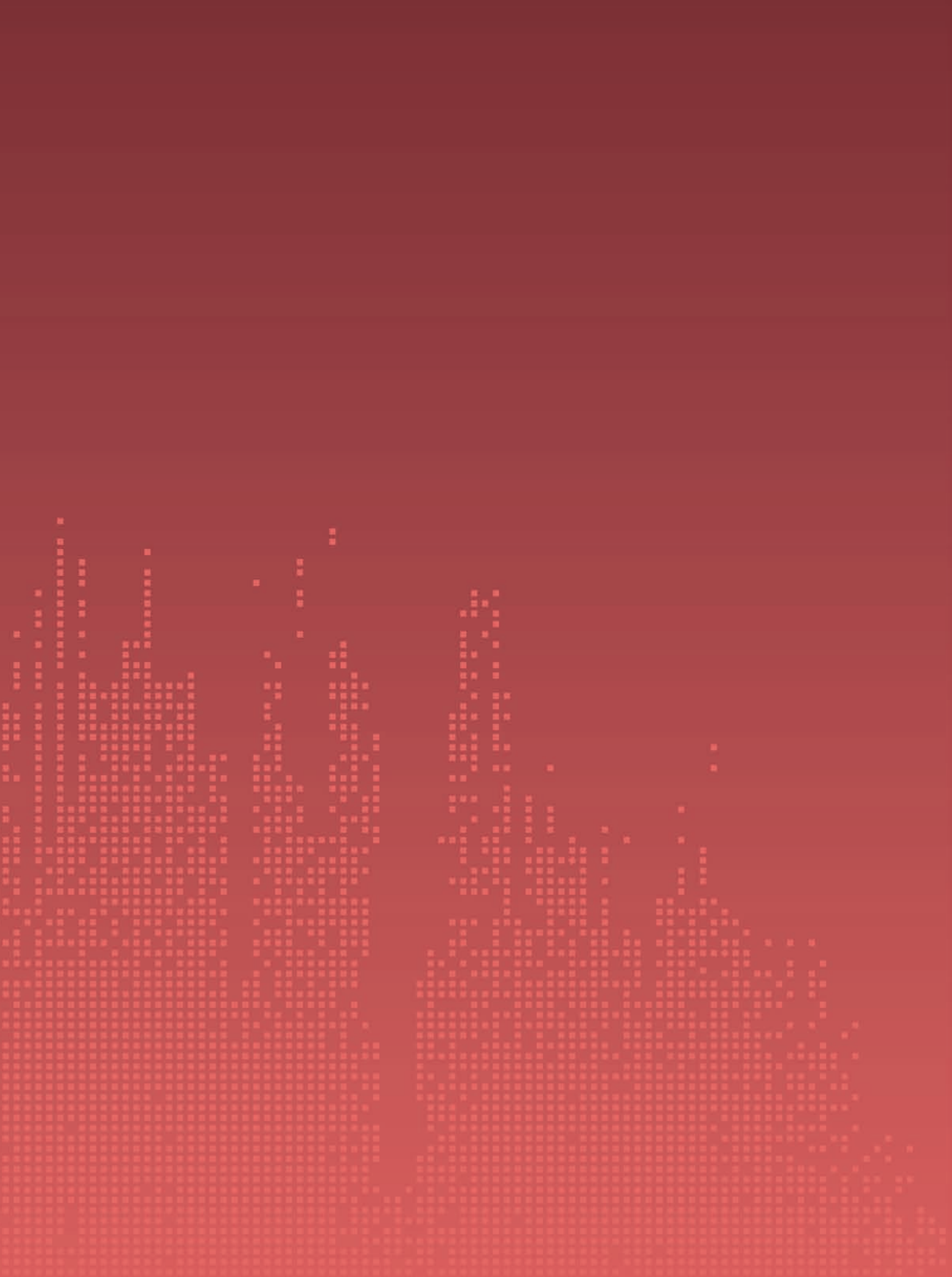
Research participants were also asked if there are programs and/or prediction proposals for dropout control. In the segment of accredited full DL undergraduate courses, in about 40% of the HEIs there are consolidated programs. In other segments, the rates are lower, varying between 15% and 20%.

Concerning the operational level of dropout control strategies, regardless of the segment, most HEIs are in the development phase of their programs. This allows us to affirm that the topic of dropout is part of the daily life of at least 60% of the HEIs participating in the Census.

However, it should be noted that, despite the existence of initiatives aimed at the control of dropout by the HEIs, there is still a long way to go in the sense of expanding the forms of control – either through the implementation of technology or through human intervention actions, whether for the application of new methodologies to allow the student to calmly follow his academic journey.

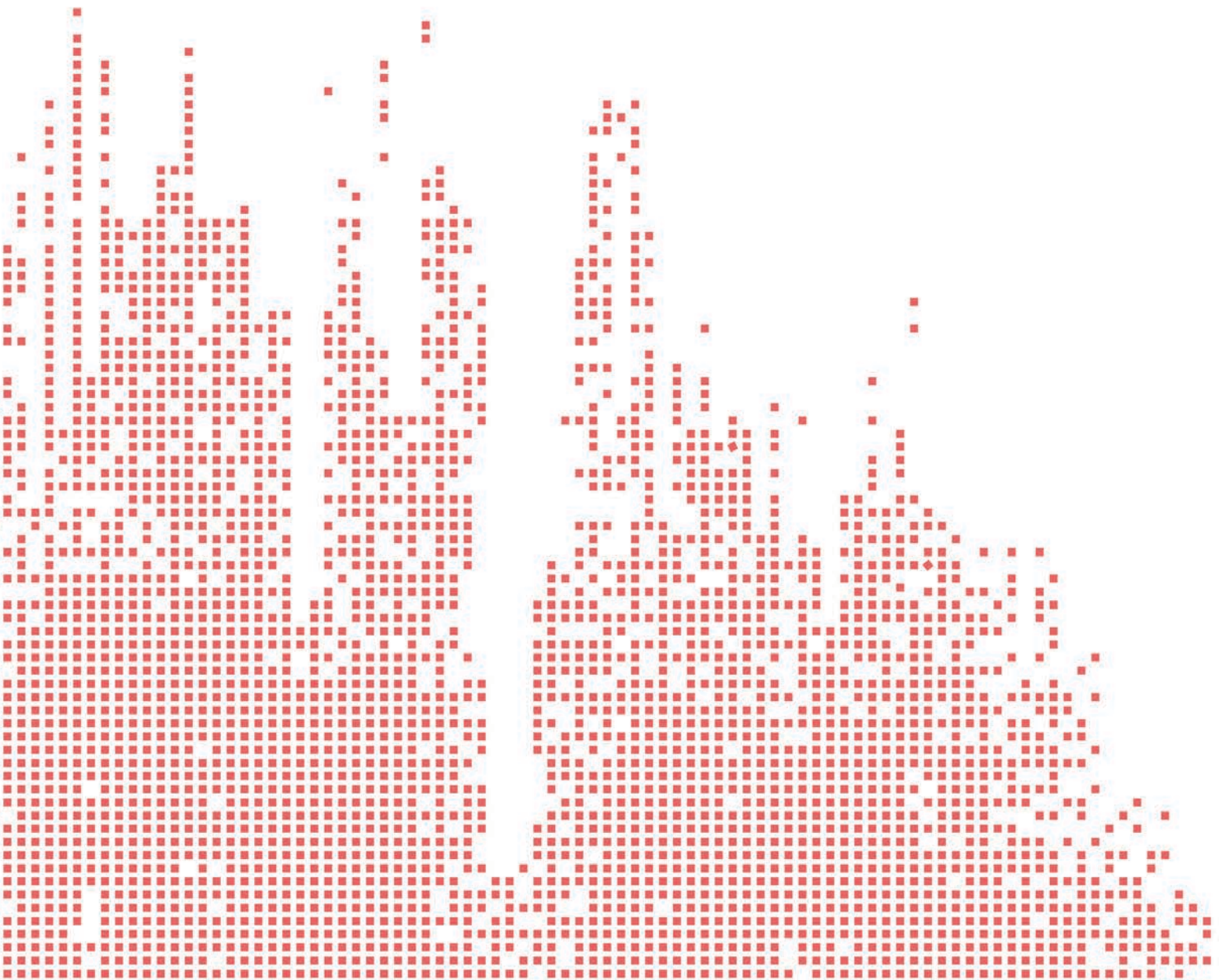
About the author

Evandro Luis Ribeiro holds a bachelor's degree in Pedagogy and in Physical Education; a master's degree in Production Engineering; a specialist degree in University Management and Leadership from the Inter-American Organization for Higher Education (OUI Canada/UFSC); a MBA degree in Academic and University Management; and a specialist degree in Educational Management. He is currently the DL general coordinator, teacher and tutor at Claretiano – University Center; member of the GT-EAD of the Brazilian National Association for Catholic Education (Anec); member of the Sinaes evaluators bank and member of the ABED's Ethics Council.



Part 10

Characteristics of hybrid learning



Marcos André Silveira Kutova

Hybrid learning combines hours in the on-site modality with hours in the distance learning (DL). In Brazil, the most common form of hybrid undergraduate course is one in which online activities are included in on-site courses, through partial or full DL courses. This practice, at the time limited to up to 20% of the total course workload, was authorized by Ordinance No. 2,253/2001, of the Ministry of Education (MEC). After successive changes in this accreditation, today, under the terms of Ordinance No. 2,117/2019, each course can offer up to 40% of its total workload in the DL modality.

Even though this legal authorization for offering partial or full DL courses has existed for two decades, some institutions have not yet incorporated online activities into their courses, even if they offer some type of digital resource for their students in on-site courses. Among the 61 institutions that reported the degree of digitalization of their on-site courses in 2020, 22 institutions were in this situation, with 5 reporting that they provide digital content repositories, 12 provide virtual learning environments (VLE) and another 5 do not offer any digital resources in their on-site courses.

Among those who reported offering DL hours in their on-site courses, 24 institutions said that they do it in up to 20% of the workload, 3 reported doing it in up to 30% of the workload and 12 reported that they do it up to 40 hours, as shown in Chart 10.1.

Chart 10.1 – On-site courses digitalization rate

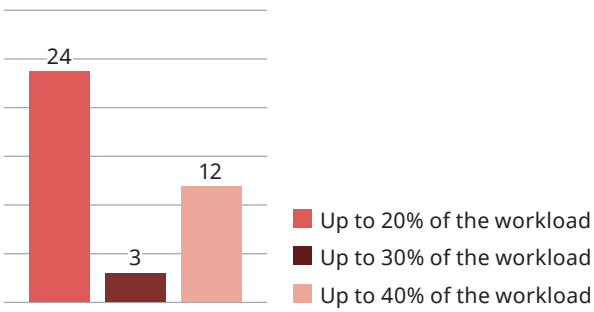


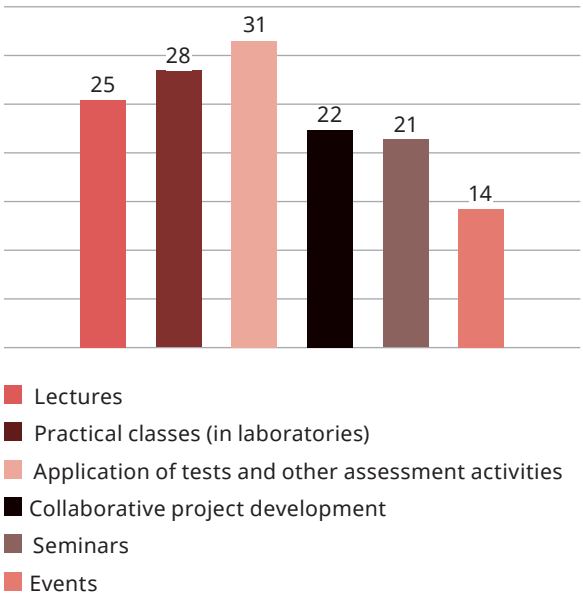
Chart 10.1 shows that there are still few institutions that offer DL workload in their on-site courses above the old limit of 20%. There are only 15 among the 85 institutions that participated in the Census. However, it is important to consider that the authorization to increase the limit only took place at the end of 2018, so it is possible to believe that more institutions will increase this workload in the coming years. Another factor that should stimulate this increase is the experience that virtually all on-site courses had with online teaching during the COVID-19 pandemic.

The offer of DL courses in on-site programs brings several benefits to students, such as the freedom to study at the most convenient times, reduced travel to the institution and curricular flexibility. For institutions, there are also benefits, the main one being the optimization of their efforts, as a DL course can concentrate students from different campuses or hubs in a single class. This DL course offering, however, usually happens in place of the on-site offering. Among the institutions participating in the Census that offer DL courses in on-site programs, 46 said they do not offer the flexibility for the student to choose the modality in which they want to take them and 17 said yes, and of these, 4 said they offer this flexibility in all its DL courses.

The participating institutions also informed what were the on-site practices carried out in their hybrid courses, regardless of the modality of each discipline. Here, however, it is important to consider that some institutions did not report these on-site activities, because they did not perform them during the pandemic, and those that did inform them could only perform them before the suspension required by the healthcare bodies.

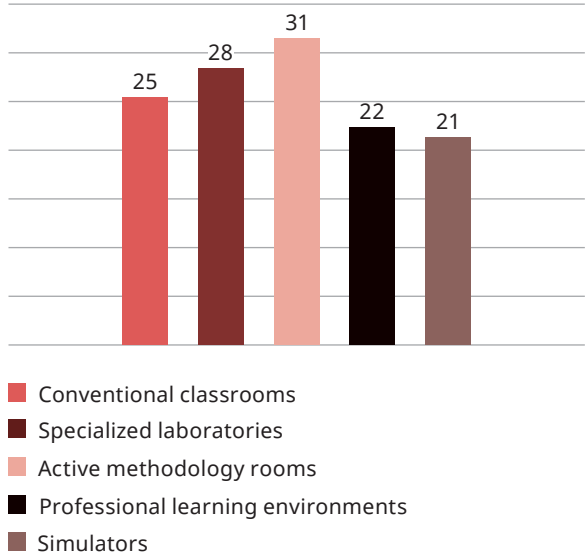
The on-site activity in the hybrid courses most cited by the institutions was the application of tests and other evaluative activities, followed by practical classes and lectures, as shown in Chart 10.2. Institutions were able to tick all applicable options. Here, however, it is believed that the 7 institutions that did not report the application of on-site tests, but that offer lectures or on-site practices, also carry out the evaluation in person, further reinforcing the application of tests as the main on-site practice in hybrid courses.

Chart 10.2 – Activities performed in on-site moments in hybrid courses



Finally, the institutions informed which were the on-site learning spaces used in the hybrid courses. In line with the data presented in Chart 10.2, the most used spaces were conventional classrooms and specialized laboratories, as shown in Chart 10.3. It is interesting to note, however, that many institutions (31 of the 85 participants) already have active methodology rooms for their on-site and hybrid courses. The existence of such rooms suggests that these institutions are modernizing their pedagogical projects. Also noteworthy is the fact that 22 institutions employ professional learning environments in their hybrid courses. Again, institutions were able to tick all applicable options.

Chart 10.3 – On-site learning spaces in hybrid courses



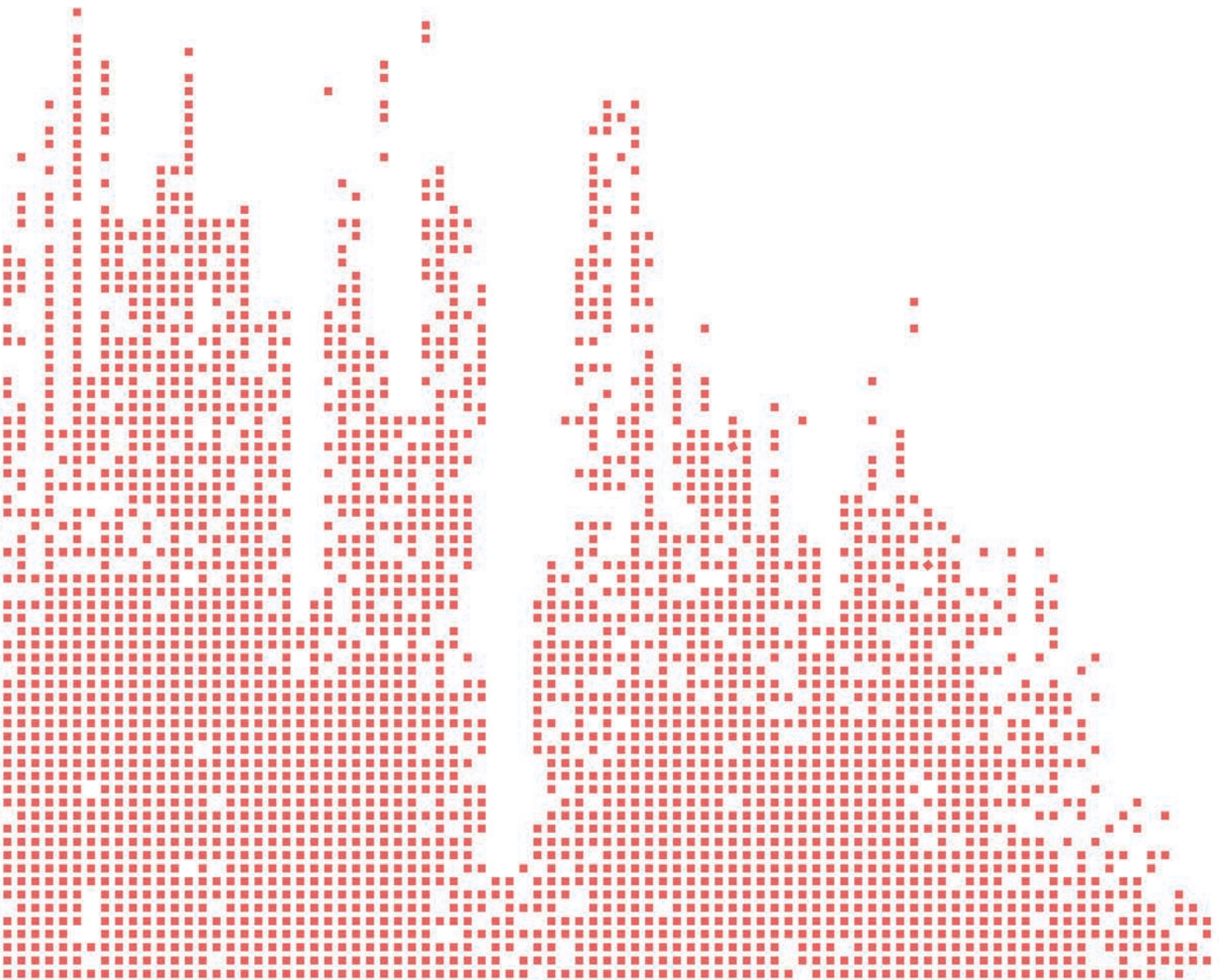
The year 2020, severely impacted by the COVID-19 pandemic, prevented the advancement of hybrid teaching through on-site courses. However, the experiences of virtually all institutions in 2020 and 2021 with online teaching, synchronous or asynchronous, will be a strong driver of this modality in the coming years. The next editions of the Brazilian Census for Distance Learning will certainly show a scenario quite different from the one presented in this report.

About the author

Marcos André Silveira Kutova holds a bachelor's degree in Electrical Engineering from the Federal University of Minas Gerais – UFMG (1993); a technology degree in Data Processing from the Mineira Foundation for Education and Culture – Fumec (1990); a specialist degree in Business Management from the Dom Cabral Foundation (2006); a master's degree in Computer Science from the University of São Paulo – USP (1999); and a PhD in Geography, in Spatial Analysis' line of research, from the Pontifical Catholic University of Minas Gerais – PUC Minas (2013). He has been a professor of Computer Science and director of the Distance Learning Center at the PUC Minas since 2011.

Part 11

Open non-corporate and corporate courses



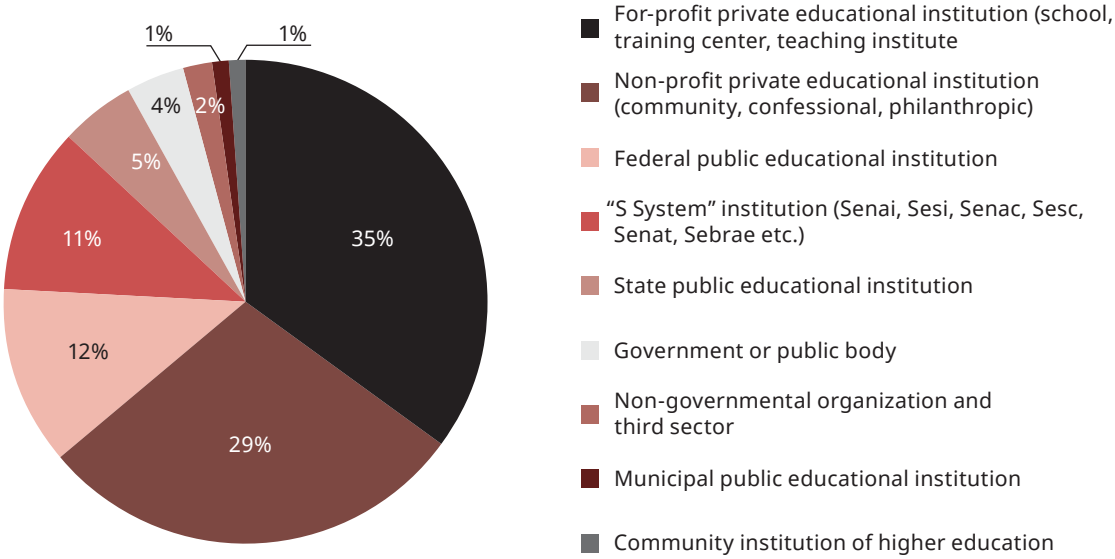
Antonio Alvaro de Assis Moura

Open courses are those which are not subject to any regulation or inspection by government agencies. Open courses are initially divided between non-corporate and corporate courses – that is, those that are produced or broadcast to the public of a specific corporation. Concerning their category, open courses can be divided according to their role; for this Census the following division was chosen:

- Professional initiation
- Operational training
- Social/behavioral skills training
- Update training
- Improvement training
- Extension courses
- Preparatory courses
- Language courses

In this Census, responses were obtained from 85 institutions. Private institutions form the majority of respondents with 65% of the total, with 35% for-profit and 30% non-profit. A prominent position should be given to "S System" institutions (Senai, Sesi, Senac, Sesc, Senat, Sebrae, etc.), which represent 4% of the sample.

Chart 11.1 – Respondents by administrative category

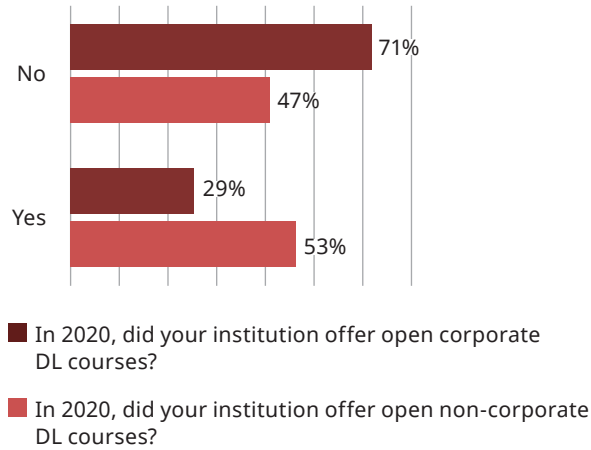


As for the geographic distribution, most respondents, with 48%, were in the Southeast region. In addition, of the total number of respondents, 35% are in inland cities, while 65% are in state capitals or the federal district.

Based on the responses obtained, it is interesting to note that 11% of institutions only offer distance learning (DL) and, on the other hand, only 4% do not offer distance education. The others offer several modalities, such as hybrid and on-site. A possible explanation for these percentages lies in the fact that, during the research period, the COVID-19 pandemic was a decisive factor for DL.

Regarding the offer of open courses, 53% of the institutions offered open corporate courses and 29% offered open non-corporate courses (Chart 11.2). These data must be evaluated very carefully, due to the number of respondents, but they serve to set limits for the analysis of other data within the same topic and for the comparison of data. For example, the 4% of respondents from the "S System" institutions are strongly oriented towards offering open courses, whether corporate or non-corporate.

Chart 11.2 – Open courses offered in 2020



Considering all the modalities existing in the current questionnaire, operational training courses correspond to the largest share of the courses offered, with 44% of the total, followed by update training and improvement training courses, both with 19% of the total. These three modalities reach 83% of the courses offered.

When you look at the number of enrollments, you can see that the majority (41%) focuses on professional initiation courses. Obviously, the enrollment rate per course in this modality is higher than that of the operational training, update training and improvement training courses.

Table 11.1 – Enrollments by type of open corporate and non-corporate courses

Modalities	Courses	Enrollments	Enrollments/Courses	% Course	% Enrollments
Professional initiation	2,246	1,090,384	485.48	7%	41%
Operational training	13,778	330,739	24.00	44%	12%
Social/behavioral skills training	1,279	263,316	205.88	4%	10%
Update training	5,964	317,812	53.29	19%	12%
Improvement training	6,039	175,970	29.14	19%	7%
Extension courses	1,698	417,883	246.10	5%	16%
Preparatory courses	10	60,484	6,048.40	0%	2%
Language courses	218	6,136	28.15	1%	0%
Total	**31,232**	**2,662,724**	**85.26**	**100%**	**100%**

In this regard, enrollments per course, what stands out is the high rate of preparatory courses, with more than 60,000 enrollments for the 10 courses offered, all of which are exclusively open non-corporate. It is understandable that these courses are not offered in the corporate market, as they are preparatory to college entrance exams, Enem or competitions, which is hardly of interest to a corporation, which normally seeks courses aimed at the professional market.

Table 11.2 – Enrollments by type of open corporate course

Modalities	Courses	Enrollments	Enrollments/Courses	% Course	% Enrollments
Professional initiation	719	78,383	109.02	16%	9%
Operational training	916	278,575	304.12	21%	31%
Social/behavioral skills training	837	229,279	273.93	19%	26%
Update training	756	150,803	199.47	17%	17%
Improvement training	818	145,819	178.26	19%	16%
Extension courses	241	9,389	38.96	5%	1%
Preparatory courses	0	0	–	–	–
Language courses	111	3,018	27.19	2.5%	0%
Total	**4,398**	**895,266**	**203.56**	**100%**	**100%**

Considering the relative enrollments for open corporate and non-corporate courses, the differences are much more pronounced. Professional initiation enrollments accounted for 57% of enrollments for open non-corporate courses (largest share in this regard) and only 9% for open corporate courses. On the other hand, enrollments in social/behavioral skills training courses accounted for 26% of open corporate courses (second largest share in this regard) and only 2% for open non-corporate courses.

It can be seen here that this possibly reflects the interest of the corporate market primarily in operational training and in social/behavioral skills training, as these are closely linked to professional activity.

Table 11.3 – Enrollments by type of open non-corporate course

Modalities	Courses	Enrollments	Enrollments/Courses	% Course	% Enrollments
Professional initiation	1,527	1,012,001	662.74	6%	57%
Operational training	12,862	52,164	4.06	48%	3%
Social/behavioral skills training	442	34,037	77.01	2%	2%
Update training	5,208	167,009	32.07	19%	9%
Improvement training	5,221	30,151	5.77	19%	2%
Extension courses	1,457	408,494	280.37	5%	23%
Preparatory courses	10	60,484	6,048.40	0%	3%
Language courses	107	3,118	29.14	0.4%	0%
Total	**26,834**	**1,767,458**	**65.87**	**100%**	**100%**

On the contrary, extension courses have a much greater weight in non-corporate open courses than in corporate courses, 23% for the former and only 1% for the latter. Extension courses are often derived from formal specialization courses and therefore offered by institutions dedicated to non-corporate courses.

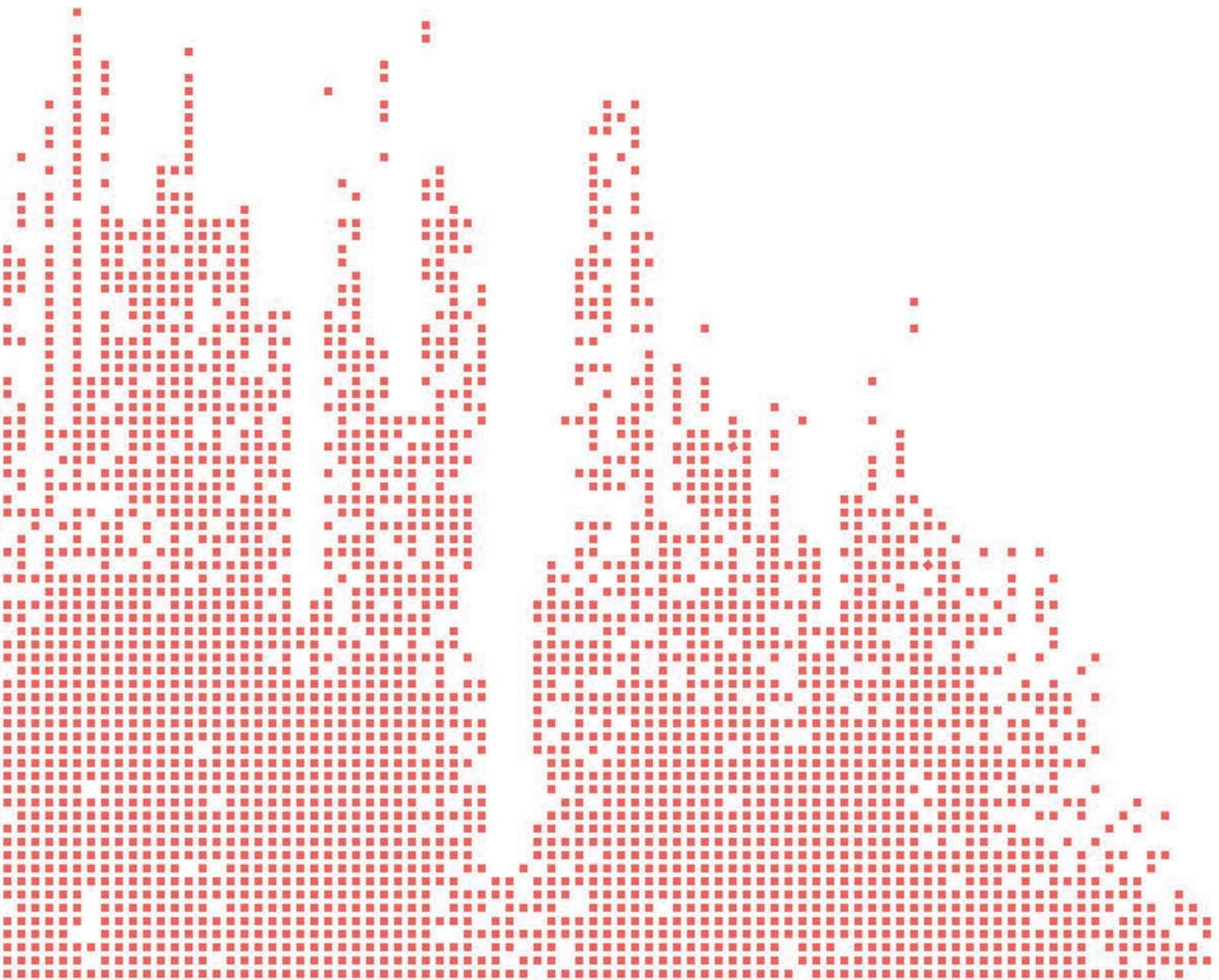
The “S System” institutions by their very nature have a significant weight in the offer of open courses, with only 9 among the 85 respondents, they were responsible for 42% of enrollments 1,122,492 out of a total of 2,662,724 enrollments. This data is even more important when it is noted that only 4 of these 9 institutions offered open corporate and non-corporate courses.

About the author

Antonio Alvaro de Assis Moura is director of education and innovation at the Alumia Educacional. He holds a bachelor’s degree in Law from the Faculty of Law of São Bernardo do Campo – FDSBC (1989); a bachelor’s degree in Electrical Engineering from the Mauá Engineering School (1991); a master’s degree (2003) and a PhD (2012) in Production Engineering from the Methodist University of Piracicaba (Unimep). He was a professor of the Production Engineering program at the Faculty of Integrated Sciences at the Federal University of Uberlândia (UFU). He has experience in product development and higher education administration, as he was the general coordinator of the Brazilian Institute of Advanced Technology (currently Veris Educacional S.A.) in Campinas.

Part 12

What the institutions have bought?



Regarding the administrative category of higher education institutions (HEIs) respondents, of the 86 with course offers in distance learning (DL) modality, the highest concentrations remain: in for-profit or non-profit private institutions, totaling 63.95%, followed by federal public educational institutions, with 12.79%, and state public educational institutions with 4.65%.

Furthermore, the 2020 Brazilian Census for Distance Learning indicates a concentration of HEIs' headquarters in state capitals to the detriment of their distribution throughout inland cities.

Regarding the Open University of Brazil (UAB) System, 15% of public HEIs participated. In relation to the Open University of the Brazilian Unified Health System (UNA-SUS), this percentage is 4%.

Of the HEIs that responded to the Census, most offer DL, hybrid and on-site courses (38%).

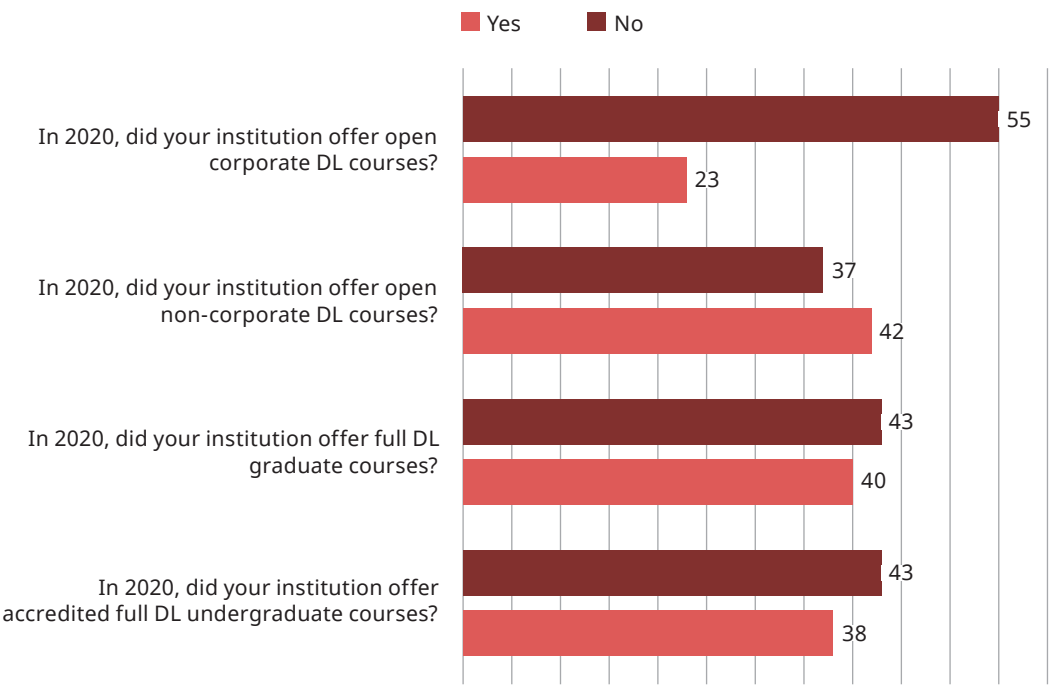
In addition to this information, the 2020 Census investigated which resources (products and services) institutions purchased to subsidize their DL course offers.

All told, only 86 institutions responded to this Census question, encompassing the following segments:

- Accredited full DL undergraduate courses
- Full DL graduate courses
- Open non-corporate DL courses
- Open corporate DL courses

The institutions indicated whether or not they had offered courses in 2020 by segment (Chart 12.1).

Chart 12.1 – Courses offered by segment



In order to identify what services were contracted by institutions in 2020, this Census made available a list of 30 answers and included the option "Any supplier was hired by the institution". Respondent institutions, operating in the four segments, responded according to Chart 12.2.

Chart 12.2 – Contracted products and services in 2020 by segment

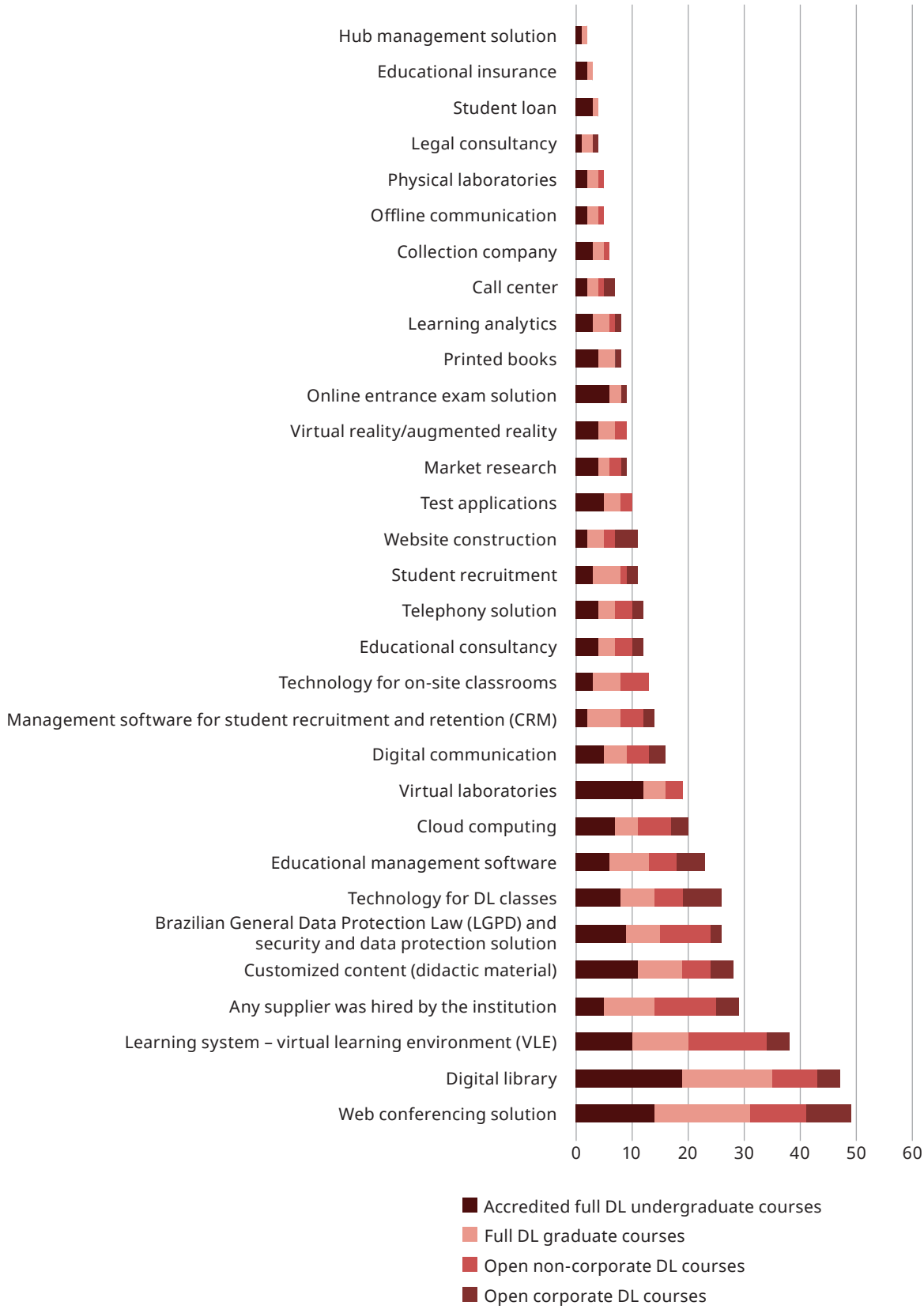
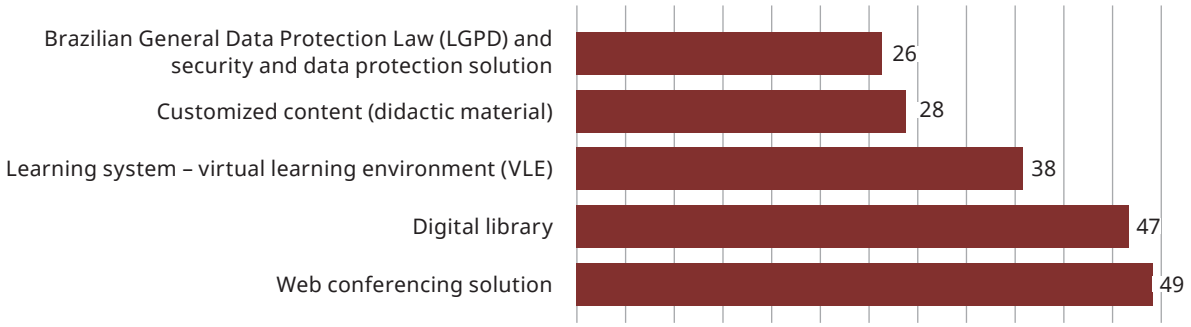


Chart 12.2 shows that all services had some demand for institutions that offer DL undergraduate or graduate courses. The institutions that offer open courses (corporate or non-corporate) had lower demands for these services.

In a general context, the services demanded by the four segments were shown in Chart 12.3.

Chart 12.3 – Contracted services in 2020, without distinction between segments



Digital library solutions, learning system – virtual learning environment (VLE) and customized content (didactic material) continue to be highly demanded. These are ordinarily necessary solutions for DL course offers and would be expected to be among the most sought after by institutions.

In addition, considering the current pandemic moment, the demand for a web conferencing solution is not impressive, which was the most appropriate solution for the institutions' on-site activities (of on-site courses and DL courses) in the application of said remote class.

Services related to security and data protection were in high demand due to the approaching deadline for compliance with Brazilian General Data Protection Law (LGPD) to the fundamental rights of freedom, privacy and free formation of the personality of each individual, which are fundamental in the activities of educational institutions at all levels.

Charts 12.4, 12.5, 12.6 and 12.7 show, in descending order, the solutions most sought after by institutions in each of the four segments investigated.

Chart 12.4 – Contracted resources for undergraduate courses

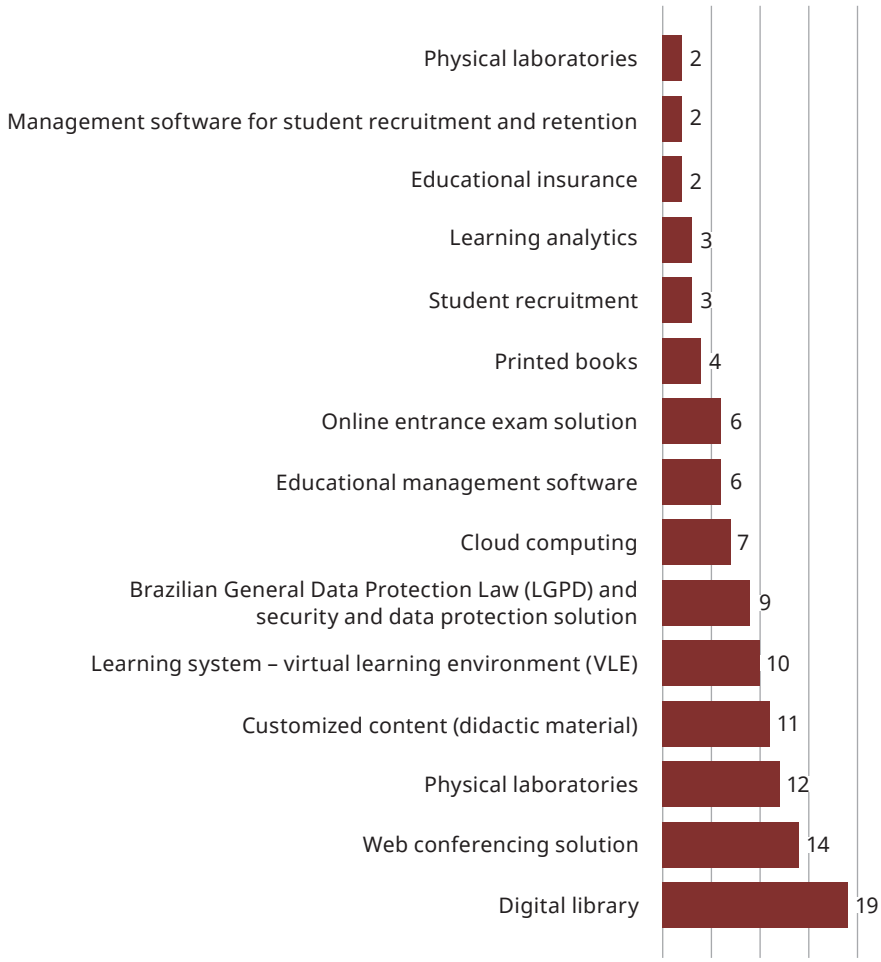


Chart 12.5 – Contracted resources for graduate courses

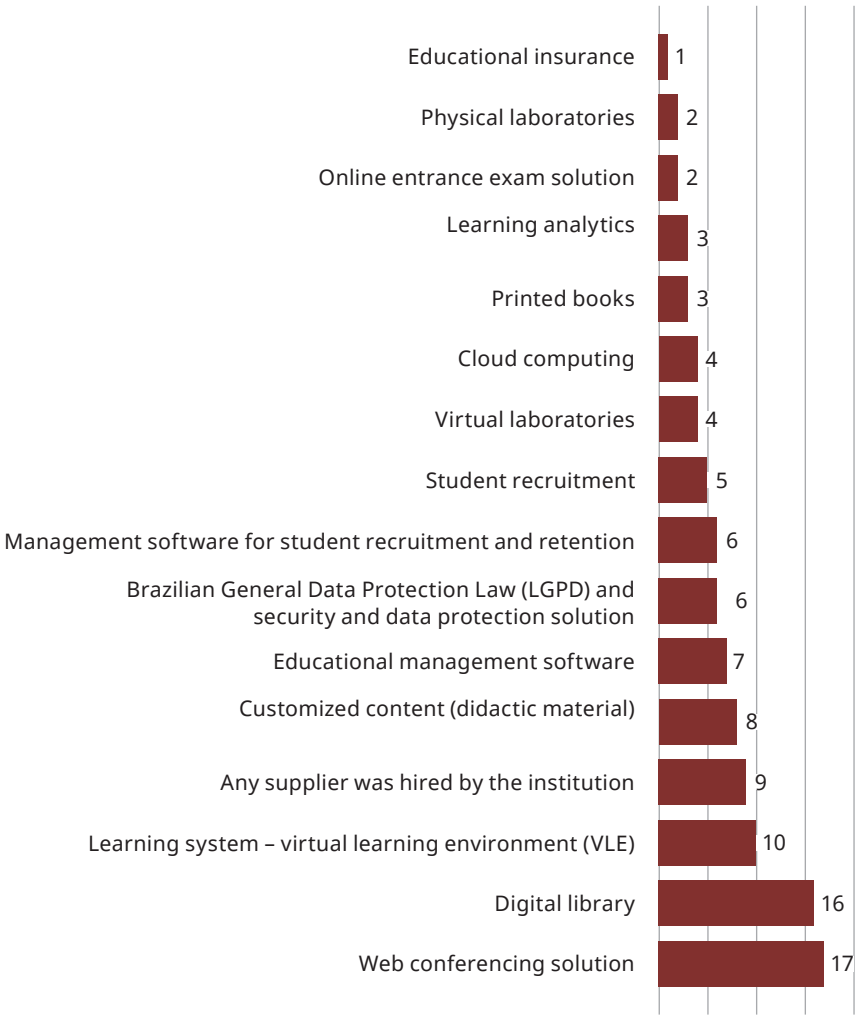


Chart 12.6 – Contracted resources for open non-corporate distance learning courses

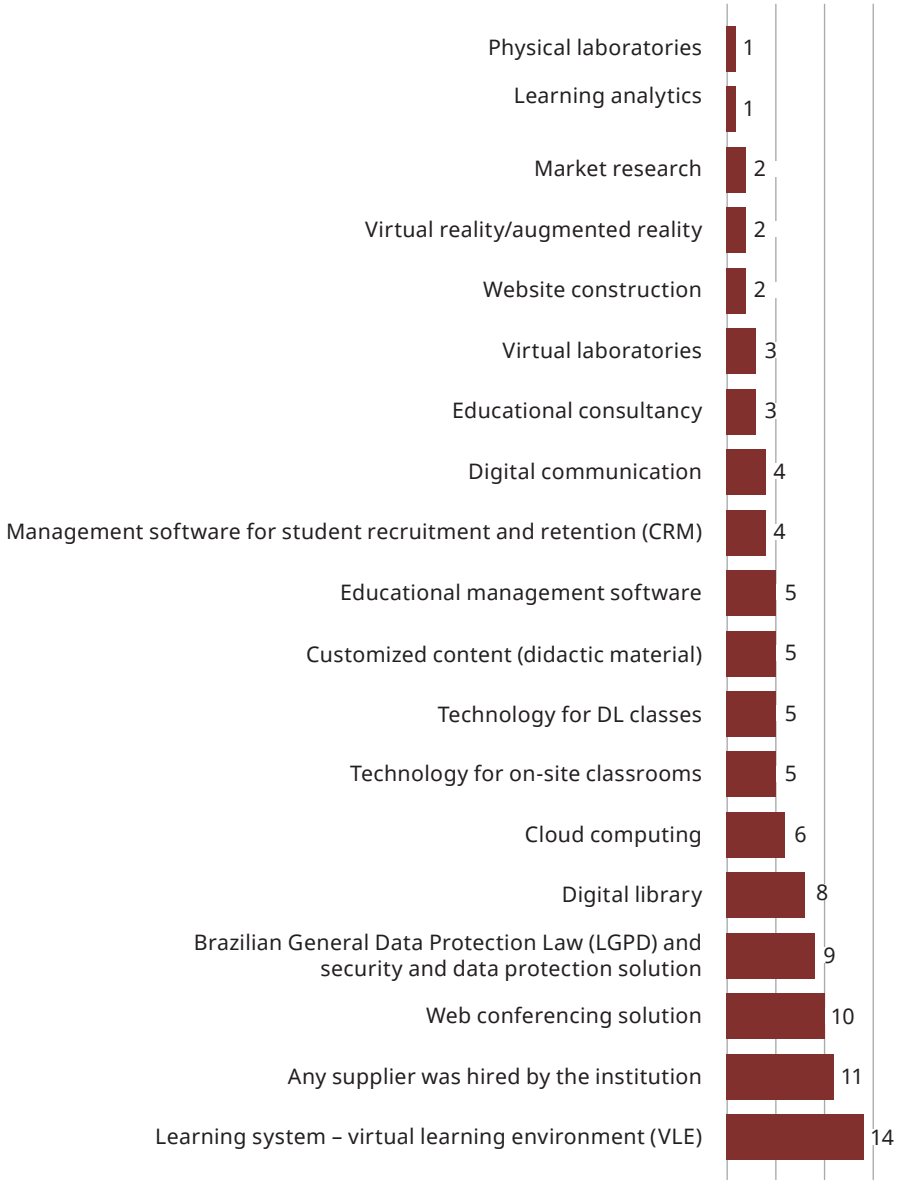
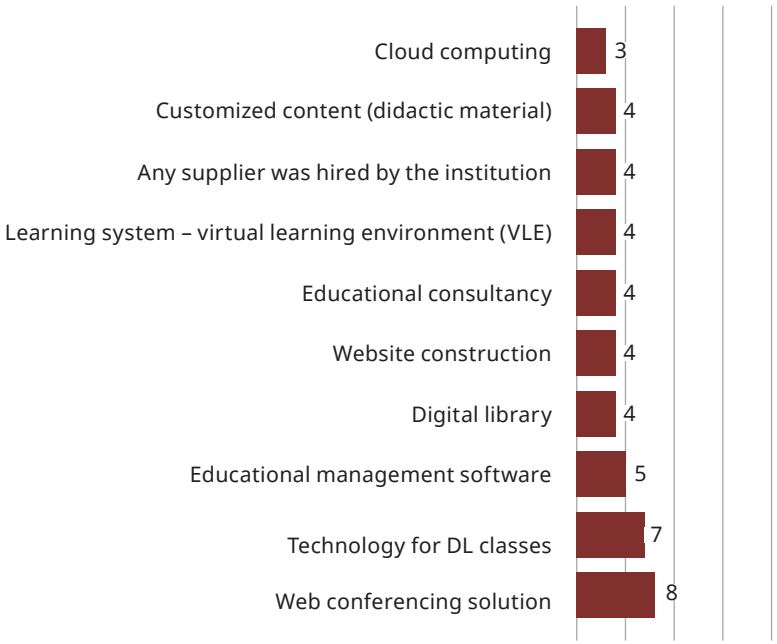


Chart 12.7 – Contracted resources for open non-corporate courses



Considering the services contracted for the open corporate DL courses, it should be noted that the participation of institutions was low – only 19 institutions (22.09%).

Still investigating the types of services from suppliers contracted by the institutions, the 2020 Census requested information about the evaluation of the items served. Only three of the four segments were asked to respond, namely: full DL undergraduate and graduate courses and open non-corporate DL courses. The investigated variables (in total eleven) are presented in Table 12.1, oriented in descending scale by the evaluations issued in the general framework.

Table 12.1 – Contracted services evaluation

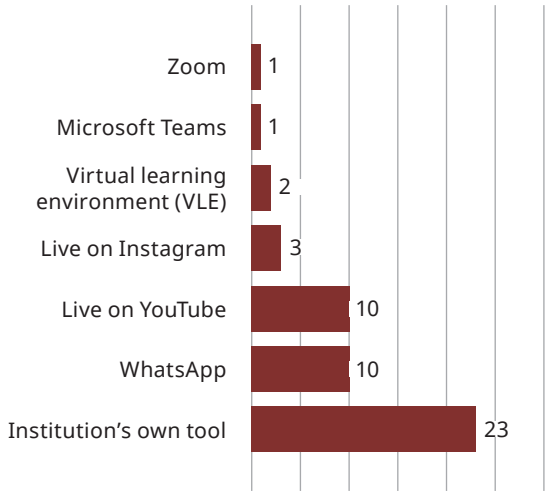
Services evaluation	Accredited full DL undergraduate courses	Full DL graduate courses	Open non-corporate DL courses	Total
Cost of service provided	21	20	20	61
Operational performance	16	17	16	49
Stability of the service offered	19	12	12	43
Level of satisfaction	12	13	14	39
Quality of service provided	12	13	13	38
Delivery speed	9	6	10	25
Cost-benefit	5	9	11	25
Responsiveness/Feedback	6	6	11	23
Service provided is equivalent to the product that was sold	5	7	7	19
Technical support	5	5	5	15
Upgrade of services provided	0	7	5	12

With small variations, the evaluated segments responded very similarly to this question.

The combination of the cost of the service provided, the operational performance and the stability of the service offered meets the needs of the institutions in the intended way, in order to subsidize their students and courses.

Finally, the 2020 Census sought to identify, specifically in institutions that offer open non-corporate DL courses, which types of tools were used to offer their courses, these data are gathered in Chart 12.8.

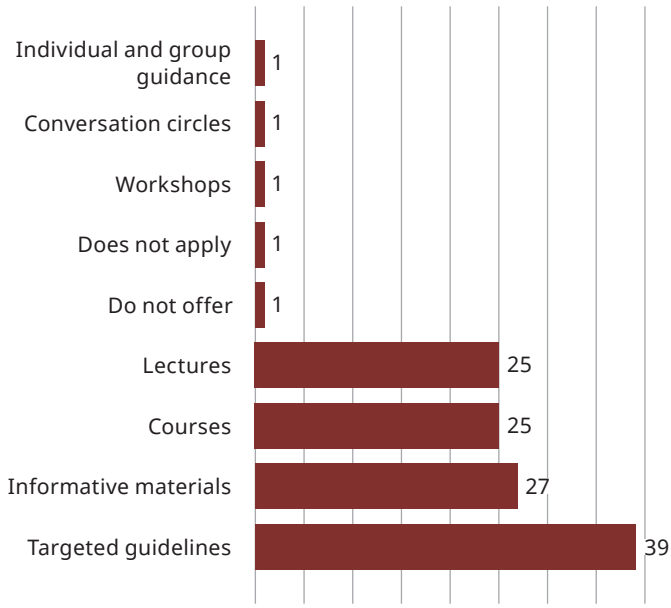
Chart 12.8 – Tools used in open non-corporate distance learning courses



Predominantly, institutions use their own tools, followed by lives on YouTube and the use of the social network WhatsApp.

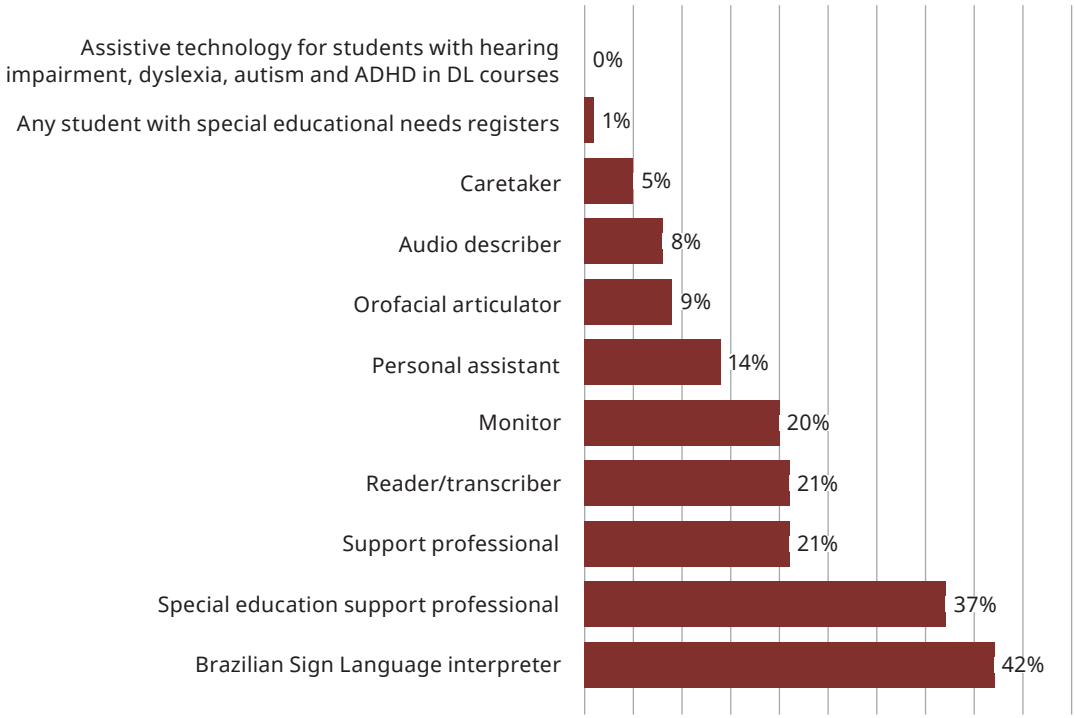
The 2020 Census also sought to identify what types of training or guidance are offered to teachers and tutors to prepare them to support the target audience of special education. Although 41 institutions did not respond, it can be observed that targeted guidelines were preferably adopted, followed, to a lesser extent, by access to informative materials, courses, and lectures.

Chart 12.9 – Training or guidance to teachers/tutors to support the target audience of special education



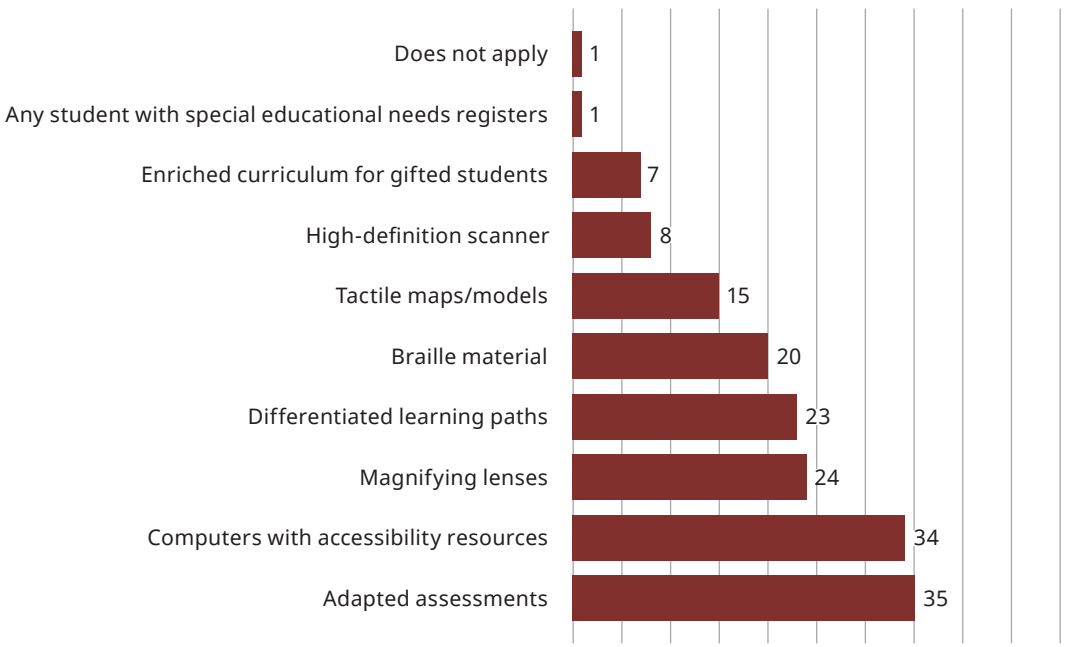
Regarding the type of specialized human support offered to students with special educational needs, the Brazilian Sign Language (known as Libras) interpreter was the most cited, indicating the profile sought in terms of compliance with regulatory aspects.

Chart 12.10 – Human support offered to the students with special educational needs

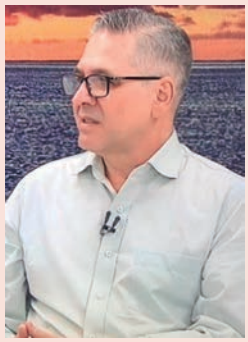


As for the provision of technological accessibility resources, adapted assessments and computers with accessibility resources were the most cited.

Chart 12.11 – Technological accessibility resources offered to the students with special educational needs



About the authors



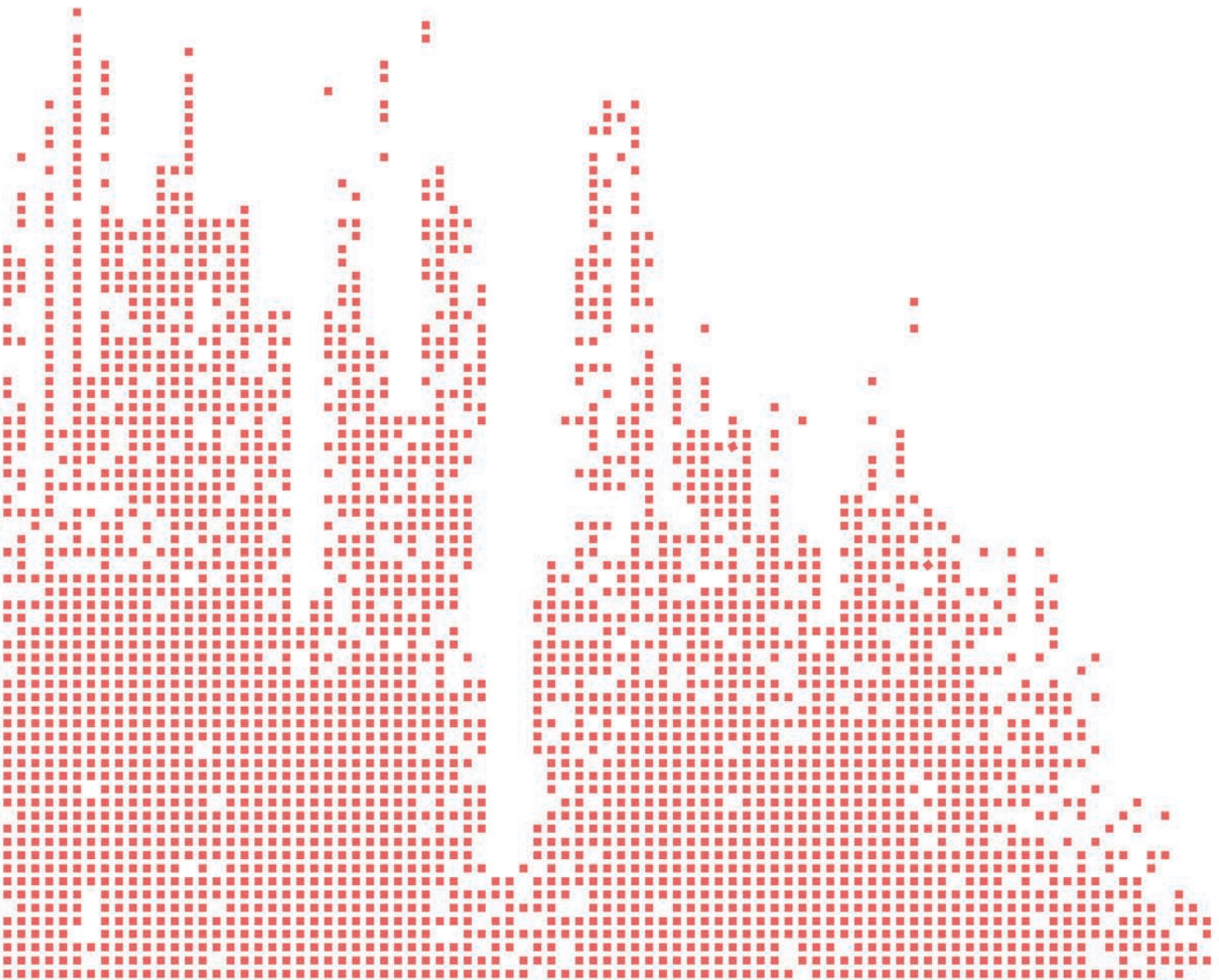
Dyjalma Antonio Bassoli holds a PhD in Science and a master's degree in Bioengineering from the University of São Paulo (USP); a bachelor's degree in Physiotherapy (1990); and a bachelor's degree in Biology (2006). He is a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC); DL general coordinator at CESMAC University Center; ad hoc member of the Evaluators Database of the São Paulo State Council of Education (CEE-SP); professor since 1992; university manager since 1998; DL manager since 2002.

Sérgio Venancio da Silva holds a master's degree in Engineering from the University of São Paulo (USP); a bachelor's degree in Chemistry from the Santa Cecília University (Unisanta); a bachelor's degree in Pedagogy from the City of São Paulo University (UNICID); and a bachelor's degree in Production Engineering from the Virtual University of the State of São Paulo (UNIVESP). He is a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC); a professor since 2007; and the Production Engineering undergraduate program coordinator at CESMAC University Center.

Edileine Vieira Machado holds a doctorate in Education and a master's degree in Language and Literature from the University of São Paulo (USP); a bachelor's degree in Language and Literature from the São Paulo State University (UNESP); and a bachelor's degree in Pedagogy from the Ninth of July University (UNINOVE). She is a collaborating professor in the Doctoral Program in Language and Literatures at the Pontifical Catholic University of Minas Gerais (PUC Minas); ad hoc member of the Evaluators Database of the São Paulo State Council of Education (CEE-SP); a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC); a professor since 1995; and the Language/Literature and Pedagogy DL undergraduate programs coordinator at CESMAC University Center.

Part 13

Distance learning in informal training



Mara Yáskara Nogueira Paiva Cardoso

In times of total connectivity, in which social networks and everything the internet offers us mix with our natural communication, wanting to learn what we want is a reality within everyone's reach, whether to complement formal learning, as a graduation, or to acquire new knowledge.

Thus, training that is outside the scope of formal schooling is possible through digital means and, currently, immediately, without leaving home, free of charge or not. Distance learning (DL) allows this and, in times of a pandemic, when we are isolated at home, the offer of lectures, courses, workshops, workshops on the most different topics, from the simplest to the most complex, has expanded in a intensive in different areas of knowledge.

In this way, an opportunity arose for higher education institutions (HEIs) to be able, through their distance education structure, to offer courses directed or not to their students, who, at that moment, stayed at home, after all, the analysis referred to if to the year 2020, period of pandemic.

In the 2020 EAD.BR Census, we have a sample of how much and how the HEIs worked on this issue. A new area of DL action is revealed, in addition to the already known courses that are part of the university extension, whose objective is and always will be to complement and enrich the themes worked in the classroom.

What we will see, next, is how much the HEIs dedicated themselves to informal training with contents that are totally open and different from those related to the programs of undergraduate courses, normally offered in university extension.

This edition of the Census had the participation of federal and state public educational institutions, for-profit private educational institutions (schools, training centers, teaching institutes and others) and non-profit (community, confessional, philanthropic), located in the Central Regions -West, Southeast, Northeast and South of the country, in the capitals, in the Federal District and in the countryside, whether or not they participate in the Open University of Brazil (UAB) and the Open University of the Unified Health System (UNA-SUS), which offer courses in face-to-face, distance education or hybrid modalities.

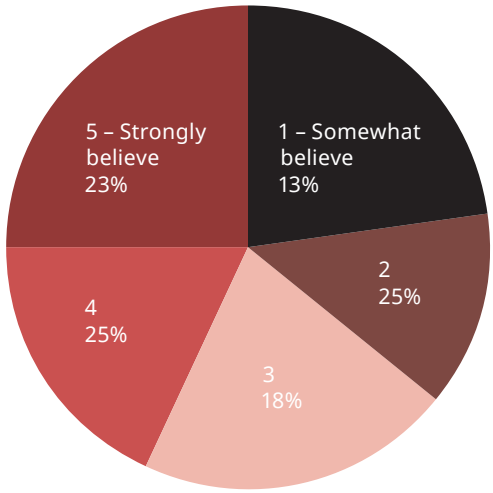
After compiling the data, we observe the following scenario:

- 47% of HEIs offered, in 2020, accredited full DL undergraduate courses.
- 30% of the HEIs did not offer, in 2020, open non-corporate DL courses.
- only 3.5% are studying options to offer open courses, and the other 96.5% agree that open DL courses can enrich the extension portfolio of their HEI.
- they all agree that offering open courses, in this case, DL, can be a strategy to work on certain skills necessary for the student/future professional.

Perhaps this is an area that HEIs still feel insecure about embracing. Due to the large portfolio of open courses, in any area of knowledge, we can say that, for the planning and coordination of this type of courses, it is necessary to have a global and broad vision in open themes and also the domain of social networks, a universe of many open courses, which cover the areas of humanities, social sciences, biological sciences and exact sciences in a totally different way in relation to formal courses at HEIs. Attractiveness is a differentiating point for the success of this type of course.

It is interesting to analyze Chart 13.1 regarding the instruction of this type of course. According to the survey, 23% of the HEIs strongly believe (5) that open courses can be taught by anyone and agree that they give teachers or even students the opportunity to offer different topics.

Chart 13.1 – On a scale of 1 to 5, how much does the institution believe that anyone can teach in open courses?

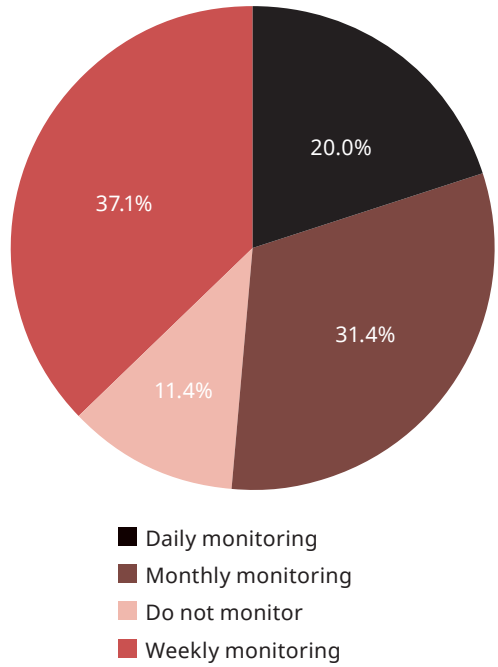


In addition, 70% of HEIs strongly believe that open distance courses are a great opportunity for students to understand how to deal with distance learning. In this case, 29% of the HEIs have an area responsible for data analysis and learning outcomes.

This analysis is also carried out with informal courses, that is, courses that are not undergraduate or graduate. Here, an interesting reading about the power of interest of students, or even non-students, in these types of courses becomes viable, which can lead to a decision to invest in new programs.

Only 11.4% of the responding HEIs declared that they do not monitor student performance, as shown in Chart 13.2.

Chart 13.2 – Frequency of monitoring students performance



Despite being a small universe, it is essential that the student is accompanied and monitored in any type of distance course, in order to feel safe as a student. This corroborates the results that only 5.6% of the HEIs do not give feedback on the results obtained in learning to their students.

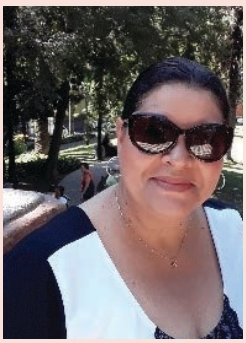
In addition, it is pertinent to observe the subjects of general interest that were revealed by the research such as food, healthcare, mental health, arts and culture, decoration, gardening, the elderly, music, beauty, administration, management, among others. Despite this, there is a majority that still does not offer any of these topics, has not responded or does not offer any free courses.

The research allows the conclusion that this area is still timid, even though we currently have HEIs that offer several distance courses and, therefore, have the experience, expertise and structure necessary to offer open courses.

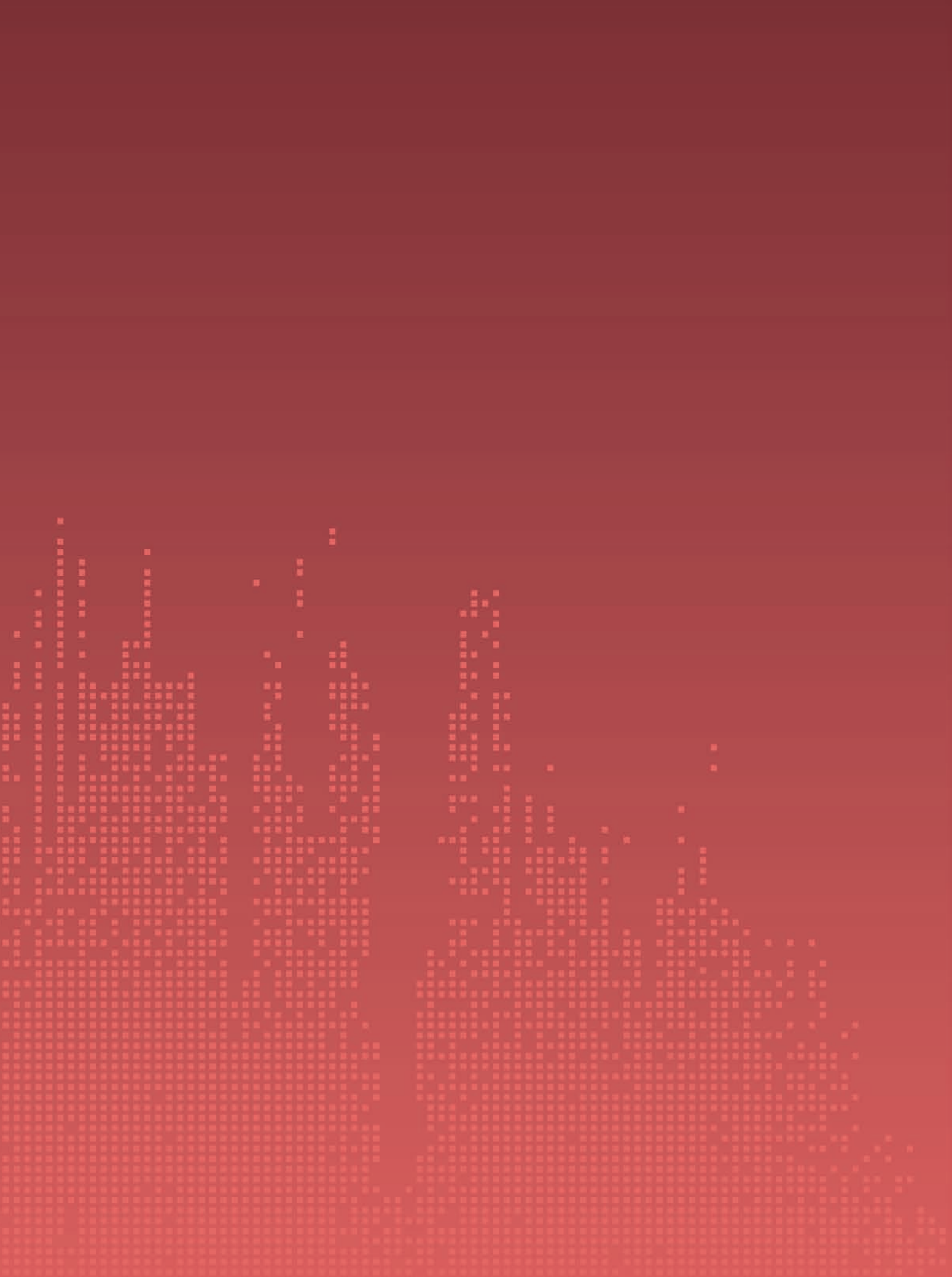
The results presented here may be the result of a lack of a more dedicated look at open courses, or a lack of knowledge that this market exists and is highly sought after. In 2020, marked by the COVID-19 pandemic, people sought to read, watch, watch and study subjects of their interests, whether for leisure, for knowledge, for work, or to fill their time at home. On social media, the lives, lectures, workshops, or even courses on the most varied topics have increased, demonstrating that this audience is present and that the choice has become complex.

A point to highlight is the presence of HEIs in social networks, which is still shy, many of which are restricted to an academic or commercial focus. Therefore, it is imperative to consider the possibilities that social networks can bring with this type of informal training, aimed at a not so specific, but general audience, ranging from students to people in the whole community.

About the author

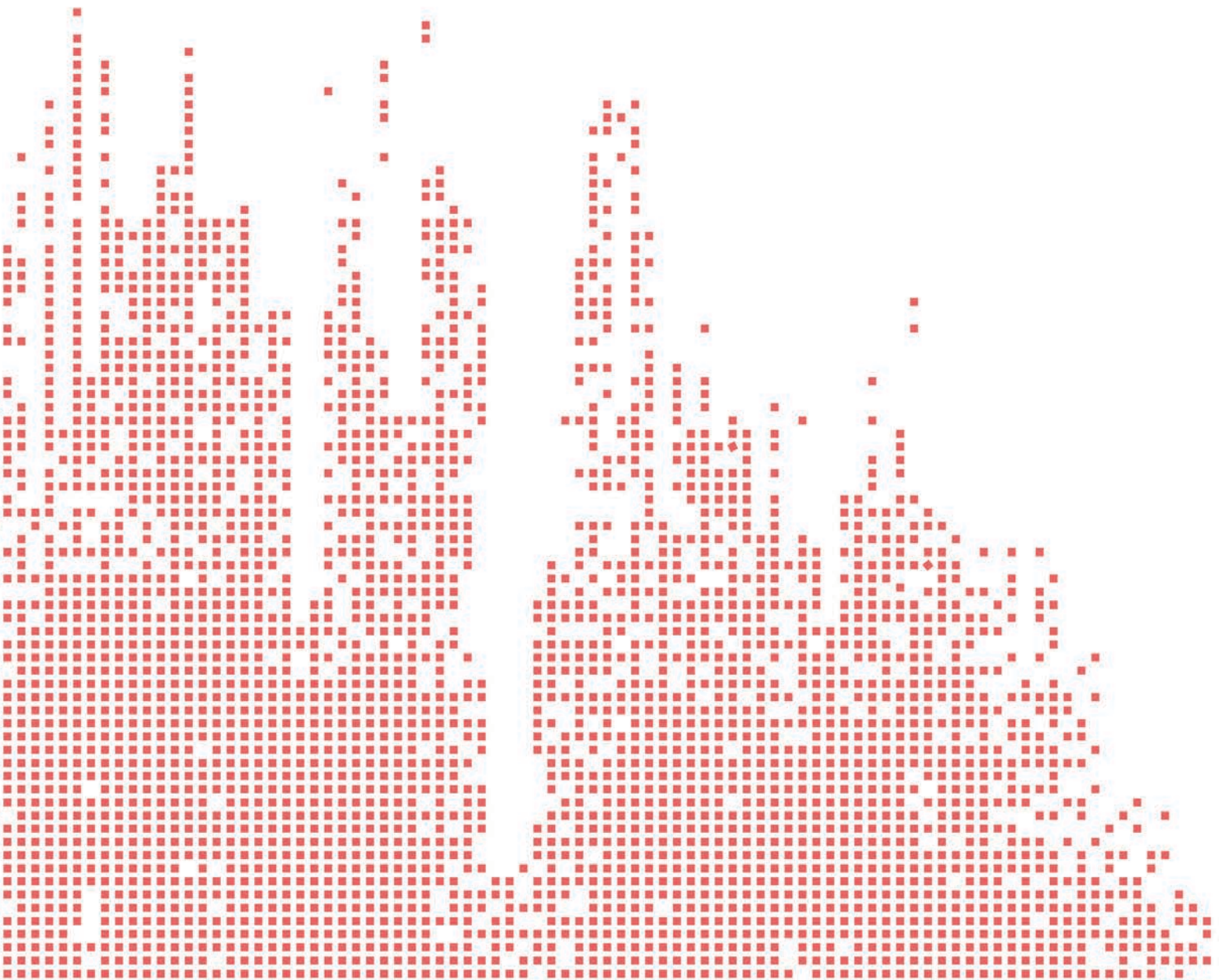


Mara Yáskara Nogueira Paiva Cardoso holds a doctorate in Education and a master's degree in Education, Business and Communication. She is an academic management consultant in higher education, teaching and curriculum planning, and teacher training for DL and on-site modalities.



Part 14

Students' profile



Viviane Marques Goi

According to the last Higher Education Census, carried out in 2019 by the National Institute of Educational Studies and Research Anísio Teixeira (Inep), distance learning (DL) has, in fact, shown that its place is guaranteed in the educational world. This model, which was once heavily criticized and questioned by those who still had resistance to it, shows up today as a great opportunity to expand the horizons of tens of thousands of Brazilians.

The data indicate that at least 63% of all vacancies offered for higher education in 2019 were in the DL modality. In 2019, there was a change from previous scenarios, given that the number of students enrolled in the on-site modality was lower compared to those enrolled in the DL model. What happened to make this change happen?

We can raise some points to think about. The first is that access to information technologies has increased. Today, with a smartphone, it is already possible to take any course online. In addition, without the need to maintain increasingly larger physical spaces to accommodate their students, several universities invest heavily to expand their campuses to digital. With a single recorded class, the best teacher in the field can reach thousands of students in Brazil and around the world, giving everyone the same conditions to learn from someone who is a reference in that subject. The advantage of the digital environment is precisely this: physical barriers are overcome, with this, it is possible to reach ever greater numbers of people. With this lower cost, private institutions pass on even more affordable values to their students, who are more interested in obtaining an undergraduate degree, as this becomes part of their budget. It is important to note that, despite being "cheaper" in the long term, investing in a structure to offer distance learning courses is not a simple task for public institutions, which offer very few places for graduation in the distance learning modality compared to private institutions. Public universities face evident scrapping over the years, and it can become complicated to expand their territories in this way. These are just some of the reasons we can consider when analyzing the 2019 data.

However, it is essential, at this point, to remember that, since 2020, this scenario has changed. After the beginning of the covid-19 pandemic, a lot has changed in the homes of Brazilian students. We have seen unemployment rates rise as never before, causing many to give up things that are considered non-essential in order to survive. This says a lot about the profile of distance learning students. With this information, we can consider that seeing the number of graduates of these courses increasing is even more important than seeing the vacancies being made available. Since the beginning of the pandemic, the number of evasions and dropouts has increased. If, before, people left their courses for various reasons, from lack of identification with the choice to even changes in plans in their lives, today we see the economic aggravating factor much stronger and present. Of the hundreds of institutions consulted, few are able to accurately measure what happened to their students during this period, but the health and economic crisis can be indicated as a crucial factor.

In the DL model, most people take a degree; bachelor's courses are still more sought after within the on-site model. The increase in vacancies dedicated to the degree contributed to the increase in masters and doctors teaching in undergraduate courses, which indicates a positive growth in recent periods.

Also according to data from the last year, we can see that the vast majority of people who take DL courses are women, who, sometimes, in the midst of their triple journeys between work, home and maternity, see distance learning as an opportunity to improve your resumes without leaving home.

Among these students in the Brazilian scenario, black people do not make up the majority in any type of education. In the Southeast region, on-site and public institutions have managed to equal the number of blacks and whites in classrooms thanks to the implementation of quotas, in addition to being a region where people from other cities are concentrated to study. The only region where it is possible to notice a greater number of black people than white people is the Northeast of the country, which respects the demographic relationship of its states, composed largely of black people.

As for social class, the latest research shows that, in the distance learning modality, most students belong to classes C, D and E, while in the face-to-face modality, classes A and B still occupy a lot of space, both in public and private HEIs, even if they correspond to a small part of the Brazilian population. This factor is indicative of the crisis that many private institutions have faced. With the arrival of a pandemic and an uncertain scenario, many were forced to lock their courses until they felt stable enough to return to virtual classrooms.

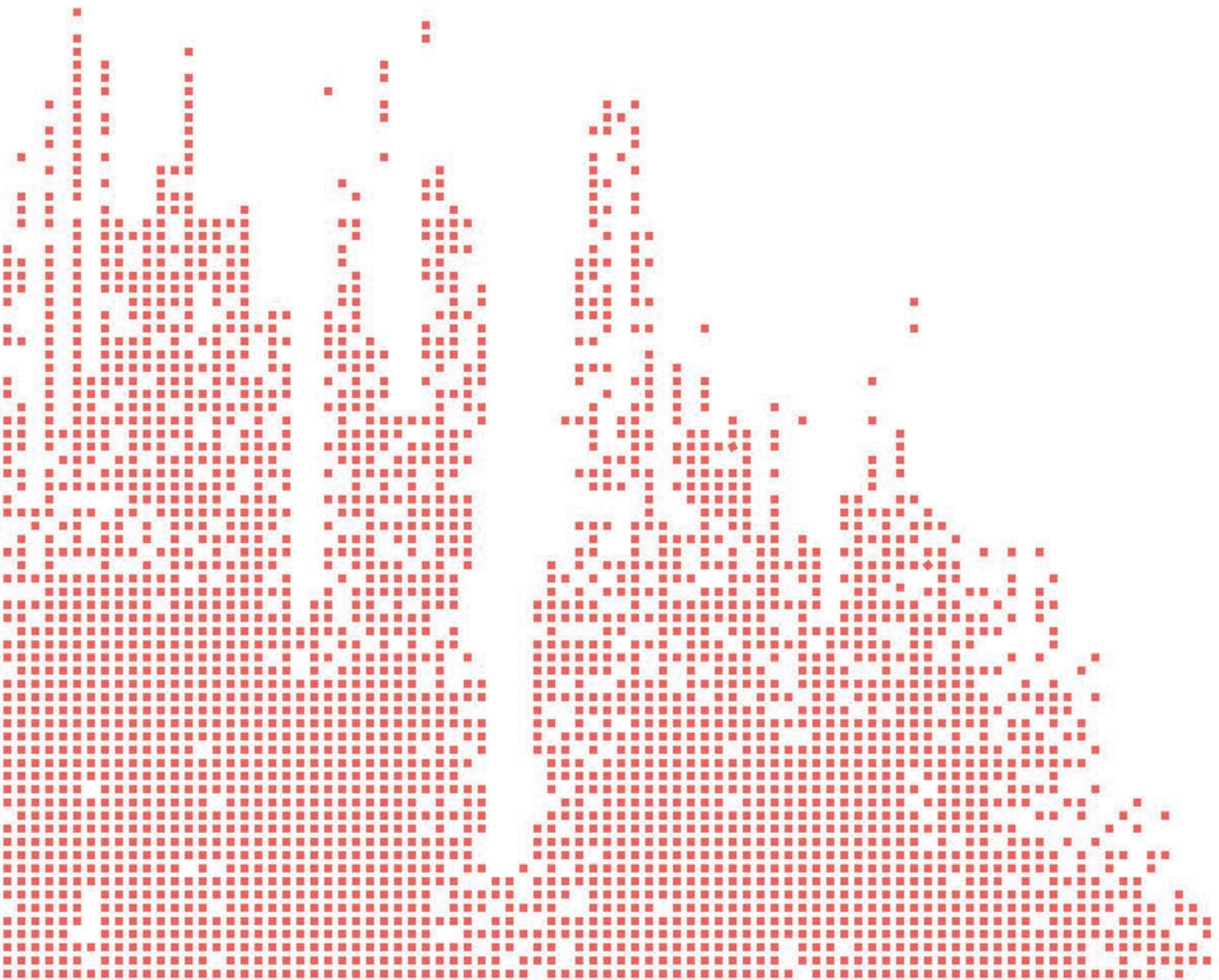
Undoubtedly, the possibility of doing a distance degree using the internet has expanded access and the chance for many people to fulfill their dreams, grow in their careers and even change their realities. In a country that offered courses on television, the fact that a student could choose at what time and in what way he studied opened the doors of graduation to those who are part of the great labor force in the country. This change is fundamental in the fight against social inequalities and proves that education is a keyway to provide access and correct structural flaws in a country that struggles to eliminate inequality from its origins. We will feel the impact of dropouts, in fact, at the end of the pandemic, when students can resume their studies. Until then, institutions are adapting and becoming more flexible to serve this very important audience of students.

About the author

Viviane Marques Goi is a founding partner of VG Educacional. She holds a PhD in Intelligence Technology and Digital Design, a master's degree in Mathematical Modeling, and a bachelor's degree in Computer Science. She has been a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC) for over 15 years of on-site and DL modalities. She is an educational consultant for higher education in both teaching modalities. She was a professor in undergraduate and graduate courses at HEIs, in addition to holding administrative positions such as director of undergraduate, graduate and extension courses; course coordinator; and general coordinator of DL at HEIs in the states of Mato Grosso do Sul and Paraná. Currently, she works as a director and pedagogical consultant at VG Educacional.

Part 15

About learning evaluation



Jucimara Roesler

The growth of distance learning (DL) in Brazil was already a reality before the pandemic. The positive results of DL have been a constant in the Brazilian reality, measured by the instruments of the Brazilian National System for Higher Education Evaluation (Sinaes), with the objective of verifying the improvements in the quality of the teaching and learning process through internal evaluation, as well as demonstrating the quality of higher education institutions (HEIs) and their courses to society through external evaluation. The digital transformation of the classroom was confirmed, during the pandemic, as a strategy for the continuity of learning and, for the post-pandemic, it was constituted as a way to break and overcome traditional teaching models, aiming at the maturation of didactic-pedagogical processes with the intensive use of digital technologies and the experiences lived by teachers and students.

Evaluation is a strategic vector for educational institutions, both to assess indicators of the quality of the teaching process and to assist students in the process of developing the skills and abilities proposed in the training itineraries. It assumes, therefore, an important institutional place insofar as a set of indicators can be constituted in statistical values constructed to allow the taking of decisions and the correction of directions, through actions properly planned in the strategies of each HEI. With a good set of indicators, it is possible to measure, in a simple way, what is "going well" and what is "going wrong" and, thus, deciding what to keep and what priorities for improvements or innovations to be applied.

If, before the pandemic, educational movements were for a change in the evaluation process in HEIs, during and after the pandemic, this gains even more relevance when applied to a hybrid or online education. The challenge is to "evaluate how we evaluate" and how "we should evaluate", we are talking about a new assessment culture, with more flexible and personalized models. The recreation of the models brings the challenge of thinking about proposals for evaluating the process and competences, based on the activities applied in synchronous and asynchronous moments, in face-to-face and online environments. Therefore, methodologies that enhance problem solving, "know-how" or "hands-on" teaching are important elements of learning evaluation. Digital transformation brings with it the need to bring online applications and artificial intelligence to classroom activities, as well as learning management, automation-tuned processes and systems, and predictive analytics of data and technologies. Monitoring – action that carries the meaning of following something to analyze the information and redirect directions when necessary – is vital in the innovative processes to be applied in the scenario of digital transformation of learning.

In the 2020 Brazilian Census for Distance Learning, participating institutions that offer DL undergraduate courses presented the following percentages related to student academic performance monitoring: 37% monitor weekly; 32% daily; 18% monthly; and 5% do not carry out actions to monitor student academic performance – in addition, 8% chose not to declare their monitoring practices, as shown in Chart 15.1.

Chart 15.1 – Frequency of monitoring students academic performance

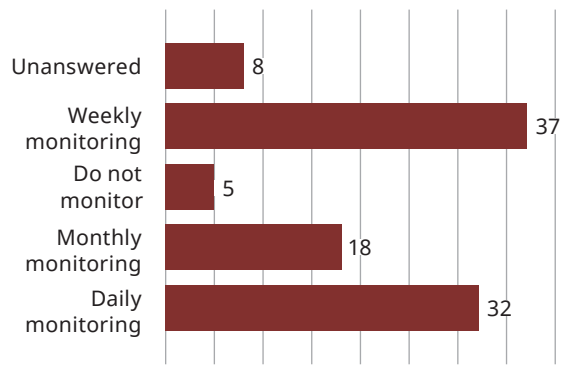


Chart 15.2 – Are student academic performance data compared using cluster analysis?

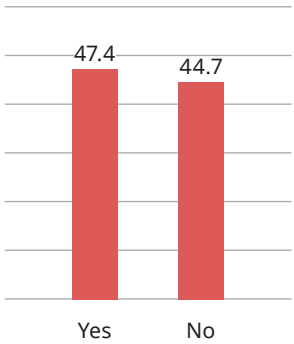
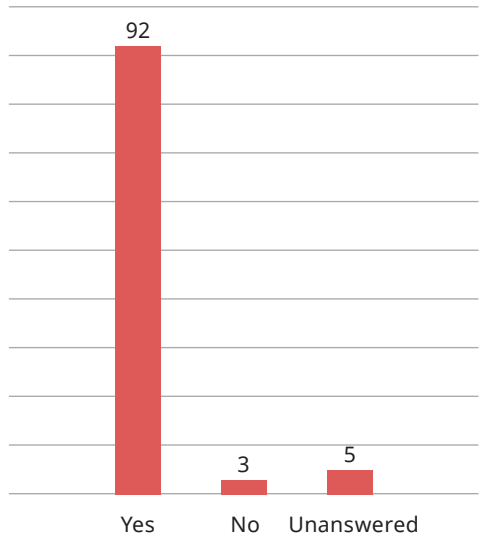


Chart 15.2 demonstrates that learning analytics is consolidating itself as a reality in HEIs. This concept presupposes the analysis and use of educational data generated by virtual learning environments (VLE). The volume of data generated by technologies embedded in hybrid or online courses allows devices such as artificial intelligence, data mining, adaptive learning, predictive modeling, graph theory and internet of things to provide information about performance for the student himself (self-evaluation), for the teachers – so that they understands the evolution of the learning of their –, and for the pedagogical team – so that it can identify the experience with the educational resources made available in the learning situations. Clustering is a technique that can help to recognize students, personalize content, and engage students in teaching proposals.

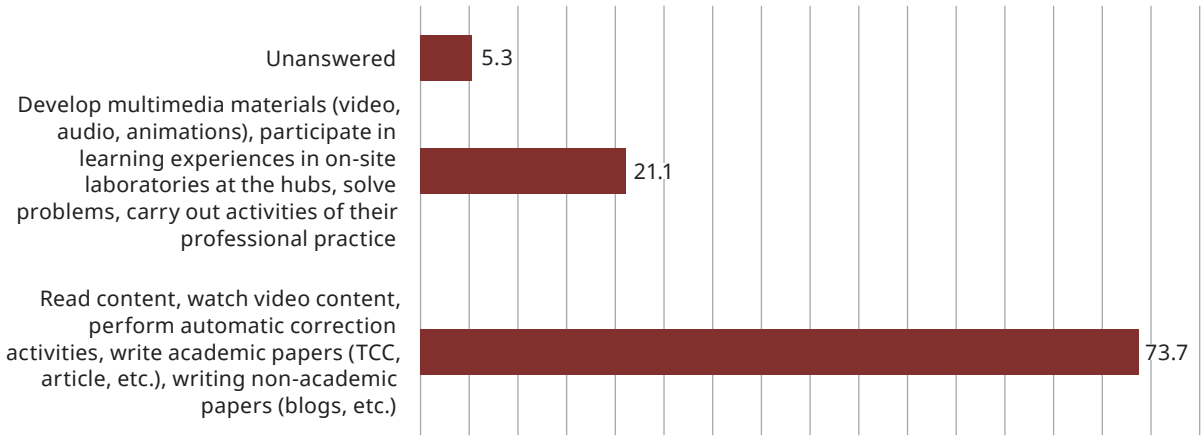
When asked about the feedback to students in relation to the results obtained in learning, 92% of the HEIs with DL undergraduate courses declared that they offer this feedback; 3% who did not; and 5% did not present this information, as shown in Chart 15.3.

Chart 15.3 – Do students receive feedback on learning outcomes?



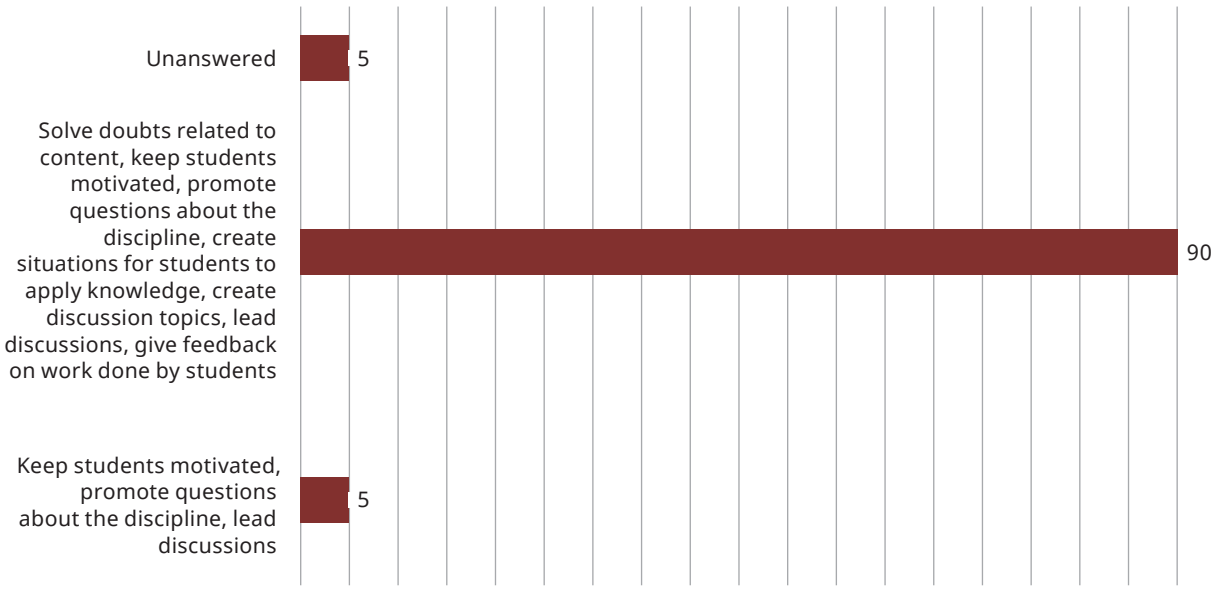
When asked what are the learning actions that students are invited to perform, 73.3% of the participating HEIs with undergraduate courses answered reading activities, video viewing, automatic correction activities, production of academic texts; 21.1% reported that students participate in learning experiences in on-site laboratories at the centers, develop problem solving, carry out activities of their professional practice (teaching practices, practices in the healthcare area, use of tools, artistic production, software development etc.) and 5% do not declare which actions are carried out, as shown in Chart 15.4.

Chart 15.4 – What learning activities are students invited to perform?



When asked if the activities proposed to students are accompanied by designated professionals, 90% reported that the tutor is present to answer questions regarding the content, keep students motivated, promote questions about the discipline, create situations for the application of knowledge, create discussion topics, lead discussions, give feedback on work done, promote and monitor collaborative work; 5% reported that the tutor has the role of keeping students motivated, promoting questions about the subject and leading discussions; and another 5% did not inform the role of the tutor, as shown in Chart 15.5.

Chart 15.5 – What is the tutor's role?



Census data show that HEIs already bring innovations in their educational practices, even if less representative and without major disruptions. It is possible to conclude that movements to review teaching and assessment methodologies have begun. This is because the indicators of resource use such as problem solving in practical environments (21%), learning analysis (47.4%), professionals who provide pedagogical support with a relevant role in the teaching and learning process (90%) – demonstrated in the Census survey suggest changes in the face of a new educational scenario.

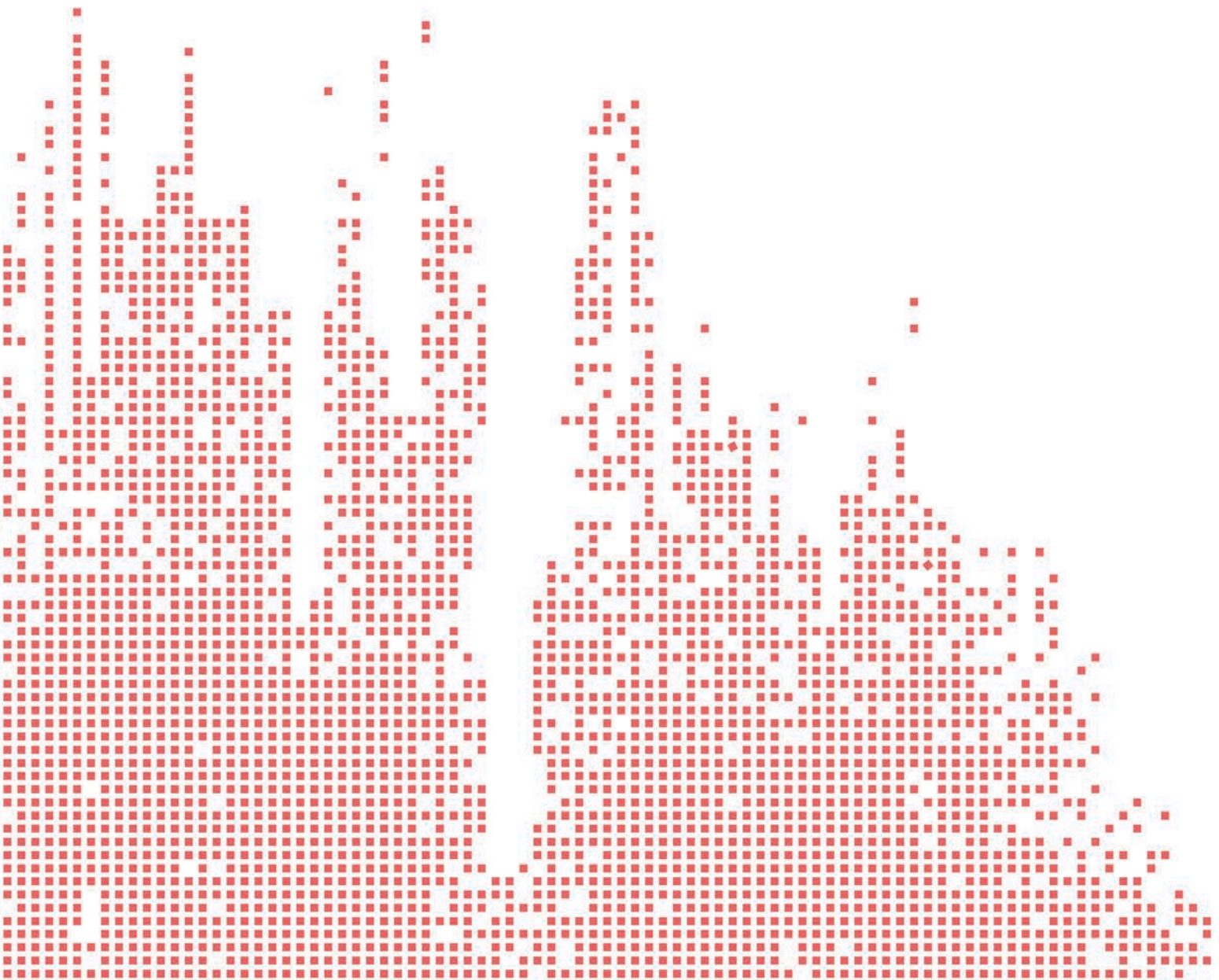
Undoubtedly, the challenges for the post-pandemic are many, including preserving competitiveness in the educational market, with planning that considers the demands of the target audience and the context in which it is inserted, both those of the world of work – with the search for a professional with new skills, especially digital skills and new soft skills – as well as those of society that is experiencing an exponential transformation in their lives due to the advancement of technologies and digital culture. In this context, evaluative learning practices constitute important elements to provide a diagnostic, formative, procedural and summative process, so that it is an instrument to develop and measure the development of different skills and abilities in the formative itinerary. Traditional education is outdated in the post-pandemic period, as revealed by research applied by Paiva (2021) to students in the Center-West of Brazil, who bring the following expectations to education: increase the actual workload for practices; promote quality internships; offer theoretical courses at a distance and, thus, book on-site meetings for what is really essential; promote practical situations in the community to provide opportunities for professional growth with real experiences; extension; directed volunteer work and "hybrid" scientific initiation.

About the author

Jucimara Roesler holds a PhD in Social Communication and a master's degree in Education. She conducted postdoctoral research at the Complutense University of Madrid. She is a pedagogue; a DL higher education executive with experience in the South (former director of UnisulVirtual), the Southeast (former director of DL at Veiga de Almeida and Newton Paiva) and the Northeast (former director of DL at Tiradentes Group) of Brazil; a Scientific Committee member of the Brazilian Association for Distance Learning (ABED); director of UNIFEMM University Center; and a consultant for Hoper Educação.

Part 16

Supplying institutions' profile



Dyjalma Antonio Bassoli, Sergio Venancio da Silva e Edileine Vieira Machado da Silva

The 2020 Brazilian Census for Distance Learning once again investigated the profile of suppliers for distance learning (DL).

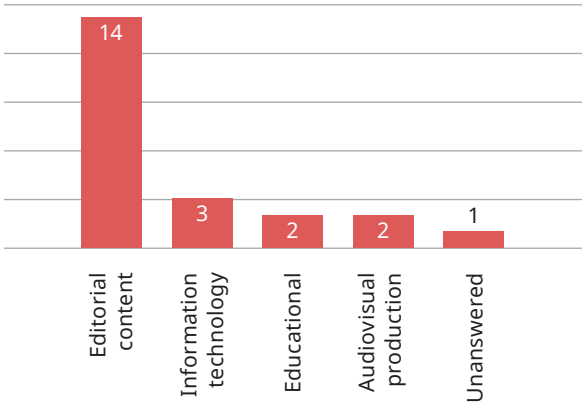
Among the 22 companies that kindly responded to the Census, it was possible to identify 10 products/services demanded by educational institutions, and 9 of them are also DL educational institutions.

It was possible to identify the following business activities:

- Digital marketing consulting services agency
- Ad agency
- Press office
- Pedagogical and educational consultancy
- Content development for DL
- Editorial content (printed and digital/multimedia textual content production)
- Printing
- Audiovisual production
- Didactic resources for active methodologies, simulations and educational games
- Information technology (hardware)

The main products/services provided were: editorial content (printed and digital/multimedia textual content production), with 14 institutions; audiovisual production, with 10; and information technology (hardware), with 9.

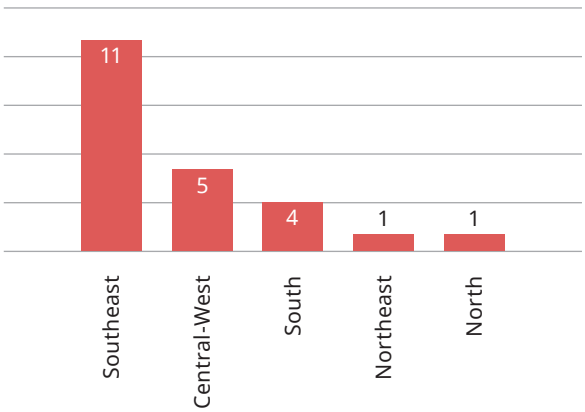
Chart 16.1 – Supplying institutions' field of business



Most respondent companies (9, which corresponds to 41%) operate in only one segment. Another 7 companies (31%) operate on 2 fronts. Only 3 companies operate on 3, and 2 respondents on 4. One company did not mention the service provided.

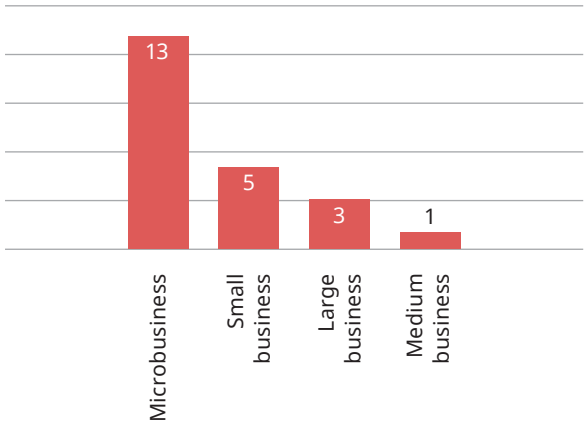
The supplying institutions' headquarters are located in 9 states of the federation. The largest concentration of companies is in São Paulo, with 9 suppliers, followed by Paraná, with 3. Federal District, Rio de Janeiro and Goiás hold the headquarters of 2 companies each. Amazonas, Ceará, Mato Grosso and Rio Grande do Sul comprise 1 company each.

Chart 16.2 – Location of supplying institutions' headquarters



The Census sought to identify the size of these companies. In this sense, most respondents (13, or 59%) fit the microbusiness category. Small businesses are 5 (22%); large businesses 3 (13.5%); and only 1 supplier is characterized as a medium business.

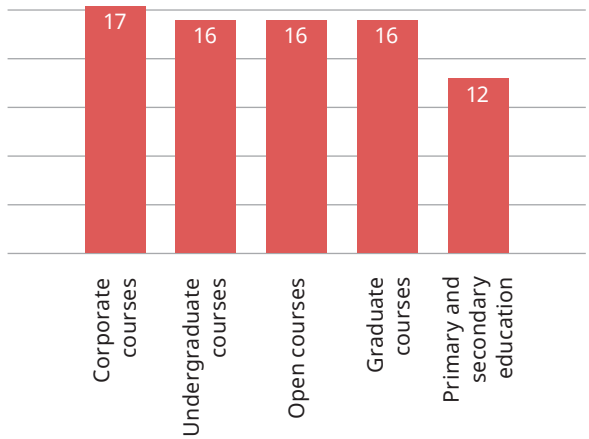
Chart 16.3 – Size of the respondent supplying institutions



- **Large business**: more than 100 employees for services and commerce; more than 500 for industry.
- **Medium business**: 50 to 99 employees for services and commerce; 100 to 499 for industry.
- **Small business**: 10 to 49 employees for services and commerce; 20 to 99 for industry.
- **Microbusiness**: up to 9 employees for services and commerce; up to 19 for industry.

In addition, the research investigated the educational segments (primary and secondary education, undergraduate, graduate, corporate, open courses) served by supplying institutions. The results are shown in Chart 16.4.

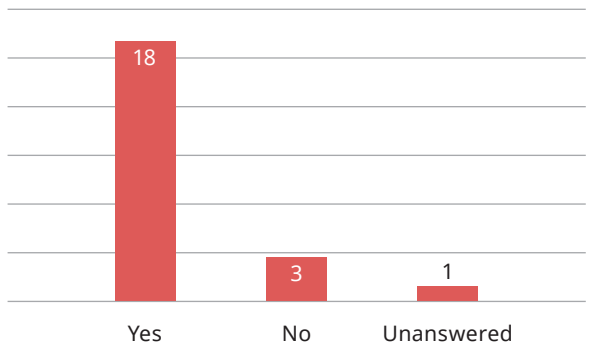
Chart 16.4 – Educational segments supported by the supplying institutions



It is possible to observe that the responding providers work in the different educational segments, considering that the values reached are very close, with a slight reduction for primary and secondary education services.

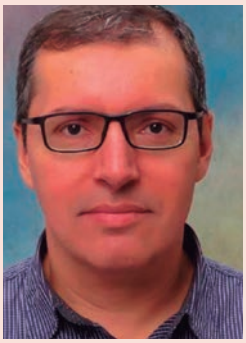
Companies were asked whether their products and services helped to develop skills and competencies via DL, and the majority (18, or 81.8%) indicated positively. Only 3 (13.6%) responded negatively, and one company abstained, not responding.

Chart 16.5 – Potential for developing skills and competencies via distance learning



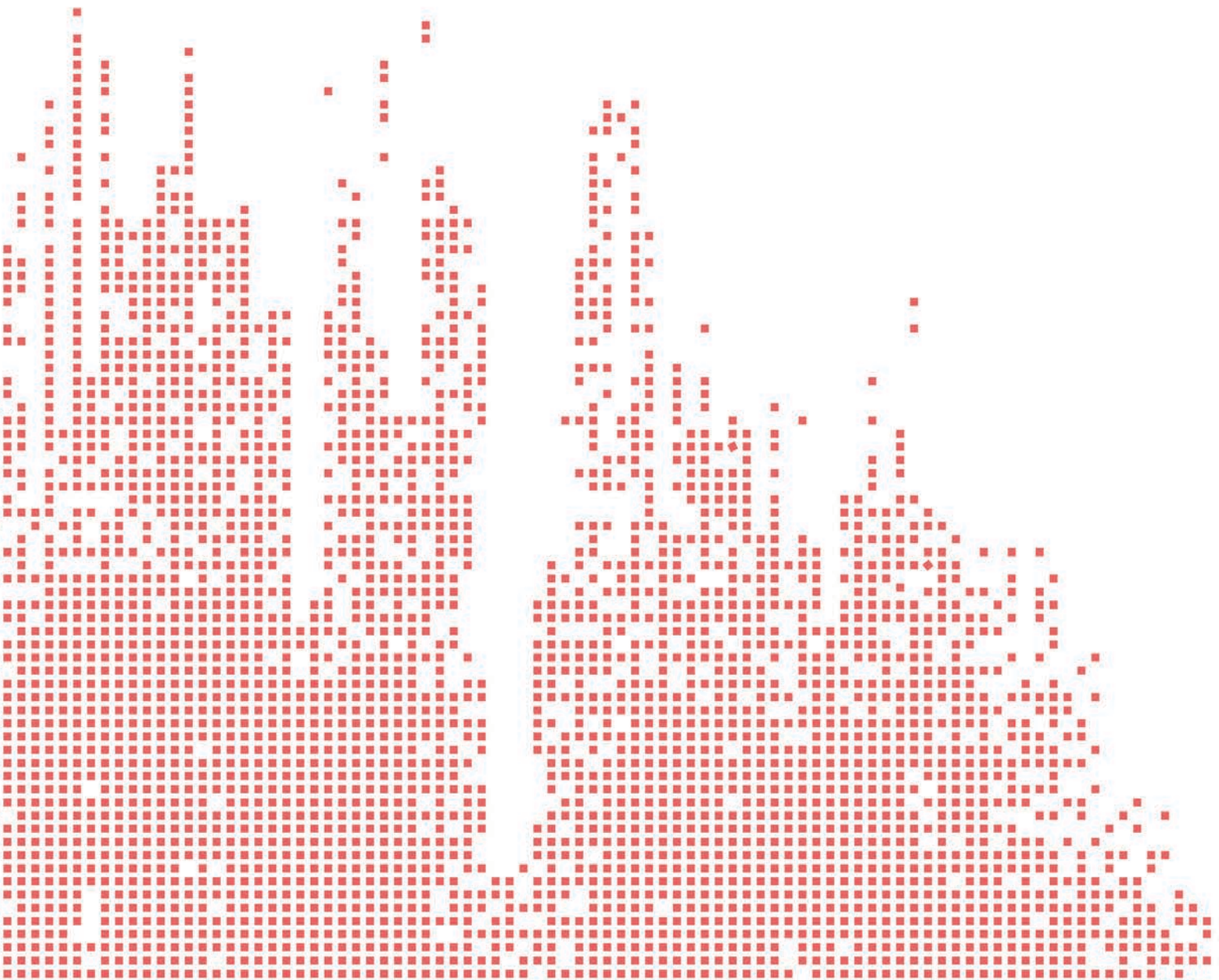
About the authors

Dyjalma Antonio Bassoli holds a PhD in Science and a master's degree in Bioengineering from the University of São Paulo (USP); a bachelor's degree in Physiotherapy (1990); and a bachelor's degree in Biology (2006). He is a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC); a DL general coordinator at CESMAC University Center; ad hoc member of the Evaluators Database of the São Paulo State Council of Education (CEE-SP); a professor since 1992; a university manager since 1998; a DL manager since 2002.



Sérgio Venancio da Silva holds a master's degree in Engineering from the University of São Paulo (USP); a bachelor's degree in Chemistry from the Santa Cecília University (Unisanta); a bachelor's degree in Pedagogy from the City of São Paulo University (UNICID); and a bachelor's degree in Production Engineering from the Virtual University of the State of São Paulo (UNIVESP). He is a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC); a professor since 2007; and the Production Engineering undergraduate program coordinator at CESMAC University Center.

Edileine Vieira Machado holds a doctorate in Education and a master's degree in Language and Literature from the University of São Paulo (USP); a bachelor's degree in Language and Literature from the São Paulo State University (UNESP); and a bachelor's degree in Pedagogy from the Ninth of July University (UNINOVE). She is a collaborating professor in the Doctoral Program in Language and Literatures at the Pontifical Catholic University of Minas Gerais (PUC Minas); ad hoc member of the Evaluators Database of the São Paulo State Council of Education (CEE-SP); a member of the Evaluators Database (BASis) of the Brazilian National System for Higher Education Evaluation (Inep/MEC); a professor since 1995; and the Language/Literature and Pedagogy DL undergraduate programs coordinator at CESMAC University Center.



Annex

Respondents

Educational institutions

State	Institution	Institutional email	Site	Respondent name
AL	Cesmac	dyjalma.bassoli@cesmac.edu.br	https://ead.cesmac.edu.br/	Dyjalma Basssoli
AL	Universidade Federal de Alagoas – UFAL	gr@reitoria.ufal.br	https://ufal.br/	José Geraldo da Cruz Gomes Ribeiro
BA	Centro Universitário do Rio São Francisco – Unirios	marilia@unirios.edu.br	https://unirios.edu.br/	Marília Gabriela Cruz dos Santos
BA	Serviço Social da Indústria – Sesi BA	giseleo@fieb.org.br	http://sesi.fieb.org.br/sesi/	Gisele Marcia de Oliveira Freitas
CE	Centro Universitário Fanor Wyden – UniFanor Wyden	alyne.ricarte@unifanor.edu.br	https://unifanor.edu.br/	Alyne Ricarte
CE	Fundação Demócrito Rocha – FDR	uane@fdr.org.br	https://fdr.org.br/	Marisa Ferreira da Silva
CE	Universidade de Fortaleza – Unifor	nte@unifor.br	https://unifor.br/	Mirian Cristina de Lima
CE	Serviço Social da Indústria – Sesi CE	agdantas@sfiec.org.br	https://sesi-ce.org.br/	Alysson Gadelha Dantas
DF	Centro de Ensino Tecnológico de Brasília – Ceteb	anapaula@ceteb.com.br	https://ceteb.com.br/	Ana Paula Porfírio de Souza
DF	Instituto de Ensino Profissionalizante – Inedi	anapaula@inedidf.com.br	https://inedidf.com.br/	Ana Paula de Souza Ferreira
DF	Serviço Nacional de Aprendizagem Rural – Senar Nacional	senar@senar.org.br	https://cnabrasil.org.br/senar	Larissa Arêa Sousa

State	Institution	Institutional email	Site	Respondent name
ES	Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo – Ifes	sa.cefor@ifes.edu.br	https://ifes.edu.br/	Secretaria Acadêmica do Cefor
ES	Serviço Nacional de Aprendizagem Industrial – Senai ES	jperini@findes.org.br	https://senaies.com.br/	Julia Maria Perini
ES	Serviço Social da Indústria – Sesi ES	jperini@findes.org.br	http://www.sesi-es.org.br	Julia Maria Perini
GO	Faculdade FAP	ead@faculdadefap.edu.br	http://faculdadefap.edu.br	Marcelo Mazza
MA	Universidade Estadual do Maranhão – Uema	ilka.serra@uema.br	https://www.uema.br/	Vanessa Georgia Gonçalves Bastos Beckman
MG	Cogna Educação S.A.	avaliacao@kroton.com.br	https://cognaedu.com.br/	Ludmylla Cerceau Ibrahim Martins
MG	Escola de Contas e Capacitação Professor Pedro Aleixo – Tribunal de Contas do Estado de Minas Gerais (TCE-MG)	debora.leal@tce.mg.gov.br	https://escoladecontas.tce.mg.gov.br/	Débora Cristina Cordeiro Campos Leal
MG	Escola de Teologia Viva com Esperança	pastorantoniosergio1960@gmail.com	https://wwwwestudoserespostasteologicas.wordpress.com/	Antonio Sérgio Santos da Silva
MG	Instituto Federal do Sul de Minas – IFSULDEMINAS	diretoria.ead@ifsuldeminas.edu.br	https://portal.ifsuldeminas.edu.br/	Evandro Moreira da Silva
MG	Universidade do Estado de Minas Gerais – UEMG	coordenadoria.ead@uemg.br	https://www.uemg.br/	Patrícia Maria Caetano de Araújo
MG	Universidade Federal de Minas Gerais – UFMG	pedagogico@caed.ufmg.br	https://www.ufmg.br/	Eliane Marina Palhares Guimarães
MG	Universidade Federal de Uberlândia – Ufu	cead@cead.ufu.br	http://www.cead.ufu.br/	Vinícius Silva Pereira

State	Institution	Institutional email	Site	Respondent name
MG	Universidade Federal de Viçosa – UFV	cead@ufv.br	https://www.cead.ufv.br/	Íris Ferreira de Sousa
MG	Universidade Vale do Rio Doce – Univale	reitoria@univale.br	https://www.univale.br	Cristiane Mendes Netto
MG	Vaccari Lopes Educação e Tecnologia Eireli – Pós EAD Brasil	vendas01@poseadbrasil.com.br	www.poseadbrasil.com.br	Luana Aparecida Pereira de Almeida
MS	Universidade Anhanguera – Uniderp	avaliacao@kroton.com.br	https://www.uniderp.com.br/	Ludmylla Cerceau Ibrahim Martins
MS	Universidade Federal da Grande Dourados – UFGD	reitoria@ufgd.edu.br	https://www.ufgd.edu.br/	Elizabeth Matos Rocha
MT	Vanguarda Instituto de Educação	veneranda.quezada@gmail.com	https://www.institutovanguarda.com.br/	Janaina Ferreira da Silva
PB	Instituto Federal de Educação, Ciência e Tecnologia da Paraíba – IFPB	ead@ifpb.edu.br	https://www.ifpb.edu.br/ead	Francisco de Assis Rodrigues de Lima
PB	União de Ensino e Pesquisa Integrada Ltda. – Unepi	atendimento@unepi.com.br	http://www.unepi.com.br/	Arthur Vieira
PB	Universidade Estadual da Paraíba – UEPB	proead@setor.uepb.edu.br	https://www.uepb.edu.br/	Carolina Cavalcanti Bezerra
PB	Universidade Federal da Paraíba – UFPB	superintendencia@sead.ufpb.br	http://www.sead.ufpb.br/	Renata Patricia L. Jeronymo M. Pinto
PE	Escola Técnica Estadual Professor Antonio Carlos Gomes da Costa – Etepac	etepac.ead@gmail.com	https://ead.educacao.pe.gov.br/	Manoel Vanderley dos Santos Neto
PE	Fundação Joaquim Nabuco – Fundaj	ead.difor@fundaj.gov.br	https://www.fundaj.gov.br/	Verônica Danieli de Lima Araújo

State	Institution	Institutional email	Site	Respondent name
PE	Universidade Católica de Pernambuco – Unicap	ead@unicap.br	https://portal.unicap.br/	Carlos Alberto Jahn
PI	Instituto Anjo Azul de Desenvolvimento Infanto-Juvenil	nossoespacoanjoazul2016@gmail.com	–	Elisangela Freitas da Silva
PR	Centro de Educação de Jovens e Adultos a Distância Mathisa – Cead Mathisa	contato@ceadmathisa.com.br	http://ceadmathisa.com.br/	Alessandra Piacentini e Samira Mendes
PR	Centro Brasileiro de Cursos – Cebrac	flavia.teixeira@cebrac.com.br	https://portal.cebrac.com.br/	Flávia Regina Pereira Teixeira
PR	Centro de Educação Profissional Democrata	escolademocratactba@gmail.com	https://www.escolademocrata.com.br/	Karolyne Rosário Golaz
PR	Centro Universitário Integrado	secretaria@grupointegrado.br	https://grupointegrado.br/	Maria Danieli Menegassi de Castro
PR	Instituto de Desenho Instrucional – IDI	contato@desenhoinstrucional.com	https://www.desenhoinstrucional.com/	Michele Kasten
PR	Universidade Cesumar – UniCesumar	angelica.bandeira@unicesumar.edu.br	http://www.unicesumar.edu.br/	Janes Fidélis Tomelin
PR	Instituto Adventista Paranaense – IAP	secretaria.nead.iap@gmail.com	https://iap.org.br/	Evelyn Damasceno Silva de Freitas
PR	Universidade Tuiuti do Paraná – UTP	marlei.malinoski1@utp.br	https://www.tuiuti.edu.br/	Marlei Gomes da Silva Malinoski
PR	Universidade Estadual do Norte do Paraná – Uenp	ead@uenp.edu.br	https://uenp.edu.br/	Silvio Tadeu de Oliveira
PR	Centro Universitário Internacional Uninter	reitoriagabinete@uninter.com	https://www.uninter.com/	Tânia Mara da Silva

State	Institution	Institutional email	Site	Respondent name
PR	Universidade do Norte do Paraná – Unopar	avaliacao@kroton.com.br	https://www.unopar.br/	Ludmylla Cerceau Ibrahim Martins
RJ	Associação Internacional de Lions Clubes Distrito Lc-1 – Instituto de Desenvolvimento da Liderança	lionslideranca@lionslideranca.org.br	http://www.lionslideranca.org.br	João Roberto Moreira Alves
RJ	Centro Municipal de Referência de Educação de Jovens e Adultos – Creja RJ	creja@rioeduca.net	https://crejarj.wixsite.com/creja	Maurício Oliveira Chaves
RJ	Centro Universitário Unicarioca – Unicarioca	jpandolfo@unicarioca.edu.br	https://www.unicarioca.edu.br/	Jeferson Pandolfo
RJ	Centro Universitário São José –UniSãoJosé	assessoria@saojose.br	https://saojose.br/	Rita de Cássia Borges de Magalhães Amaral
RJ	Colégio Anglo-Americano	anamaria.rocha@angloamericano.edu.br	https://www.angloamericano.edu.br/	Janaina Ferreira
RJ	Diretoria de Ensino da Marinha – DENSM	densm.secom@marinha.mil.br	https://www.marinha.mil.br/ensino/	Luiz Claudio Medeiros Biagiotti
RJ	Faculdade Ibam	ibamensur@gmail.com	http://www.ibam.org.br/	Silvia Leão
RJ	Fundação Getúlio Vargas – FGV	cristiane.mattos@fgv.br	https://educacao-executiva.fgv.br/	Cristiane Perroud Boier Mattos
RJ	Instituto Brasileiro Automotivo – Ibauto	contato@ibauto.com.br	https://www.ibauto.com.br/	Valter Rodrigo dos Santos Silva
RJ	Instituto de Pesquisas Avançadas em Educação	ipae@ipae.com.br	http://www.ipae.com.br/ipae/	João Roberto Moreira Alves
RJ	Serviço Nacional de Aprendizagem Comercial – SENAC DN	victor.zucarino@senac.br	https://www.senac.br/	Victor Zucarino

State	Institution	Institutional email	Site	Respondent name
RS	Centro de Convivência Alpha Eirelli –Escola Conquistadora	contato@escolaconquistadora.com.br	https://www.escolaconquistadora.com.br/	Sonia Marli Furlan
RS	Fundação Escola Superior do Ministério Público	joyce.pernigotti@fmp.com.br	https://fmp.edu.br/	Joyce Munarski Pernigotti
RS	Universidade do Vale do Taquari – Univates	campus@univates.br	https://www.univates.br/	Franciele Maria Krämer
RS	Universidade Federal de Santa Maria – UFSM	prcolusso@cead.ufsm.br	https://www.ufsm.br/	Paulo Roberto Colusso
SC	Inova Práticas Educacionais – IPE	denia.falcao@gmail.com	http://inovapraticaseducacionais.com.br/	Dênia Falcão
SC	Serviço Nacional de Aprendizagem Industrial – Senai SC	senai@sc.senai.br	http://sc.senai.br	Débora Beluco Michels
SC	Serviço Social da Indústria – Sesi SC	debora.michels@sc.senai.br	https://sesisc.org.br/	Débora Beluco Michels
SC	Universidade do Oeste de Santa Catarina – Unoesc	reitoria@unoesc.edu.br	https://www.unoesc.edu.br/	Jaciney Aparecida Danielli
SP	Cenpec Educação	cenpec@cenpec.org.br	https://www.cenpec.org.br/	Adriana Silvia Vieira
SP	Centro Universitário das Faculdades Integradas de Ourinhos – Unifio	luciane@unifio.edu.br	https://www.unifio.edu.br/	Luciane Aparecida Mariano
SP	Centro Universitário da Fundação Hermínio Ometto – FHO	proreitoria@uniararas.br	http://www.fho.edu.br/	Marcelo Augusto Marretto Esquisatto
SP	Centro Universitário Anhanguera Pitágoras Ampli	avaliacao@kroton.com.br	https://www.ampli.com.br/	Ludmylla Cerceau Ibrahim Martins
SP	Colégio Aplicação A Inteligência	secretaria@colegioaplicacaointeligencia.online	www.colegioaplicacaointelogencia.online	Claudimir Novaes

State	Institution	Institutional email	Site	Respondent name
SP	Colégio Lapa	colegiolapa@colegiolapa.com.br	https://colegiolapa.com.br/	Jose Gonçalves Lage e Silva
SP	Faculdade de Tecnologia Saint Paul	secretaria.academica@saintpaul.com.br	https://saintpaul.com.br/	Raquel Aparecida da Silva
SP	Faculdade Fipecafi	fipecafi@fipecafi.org	https://fipecafi.org	Juliana Nascimento
SP	Faculdade Metropolitana do Estado de São Paulo	relacionamento@faculdademetropolitana.edu.br	https://faculdademetropolitana.edu.br/	Taísa Ferreira
SP	Instituto Presbiteriano Mackenzie	cedad@macekenzie.br	https://www.mackenzie.br/	Gabriela Henrique Araújo de Souza
SP	Instituto Adventista de Ensino – Unasp	waggnoor.kettle@unasp.edu.br	https://www.unasp.br/	Waggnoor Macieira Kettle
SP	Instituto Brasileiro de Educação Profissional do Estado de São Paulo – Ibresp	secretariaescolar@ibresp.com.br	https://www.ibresp.com.br/	Lisamar Delazeri Castro
SP	Universidade do Oeste Paulista – Unoeste	sonia@unoeste.br	https://www.unoeste.br/	Sonia Sanae Sato
SP	Universidade de Araraquara – Uniara	mppilon@uniara.edu.br	https://www.uniara.com.br/	Mônica Pereira
SP	Universidade Presbiteriana Mackenzie	cedad@mackenzie.br	https://www.mackenzie.br/	Gabriela Henrique Araújo de Souza
SP	Universidade de Sorocaba – Uniso	leo.silva@prof.uniso.br	http://uniso.br	Leo Victorino da Silva
SP	Universidade Metropolitana de Santos – Unimes	unimes@unimes.br	https://portal.unimes.br/	Elisabeth dos Santos Tavares

Supplying institutions

State	Institution	Institutional email	Site	Respondent name	Services/products
AM	EduStream	vamosinovar@edustream.com.br	www.edustream.com.br	Reinier Alex de Oliveira Freitas	Technologies for: educational management systems (EMS), business intelligence, G Suite education/business, webinar, streaming, social media, mobile, e-learning, virtual learning environment (VLE), distance learning, e-commerce, GApps Edu, and others.
CE	Ensetec Tecnologias Educacionais	pedro@pedrofurquim.com.br	–	Pedro Luiz Furquim Jeangros	Education projects' consulting and management, specialized in content production and employee training and development.
DF	Raleduc Tecnologia e Educação Ltda.	adm@raleduc.com.br	https://www.raleduc.com.br	Rafael Lacerda	Platform, development and transposition of contents. Udemy's sole representative in Brazil.
DF	Strong Edições	strongedicoes@gmail.com	www.strongedicoes.com	Elias do Nascimento Melo Filho	Editing and publishing of distance learning materials such as books and magazines. Intellectual property; revision; instructional design; tools for people with disabilities; and expert advice.
GO	Faculdade FAP	ead@faculdadefap.edu.br	http://faculdadefap.edu.br	Marcelo Mazza	Contents and practices that the market demands.
GO	Grupo Performance	adrianorochanascimento@gmail.com	www.grupoperformance.com.br	Adriano Rocha Nascimento	WEB Software Platform for educational management.
MT	Vanguarda Instituto de Educação	vanguardasecretaria@gmail.com	www.institutovanguarda.com.br	Janaina Ferreira da Silva	Hybrid courses.
PR	Centro de Educação Básica para Jovens e Adultos a Distância Mathisa – Cead Mathisa	contato@ceadmathisa.com.br	http://ceadmathisa.com.br	Samira Mendes	Distance learning courses for middle school and high school for youth and adult education.

State	Institution	Institutional email	Site	Respondent name	Services/products
PR	InterEDTech Tecnologias Educacionais	atend.geral@interedtech.com.br	www.interedtech.com.br	Leonardo Bruna Barbieri	Digital transformation for primary, secondary and higher education institutions, focusing on financial, marketing and academic solutions. The main objective is to help educational institutions to promote fluid and modern experience in student conversion, using the fintech-edunext platform, integrated with digital marketing and delivering content in LMS.
PR	VG Educacional	diego@vgeducacional.com.br	www.vgeducacional.com	Diego Dias	Teaching/learning materials for distance learning, editorial and audiovisual content.
RJ	Elsevier Editora Ltda.	recepcaorj@elsevier.com	http://elsevier.com/pt-br	Gisely Pinto	Clinical evidence-based information, learning technologies, and evaluation tools; decision support and student support platforms such as Complete Anatomy, ClinicalKey, and Clinical Skills.
RJ	Trend Market Consultoria, Instrutoria e Treinamento	contato@trendmarket.com.br	https://www.trendmarket.com.br	André Dias	Marketing training, based on the pillars of digital presence, content and sales through social networks; network management; performance marketing (digital advertisements).
RS	Coonteudo	coop.coonteudo@coonteudo.com.br	www.coonteudo.com.br	Wilson Cypriano Pereira	Customized learning solutions for distance learning modality.

State	Institution	Institutional email	Site	Respondent name	Services/products
SP	Artesanato Educacional Ltda.	artesanatoeducacional@gmail.com	https://artesanatoeducacional.com.br/	Carlos Santos	A variety of services and products, from a bookstore specializing in distance learning to the offer of online and on-site courses, which are always related to the area of education and technologies. It sells books and games related to distance learning and educational technologies. It also organizes and participates in events in the area, especially the Distance Learning Journeys. In addition, it offers consulting, lectures and various training in the area.
SP	De Pieri Comunicação	falecom@depiericomunicacao.com.br	www.depiericomunicacao.com.br	Sonia De Pieri	Audio production and editing; female and male voice-over in Portuguese and other languages to compose the learning trail; translation, transcription, subtitling, writing and proofreading.
SP	Denodo Soluções Digitais	renata.rosario@denodo.com.br	www.denodo.com.br	Renata Rosario	Digital solutions, as courses, learning trails, videos, e-books and podcasts.
SP	Newis Cool Tecnologia Educacional Ltda.	titton@newis.cool	https://newis.cool	Luiz Antonio Titton	Didactic resources for active methodologies, simulators and educational games.
SP	Primeira Escolha/ Empresa Brasileira de Avaliação Educacional Ltda. – Ebrae	luciana@primeiraescolha.com.br	https://site.primeiraescolha.com.br/	Luciana Correa	Educational evaluation, professional certifications, tests for recruitment and selection processes. It is specialized in selection processes and online tests.
SP	Prisma Educação Continuada e Aprendizagem Profissional Ltda.	raquel@prismaconsultoriaemsaude.com.br	https://www.prismadigital.tech/	Raquel Motta	Digital and hybrid training for the healthcare sector, corporate courses and universities.

State	Institution	Institutional email	Site	Respondent name	Services/products
SP	Site Educacional Ltda.	site@siteeducacional.com.br	www.siteeducacional.com.br	Victor Wolowski Kenski	Consultancy for the implementation of distance learning projects; pedagogical projects for educational institutions and corporate universities; training of teachers and tutors for distance learning; content curation; and development of teaching/learning materials for distance learning.
SP	Teixeira Soluções Educacionais	josetadeu_almeida@yahoo.com.br	https://www.linkedin.com/in/josé-tadeu-almeida-10866b39/	José Tadeu de Almeida	Teaching/learning materials (books/questions) for primary, secondary and higher education, with thematic projects and subjects suited to the needs of corporate customers; distance learning platforms and interactive didactic content.
SP	Wire EdTech Solutions	renato.amorim@wire.net.br	www.wire.net.br www.wire-edtech.com.br	Renato de Amorim Gomes	Products and services developments especially for digital education.