Guidelines for the dissemination of distance education, from the analysis of prejudice against this education modality

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ABSTRACT. This article aims to propose guidelines for the dissemination of Distance Education (DE) in Brazil, based on the identification and analysis of prejudice against this type of education. Therefore, it seeks to answer the following research question: How can DE be widely disseminated to serve the different classes of society, based on the analysis of prejudice against DE? It is a qualitative, exploratory and field research, carried out through online data collection answered by 100 respondents; and data treatment performed through content analysis. For 78% of respondents, there is prejudice against distance education and the main reasons are: perception that the quality of teaching is low, lack of credibility about the teaching-learning process, lack of knowledge about this teaching modality and resistance to the new. It is concluded that there is a need to implement improvements on the part of educational institutions, for a greater recognition of DE. Thus, guidelines for Distance Education are proposed in order to expand opportunities for education at all levels of society, such as: the need for customization and constant improvement of the quality of material and content; information on the characteristics, forms of interaction and the teaching-learning process in distance education; dissemination of comparative results between DE and face-to-face students; evidence that there is no difference in the level of difficulty in relation to the face-to-face modality; demonstrate concern for students’ effective learning and the possibility of using distance education in all areas of knowledge; and to promote teacher training and involvement programs in distance education, in order to make them overcome paradigms arising from classroom teaching.

Keywords: content analysis; preconception; distance learning; education modality.

Diretrizes para a disseminação da educação a distância, a partir da análise do preconceito contra esta modalidade de educação

RESUMO. Esse artigo tem como objetivo propor diretrizes para a disseminação da Educação a Distância (EaD) no Brasil, a partir da identificação e análise do preconceito contra esta modalidade de educação. Busca, portanto, responder a seguinte pergunta de pesquisa: Como a EaD pode ser amplamente difundida para atender as diversas classes da sociedade, a partir da análise do preconceito contra a EaD? Trata-se de uma pesquisa qualitativa, exploratória e de campo, realizada por meio da coleta de dados online respondido por 100 respondentes; e tratamento dos dados realizado por meio da análise de conteúdo. Para 78% dos respondentes há preconceito contra a EaD e as principais razões são: percepção de que a qualidade do ensino é baixa, falta de credibilidade sobre o processo de ensino-aprendizagem, falta de conhecimento sobre essa modalidade de ensino e resistência ao novo. Conclui-se que há a necessidade de implementar melhorias por parte das instituições de ensino, para um maior reconhecimento da EaD. Assim, diretrizes para a Educação a Distância são propostas visando ampliar oportunidades para a educação em todos os níveis da sociedade, tais como: a necessidade de customização e aprimoramento constante da qualidade do material e do conteúdo; informações sobre as características, formas de interação e processo de ensino-aprendizagem na EaD; divulgação dos resultados comparativos entre os alunos da EaD e presenciais; evidenciar a inexistência de diferença no nível de dificuldade em relação à modalidade presencial; demonstrar a preocupação com o aprendizado efetivo dos alunos e com a possibilidade de se utilizar a EaD em todas as áreas do conhecimento; e promover programas de capacitação e envolvimento dos professores na EaD, a fim de fazer com que superem paradigmas oriundos do ensino presencial.

Palavras-chave: análise de conteúdo; preconceito; educação a distância; modalidade de educação.
Directrices para la difusión de la educación a distancia, a partir del análisis del prejuicio contra esta modalidad educativa

RESUMEN. Este artículo tiene como objetivo proponer pautas para la difusión de la Educación a Distancia (EaD) en Brasil, con base en la identificación y análisis de prejuicios contra este tipo de educación. Es una investigación cualitativa, exploratoria y de campo, realizada a través de la recopilación de datos en línea respondida por 100 encuestados; y tratamiento de datos realizado mediante análisis de contenido. Para el 78% de los encuestados, existe un prejuicio contra la educación a distancia y las razones principales son: percepción de que la calidad de la enseñanza es baja, falta de credibilidad sobre el proceso de enseñanza-aprendizaje, falta de conocimiento sobre esta modalidad de enseñanza y resistencia a lo nuevo. Se concluye que existe la necesidad de implementar mejoras por parte de las instituciones educativas, para un mayor reconocimiento de la EaD. Por lo tanto, se proponen directrices para la educación a distancia con el fin de ampliar las oportunidades de educación en todos los niveles de la sociedad, tales como: la necesidad de personalización y la mejora constante de la calidad del material y el contenido; información sobre las características, formas de interacción y el proceso de enseñanza-aprendizaje en educación a distancia; difusión de resultados comparativos entre EaD y estudiantes presenciales; evidencia de que no hay diferencia en el nivel de dificultad en relación con la modalidad cara a cara; demostrar preocupación por el aprendizaje efectivo de los estudiantes y la posibilidad de utilizar la educación a distancia en todas las áreas del conocimiento; y para promover programas de capacitación y participación docente en la educación a distancia, a fin de que superen los paradigmas derivados de la enseñanza en el aula.

Palabras-clave: análisis de contenido; prejuicio; educación a distancia; modalidad educativa.

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Introduction

Brazil is an unequal, developing country, (and) with a large territorial extension, and presents difficulties and weaknesses in its educational process. Distance Education (DE) can be considered an important education modality for the creation of opportunities for a large number of people. It has the power to reduce distances and (the) inequalities, filling the formational gaps of Brazilian citizens (Mauro, Freitas, Cintrão, & Gallo, 2017).

DE is a growing (and) changing phenomenon in Brazil. The development of Information and Communication Technologies (ICT) has enabled new levels of diffusion of this type of education. Considering the year 2018 there was an increase of 20% in the overall number of enrollments in the DE modality and 79% of regulated EaD courses that are entirely at a distance, with a predominance for educational institutions in the Southeast (Brazilian Association of Distance Education [Abed], 2018).

In 2018, for the first time, the total number of vacancies offered for graduation was higher in EaD than in face-to-face modality. Considering the last five years, the growth of vacancies in DE is 135%. The presence of EaD in undergraduate courses tends to increase even more, since the Brazilian government has sanctioned Ordinance 2.117/2019, which allows educational institutions to make available up to 40% of their course load in EaD, consolidating the hybrid education modality (Brazil, 2018).

Moreover, DE courses are considered financially important for educational institutions: for 60% of the institutions, DE represented more than 51% of profits in 2014 - which is relevant when compared to the financial return of face-to-face courses. Thus, DE is a new space for expansion and profit-making by Brazilian educational institutions (Mancebo, Vale, & Martins, 2015; Abed, 2018).

Despite the significant growth and the perception that DE can help overcome the educational gap in Brazil, this education modality still struggles with prejudice and resistance (Mancebo et al., 2015). The labor market, for example, presents strong prejudice against DE (Garcia, Silva, & Riedo, 2015). However, Santos and Menegassi (2018) state that people’s prejudgment about DE has been reduced over time, since institutions have been proving that the grades of DE students are equal or even higher than those of face-to-face students. Fioravanzo, Vieira, and Claro (2016) state that the prejudice phase has passed, with barriers already overcome and with greater acceptance by the parties involved.

This article originates from the first author’s idea of investing and deepening in the subject of DE (Distance Education). It is not a research that originated from a master’s thesis or doctoral dissertation. The institution to which the first author was linked as a student, at the time of the generation of the first version (and which evolved until the version currently submitted and approved in this journal), was not submitted to the ethics committee, because it was created after the end of the data collection phase of this article. As it was a survey without identification of the respondents, and with voluntary participation, all participants were aware that the information collected would be used for academic purposes and the voluntary participation itself was considered as consent.

Considering the above contextualization, the following question guided this research: How can EaD be widely disseminated to meet the several classes of society? To answer it, the general objective was to propose guidelines for the dissemination of DE in Brazil, based on the identification and analysis of prejudice against DE and its causes. It was identified only two articles that address the theme prejudice against DE, directly - Corrêa and Santos (2009) and Almeida Filho (2015), so that this article seeks to contribute to a better understanding of this phenomenon within the Brazilian reality.

The present article can be characterized as a qualitative, exploratory and field research: a) qualitative because it considers the content analysis of the response of 100 respondents, obtained through an online questionnaire (Vergara, 2013; Marchisotti, Joia, & Carvalho, 2019) where it sought to identify whether or not there is prejudice against DE and understand what their motivators are. To do so it was used content analysis that ‘[...] constitutes a research methodology used to describe and interpret the content of all classes of documents and texts.’ (Moraes, 1999, p. 2); b) exploratory, as to its purposes, because it aims to identify the perception of Brazilians regarding the researched theme (Vergara, 2013), and c) a field research, since it seeks to understand a certain social fact in its natural context (Kinchescki, Alves, & Fernandes, 2015).

The links with the research questions were sent using the technique of accessibility or convenience, without the use of statistical means (Vergara, 2013). A first filter applied to all responses received, was to select those that had the question ‘Is there prejudice with respect to DE? This ensures, in this way, the analysis of only those responses whose respondents understand that there is, in fact, prejudice against this type of education. Next, the content of the answers to the question ‘What are the reasons for prejudice against DE?’ were analyzed, in order to identify categories that represent the reasons expressed by respondents for prejudice against DE.

To this end, the content analysis was performed according to the procedures and steps described by Moraes (1999): 1) Preparation of the information - tabulation of all responses in an Excel spreadsheet; 2) Transformation of the content into units (Unitarization), which in the case of this research were the sentences - all responses from each of the respondents were analyzed sentence by sentence; 3) Classification of the units into categories (Categorization) - from the analysis of the sentences in the previous step, categories were created to express the opinions of the respondents on the theme; 4) Description - explanation of each of the categories, based on the previous analyses; and 5) Interpretation - analysis of the broad meaning of the answers, by examining the categories created and their descriptions. Finally, each of the categories created was compared with the articles from a bibliographic research, in order to identify if in fact the arguments put forward by the respondents, concerning their position on the existence of prejudice, are corroborated by theory or are dubious facts, without theoretical support. This theoretical reference was obtained following the procedures proposed by Chueke and Amatucci (2015), using the Boolean search: ‘Distance Education’ or ‘Distance Education’ or ‘Distance Teaching’ or ‘Distance Learning’ or ‘Distance Learning’. After applying filters - articles published in the last 5 years, peer-reviewed journals in Portuguese language - it was possible to find 608 articles. From this initial base we sought to identify at least 2 articles, by reading the abstracts, that were associated with each of the categories previously created in the content analysis, so that it is possible to corroborate (or not) what was said by the interviewees during the analysis of the results.

Within the growth of DE, it is natural that there are divergent positions on the subject. According to Oliveira (2013) there are positions contrary to DE, by the defenders of face-to-face education, who consider DE as an education modality without quality. According to Patto (2013), distance education demonstrates the bankruptcy of education, being one of the threats to the integrity of public schools. The offer of DE courses would be a movement to promote emergency public policies and, in this sense, it can be understood as an education with a high degree of precariousness. It is claimed that it is an attempt to commercialize higher education and that the DE movement would not be in fact concerned with student learning (Arruda & Arruda, 2015). On the other hand, there are supporters of DE who understand it as a new form of education and an important pedagogical practice, considering face-to-face education as outdated and antiquated (Oliveira, 2013).

There is also a third tendency, currently identified as the one with the best results, which believes that the mix of face-to-face education with DE is the most appropriate, and this method of education is called hybrid (Renosto & Cardoso, 2015). There are even works based on case studies that claim that the use of DE, as a complement to face-to-face teaching in undergraduate courses, makes professional training more effective (Mezzari, 2011). Moran and Valente (2015) corroborate this understanding by stating that the system part face-to-face, part distance, presents itself as the most promising, ensuring meaningful learning. For Rocha and Herrmann (2019), the hybrid modality is already a reality, bringing together daily experiences and technology.
One study compared the performance of a face-to-face teaching class and another in EaD modality and the results were favorable to the second group. The performance in tests and class interaction was similar for both classes, and in most of the items evaluated, the DE students had a better performance. It was found that the success of the teaching-learning process using DE is associated with the exploration and appropriate use of virtual resources and tools, as well as the incentive for participation and the search for improvement of techniques and methods used (Nascimento, Czykiel, & Figueiró, 2013).

For any education modality, there are advantages and disadvantages. However, it is frequent the negative assessment of DE, without a deeper knowledge about this education modality; without concrete, real, academic or practical basis to justify it. As addressed by Abbad (2014), there is a difficulty in demonstrating the effectiveness of DE compared to face-to-face education, as well as other challenges to be overcome by DE and that are confronted with the Brazilian reality, such as the need to promote the digital inclusion of the population; greater familiarization of the actors involved with the Internet and associated technological tools; improvement of DE-based courses, with attention to teaching-learning strategies that promote greater interaction and better use of ICT technologies; better evaluation systems that measure the Distance Education system; and better understanding of the reasons for the high dropout rate and development of actions to mitigate it.

Thus, it should be emphasized the need for improvements in DE. According to research by Silva and Moita (2019), the main difficulties reported by students in DE modality are: 1) inadequate infrastructure for the modality; 2) inadequate teaching resources and 3) lack of internet access. Although the insertion of video classes is well accepted by the new generation, as well as virtual simulators, the care with the teaching material should be doubled, since the teaching-learning processes are changing all the time and new technological resources are emerging. These processes can be more effective with the use of the Internet and new technologies, such as Artificial Intelligence and Cognitive Computing, requiring adjustments in the pedagogical models of educational institutions (Barros & Guerreiro, 2019).

There is doubt whether the prejudice against DE is something new or a condition experienced since the beginning of the use of this method of education. The initial experiences of the dissemination of DE by the Brazilian Open University (UAB), from 2006, were made in a botched manner, without the care and academic debates necessary to ensure, at the time, criteria and standards for measuring the quality of this education modality, which brought some discredit to DE (Mancebo et al., 2015).

Almeida Filho (2015), corroborates this understanding, by stating that the prejudice against DE is characterized by past experiences of failures in the use of this methodology in Brazilian history. The disqualifications regarding DE are unfounded, and are associated with cultural variables, lack of knowledge and difficulties of adaptation with respect to the technological resources used. For Almeida (2015), the origin of prejudice against DE comes from the belief that students do not learn, effectively, that is, DE does not provide the construction of knowledge. In this context, DE is considered of low quality if compared to the face-to-face model, besides presenting a lower level of difficulty, being easier in terms of content.

When it comes to higher education, the professors themselves and the academic institutions themselves can be a source of prejudice against DE (Alencar, Silva, Lima, Firmo, & Queiroz, 2015), either because of lack of knowledge, or because of corporatism or the need to maintain the status quo. The view, by the academia itself, that DE education is an instrument for the propagation of low-quality education, and that it aims to promote the expansion of higher education at any price, is relatively common. DE is, in this context, understood as a tool used to mask deficiencies of public policies for the expansion of education (Arruda & Arruda, 2015).

Much of the prejudice against education of education is based on the supposed lack of quality of the courses. However, according to Moran and Valente (2015), a quality DE course challenges classroom courses in terms of: 1) the flexibility, both of time and schedules and procedures; and 2) the change of focus on learning, tutoring, and the student, to the detriment of teaching. However, one question is worth asking: How to characterize whether a given course has quality or not? According to Bertolin and Marcon (2015), for the case of higher education courses, the quality of courses and higher education institutions are measured by rankings, which are based on exams such as Enade or, in the past, Provão. However, the authors emphasize that this form of quality assessment, per se, is not a reliable instrument and what really differentiates the performance of students is their cultural knowledge - social, family, economic and cultural context.

A research on prejudice against DE goes beyond the analysis of the teaching-learning relationship, because it also involves the analysis of external factors. According to Alencar et al. (2015) a better dissemination of
DE-based courses is necessary, both from the point of view of marketing itself, and about the education modality itself, in addition to the formal aspects of DE, such as the validity of these courses under Brazilian law, as well as the market acceptance of graduates in DE-based courses.

However, it is worth noting that even considering the existence of prejudice against DE, it can be seen that in practice, and considering the Brazilian context - large territory, need for training of the population for insertion in the labor market and deficiency of physical infrastructure - it has been decreasing. Universities have been seeking to discuss, criticize, analyze, qualify and implement courses in DE, in addition to making them available as a modality of education effectively used to meet those who cannot afford to take face-to-face courses (Costa & Cochi, 2013). Still, there are obstacles to the existence of a digital culture and a full understanding of new technologies used in DE, by teachers who have difficulties in breaking with the paradigms of traditional classroom teaching (França, Costa, & Santos, 2019).

In this survey, the profile of the respondents has the following characteristics: 1) 55.6% are male; 2) 91% are between 25 and 55 years old; 3) 91% live in the southeast region; 4) 36% are predominantly engineers; 5) 81% have a graduate degree; 6) 63% had already taken a distance learning course. From the total of 100 responses considered, 78% stated that there is prejudice against EaD. After the content analysis of the answers of these respondents, it was possible to build the list of categories, describe and exemplify them with sentences from the respondents.

**Category 1 - content quality**

Respondents believe in the poor quality of DE course content. DE courses are considered superficial, in terms of the quality of content of the material, which is often not customized for this type of education: 'Quality in terms of content and teaching didactics' (Respondent 23).

This category is aligned with the statement of Fonseca et al. (2015), who identified that the perception of students about the quality of the content of an DE course is positive, showing that there is a satisfaction in relation to its importance for learning, ease of access and visual presentation. On the other hand, Santos (2017) is emphatic when stating that the quality of the didactic material of DE courses does not always meet the needs of students, either due to deficient content, meaningless practices and the lack of constant monitoring of student performance.

**Category 2 - quality of teaching**

There is the assumption, on the part of the interviewees, of a poor quality of teaching in DE courses. The teaching-learning process in DE is less effective than face-to-face teaching. There is a fear of the quality of DE courses, which is considered low, of little depth, besides the courses being considered inefficient, incomplete, badly structured, without criteria and focus. DE course students do not have the same level of preparation as those who attend classroom courses. There is a perception of difficulty in evaluating the student in DE courses and suspicion that there is fraud in the evaluations. It is suggested that there is no guarantee of quality on the part of the institutions that have distance learning based courses, and that in-class courses are better evaluated. DE courses lack seriousness and there is a feeling that students are not learning and the courses are of lesser expression: 'The quality of teaching is believed to be inferior' (Respondent 25).

This category is aligned with the statement of Teixiera et al. (2015) who, when analyzing the perception of graduates of a DE course, identified that they consider it of excellent quality, being very satisfied with this type of education as a whole. According to Lau, Mendes, Ventura, Bollela, and Teixeira (2017) DE is suitable for the generation of knowledge and gain of skills by students - qualified reasoning, reflection, and involvement.

**Category 3 – credibility**

There is a perception that DE courses are not reliable, i.e., there is a feeling of doubt regarding the possibilities of fraud and lack of control and support of educational institutions. However, it is understood that this lack of credibility is temporary, since the courses are considered new: 'Lack of credibility' (Respondent 99).

This finding is in accordance with the statement of Martins and Costa (2015) who identified that one of the difficulties faced by DE is its position of low prestige, generating a perception of poor quality, which are distortions of reality. They emphasize that this discreditability ends up generating a perception of poor quality, which are distortions of reality. According to Almeida Filho (2015) the depreciative discourses
regarding EaD decrease credibility and acceptance, despite the statistics presenting favorable data and the institutions strive for greater awareness.

**Category 4 – lack of knowledge**

The interviewees perceive the lack of information about DE as a reason for the prejudice. The lack of knowledge and information as a whole, of the methodology used in DE, as well as of the results generated by this type of education are the causes of prejudice against DE. This is true for both students and teachers: ‘Prejudice due to lack of knowledge’ (Respondent 27).

This category is in accordance with the statement of Ferrugini, Souza, Morais, and Pinto (2014), who identified that there is a lack of knowledge about what DE in fact is and its operating model. Almeida Filho (2015) goes further, stating that the prejudice against DE is due to cultural issues, personal characteristics, social adaptation and limited knowledge about the techniques and methods adopted in this education modality.

**Category 5 – easiness**

Respondents state that DE courses lack rigor, are looser and students are more easily approved compared to face-to-face courses. They believe in a lesser demand in this type of course: ‘They believe that the courses are easier to approve’ (Respondent 26).

This category is in accordance with the statement of Bokums and Maia (2018), who identified that DE is still considered by many as an easier, second-rate education; but that in reality it is an education modality that is not inferior to face-to-face and that still promotes social insertion. Ferrugini et al. (2014) make it clear that DE requires a lot of dedication on the part of the student, so that the assumption that learning is easier does not match reality.

**Category 6 – interaction**

There is a perception of lack of interaction between teachers/students and between students/students, so that there is little exchange of experiences, information, and networking, impacting negatively on the teaching-learning process: ‘Lack of exchange of experiences between teachers and students, especially in courses focused on education, where there is a lack of interaction as an important element in the teaching-learning process’ (Respondent 23).

This category is in accordance with the statement of Rosa and Orey (2017), who identified that the teacher, once mastering the virtual platforms and through an appropriate instructional design, favors collaborative and interactive learning relationships. Brod, Rodrigues, and Milcarek (2017) are in the same line, when they mention that DE enables interaction between students and teachers, effective participation and greater access to content.

**Category 7 – outreach**

The respondents present an understanding that the characteristics of the Distance Education system are not well disseminated, just as there is no disclosure of successful professionals who graduated through DE. Distance Education needs to publicize its results in an appropriate way, so that they are known. There is a need for better dissemination of the characteristics of this type of education to the consumer market: ‘Institutions often do not make a good dissemination of the results in the specialized media’ (Respondent 29).

This category meets the statement of Sarquis, Picolli, Ramos, Hoeckesfeld, and Lima (2016), who identified that there is investment in marketing and dissemination - online and offline -, as well as the use of strategies for prospecting new students - online and face-to-face sales -, with satisfactory results and within the expectations of the business. On the other hand, for Borges, Constante, Domingues, and Añaña (2014) educational institutions need to invest more in word-of-mouth dissemination of their DE courses, which only occurs after the generation of trust by current and former students.

**Category 8 – resistance**

The interviewees are resistant to new things and the DE courses are considered recent, not yet fully validated by the market, when compared to face-to-face courses. The DE courses lack usability, life experience and experience to become solidified. People are used to the traditional models of education and changes
generate resistance, with a lack of adaptation by students to DE: ‘Lack of knowledge and resistance to new things’ (Respondent 34).

This category is in accordance with the statement of Antunes and Batista (2016), who identified that there is resistance on the part of students and teachers regarding DE, because it is new, which generates fear, stress and anger. Mancebo et al. (2015) corroborate this understanding, by stating that there is resistance against DE in Brazil.

**Category 9 – Fitting**

There is a perception that only certain subjects are appropriate to be provided entirely over the Internet. There are courses that are inappropriate for DE, which require physical contact with students: ‘It wouldn’t really be prejudice... but some courses are not likely to fit the DE model. Courses that require minimum infrastructure of laboratories, testing areas, etc. for example’ (Respondent 42).

This category is in line with Lau et al. (2017), who identified that the use of DE in health care was introduced in 2010, with reports of success and successful formative practices. In the same direction, Costa, Bueno, and Gomes (2015), state that the formative success is not associated with the education modality, but rather with external changes that require a change in the way health is taught, whether at a distance or in person.

**Category 10 – behavior**

For the interviewees, the students' behavior - lack of dedication, seriousness, interest, maturity, commitment and concentration - makes it difficult to take DE courses and interferes in their pre-judgment: ‘From my experience, DE courses require much more dedication than the ones I took in person’ (Respondent 41).

This category meets the statement of Nascimento and Oliveira (2017), who report the difficulties of students during an DE course, demonstrating that they are associated with both behavioral issues, as well as the correct management of time, mainly. Cavalcanti (2016) states that the motivation for the evasion of DE courses are personal aspects, such as lack of vocation for the realization of the course in DE, lack of motivation, aspects related to family, lack of adaptation, problems inherent to work, lack of time and health problems.

**Category 11 – institutions**

It is perceived that there is a lack of renowned institutions that provide courses based on DE. There is a feeling that institutions are concerned only with selling DE courses, without guaranteeing and attesting to the effective learning of the student: ‘Several institutions concerned with selling a product, but without guaranteeing learning and attesting to it’ (Respondent 60).

This category meets the statement of Fioravanzo et al. (2016), who mentioned that if precautions are not taken regarding the stimulus of interaction and dialogue with the student, DE can be compared to a bank, where the teacher ‘deposits’ the knowledge and the student ‘memorizes’, just repeats. Almeida Filho (2015) attests that there are several studies that prove that DE increases the number of students served by educational institutions, therefore, it generates profit for private institutions, and it is used as political propaganda in public institutions.

**Category 12 – corporativismo**

There is a perception that there is a corporativism, a lobby in favor of the traditional teaching system, which prevents DE from developing properly. It is the attachment to the status quo, to the detriment of a change to the new reality that presents itself: ‘Lack of knowledge of the method, corporativism’ (Respondent 72).

This category is in accordance with the statement of Pires and Arsand (2017), who identified that professors are still stuck in the paradigms associated with traditional teaching methods, and that there is fear that the use of informatics brings risks to professors and the maintenance of the status quo. For Alencar et al. (2015), lack of knowledge, corporatism, and the need to maintain the status quo are the reasons why there is prejudice against DE.

From the analysis of the categories it was possible to elaborate Table 1, which identifies the main reasons for prejudice or negative perceptions against DE and the proposition of guidelines to be adopted, so that there is a stimulus for its dissemination.
When analyzing the results it was identified that categories 2, 3, 4 and 8 refer to those that demonstrate prejudice on the part of the respondents, because they are arguments not corroborated by the literature. It can be noticed that the lack of knowledge, the resistance to the new, the lack of credibility about DE, and the fear they overcome their resistance.

Table 1. Guidelines for the dissemination of DE in Brazil.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Motivators</th>
<th>Guidelines for the dissemination of DE in Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 - content quality</td>
<td>Poor quality content</td>
<td>The didactic material must be elaborated according to the characteristics of this education modality and not customized from the content used in face-to-face education. It needs to be constantly adjusted, according to the students’ evaluations, including new resources such as video classes, virtual simulators, among others.</td>
</tr>
<tr>
<td>Category 2 - teaching quality</td>
<td>Less effective teaching</td>
<td>It is necessary to reinforce the care with the teaching-learning processes in DE, with transparency and feedback to students. Present the comparative results of performance between DE and face-to-face students in order to overcome prejudice.</td>
</tr>
<tr>
<td>Category 3 - credibility</td>
<td>Lack of credibility</td>
<td>The lack of knowledge about how the teaching-learning process happens generates doubts, therefore, the course dynamics and especially the evaluations must be discussed and the consolidated results presented to the students.</td>
</tr>
<tr>
<td>Category 4 - Unawareness</td>
<td>Lack of knowledge</td>
<td>Before, during and after the course, it is necessary to be concerned with detailing what DE is, which tools, methodologies and techniques will be used. Make a comparison of what changes in relation to face-to-face teaching.</td>
</tr>
<tr>
<td>Category 5 - easiness</td>
<td>Easier to accomplish</td>
<td>Introduce the duties and responsibilities of the students during the course, making them aware that, in reality, the course often ends up being more difficult than the face-to-face one. Reinforce the need for discipline and self-learning.</td>
</tr>
<tr>
<td>Category 6 - interaction</td>
<td>Lack of interaction</td>
<td>Presenting the different forms of interaction between student/student and student/teacher, confirming that there is no loss when it comes to the teaching-learning process. The interaction is different, and often more effective. In case of hybrid courses, make it clear that face-to-face meetings can also occur outside the virtual environment.</td>
</tr>
<tr>
<td>Category 7 - Disclosure</td>
<td>Lack of dissemination of results</td>
<td>Stimulate the disclosure of the courses’ grades with MEC, the students’ test results, and disclose cases of professional or academic success of former students.</td>
</tr>
<tr>
<td>Category 8 - resistance</td>
<td>Resistance to novelty</td>
<td>Increase communication and interaction between former students (with) and current and potential students, from the recording of videos that demonstrate their satisfaction with the online course. Provide short courses in DE, as a tasting, so that potential students (lose the fear) overcome their resistance.</td>
</tr>
<tr>
<td>Category 9 - framing</td>
<td>There are courses that are impossible to take</td>
<td>Clarify the lesson plan and demonstrate that there are few courses in which there is some kind of barrier and, in these cases, make it clear that there is a hybrid modality - part online, part face-to-face. Present the evolution and gains in terms of technological resources to take certain courses online.</td>
</tr>
<tr>
<td>Category 10 - behavior</td>
<td>Student misbehavior</td>
<td>Show that some characteristics such as discipline, self-learning and commitment are fundamental for the student's success. To present, before the student is admitted, which skills he/she needs to develop, offering preparatory courses for this purpose (pre-course). The institutions need to explain what measures they take to ensure student learning.</td>
</tr>
<tr>
<td>Category 11 - institutions</td>
<td>Focus on the commercial only</td>
<td>Present the grades from ENADE and MEC evaluations obtained by the institutions. Present the market data that corroborates the presence of large institutions in this market, including international ones.</td>
</tr>
<tr>
<td>Category 12 - corporativism</td>
<td>Boycott of DE</td>
<td>Teachers who are not yet enrolled in DE should be encouraged to participate in courses offered in this modality, starting with the offer of training and improvement courses in DE, and with a compensation proposal compatible with those of classroom courses, so that the gains obtained in classroom teaching and in DE are equivalent.</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors themselves.

When analyzing the results it was identified that categories 2, 3, 4 and 8 refer to those that demonstrate prejudice on the part of the respondents, because they are arguments not corroborated by the literature. It can be noticed that the lack of knowledge, the resistance to the new, the lack of credibility about DE teaching-learning process and the perception that teaching is of low quality are determining factors for the potentialization of prejudice and the negative view about this type of education.

Final considerations

In general, it is identified that there is prejudice against DE, both among students and among teachers. However, over time, this prejudice has been decreasing, which can be seen by the growth in the adoption of DE, either in isolation, or mixed with the face-to-face modality. It is worth mentioning that some considerations against DE are factual and cannot be considered as prejudice, but as intrinsic characteristics of this education modality or points of attention to be attacked, in searching for improvement. The lack of knowledge about DE is a critical and impactful point in this sense.

After categorizing the data collected, it was identified that some opinions of the interviewees do not have a theoretical basis that justifies their position, therefore they were considered in this research as prejudice: 1) Low quality of teaching, where the teaching-learning process is less effective than face-to-face teaching.
with low performance and depth; 2) There is fraud, lack of control or backing of the institutions that promote this type of education, causing a distrust regarding DE and a lack of credibility in educational institutions; 3) Lack of knowledge about DE - methodologies used and the successful results achieved; and 4) The lack of habit and customs of the actors involved with the new way of learning with DE generate a negative perception about this type of education and, consequently, prejudice.

Despite not being characterized as prejudiced attitudes, there are some aspects related to DE that need to be better worked out so that this type of education is better recognized. From these findings it was possible to define guidelines for a possible dissemination of DE in Brazil: 1) Improve the quality of content, without adaptations from classroom education. 2) To publish comparative results between DE students and classroom students, proving that the performance of the former is equal or superior to that of the latter; 3) To publish cases of academic or professional success, of students who have graduated in DE; 4) To inform about the teaching-learning process, how it differs from that used in classroom education, including forms of assessment; details of tools, methodologies and techniques to be used; 5) To seek awareness that DE courses are equally or more difficult than face-to-face courses, requiring discipline, commitment and self-learning. 6) To increase the interaction between former students with current and potential students, through recorded videos and lectures; 7) To offer short DE courses, so that current and potential students become more familiar with this education modality; 8) Disseminate the possibility of using EaD for all courses, eliminating potential cognitive barriers and lack of knowledge about this education modality; 9) Clarify that there are courses taught 100% online, but there are also those that will require a face-to-face part (hybrids); 10) Disclose the DE market and how it has been used by large national and international educational institutions. To highlight the institution’s major commitment to the teaching-learning process, and not just to financial gain. Demonstrate effectively, with data and arguments, the institution’s concern in developing courses that ensure quality learning; finally, 11) Practice an active management of teachers, involving and stimulating them in the development of the content, the lesson plan and all the activities associated with DE courses, in order to mitigate corporatism on the part of the teachers, who prefer to maintain the status quo associated with classroom teaching. To offer training and improvement courses for teachers, as well as remuneration compatible with face-to-face teaching, so that there is no boycott of DE.

The following can be cited as managerial and academic contributions of this work: 1) Identified the reasons for the existence of prejudice against DE, managers of educational institutions that offer DE courses can take measures so that such prejudice is reduced as much as possible; 2) The proposition of guidelines for the dissemination of DE in Brazil enables institutions to pay attention to points of greater impact to the results of DE courses; and 3) Since academic studies on prejudice against DE are rare in Brazil, this article contributes with important information, based on a field research, which highlights a subject that deserves to be further discussed academically.

Future studies could create scales to measure the degree, the level of prejudice against DE, both by students, teachers and institutions, in order to be able to plan actions for the gradual reduction of these prejudices. It is also suggested that ways to reduce prejudice against DE should be researched, given its importance to society. Effective actions need to be thought out and implemented so that DE can be accepted as another form of education and not as a second-rate course.

One of the limitations of this work, which is present in all qualitative research, is the possible interference of the authors in data analysis and subsequent categorization, which can bias the results. This limitation is mitigated by the researchers’ experience in using content analysis.

References


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