Expansion of undergraduate Nursing courses: distance education scenario, interests, and challenges

A expansão dos cursos de graduação em Enfermagem: cenário, interesses e desafios do ensino a distância

Expansión de cursos de grado en Enfermería: escenario, intereses y desafíos en enseñanza a distancia

ABSTRACT

Objective: To analyze the expansion of undergraduate Nursing courses in Brazil, especially those in the distance education modality. Methods: Exploratory, descriptive, analytical, and documentary study that used the Statistical Overview of Higher Education – Undergraduate Courses, of the Brazilian National Institute for Educational Studies and Research “Anísio Teixeira”, which is part of the Ministry of Education and Culture, as a source of secondary data for the period between 2009 and 2018. Results: There was a growth in the number of undergraduate Nursing courses and new seats in the distance education modality. However, only 8.89% of these seats were occupied and 3.39% of the enrolled students completed the course, which accounted for 0.30% of the new seats. Conclusion: The expansion of undergraduate Nursing courses is aligned with the general trends in higher education. This scenario exposes the interests of capital in education, which emphasizes the need for collective development of strategies to guarantee the right to education that is public, free and has social quality.

DESCRIPTORS
Education, Higher; Education, Distance; Nursing.
INTRODUCTION

Contemporary neoliberal capitalism, ruled by financial purposes, has produced a new pattern of global accumulation that allows production and circulation of capitals on a world scale, concentrating wealth and originating social inequality, and concomitantly intensifying the mechanisms of commodification and privatization. Its development was grounded in a set of ideas that drew on individualism and management of oneself, which has encouraged competition, subordination, and conversion of social rights into services to be consumed on the market.

This model has produced an increasing exclusion of great population groups, which become subject to hunger, poverty, violence, and lack of social rights, as well as feelings of instability, danger, isolation, defenselessness, and abandonment. Social inequality, exploitation, unemployment and underemployment, establishment of precarious working relationships and conditions, decrease in wages, and conservative-liberal values have become more common.

In the education sphere, adoption of globalized capitalism occurs by means of a series of measures, isolated or combined, disseminated under the designation of reforms, which expose, in addition to local specificities, a deep redefinition of the role of the State regarding its relationship with education. There has been a financial retraction of this agent in the delivery of social services followed by privatization or, at least, an attempt to make these services private.

In this correlation of forces, there is a decrease in state assignments of a universalist social nature and an expansion of the space and power of private interests. Consequently, educational policies have limited training to market interests, translated as a productive, flexible, and adaptable profile, capable of enduring and tolerating work intensification and the establishment of more precarious working conditions.

These characteristics result in massification of training in private higher education institutions (HEIs), whose alumni are intended for low-quality jobs, low technical knowledge, and greater exploitation. This massification process contributes to the commodified production and dissemination of knowledge, which, under the label “innovation”, deepen science privatization by means of public-private partnerships.

Recent trends in higher education in Brazil include considerable growth in the number of private/commercial HEIs; adoption of governmental policies that encourage an increase in the number of seats, enrollments, and available courses in federal higher education institutions (FHEIs); and remarkable differentiation of courses, institutions, and teaching modalities, with distance education (DE) and expansion of graduate courses with an emphasis on the commodification of knowledge.

Although the definition of DE is comprehensive, it is usually defined as a teaching modality in which teachers/professors and students are located in different geographic places. It was initiated in the eighteenth century by means of courses carried out by mail and, consequently, preceded the internet. E-learning, in turn, also with different definitions in the literature, occurs when internet technologies are used to promote student learning. It can be synchronous (when a group of people engage in activities at the same time) or asynchronous (when activities are filmed and made available to students later on, so they can access the material whenever they want). There is a term that refers to the combination of face-to-face and distance education (blended learning or b-learning), considered a hybrid form, and a designation for the specificity of the remote devices used in learning (mobile learning or m-learning).

Despite terminological differences, the Brazilian legislation defines DE as an educational modality mediated by the use of information and communications means and technologies, and stresses the need for trained professionals and appropriate access, follow-up, and evaluation policies. The recent decree No. 9,057 of 2017 by the Ministry of Education and Culture (MEC) also mentioned that the modality is related to educational activities between teachers/professors and students in “varied places and times”, which allows to interpret that these activities can be synchronous and asynchronous.

Distance education has been provided for since the 1996 Brazilian Law of Education Directives and Frameworks. However, it was by means of the decree mentioned above that expansion, diversification, and flexibilization of this teaching modality occurred regarding course creation, functioning, and evaluation. The foundation of face-to-face units by institutions themselves, without needing previous authorization by MEC and the offer of DE courses without the requirement of a previous registration for the face-to-face equivalent stood out among the main changes. In other words, the new legislation guaranteed more autonomy and flexibility for the opening of new units, which resulted in an increase of 51% in the number of DE courses from 2017 to 2018, especially in the private higher education network. In 2018, over 80% of the DE students in Brazil were concentrated in 20 HEIs, of which five, all private, held the enrollments of more than half of these students.

Expansion and intensification of use of DE in Brazil were also favored by Decree No. 2,117, of December 6, 2019, which authorized up to 40% of the total course load of face-to-face undergraduate courses in FHEIs to be offered as DE activities.

Nursing education is inserted this context, changing as the result of a multiplicity of historical and social processes that originate from the practice in the category and the social contexts in which it is carried out. From this perspective, education in Nursing is not something idealized or abstract, but a part and a product of the process of society itself.

Expansion of higher education in Nursing has been marked by indiscriminate opening of new courses; existence of gaps between these openings and the specific needs and demands of each region, which reinforces geographic inequality, expressed as regional and intraregional disparities; privatization; and uncontrolled spread of courses and institutions increasingly more distant of the concept of university and quality standards. As part of this process, the number of places in the DE modality grew on the grounds that access should be facilitated and democratization of higher education should be ensured.

The literature on expansion of undergraduate Nursing courses has not yet covered the subject objectively and critically. There is an empirical gap regarding its implications for Nursing education, especially how it is related to the more general process of expansion and commodification of higher education in Brazil. This theoretical-methodological scarcity is even greater when DE is considered.
The objective of the present study was to analyze the expansion of undergraduate Nursing courses in Brazil, especially those in the DE modality.

METHOD

TYPE OF STUDY

Exploratory, descriptive, analytical, and documentary study that sought to examine the expansion of undergraduate Nursing courses in Brazil as a social phenomenon, taking as starting points the limits and possibilities of the social-historical context in which it is inserted[14].

DATA SOURCE AND SELECTION CRITERIA

Secondary data obtained from the Statistical Overview of Higher Education – Undergraduate Courses, of the Brazilian National Institute for Educational Studies and Research “Anísio Teixeira” (Inep, as per its acronym in Portuguese), which is part of MEC, were used. This material consolidated the data gathered by the Higher Education Census, carried out with Brazilian HEIs, and is the main source of official data on higher education in the country. The data are public, available for download, and put together a set of information on HEIs, including offered courses, teaching staffs, technical-administrative employees, among others, in Microsoft Excel® spreadsheets.

The Inep website has hosted Statistical Overviews of Higher Education since 1995, although the time frame chosen for the present study was nine years, from 2009 to 2018, the period between the opening of the first registered DE undergraduate Nursing course and the release of the last Overview (September 2019, when data were collected).

DATA COLLECTION

Taking into account the objective set for the study, the extracted data referred to: a) face-to-face and DE undergraduate Nursing courses by type of academic institution and administrative category; b) offered seats, enrolled candidates, and admitted students by selection process in DE undergraduate Nursing courses by type of academic institution; c) enrollments in DE undergraduate Nursing courses by type of academic institution and administrative category; and d) graduates in DE undergraduate Nursing courses by type of academic institution and administrative category.

Data extraction was carried out by two researchers separately, and data were compared subsequently so their reliability could be confirmed. They were then organized and systematized in a dataset by using Microsoft Excel® 2016 and following the data bank format of the Statistical Overviews.

DATA ANALYSIS AND TREATMENT

Descriptive statistics were applied to treat data related to the expansion of face-to-face and DE undergraduate Nursing courses over the examined period. Once this step was completed, a descriptive and analytical examination was carried out, and the results were linked to the historical context and the expansion of higher education in Brazil in general, recognizing the dialectical movement involved in this process.

ETHICAL ASPECTS

Because data extraction occurred in documentary sources available for public consultation, there was exemption of evaluation of the proposal by an ethics committee, according to Ethical Resolutions No. 466/2012 and No. 510/2016.

RESULTS

There were 39 face-to-face undergraduate Nursing courses in 1964, a number that grew to 106 in 1991, an increase of 171.0%. In 2004, the number of courses was 415, an increment of 291.5%. After the 1996 Brazilian Law of Education Directives and Frameworks, the expansion was even more pronounced. Only five courses were created from 1991 to 1996, which accounted for an increase of 4.7%, whereas the growth was 645.3% between 1991 and 2010[16].

According to the Higher Education Census, there were 1,041 undergraduate Nursing courses in Brazil in 2018, meaning an increase by 8.8 times approximately since 1991. Analysis of the period from 2009 to 2018 showed that the expansion of face-to-face undergraduate Nursing courses in Brazil (38.4% more courses) was higher than that recorded for the overall number for higher education courses (25.0%) (Figure 1).

![Figure 1](image-url)
The overall number of DE undergraduate courses in Brazil increased 2.76 times between 2009 and 2018. Over the same period, the growth in the number of DE undergraduate Nursing courses in the country was 2.50, as shown in Figure 2. There was a remarkable increase in the offer of undergraduate Nursing courses (250.0%) from 2017 to 2018, when the new regulation for DE in Brazil was issued. The number of DE courses grew around 51.0% over this biennium.

The expansion in the DE modality in undergraduate Nursing courses between 2009 and 2018 (250.0% more courses) was greater than that in the face-to-face category (38.43%), as shown in Figure 3. However, it must be taken into account that face-to-face courses prevail in absolute numbers. The increase was intensified from 2017 onwards. The number of DE undergraduate Nursing courses was relatively stable until 2017 (two to three courses) and grew steeply to seven in 2018.

Despite the marked increase in the number of DE undergraduate Nursing courses from 2017 to 2018, the data indicated that this phenomenon was related almost exclusively to the growth in the number of seats rather than the creation of new courses. The number of seats in DE undergraduate Nursing courses increased 32.2 times between 2009 and 2018. For instance, in 2016, two courses in this modality offered 72,509 places (Figure 3).

In 2018, seven courses accounted for 66,402 new seats (Figure 3). It is noteworthy that the increase in the number of seats occurred before the increase in the number of courses in this modality and that the concentration of new seats by course is high (around 9,000 for each of the seven DE undergraduate Nursing courses in the country).

Regarding academic and administrative organization of face-to-face undergraduate Nursing courses, expansion happened mainly in isolated private universities and colleges. In the DE modality, all courses and, consequently, the seats they offered, the enrollments, and the graduates have been part of private institutions since 2009. Therefore, the 763 nurses who obtained a degree in a DE course in the examined period (2009-2018) in Brazil studied in private HEIs, as shown in Tables 1 and 2.
As shown in Table 2, since 2016 there has been a marked increase in the number of enrollments in DE undergraduate Nursing courses. In the period from 2015 to 2018, the growth was approximately 19 times. However, this proportion was not observed for the number of graduates.

Analysis of the relationship between offered seats, enrolled candidates, and admission in DE courses showed that the increase is neither linear nor ascendant and that not all seats were filled. Although there was an increase in the candidate/seat ratio (from 0.3 in 2009 to 1.136 in 2018) and in the admitted student/seat ratio (from 0.09 in 2009 to 0.336 in 2018), which indicated some level of demand for this course modality, the quantity of filled seats over these years was 9.05% and 33.6%, respectively(17). These data reinforced the argument that offering seats does not necessarily mean expanding access. It showed, however, that over the past years there was substantial growth in the number of offered seats and a slight increase in demand (number of enrolled candidates).

In the same period (2009-2018), 26,401,654 seats were offered, 12,317,848 enrollments were carried out, and 1,944,012 students completed their DE undergraduate Nursing course in Brazil. These numbers meant that 46.66% of the seats were occupied, 15.78% of the enrolled students completed the course, and only 7.36% of the seats were filled by students who completed the course(17).

Regarding Nursing and DE specifically, in the same period, 288,281 seats were offered, 29,759 enrollments were carried out, and 763 students concluded the course. That is, only 10.32% of the offered seats were occupied, 2.56% of the enrolled students completed the course, and 0.264% of the seats were filled by students who completed the course(17).

Similar analysis for the face-to-face modality indicated that 1,307,839 seats were offered, there were 2,534,404
enrollments, and 387,608 students concluded the course. In this case, 57.0% of the seats were occupied and 46.7% of the enrolled students completed the course(17).

Although these results must be weighed by taking into account time to complete the course, transfers between courses, and evasion, they reinforced the arguments that expose the misconception regarding the fact that DE promotes democratization of education and the commercial interest involved in the offer of this teaching modality.

DISCUSSION

Expansion of access to higher education in Brazil occurred by means of an increase in the offer of courses, growth in the number of enrollments in the private sector, and rationalization of resources in public HEIs(15). It was marked by the predominance of private over public, commodification and commercialization of education, and immediatism and numeric growth, especially in private institutions prioritizing taking in a high quantity of students. Most of these institutions are characterized by low production of knowledge and emphasis on training in careers that demand little investment. Consequently, they attract a higher number of students with problems in the quality of their pre-higher education training(19).

The dual nature of the Brazilian higher education (the presence of both the public and private sectors) has been guaranteed since 1891, which allowed the Brazilian State to develop a series of legislations to ensure unity in the national education system over more than one century, with the government acting sometimes as a regulatory agent and sometimes as an offer modulator. Since the promulgation of the Brazilian Law of Education Directives and Frameworks, there has been a flexibilization of the public higher education, and a new legal apparatus allowed the teaching system to be adjusted to market rules. Therefore, system flexibilization and heterogeneity mark the differences between private and public, but also can be found in each one of them(19).

By being open to the market, private HEIs began being negotiated by means of processes of acquisition and merger, with their capital going public in the stock market and possibilities of coordination with international education corporations. This movement impacts several aspects, including the way teachers/professors are hired and DE inclusion and expansion, which, in turn, affect the quality of education offered in these institutions(19).

Therefore, Brazilian higher education is a historical, complex, and contradictory phenomenon, which is neither neutral to nor isolated from the dynamics and needs of society, production restructuring, neoconservative movements, and interests involved in capital production and valorization. At the same time, it allows access to a great share of the population that was historically deprived of having this level of education, although in courses of questionable social quality and of a nature that predominantly favors privatization.

Another factor that adds to this complex situation is the reduction of resources for public higher education, especially after the approval of Proposed Amendment to the Constitution no. 241, which established, among other measures, budget freeze in the education and health areas for 20 years, which jeopardizes sustainability and guarantee of quality in public higher education(20). The impacts on HEIs were related to the possibility of not meeting the goals established in the 2014-2024 Brazilian National Education Plan, since this would imply doubling the resources to increase the expected number of enrollments, a scenario made unlikely by the mentioned Proposed Amendment to the Constitution.

Higher education in Nursing, being a part of a larger system, follows this process. The number of face-to-face undergraduate Nursing courses in public and private HEIs increased, mainly in private university centers and colleges, which means that Brazil is experiencing a Nursing training process focused on private teaching, in which market interests outweigh social interests of collectivities and the right to education and health.

During the first decade the Brazilian National Curriculum Guidelines were in force (from 2001 to 2011), the increase in the number of courses in the public network was small, in contrast to what happened in the private sector, which showed a steep growth in the same period. The number of students who apply for seats in these courses is considerably higher than the number of offered seats, with the ratio being approximately five students per seat. The number of students who completed the course in the public sector remained nearly unchanged because of evasion and stagnation in the number of courses and seats. In this period, there already were 19,680 seats in DE undergraduate courses(16).

Despite relatively high numbers in the Nursing workforce and expansion in the number of courses, the concentration and availability of Nursing professionals per person have been unequal, even insufficient in some regions of the country, since 2012. The South-Southeast axis concentrated 71.2% of undergraduate Nursing courses in Brazil. The reason is that most courses are set in areas with greater population density and concentration of educational resources, which contributes to deepen regional inequalities(21).

It is clear, then, that the movement of expansion of undergraduate Nursing courses was not accompanied by studies on the specific needs and demands of each region. Conversely, this movement reflects the logic of commodification of education, which gives rise to pressures of groups interested in obtaining and accumulating capital without taking into account the needs and demands of education and health(15). “Growing at any cost is not enough. It is important to grow, as long as the criterion of quality and pertinence of training is observed. Expansion is necessary, but with the guarantee that quality standards compatible with the contemporary world will be kept up and a closer relation between the world of training and the world of work.”(22)

If, for one thing, expansion of higher education in Nursing may point to a possible democratization in access, “it is necessary to question the offer of jobs for nurses, as well as the relationship between quality and quantity of professionals required to consolidate the Brazilian Unified Health System.”(21). At the same time, it is imperative to increase the number of nurses in the country, it is crucial to
guarantee that they are trained in courses with social quality and committed to the implementation of the Unified Health System (Sistema Único de Saúde – SUS), as a way to fight social inequities\(^\text{[15]}\).

The marked increase in the number of places and enrollments in the DE modality stands out in this process of expansion of higher education in Nursing. Contrarily to face-to-face teaching, which is characterized by the offer of courses in public and private HEIs, in DE courses are offered exclusively in private institutions, mainly by means of increasing the number of seats, which deepens the challenges already mentioned. Since the new DE regulation was issued in Brazil, in 2017, making the offer of courses more flexible, an even greater tendency of expansion has been observed for this modality in Nursing, as shown by the 2018 Higher Education Census.

Regarding national orientation, both face-to-face and DE courses follow the Brazilian National Curriculum Guidelines of Undergraduate Nursing Courses. Therefore, there are no explicit differences in the profile of the graduates, course objectives, competences, skills, and curricular organization in the pedagogical projects when both modalities are compared. However, representative entities from health\(^{\text{[23]}}\) and Nursing\(^{\text{[24]}}\) areas and Brazilian and international studies\(^{\text{[25–28]}}\) have problematized the potentialities and limits of implementing DE courses in health or Nursing.

There are concerns regarding concretization of competences and skills necessary to carry out work as a nurse\(^{\text{[25–28]}}\) insufficient training of teachers and students to critically use the digital educational space, replacement of teachers with tutors, restricted contact of students with the reality of health services\(^{\text{[28]}}\), limited interaction with professionals and users at these services and restricted social experience, work overload of teachers\(^{\text{[27]}}\), and unavailability of proper and accessible infrastructure\(^{\text{[26]}}\).

These worries rest on the premise that the defining elements of training and work in health depend on concrete social relationships that develop in health service production spaces and construction of life itself, hence, on courses being face-to-face. Additionally, they acknowledge that DE cannot intensify the decrease in teachers work quality, produce social exclusion, and amplify the meritocracy speech.

It must be emphasized that associated and complementary use of information and communications technologies in face-to-face training allows to diversify and extend teaching practices\(^{\text{[25,28]}}\), but this hybridization process requires caution\(^{\text{[25]}}\), because there are gaps and uncertainties in the understanding of the impact of technological resources in training in health and Nursing\(^{\text{[29]}}\). Application of these tools must be coherent with the course objectives, the training purpose, and the intended profile of the graduates, as well as guarantee equitable and qualified access to all people involved.

In face of the expansion of DE courses in Brazil, the Brazilian National Health Council has stood out against the existence of any DE undergraduate course in the health area since 2016. By taking on the leading role in this discussion, the Council acknowledged the “losses that these courses can cause to the quality of training of professionals and the risks that these professionals can offer to society immediately and in the medium and long run as a consequence of inadequate training”\(^{\text{[21]}}\).

This concern was reiterated in the Brazilian National Seminars of Guidelines for Education in Nursing, especially in the past four editions, in which the question was the theme of several debates and legal referrals contrary to Nursing education by means of DE undergraduate courses. This position of the category is present in the new Brazilian National Curriculum Guidelines, which restricts training in Nursing to face-to-face courses and is currently pending before MEC.

The Brazilian Nursing Association (Associação Brasileira da Enfermagem – ABEN), together with other 58 entities, signed the “Public Statement Against Distance Education Undergraduate Courses in Health: Training with Quality in Health in Face-to-face Courses Only!”\(^{\text{[29]}}\). The institution acknowledges insertion of students into the health services network of SUS and into the social apparatus in which this system’s users live and work as being indispensable to training in health. It also advocates an educational model in which there is critical understanding of social needs, to be achieved by permanently coordinating theory and practice\(^{\text{[24]}}\).

The Statement also emphasized that the seats in face-to-face undergraduate courses in the health field are not totally filled, which shows the inappropriateness and lack of social need of DE in health and Nursing. Additionally, it pointed out that analysis of DE undergraduate courses in health already showed a situation incompatible with proper professional practice\(^{\text{[29]}}\). This scenario was made worse by Decree No. 9,057, of May 25, 2017, which allowed registration of HEIs exclusively to offer DE undergraduate courses without establishing a distinction for courses in the health area\(^{\text{[10]}}\).

In view of the above, it is necessary to foster critical understanding of the interests involved in expansion of DE, especially in courses in the health area. The arguments based on importance of technological innovation, flexibility, disappearance of spatial and temporal barriers, encouragement of creativity, agility in access of several sources of information, and teachers’ autonomy cannot be accepted uncritically. Distance education is another strategy toward profit, under the increasingly greater control of financial capital\(^{\text{[29]}}\).

The present study only partially described the reality of expansion of undergraduate Nursing courses in the face-to-face and DE modalities. Other studies should address local/ regional specificities and the perceptions of people involved in the educational process in health and Nursing.

**CONCLUSION**

Although work in the health and Nursing areas has its specificities, expansion of higher education in Nursing is inserted in the general process of changes in Brazilian higher education. It is part of a historical-social movement of commodification and commercialization of education, which was worsened by DE.

Standing up for democratization of access to higher education assumes championing for education as a public asset
and a social right that contributes to uncovering reality and transforming social injustices and inequalities. Therefore, it requires fighting against the perverse, dehumanizing, and individualist logic of capital, which reduces education to a product. It is necessary that policies of expansion of courses in the health and Nursing area be grounded in full right to public education, regional social needs, and work in health, allowing access, permanence, and conclusion with equity and social justice.

RESUMO

DESCRIPTORES
Educação Superior; Educação a Distância; Enfermagem.

RESUMEN
Objetivo: Analizar la expansión de cursos de grado en Enfermería, particularmente en modalidad de enseñanza a distancia. Método: Estudio exploratorio, descriptivo, analítico y documental, utilizando como fuente de datos secundarios las Sinopsis Estadísticas de Educación Superior – Graduación del Instituto Nacional de Estudios y Encuestas Educativas Anísio Teixeira, del Ministerio de Educación, entre 2009 y 2018. Resultados: Se observó crecimiento cuantitativo de cursos y de nuevas vacantes en modalidad a distancia. Sin embargo, solo el 8,89% de las vacantes ofrecidas fueron ocupadas, 3,39% de los matriculados concluyeron el curso y 0,30% de las vacantes ofrecidas correspondieron a alumnos egresados. Conclusión: La expansión de cursos de grado en Enfermería está articulada al movimiento general de la Educación Superior. Este escenario revela los intereses del capital en la educación, requiriendo de la construcción colectiva de estrategias que garanticen el derecho a la educación pública, gratuita y con calidad social.

DESCRIPTORES
Educación Superior; Educación a Distancia; Enfermería.

REFERENCES
Financial support

Coordenadoria de Aprimoramento de Pessoal de Nivel Superior (Capes).