

# Considerações sobre a avaliação da pós-graduação *stricto sensu* nacional no contexto do quadriênio 2017-2020

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## RESUMO

O objetivo deste artigo é apresentar considerações acerca da avaliação da pós-graduação *stricto sensu* nacional no contexto do quadriênio 2017-2020 e do aperfeiçoamento dos instrumentos utilizados na avaliação para a qualidade da formação de mestres e de doutores. Nesse intuito foi realizada pesquisa documental e exploratória em documentos produzidos pela Coordenação de Aperfeiçoamento de Pessoal de Nível Superior e o levantamento de trabalhos acadêmicos publicados na atualidade sobre as temáticas: avaliação da Capes e qualidade na pós-graduação *stricto sensu*. O estudo mostrou que o quadriênio avaliativo 2017-2020 da Capes buscou incrementar o debate e a promoção de melhorias para a qualidade da pós-graduação *stricto sensu* do Brasil. Espera-se que esse estudo possa colaborar com a construção do conhecimento científico acerca da importância da avaliação da Capes para a qualidade da pós-graduação *stricto sensu* nacional.

**PALAVRAS-CHAVE:** Avaliação. Capes. Qualidade. Pós-graduação

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# **Considerations on the evaluation of national *stricto sensu* postgraduate courses in the context of the 2017-2020 four-year period**

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## **ABSTRACT**

The objective of this article is to present considerations on the evaluation of national *stricto sensu* postgraduate programs in the context of the 2017–2020 quadrennium, as well as the refinement of the instruments used to assess the quality of master's and doctoral training. To this end, a documentary and exploratory study was conducted, analyzing documents produced by the Coordination for the Improvement of Higher Education Personnel (Capes) and surveying recent academic publications on the topics of Capes evaluation and quality in *stricto sensu* postgraduate education. The study revealed that the 2017–2020 Capes evaluation cycle sought to foster debate and promote improvements in the quality of *stricto sensu* postgraduate education in Brazil. It is expected that this study will contribute to the advancement of scientific knowledge regarding the role of Capes evaluation in ensuring the quality of national *stricto sensu* postgraduate programs.

**KEYWORDS:** Evaluation. Capes. Quality. Postgraduate

# Consideraciones sobre la evaluación de los posgrados nacionales estricto sensu en el contexto del cuatrienio 2017-2020

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## RESUMEN

El objetivo de este artículo es presentar consideraciones sobre la evaluación de los estudios de posgrado nacionales estricto sensu en el contexto del cuatrienio 2017-2020 y el perfeccionamiento de los instrumentos utilizados en la evaluación de la calidad de la formación de maestría y doctorado. Para ello, se realizó una investigación documental y exploratoria sobre documentos elaborados por la Coordinación de Perfeccionamiento del Personal de Educación Superior y un relevamiento de trabajos académicos publicados hoy sobre los temas: Evaluación de la Capes y calidad en los posgrados estricto sensu. El estudio mostró que la evaluación cuatrienal de la Capes 2017-2020 buscó incrementar el debate y promover mejoras en la calidad de los estudios de posgrado estricto sensu en Brasil. Se espera que este estudio pueda colaborar con la construcción de conocimiento científico sobre la importancia de la evaluación de la Capes para la calidad de los estudios de posgrado nacionales estricto sensu.

**PALABRAS CLAVE:** Evaluación. Capes. Calidad. Posgrado.

## Introduction

Quality is a term that encompasses multiple meanings and, for this reason, has the potential to generate apparent consensus, as it allows for different interpretations based on varying evaluative frameworks. In general terms, the concept of quality has been widely used within the logic of productivity, particularly in reference to product quality and process quality. In the field of education, likewise, it is necessary to consider both the idea of product quality and process quality given that much of the debate on educational quality is also rooted in this productivity logic. Beyond this perspective, another understanding of quality can be identified: one that relates to the best process for achieving a desired outcome (Oliveira & Araújo, 2005). In this sense, the meaning of “quality” in education considering the polysemy of the term and its various interpretations will depend on the values at stake, the social position of individuals, and their experiences, which ultimately shape their understanding of the term “quality.”

In the context of *stricto sensu* graduate education, quality standards are defined and guided by regulations that establish the minimum requirements for the renewal of recognition of graduate programs. General criteria for evaluating quality are proposed by the Technical-Scientific Council for Higher Education (CTC-ES), but each evaluation area defines its own specific criteria through guiding documents (Brazil, 2023). Historically, Brazilian graduate education was institutionalized in the 1960s with the approval of Opinion No. 977/65 (Brazil, 1965), though the regulations for its operation were only established in 1969 through Opinion No. 77/69 of the Federal Council of Education (Brazil, 1969) a body now equivalent to the National Council of Education (CNE).

Therefore, Opinions No. 977/65 and No. 77/69 laid the conceptual and legal foundations for graduate education in Brazil. However, it was the National Graduate Education Plan (PNPG) that helped consolidate and institutionalize the system. Through the PNPG, it became possible to conduct diagnoses, set goals, and define actions for graduate education. In the context of implementing the PNPG, starting in the 1970s, CAPES developed as the primary funding agency for graduate education, and in 1976, it launched the evaluation system with the goal of establishing the necessary quality standards for master's and doctoral programs offered by Brazilian institutions: “the evaluation system, which has been continuously improved, serves as an instrument for the academic community in the pursuit of a standard of academic excellence for national master's and doctoral programs”(Brasil, 2020b).

However, according to Rothen (2020), the evaluation carried out by CAPES is regulatory in nature, as its results have direct consequences for graduate programs in terms of accreditation and

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authorization to operate. Moreover, it induces programs to adapt to the criteria that define what qualifies as a “good” program, including the practice of ranking. As a result, the author notes, it is quite common for graduate programs to strive for higher positions in the rankings produced by CAPES evaluations. Consequently, the academic dynamics of graduate programs become closely tied to the pursuit of better evaluation outcomes, which means meeting the demands of the evaluation criteria and to do so, it is necessary to publish.

For Prado (2019), graduate education should follow a learning logic focused on the process rather than the product. In the evaluation of **stricto sensu** programs, as Barata (2019) points out, the emphasis has been placed on academic output. As a result, the quality of training in master's and doctoral programs is being assessed indirectly, based on the publication of final research results in the form of articles, books, theses, and dissertations, as well as the academic productivity of graduates which may have a negative impact on the actual quality of master's and doctoral training.

The objective of this article is to present reflections on the evaluation of *stricto sensu* graduate education in Brazil within the context of the 2017–2020 quadrennium, and on the improvement of the instruments used to assess the quality of master's and doctoral education. To this end, a documentary and exploratory analysis was conducted, drawing on materials produced by the Coordination for the Improvement of Higher Education Personnel (CAPES), along with a review of current academic works addressing the themes of CAPES evaluation and quality in *stricto sensu* graduate education.

## Method

The method used in this study was a documentary and exploratory research based on documents produced by the Coordination for the Improvement of Higher Education Personnel (Capes) conducted through Capes' official website and a survey of current academic works addressing the themes of Capes evaluation and quality in *stricto sensu* graduate education conducted using Google Scholar and the Scientific Electronic Library Online (SciELO) database. The selection of studies took into account the research theme, the central problem, and the study's objective.

The survey of academic works was organized in three steps. The first step involved defining the theme, for which the research problem, objective, and theoretical framework were considered. The main topics addressed were the evaluation by Capes and the quality of **stricto sensu** graduate education. The second step was the selection of databases: Google Scholar, which provides access to

a wide range of academic works, and SciELO, an open-access digital library for scientific journal publications. The third step consisted of documentary research using documents produced by Capes.

The discussions presented here offer reflections on Capes' evaluation practices for assessing the quality of national **stricto sensu** graduate education during the 2017–2020 evaluation cycle, as well as on the improvement of the instruments used to assess the quality of master's and doctoral training.

## Evaluation of *Stricto Sensu* Graduate Education in Brazil

The evaluation of *stricto sensu* graduate education is the core instrument of the National Graduate Education System (SNPG). This system has the following objectives: to provide graduate-level training for educators at all levels of education; to train qualified human resources for the non-academic job market; and to strengthen the country's scientific, technological, and innovation foundations. According to Capes (Brazil, 2022a), in order to facilitate the development of evaluation activities, the assessment areas are grouped, based on thematic affinity, into two levels: the first level consists of three Colleges, and the second level is organized into nine Major Areas.

According to Capes (Brazil, 2021a), “together with the Evaluation Forms and Evaluation Reports, the Area Documents constitute the triad that expresses the processes and outcomes of the Four-Year Evaluation.” Regarding the Area Documents and Evaluation Forms, Capes (Brazil, 2019a) highlights:

The Area Documents serve as a reference for evaluation processes, both in the development and submission of proposals for new programs and in the evaluation of programs already in operation. These documents describe the current state, characteristics, and perspectives of each area, as well as the criteria considered a priority in the evaluation of graduate programs within each of the 49<sup>3</sup> assessment areas. Each area outlines the main aspects of its evaluation in its respective Area Document, based on an Evaluation Form previously approved by the CTC-ES. This Evaluation Form is common to all areas in terms of the criteria and items to be assessed. It is the responsibility of each area to determine how these criteria and items will be evaluated and, within the limits established by the evaluation regulations, to propose the weighting of each item (Brasil, 2019a, p.7-8).

The evaluation reports are available on the webpages of each evaluation area, and the result spreadsheets of the Four-Year Evaluation provide the list of scores assigned to graduate programs (Brasil, 2022a).

<sup>3</sup> In October 2023, the CAPES Higher Council approved the creation of a new evaluation area: “Sciences and Humanities for Basic Education”, thereby increasing the total number of evaluation areas to 50.

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CAPES Ordinance No. 122, dated August 5, 2021 (Brazil, 2021b), establishes the general parameters and procedures for the *Four-Year Permanence Evaluation* of **stricto sensu** graduate education in Brazil, to be considered for the 2017–2020 evaluation cycle. According to CAPES (Brazil, 2021b), the Four-Year Permanence Evaluation is conducted within the evaluation areas, following a set of basic criteria established by the Technical-Scientific Council for Higher Education (CTC-ES).

As stated in the ordinance (Brazil, 2021b), the object of the Four-Year Permanence Evaluation comprises graduate programs that began operating during the evaluated period and were registered on the Sucupira Platform. The evaluation activities follow a calendar that begins with the submission of data collection by the graduate programs and concludes with the publication of the evaluation results.

According to Ribeiro, Bissoli, and Melhem (2020), the functioning of the CAPES evaluation system for national graduate education follows a current methodology based on three elements: types of production/strata, evaluation criteria, and cutoff scores:

Element 1 – Types of Production/Strata: This element defines the various types of academic production accepted by CAPES across different fields of knowledge and establishes a method for evaluating each type of production through specific strata. Examples include: Qualis Periodicals; Qualis Books; Qualis Artistic-Cultural; Event Classification; and Qualis Technical and Technological. Element 2 – Evaluation Criteria: This consists of a set of Indicators and Weights used by CAPES in the evaluation of graduate programs in Brazil. These indicators are structured across four levels: the criteria (first-level indicators – N1), which are composed of items (second-level indicators – N2), which in turn are composed of subitems and their respective indicators (third-level indicators or below – N3). All items, subitems, and indicators typically have assigned weights. Element 3 – Cutoff Scores: These are scores that define numerical ranges for each criterion and correspond to the following ratings: MB (Very Good), B (Good), R (Fair), F (Weak), or I (Insufficient). To illustrate with a familiar example, one might consider the grading system in most undergraduate programs in Brazil. In this case, the cutoff scores are 40, 60, 80, and 90. Scores below 40 receive the rating “F”; scores between 40 and 59 are rated “E”; and so on, with scores between 80 and 89 and 90 to 100 receiving the ratings “B” and “A,” respectively—ratings that most students aim to achieve. In this way, all students know in advance the scores they must attain in order to receive higher evaluations throughout their program (Ribeiro; Bissoli; Melhem, 2020, p. 15-21).

According to Capes (Brazil, 2022a), the results of the periodic evaluation of graduate programs are determined after the analysis of indicators related to the evaluation period, and these results are expressed through scores ranging from one to seven for master’s and doctoral programs. The analysis of indicators is carried out by the evaluation area committees and subsequently reviewed and ratified by the CTC-ES, which approves the final results. These results serve as the basis for the deliberation of the National Council of Education (CNE) regarding which programs meet quality standards and will therefore be granted renewal of recognition to continue operating in the following

period. Programs approved by Capes and recognized by the CNE that receive scores of 1 or 2 are prohibited from enrolling new students and must ensure the completion of training for students already enrolled in the program (Brazil, 2023).

Still according to Ribeiro, Bissoli, and Melhem (2020), the Area Coordinations by and large calculate and rank all the scores obtained by the programs in their respective areas, and define the cutoff scores for each criterion. This creates a distribution of graduate program scores across the evaluation ratings, thereby forcibly generating a greater distinction between programs:

In the evaluation of Graduate Programs (PPGs) in Brazil, the practice of "ranking," when adopted, means that, necessarily, some PPGs will have to be poorly evaluated in certain criteria in order for others to receive better evaluations. The reason is simple: raising the cutoff scores "upward" limits the number of PPGs that will receive higher ratings in their criteria and, consequently, will achieve higher scores in their four-year evaluation. Ultimately, adopting this practice means that the cutoff scores can only be disclosed belatedly. That is, to determine the cutoff scores for the criteria, each Area Coordination (CA) must first calculate and rank all the scores for the PPGs' criteria, which can only be done after collecting data from all the PPGs in that area. Therefore, the publication of changes in cutoff scores by CAs that adopt "ranking" traditionally occurs in the second half of the year following the evaluated quadrennium, when the "Four-Year Evaluation Report" is published by each Area Coordination at CAPES (Ribeiro; Bissoli; Melhem, 2020).

During the 2017-2020 Four-Year Evaluation, the Federal Public Prosecutor's Office of Rio de Janeiro filed civil public action No. 5101246-47.2021.4.02.5101/RJ against CAPES, aiming, with this action, to have the regulatory agency suspend the ongoing evaluation at the time and present to the court the complete list of the "evaluation criteria," "types of production/strata," and the "cutoff scores" used in the Evaluation. According to CAPES (Brazil, 2022b), it took nearly four years of proceedings, starting with Inquiry No. 1.30.001.005132/2018-61 (MPF/RJ) in December 2018, followed by the Civil Public Action (ACP) 5101246-47.2021.4.02.5101/RJ in September 2021, and culminating in the agreement approved in September 2022. According to CAPES (Brasil, 2022b):

What did the Federal Public Prosecutor's Office (MPF) question?

1. Evaluation parameters (requirements, indicators, etc.) that are too subjective, vague, or undefined could cause confusion for the graduate programs (PPGs) and lead to a lack of fairness in the evaluation;

2. Parameters defined at the end of the quadrennium cannot be used to evaluate actions that occurred prior to their definition; in other words, they cannot be applied retroactively, as this would violate the principles of legal certainty and the predictability of the evaluation.

What did the MPF request in the civil public action (ACP)?

1. In the ongoing evaluation (2017–2020), to apply only the criteria established by the end of 2016, without any extemporaneous changes, except for the application of transitional rules;

2. in future evaluations, to refrain from retroactively applying new evaluation criteria—understood as those defined after March of the first year of the quadrennium—allowing such new criteria to be applied only in subsequent evaluation periods.

Through this agreement, Capes committed to:

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1. Define evaluation parameters without applying them retroactively; in other words, establish evaluation parameters before the actions to be assessed in the future take place.

2. Use standardized elements to prevent evaluation parameters from resulting in non-uniform or unequal assessments;

On the other hand, the Federal Public Prosecutor's Office (MPF) agreed to acknowledge the need to apply the current parameters in the 2017–2020 four-year evaluation, even if they were published only at the end of the period, provided that graduate programs (PPGs) adversely affected by any retroactive changes may request, as a preliminary appeal or petition for reconsideration, that this aspect be reviewed—allowing, in such cases, the repetition of the previous score (Brasil, 2022b).

The agreement between the parties was formalized through a settlement agreement (termo de autocomposição) on August 31, 2022, which contains sixteen clauses. Clause seven establishes that, for future evaluation periods, the definition of evaluation parameters for graduate programs must take into account issues related to quantity and productivity, with attention to quality:

For subsequent evaluation periods, the parties agreed that the definition of evaluation parameters shall also observe the following:

(i) Purely quantitative metrics, with an exclusive focus on absolute productivity, should be avoided;

(ii) Productivity criteria should be considered in relative terms, taking into account the number of faculty and students affiliated with the graduate program (PPG), in order to prevent distorted or disproportionate results;

(iii) The number of degrees awarded and/or the percentage of approved students should not be a determining factor in evaluation parameters, as it may encourage mass approvals to the detriment of quality;

(iv) Criteria involving excessive subjectivity should be avoided;

(v) Exceptions should be maintained and improved in cases involving graduate programs that focus on exclusively national or local issues, without the intention of universal applicability, in order to reasonably prevent distortions in the evaluation of such programs (Brasil, 2022b).

Intellectual production in the evaluation of **stricto sensu** graduate programs plays a central role in the scoring process of these programs. According to the Forum of Pro-Rectors for Research and Graduate Studies – FOPROP (2017):

A quantitative approach prevails in the evaluation process, and the emphasis on numerical weighting encourages programs to adopt an exaggerated “productivist” stance, which in many cases leads to low-quality and low-impact output. When productivism becomes ingrained in the academic culture of graduate programs, it tends to neglect the fundamental importance of graduate student education. An evaluation model that gives greater value to the qualitative dimensions of programs requires a revision of both the evaluation criteria and indicators (FOPROP, 2017).

According to FOPROP (2017), the evaluation of **stricto sensu** graduate programs seeks to value all intellectual output considered to be of high quality. Moreover, while a large number of outputs are taken into account during the evaluation, “the impact of a program is not determined by the totality of its products, but by its most significant ones” (FOPROP, 2017).

## Quality in *Stricto Sensu* Graduate Education in the Context of the 2017–2020 Quadrennium

For the 2017–2020 Four-Year Evaluation, qualified outputs identified by graduate programs and researchers were incorporated, with the aim of “balancing quantitative and qualitative indicators in the evaluation process, with special attention to aspects related to the relevance and impact of the program’s outcomes, whether in terms of training or the existing research dynamic” (Brazil, 2018, p. 16).

In that evaluation cycle, CAPES introduced the inclusion of *Evaluation Highlights*, in response to a need identified by the academic community. This addition reflected the incorporation of quality indicators regarding what is produced by graduate programs—both collectively and individually “[...] through the submission of a defined set of products that reflect their best academic outputs, dissertations and theses, their level of institutionalization, and their impacts” (Brazil, 2018, p. 12).

In addition to the submission of *Evaluation Highlights*, the 2017–2020 quadrennium introduced a new Evaluation Form designed to implement or reformulate issues related to several axes: Self-assessment and the Institutional Development Plan (PDI); impact on regional and national economic and social development; a single evaluation model with a multidimensional approach; selected outputs, with the five most relevant being considered; social and economic relevance; alumni follow-up; balance between quantitative and qualitative indicators; changes to the *Qualis* system; internationalization; and innovation (Brazil, 2019a; Brazil, 2019b).

Regarding the new evaluation form, Bão (2019) notes that it “places greater value on the mission of graduate education, which is to train human resources, and will allow for the evaluation of the knowledge produced during the training of master’s and doctoral students, as well as its final outcomes.” In order to evaluate both the training of human resources and the knowledge generated through that process, the data required by the evaluation form must be provided by the graduate programs.

This data submission is carried out through data collection and entry via the “Data Collection” (*Coleta de Dados*) system within the Sucupira Platform. According to CAPES (Brazil, 2014a), the Sucupira Platform is a tool designed to collect information and conduct analyses and evaluations of graduate programs. The system provides real-time, transparent access to the information, processes, and procedures carried out by CAPES within the National Graduate Education System (SNPG), thus serving as the SNPG’s primary reference base.

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The Sucupira Platform includes both public and restricted access. The public access section includes modules such as: Learn About the Evaluation; Evaluated and Recognized Programs; Capes Data Collection; Four-Year Evaluation; New Program Proposal Application (APCN); Cooperation Projects Between Institutions (PCI); Qualis; and Data and Statistics.

It is through the “Capes Data Collection” module of the Sucupira Platform that graduate program coordinators submit the information required for evaluation, access reports, submit requests, file appeals regarding program evaluations, among other functions. According to CAPES (Brazil, 2014a), Capes Data Collection is a computerized system developed in modules, with the purpose of gathering information from *stricto sensu* graduate programs throughout the country, thereby supporting part of the evaluation process.

The process of data entry and transfer to the Sucupira Platform is complex. While some information can be extracted automatically, much of the data entry into the platform is done manually. Therefore, the development of tools to automate this process could result in a reduction in the time spent and an improvement in the quality of the information provided, which would likely lead to a decrease in personnel costs and an acceleration of the secretariat services. Furthermore, the difficulties faced by the coordinators of graduate programs in keeping up-to-date records of the individual academic output of faculty members under their supervision are well known. Similarly, they often face challenges in observing the overall scientific output of their program, including the courses it offers or the research lines that structure those courses (Ferraz *et al.*, 2017, p. 9)

According to Pimentel (2017, p.6), some graduate program coordinators “recognize the Sucupira Platform as the main evaluation tool for graduate education,” but they also offer criticism regarding the inclusion of data in the system, as well as the evaluation system for *stricto sensu* programs, particularly in relation to the classification of the intellectual output of faculty and students and the Qualis system.

The debate about intellectual production is of great importance in the academic sphere, considering that “scientific, technological, artistic, literary, and cultural productions, in their various forms and manifestations, serve as mechanisms for the dissemination and democratization of academia’s actions to society” (Curty, 2010, p.06).

Regarding the classification of intellectual production in graduate programs, according to CAPES (Brasil, 2020c):

**Box 1 – Products and Stratification**

Production	Stratification
Qualis Reference - Periodicals	A1; A2; A3; A4; B1; B2; B3; B4; C
Book Classification	L1; L2; L3; L4; L5; LNC
Artistic-Cultural Qualis	A1; A2; A3; A4; B1; B2; B3; B4;
Technical Production	T1; T2; T3; T4; T5; TNC
Event Classification	A1; A2; A3; A4; B1; B2; B3; B4; C

Source: Capes (Brasil, 2020c).

Regarding Qualis Books, the evaluation is done individually, by work, and occurs according to the periodicity of the area meetings, which are held every four years. The classification is carried out by committees of consultants and the evaluation areas, which define the criteria for assigning quality to the books.

As for Qualis Artistic-Cultural, artistic-cultural production is understood as “creative, poetic, and interpretative products and processes that result from academic research produced within the Graduate Programs of the country, expressed through visual, scenic, musical, literary, and other languages” (Brazil, 2019b, p. 9). For artistic-cultural production to be considered qualified, it must meet a set of minimum requirements, evaluated by the areas, in dialogue with the academic community.

Concerning Qualis Events, the scientific event category refers to activities that aim to “bring together specialists and those interested in specific areas of knowledge to discuss topics that address common concerns, with a focus on updating and advancing scientific research, as well as disseminating research findings” (Brazil, 2019b, p. 6). Various types of works are published in the proceedings of scientific events, such as full papers, abstracts, and extended abstracts. There are also works presented that do not involve publication in proceedings, such as presentations, lectures, and oral communications, among others. According to CAPES (Brazil, 2019b), each Area Coordination establishes its own criteria, weights, and metrics for evaluating events, based on a common proposed structure, which generally considers the impact on society.

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Regarding Qualis Technical and Technological, with the aim of improving the measurement of the technical and technological production of graduate programs, CAPES (Brazil, 2019c), through the Working Group – GT Qualis Technical and Technological, sought to characterize the types and subtypes of technical and technological products and processes developed by graduate programs and propose a classification method and indicators for these products (Winter, 2017).

[...] technology is the application of scientific knowledge, techniques, and expertise used to create transformative solutions in the form of products, processes, or services. A technological product is a “tangible object” with a high degree of novelty resulting from the application of new scientific knowledge, techniques, and expertise developed within the scope of graduate research, used directly in solving problems for companies producing goods or providing services to the population, aiming at social well-being (Brasil, 2019c, p.22).

According to CAPES (Brazil, 2019c), products must have their origin linked to activities derived from research lines, and projects must be connected to products resulting from outcomes achieved through research developed by graduate programs, primarily within the scope of technological production, aiming at the evolution of knowledge.

The criteria that differentiate technical and technological production are: Impact; Applicability; Innovation; Complexity. According to Winter (2017), the quality of products is directly related to the quality of education, and for him, with the increase of quality products, the process of training human resources becomes more varied, thereby meeting the demands of various sectors in society.

Qualis Periodicals is a system used to classify the scientific output of graduate programs concerning articles published in scientific journals, assessing the quality of the articles based on the quality of the journals.

Carvalho and Real (2021) explain that, in 1997, at CAPES' invitation, a team of international consultants analyzed the evaluation system for graduate programs in Brazil, and among their recommendations was the need to create clear definitions for each concept related to graduate programs. In this context, the *Qualis* Program was created, with the aim of establishing quality standards for scientific publications.

**Qualis** adopts a methodology for stratifying the quality of intellectual production in graduate programs in Brazil. According to CAPES (Brazil, 2020a), in the evaluations for the periods 2010–2012 and 2013–2016, the classification began with A1, considered the highest level, followed by A2, B1, B2, B3, B4, B5, and C, the latter being weighted as zero. For the 2017–2020 quadrennium, this classification was modified to incorporate the A3 and A4 strata while discontinuing the B5 stratum, resulting in the following classification: A1; A2; A3; A4; B1; B2; B3; B4; C – zero weight.

The new evaluation methodology for Qualis Periodicals presents a unique classification for each journal; classification by primary areas; and bibliometric indicators, which consider the number of citations of the journal in three databases: Scopus (CiteScore), Web of Science (Impact Factor), and Google Scholar (h5 Index). According to CAPES (Brazil, 2020a), the changes in Qualis Periodicals follow the recommendations outlined in the report of the Special Monitoring Committee for the PNPG (2011–2020) and involve discussions within the academic and scientific community through Working Groups.

According to CAPES (Brazil, 2020a), the new method seeks more objective criteria that allow for a more balanced comparison between evaluation areas, also considering internationalization. The agency states that the improvement of the tools used to assess national **stricto sensu** graduate education focuses on the quality of master's and doctoral training.

Nascimento, Fialho, and Brandenburg (2021) argue that the impact of scientific articles plays a crucial role in evaluating academic production. However, the effectiveness of predicting the number of times a publication is cited (represented by the number of citations in other works) is limited by the metric classification of citations which does not fully predict the quality or social impact of the production or the journal being analyzed.

According to Carvalho and Real (2021), the evaluation of journals conducted by CAPES influences the quality of academic journals by establishing quantitative and qualitative standardization parameters within various strata. From this perspective, Qualis Periodicals is used in graduate education as an indicator that influences the selection of journals, submission of papers, and the research of bibliographic material.

The evaluation of national graduate education is viewed by critics as a means that values production and publication, to the detriment of the quality and benefits that a study obtained through research could bring to society and science. Similarly, within this context, there is also criticism of the scientific production primarily disseminated in journals with **Qualis** rankings—not because of the requirement, but because of the value attributed to these publications, to the detriment of the qualification of other equally important outlets, considering the commitment to the socialization of knowledge (Ferreira; Ferenc; Wassem, 2018, p. 1,335).

On the other hand, critics agree that the highlighted quality of Brazilian graduate education is, to a significant extent, due to the evaluation system adopted at the national level by CAPES (Verhine and Dantas, 2012), as CAPES is responsible for certifying, recognizing, and evaluating graduate

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programs in Brazil, playing a key role in the expansion and consolidation of **stricto sensu** graduate education across all Brazilian states.

According to Souza and Rocha (2018), evaluations are influenced by values, worldviews, and the perceptions of evaluators regarding reality, as well as by government interventions, for example, through policies aimed at assessing the quality of the educational system. As Gadotti (2013) points out, quality is a polysemic concept, which, in education, has been approached from various angles. However, it should be understood essentially as a dynamic concept that must adapt to a world undergoing profound transformations. Therefore, it is a political concept that, although it shares common elements, changes depending on the context.

## Final considerations

This article presented considerations regarding the evaluation of national **stricto sensu** graduate education within the context of the 2017–2020 quadrennium and the improvement of the tools used in the evaluation of master's and doctoral training quality. To this end, a documentary and exploratory research was conducted on documents produced by the Coordination for the Improvement of Higher Education Personnel (CAPES) and a survey of current academic works on the themes: CAPES evaluation and quality in *stricto sensu* graduate education.

The study showed that the 2017–2020 evaluation cycle of CAPES sought to enhance the debate on quality in graduate education through the composition and operation of working groups and consultations with the academic community. It also aimed to promote actions for improving the evaluation processes of graduate education quality, through the following reforms: the creation of a new evaluation form (based on the need to implement/reformulate issues related to impact, innovation, the balance between quantitative and qualitative indicators, among others); the inclusion of Highlights (considering the incorporation of quality indicators for what is produced by graduate programs); and the revision of the Qualis methodology in evaluating the stratification of the intellectual production quality of graduate programs.

In general, evaluations are influenced by values, worldviews, and the evaluators' perceptions of reality, as well as by a variety of political and governmental interests. However, this does not necessarily imply a total critique of the evaluation processes undertaken by CAPES. In fact, the quality of *stricto sensu* graduate programs is also attributed to the agency's role in the expansion and

consolidation of national graduate education, as well as in the regulation and evaluation of courses offered by Brazilian universities.

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