https://doi.org/10.28976/1984-2686rbpec2024u12971320

Submitted on 20 august 2024
Accepted on 26 november 2024
Published on 12 december 2024

Qualitative Assessment of Graduate Courses in the Field of Education: Data Quality and Challenges in the Professional Modality

Avaliação Qualitativa da Pós-Graduação na Área de Ensino: Qualidade dos Dados e Desafios na Modalidade Profissional

Evaluación Cualitativa del Posgrado en el Área de Educación: Calidad de los Datos y Desafíos en la Modalidad Profesional

Rosana Aparecida Salvador Rossit, Cleidilene Ramos Magalhães, Ivanise Maria Rizzatti, e Giselle Rôças

Abstract

The Graduate Assessment Form restructuring in the teaching area presented changes resulting from the expansion of qualitative indicators in the general assessment process of graduate programs (GPs). Peer review is the modality established by CAPES for assessing programs, with training reflection as a guideline, which contributes to the feedback needed to improve teaching processes and procedures. In the committees, consultants work together to develop and/or detail the criteria to support the organization of work and the design of assessment strategies. Since the 2017–2020 Quadrennial Assessment, concerns have arisen about what GPs, in the professional modality of the teaching area, have prioritized to value the quality of information included in the CAPES Data Collection report. In this context, this article, in essay format, adopts a theoretical-descriptive nature to reflect on the meaning of each part of the Assessment Form, and aims to contribute to assessment inherent to the reality of programs and their training and research practices, valuing their insertion, modality and vocation, in line with the teaching area criteria. Based on the authors' experience in the assessment process developed in the last four years, the adopted criteria that guide assessment work are discussed, with contributions to improving the programs.

Keywords: evaluation study, teaching, graduate studies, data quality

Resumo

A reestruturação da Ficha de Avaliação da pós-graduação na Área de Ensino apresentou mudanças decorrentes da ampliação de indicadores qualitativos no processo geral de avaliação dos programas de pós-graduação (PPGs). A análise por pares é a modalidade instituída pela CAPES para avaliação dos programas, tendo como diretriz a reflexão formativa, que contribui para o *feedback* necessário ao aperfeiçoamento de processos e procedimentos de ensino. Nas comissões, os consultores trabalham conjuntamente na elaboração e/ou detalhamento dos critérios para subsidiar a organização do trabalho e o delineamento das estratégias avaliativas. A partir da Avaliação Quadrienal 2017–2020, surgiram inquietações sobre o que os PPGs, na modalidade profissional da Área de Ensino, têm priorizado para valorizar a qualidade das informações inseridas no relatório do Coleta de Dados da CAPES. Neste contexto, este artigo, em formato de ensaio, adota a natureza teórico-descritiva para refletir sobre o significado de cada parte da Ficha de Avaliação, e tem como objetivo contribuir com a avaliação inerente

à realidade dos programas e suas práticas formativas e de pesquisa, valorizando sua inserção, modalidade e vocação, em consonância com os critérios da Área de Ensino. Com base na experiência das autoras no processo avaliativo desenvolvido no último quadriênio, discutem-se os critérios adotados que balizam o trabalho de avaliação, com contribuições para a melhoria dos programas.

Palavras-chave: estudo de avaliação, ensino, pós-graduação, qualidade dos dados

Resumen

La reestructuración del Formulario de Evaluación de posgrado en el área docente presentó cambios derivados de la ampliación de indicadores cualitativos en el proceso general de evaluación de los programas de posgrado (PPGs). El análisis de pares es la modalidad establecida por la CAPES para la evaluación de programas, con la reflexión formativa como directriz que contribuye a la retroalimentación necesaria para mejorar los procesos y procedimientos de enseñanza. En los comités, los consultores trabajan juntos en la elaboración y/o detalle de criterios para apoyar la organización del trabajo y el diseño de estrategias de evaluación. A partir de la Evaluación Cuatrienal 2017–2020, surgieron inquietudes sobre qué han priorizado los PPGs, en la modalidad profesional del área docente, para valorar la calidad de las informaciones incluidas en el informe de Colección de Datos de CAPES. En este contexto, este artículo, en formato de ensayo, adopta un carácter teórico descriptivo para reflexionar sobre el significado de cada parte del Formulario de Evaluación, y pretende contribuir a la evaluación inherente a la realidad de los programas y sus prácticas de formación e investigación, valorando su inserción, modalidad y vocación de acuerdo con los criterios del área docente. A partir de la experiencia de los autores en el proceso de evaluación desarrollado durante los últimos cuatro años, se discuten los criterios adoptados que orientan el trabajo de evaluación, con aportes al mejoramiento de los programas.

Palabras clave: estudio de evaluación, enseñanza, graduado, calidad de los datos

Introduction

This essay was born after the authors participated as consultants in the 2017–2020 Quadrennial Assessment process and identified aspects that could be shared with the community, with a view to qualifying data and other elements inserted by graduate programs (GPs), in the professional modality of the teaching area, in the Coordination for the Improvement of Higher Education Personnel (In Portuguese, *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* — CAPES) Data Collection report, prospecting future assessments and expected advances in terms of improvements and qualification of programs.

Based on the experience, some concerns emerged: what has been prioritized by GPs in the CAPES Data Collection report construction to reveal their potential and enable qualitative data analysis by consultants? How does the relationship between the area of concentration, lines of research, graduate profile and target audience articulate with the program characteristics to demonstrate adherence to the teaching area? Considering the identity of each program, what criteria have been used to select and justify the highlights "intellectual productions", "success stories" and "successful graduates" as representation of the insertion and social impact of the program?

The essay was guided by the following question: what reflections should professional GPs prioritize to ensure the quality of the data entered in the CAPES Data Collection report, in order to reveal consistency and adherence to the teaching area?

With the intention of provoking reflections on what professional programs have prioritized to value the quality of information in the CAPES Data Collection database, this essay aimed to contribute to assessment inherent to the reality of programs and their training and research practices, valuing their insertion, modality and vocation in line with the teaching area criteria.

The Current Model of Graduate Assessment

The Proposal for Improving the Assessment of Graduate Studies (CAPES, 2018), presented by the Brazilian National Graduate Plan (In Portuguese, *Plano Nacional de Pós-Graduação* — PNPG) National Monitoring Committee, aimed to contribute to improving the assessment system and the process of inducing quality in Brazilian graduate studies. The work was structured based on the new demands of scientific, technological and innovation academic communities, which signaled the need to improve some aspects of the current assessment model. The proposal identified ten convergent aspects that could be improved in the assessment process. Among them are self-assessment of GPs based on institutional strategic plan for graduate studies, multidimensional assessment, social and economic impact and relevance, and reduction of asymmetries, training and monitoring of graduates, a greater balance between quantitative and qualitative indicators, innovation, insertion, and internationalization.

According to Verhine et al. (2024, p. 1), for the first time,

> [...] the inputs provided by the programs, which were traditionally treated qualitatively only for their contextualization, began to receive weight in the assessment. Other factors, also of a qualitative nature and which dealt with the training processes and impacts of the program, received greater importance.

Previously, GPs were assessed and compared to others in the same assessment area to which they were accredited. However, with the assessment paradigm assuming criteria that consider qualitative and quantitative aspects centered on self-assessment and strategic planning, GPs began to be compared to themselves on a time scale of four-year assessments. This paradigm shift provokes new understandings and changes. The first is related to the committee that advises the areas, formed by peers from the respective assessment area and program modality, while the second concerns the way in which the report on the program's activities should be prepared.

Peer assessment is the modality established by CAPES, with the guideline that it is also a training assessment, considering that the consultants who participate in the different instances of the process are instructed through training so that they can better understand the assessment system. Therefore, training assessment can contribute to improving the action, providing elements to adapt the teaching processes and procedures

to the needs (Haydt, 2000). In this type of assessment, we have different actors working together in the elaboration and/or detailing of the criteria to be assessed, which can help in the (re)organization of work and in the design of new strategies in GPs (Neyra, 2014).

The peer review system should be based on the academic, scientific and technological merit of the researcher or course, using qualitative criteria. However, quantitative criteria can be used in a complementary manner (Andrade, 2005). These criteria need to be widely disseminated and legitimized, and any changes should be subject to debate and consensus building in the areas of assessment. In peer review, the criteria should belong to the community being assessed, not to the evaluators, ensuring the premises of this assessment format.

In the context of peer review, assessment committees are designated and assigned to specific actions during the Quadrennial Assessment. Thus, to better guide the assessment process, the criteria must be clearly and operationally described to support decision-making in relation to the items and sub-items in the Assessment Form used by CAPES. The criteria used by Area 46 are described in documents that describe the Assessment Form, guiding the completion of the final report, and also in the final report of the 2017–2020 Quadrennial Assessment, documents available on the teaching area page[1].

The assessment committees for the 2017-2020 Quadrennial Assessment were held, exceptionally, between 2021 and 2022, due to a public civil action filed by the Federal Public Prosecutor's Office that interrupted the quadrennial assessment for a few months. Their compositions were governed by Ordinance 80 of May 12, 2021 of the CAPES Assessment Directorate, which established that assessment committees, intended for the 2017-2020 Quadrennial Assessment actions of *stricto sensu* graduate programs in Brazil, were of a temporary nature and had a defined purpose. These committees provided technical-scientific advice by preparing opinions that supported the assessment activity by going through the criteria of the Assessment Forms, maintaining confidentiality and issuing opinions based on ethical and technical rigor, although without deliberative powers, not falling within the concept of a collegiate body.

The CAPES teaching area has developed its project for graduate studies with an interdisciplinary attitude, valuing:

> [...] compositions of faculty with training in different areas of knowledge, who are willing to think together about teaching issues and who demonstrate integrative experience in educational research; graduate curricular proposals that prioritize the integration between disciplinary fields in the training of graduate students; expansion of research that works with educational processes from an interdisciplinary perspective; research on educational processes and products that also advance towards teaching and learning from an interdisciplinary perspective. Therefore, the interdisciplinary identity of the teaching area is

1 Teaching area page: https://www.gov.br/capes/pt-br/acesso-a-informacao/acoes-e-programas/avaliacao/sobre-a-avaliacao/areas-avaliacao/sobre-as-areas-de-avaliacao/colegio-de-ciencias-exatas-tecnologicas-e-multidisciplinar/multidisciplinar/ensino

> increasingly valued in teaching and research, being the basis for the analysis and assessment of course projects and the four-year assessment (CAPES, 2019a, p. 08) (freely translated).

In addition to the interdisciplinary perspective in the training proposal, including a diverse faculty, programs in education, especially in the professional modality, present a peculiarity in terms of the profile of students, who must be workers, coming from formal or informal educational spaces and from educational spaces in the health and social fields. This characteristic expands the possibilities of realizing the social role of universities, which, through research and graduate studies, strengthen their connection and contribution to other sectors of society, especially in the formation and development of critical awareness of citizens and professionals who work with the population. In this context, graduate studies have a strategic role in promoting continuing education of professionals who are already working in different social contexts.

Thus, it is understood that the task of graduate studies is to think about and develop actions that contribute to overcoming the dichotomy between theory and practice and to reducing the gap between research developed in universities and teaching carried out in the different contexts of professional activity (in education, health, social fields, science and technology), i.e., in social practice. Thus, it is expected that actions and projects developed in graduate programs in the teaching area aim to transform professional practice settings, investing in the preparation of graduate students as reflective and critical professionals committed to social change (Freire, 1997; Zeichner & Diniz-Pereira, 2005; Zeichner, 2014), in order to take their work context as an object of study for transforming and improving their professional practice and the social reality in which they work. Therefore, it is expected that graduates will be agents that contribute to the social impact in relation to the quality of education in the diversity of institutions and demands that emerge in the context of professional activity.

Furthermore, it should be noted that, as of 2018, with the approval of the new Assessment Form for Graduate Programs, the assessment paradigm has changed, focusing on the training of graduate students and the strategic planning of programs. Now, graduate programs are compared with themselves, which requires that, based on the results of the previous four-year period, they develop a strategic plan for each new assessment period. The objective is to overcome the weaknesses identified and strengthen the program, both in the training of human talents and in the consolidation of its academic excellence and evolution in technical-scientific and social terms. As pointed out,

> The program's strategic planning, also considering articulations with the institution's strategic planning, with a view to managing its future development, aims to adapt and improve the infrastructure, and better training of its students linked to intellectual production — bibliographic, technical and/or artistic (CAPES, 2019a, p. 10). (freely translated)

In this logic, some dimensions must be considered by the program self-assessment committees in strategic planning, such as: (i) quality of graduate training; (ii) social impacts of program actions; (iii) program actions considering their local, regional, national and/or international insertion; and (iv) innovation in academic productions and processes.

Among the innovations proposed by CAPES in assessment processes of programs, it is important to highlight the importance of strategic planning to consider the dimensions contained in the Assessment Form. It is important to emphasize that the appropriate inclusion of GP data in the annual *Sucupira* Platform CAPES Data Collection, ensuring the quality of the data reported, is an essential condition to support the assessment process. In view of this, the faculty must build, collaboratively with the program coordination, a progressive and consistent report during a four-year period and, thus, contribute to an efficient and effective analysis of GPs by consultants.

According to Rossit et al. (2024), there is a growing movement on self-assessment in graduate studies and its impacts on the assessment system, which is being implemented both at CAPES and at universities.

Self-assessment is characterized by "self-analysis carried out collectively by the actors involved in the process, highlighting the potentialities, weaknesses and opportunities for improvement". Self-assessment represents a collective effort to implement moments of critical, democratic and participatory reflection (Leite, 2008). Leite et al. (2020) highlight the importance of self-assessment as a path that, alongside external assessment, can compose a model for improving GPs.

Self-assessment is a necessary mechanism for GP qualification. Hence, "the search for excellence in graduate studies involves the evaluative view of professors, students, the administrative sector and even external agents on the actions, processes and products carried out and developed with a view to building solutions to the difficulties encountered" (CAPES, 2019b, p. 10). The new Assessment Form indicates that:

> [...] the processes, procedures and results of the program's self-assessment will be analyzed and valued, with a focus on student training and intellectual production. This implies that programs must organize and carry out self-assessment processes, the results of which should indicate the strengths or successes and difficulties or failures in dimensions and focuses previously defined by the programs themselves in their respective strategic plans (CAPES, 2019b, p. 10) (freely translated).

In turn, Leite (2018) points out that a self-assessment carried out efficiently and competently results in knowledge about a given reality, seen from actors' perspective in relation to the results to be constructed, considering the social, professional and public responsibility of a program or institution. The process, carried out in a collaborative and participatory manner, contributes to the observance and respect of ethical principles of honesty and transparency, giving importance to self-assessment.

In order to achieve this goal, greater emphasis is needed on both the program's self-assessment and the use of qualitative indicators in external assessment. Thus, once the process is complete, programs must list the results obtained, propose actions and define goals. Therefore, strategic planning must reflect how goals and actions will be achieved together with the supporting institution, faculty and students. The time scale used is based on the four-year assessment cycle so that it is possible to propose that short-term actions be planned to be carried out in the current Quadrennial Assessment. Medium- and long-term actions can be understood, respectively, as those to be carried out in the following Quadrennial Assessments. This planning must be presented in the program report, with planned actions and due justifications. This is also the opportunity for the GP to report possible events (internal and external) that occurred throughout the four-year period, such as absences, leaves of absence, strikes and others.

Another new feature proposed in the Assessment Form is innovation assessment, which is associated with the approximation of GPs to the industrial, service or public management production sectors at all levels, with a view to social innovation. From this perspective, the teaching area understands the vocation of professional master's and doctoral programs as a set of "research into educational processes and products with a view to meeting the most pressing social demands, especially for basic education, but also for higher education, health education and technologies associated with teaching and learning" (CAPES, 2019a, p. 9) (freely translated).

Innovation in teaching production involves original research, a focus on little-explored topics that fill knowledge gaps, the application of new methodologies, and experimental production. It includes dissemination in various media and for various audiences, strategic dialogue with other areas and with local, regional, national, and international knowledge. In addition to this, it encompasses the development of new educational, cultural, social, and environmental technologies, the advancement of knowledge frontiers, contributions to professor and researcher training, and the development of public policies.

In this regard, it is important to reflect on the concept of social innovation, which encompasses the development of innovative solutions to problems and needs that affect society. Innovations represent a break with prevailing routines, ways of thinking and acting, and as such, are marked by high risk and uncertainty during their implementation. Social innovations are social both in their ends and in their means, and have the merit of being simple and incisive (Monteiro, 2019).

Social innovation encompasses different sectors, levels of analysis and methods for identifying processes — strategies, tactics and theories of change — that generate lasting impact. It is a new solution to social problems that proves to be more effective, efficient, sustainable or fair than existing alternatives, benefiting society as a whole rather than specific individuals (Phills Jr. et al., 2008, pp. 36–37). According to Mulgan (2007, p. 8), "social innovation manifests itself in innovative activities and services, motivated by the intention to meet social needs and generally developed and disseminated by organizations with predominantly social purposes".

Thus, the innovations produced within GPs must address relevant topics in education and provide solutions to the demands of the reality of work, with the potential for transformation in society in academic, educational, technological, social, environmental, economic, cultural terms or promotion of inclusion and diversity.

Other issues that emerge in the current assessment model involve the characterization of "merit" and "impact". Merit assessment is necessarily qualitative, and impact assessment generally involves quantitative criteria. To consider merit and impact, this can certainly only be done by peers who are able to perceive and recognize academic, scientific and technological merit as well as identify parameters that allow measuring impact (Andrade, 2005).

The impact of GPs on education should be assessed based on the results and effects observed in the medium and long term, considering the advancement of scientific and technological knowledge in the area. Although these programs are expected to contribute to improving the quality of education in Brazil, this contribution occurs indirectly and gradually, through knowledge production and dissemination and training of qualified human resources. The area's coordination has been discussing these new concepts with the support of reports prepared by the academic community of programs and organized in working groups. The conclusions and guidelines are recorded in the 2023 Mid-Term Seminar report (CAPES, DAV, 2023).

Another aspect to be considered when assessing programs is regionalization and/or internationalization. According to the Teaching Area Document (CAPES, 2019a, p. 11), "the internationalization of GP activities can reflect on the quality of production and student training". Therefore, it is encouraged, as far as possible, to seek international insertion of the program, in order to compare the training of Brazilian researchers with that of other countries, even though, in the teaching area, the emphasis of training and research is directed towards finding solutions to Brazilian problems within the scope of regionalization. Thus, the greatest challenge is to produce relevant knowledge that contributes to the qualification of professional practice in the context of teaching in education, health, social, science and technology.

Reflections on Completing the CAPES Data Collection Report

Based on the knowledge, experiences and reflections made available by GPs in the teaching area, in the professional modality, referring to the last four years (2017–2020), the challenges of this assessment process and some guidelines for qualifying the data reported in the CAPES Data Collection report are presented.

It is assumed that programs must present all information related to each year of a four-year period, with the intention of showing the alignment between the GP proposal and the items in the Assessment Form (CAPES, 2020). According to recent guidance from CAPES, the program must fill out the "Collection" module annually with all data, submitting, at the end of the last year of the four-year period, the report with all qualitative information and production highlights, success stories and successful cases.

Schraiber (2011) explains that success has a technical connotation and is supported by data analysis, presented based on scientific and technological knowledge, mobilized to implement good practices in solving society's problems, indicating the "how to do it", in a practical and didactic manner, from a perspective that can be replicated or transposed to similar contexts. Thus, success or achievement is related to practice improvement, with "what to do", and emphasizes the standardization of actions with the development of educational products that can be replicated or adapted to other contexts, i.e., the scientific and technical knowledge produced has practical application and relevant social impact. Success expresses a connection with practice, and refers to finding appropriate technologies, from a practical point of view, that allow replication in similar contexts, and can contribute to improvements in the organization of work and in the daily lives of the people involved and others who may benefit from them.

The first point to be considered is that there is coherence and adherence to the area of concentration, lines of research, graduate profile and target audience described in the approved Assessment of New Course Proposals (In Portuguese, *Avaliação de Propostas de Cursos Novos* — APCN). Adherence to the teaching area and professional modality in master's and/or doctoral courses must be considered throughout the entire process. In addition to these aspects, it is important for GPs to make explicit in the report how these aspects are linked to the selection of highlights, revealing the criteria for selection and indication in light of the course mission and description, as well as the justifications for each of the selected highlights. Additionally, it should be made clear to what extent these highlights represent the social inclusion and impact of the program on society, as these are aspects that reveal a more realistic dimension of GPs and contribute to a more robust qualitative assessment.

In the 2017–2020 Quadrennial Assessment, consultants used the new Assessment Form for the teaching area for professional programs (CAPES, 2020, p. 10), which consists of three assessment criteria, such as program, training and intellectual production, and program impact on society, which are divided into 12 items and 34 subitems. Based on criteria previously defined by the area, indicator analysis directs the results to a scale of five levels called "concepts": very good (VG); good (G); fair (F); weak (W); and insufficient (I). There is also the possibility of the result being measured as not applicable (NA). For each of these concepts, there is a breakdown that parameterizes the indicators for designating the result.

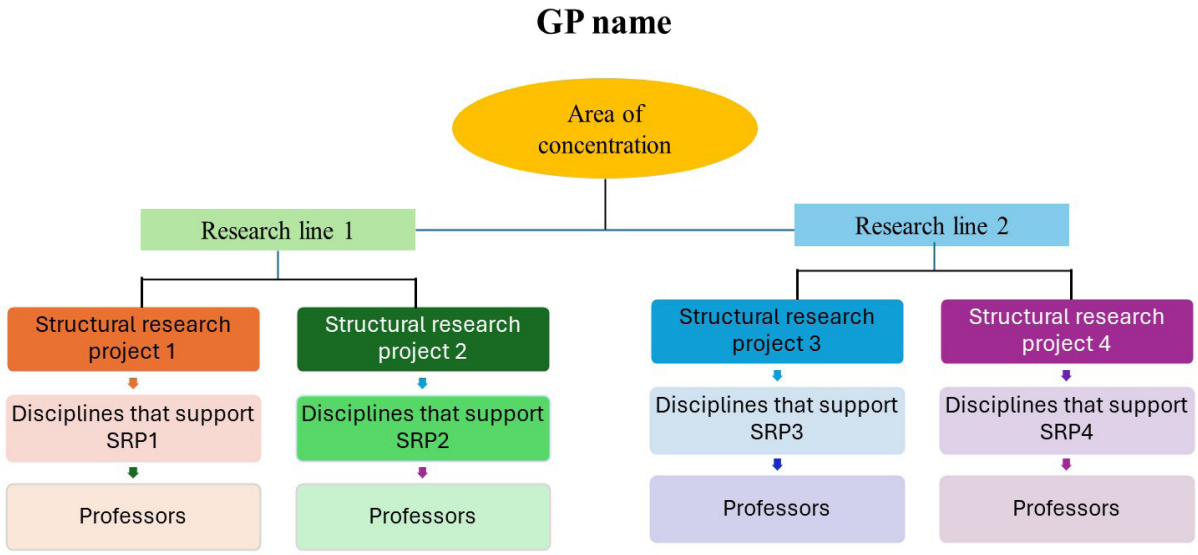
In terms of program, the coherence between the GP name, the course proposal, the area of concentration, the research lines, the structural projects (macroprojects), developed collectively by faculty members, with the participation of students and graduates, when possible, and the curricular structure, which includes disciplines and other activities, is assessed. A common mistake is to list individual research projects by faculty members, usually submitted to funding agencies, which should be classified as teaching activities, not as structural projects of GPS. Structural research projects must involve at least two faculty members of the program, one of whom must be the

coordinator, in addition to students and, occasionally, graduates, researchers or external collaborators. These projects must have syllabi that support knowledge production according to the GP objectives and are aligned with the research lines and scope of the teaching area.

In Figure 1, a possible organization of the structure of a course is simulated, highlighting the interrelationship between the different structuring layers of a GP.

Figure 1

Simulation of the organization of the structure of a course and the interrelationship between the different structuring layers of a graduate program



Source: prepared by the authors, 2024.

The information contained in the CAPES Data Collection report should show signs of updating the curriculum structure over the four-year period. This subitem assesses the changes, updates and differences that have occurred in the program over the last four years. Updating the data and arguments provided should contribute to the ongoing improvement of GPs. In this case, the main expectation is that the syllabuses and bibliographic references of disciplines will be regularly updated. When duly justified, changes to the area of concentration, research lines and the program name will be acceptable, following the appropriate procedures guided by the Assessment Directorate — CAPES (DAV). It is important to emphasize that such changes should consider the adherence to the teaching area, be supported by faculty training and experience, and have been indicated based on self-assessment processes, with incorporation into the course's strategic planning.

Subsequently, the adequacy and coherence of the program's objectives are assessed in relation to the target audience and expected profile of graduates. These are expected to be aligned with the area objectives, which focuses on research and production that address teaching in a given field of knowledge and that establishes the necessary interlocutions with other fields (e.g., health, mathematics, science, among others), with the objective of mediating knowledge in formal and informal teaching and learning spaces. In this way, it aims to build scientific knowledge about this process, considering the macro and microstructural factors that interfere with it. Furthermore, the programs are responsible for training human resources for research and teaching.

The GP infrastructure for teaching and research considers diverse environments, such as laboratory conditions, experimental areas, health and teaching units, museum and IT spaces (e.g., access to the World Wide Web, multimedia information sources), libraries, physical spaces for administrative and teaching activities, ensuring appropriate support for the development of course activities, also involving analysis and assessment. It is important to describe the sectors and equipment that are effectively used by the program, without the need to describe the institutional infrastructure.

For professional master's and doctoral courses, the teaching area requires the development and assessment of an educational product or process (EP) developed by graduate students, in addition to the monitoring and supervision of professional practice (CAPESa, 2019, p. 14). The teaching area adopts the nomenclature EP in all its official documents, considering the memory and understanding accumulated since its creation. However, in CAPES' official documents, the term established for all 50 areas is "technical-technological production", with the acronym TTP being commonly used.

One of the aspects that proved to be weak in the analyses that permeated the 2017-2020 Quadrennial Assessment refers to a subitem that addresses the monitoring of supervised internship practice (SIP), supervised professional practice (SPP) professional practice monitoring (PPM). The different nomenclatures are related to the timeline and evolution of the understanding of the main objective of this activity. This activity was mistakenly understood as supervised internship or student internship, which was the reason for the name change.

The PPM is a mandatory item for curricular integration and must include monitoring of graduate students, through individual guidance, by a research group and/or a specific discipline for this purpose. Monitoring mechanisms must be described in the program proposal (CAPES, 2019a, p. 16). The PPM was a non-existent element in most CAPES Data Collection reports from the last four years. It is understood that monitoring professional practice is one of the attributions of the guidance process to be implemented in agreement between advisor and advisee, with provision for the elaboration of a plan that makes it possible to create strategies to know graduate students' workspace and carry out a situational analysis of professional practice, with a view to identifying aspects that can be improved based on idealization, elaboration, development, application, assessment and review of an EP that directly dialogues with graduate students' professional practice. Therefore, GPs must describe, clearly and succinctly, how this monitoring activity of master's and doctoral students is carried out.

Regarding the teaching profile, the training and performance of permanent professors (PPs) are assessed as well as the adherence of their production and compatibility of their performance with the area of concentration and research lines of the program. Also, the distribution of PPs in relation to research lines and projects is assessed, which must be balanced according to production highlights that will be indicated by GPs.

It is considered important that PPs participate in the training of undergraduate students in undergraduate courses, basic education, health education and other sub-areas or with professionals who work in different segments of society. Retired PPs from the same institution and those on regulated leave will be disregarded for the purposes of assessing this indicator, when a report is presented with the appropriate justifications.

The subitem that assesses the strategic planning of GPs considers the links with the strategic planning of the educational institution, with a view to managing its future development, adaptations and improvements to the infrastructure, in addition to better training of graduate students linked to intellectual production (bibliographical, technical and/or artistic). The existence of short, medium and long-term plans that involve adequate, tangible, transparent and well-established goals for the program is assessed. The actions and procedures for future management of GPs are also assessed, indicating the continued guarantee and improvement of the infrastructure and qualification of teaching staff, with a view to training graduate students and improving intellectual production in the context of the demands involving the teaching area. Management actions and procedures aimed at raising financial resources and regional, national and international exchanges are also analyzed in the role of reviewers in teaching journals, involvement in course management activities and in extension actions.

For the processes, procedures, and results of the program's self-assessment, the organization and self-assessment mechanisms that can highlight the GP's strengths and weaknesses are assessed. These data, of a qualitative nature, make up the indicators, resulting in the most recent change in the Assessment Form (CAPESa, 2019; Verhine et al., 2024), which significantly impact program assessment, as verified by the different areas in the last four years. It is worth noting, however, that self-assessment must be aligned with the program's strategic plan, in order to prioritize goals associated with the qualification of student and professor training and intellectual production, with an emphasis on EPs.

To exemplify the criteria adopted, indicator 1.4, "The processes, procedures and results of the program's self-assessment", focusing on student training and intellectual production, was analyzed based on the results presented:

> 1.4.2. Is the self-assessment project aligned with the GP strategic plan, focusing on student and professor training and intellectual production? (Qualitative — 50%). The self-assessment project must be aligned with the GP strategic plan, in order to prioritize goals associated with the qualification of student and professor training of GPs in teaching and intellectual production, with an emphasis on educational products/processes (technical-technological production — TTP).

(VG) - The GP has already consolidated a self-assessment process;

(G) - The GP has already organized the self-assessment process and already has some results;

(F) - The GP has already organized the self-assessment process, but does not yet have results;

(w) - The GP is organizing the self-assessment process;

(I) - The GP does not have any self-assessment process initiative.

In terms of education, the quality of the intellectual production of students and faculty is assessed in relation to adherence and coherence with the area of concentration, lines of research and scope of the teaching area. GPs must indicate up to eight dissertations/theses for analysis, ensuring temporal representation by area of concentration, line of research and advisor. Each and every highlight must always be accompanied by a justification that presents aspects about the current situation, the social relevance of the topic and the contributions to qualified expansion of knowledge in the area, based on the course mission and objectives, as well as the profile expected for graduates.

In the case of indication of dissertations/theses, it is also important to consider what the educational process/product was, except for the EP generated by the research and narrated in the dissertation/thesis. For the purpose of this indication, the program must justify the quality of dissertations/theses, considering the EP developed and the adherence to the area of concentration and line of research. Also, the composition of the dissertations/theses examining board is assessed to identify diversity, alignment of training and the presence of at least one member external to the program.

Concerning the quality of the intellectual production of students and graduates, the indicated production, such as articles in journals, books or chapters, complete works in annals and EPs, is assessed to analyze adherence to the area of concentration and lines of research. For this purpose, the professional modality program will indicate up to five bibliographic productions and up to five EPs published in the four-year period involving students and graduates. In the set of indicated productions, there can be no duplication. The GP that did not complete the four-year assessment cycle and that did not conclude its first defenses may justify the indication of a smaller number of productions.

In this aspect of training, the total weighted production of students and graduates is also assessed, in terms of articles A1 to B4, in relation to the number of graduates in the four-year period plus those enrolled in the last year of the four-year period. For this, the following scores for the journals were considered: A1 = 100; A2 = 85; A3 = 75; A4 = 60; B1 = 50; B2 = 35; B3 = 25; B4 = 10; and C = zero. In relation to the percentage of technical production indicated by GPs, the production of PPs involving students or graduates was assessed in relation to the technical/educational production in strata T1 to T3, which have their own qualification methodology, described in the official documents of the teaching area.

In the context of a professional GP, a dissertation or thesis organizes research based on the development of an EP, using gamification, the creation of science clubs or the development of WebQuests. These processes are disseminated through means such as documentaries, booklets or portfolios, which serve as ways of materializing learning. However, these dissemination materials are not automatically considered educational products. To be recognized as such, they must undergo specific stages of assessment and continuous application.

The concept of artifact emerges as the most appropriate to represent these productions. An educational artifact, such as a documentary, for instance, acts to disseminate and share the process and results obtained. For an artifact to be considered an ED, it must meet certain requirements, such as going through application phases, having been rethought in terms of its limitations and replication potential, and being formally assessed (Mendonça et al., 2022). Otherwise, it remains a means of dissemination, not a complete ED.

Given this understanding, it is emphasized that, when listing the highlights of technical production, the program must focus on demonstrating the elements that indicate its alignment with the role and characteristics of graduate studies in the professional modality.

Another element of analysis refers to the destination, performance and assessment of GP graduates in relation to the training received. This item assessed the way in which the program monitors graduates after the end of the course, explaining the strategies, instruments and other possibilities for interaction. This monitoring makes it possible to identify the insertion of GP graduates in the world of work, in situations of nucleation of new research and development groups in Brazil and in the world, in the continuation of studies and in acting in leadership positions in public administration or civil society. Also assessed, qualitatively, are the activities carried out that involve and integrate the program graduates both as listeners and as active participants in giving classes, lectures and courses, coordinating workshops, among other events.

As for successful graduates, the influence of the training offered by the program on the success of graduates is assessed. To this end, the GP indicates five successful cases of graduates during the four-year period, with their respective justifications, in order to demonstrate the influence of the program on the success of graduate students. These indications are filled out directly in the CAPES Data Collection report.

Regarding the quality of research activities and intellectual production of faculty members, considering the professional modality, up to four productions indicated by PP are analyzed, two of which must be bibliographical and two technical. In the set of productions indicated, there cannot be duplication in relation to other highlights of faculty members or intellectual production. It is clarified that failure to indicate four productions or repetition of one of them indicates weakness in GP. Here, the minimum capacity for relevant production of PPs is assessed, which may involve students and graduates. The adherence and alignment of production indicated by PPs with their area

of concentration and lines of research are also assessed, in order to reflect the coherence of production with the program objectives and identity as well as the justification provided for each of the indications. The ratio between the production score indicated by PPs in the upper strata in the form of journal articles (A1 to A4), books and book chapters (L1 and L2), and TTP/EP (T1, T2 and T3) in relation to the total PP of the program is quantitatively assessed. Assessment is carried out based on the scores of the journals by stratum, the scores of EPs and the scores of books and book chapters, as guided by the documents of Area 46 (CAPES, 2019a).

Due to the need for involvement in teaching and research, the involvement of PPs in teaching activities in the program is qualitatively assessed, considering that at least 70% of PPs taught/acted in at least two GP disciplines during the four-year period, in addition to other teaching and course management activities.

In relation to the number of PPs' mentees, the percentage of PPs that do not meet the minimum of one mentee per year in the program and the maximum of ten mentees per year is assessed, adding up all the courses in which they act as PP, in order to ensure the quality of mentoring.

The number of supervisions must be consistent with the experience, workload and training of supervisors. A number greater than ten supervisions by a supervisor per year, in the Brazilian National Graduate System (In Portuguese, *Sistema Nacional de Pós-Graduação* — SNPG), indicates a weakness in the program. This will make it possible to justify cases in which professors did not meet the requirements, due to situations such as participation in post-doctoral internships, maternity leave, health problems, among others.

The teaching area understands that it is important to have a core of at least five PPs working exclusively on the program. The proportionality between the number of professors that form this core and the total number of professors will be subject to assessment, particularly for GPs with more than 25 professors.

Due to the need for involvement in research, the participation of PPs in individual research projects and macroprojects is assessed. Macroprojects involving faculty and students or graduates are characterized as structural research projects of GPs, in which collaborative research is valued, with broad involvement of the program. All PPs must be registered in at least one macroproject. Programs will be assessed based on the proportion of PPs participating in macroprojects.

In terms of impact on society, the impact and innovative nature of the production (ten intellectual productions, up to five bibliographic and up to five EPs), representative of the program and indicated in the CAPES Data Collection based on the relevance of the topic for the teaching area, meeting social demands and with local, regional, national or international reach, are qualitatively assessed. Each highlight must be accompanied by a justification that argues about the innovative and impactful aspects, according to the understanding of the area, after the 2023 Midterm Seminar (CAPES, DAV, 2023).

The impact of a program is determined by its most significant products, not by all of its products. Thus, each GP must indicate the products considered most impactful and adherent, since assessment must limit its analysis to only the indicated products, in order to make assessment less costly and more relevant (CAPES, 2018).

The document "Improving the Graduate Assessment Model" states that the main objective of graduate courses is:

> [...] to train master's and doctoral degree holders capable of facing new scientific challenges with intellectual independence, contributing to the scientific, technological, economic and social progress of Brazil as an independent nation immersed in a rapidly evolving globalized world. Graduate studies should be established in an environment that encourages the advancement and exploration of the frontiers of scientific and technological knowledge, without imposing disciplinary barriers, with attention to the current demands of society and where dialogue between peers is promoted at national and international levels (CAPES, 2018, p. 8) (freely translated).

As for the program's economic, social and cultural impact, successful cases are assessed that demonstrate contributions to regional socioeconomic development and that may impact local and regional development, involving: extension activities (seminars, meetings, workshops, courses, among others); the capacity of GPs to establish partnerships with institutions for the development of research projects or projects that involve action in the community, with a view to contributing in an innovative manner to social inclusion, in order to meet the community demands and needs through teaching, research and their results; cooperation actions or systematic exchanges with other GPs with a character of solidarity, in which a program with more experience and time of existence can collaborate with a younger one; and development and participation in research projects with national or international funding. For this subitem, the program indicates up to six successful cases, with the necessary details for their understanding and with the due justifications for the indications.

Another aspect that is subject to analysis and assessment refers to internationalization, insertion (local, regional, national) and visibility, which must be flexible, considering the local-regional characteristics, objectives, program mission and profile. In the internationalization sub-item, among the productions indicated by GPs, articles in qualified journals, books and book chapters, and complete works in events involving foreign co-authors are qualitatively assessed.

For the purposes of internationalization actions, it is important to consider collaborations, agreements or cooperation programs with foreign institutions and centers, co-supervision agreements, double degrees, courses taught in English, presence of international faculty (senior professor/researcher or on sabbatical training), foreign students or postdoctoral fellows in the program or other form of academic mobility or international nucleation of graduates. These items should be clearly highlighted in the report.

One of the forms of internationalization refers to the participation of faculty, students and graduates in events, courses and technical visits of an international nature (outside the country), preferably with the presentation of complete papers or activities that demonstrate the relevant role of these participants. Therefore, such participation is assessed and valued. When considering the participation of foreign members, it is important to identify whether this is sporadic or frequent, as well as the diversity of foreign faculty members who make up the examining boards for master's and doctoral programs, which are characterized as more intense processes of internationalization.

In relation to local, regional and national social inclusion, the participation of the program's PPs in activities that demonstrate the value of professors' knowledge and experiences is assessed, contributing to their inclusion in the national scientific community. To this end, the following are valued: participation in committees, editorial boards, acting as reviewers for journals and funding notices, acting in scientific societies and committees, partnerships and projects with Basic Education, involvement with other segments of society, continuing education of professionals in education, health, social fields, science and technology, as well as other activities considered relevant to the teaching area.

In relation to the program visibility, website updating and maintenance are positively assessed, with at least an English version, up-to-date dissemination of the program's internal data, notice, selection criteria for new students, teaching output, and funding received from public and private agencies. This topic should be clearly highlighted in the report.

Finally, in relation to the registration of educational products/processes, EPs are positively assessed if, in addition to having been validated by an examining board: they have some record; they have been applied in real classroom conditions or other teaching spaces; they have free access through the provided link; and they are also registered in the EduCapes Portal, institutional repositories and/or equivalent.

In professional programs, unlike academic programs, a graduate student "needs to develop an educational process or product to be applied in real classroom conditions or other teaching spaces, in an artisanal format or in prototype form" (CAPES, 2019a, p. 15). This EP can be, for instance, a teaching sequence, a computer application, a game, a video, a set of video classes, a piece of equipment, an exhibition, among others. The dissertation/thesis should be a reflection on the EP elaboration and application supported by the theoretical methodological framework that anchored its development.

The teaching area understands the EP as the result of a creative process generated from a research activity, with a view to answering a question or a problem or, even, a concrete need associated with the field of professional practice, and may be a real or virtual artifact, or, even, a process. In addition, it may be produced individually (student or professor) or collectively. The presentation of description and technical specifications contributes to the EP being shareable or registered (remembering that there are different possibilities for registration, and it is up to the program to choose the one that best suits the product/process in question).

The teaching area is, therefore, essentially one of translational research, which moves between basic science and the application of the knowledge produced. In this way, it "seeks to build bridges between academic knowledge generated in research in education and teaching for its application in educational products and processes aimed at society demands and local-regional and national needs" (CAPES, 2019a, p. 3) (freely translated).

Professional programs have common characteristics that involve training for research and qualification for the specificities of the GP's topic and identity, and consider that:

- Graduate students remains active in their workplace;
- Training for research and development of EP can promote changes in the work context;
- The curriculum matrix is part-time, due to the need for graduate students to remain linked to the professional practice setting;
- The research lines should emphasize the professional activity of graduate students;
- The course completion time should be longer: master's degree = 24 months (with scholarship) and up to 36 months (without scholarship); and doctoral degree = 48 months (with scholarship) and up to 60 months (without scholarship);
- The EP should be mandatory and related to professional practice and linked to the dissertation/thesis;
- The existence of scholarships will depend on the existence of external funding;
- The committees and metrics for assessing professional programs should be different from those implemented for academic programs in the teaching area.

There is an understanding in the field of education that education is not enough to address the country's main problems, but without it, it is not possible to propose solutions to problems such as social inequality, corruption and the new ethical and social issues linked to digital media, which increasingly permeate everyone's lives. Therefore, research in education is strategic in that it is one of the necessary components to promote changes in basic education and higher education. Science and mathematics education, health education and language education are fields that have strategic value for the country's technological development as well as for the processes of humanization and improvement of the population's living conditions.

Final Considerations

This article, in essay format, adopts a theoretical-descriptive nature to reflect on the meaning of each part of the Assessment Form, and aims to contribute to the assessment inherent to the reality of programs and their training and research practices, valuing their insertion, modality and vocation in line with the teaching area criteria.

The 2017–2020 Quadrennial Assessment of *stricto sensu* GPs in the professional modality of the teaching area inaugurated a new assessment model, in which qualitative elements that were previously only appreciated in the contextualization of programs are now valued, receiving weight in assessment (Verhine et al., 2024) and revealing fundamental aspects for understanding the quality and impact of programs as feedback for future improvements.

The report produced from the CAPES Data Collection, completed by programs on the *Sucupira* Platform, emerged as a unique source of information, highlighting the need for clear and objective writing, in addition to the organization of precise and detailed data so that assessment analysis could proceed as expected. Thus, as a first point of attention, it is important for the faculty, program coordinators and vice-rectors to strive to present data that is clear, consistent and comprehensive, in order to reveal the qualities of GPs.

The presentation of the program's history and information related to items on the Assessment Form are extremely important. A well-structured and transparent narrative that articulates the area of concentration, the lines of research, graduate profile and the target audience is essential to demonstrate adherence to the teaching area and the professional modality. These elements are important for understanding the program identity and purpose, showing how each component contributes to training professionals who are capable and committed to Brazilian education.

The selection of highlights in the CAPES Data Collection report must be made carefully and transparently. The selection criteria must be clear and justified, elucidating how each of the nominations reflects the impact of the program and its economic, social, technological, academic insertion, among others. Coherence between the highlights and the objectives, demands and profile of graduates is essential, evidencing how actions and productions are aligned with the program mission and vision.

The arguments used to justify the highlights of the production indicated by the PPs must demonstrate adherence and alignment with the area of concentration, the lines of research and the scope of the teaching area. The academic production must reflect the identity of GPs and established objectives. The justification for indications must be robust, considering elements such as relevance, innovation and impact of the program on society.

The research developed must necessarily consider the scope of the area, assuming the aspects of teaching as the central object of study. This approach is crucial to guarantee the relevance and specificity of the dissertations/theses produced, strengthening the identity and impact of research in the field of teaching and education.

The specificity of the teaching area lies in the investigation of educational processes, pedagogical practices, educational policies and teaching-learning methods in different environments. Addressing these aspects as the main object of study allows for an in-depth and contextualized understanding of the complexities and challenges inherent in the theoretical and practical fields, when we observe the production of professional

programs. Moreover, it promotes innovation and continuous improvement of educational practices, offering well-founded and contextualized solutions to real problems faced in the educational, health, social and other environments. This understanding is extended to the educational processes and products generated by the programs.

On the other hand, when research deviates from this focus, producing "generic" works, which could be defended in any other CAPES area, this weakens the intellectual production of the field of education. The production of "generic" dissertations/theses, which are not closely aligned with the scope of the teaching area, compromises the capacity of GPs to contribute to the advancement of knowledge and educational practices, in addition to diluting the potential impact of their research in the educational field.

Therefore, GPs need to maintain a commitment to the specificity of the scope of the teaching area, as well as adherence to the area of concentration, research lines and structural research projects of the course. This implies guiding the projects so that they directly address the aspects of "teaching" as an object of study, contributing to a robust and specialized body of knowledge. This orientation strengthens intellectual production, ensures a significant impact on research and preserves the integrity and distinction of the areas of knowledge within CAPES.

The challenges of assessment are multiple and complex. Consultants face the task of interpreting and analyzing diverse data, which requires a deep understanding of the specificities of each program, considering the current assessment paradigm: which is to compare a GP with itself in the various assessment dimensions. Assessment is an opportunity for continuous learning in which consultants can improve their analytical and methodological skills, returning with important information to their institutions of origin, expanding the understanding of the dynamics of assessed programs, but, especially, contributing to consolidating the teaching area in Brazil.

In short, the four-year assessment of *stricto sensu* GPs in education, in the professional modality, requires a meticulous and integrated approach. Data quality, clarity in the program history presentation, justification of highlights and coherence of academic production are central elements for a consistent and effective assessment. This process not only recognizes the merits of programs, but also identifies areas for continuous improvement, promoting development and excellence in professional training.

It is also important to highlight the need for programs to understand that the responsibility for filling out the data in the CAPES Data Collection and presenting the justifications for the highlights is collective and collaborative, and that this task should not be the sole and exclusive responsibility of the GP coordination. After all, a GP is made up of coordination, PPs, collaborators and visitors, in addition to students, graduates and administrative technicians involved in the construction and committed to the development and success of the program and to its contribution to training qualified human resources and producing new knowledge in the area.

Acknowledgments

We would like to thank our institutions and the Brazilian National Council for Scientific and Technological Development (In Portuguese, *Conselho Nacional de Desenvolvimento Científico e Tecnológico* — CNPq) for the support of the authors' productivity research grants.

References

Andrade, J. B. (2005). A avaliação por pares. *Química Nova*, *28*(6), 1–1. https://doi.org/10.1590/S0100-40422005000600001

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). (2019a). *Documento de Área – Área 46: Ensino*. CAPES. https://www.gov.br/capes/pt-br/centrais-de-conteudo/ENSINO.pdf

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). (2019b). *Relatório do Grupo de Trabalho. Autoavaliação de Programas de Pós-Graduação. CAPES*. https://www.gov.br/capes/pt-br/centrais-de-conteudo/10062019-autoavaliacao-de-programas-de-pos-graduacao-pdf

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)/Diretoria de Avaliação (DAV). (2020). *Ficha de Avaliação – Programas Acadêmicos e Profissionais. Área 46: Ensino*. CAPES. https://www.gov.br/capes/pt-br/centrais-de-conteudo/FICHA_ENSINO.pdf

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). (2018). *Proposta de Aprimoramento do Modelo de Avaliação da PG Documento Final da Comissão Nacional de Acompanhamento do PNPG 2011-2020*. Ministério da Educação. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. https://www.gov.br/capes/pt-br/centrais-de-conteudo/18102018-pnpg-cs-avaliacao-final-cs-final-17-55-pdf

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)/Diretoria de Avaliação (DAV). (2023). *Relatório do Seminário de Meio Termo [Ensino]. Divulgação de informações da Área de Avaliação referentes ao Seminário de Meio Termo do quadriênio 2021-2024*. CAPES. https://www.gov.br/capes/pt-br/acesso-a-informacao/acoes-e-programas/avaliacao/sobre-a-avaliacao/areas-avaliacao/sobre-as-areas-de-avaliacao/colegio-de-ciencias-exatas-tecnologicas-e-multidisciplinar/multidisciplinar/Ensino_Relatorio_SMT_2023_46.pdf

Freire, P. (1997). *Pedagogia da autonomia: saberes necessários à prática educativa*. Paz e Terra.

Haydt, R. C. C. (2000). *Avaliação do processo ensino-aprendizagem*. Ática.

Leite, D. (2005). *Reformas universitárias: avaliação institucional participativa*. Vozes.

Leite, D. (2008). Ameaças pós-rankings sobrevivência das CPAs e da auto-avaliação. *Avaliação: Revista da Avaliação da Educação Superior*, *13*(3), 833–840. https://www.scielo.br/j/aval/a/bFwqzg6NNKTFRWqwT9YGG6M/?format=pdf&lang=pt

Leite, D. (03 de outubro, 2018). *A autoavaliação na pós-graduação. Alternativa, sistemática e componente do processo avaliativo CAPES*. 3º Seminário da Série Repensando a Avaliação - Avaliação Comparada da Pós-Graduação, Brasília, Distrito Federal.

Leite, D., Verhine, R. E., Dantas, L. M. V., & Bertolin, J. C. D. (2020). A autoavaliação na pós-graduação (PG) como componente do processo avaliativo Capes. *Avaliação: Revista da Avaliação da Educação Superior*, *25*(2), 339–353. https://doi.org/10.1590/S1414-4077/S1414-40772020000200006

Mendonça, A. P., Rizzatti, I. M., Rôças, G., Farias, M. S. F. (2022). O que contém e o que está contido em um Processo/Produto Educacional?. *EDUCITEC: Revista de Estudos e Pesquisas sobre Ensino Tecnológico*, *8*, e211422. https://doi.org/10.31417/educitec.v8.2114

Monteiro, A. (2019). O que é a inovação social? maleabilidade conceitual e implicações práticas. *Dados*, *62*(3), e20170009, 1-34. https://doi.org/10.1590/001152582019187

Mulgan, G., Tucker, S., Ali, R., Sanders, B. (2007). *Social innovation: what it is, why it matters and how it can be accelerated*. Young Foundation. https://www.youngfoundation.org/our-work/publications/social-innovation-what-it-is-why-it-matters-how-it-can-be-accelerated/

Mulgan, G. (2010). "Inovação Social". In C. Azevedo, R. C. Franco, & J. W. Menezes (coords.), *Gestão de organizações sem fins lucrativos: o desafio da inovação social* (pp. 51–74). Edições Vida Económica.

Neyra, P. (2014). *Avaliação formativa na licenciatura de espanhol: Autoavaliação e autorregulação em foco* (Dissertação de Mestrado, Universidade Federal do Pará, Belém, Pará). Repositório Institucional da UFPA. http://repositorio.ufpa.br/jspui/handle/2011/5905

Rossit, R. A. S., Poletto, P. R., Uchôa-Figueiredo, L. R., Lopes, K. F., & Mazzaia, M. C. (2024). Autoavaliação como estratégia de planejamento em um programa de pós-graduação. *Avaliação: Revista da Avaliação da Educação Superior*, *29*, e024002. https://doi.org/10.1590/1982-57652024v29id272994

Phills Jr., J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation. *Stanford Social Innovation Review*, *6*(4), 34–43. https://doi.org/10.48558/GBJY-GJ47

Schraiber, L. B. (2011). Quando o 'êxito técnico' se recobre de 'sucesso prático': o sujeito e os valores no agir profissional em saúde. *Ciência & Saúde Coletiva*, *16*(7), 3041–3042. https://doi.org/10.1590/S1413-81232011000800003

Verhine, R. E., Dantas, L. M. V., & Souza, A. R. (2024). Indicadores qualitativos na avaliação da pós-graduação em educação. *Estudos em Avaliação Educacional*, *35*, e10777. https://doi.org/10.18222/eae.v35.10777

Zeichner, K. M., & Diniz-Pereira, J. E. (2005). Pesquisa dos educadores e formação docente voltada para a transformação social. *Cadernos de Pesquisa*, *35*(125), 63–80. https://doi.org/10.1590/S0100-15742005000200005

Zeichner, K. M. (2014). Formação de professores para a justiça social. In M. Moreira, & K. Zeichner (eds.), *Filhos de um deus menor. diversidade linguística e justiça social na formação de professores* (pp. 135–151). Edições Pedago.

Rosana Aparecida Salvador Rossit

Universidade Federal de São Paulo
Santos, São Paulo, Brasil
rosana.rossit@unifesp.br

Cleidilene Ramos Magalhães

Universidade Federal de Ciências da Saúde de Porto Alegre
Porto Alegre, Rio Grande do Sul, Brasil
cleidirm@ufcspa.edu.br

Ivanise Maria Rizzatti

Universidade Federal de Roraima
Boa Vista, Roraima, Brasil
niserizzatti@gmail.com

Giselle Rôças

Instituto Federal do Rio de Janeiro
Rio de Janeiro, Rio de Janeiro, Brasil
giselle.rocas@ifrj.edu.br

Editor in charge: Aline Andréia Nicolli

Translated by: LSB Traduções

Journal financed by Associação Brasileira de Pesquisa em Educação em Ciências — ABRAPEC

Manifestation of Attention to Good Scientific Practices and Exemption from Interest and Responsibility

The authors declare that they are responsible for complying with the ethical procedures provided by law and that no competing or personal interests could influence the work reported in the text. They assume responsibility for the content and originality, as a whole or in part.