Jesús Gabalán-Coello

Fredy Eduardo Vásquez-Rizo

Michel Laurier

Evaluating Teaching Practices in Graduate Programs

Universidad AUTÓNOMA de Occidente

ACREDITACIÓN INSTITUCIONAL DE ALTA CALIDAD
Vigilada MinEducación.
Res. no. 16740, 2017-2021.

Springer

SpringerBriefs in Education

We are delighted to announce SpringerBriefs in Education, an innovative product type that combines elements of both journals and books. Briefs present concise summaries of cutting-edge research and practical applications in education. Featuring compact volumes of 50 to 125 pages, the SpringerBriefs in Education allow authors to present their ideas and readers to absorb them with a minimal time investment. Briefs are published as part of Springer's eBook Collection. In addition, Briefs are available for individual print and electronic purchase.

SpringerBriefs in Education cover a broad range of educational fields such as: Science Education, Higher Education, Educational Psychology, Assessment & Evaluation, Language Education, Mathematics Education, Educational Technology, Medical Education and Educational Policy.

SpringerBriefs typically offer an outlet for:

- An introduction to a (sub)field in education summarizing and giving an overview of theories, issues, core concepts and/or key literature in a particular field
- A timely report of state-of-the art analytical techniques and instruments in the field of educational research
- A presentation of core educational concepts
- An overview of a testing and evaluation method
- A snapshot of a hot or emerging topic or policy change
- An in-depth case study
- A literature review
- A report/review study of a survey
- An elaborated thesis

Both solicited and unsolicited manuscripts are considered for publication in the SpringerBriefs in Education series. Potential authors are warmly invited to complete and submit the Briefs Author Proposal form. All projects will be submitted to editorial review by editorial advisors.

SpringerBriefs are characterized by expedited production schedules with the aim for publication 8 to 12 weeks after acceptance and fast, global electronic dissemination through our online platform SpringerLink. The standard concise author contracts guarantee that:

- an individual ISBN is assigned to each manuscript
- each manuscript is copyrighted in the name of the author
- the author retains the right to post the pre-publication version on his/her website or that of his/her institution

More information about this series at http://www.springer.com/series/8914

Jesús Gabalán-Coello
Fredy Eduardo Vásquez-Rizo • Michel Laurier

Evaluating Teaching Practices in Graduate Programs

Universidad
AUTÓNOMA
de Occidente

ACREDITACIÓN
INSTITUCIONAL
DE ALTA CALIDAD
Vigilada MinEducación.
Res. No. 16740, 2017–2021.

Springer

Jesús Gabalán-Coello
Academic Vice Rectorate
Universidad Católica de Pereira
Pereira, Risaralda, Colombia

Fredy Eduardo Vásquez-Rizo
School of Communication & Social Science
Universidad Autónoma de Occidente
Santiago de Cali, Colombia

Michel Laurier
Faculty of Education
University of Ottawa
Ottawa, ON, Canada

Preface

Today, educational evaluation is one of the pillars on which the quality of universities and, therefore, the quality assurance systems in higher education institutions are based. This has allowed, from an institutional evaluation approach, to relate aspects concerning the institutional mission or project, academic resources, curricula, physical and financial resources, as well as teaching-learning processes, in which students and teachers play a leading role.

It seems that there is a certain consensus on the part of the scientific community that specialises in this field on the meaning of evaluation as a process that transcends a perspective of measurement or observation to become a tool that seeks to contribute to the improvement of the quality of teaching processes and integrates professor development as a transversal element.

The foregoing is the framework in which this reflection is developed, which attempts to foster discussion around the aspects that turn a professor into a high-quality one. This is according to the perception of those involved in a teaching-learning process, in this case, having as a field of study a higher level context, such as postgraduate studies.

Thus, Chap. 1 of this book is based on a general definition of evaluation and its meanings in different types of contexts, as well as its various related elements. Here, the concept of evaluation is presented from a holistic perspective and then an approximation is developed towards the constituent elements of evaluation in the specific educational context, pointing out obligatory reference authors and some historical referents. Then, the concept of *professor evaluation* is introduced, since relations in the educational context emerge due to the confluence of two actors: those who want to learn and those who have something to teach.

Based on the above concern, a review of the literature on the treatment that the scientific community has made around these aspects is carried out in Chap. 2. Here, an institutional view is taken through factors, and professors are identified as a factor of great weight in the analysis of institutions, since the perception of the quality of higher education institutions is increasingly a reflection of the perception of the quality of their teaching staff.

At the end of this review, the differential situation is presented in undergraduate and graduate studies (finding prevalence in the former). In the same manner, numerous sources of information related to students are evidenced, which, according to the consulted bibliography, in many cases leave with little participation other possible (and perhaps important) sources, such as the professor himself, the directorate and his peers.

Chapter 3 introduces a conceptual framework in which, in the first place, an approximation to the central concepts is presented because they are taken into account in postgraduate professor evaluation and to concepts that are peripheral or contextual and that should also be considered. Some of these are institutional evaluation approaches and their corresponding procedures, techniques, and instruments. Likewise, the elements exposed in the literature review and how they come together to guide the methodological approach to be proposed in relation to the graduate field are related.

Chapter 4 outlines a proposal for a methodological approach consisting of four fundamental moments, known as prelude, quantitative approximation, qualitative approximation and proposal for an integrating vision. These moments have the purpose of guiding in the path of auscultation on the preponderant aspects in the graduate teaching function according to the perception of those involved. In this sense, they are conceived to help any institution of higher education that wishes to implement this model of analysis. Finally, the ethical considerations of the study are addressed.

Subsequently, in Chap. 5, a step-by-step development of the methodological postulates is carried out, taking into account a specific case of validation (supported by a master's degree in engineering, active in an institution of higher education). This is done due to the need to validate the proposal contained here in a specific scenario, in such a way that the model presented undergoes a rigorous process that leads to its certification.

Finally, in the section "Final Thoughts", an academic discussion is proposed with the intention of presenting the main findings synthetically and positioning the reader in the understanding of the educational phenomena that take place in the postgraduate field. These lead the reader not only to recognize the importance of this context but also to reflect on the scope and limitations of this type of study, inviting him/her to reflect and think about future works associated with the current and evolving state of educational evaluation in advanced training environments.

Pereira, Risaralda, Colombia   Jesús Gabalán-Coello
Santiago de Cali, Colombia   Fredy Eduardo Vásquez-Rizo
Ottawa, ON, Canada   Michel Laurier

Contents

Chapter 1
Evaluation in the University Context: From the General to the Particular

1.1 The Evaluation Environment

The evaluation adopted in organisational contexts implies observation or measurement through instruments, in order to guarantee the effectiveness of the processes, understanding effectiveness as the confluence between the good administration of resources (efficiency) and the guarantee of the scope of the results (effectiveness). It seems, therefore, that there is an initial relationship between the word *evaluation* and the appearance on stage of the term *subordination*. Towards the beginning of the twentieth century, Taylor and Ford used this concept within the production line, through which production is sought in a rational and efficient way, standardising times and movements and valuing the levels of productivity of the operator within a predetermined productive scheme. For his part, Fuchs (1997) argues that the systematic use of performance evaluation began in governments and the armed forces at the beginning of the last century.

In agreement with the above, the evaluation in the organisational dynamics has associated concepts such as *supervision* and *subordination* (supervision on the part of an employer, leader or person in charge of leading a team towards the achievement of the proposed objectives and subordination on the part of the people who agree to follow their guidelines in the achievement of these objectives). On the basis of what is mentioned, and according to data, figures and relevant information, the state of progress or the percentages of error in the achievement of the objectives and the goals set is contrasted. This precedent step gives rise to action plans as a means of timely intervention to correct deviations (giving appropriate prevalence to refusals) and with periodic intervention and periodic feedback during the time the action plan is established.

As can be seen, information (understood as data and figures interpreted in the light of criteria and that become relevant in a given context) is shown as a fundamental element in the evaluation process that marks an urgent need to ensure its

quality with respect to relevance and timeliness. To assess, for Pérez-Juste and García-Ramos (1989), is an act in which the characteristics to be assessed must be established and information about them must be collected in order to subsequently make decisions based on the judgement issued. Marquès-Graells (2000), for his part, conceives judgement as a goal and defines the process as predominantly associated with data collection. In this direction, he believes that "evaluation is a process of gathering information about something, person or action, aimed at the development of value judgments".

Other authors identify an evaluation with deep procedural roots according to measurable goals in the short, medium and long term. Espinoza (1986) presents evaluation as a basic exercise to compare an action with what had been planned.

Perspectives such as that of Stufflebeam and Shinkield (1987) put evaluation in a form of "applied social research", the purpose of which is to provide, in a valid and reliable way, data and information to support "a judgment about the merit and value" of the different components of a programme. It also relates to a set of activities that are carried out or will be carried out with the purpose of producing concrete results, verifying the extent and degree to which these results have been given. It is essential, according to Ander-Egg (2000), that evaluation should result in rational and intelligent decision-making between courses of action and promote understanding of factors associated with existing strengths or weaknesses in the achievement of results.

The above reflects, therefore, the logical consequence of identifying the evaluation from synergic relations of the perspectives related to measurement and the perspectives adept at understanding the phenomena studied. That is to say, the result takes on its relevance by itself, but the process, by means of which that result is obtained, is equally important.

According to the Inter-American Development Bank (IDB) (1997), the goal of evaluation has basically moved from auditing and blame (what they call first- and second-generation evaluation, measurement and description for comparison purposes, respectively) to the current goal of understanding and learning from experiences gained (what they call third and fourth generation, value services and use of concepts of transparency, executive accountability and performance coordinated through analysis of all available data).

The transversal role of evaluation exercises is now undeniable, given the multiplicity of disciplinary fields in which a preponderant participation can be evidenced. (In this regard, review Bisai and Singh (2018), who in India use assessment to determine the process of learning and language acquisition in a group of children, or Thulare (2018), who in South Africa uses assessment to analyse the effective implementation of some public policies, among many other examples, where the use of assessment can be seen in different fields, some of them confluent or transversal).

Thus, one of these fields of reference is education within its most generalisable conceptualisation, which is where this concept is perceived as:

> A moment of detention in the formative process, by virtue of which the subject distances himself from his own praxis and his objectifications with the intention of reflecting on them, judging them, elaborating the corresponding critique and converting his process of objectification into experience that allows him to recover as an enriched subject. (Yurén-Camareda 2000; 55)

In accordance with the above, an approach to evaluation will be proposed below, using educational processes as a framework for analysis.

1.2 Evaluation in an Educational Context

In order to be able to talk about evaluation in the educational context, first of all, there must be clarity in relation to two important concepts: educational quality and educational effectiveness.

The first, understood, according to Mosquera-Albornoz (2018), as being able to achieve such a degree of satisfaction for those who are educated that what is learnt allows them to grow not only in their academic aspect but also as a person, in such a way that the education they acquire makes it possible for them to solve various problems in their lives and in their context. Position shared by Egido-Gálvez (2005), when affirming that whoever wants to understand evaluation as a process associated with education must understand that it must necessarily involve or bet on the quality of education, underpinning what is known as educational pertinence.

In this sense, educational evaluation becomes not only an activity associated with the teaching-learning process but also an instrument of social control (to know the level of achievement of the planned educational objectives) (Marquès-Graells 2000) and an input of improvement and optimisation of the quality of the educational system in which it is applied (Eroshkin et al. 2017). That is to say, it is a type of evaluation that is oriented more towards the provision of information that can improve the quality of education, as a guarantee of that quality, than towards simple sanction, classification or selection.

For his part, Burlaud (2007) states that this social condition of education (including its evaluation process) demands that its quality and pertinence take into account external factors and diverse dimensions associated with the subject being educated and his/her environment (contextual, epistemological, historical, curricular, socio-affective, didactic, organisational and psycho-pedagogical). These must make it possible to measure the impact of said evaluation on their own quality of life.

Thus, the concept of educational quality must involve not only aspects of training or academics but also take into account other elements related to the usefulness of such education in society. In this regard, Braslavsky (2004), through a study with the Organization of Ibero-American States (OEI) and the Santillana Foundation, proposes to consider (1) personal and social relevance; (2) conviction, esteem and self-esteem of those involved; (3) ethical and professional strength of those involved; (4) leadership capacity of leaders and directives; (5) teamwork inside and outside the school and the educational system; (6) alliances with other agents associated or not with education; (7) curriculum at all levels; (8) quantity, quality and availability of educational materials; (9) plurality and quality of methodologies and didactics; and (10) socio-economic and cultural incentives, among many other existing proposals, all of them depending on the context surrounding the educational process.

On the other hand, in terms of educational effectiveness, a concept also associated with educational pertinence, this is a fundamental indicator of educational quality (Sammons et al. 1998), since it measures, in the training process, the maximum possible approximation between the initially planned objectives and the results obtained at the end of said process (Bandeira-Andriola 2000).

In other words, educational effectiveness tends to become one of the main objectives of educational policies (Verger and Normand 2015), since it is the way to verify, through diverse variables, whether the formative process has been carried out correctly or not.

This is how Sammons et al. (1998) propose to analyse, within this indicator, the following influential factors. These are not independent nor do they represent an exhaustive list, since, as with educational quality, there are different authors who propose diverse variables, but all of them are related to the assessment of a before and after of the educational process: (1) leadership, (2) shared vision and objectives; (3) learning environment, (4) teaching-learning as the epicentre of school activity, (5) teaching as purpose, (6) high expectations, (7) positive reinforcement, (8) monitoring of student progress, (9) student rights and responsibilities, (10) household-educational centre collaboration and (11) learning organisation.

In this way, educational effectiveness breaks different schemes of traditional education to give way to a formative intentionality centred on the permanent contrast of the lessons that the student acquires or is gradually acquiring, or of the environments that surround him. These make him be seen no longer as a passive subject of the process, who receives the teacher's instructions, but as an active individual, constructor of his own knowledge and recogniser of his context and destiny (CIAE 2015).

Based on the foregoing, it can be said in general terms that evaluation (as an important aspect of the educational process, tending towards educational effectiveness and improvement of educational quality) presupposes a specific way of knowing reality. This is exemplified through the educational reality, in which evaluation functions as an element that helps to identify possible changes that contribute to its improvement. It is under this framework that evaluation is recognised as a "process of gathering information aimed at issuing judgments of merit or value regarding some subject, object, or intervention with educational relevance" (Mateo 2000).

In the same direction, it seems that evaluation in education would be responsible for directing questions around what, who, how, why, for what and when to teach. In this regard, De la Orden (1989) states that evaluation determines what students learn and how they learn it, what teachers teach and how they teach it, contents and methods, in other words, the product and process of education. Consciously or unconsciously, the educational activity of students and teachers is to some degree channelled through evaluation.

Therefore, evaluation in education becomes a systematic process of identification, collection or treatment of data on educational elements or facts, with the aim of first assessing them and, on the basis of this assessment, making decisions (García-Ramos 1989).

1.2.1   Some Historical References

Before beginning with the illustration of some periods that have marked the development of the concept of *evaluation* in the field of education, it is necessary to reiterate that evaluation is a complex but inevitable process (Stufflebeam and Shinkield 2007), given that it is a positive force when it serves progress and is used to identify weak and strong points and tend towards improvement.

There is undoubtedly a perceived association between education and evaluation, and it is further abstracted that this correspondence has existed for a timeline spanning several decades. On this matter, Monedero-Moya (1998) identifies several periods in the history of evaluation in education. These periods are described below, and some authors are added to them that will contribute to construct the framework of the studied problematic.

1.2.1.1   Era of Reform

Approximately, it is located in the nineteenth century. Educational evaluation is understood as a synonym for the word *measurement*. This returns to the not very dynamic evaluation focused only on the figure, with a lack of elaborated reflections and analyses. In fact, a static position of evaluation is defended, and the main function is to inquire about how schools function. In the transition between this period and the next, Binet (1905) builds the first scales for measuring intelligence.

1.2.1.2   Era of the Measurement Generation

It is located at the beginning of the twentieth century. The scientific community is beginning to show interest in studying school problems and school performance, using the term *evaluation* always in the company of the measurement paradigm. It is in this generation that psychometric techniques take centre stage. Research is focused on creating school tests and developing knowledge test scales.

In this way, "static" measurement begins to consider elements that are not only quantitative in nature, although they continue to be the predominant ones. This makes it possible to evaluate different types of processes that involve giving certain management to their constituent elements, after having been identified according to their degree of importance and diverse characteristics, and having interrelated them (Cortés-Lozano and Vásquez-Rizo 2015).