

REVISTA DE EDUCACIÓN

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The thesis workshop in the doctoral training process

El taller de tesis en el proceso de formación doctoral

O workshop de tese no processo de formação de doutoramento

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ABSTRACT

In the process of doctoral training, the formation of research skills is essential; one of the ways in which doctoral committees can influence this is through thesis workshops, hence the objective of this article is to propose actions to improve the performance of these in terms of their training function. To fulfill this objective, from the theoretical point of view, the historical-logical and systemic method, as well as the technique of documentary analysis were used, while from the empirical point of view, the measurement method and the techniques of documentary analysis, survey and interview were used. The main results are, from the theory point of view, the skills to be trained, as well as characteristics of the the thesis workshops, and from the practice point of view, the difficulties of the workshops at the University of Pinar del Río, among which are the insufficient visibility of the publications of the doctoral students, the little use of info-technological tools, the diversity of methodologies to develop the workshops in the different programs, the insufficient discussion and argumentation on the part of the doctoral students, among others, so it is concluded with a proposal to normalize the realization of the thesis workshops in the university in order to increase their quality and impact.

Key words: thesis workshops; doctoral training.

RESUMEN

En el proceso de formación doctoral, la formación de habilidades investigativas es esencial; una de las vías que pueden emplear los comités de doctorado para incidir en ello son los talleres de tesis, de aquí que el objetivo del presente artículo sea proponer acciones para perfeccionar la realización de los mismos en lo que a su función formativa se refiere. Para cumplir con dicho objetivo se emplearon, desde el punto de vista teórico, el método histórico-lógico y el sistémico y técnica de análisis documental, la mientras que desde el punto de vista empírico se empleó el método de medición y las técnicas de análisis documental, encuesta y entrevista. Como resultados principales desde la teoría fueron, las habilidades a formar, así como las características de los talleres de tesis y desde la práctica, las dificultades de los talleres en la Universidad de Pinar del Río, entre las que se encuentran: la insuficiente visibilidad de las publicaciones de los doctorandos, el poco uso de infotecnológicas, herramientas la diversidad de metodologías para desarrollar los talleres en los diferentes programas, la insuficiente discusión y argumentación por parte de los

doctorandos, entre otras, por lo que se concluye con una propuesta para normalizar la realización de los talleres de tesis en la universidad de manera que se eleve la calidad e impacto de los mismos.

Palabras clave: talleres de tesis; formación doctoral.

RESUMO

processo de formação No para doutoramento, а formação de competências de investigação é essencial; uma das formas em que os comités de doutoramento podem influenciar, isto é, através dos workshops de tese, daí que o objetivo deste artigo seja propor ações para melhorar o desempenho destas em termos da sua função de formação. A fim de cumprir este objetivo, foram utilizados, de um ponto de vista teórico. O método histórico-lógico e o método sistémico e a técnica de análise documental foram utilizados, enguanto do ponto de vista empírico, o método de medição e as técnicas de análise documental, inquérito e entrevista foram utilizados. Os principais resultados são, a partir da teoria, as competências a formar, bem como as características dos workshops de tese e da prática, as dificuldades dos workshops da Universidade de Pinar del Río, entre as quais se destacam a insuficiente visibilidade das publicações dos doutorandos, a pouca utilização de ferramentas informáticas, a diversidade de metodologias para desenvolver os workshops nos diferentes programas, a insuficiente discussão e argumentação por parte dos doutorandos, entre outros, pelo que se conclui com uma proposta de normalização da realização dos workshops de tese na universidade a fim de aumentar a sua qualidade e impacto.

Palavras-chave: workshops de tese; formação de doutoramento.

INTRODUCTION

Since the incorporation of research into the university by the Humbolt brothers in Germany in the 19th century, doctoral training has been one of the main tasks in this process, both for oneself and for society. Throughout these years, the ways of doing research and teaching have changed and with it the ways in which PhDs are formed, hence the union between these processes, far from weakening, has been strengthened.

The strengthening of the preparation of PhDs in Cuba is an urgent need that demands changes and transformations that take into account the national and international experiences. In the institutional order, the Decree Law 372/2019 recovers the national experiences and updates the regulations according to the best international decentralizing practices, the to authorized institutions a group of activities that give them a greater autonomy for the decision making, at the same time that they acquire a greater responsibility in the processes of admission, formation and exit of doctorate students.

According to Saborido 2018:

The key aspect in this analysis is the structuring of doctoral programs, conceived in deep integration to research. This implies solid research groups working on relevant R+D+i projects, according to national or territorial priorities, with bold strategies in the lines of research and with the capacity to attract and train integral young talents willing to accept the arduous challenge of becoming PhDs (p.8).

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In order to reach a consensus on the changes reflected in the new regulations, there was a long process of analysis, discussion and decision making at the national level among the CNGC (In Spanish), the permanent courts and the authorized institutions, which, although it was difficult due to the introduction of new ways to manage the programs, has changes that are mainly oriented to the management of doctoral training.

As a result of this process, other changes must take place, some ones in the order of administration of the programs at the level of authorized institutions and doctoral programs, but the most important ones must take place in the mentality of the faculty of PhDs who intervene in the formation process that takes place within each program, in order to change the methods and forms used mainly in their content.

The MES (Ministry of Higher Education) and the country need an increase in the number of PhDs to be trained so that they can be incorporated with all the skills trained into the development of the universities and the country. Increasing the number of PhDs involves, among other things, increasing the academic efficiency of the doctoral training process and reducing the number of extensions. In both cases, the quality of the training process developed by the program is essential.

In the analysis of doctoral training, the emphasis has historically been placed on the exit indicator, but the changes that are to be achieved require that the entry and process indicators be worked on with the same exigency and depth, methodologically in the procedures and good practices that can guarantee the quality of the same to ensure the exits as planned.

In the current context, the accelerated training of PhDs is developed by working increasingly with younger professionals, with limited professional experience and scarce development of research skills, which is a major challenge for each program, which should enable them to achieve the knowledge and scientific results that lead them to the successful development and defense of the doctoral thesis adjusted to the time periods recognized in the legislation.

According to Alvarez and Difabio 2018, pedagogy at this level must overcome the mistaken assumption that candidates are "already and always" autonomous academics at the beginning of their application (Johnson, Lee & Green, 2000); they are again students who must incorporate the knowledge, skills, and intellectual habits of a specific field of study, in a process that will allow them to investigate a relevant topic from a high level of professional competence.

Increasing the number of trained doctoral students means increasing the number of tutors in a context where, according to the data of the MES, although more than half of the PhDs form PhDs, the necessary indicators are not reached.

Scientific leaders are essential and more and better incentives should be given to PhDs who know, can and want to train others. It is appropriate to work, in general, on the basis of a researchformative pyramid, with scientific leaders at the top as heads of large projects, as supervisors, followed by other experienced PhDs as tutors of doctoral students in training within a project research area, up to a base of undergraduate students in training within the research project.

In this context, the systematic work of the program's doctoral staff, under the leadership of its doctoral committee, is essential to achieve the development and/or formation of the skills that doctoral students must demonstrate in the final exercise of defending their thesis results.

One of the ways in which the doctoral program can work on these skills is through the so-called thesis workshops. These are the intermediary step between the development of each of the research tasks that should lead to the results that will be presented in the form of scientific articles, presentations for events and finally the thesis and its oral communication, whose characteristics are very particular and typical of this type of event.

According to Alvarez and Difabio 2018, feedback (which should be given in the framework of thesis workshops) is especially important for the learning experiences of PhD students, since the comments of the supervisors (or reviewers) are usually the main form of instruction. On the other hand, feedback can enhance learning as long as it integrates an appreciation of the student's work and an explanation of the criteria used for this weighting, as well as student action based on what they have learned.

The observation of the development of thesis workshops, pre-defenses and thesis defenses in all the doctoral programs of the university has allowed the identification of failures in the formative function of the thesis workshops manifested in the performance of the doctoral programs.

Hence, the objective of this article is to propose actions to improve the performance of thesis workshops in terms of their formative function.

MATERIALS AND METHODS

The results that are exposed were supported in the use of a group of methods of investigation of the theoretical and empirical levels, all from a Marxist-Leninist approach, taking as a main method the dialectic-materialist one. Among the methods on the theoretical level are systematization and modeling, and among the methods on the empirical level were applied documentary analysis, observation, the interview, the survey, and the procedure of methodological triangulation.

From a population of 127 doctoral students at the moment of the investigation, we worked with a sample of 53 doctoral students belonging to the five doctoral programs approved in the University of Pinar del Rio, formed in the last four years, from 2016 to 2019, at a rate of 25 in the program of Education Sciences; 12 in the program of Economic Sciences; nine in the program of Forest Sciences; five in the program of Agricultural Sciences and two in the program of Geology, following as selection criteria the year of formation and the objective to be evaluated in the workshop.

The performance of the doctoral students selected in the sample was observed in 53 thesis workshops: nine corresponded to initial thesis workshops, where the objective was centered in the quality of the theoretical-methodological design; 11 to thesis workshops dedicated to the presentation and debate of the state of the art; 10 to thesis workshops where the results of the diagnosis of the initial state of the object of investigation were presented; 13 to thesis workshops where the solutions to the scientific problem were presented and 10 to workshops declared from passing to pre-defense with complete theses.

In addition, 47 tutors of the 53 previously selected doctoral students were interviewed, and 32 PhDs who served as coordinators of the 53 thesis workshops conducted and 91 PhDs who were members of the workshops as part of the faculty of the programs were surveyed.

As a result of the application of the research methods, a group of theoretical and practical conclusions were reached that allowed their partial socialization

within the programs, the integrated results of which are shown below.

RESULTS

The bibliography consulted for the theoretical diagnosis agrees on the importance of developing research skills, in line with the times, during the process of training doctoral students.

In the Decree Law 372/2019 about the National System of Scientific Degrees of Cuba, it is stated that

Article 5.1. The scientific degree of Doctor in certain area of knowledge is granted to university graduates who contribute significantly to the development of knowledge in their research topic and fully satisfy the requirements and corresponding evaluations of their doctorate programs.

5.2. The training Article process culminates with the defense before the designated tribunal of an original thesis that demonstrates a degree of scientific maturity, the ability to face and solve complex problems independently, and a profound theoretical and practical mastery of the area of knowledge of the studied, through program the presentation of the result achieved, based on the novel solution of a theoretical or practical scientific problem.

However, sometimes it happens that at the moment of pre-defending or defending their results as doctorate students, publishing in highly recognized magazines or preparing works for events or for opting for awards, difficulties arise due to insufficiencies, sometimes already insurmountable, in the design and execution of the research tasks, in the writing of the documents, in the argumentation and demonstration of the results, among others, which is why we agree with Saborido (2018) about the need of a good research training in

doctorate programs to avoid this happening.

The scientific training of doctoral students is currently more important than ever, due to the changes that have been experienced in recent decades in the ways of doing research and producing knowledge. According to Cruz (2014):

...the production of knowledge is undergoing a radical transformation that changes the `old' way of doing research, characterized by homogeneity (tendency to solve simple problems) and by the tendency to limit itself to its own discipline, to establish hierarchies, to work on mini-research projects and to set knowledge transfer as the goal of research, by a new form that pays special attention to the solution of complex problems, favors processes of codification of tacit knowledge in macro projects of scientific and applied research, of interdisciplinary character and sets as a goal of research and development, innovation (R+D+i) (p. 650).

Medina (2003) sets forth the challenge of moving from the formation of research skills in doctoral students to the formation of scientific competencies, understanding as such the repertoire of observable behaviors that integrate attitudes, values, aptitudes, appropriate knowledge, skills and personality traits.

According to Manathunga et al. (2006), cited by Cruz (2014), this is a new pedagogy for interdisciplinary doctoral training in four dimensions: the first has to do with the teaching and learning

processes through which it is possible to create spaces for dialogue, so that professionals from different disciplines can interact using different methods and tools and so that they can create and exchange new knowledge. The second is like an intercultural experience through professionals from different which disciplines can re-evaluate their own concepts and practices in light of those of other disciplines. The third is the possibility of encouraging professionals from different disciplines to use their capacity for analytical and creative thinking to reorganize knowledge in such a way that they can not only generate innovative solutions to a problem but also evaluate the effectiveness of those solutions. The fourth is the possibility that students can understand how new knowledge is naturally generated in their own discipline (epistemology) and how this new knowledge may relate to or conflict with that generated in other disciplines.

According to Cruz (2014), it is a matter of assuming a new training paradigm whose teaching-learning environments will facilitate the doctoral student to acquire the capacity to:

- Reason in an analytical, critical, practical and creative way
- Conceptualizing a problem or an object of study
- Integrate and synthesize information
- Make reasoned value judgements
- Arguing with academic rigor
- Create and interpret new knowledge
- Research
- Show
- Learning autonomously
- Get motivated
- Self-regulation
- Communicate (express yourself in persuasive and coherent prose)
- Persevere in the face of frustration
- Tolerate ambiguity
- Taking risks

- Understand academic and commercial exploitation processes
- Use information technology
- Demonstrate flexibility and impartiality
- Teamwork, networking
- Adjusting to change
- Make decisions in complex, unpredictable and highly uncertain situations.
- Assume personal, social, ethical and environmental responsibility
- Academic and administrative management

Thesis workshops have been defined as a scenario to work on these skills. According to Hernández et al. (2009) the thesis workshop is a particular type of scientific-pedagogical activity typical of the process of formation of the doctoral student, directed by a scientific working body in order to develop and prove the achievement of the necessary skills for the successful oral presentation of the essential aspects of the research activity carried out and its defense with the adequate support of scientific means and vocabulary.

On the other hand, from the empirical point of view, the methods and techniques applied allowed obtaining a characterization of the current state of the doctoral formation process at the university and in particular how the development of the thesis workshops were reflected in this process, which is exposed through a summary that gathers the main strengths and weaknesses.

Strengths

- Adequate levels of motivation of the doctoral students for the presentation of their scientific results in the different activities organized by the training programs
- The active participation of the PhDs as members of the thesis

and pre-defense workshop tribunals.

 Favorable exchanges of experience between doctoral students, professors of the programs' faculties and tutors, because of the debate produced in the collective activities organized as part of the training process.

Weaknesses

- Although the PhDs participating in the thesis workshops have previous experience in this type of postgraduate organizational form, there is no uniform behavior and performance.
- Few questions are asked to the doctoral students by the members of the thesis and predefense workshops, prevailing the pointers and suggestions, which limits the possibility of developing the argumentation capacity of the doctoral students.
- In the answers to the questions and suggestions, not always the doctoral students rely on the main authors of the art studies carried out in the development of the thesis, demonstrating deficiencies in the capacity of argumentation.
- Sometimes the criticism made of the existing theories about the topic being researched is poor in quantity and depth.
- It is necessary to use qualitative methods that support the analysis of the studies carried out through the application of quantitative methods and info-technological tools.
- The application of statistical methods and techniques applied in the practical evaluation of scientific results are not always well founded.
- Sometimes, the vote in favor of the doctoral candidate for his or her pre-defense or defense does not correspond to the results of the written thesis and its defense.

- Delays in the presentation and/or confirmation of the minimum publications required by the programs, mainly in the magazines of high international impact as an indispensable requirement for the pre-defense of the thesis.
- Not all doctoral students have participated in enough thesis workshops prior to the predefense act.
- There are still divergent criteria related to the methodology of research by some PhDs, supported mainly by personal experiences that are not very updated.
- The necessary systematization in the development of methodological work by professors and tutors, organized by the programs as part of the improvement of the doctoral training process carried out at the university, has not been achieved.
- In the debates that are held in the thesis workshops, the relationship between the doctoral theses and the research projects to which they belong does not stand out.

DISCUSSION

Resolution 3/2020 of the Cuban National Commission of Scientific Degrees (CNGC) updates the conception, development and responsibilities in doctoral training in the country in line with what was approved in Decree Law 372. In its Article 25, it defines the functions of the doctoral committee as managing the academic development of the program, executing the admission process, proposing the admission of doctoral students, elaborating and controlling the individual training plan of each one of them and coordinating the activity of the participating institutions and collaborators of the program.

Point 13, Annex 1 of the aforementioned resolution, dedicated to specifying the components of the doctoral programs, states that within them is the:

b) conducting collective and systematic scientific discussions conducted by the scientific leaders of the research lines, project leaders and tutors for the presentation of the results of the scientific tasks performed by the doctoral students in the group and that allow the assessment of their research progress.

It remains then, under the responsibility of each doctoral committee to define the form, structure, typology and content in which these discussions will be developed in order to achieve the expected results in the training of future PhDs, which to some extent explains the results shown in the empirical diagnosis.

Regardless of the fact that in each area of science there can be different ways to carry them out, in the case of the doctorate programs conducted by the University of Pinar del Río "Hermanos Saíz Montes de Oca", which cover the Education, Economic, Geological, Agricultural and Forestry Sciences, the use of the so-called thesis workshops has been generalized, without having a theoretical base on the conception and development of them, not so much in their denomination, since they are declared in the five programs, but inside their execution.

Although thesis workshops can be organized in the different scenarios in which doctoral training must take place, only those organized and conducted by the doctoral committee are of interest here, and their objective is to evaluate the progress of the research process carried out by the doctoral student.

According to Perez (2005), the workshop can be defined as a non-academic form of the postgraduate course that can be identified as a living trial of exposure and collective and individual learning. It is a space where ideas are exchanged, reflections and individual and collective assessments are produced, and consensus is reached. Therefore, it is not only a learning space for doctoral students but also for the group of PhDs who take part in it.

In the Postgraduate Regulation of the Republic of Cuba, RM 140/2019, in its article 20.2, it is recognized the workshop as a secondary organization form within professional improvement.

The workshops can be developed in different moments of the doctoral candidate's formation process, mainly to evaluate the results of the macro tasks of the scientific research process, there is not a pre-established quantity, which should be defined according to the competences that the doctoral candidate is demonstrating.

They are considered a confrontation exercise, which requires the doctoral student to present in oral and written form his or her main results, which allows the evaluation of the development of his or her scientific vocabulary, projection towards the public, argumentation capacity, capacity to listen and interpret in order to respond with solid arguments, self-criticism capacity, capacity to design and handle information technologies, both in the oral presentation and in the written presentation of the document; skills all of which, as previously listed, are essential to achieve good results at the end of the stage.

The training function of the workshops will not be fulfilled if all the participating PhDs are not previously prepared from the material that will be presented by the doctoral candidate to guarantee the realization of scientifically and ethically sound interventions.

Hence, it is ratified that the results of the thesis workshops, as a training scenario, depend on the level of development of the capacities that the doctoral students,

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the tutors and the rest of the members of the program's faculty wish to form.

The scientific-methodological work within the program's faculty is essential to increase the program's preparation and to propitiate a change of mentality and the development of the competencies that are currently needed to conduct the doctoral training processes. In these activities it is necessary to insist on the conscious and active participation in these workshops, in the study of the material and in the ethical behavior of each one.

On the other hand, through the methodological work, а certain homogeneity must be guaranteed at the level of the program's faculty regarding the characteristics of the methodology of scientific research that must be assumed, avoiding that the PhDs participating in the workshops rely only personal experiences, on their guaranteeing а common scientific language of action.

The thesis workshops cannot be only dedicated to the presentation of the final results of the research, since each one of the advances achieved is susceptible to be questioned and, therefore, defended or rectified and in terms of the preparation of the doctoral student it propitiates valuable and irreplaceable experiences for the future pre-defense and final defense of the thesis report (Hernández et al. 2009).

From the multitude of advances that can be presented to scientific judgment and defended by the doctoral student, Hernández et al. (2009) identify the following, due to their capacity to enable them to carry out a demonstrative exercise of the theoretical and methodological domain achieved and to propitiate recommendations that turn out to be crucial guarantees for the subsequent research work:

- to present the status of the studies carried out on the topic and the research design to address the particular scientific problem.
- to present the theoretical and methodological foundations of the object of study that will be assumed as the theoretical frame of reference in research and the instrumental apparatus for empirical investigations.
- to present the result of the empirical investigations of diagnostic order and the partial conclusions that lead to the conception of the proposal of scientific solution.
- to present the complete report of the thesis.

As training scenarios, in these workshops, in addition to those that directly intervene in the program, it is convenient to have the participation of other doctoral students who work in different stages of the program. The thesis workshops are open spaces for the communities where they will take place.

Álvarez and Difabio (2018) demonstrated that when the teacher's feedback includes suggestions and questions, instead of direct corrections, the students respond more constructively: they not only discuss the content of the work, but also produce significant changes in the arguments of the texts they are writing, as well as that the students prefer the feedback embedded in the writing work, which transmits a comment or a question from the teacher.

Based on the precedents discussed above, a group of actions are proposed that will allow the completion of the thesis workshops in the doctoral programs of the University of Pinar del Río "Hermanos Saíz Montes de Oca".

Action 1

To assume as general objectives of the thesis workshops in the doctoral programs of the university the following:

- To ensure that doctoral students prepare their doctoral thesis plan, according to the requirements established by each area of knowledge and each thesis committee.
- To deepen the recognition of the characteristics and academic requirements of a doctoral thesis.

To contribute to ratify the theoreticalmethodological design of the research proposed by the doctoral student.

- To strengthen the research in progress, through the constructive criticism of all participants.
- Collaborate in the construction of a communicable line of argument for each thesis.
- To favor the collaboration between doctoral students, tutors and members of the program's faculty.

Responsible: PhD committee

Action 2

Consider that in doctoral programs the number of workshops organized by each doctoral student should be flexible, depending on the characteristics of the researcher, the topics covered and the context in which the training is carried out.

Person in charge: doctoral committee

Action 3

Consider that among the main contents that should make up the thesis workshops aimed at training PhDs, there is no lack of aspects such as the following, which can be planned separately or in some cases shared in the same workshop

- Defend the theoretical and methodological design of the research to be carried out.
- To present the results of the study about the theoretical and methodological references related to the object of research, where it demonstrates the need for science to carry out its thesis and find the foundations for its future contributions.
- Present the results of the empirical diagnosis where he demonstrates the existence in social practice of the scientific problem he intends to solve with his research.
- Present the proposed solution to the problem under investigation with its corresponding theoretical foundation.

Present the results of the evaluation of the proposed solution to the problem, mainly from the point of view of social practice, the latter, according to the possibilities of the area of knowledge and demands of each program.

• To present the integrated results in their first version of the complete thesis.

Person in charge: doctoral committee

Action 4

In relation to the evaluation of the doctoral student, at the end of each workshop the coordinator, together with the PhDs designated to participate, must decide whether to approve the results presented or to redo the same given the magnitude of the modifications that must be made. In the case that the decision is that the results should be presented again in another workshop, the doctoral candidate will be specified the period of time he/she has available to do so, so that he/she does not fall behind in

his/her plan; furthermore, it should be taken into account that the same composition of PhDs who evaluated the results is maintained.

Person in charge: doctorate committee

Action 5

To value in the thesis workshops, as a space of formation, the development of the following capacities in the doctorate students: communicative, use of the scientific language, argumentation, of critical judgments, assimilation handling of the technologies of the information and the communications, capacity of synthesis, domain of the area of the knowledge in which it works and of other related disciplines and domain of the methodology of the investigation, among others.

Principal Investigator: Doctoral Committee

Action 6

Assume as maximum time of exposure in each workshop between 15 and 30 minutes, attending to the objectives that are drawn, which would help to evaluate the capacity of synthesis of the doctoral students and train the ability to adjust to the time in their exposure.

Responsible: PhD committee

Action 7

To guarantee that the thesis workshops are carried out under the direction of the doctoral committees of each program, foreseeing for their success the following tasks

 Plan the annual completion date of the workshops according to the training plans of each doctoral student; in this sense it is valid to clarify that although in the same program there are doctoral students in different stages, the evaluation of results of different research tasks should not be mixed in the same workshop.

- Disclose, at least 15 days in advance, the date of the workshop, the speakers, time and place.
- Guarantee adequate space for the development of the workshop, with sufficient capacity to accommodate all attendees and other interested parties.
- To guarantee the technical means to carry out the projection of the results with quality and clarity.
- Designate at least two reviewers of the written document, specialists in the subject to deepen, both in the methodology of research and in the content and form of the document. Here it must be taken into account that they are not repeated in all the workshops that the doctoral student must develop.
- Select, within the faculty, at least five other PhDs with preparation and experience that should not be absent from the workshop. Among them should be included at least two PhDs, members of the project team where the research is inserted. In no case should they belong to the same project, as this would replace the seminar and/or scientific session that, within the R+D+i project, constitutes another training scenario with its own objectives.
- Circulate the written document to all the selected participants at least seven days in advance and to the reviewers at least 15 days in advance.
- Invite PhDs from other related areas, both within the institution and outside it, who have a relationship with and experience in the subject, whenever possible.
- Plan sufficient time for the development of the workshop, so as to guarantee the exchange of criteria between the doctorate and the participants. In no case

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should it happen that the doctoral student is not allowed to answer questions or to argue his points of view in relation to the opinions that are expressed about his work, unless they are aspects of form, constituting an essential element within the formative process of the doctoral student.

- Reinforcing the previous idea, it must be guaranteed that in the participation of the PhDs, the questions prevail over the suggestions, which depending on the answers given by the doctoral students, provoke the proposal of recommendations.
- To guarantee the presence of the tutor, who must be invalid to carry out the same.
- To guarantee, by means of a written document, the consent of the tutor for the doctoral candidate to present his or her results for meeting the requirements established according to his or her review.

Person in charge: doctorate committee

Action 8

Determine as responsibilities of the member of the PhD committee conducting the thesis workshop the following

- Appoint a member of the committee to take the minutes.
- To guarantee an environment of formality and respect in the development of the thesis, but where the doctoral student is given confidence and security to feel comfortable during the exercise.
- Provide the floor to participants and doctoral candidates as appropriate.
- To guarantee the discipline and ethical behavior of all the participants, as it corresponds in a process of group learning.

Person in charge: doctorate committee

Action 9

Consider that once the development of the thesis workshop is concluded, the following are the responsibilities of the member of the doctoral committee or in its absence the person designated to perform the function of conducting the same:

- Meet briefly with the PhDs designated to participate in the event and vote on the results in an open manner.
- Inform the doctoral candidate and his/her tutor about the results.
- To provide details on the writing of the minutes and to send them to the doctoral candidate and his/her tutor within a period of no more than 15 days.
- Make an assessment of the development of the workshop as a learning space, which can be done in the form of selfevaluation listening to the criteria of all participants.

Person in charge: doctorate committee

For younger doctoral students with little scientific and professional experience, the thesis workshop is a great help in overcoming academic and social isolation, which is recognized as one of the main problems faced by all doctoral students, by creating a learning environment in which they are gradually introduced to the culture of scientific work, where they can interact with their peers, tutors and other members of the faculty who will provide motivation, support and commitment.

The doctoral committee and its faculty are responsible for ensuring the successful development of the thesis workshops, as an expression of the scientific skills developed by the doctoral student, which are closely related to the

scientific skills possessed by the tutors and other members of the faculty.

The thesis workshops, considered nonacademic forms of the postgraduate program, are excellent spaces for the doctoral training of scientific students in the framework of doctoral programs, in harmony with other existing forms such as the seminar, the scientific group research session within the project and the systematic advice of the tutor, among other spaces designed to develop skills and research capabilities indispensable in their training as a toplevel researcher.

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