

QUALITY MANAGEMENT IN THE MASTER'S DEGREE IN EDUCATION AT THE UNIVERSITY OF LAS TUNAS

GESTIÓN DE LA CALIDAD EN LA MAESTRÍA EN EDUCACIÓN DE LA UNIVERSIDAD DE LAS TUNAS

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Abstract:

The present work is aimed at socializing the experiences of the process of self-evaluation, external evaluation and follow-up to the improvement plan of the postgraduate academic program: Master's Degree in Education, which is implemented at the University of Las Tunas since 2011. For further development of this program, the results of the impact assessment were considered. They were obtained through the application of surveys, interviews and valuation scales to the declared social strata, with the intention of making the program more viable in the new context of the integrated university. This process of impact assessment also allows us to assume a more qualitative conception of the area of knowledge of the program, because it responds to the on-going professional development of in-service teachers and graduates of non-pedagogic majors who work as teachers in the university and the municipal university branches. Furthermore, the Program Management System is implemented to guarantee its sustainability, with a better insertion in the knowledge society.

Key words: self-evaluation, evaluation, learning, impact, improvement plan

Resumen:

El presente trabajo está dirigido a socializar las experiencias del proceso de autoevaluación, de evaluación externa y seguimiento al plan de mejora del programa académico de postgrado: Maestría en Educación, que se ejecuta en la Universidad de Las Tunas desde el año 2011. Para el perfeccionamiento del programa se consideraron los resultados de la evaluación de impactos, lo que se logró a través de la aplicación de encuestas, entrevistas y escalas valorativas a los estratos sociales declarados, con la intención de hacer más viable el programa en el nuevo contexto de la universidad integrada, lo que nos permite asumir una concepción más cualitativa del área del conocimiento del programa, al dar respuesta a la formación permanente y seguimiento a los profesores en ejercicio y a los egresados de las carreras no pedagógicas que se desempeñan como docentes en la propia universidad y los centros universitarios municipales; para el logro de este propósito se implementa el Sistema de Gestión del programa, lo que nos garantizará su sostenibilidad, con una mejor inserción en la sociedad del conocimiento.

Palabras claves: autoevaluación, evaluación, aprendizaje, impacto, plan de mejora

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Main antecedents

The implementation of the Master's Degree in Education with its own staff from Pepito Tey University of Pedagogical Sciences in Las Tunas Province has been the result of the inter-institutional collaboration with the Enrique José Varona Higher Pedagogical Institute since the second half of the nineties. In the courses 1996-1997 and 1997-1998, studies of this same character continued to be developed in Las Tunas by the same institution, with the implementation of the XI Edition. This process ended between 2005 and 2007 with 27 graduates who continued their professional and academic development and became part of the group of teachers with great scientific potential to integrate the staff of the first and second editions of the program at Pepito Tey University of Pedagogical Sciences.

With the opening of the first edition of the Master's Degree in Education in Las Tunas, there was a response to the professional development needs of the relatively young university staff members who did not have access to the different editions and programs of the Master's Degree in Educational Sciences which closed in 2010. In addition, some demands for teacher development courses from the educational structures of the territory have also been met.

The Master's Degree in Education closed its first edition in November 2015 and the second in May 2016. Their initial enrollment in both editions was 30 and 31 students, respectively. They completed all the academic activities and graduated according to the duration of the program, for 100% efficiency. So far, the employers have expressed satisfaction with the graduates for the levels of performance achieved in tasks of greater complexity.

Present day and perspectives

As a result from the external evaluation process developed by the National Accreditation Board (JAN in Spanish) in December 2016, the Master's Degree in Education reached the highest category of accreditation and was awarded the Program of Excellence evaluation. This allowed the beginning of the IV Edition last March, with about 110 applicants during the admission process, of which 62 were finally accepted: 30 of them come from the different educational levels of the territory and 32 from the University of Las Tunas. Thus, the program continues implementation nowadays since it responds to the needs of teachers' development.

As part of the follow-up to the improvement plan, the contingency actions, related to the weaknesses identified during the self-assessment process and officially validated by JAN, are addressed. They are focused on giving a more differentiated follow-up to the exchange with foreign institutions, in addition to achieving greater stability in the work with interactive platforms.

The Master's program is structured in three modules that correspond to the degree of specialization. A basic module that covers 6 courses and provides 17 credits; one specialized, with 10 courses and 20 credits and a third module on the research process, which adds up 38 credits.

Degree of specialization	Courses	Credits	Hours
I. BASIC	6	17	816
II. SPECIALIZED	10	20	960
III. RESEARCH PROCESS *	4	38	1824
Total	20	75	3600

* Postgraduate students need to select three optional courses out of eleven that are offered.

The organizational infrastructure that has been achieved together with the human potential allow us to be able to form postgraduate students capable of undertaking research and psycho-pedagogical experiences in the school and university contexts. They learn a set of methods and techniques with philosophical, sociological and historical perspectives of education and master the most up-to-date foundations and resources provided by Pedagogy, Psychology, Educational Scientific Management, Information and Communication Technology and Didactics.

Impact assessment

The Master's Degree in Education program anticipates as its main impact: to educate, in accordance with potentialities and needs, professionals with specific competences as social promoters of educational research, capable to identify the problems that affect education, planners of alternative solutions with the application of scientific methods, and considering the dynamics of a participatory approach.

The general objectives foresee the effects of the program and show an adequate systematicity with the specific ones established for each module. These are made explicit since the call for application is issued together with the entrance requirements, the profile of the graduate students, and some of the important dates related to admission, enrollment and the beginning of courses.

The graduates of the three editions show a level of satisfaction with the studies carried out by the Master's Degree in Education. They state that they are in a better position to face the teaching-learning process with their undergraduate students and the students of the different levels of education and to assume tasks of greater complexity in their professional performance. They are better prepared to study and characterize groups of students of different levels, to improve quality in tutoring term papers and diplomas and to execute methodological activities in their schools, teaching departments and/or faculties. Also, they express satisfaction with their tutors' work, and the appropriation of research methods that have allowed them to overcome the different stages of their investigations, and they think that the actions developed for the introduction of results are of great methodological value. It is relevant that some graduates with better results and preparation have taken part as members of the board of examiners of graduates from the 3rd Edition.

The adopted strategy for impact assessment is based on the following grounds (Dopico 2010):

- It is a continuous process aimed at evaluating not only the results, but also the quality of the implemented actions.
- It must be able to assess whether or not the expected changes and the relevance of the expected changes are produced.
- It must be ascertained that the observed changes are the result of actions whose impact is being assessed.

- It should provide information on the aspects of the evaluated object that had a greater impact on the actions applied, and the extent and contribution their different components made to quality improvement.
- It must provide information on contingencies that may appear.
- Impact assessment is a process aimed at judging the value of the changes produced in an object by the impact of certain actions, the extent they had, the aspects they affected and to what extent these changes contribute to the continuous improvement of the object evaluated.

Based on Bernaza's work (2015), the authors, in the context of quality management, systematized different indicators for the execution and evaluation of the impact of academic postgraduate courses, namely:

1. Interdisciplinarity
2. Collaborative learning, which is operationalized in the following indicators:
 - Interaction with other members of the group
 - Positive interdependence
 - Individual responsibility
 - Development of group work skills
 - Heterogeneous working groups
 - Equal opportunities
 - High motivation
3. Personalized orientation in the postgraduate course

In addition to reflecting on the previous foundations and considering them for the validation of the strategy for impact assessment in successive stages, much work is being done on improving and systematizing the above indicators with the assistance of the Academic Committee and professors, the postgraduate students, staff members, school principals, policy makers and coordinators of undergraduate programs. These indicators are evaluated through interviews, questionnaires and/or surveys with the modality of rating scales (Quiñones and Addine 2015).

System of actions to improve the strategy of impact assessment in the Master's Degree in Education Program

The self-assessment process of the two completed editions of this program, the analysis of the improvement plan, and the results of the strategy, made the Academic Committee reconsider the impacts that the program produce in undergraduate programs Pedagogy-Psychology Undergraduate Program (Certified), and The Speech Therapy Program (in the process of external evaluation). Both programs correspond to the area of knowledge of the Master's Degree in Education and are studied at the Faculty of Basic Education Sciences (FCEB) and should be taken into account for the implementation of the 4th Edition of the postgraduate academic program and the completion of the following actions:

- Review of the curricular strategies of both undergraduate programs by the Academic Committee.
- Application of research instruments to the heads of departments, undergraduate program coordinators, head teachers and professors.
- Determination of content and systematization of its components.
- Application of group interviews (If necessary).

The Academic Committee initiated a follow-up study to the professional development achieved by the graduates of this program who work with different departments and programs at the University of Las Tunas. Several instruments for data collection were applied to different social strata and the preliminary results evidenced a satisfaction level in the employers at the university and the territory. They all indicated that the graduates of the two editions assume responsibilities of greater complexity such as being in charge of curriculum disciplines and/or subjects, coordinating academic years in undergraduate programs, and developing research tasks. They also take on tutoring and mentoring responsibilities, teach workshops on methodological issues at departments and/or faculties, as well as increase participation in national and international events and publications. On the part of the graduates of the program, there is an growing tendency in the presentation of new doctoral proposals related to the research areas of their Master's Degree dissertations.

During the process of impact assessment by external evaluators, it was verified that in the first edition, seven out of 23 graduates were promoted to management posts and this represented the 30.4%. In the second edition, six out of 23 were promoted to management posts (26%). 30 graduates (65.2%) from both editions changed successful their teaching rank. The systematic monitoring of the program has made possible its continuous improvement during classroom, research and complementary activities. The program has impacts on the promotion of its students and graduates and their responsibilities within curriculum disciplines, subjects and academic undergraduate programs.

The research topics/areas reinforce the scientific character of the program and guide teachers, tutors, students and employers to identify the didactic logic of the program contents for the different modules. These are closely related to the main diagnosed needs and to the experiences gathered from the three previous editions of the academic program:

- Education, Society and Pedagogy
- Curriculum
- Didactics of Primary, Junior, Senior and Higher Education
- Educational Psychology
- Scientific Educational Management
- Educative technology
- Educational Orientation
- Education in Creativity
- Community work.

Didactic logic of the program contents

Because of the improvement and updating of the different programs, the course on Statistics applied to educational research is introduced before the Thesis Seminar I and is aimed at making use of the essential contents of the theory of probabilities and statistical methods to educational research to draw valid conclusions and make reasonable decisions. This is an issue of great value for the methodological foundation and validation of results.

The Methodology of Educational Research course is divided into two parts: the first is aimed at determining the stages of exploration, planning and execution of the theoretical design of the research; the second part has the purpose of identifying the empirical causes of the problem being investigated, propose solutions and verify their relevance.

The organization of the fourth Edition guarantees a more adequate logic of the program contents, which is based on the principle of interdisciplinarity. It is revealed that more than 60% of the academic credits correspond to the development of research skills and that the scope of the program knowledge area is enhanced by the interdisciplinary articulation between the Methodology of Educational Research (MIE) I and II, Psychology, General Didactics and specialized Didactics. The latter, in the context of the integrated university, responds to the education demands of graduate teachers from non-pedagogical specialties, an issue that the program has to address by reconsidering other dimensions for its area of knowledge.

Due to the aforementioned, the most correct didactic logic for the development of the different courses in the IV Edition should be as follows:

1. Methodology of Educational Research I
2. Statistics applied to educational research
3. Thesis Seminar I
4. Methodology of Educational Research II
5. Thesis Seminar II
6. Thesis workshops
7. Elective courses

The Academic Committee in the Program Standardization Manual regulates the academic activities (compulsory and non-elective courses) and the whole process of academic preparation of postgraduate students. These activities are reinforced by complementary activities such as publication of scientific articles, participation in events and introduction of results which also have an investigative character.

On the standardization of the program

The research results that are specified in the thesis presentation are regulated by the guidelines in the Program Standardization Manual, which encompasses the following documents (Addine 2016):

- Guidelines for students' works/papers
- Suggestions for oral presentations

- Guidelines for tutors' work
- Guidelines for opponents' papers
- Guidelines for examiners

All these documents were subjected to a rigorous validation process based on the results of the three previous editions of the program and are part of its formal documents and regulations at the University of Las Tunas.

Prospective approach of the Master's Degree in Education (IV Edition)

The significant advances in the management of knowledge in varied sources, the infinite possibilities of access and storage of content, and the characteristics of the new development models constitute an unprecedented challenge and generate new contradictions in teacher development. This reality is configured as an expression of the continuous improvement of school systems and the need for excellence in the services offered by universities in their different extension strategies and intervention actions.

It is for this reason that the prospective approach presupposes anticipation of results, further forecasting, diagnosis and characterization; This way, the educational present is analyzed critically and constructively, based on a comparative approach with the previous one and with a preventive, anticipated connotation of what in the future can be manifested towards the formation of indicators, that from the conception of evaluation of Impact, guarantee us a minimum of quality and the perpetuation of a culture of quality evaluation and accreditation of Postgraduate Education "(Quiñones, 2011, p.2)

In order to respond to these requirements and achieve a system of evaluation and accreditation in accordance with international standards, the University System of Program Accreditation (SUPRA) is created and developed. The Master's Degree Evaluation and Accreditation System (SEA-M) is part of it and responds to the development and consolidation of the Master's Degree as a postgraduate course with international recognition.

The prospective character of the SEA-M is based on three stages where the genesis and antecedents (self-evaluation) of the programs, evolution and validation of evidence (external evaluation: strengths and weaknesses) and certification of results (accreditation level) are evaluated in an integrated way. This process undoubtedly leads to continuous improvement of the program and will guarantee its perpetuity in successive stages and/or phases during implementation. In the case of Certified and Excellence Program categories, they will have national and international recognition and autonomy for their execution in both contexts.

From the self-assessment process and the feasibility diagnosis implemented by the Academic Committee, the sustainability of the Master's Degree in Education academic program in our university is made clear with the submitted applications for admission to subsequent editions from the university or other institutions in the territory, as well as applications from universities in other countries such as Ecuador and Peru or letters of interest from foreign students in Angola and Ecuador.

The quality of the self-evaluation and accreditation processes will depend on the coherence between the levels of achievement and the goals. For this, it is necessary to consider three dimensions in the new conditions of the program implementation and based on González's works (2005):

Relevance: it is understood as the relationship with the environment and impact. In this dimension, appropriate answers to the following questions are required: To what extent have the conditions for the opening of the current edition of the program improved in relation to the context? Were strategies designed to respond to the professional development of human resources in areas of knowledge different from the program? Is there any differentiation of the methodological work in the knowledge area of program related to special didactics? Are there any new demands from employers? Does the program respond to these demands? Is the improvement of the impact assessment strategy evident for successive stages? Is there any relevant group work to achieve a rational and intensive use of knowledge to make postgraduate management more efficient?

In order to achieve quality management with a prospective character in the Master' Degree in Education Program, the particularities of the didactics of primary school are considered, with emphasis on the elementary school, and the improvement of the optional course: Teaching and learning methodology, with the purpose of introducing didactic and learning strategies for the study of this knowledge system. This should enhance teacher motivation to solve the professional problems during the teaching-learning process in this type of school and stimulate metacognition based on the cognitive and investigative resources of each teacher (Silva and Alfonso 2016).

Relevance is also characterized by the rational and intensive use of knowledge in the postgraduate course. In this regard, Abreu-Hernández and De la Cruz-Flores state that "The most relevant problems for today's society require the intensive use of knowledge, group work, high theoretical and conceptual capacity, and a great capacity for articulation with the context of practice" (2015, p.166).

Integrity: it is defined as the achievement of coherence between word and action. In this dimension, it is feasible to answer: Is there any consistency between the expectations derived from the results of the diagnostic tests during the admission process to the IV Edition and the results that are being achieved? Have the regulations been improved and made more consistent with SEA-M indicators for further self-evaluation aimed at reaccreditation? Are there any strategies to follow the improvement plans? Are the strategies for introducing results being improved?

Effectiveness: it implies the degree of fulfillment of the pre-established goals. Questions that should be answered: Are monitoring and implementation of the actions of the program improvement plan evident for the new stage? Has the academic activity derived from the research tasks of postgraduate students and professors increased? Do the scientific results respond to interdisciplinarity as a didactic logic of the program?

As for the use of resources, three other dimensions are taken into account:

- **Availability of the necessary human, material and information resources.** This dimension demands answers to the following questions: Were human and material resources of the program planned? Was the improvement plan to maintain indicators of excellence carried it out? Do the university and faculties guarantee the access to necessary information for the execution and sustainability of the program? Are the material resources and facilities relevant and enough for classroom and research activities?

- **Administrative and academic efficiency:** it reveals the adequate use of existing resources for undergraduate and postgraduate courses. The analysis of this dimension presupposes answers to the following questions: Is monitoring of the mechanisms of optimization of resources planned? Do students express satisfaction with respect to the requirements for retention? Are actions carried out to increase postgraduate students' achievement levels in the completion of research tasks?
- **Effectiveness:** it allows establishing if resources are appropriate to achieve the set purposes. Here it would be helpful to ask: Are the available resources adequate to maintain the achieved results and establish new goals for reaccreditation?

As for the processes, a dimension is considered:

- **The relationship between strategic and organizational processes and academic and administrative processes.** In this dimension, the following questions should be answered: Have university authorities and researchers internalized the need to work for raising the quality of all development processes in the university and not only for the search for an accreditation category? Are the relationships between undergraduate curriculum strategies and the program research areas identified in the new stage of its implementation? Do teachers show the need to improve their professional performance? Do the research processes of the program stimulate new research topics in undergraduate courses? Are the results of research properly introduced into the undergraduate teaching-learning process?

These dimensions lead us towards a more favorable situation for the analysis of the results of postgraduate programs and the identification and evaluation of their impacts with emphasis in undergraduate studies.

It may be summarized that the quality and perpetuity of postgraduate academic programs in the current conditions of their development are determined by the processes of self-evaluation, external evaluation and accreditation, which guarantee growth, diversification and autonomy in the provision of highly qualified services to national and international users who request it.

In spite of the achievements obtained in the self-evaluation, external evaluation and accreditation processes in universities, we must continue to work fully in solving the problems that mostly affect the successful development of university processes and in the education of a culture, that secures quality in the postgraduate courses.

In the follow-up to the teaching-learning process in postgraduate courses, interdisciplinarity is a basic criterion to identify the guiding principle and the didactic logic of the knowledge system in the different courses. New forms of thinking and collaborative learning should be fostered to favor excellence in specialists' performance, the development of culture, the internalization of stable professional performance characterized by leadership in the assumption of academic and social responsibilities.

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