



Original article



The impact assessment process of elementary school teachers' development





El proceso de evaluación de impacto de la superación de los maestros primarios

O processo de avaliação de impacto do desenvolvimento de professores primários

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ABSTRACT

The changes and transformations currently taking place require primary teachers to upgrade their vocational skills and improve their performance. This article is part of a research that addressed a problem related to the weaknesses in the design and implementation of the impact assessment process for the passing of primary teachers in Pinar del Río. The objective of this article is to propose an approach to the background of the process of impact assessment of the passing of primary education teachers, which will enable future stages of research. The study, which covered the period of "Perfecting the National Education System", from 1959 to the present, used a combined approach of theoretical and empirical methods typical of educational research, where historical analysis -logical and documentary analysis played a central role. In accordance with the procedural requirements of

historical-logical analysis, a periodization criterion was defined, which allowed to identify three stages in the historical evolution of the object: 1959-2000, 2001-2015 and 2016-present. In addition, three key indicators were established to characterize each of these stages. As a result, a detailed study of the background of the object in its historical context was obtained. In conclusion, the need to implement a model that will improve the performance of primary education teachers is reaffirmed.

Keywords: evaluation; impact; professional development; primary education.

RESUMEN

Los cambios y transformaciones que se están llevando a cabo actualmente exigen que los maestros de la educación primaria eleven su preparación profesional y mejoren su desempeño. Este artículo forma parte de una investigación que abordó un problema relacionado con las insuficiencias en la concepción y ejecución del proceso de evaluación de impacto de la superación de los maestros primarios en Pinar del Río. El objetivo del artículo es proponer un acercamiento a los antecedentes del proceso de evaluación de impacto de la superación de los maestros de la educación primaria, lo que posibilitará futuras etapas de la investigación. El estudio, que abarcó el período del "Perfeccionamiento del Sistema Nacional de Educación", desde 1959 hasta la actualidad, empleó un enfoque combinado de métodos teóricos y empíricos propios de la investigación educativa, donde el análisis histórico-lógico y el análisis documental jugaron un papel central. De acuerdo con las exigencias procedimentales del análisis histórico-lógico, se definió un criterio de periodización, que permitió identificar tres etapas en la evolución histórica del objeto: 1959-2000, 2001-2015 y 2016-actualidad. Además, se establecieron tres indicadores clave para caracterizar cada una de estas etapas. Como resultado, se obtuvo un estudio detallado de los antecedentes del objeto en su contexto histórico. En conclusión, se reafirma la necesidad de implementar un modelo que permita mejorar el desempeño de los maestros de educación primaria.

Palabras clave: evaluación; impacto; superación profesional; educación primaria.

RESUMO

As mudanças e transformações que estão ocorrendo atualmente exigem que os professores de educação primária elevem sua preparação profissional e melhorem seu desempenho. Este artigo faz

parte de uma pesquisa que abordou um problema relacionado às deficiências na concepção e execução do processo de avaliação de impacto da superação dos professores primários em Pinar del Río. O objetivo deste artigo é propor uma abordagem sobre os antecedentes do processo de avaliação de impacto da superação dos professores da educação primária, possibilitando futuras etapas da pesquisa. O estudo, que abrangeu o período do "Aperfeiçoamento do Sistema Nacional de Educação", de 1959 até o presente, utilizou uma abordagem combinada de métodos teóricos e empíricos da pesquisa educacional, onde a análise histórico-lógica e a análise documental desempenharam um papel central. De acordo com as exigências procedimentais da análise histórico-lógica, foi definido um critério de periodização, permitindo a identificação de três estágios na evolução histórica do objeto: 1959-2000, 2001-2015 e 2016-presente. Além disso, três indicadores-chave foram estabelecidos para caracterizar cada um desses estágios. Como resultado, obteve-se um estudo detalhado dos antecedentes do objeto em seu contexto histórico. Em conclusão, reafirma-se a necessidade de implementar um modelo que permita melhorar o desempenho dos professores de educação primária.

Palavras-chave: avaliação; impacto; superação profissional; educação primária.

INTRODUCTION

Higher education is undergoing major changes due to the growing demands placed on universities. Society and the state are acting together, reclaiming the role of higher education as a trainer par excellence for professionals who will later become the engines of the country's economic and social development. In this sense, education should not only focus on the transmission of knowledge but also on its ability to form values and skills that contribute to collective well-being.

This process involves using education as a powerful tool in the integral formation of the human being, promoting ethics, social awareness, sense of duty, organization, discipline, responsibility, respect and love for others, all this in the interests of social welfare. Educators are responsible for developing these virtues in students, reinforcing their work with young people to fulfill the task of preparing human beings (Ruiz et al., 2021).

The need for highly qualified professionals is now more evident than ever, and this means constant preparation through post-graduate training. Graduate education is essential to prepare students for the social, political and technological challenges of the 21st century (Guerra et al., 2019).

Throughout its history, postgraduate education has maintained the essence of professional advancement and the most prominent academic forms such as diplomas, courses and training. These organizational forms have found their highest level of updating and legality in Resolution 140/2019, which establishes that, as forms of professional improvement, they include, in addition to graduates, courses and training, self-repair, specialist conferences, seminars, workshops, scientific discussions and consultations. These elements complement and enable the study and dissemination of advances in knowledge, science, technology and art. The resolution also recognizes as organizational forms of academic postgraduate studies the master's degree, the postgraduate course and the doctorate.

In this context, the postgraduate must rebuild a new education which prepares individuals to respond adequately to the challenges of today's age, where innovative learning involves the development of three major human capacities: autonomy, which is the basis of all self-realization; critical thinking, the ability to make judgments and decisions with personal independence and freedom; and integration, the individual's right to be part of the whole, cooperating and establishing deeper human relationships, understanding the interrelationships of problems, situations and issues (Acosta et al., 2020).

In Cuba, each university, in close collaboration with the Organs and Agencies of the Central Administration of the State, plans and implements the strategy for professional advancement according to the needs of its professionals. This strategy is aligned with the satisfaction of the demands of professionals, and in the specific case under consideration, it focuses on those related to the education sector, particularly with teachers of primary education.

This level of education is becoming increasingly relevant, especially today, when working under the challenges and challenges of the III National Perfectioning of Education. This project requires that the primary teacher is a competent professional, with sufficient scientific preparation to face the challenges imposed by this research project, and with a broad humanistic development. These aspirations must be achieved, among other things, through the professional improvement which this teacher receives.

The authors therefore consider that the improvement of professional skills has transformed the performance of primary teachers. In other words, it has had a significant impact on their ability to lead the teaching-learning process with higher quality. Thus, the impact assessment of this improvement in the performance of primary education teachers acquires a special relevance, since it allows to know the qualitative and quantitative results generated, identify advantages, shortcomings, strengths and weaknesses, and ultimately, to perfect the process.

On the other hand, impact assessment is part of a broader agenda for evidence-based public policy formulation. This growing trend worldwide implies a shift in focus from just inputs to products and outcomes. This involves reconfiguring educational policies, curricula and university programs to address with priority the socio-professional demands that arise from the current needs of humanity in the 21st century (Guerra et al., 2019).

There is no doubt that a proper assessment of the impact of the passing of primary school teachers facilitates the visualization of changes in learning and the management of the teaching-learning process. Through this evaluation, it is possible to identify the potential and limitations of the proposed actions, as well as the use of previous learning (Prado & García, 2019).

Therefore, this article aims to propose a historical approach to the impact assessment of the improvement of primary education teachers; the aim is to provide elements which contribute to the continuous improvement of educational processes at this level.

MATERIALS AND METHODS

The research was descriptive in nature and based on the dialectical and historical materialist method. In order to find the data that would meet the objective, various theoretical methods were used, such as historical-logical analysis, as well as logical processes of thought: analysis, synthesis, induction and deduction.

In the empirical field, documentary analysis was used, which consisted of reviewing key documents related to the evolution of the National Education System and the professional improvement of primary school teachers.

These methods allowed systematizing and modeling the theory that underlies this historical overview, providing a conceptual and methodological framework for addressing the subject.

The period studied was defined as "The improvement of the national education system" and divided into the following stages:

- First stage: second improvement of the national education system (2001-2015).
- Second stage: third improvement of the national education system (2016-present).

The indicators used to guide the study were:

- Development of the process of professional improvement of primary school teachers.
- Development of the process of evaluation of impact of the improvement of teachers in primary education.

RESULTS

Based on the dialectical-materialist method, which involves examining the phenomenon studied in its emergence and development, it was considered important to address in the study the development of the impact assessment of the passing of primary education teachers in Cuba. The following is a summary analysis of the various stages in this process.

Impact assessment emerged in the early 1970s in a small number of industrialized countries, where the growth in the number and size of development projects and their negative effects led to a rise in environmental activism and growing public interest in this problem. Since the 1980s, environmental impact assessment has been gradually incorporated into the decision-making process for development projects at both national and international levels.

In Cuba, the Ministry of Science, Technology and Environment was established in 1994 with both a national and local structure. Later, important legislation emerged, such as Ministerial Resolution 130/95 "Regulation for the State Environmental Inspection" and Law 81 "Environment Act" of 1997 introducing the concept of impact assessment, although in this case it was concerned with the evaluation of the effects of the educational process, a concept which would not be adopted until 1997.

On the other hand, there were other parallel processes related to impact assessment that began to manifest themselves:

- The creation in 1994 of the Latin American Laboratory for Quality Assessment of Education, which enabled the implementation in 1999 of a System for Evaluation of the Quality of Basic Education.
- The official implementation of the System for Evaluation and Accreditation of Masters, according to Instruction 1 of 1999, in all Cuban higher education, as the Master's degree is developed and consolidated as an academic graduate figure with international recognition. This subsequently resulted in the accreditation of graduate courses, universities and other postgraduate programs.

The impact assessment of career advancement was particularly relevant since it is not reflected in either of the two previous processes, which will not be addressed in the subsequent analyses.

Stage 1. Second Improvement of the National Education System (2001-2015)

From the 2000s to the present, the professional development of primary school teachers was based on various forms of organization (diplomas, improvement courses, workshops, self-improvement, among others), and research carried out within the framework of master's and doctoral programs, the latter resulting from research projects.

At the beginning of the 21st century, with the so-called Third Educational Revolution that was implemented in Cuba since 2000, professional advancement continued to be guided by decentralization actions, in relation to the needs and potential of each province, the municipality and even the schools, through joint work between the Higher Pedagogical Institutes (at this stage) and the provincial education directorates.

National seminars were held in preparation for the start of each school year, aimed at MINED staff and educators. In addition, the Master's degree was developed as a widely accessible academic postgraduate course for educators from across the country.

At this stage, a systemic concept of the passing of the Primary School Directors was developed and used to evaluate the impact of the proposed system of passing applied with the Primary School Directors in the municipality of Holguín. With regard to impact assessment, research was carried out

to evaluate the development of pedagogical and professional skills among primary school teachers and principals.

In the case of the model for social and pedagogical impact assessment of educational programs (1999-2004), the focus was on post-graduate impact assessment, analyzing the process as a result of the program's significance to the social environment.

On the other hand, in 2004, as part of the continuous improvement of higher education and the experience gained from postgraduate practice, RM 6/96 was repealed by RM 132/2004, which regularized postgraduate education in Cuba. This resolved modifications concerning the norms, procedures and regulations for the planning, development and control of the continuing education process of university graduates.

From the 2005-2006 school year, the Master's degree in education was opened up at national level and most of the teachers from different educational sectors were included. This program deepened research on the professional development of primary education teachers, allowing raising the level of scientific-pedagogical improvement of teachers. The second quality assessment study on education was conducted in 2006.

During the second half of the decade 2000-2010, research on impact assessment at the level of teachers of university branches emerged in the Pinar del Río region. Between 2009 and 2014, research related to the impact assessment of career advancement continued.

Since 2010 and until today, actions that contributed to the improvement of primary education teachers were implemented, such as the development of special pedagogy events and primary education symposia at provincial, national and international levels, as well as scientific-methodological seminars at national level.

Stage 2. Third improvement of the National Education System (2015-present)

At this stage, various actions were developed to improve the professional skills of teachers and teachers in each of the territories. The methodological work within MINED schools as a way of improving teachers continued to be developed. The study and research centers of universities played an increasingly important role, with the development of academic programs increasing. The quality department of universities continued its activities for accreditation of careers, institutions, study

centers and academic programs as well as impact assessment in educational practice, jointly with employers.

As regards impact assessment, the previous standards were maintained, although research and methodologies for impact assessment, adapted to various education sectors, processes or training programs, continued to be developed.

However, in the face of the unsuspected emergency and uncertainty generated by the epidemiological situation caused by COVID-19, postgraduate education was reduced. The Ministry of Higher Education nevertheless continued to organize the continuity of the educational process, relying on individual responsibility and the efforts of teachers, managers and students.

The postgraduate reinforces new qualities, as it shifts from the spectator to the virtual or distance mode, in response to the necessary isolation. This modality allows teaching-learning in different times and places, with an emphasis on student autonomy and the use of support materials, together with Information and Communication Technologies.

Legislation and reforms at this stage

Law No. 116 of the Labor Code, in its article 40, recognizes that workers have the right to study, provided they use their free time and are based on personal effort, except in cases of special state interest. This legal framework and the reforms introduced strengthened professional development and academic training, allowing better decisions to be made about orienting professionals towards postgraduate studies.

In 2019, resolutions 139 and 140 were promulgated, related to the National System of Scientific Degrees and the Regulation of Graduate Education, making its management flexible to adjust to the needs of higher education in Cuba. The Resolution 51 of 2020 of the Ministry of Higher Education also made adjustments to the continuity and evaluation processes of postgraduate studies in the academic courses 2019-2020 and 2020-2021.

At this stage, the occupational advancement from jobs and its link with the scientific activity of educational institutions acquired a relative importance. The part-time modality, due to its semi-presential nature, optimized times, spaces and resources. With the emergence of COVID-19, distance learning has gained a higher profile, positioning itself as a key alternative in conditions of limited

access to universities and projects focused on using the technological resources available at each institution.

DISCUSSION

The results of this investigation reinforce the previous findings of the diagnostic study conducted by Echevarría et al. (2018), which highlight the inadequacy in the design and implementation of the impact assessment of the passing of primary education teachers in Cuba. Despite decades of efforts to improve teacher training, there are still shortcomings in the evaluation mechanisms which hinder the full exploitation of opportunities for improving teachers' performance in the classroom.

At the international level, several studies underline the growing relevance of impact assessment in educational contexts. Moyón et al. (2024) present future perspectives on this process, especially in the context of health technology assessment, suggesting that impact assessment should be expanded to multidisciplinary areas, including education and social welfare. These recommendations emphasize the importance of education policies and teacher training projects incorporating systematic and continuous evaluations, with the aim of maximizing their effectiveness and adapting their approaches to changing societal needs.

On the other hand, the study by Heredia et al. (2024) on the impact of socio-emotional education highlights how it can transform teachers' professional development, improving both their emotional competence and interpersonal relationships; the training is a very important aspect of the vocational training system. This approach offers valuable perspective for teacher training programs in Cuba, suggesting that integrating socio-emotional skills into training can enrich impact assessment by promoting a more harmonious and collaborative work environment.

Flores et al. (2024) also highlight that a well-implemented impact assessment can contribute significantly to the creation of safer and more positive school environments. This finding is particularly relevant in the Cuban context, where the quality of the school environment is fundamental to the educational success of students. Impact assessment, in this sense, should not only measure academic outcomes but also the effects on the institutional climate, which in turn influences learning and well-being of learners. In general, the authors agree that it is important to assess the impact of career development in the current context; professionals must acquire new

scientific and technological knowledge independently and creatively to solve professional problems emerging (Valdesprietto Roche et al., 2004).

Finally, the studies by Satchimo & Urbay (2024) stress that evaluation of the impact of teacher training programs contributes to a continuous improvement of teaching methods, allowing greater adaptability to changing challenges in classrooms. Feedback from the impact assessment can be crucial in adjusting pedagogical approaches and ensuring that training programs are aligned with the real needs of the educational context.

The research confirms that the impact assessment on the passing of primary school teachers in Cuba is still insufficiently developed, which limits its potential to improve teaching performance and the quality of the educational process in general.

The incorporation of impact assessment in various areas, including education, as suggested by international authors, is crucial to strengthening training processes. In particular, the integration of technology, socio-emotional education and continuous improvement in teacher training are key components that must be considered in the Cuban context.

Studies on socio-emotional education highlight its importance in teacher training, suggesting that impact assessment should go beyond the academic, including teachers' emotional well-being as an essential factor in their professional development.

Impact assessment should also measure the effects on the school environment, as a safe and positive educational environment directly influences students' learning and the quality of teaching.

The results highlight the importance of continuous assessment to improve teaching methods, adapting them to student needs and social context, which will allow for more effective and relevant teaching.

The integration of these approaches into the Cuban education system will not only contribute to an improvement in the professional development of teachers, but also enhance the quality of education as a whole, adapting to the changes and challenges of the 21st century.

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Conflict of interest

Authors declare no conflict of interests.

Authors' contribution

The authors participated in the design and writing of the article, in the search and analysis of the information contained in the consulted bibliography.



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