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An approach to the management of university processes: its dimensions

Una aproximación a la gestión de los procesos universitarios: sus dimensiones

Uma abordagem para a gestão de processos universitários: suas dimensões

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ABSTRACT
The Center for the Study of Educational Sciences of Pinar del Río, among its functions, leads research in the field of university management, of students inserted in the training processes of the master's and doctoral programs in Educational Sciences . The masters and doctoral students presented inconsistencies in the theoretical systematizations, when addressing the research objects related to the management of university processes. In general, they focused in an atomized and disconnected way on the contents of the management of the process they were investigating. For the investigations carried out, the authors of this work used a system of theoretical and empirical methods, namely: documentary analysis, scientific observation, interviews, analysis and synthesis, and induction and deduction, which allowed compliance with the objective of founding an approach to the management of university processes and their dimensions, which will serve researchers as a guide for the development of their starting theoretical frameworks. A theoretical foundation was presented as a result of the systematization carried out, which contributed to give organization and coherence to the theoretical frameworks of the investigations related to the management of university processes. This work constitutes one of the results of the research project on the management of university processes at the University of Pinar del Río.

Keywords: dimensions; Education Management; University management; processes.

RESUMEN
El Centro de Estudios de Ciencias de la Educación de Pinar del Río, entre sus funciones, lidera la investigación en el ámbito de la gestión universitaria, de los estudiantes insertados en los procesos formativos de los programas académicos de maestría y

doctorado en Ciencias de la Educación. Los maestrantes y doctorandos presentaron inconsistencias en las sistematizaciones teóricas, al abordar los objetos de investigación relacionados con la gestión de los procesos universitarios. Por lo general, enfocaron de forma atomizada e inconexa los contenidos de la gestión del proceso que investigaban. Para las indagaciones realizadas, los autores de este trabajo utilizaron un sistema de métodos teóricos y empíricos, a saber: el análisis documental, la observación científica, las entrevistas, el análisis y la síntesis y la inducción y la deducción, que permitieron cumplir con el objetivo de fundamentar una aproximación a la gestión de los procesos universitarios y sus dimensiones, que le sirva a los investigadores como guía para la elaboración de sus marcos teóricos de partida. Se presentó una fundamentación teórica como resultado de la sistematización realizada, que contribuyó a dar organicidad y coherencia a los marcos teóricos de las investigaciones relacionadas con la gestión de los procesos universitarios. Este trabajo constituye uno de los resultados del proyecto de investigación sobre la gestión de los procesos universitarios en la Universidad de Pinar del Río.

Palabras clave: dimensiones; gestión educativa; gestión universitaria; procesos.

RESUMO
O Centro de Estudos de Ciências da Educação de Pinar del Río, entre suas funções, conduz pesquisas no campo da gestão universitária, de estudantes inseridos nos processos de formação dos programas acadêmicos de mestrado e doutorado em Ciências da Educação. Os mestrandos e doutorandos apresentaram inconsistências nas sistematizações teóricas, ao abordar os objetos de pesquisa relacionados à gestão dos processos universitários. Em geral, eles focaram de forma atomizada e desconectada nos conteúdos da gestão de processos que investigaram. Para as investigações realizadas, os autores deste trabalho utilizaram um sistema de métodos teóricos e empíricos, a saber: análise documental, observação científica, entrevistas, análise e síntese, e indução e dedução, o que permitiu cumprir o objetivo de fundamentar uma abordagem ao gestão dos processos universitários e suas dimensões, que servirão de guia aos pesquisadores para a elaboração de seus referenciais teóricos de partida. Uma fundamentação teórica foi apresentada como resultado da sistematização realizada, que contribuiu para dar organização e coerência aos referenciais teóricos das pesquisas relacionadas à gestão dos processos universitários. Este trabalho constitui um dos resultados do projeto de pesquisa sobre a gestão de processos universitários na Universidade de Pinar del Río.

Palavras-chave: dimensões; Gerenciamento de educação; Gestão universitária; processos.

INTRODUCTION

The Center for the Study of Educational Sciences of Pinar del Río (CECEPRI), of the University of Pinar del Río "Hermanos Saiz Montes de Oca", Cuba, among its functions, leads research in the field of process management university students The master's and doctoral academic training programs of this center have researchers who carry out their research in the management of university processes.

The planetary emergency that endangers the sustainability of current and future generations leads to training processes focusing from the complex socio-formative paradigm and on skills for Sustainable Development, which allow them to face the challenges of unsustainability in the exercise

of their professions. Hence the importance of the research, development and innovation process acquiring new qualities (Jorge, 2020: 53; Díaz-Canel, 2021: 1-2).

At present, educational research related to educational management and, in particular, the management of university processes is an area of knowledge of great strategic importance for Cuba, given the policy of the Cuban State and Government supported by government management based on in science and innovation (Díaz-Canel, Núñez and Torres, 2020:367).

The postgraduate academic training process of CECEPRI master students and doctoral students must be in tune with situated learning, which prepares them to problematize, solve problems of educational practice and generalize experiences in the area of university process management.

An exploratory study carried out in 2021 confirmed that the theoretical systematizations of the research objects related to the management of university processes, carried out by these researchers, frequently focus in an atomized and disconnected way on the contents of the management of the process they investigate.

objective of this work is to base an approach to the management of university processes and their dimensions, so that it serves researchers as a guide for the elaboration of their starting theoretical frameworks.

Researchers and advisors (tutors) could find in this work a guide to conduct research related to the management of university processes. We clarify that in no way does this constitute a straitjacket, which can hinder the creativity of each researcher or tutor.

This work constitutes one of the results of the institutional research project entitled *The improvement of process management in the teaching department, at the University of Pinar del Río*, which has been running since January 2018, closing in December 2022, of which The authors are members, one as coordinator and the others as researchers.

MATERIALS AND METHODS

The foundation of an approach to the management of university processes and their dimensions, in such a way that it serves researchers as a guide for the elaboration of their starting theoretical frameworks, required an integral perspective given by the dialectical research paradigm, which relied on a set of theoretical and empirical methods.

The selection of the theoretical and empirical methods pointed to the eminently qualitative character of the phenomenon under study, which did not rule out the unity between the qualitative and the quantitative and vice versa in information processing.

The search, obtaining and processing of information were based on theoretical and empirical methods, techniques and procedures, namely: the Google search engine with the use of keywords on the subject of management, in high visibility databases, Scielo, for example.

The information was organized and processed in tables with several entries with the concepts and their definitions and other transcendental contents, presented by authors, year of publication, place of publication, and philosophical, psychological, and pedagogical position. Next, the source triangulation technique was used to search for concordant and discordant aspects, which through the deductive route allowed theoretical generalizations to be reached.

The methods of documentary analysis, scientific observation and interviews were also used to search for information.

The system of methods, techniques and procedures made it possible to base an approach to the management of university processes and their dimensions, so that it would serve researchers as a guide for the elaboration of their starting theoretical frameworks.

The study covered a total of 11 master's and doctoral theses that dealt with the management of some of the university processes, between 2010 and 2021. Of these, four theses from the master's program in Education Sciences and seven from the doctoral programs in Educational Sciences in liquidation and current that are developed in the CECEPRI of the University of Pinar del Río "Hermanos Saiz Montes de Oca".

Being imbricated this theoretical and practical exploration in a research project not associated with an institutional program, entitled *The improvement of the management of processes in the teaching department, at the University of Pinar del Río* allowed to present the result related to the foundation of an approximation to the management of university processes and their dimensions for the students of the postgraduate academic programs of master's degree and doctorate in Educational Sciences of CECEPRI.

RESULTS

The training of master's degrees and doctors in the area of university process management is one of the prioritized lines of CECEPRI. In this sense, there are three training programs, namely: the Master's program in Educational Sciences, the Doctoral program in Educational Sciences in liquidation and the current Doctoral program in Educational Sciences.

These postgraduate academic training programs have among their lines of research the management of university processes, for which there is a research group that is in charge of its management, at CECEPRI.

The research project not associated with the institutional program *The improvement of the management of processes in the teaching department, at the University of Pinar del Río*, of CECEPRI, was conceived, in which the university management topics that the researchers carry out are inserted.

The theoretical systematization of the research objects that deals with the management of some of the university processes could be logically structured from the general, to the particular and to the singular. The general, the particular and the singular would be relative according to the criteria assumed by the researcher.

In the specific case of this work, educational management and management are considered general, university management as particular, and specific management of the university process under study as singular.

Management as a more general concept

The treatment of the management of processes in higher education institutions (hereinafter IES) has its antecedents in management and educational management. There is a large volume of information in this regard with different nuances, fundamentally philosophical, which lead those who research in this area to take a position.

The management arises as a result of social development and the transformations that were experienced in the business sector, and due to the benefits produced in this field, its application is encouraged in other areas, including education.

Management, administration and direction, according to Murillo (2019), are terms used in organizations in the business field, where there are authors who establish differences between them, originating in the practical application and translation of other languages (p. two).

Management is an old concept and closely linked, currently, with the processes that are developed in all HEIs. It is not conceivable to think about change, improvement and transformation of university processes without thinking about the term management.

Cassasus (1997) associates management "with the understanding and interpretation of the processes of human action in an organization" (p.13).

Jordan (1999) considers that "management is directing the processes of human action in an organization, in such a way that they constitute the concrete implementation of its general policy; that is, it is adopting decisions oriented towards the achievement of objectives" (p.10).

Heredia (2002) conceives it as "a broader concept, since those who study the conceptual advance of said term emphasize that management means action and effect of carrying out tasks with care, effort and efficiency, which lead to a purpose" (p.25).

Calleja (2006) identifies it as "a process of conscious, systematic and stable influence (...) on human groups, guiding (...) to certain objectives; based on the knowledge and application of laws, principles, methods and techniques (...) characteristic of the system that is influenced" (p. 2).

As evidenced in the definitions discussed above, the allusion to *management* as an action or effect of a certain group to achieve the proposed objectives and goals is recurrent, and there is a consensus that it does not consist only in the fulfillment of objectives, but that in order to achieve adequate management, a collective construction process is required, within the planned period of time, with efficiency in the use of the resources determined for this purpose and through good communication of those involved, as well as adequate preparation of human capital.

educational management

Educational management is a relatively young discipline, whose evolution dates back to the 1960s in European countries (United Kingdom, France, Sweden and, later, Spain) and the 1980s in Latin America and the Caribbean, including Cuba.

The term *management* in the educational area, refers to Cejas (2009), is often used without precision and, sometimes, with conflicting meanings (p.216).

This author points out that, on the one hand, *management is usually defined* as *the steps leading to the consequence of something*, that is, that linked to actions that have certain objectives towards which it is directed; but also, it is related -according to the dictionary- *with the action and effect of administering*, that is, it is attributed a character closer to the normative. Hence, we can recognize at least two clear notions: one linked to the administration and another linked to the government, to the management, to collective participation (p. 216).

Cejas (2009) states that "educational management is the set of articulated actions to achieve the objectives proposed in the educational project of an educational center" (p. 216).

Botero (2009) refers that it is "the set of processes, decision-making and actions that allow carrying out pedagogical practices, their execution and evaluation" (p.2).

The Educational Management Anthology (2000), referenced by Álvarez, Topete and Abundes (2011), considers that school management is:

> a set of interrelated actions, executed by the management team of an institution to promote and enable the achievement of pedagogical intentionality in, with and for the educational community. It is one of the decision-making instances regarding the educational policies of a country (2011: 4).

Álvarez, Topete and Abundes (2011) conceive educational management as:

> … a dynamic process that manages to link the spheres of conventional administration with those of the organization structure, under the leadership and animation of effective management leadership by each director, which is exercised in a context of multiple leaderships and is it guides towards the fulfillment of the institutional mission (p.4).

From the analysis of the definitions of educational management, it is identified as distinctive features that: (1) it is a dynamic process, (2) made up of conscious, systemic and planned actions, (2) carried out by a pedagogical group under the leadership of a leader, (3) that enjoys leadership in decision-making, (4) in order to meet the objectives and goals proposed in the educational project of the school institution.

UNESCO-PERU (2011) establishes four dimensions with their respective indicators for educational management, namely: *institutional*, *administrative*, *pedagogical* and

community , which synthesize the spirit of the definitions of educational management discussed above and express the contents fundamentals of this (p. 32).

The dimensions of educational management

Educational management raises a systemic and global view of the institution. The dimensions allow us to see what is done and how it is done within each institution.

The definitions of these dimensions and their indicators are provided below.

The *institutional dimension* will help to identify the ways in which the members of the educational community are organized for the proper functioning of the institution. The main indicators include: (1) the ways in which the institution is organized, the structure, the instances and the responsibilities of the different actors, (2) the ways of relating and (3) the explicit and implicit norms (UNESCO-Peru, 2011: 35).

The *administrative dimension* includes the actions and strategies for conducting human, material, economic resources, technical processes, time, safety and hygiene, and control of information related to all members of the educational institution; as well as compliance with regulations and supervision of functions. The main indicators are related to: (1) the management of economic, material, human resources, technical processes, time, safety and hygiene, and control of information and (2) compliance with regulations and supervision of functions (UNESCO-Peru, 2011: 36).

The *pedagogical dimension* refers to the fundamental process of the work of the educational institution and the members that make it up: teaching-learning. It includes the approach to the teaching-learning process, curricular diversification, systematized programming in the curricular project,

methodological and didactic strategies, learning evaluation, the use of didactic materials and resources, as well as the work of teachers, pedagogical practices, mastery of plans and programs, management of pedagogical approaches and didactic strategies, teaching styles, relationships with students, teacher training and updating to strengthen their skills, among others. The main indicators are related to: (1) educational-methodological options, (2) planning, evaluation and certification, (3) the development of pedagogical practices and (4) updating and personal and professional development of teachers. (UNESCO-Peru, 2011: 36)

The *community dimension* refers to the way in which the institution relates to the community of which it is a part, knowing and understanding its conditions, needs and demands. Likewise, how it integrates and participates in the community culture. It also alludes to the relationships of the educational institution with the social and inter-institutional environment. The main indicators are: (1) the response to the needs of the community, (2) the relations of the school with the environment, (3) the parents, (4) the local organizations and (4)) support networks (UNESCO-Peru, 2011: 37).

The principles of educational management

The principles constitute the pillars on which the management of processes in educational institutions is sustained.

The set of general principles of educational management by Arava (1998) was taken into consideration.

Arava (1998) raises, fundamentally, as general principles of educational management

(1) *student-centered management* : the main institutional objective is the education of students; (2) *clearly defined hierarchy and authority* : to guarantee the unity of the organization's action; (3) *the clear determination of who and how decisions are made* : it implies defining the responsibilities that correspond to each and every one of the people; (4) *clarity in the definition of participation channels* , so that the competition of educational actors is strictly related to the institutional objectives; (5) *the location of the staff according to their competence and/or specialization* , considering the skills and competencies of the teaching and administrative staff; (6) *fluid and well-defined coordination* , to improve the consistency of actions; (7) *transparency and permanent communication* , by having communication mechanisms, enables a favorable climate of relations and (8) *effective and timely control and evaluation* for continuous improvement, to provide accurate information for timely decision-making (pp. 78-79).

The theoretical-conceptual analysis of the definitions of management and educational management, as well as its dimensions and indicators and the general principles that support it, lay the foundations to present and delve into theoretical and practical aspects of the management of processes in HEIs.

Process management in higher education institutions

The treatment of the management of processes in HEIs starts from understanding what is conceived by university management, on the one hand; and the role of the university in the current socio-historical conditions, on the other hand.

Next, a set of definitions of university management is presented, issued by authors who have worked on the subject.

De Vries and Ibarra (2004) consider that university management is "the specific ways in which institutions are organized and conducted to achieve their essential purposes" (p.575).

Padilla (2006), for his part, defines it as the ability to generate the best conditions for institutional processes to occur efficiently and effectively, in the achievement of objectives and goals, through an adequate relationship between the structure, the strategies, the leadership and the capacities of the available human resources (s/p).

Botero (2009) refers that university management consists of "doing everything that is necessary so that the different organizational units of the higher institution, implement the different actions existing in it. In the management, technical, financial resources are used and humans" (p.2).

Also, Cejas and Alfonso (2012) conceptualize it as "a set of factors (resources, processes and results) that must be at the service and contribute positively to the development of training, research, extension and human resources" (p. 27).

For his part, Véliz (2017) defines it as

> a global, complex, integrating and generating process that requires the conjunction of principles, models, procedures, strategies, mechanisms and managerial styles, with pedagogical, epistemological and ideological assumptions that aims to guarantee growth, strengthening and sustainable development of the organization to comply with the objectives set in the normative and regulatory

frameworks of the State linked to leading processes with prevention, transformation and innovation in contexts of constant changes, which aim at participatory, agile and relevant decision-making, to improve university teaching functions, research and extension. (p.10)

Finally, Rodríguez, Artiles and Pulido (2020) state that

> To manage in the higher institution is to carry out actions that make its development possible, for the achievement of the mission that it has established, in which, at least, the different academic managers intervene on one side and the teaching staff and students on the other (p.9)

These definitions of university management have as distinctive features: (1) that it is a global, complex, integrating and generating process; (2) that is sustained in a theoretical-practical framework (principles, models, procedures, strategies, mechanisms and management styles, with pedagogical assumptions; (3) based on the leadership of the actors in the processes; (4) for the decision of participatory, agile and pertinent decision-making, (5) in the achievement of goals and objectives aimed at improving university processes.

By situating the distinctive features that typify the management of processes in HEIs, it is necessary to establish the role of the university in the current socio-historical conditions.

Role of the university in the current socio-historical conditions

Universities are one of the social actors involved in achieving the sustainable development goals; therefore, the redefinition of their corresponding role is required. They must contribute from research and innovation to sustainable development, providing adequate and socially legitimized technological responses that provide solutions to the cross-cutting problems posed by the 2030 Agenda for Sustainable Development adopted by the UN General Assembly at the 2015 Summit, with interdisciplinary solutions.

Universities, considers Murillo (2019), should

> learn to live in change, anticipating transformative decisions that allow their survival and development, which leads them to an essentially strategic conception of their management, which manifests itself in a systematic adaptation to the changing environment, with a shared vision of the desired future of the organization (p.3).

López, García and Addine (2017) recognize that "higher education has the challenge of ensuring the quality of the permanent training of professionals capable of facing economic, social and educational transformations, and of contributing to maintaining indicators of effectiveness, efficiency and relevance in quality education for all" (p. 25).

Tristá (2005) refers that diverse and complex demands are constantly placed on HEIs, since the professional competences achieved by university graduates depend on a quality higher education system, which places

management theory in the center of research on university processes (p.4).

Almuinas et al. (2016) stated that "in less than a decade, the concern for improving the management of university processes (...), has become a decisive and crucial issue to meet the challenges of HEIs" (p.8).

This appreciation manifests an unavoidable and progressive interest towards the internal management of universities, as a way to solve the demands and shows the importance currently attached to its improvement. Therefore, it is unavoidable that university management be redefined and redesigned, based on the improvement of the management of its processes.

According to González (2020), university processes are classified "in *key or missionary* (teaching, research and extension), *strategic or transversal* (human capital, information-communication-computerization, internationalization, quality of Higher Education and educational and political work-ideological) and *support or support* (assurance to university processes" (Slides 36, 37).

The aforementioned authors agree that university management has, among its distinctive features, that it is: (1) a global, complex, integrating process and generator of actions that are linked, coordinated, organized and conducted, (2) for the achievement of objectives and goals with efficiency and effectiveness, (3) based on the leadership of the actors involved, (4) and the optimization of human, material, financial and time resources, (5) in order to make the right decisions based on of the continuous improvement of the substantive processes in the HEIs.

The exhaustive analysis of the definitions of university management, as one of the branches of educational management, leads the authors to take a look at the contents of

university management similar to that established by UNESCO-Peru (2011). From this view, it is assumed that university management materializes within the HEIs in the *institutional*, *administrative*, *pedagogical* and *community dimensions*.

The definitions of the dimensions and their indicators are closely related to the declarations in educational management, but contextualized to university processes.

The principles that underpin the management of university processes

University management needs to be based on a system of principles that constitute rules or norms of a general and flexible nature, which guide the direction of missionary, transversal and support processes in HEIs. In addition, the assumptions related to the guiding nature of the principles set forth by Díaz-Canel, Jover and Torres (2020: 380) are shared.

The system of principles offers the conditions that allow the management of university processes to be energized in practice, with the intervention of management personnel, who assume them in the different situations faced by the HEI.

The authors of this work, based on the theoretical study carried out, establish the following as the system of principles that supports the management of university processes:

1. The integral character.

The essence of the integral character of university management consists in coherently articulating the contents of university processes in the institutional, administrative, pedagogical and community dimensions within a management cycle that starts from the planning, organization, execution and control of these processes.

Comprehensive management is given in the systemic articulation that must exist between the contents of the dimensions of university management and the dynamics imposed by the managerial cycle.

2. The procedural nature.

The systemic management of the key or missionary, strategic or transversal and support or support processes acquires its dynamics in the procedural nature of the management of these processes that are interrelated, but that at the same time have their own identity.

The procedural nature is present in the managerial cycle, where the content of each of the dimensions of the management of university processes is planned, organized, executed and controlled.

3. Shared leadership.

The essence of shared leadership is an obligatory feature in the management of university processes for efficient, effective and quality development in the decision-making process.

The managers of the processes must endorse the aims, objectives and institutional goals in the different organizational structures, where managers, academic directors, teachers, students and support staff are actively involved with responsibility and an innovative character.

The prominence of the actors is manifested in the processes of the managerial cycle during the planning, organization, execution and control of university processes.

4. Communicability.

The principle of communicability in management has its essence in the achievement of an assertive, objective and truthful communication that permeates all

organizational structures, and that occurs in an ascending and descending manner during the management cycle of planning, organization, execution and control. of university processes and that materializes in timely and objective decision-making.

5. Objective decision making.

The principle of objective decision-making is based on the fact that the management of university processes must be based on real, reliable and objective data and information, in the management structure of the IES. The management carried out on this basis would guarantee the effectiveness and efficiency of the university process.

6. Continuous improvement.

The approach to quality in the management of university processes, according to Murillo (2019), is associated with compliance with international standards and their certification, and that of excellence established by the ISO 9001 standard (p.8).

Quality, according to Almuiñas and Galarza (2017), includes management, systems, decision-making, processes, dialogue, negotiation and relationships between internal and external actors, leadership, teamwork, information and methodologies (includes methods, techniques, procedures, variables, criteria, indicators, or goals and objectives), among others (pp. 73-92).

Quality, Almuiñas and Galarza (2017) add, is linked to the current reality and the identity of an HEI, expressed in the fulfillment of its mission, vision, and priority objectives and goals at a given moment. Institutional sustainability includes the sustainability of quality and its management, which is one of its components (pp. 73-92).

The essence lies in the fact that through the processes of monitoring, feedback and follow-up, the quality of the processes that are managed in the HEI and their own management are improved.

In case of failures, the strategies are redesigned and the errors are corrected that allow the quality of the processes and, consequently, the management is improved.

The procedural nature of the management of university processes

The fulfillment of the institutional objectives and goals are specified in the management of the key or missionary, strategic or transversal and support or support processes.

The ideas that are put forward below were taken from unit 3 *Educational management processes, from the Management* Manual for directors of educational institutions and adapted to university management processes (UNESCO-Peru, 2011: 41-46).

The processes of university management give an integral directionality to the operation of the educational service to satisfy the needs of the members of the university community and other institutions linked to it, with a view to achieving the established purposes, in order to offer a training process of quality established in the institutional educational project.

This quality service in HEIs implies continuous improvement in daily tasks and in management processes. In this sense, the Shewhart cycle of management processes that Deming popularized as the Deming Cycle (UNESCO-Peru, 2011: 42) was taken into consideration.

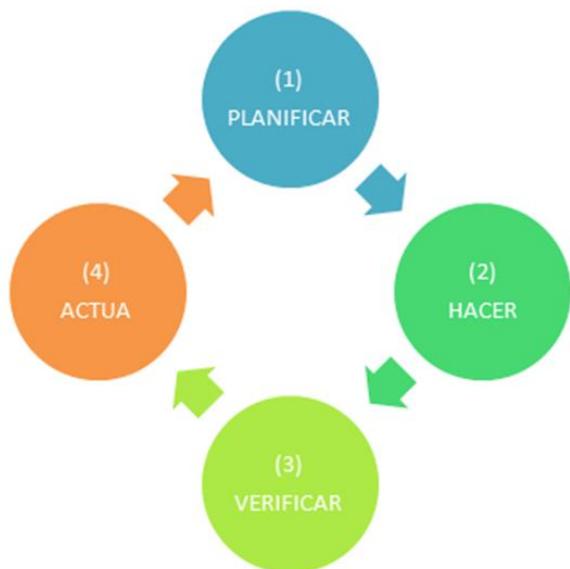This cycle has the *plan-do-check-act moments*.

Fig. 1- Deming cycle.

Through this cycle, the management of an HEI *plans*, *organizes*, *directs*, *controls* and *monitors* university management, optimizing the use of available material, financial, technological and human resources.

Planning

Planning is the phase in which the manager of the IES organization, with his work team, decides *what to do*, and determines *how* through the strategies that make the IES an institution of pedagogical excellence, according to the mission and vision of the institutional educational project.

Management is fundamentally a decision-making process. It is necessary to decide on *what must be done* to achieve the objectives and goals, *where to start* and *how it will be done*, which also implies thinking about *what resources* are available, *what is required* to achieve what is proposed and *what obstacles* would have to be overcome.

The execution

Doing is a first moment of execution according to what was planned. It implies the development of management, by facilitating the integration and coordination of the activities of teachers, students, non-teaching staff, parents, actors in the productive and service sectors, among other agents. It also implies the use of resources to develop processes, programs and projects. It involves the division of labor and functions through a hierarchy of authority and responsibility and a scheme of relationships between actors and their environment.

During execution, the organization processes of existing resources, the division of tasks, decision-making and the delegation of functions become vitally important.

Evaluation and monitoring

Verify. This moment makes it possible to ensure and verify that the execution corresponds to the schedule. In the same way, the possibility of reviewing the scheme of responsibilities and the distribution of work that was designed for the achievement of the objectives and goals outlined in the different areas considered in the planning. It also allows the introduction of readjustments to programming and resource allocation.

With the evaluation, it will be possible to identify those aspects that are important to maintain and those that require improvement to achieve the institutional objectives and goals.

Act. It implies a second moment of execution of the management process, but considering the results of the evaluation and the necessary readjustments during the process to achieve the institutional objectives and goals.

DISCUSSION

The foundation of an approach to the management of university processes and their dimensions, which will serve students of the master's and doctoral programs in Educational Sciences of CECEPRI, constitute a guide for the elaboration of their starting theoretical frameworks.

The elaboration of these theoretical frameworks is a complex process that requires different views from the philosophical, sociological, psychological, pedagogical and from the economics of education and, specifically, from university management.

The procedures used in the foundation of the theoretical systematization for the management of university processes and their dimensions were based on the dialectical-materialist method, as a methodological and ideological basis, with the study of recognized authors in the subject of educational management and university management at international, regional and national level.

The theoretical systematization covers a theoretical body based on the concepts, definitions, principles, procedural nature and good practices of educational management and university management, which helps researchers to support their theoretical and practical positions on objects. research related to the management of university processes.

This holistic and coherent vision of focusing theoretical systematizations on the management of university processes is in tune with the management of science and innovation from the complex socio-formative paradigm and on competencies for Sustainable Development, when facing the challenges of unsustainability in the exercise of their professions.

As summary mode, it is considered that; (1) the theoretical systematizations related to the management of processes in HEIs, which would be carried out by the masters and doctoral students of the postgraduate academic programs of CECEPRI, find a precise orientation in this work to focus these systematizations in a coherent and systemic way; (2) this work deals, from a logic that goes from the general, to the particular and to the singular, the theoretical definitions of management, educational management and university management, from different positions of classic and contemporary authors; (3) in the same way, the dimensions and indicators of educational management that can be adapted to the conditions of the management of the processes in the HEI are offered and (5) finally, an analysis of the procedural nature of the management in the HEIs, taking into account the criteria of the Deming cycle planning-do-verify-act in close relation with the management cycle plan-organize-direct-control that allows to dynamize the management within the HEIs, from its dimensions and indicators .

This is by no means a finished document, so it can be enriched by the researchers' own theoretical systematizations and by their own experiences in educational practice.

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