Avances teóricos de la gestión en un programa de posgrado

Theoretical advances of management and formation processes in a postgraduate program

Avanços teóricos em gestão em um programa de pós-graduação

Rosa Amalia Gómez Ortíz
Instituto Politécnico Nacional. Escuela Superior de Comercio y Admón. Santo Tomás, México
ragomez@ipn.mx, ragomez100@hotmail.com
https://orcid.org/0000-0002-2082-1696

Carlos Topete Barrera
Instituto Politécnico Nacional. Escuela Superior de Comercio y Admón. Santo Tomás, México
ctopete@ipn.mx, cartopba@yahoo.com
https://orcid.org/0000-0001-6997-8451

Resumen

El objetivo de este estudio fue analizar los avances significativos y contemporáneos del término gestión. Se revisó la visión de diferentes autores para fundamentar con elementos teóricos y empíricos los contenidos y actividades de aprendizaje en la Maestría en Administración en Gestión y Desarrollo de la Educación (MAGDE), para cubrir uno de los requisitos del Consejo Nacional de Ciencia y Tecnología y acceder al nivel consolidado de programas de calidad del posgrado. El método fue una comparación entre lo teórico y los contenidos de las diferentes unidades de aprendizaje del programa, así como con sus líneas de investigación. Esto permitió fundamentar la relación entre el conocimiento teórico contemporáneo y las diferentes unidades de aprendizaje en la formación en gestión educativa. En cada una de ellas se profundizan aspectos relacionados con teorías, actores, procesos, habilidades, contextos en el marco del sistema educativo nacional, así como de la globalización social, económica y política. La conclusión es que entre el programa y la fundamentación teórica de la gestión académica y administrativa existe congruencia, así como pertinencia, pero, sobre todo, que la gestión es un tema actual y de vanguardia.
Palabras clave: administración, congruencia teórica, formación, gestión educativa, programa de posgrado.

Abstract
The purpose was to analyze the significant and contemporary advances of the term management. It was revised the vision of different authors to support with theoretical and empirical contents as well as with learning activities in the Master in Administration in Management and Development of Education (MAGDE) in order to cover one of the requirements of the National Council of Science and Technology to access the consolidated level of quality programs of postgraduate. The method was a comparison between the theoretical and the contents of the different learning units of the program, as well as their lines of research. This allowed establishing the relationship between contemporary theoretical knowledge and the different units of learning of formation educational management. In each of them, aspects related to theories, actors, processes, skills, contexts within the framework of the national educational system, as well as social, economic and political globalization are deepened. The conclusion is that between the program and the theoretical foundation of academic and administrative management there is congruence, as well as pertinence but above all, management is a current and cutting-edge topic.

Keywords: administration, theoretical congruence, formation, educational management, postgraduate program.

Resumo
O objetivo deste estudo foi analisar os avanços significativos e contemporâneos do gerenciamento de termos. A visão de diferentes autores foi revisada para basear elementos teóricos e empíricos sobre os conteúdos e atividades de aprendizagem no Mestrado em Administração em Gestão e Desenvolvimento da Educação (MAGDE), para cobrir um dos requisitos do Conselho Nacional de Ciência e Tecnologia e acessar o nível consolidado de programas de qualidade de pós-graduação. O método foi uma comparação entre os teóricos e os conteúdos das diferentes unidades de aprendizagem do programa, bem como com suas linhas de pesquisa. Isto permitiu estabelecer a
relação entre o conhecimento teórico contemporâneo e as diferentes unidades de aprendizagem no treinamento de gestão educacional. Em cada um deles, os aspectos relacionados a teorias, atores, processos, habilidades, contextos no âmbito do sistema educacional nacional, bem como a globalização social, econômica e política são aprofundados. A conclusão é que, entre o programa e os fundamentos teóricos do gerenciamento acadêmico e administrativo, há congruência, bem como relevância, mas, acima de tudo, que a gestão é uma questão atual e de ponta.

**Palavras-chave:** administração, congruência teórica, treinamento, gestão educacional, programa de pós-graduação.

**Fecha Recepción:** Marzo 2017  **Fecha Aceptación:** Septiembre 2017

---

**Introduction**

The document arose from the commitment to comply with the requirements that the National Council of Science and Technology (Conacyt) established to evaluate the graduate programs and be able to access the next consolidated level.

An important documentary research was carried out and the one that was considered relevant from a vision of the administration and its different theories was selected, and it was reviewed how the management in its development is linked to the administrative process.

Subsequently, the learning contents of the different study programs of the Master's program in Administration in Management and Development of Education (MAGDE) were reviewed and compared with the theoretical principles and basic elements of administrative and educational management, finding a congruence in the topics with the theoretical aspects.

In each learning unit of the MAGDE program, the contents of each management element are deepened, so that the training of the students of this program acquires a global but also specific vision of the processes and elements that must be considered in the management of education, taking into account the different educational levels.
For this reason, the content of this document was integrated in the following manner: precedents of the management, in which the antecedents considered relevant for the purpose of this document are shown; conceptions of the term of the management from the point of view of the administration of companies and the educational administration; then, management models are reviewed in the international arena; Models are mentioned at the national level, which includes the description of the strategic model and includes the relevant aspects of management in educational institutions. Also in the management challenges are shown according to various authors the challenges that educational institutions have faced. In the conclusions, the challenges of management education in the MAGDE program are integrated, and the General Knowledge Application Lines (LGAC) of the program are reviewed, which jointly integrate all the aspects related to the management elements, its scope of work and the characteristics that the different actors must possess in the application of knowledge, skills and attitudes in their exercise. Likewise, the documents that allowed the integration of this document in the rubric of references are presented.

**Precedents of the management**

The fields of application of innovation in higher education institutions are teaching, research, dissemination, extension, administration and linking. In each of them, there is an administration process that includes management processes, which must support the actions for the achievement of objectives of various internal and external interest groups to an educational organization, such as: educational authorities, teachers, students, parents and external organizations, which in one way or another affect the development of an educational program.

The term management comes from the theories of administration; therefore, the terms management and administration have been the cause of extensive debates. Its translation into English is management and refers to both management and administration, so it is said that they mean the same thing. But there are authors who indicate that management is part of the administration process and of each of its elements: planning, organization, direction, integration and evaluation.
Conceptions of the term management

Like many administrative terms, management emerged in the field of companies and industries in the late nineteenth and early twentieth centuries. At the same time that some theories of the administration were created, the study and theoretical development of the management began.

From the business point of view, the main theorists were: Frederick Winslow Taylor with the scientific administration; Henry Fayol with the functional company or theory of classical organization and Max Weber with the theory of the structuralist enterprise (administrative bureaucracy).

There were other trends, among whose representatives are George Elton Mayo, Mary Parker Follet, Abraham Maslow, Frederick Irving Herzberg and Douglas Mc Gregor with the humanistic company. The influence of the aforementioned theories gave rise to the study of management based on the principles of the behavioral school, the school of organizational development, structuralist or bureaucratic theories, systems theory, quantitative methods, neoclassical theories, The Theory of contingency and the humanistic school, among others. Some of its characteristics are shown in table 1.

Every company is organized from the planning, direction, coordination and control, steps that are involved in the different actions to achieve the objectives successfully; mainly the highest managers are those who must have a greater administrative capacity (Fayol, 1961). This position is circumscribed in a specific way to the administrative process instead of orienting itself to the management part.
Tabla 1. Teorías de gestión desde el punto de vista empresarial

<table>
<thead>
<tr>
<th>Teoría</th>
<th>Características</th>
</tr>
</thead>
</table>
| Administración científica. (Frederick Winslow Taylor) | La tarea principal de las personas en las empresas era analizar y estudiar la forma de hacer eficiente el esfuerzo del ser humano (Hernández, 2011). Lo que distingue esta teoría es el diseño y desarrollo de procedimientos de métodos de trabajo y la selección de trabajadores con capacidades específicas.  
|                                                  | Demostrar la importancia que la compensación tiene en el desempeño.  
|                                                  | Iniciar un estudio riguroso de las tareas y puestos. Demostrar la importancia de la selección y capacitación del personal.  
|                                                  | Las aportaciones según Muñoz (2013):  
|                                                  | Principio de planeamiento: sustituir el trabajo improvisado del obrero por métodos basados en procedimientos. Principio de preparación: selección de los trabajadores de acuerdo con sus aptitudes y habilidades para producir más y mejor.  
|                                                  | Principio de control: controlar el trabajo para verificar que el mismo se esté ejecutando correctamente. Principio de ejecución: distribuir las atribuciones y responsabilidades para que la ejecución del trabajo sea disciplinada.  
|                                                  | Estudiar y analizar el trabajo realizado por el obrero, es decir, cómo lo hace.                                                                                                                                |
| Teoría de la organización clásica (Henry Fayol)   | La atención de esta teoría está en el trabajo que debía ser realizado (Hernández, 2011).  
|                                                  | La organización funcional es la forma más lógica y básica de división por departamentos y que la función administrativa tiene proporcionalidad cuando se reparte en todos los niveles de la empresa.  
|                                                  | Los elementos desde la óptica de Fayol son:  
|                                                  | Planeación: diseñar un plan de acción para el mañana. Organización: brindar y movilizar recursos para la puesta en marcha del plan. Dirección: dirigir, seleccionar y evaluar a los empleados con el propósito de lograr el mejor trabajo para alcanzar lo planificado. Coordinación: integración de los esfuerzos y aseguramiento de que se comparta la información y se resuelvan los problemas. Control: garantizar que las cosas ocurran de acuerdo con lo planificado y ejecución de las acciones correctivas necesarias de las desviaciones encontradas. |
Fayol (1961): “En todo género de empresas, la capacidad esencial de los agentes inferiores es la capacidad profesional característica de la empresa, y la capacidad esencial de los altos jefes es la capacidad administrativa.”

Las operaciones que se desarrollan en las empresas pueden repartirse en las seis consideraciones siguientes: operaciones técnicas, operaciones comerciales, operaciones financieras, operaciones de seguridad, operaciones de contabilidad y operaciones administrativas (Fayol, 1961).

Las características que distinguen su enfoque son: legal de normas y reglamentos; formal de las comunicaciones; racional y división del trabajo; impersonalidad de las relaciones; jerarquía de la autoridad, rutinas y procedimientos estandarizados; competencia técnica y meritocracia; especialización de la administración; profesionalización de los participantes; previsión del funcionamiento (Hernández, 2011).

La necesidad de organización de las empresas aumentaba paulatinamente según su tamaño y complejidad operativa.


Taylor gives more emphasis to the analysis of work and the abilities of people who perform certain tasks, and concludes:

The scientific administration is based on: the firm conviction that the true interests of both are unique and the same; that there can be no prosperity for the employer, in a long term of years, unless it is accompanied by prosperity for the employee, and vice versa; and that it is possible to give the worker what he most desires (high wages) and to the employer what he also seeks most (a reduced cost of labor) for his factories.

In this case there is a focus on the strategies that are used and is closer to the management process. Weber bet everything on the bureaucratic model, but we must understand that he had a concept of bureaucracy based on avoiding the emotional decisions of man through a very rigid structure and organization, legitimized by society, something different from the current conception of bureaucracy, which understands as a process full of paperwork, with samples of little interest,
slowness, inefficiency, among others. It is a model mainly focused on planning to allow operations to adapt to the demands of the bureaucracy (without touching the pejorative point of the term).

The theories of management are divided in chronological order into: classical school or classical theory; neoclassical theory; transition theories and modern management (De Miguel, 1989). The same De Miguel, defined the term management as the set consisting of men, machines, technology, information and financial resources or any other type that manages to achieve the stated objectives, but using the available resources effectively. It is a different point of view to the administrative process, since it refers to the equipment, materials and human resources involved to achieve the objectives set by the company.

Business management aims to improve productivity, sustainability and competitiveness, ensuring the viability of the company in the short term, and is conceived as the set of services provided by people, within organizations and should be understood as the art of the organization of the actors and resources.

The term management, according to the Spanish Royal Academy, comes from the verb manage: "make diligences conducive to the achievement of a business or any desire", and, unlike the administration, focuses on the design of structures, procedures and systems of information to plan, organize, direct and control. According to the previous text, Hernández and Pulido (2011) clarify it: the administration is the hardware and the software management of a social organization.

As mentioned by Hernández and Pulido, management is an intellectual, creative and permanent process that allows an individual, prepared with labor and managerial skills, to lead a productive social organization to the circumstances of the highly changing environment in which they operate, and adapting it through a series of long-term policies and strategies.

From the point of view of strategic management, management must be tactical, generating understanding and awareness of all elements of the organization. Therefore, the management is responsible for the coordination and use of resources: economic, human, technological, social and others of the company. Thus, the management is aligning each resource so that the management can cover its purposes.
The definition of the term management is congruent with its object of study; for example: business technology management is understood as the orientation of activities to design, manufacturing, marketing, sales, distribution, customer service, information systems, human resources, finance, purchasing, the clients, the suppliers, the public relations and the administration in general (Gaynor, 1996, cited by Rodríguez, 2010). Management is located as part of the different activities in a company, and has an integrating and holistic function.

In the case of the supply chain, according to García and González (2010), its purpose is to synchronize the functions of a company with those of suppliers in order to match the flow of materials, services and information with the customer's demand.

Mintzberg and Stoner (1995, cited by Vázquez H, 2010) assumed the term management as the disposition and organization of the resources of an individual or group to obtain the expected results, so that management has at least three major fields of meaning and application.

The first is related to the action: management is the diligent doing by one or more subjects and obtain or achieve something, is a way to proceed to achieve a goal or purpose determined by people.

The second is the field of research: management deals with the formal and systematic process to produce knowledge about observable phenomena in the field of action, whether to describe, understand or explain such phenomena. In this field, management is an object of study of those who are dedicated to research, which requires the creation of concepts and categories to analyze it.

In the third field, innovation and development, new management guidelines are created for the action of the subjects, with the intention of transforming or improving it, that is, to enrich the action and make it efficient, because it uses the available resources better; effective, because it achieves the purposes and purposes pursued, and relevant, because it is appropriate to the context and the people who make it.

The strategic theory was conceptualized by Daft (2000) as "the set of decisions and actions used to formulate and follow strategies that present a competitively superior adjustment between companies and their environment to achieve the objectives of the organization."
Given the different definitions, it is concluded that the management is oriented to take decisions to establish specific actions and strategies and achieve the previously established objectives.

The management is understood as the set of integrated actions for the achievement of a goal to certain term that includes all the areas: administrative, programming, control, orientation and evaluation. In addition, it is also considered as the process that allows coordinating, directing and influencing the operations of the organization so that the desired results are obtained, improving the total execution. In addition, to apply in a rational and orderly manner the resources available to achieve the objectives that have been planned.

Casassus (2000) defined management as "a capacity to generate an adequate relationship between structure, strategy, systems, style, capabilities, people, and the superior objectives of the organization considered"; therefore, managing is the ability to articulate the resources available to achieve what is desired. From a representation perspective, it can be said that management is "the capacity to articulate mental representations" (Sep, 2003).

As a summary, it is affirmed that the evolution of the theoretical conceptions about the management of the organizations has occurred around the organization of work, the productivity and the efficiency of the organizational processes associated to the structure, the strategy, to the planning, the development of power (authority) and other factors associated with the external environment of organizations. In this process three conceptions have been basically given:

1. The mechanist, whose metaphor is that of a productive machine with several mechanisms that lead to efficient production and whose structure and strategy adapt to this conception; here the statistics, forecasts, times and movements are decisive for the management of the organization.

2. The one based on human needs, whose metaphor is that of the organization as a community, and is centered on human relations within the organization and the needs of the worker; here the concepts of motivation, leadership, negotiation, communication, learning and organizational behavior charge a strong impetus for organizational management.

3. The situation, which has as a metaphor of the organization that of an organism that evolves according to the environment; Thus, the processes of planning, strategy, structure, government are
adapted to the external environment and the behavior of the actors depends on the external situation that determines the constitutive elements that make up the formal and informal structures.

Conception of the term management in education

In the educational field, management understands the nature of sufficient, accurate, adequate and, above all, valid administrative forms that allow achieving the desired results, that is, it consists of how the different inputs that intervene in educational processes are administered. The function of management is an inherent part of all organizations, whatever their specific mission; it is the generic organ of society, and in the era of knowledge of the age of knowledge.

In its appearance as a discipline in 1945, the basic purpose of management focused on how to make people produce. In the 21st century, the concept has changed since knowledge is the essential resource of any organization and the person in charge needs to apply and make this knowledge, effective management is the application of knowledge to knowledge, thereby obtaining additional resources and products. Therefore, management is the set of strategies that allow knowledge to be applied and rendered (Gómez y López, 2007).

In the previous context, the management of innovation is an integral process of functions to coordinate, direct and influence the various academic-administrative activities to achieve the objectives of innovation processes through the joint work of authorities, teachers, students and support staff.

For the purposes of this work, educational management is understood as the application of the general principles of administration, management and educational theory to educational organizations, including critical approaches.
Management models at an international level

With the 21st century there were challenges generated by a globalized economy, culture and society, a new vision of the world, the use of clean energies, the reencounter with nature, the formation of integral human beings, this coupled with a great technological development and the collapse of employment in the midst of a climate of violence that seems uncontainable, are part of the social context, where solutions are expected to emerge from the school.

The social panorama is complex and the educational management has to become part of the educational practice. The United Nations Educational, Scientific and Cultural Organization (Unesco) called on the various education systems around the world to implement the necessary changes and ensure the formation of integral human beings capable of successfully incorporating themselves into society and the world. job.

Given this scenario, a series of initiatives have been undertaken worldwide that, to a greater or lesser extent, seek to respond in accordance with the guidelines that avant-garde educational systems, mark as the best to respond to these changes.

In Latin America, countries such as El Salvador, that initiated the EDUCO program, ADONDE the Community Association of Education, the members of the community and the government initiated the educational change; in Honduras, a similar process was launched with the PROHRCO program; PRONADE is in Guatemala and a program of self-evaluation, planning and better attention to its students and community called PDE was started in Brazil.

In Mexico, the School Management Program (AGE) was launched (National Council for Educational Promotion [Conafe], 2009), which was invested in staff training; and in 2001 it began with the Quality Schools Program (PEC), which gives greater autonomy to exercise the budget based on projects to improve quality, and sought to incorporate the participation of parents, and the improvement of the training and infrastructure.

In places like Ghana and South Africa it began with the improvement of training, control, administration and evaluation. Kenya implemented the total school development program, APM, in which the parent-teacher association suggested and supervised, and the ETP, additional master program, was also established.
In Asia, in Hong Kong, China established the SMI, management initiative; in Cambodia, the EQIP was born, focused on the improvement of educational quality where the budget was available from a list of priorities; Indonesia promotes donations to schools and the operating expenses committee oversees.

In the Middle East and North Africa, we see that Israel has a decentralized school administration, where based on the objectives, work plan, monitoring and evaluation, part of the budgetary management is determined, with authority over labor aspects; In Patar (Iran), a system of schools that manage the budget independently is managed, and quality improvement is handled through contracts.

On the other hand, countries like Canada, Australia, New Zealand and England have ventured into similar programs where parents and teachers have some autonomy, but without a rigorous evaluation.

Following the World Declaration on Education for All, carried out in 2000, Unesco established principles for 21st century education. Already since 1996, when The Education Engages a Treasure (by Delors) was published, the approach of education to know how to be, know, do and coexist was raised. The Organization for Economic Cooperation and Development (OECD) in 2007 invested in educating and training people to develop the capacity and criteria to intervene in public policies. Later, in 2007, Unesco raised equity, relevance, relevance, effectiveness and efficiency as processes to determine educational quality.

Management models in the national context

The national education system has been determined by the need to enhance its ability to constantly update to respond to the rapid changes in the world today, this requires revision, adaptation and / or change of curricula and teacher to respond to the formation of democratic citizens, and all this has led the country to a change in the education system.
The transformation of educational management is considered the means to achieve this change and generate an environment of innovation and improvement of educational quality. The sum of the management, the reform, the alliance for quality resulted in the National Education Program.

In the period 2001-2006 in Mexico, the National Program of Higher Education (PRONAES) was launched, with which the participation of all the actors in the educational act was fostered: students, teachers, directors and parents, through the self commitment to the lines of action to determine the necessary conditions, such as new regulations, administrative reorganization, improvement of supervision and social participation, and optimizing the use of class time.

Decision-making about adequate measures to achieve educational purposes was also encouraged. There was a need to reorient and professionalize managerial functions in order to aim at improving quality. It was also seen the need to transform the functions and organization of the school, with advice and evaluation, to achieve the purposes. This program aims to extend the time dedicated to educational work.

In the 2007-2012 period, the Sectoral Education Program (PROSEDU) was set in motion, aimed at addressing six basic deficiencies: failure and dropout rate and low achievement, deficiencies in school training of skills to solve problems for life and for the job.

In response there are six strategic objectives: to expand opportunities for all, to promote the development and use of ICT, comprehensive education by competencies, to offer quality services, social responsibility, labor competitiveness and new school management.

In this same period, the Strategic Educational Management Model (MGEE) emerged, which aims to strengthen the participation of schools in decision-making, the co-responsibility of the different social and educational actors, transparency and accountability. The strategic lines of participation are: social co-financing, adequate economic resources, regulations, the comptroller's office and promoting direct communication. Have a supervision capable of conceptual, methodological, equipment and maintenance that makes real contributions.
In 2010, the Integral Reform of Education was implemented in which, among its principles, is the formation of integral citizens capable of developing their full potential; Another purpose is to contribute to the achievement of a higher level of effectiveness in the education system through continuity between the different levels, with special emphasis on the relevant issues related to society and life.

To do this, I address the updating of plans and programs focusing on teaching especially towards the expected learning, with attention to the training of teachers and managers and a process of participatory management. Attention is given to life skills, through lifelong learning and throughout life; competences in the handling of information; competence in handling situations and problems; and competence for coexistence and for life in society.

This approach emphasizes that students must manage the necessary skills to communicate orally and in writing, in addition to managing an additional language to Spanish, and must be able to argue and reason around the problems of their society, as well as propose solutions and make decisions; the student seeks, analyzes and evaluates information from various sources; interprets and explains socio-economic processes; he exercises human rights and values respecting social values and acts in accordance with the law, respects interculturality, knows himself, works as a team, respects diversity and has personal and collective projects.

In 1992 in Mexico, an agreement was made to modernize education based on the planning of the "Primary school management" program. This is a school project aimed at solving problems through intervention in the classroom.

In the period 2000-2001, the program of Quality Schools emerged, whose principle was to transform management, ensure learning and as a goal the achievement of educational purposes. Thus, over time, educational policies were created that were preceded by different types of management to achieve their objectives.
The strategic management model

This model consists of a set of actions that the institution deploys to plan and direct the development in accordance with a precise mission and vision, shared by all the members of the school community; In addition, it considers its capacity to redefine the philosophy, objectives and values of the institution and to obtain the actions of the different actors towards the achievement of such objectives; finally, it takes into account the capacity to project the institution in the long term.

This model privileges teamwork, openness to learning and innovation and organizational culture cohesive for a vision of the future and promotes processes of cultural change to remove bureaucratic practices. It is based on the redesign of situations that allow improving the achievement of objectives through strategic planning processes and projects that stimulate innovation.

Educational management is concretized through pedagogical management, that is, in the way that the teacher performs the teaching processes and implements the curriculum in the classroom, by translating it into didactic planning, in the evaluation and in the way of interacting with the students to promote learning.

The strategic management model seems to be the most appropriate to promote a quality education within a framework of relevance, innovation and competitiveness. Some of the basic concepts integrated in this paradigm and that make up a system are the following:

- **Innovation.** Innovation in management is defined as the organized and systematic process that starts from the diagnosis of the object, process or subject to innovate, the planning of innovation, the management and monitoring of its implementation and the evaluation of the partial, final and its impact on the purpose to be achieved through continuous improvement, making the necessary adjustments to achieve the proposed objective. Every organizational process is capable of being innovated in a gradual, integral or radical way. You can innovate everything that is done within an organization.

- **Quality** Quality management is present in each and every one of the stages of the strategic plan in order to meet the needs for which it is necessary to implement. This considers the activities and processes of the person who executes the project and has to define clear
quality responsibilities, objectives and policies, as well as continuous improvement activities. The various stages to be considered in quality management are: quality planning, quality assurance and quality control. Quality assurance requires auditing the quality requirements and the results of the evidences or quality control measures. It also matters that the established quality standards are used at all times, so it is necessary to have adequate and timely information. Of equal importance to the previous stages is the quality control, which consists of monitoring and recording the results of the activities to control the quality, that is, evaluate to take the appropriate corrective measures through making recommendations that lead to making the necessary adjustments to adhere to the quality objectives proposed in the strategic plan and the necessary recommendations.

- **Relevance.** The social relevance understood as the commitment of the organizations with the concrete problems that a society faces, to generate the alternatives that propitiate the productive development. This relevance is translated into the way of doing things inside the organization to face external realities. The good or service that is produced, the way in which it is marketed, its financing and investments, the treatment of human resources, each organizational aspect must be relevant to the society in which this organization is inserted.

- **Competitiveness** Competitiveness comes from the Latin competere, which means ability to compete. Contender to each other, aspiring ones and others with determination to the same thing. Said of one thing: to equal another analogous, in perfection or in properties. Management competitiveness refers to the capacity to contend with other educational institutions in the achievement of the perfection of educational purposes, which implies having quality indices susceptible of being compared with institutions that serve the same sectors.

We can conclude, then, that the strategic management model must have adequate inputs to measure the quality of education represented through innovation, relevance and educational competitiveness. The challenge is to have external and internal instruments generated by independent bodies that are fed in a timely manner the development of strategic plans and projects that underpin continuous improvement that lead to the achievement of educational objectives.
Management in educational institutions

Some of the conceptions held by various students of management in education are similar to those proposed by the theorists of administration, but what changes is the object of management, its spaces and particularities, some of them are shown to continuation.

Educational management is a set of theoretical-practical processes integrated and related, both horizontally and vertically, within the education system to meet and meet the social demands made on education (National Institute for Educational Planning of UNESCO, IIEP / UNESCO, 2000), in this case refers structural aspects of the organization in a timely manner.

Pozner (2001) sought to integrate the organizational with the pedagogical emphasizing that this is a fundamental aspect for the redesign of school organizations, since their dissociation affects the institutional management, even though both processes have their own characteristics for their management, which are in the following definitions.

The pedagogical management constitutes the main transformation space because the interaction with the students is the space where the objective and subjective conditions of the teaching work are constructed within a framework of institutional and social multivariables. This implies bridging the political, administrative and technical management at the different levels of a school (regardless of the level of education); however, this is not possible if school units are not self-sufficient. In the case of higher education institutions in Mexico, there are several legal frameworks, and the main ones are: centralized, decentralized or autonomous and deconcentrated.

According to Ibar (2002), to have an adequate management in an educational organization it is necessary to visualize it from a systemic approach and to have all the areas of the institution, since both points allow a balance in the school center, because the proposed objectives influence the different actors in relation to:

- **Ideological or intentional aspects.** People, in trying to achieve the objectives, create a common ideology that integrates values, motivations and attitudes that, when identified with them, influence the results, becoming an engine for school activity.
- **Aspects related to management and control.** To achieve the objectives, institutional and school planning should be considered.
- **Aspects of organizational structure.** It is necessary to have sufficient material, economic and financial resources due to the conditioning of them to streamline school management processes.

To confirm the above, Weiss E. (2000) indicates that school management is usually confused with administration, because in administrative and organizational processes the pedagogical dimension is lost sight of. This is observed in the "daily" academic activities, council meetings or organizational committees, boards where financial and administrative issues prevail over the pedagogical implications that should be considered in decision making.

Educational management is not a new term for administration or for planning. The educational management can only be understood as a new way of understanding and conducting the school organization, insofar as the strategic situational calculation is recognized as one of its foundations; and, moreover, only to the extent that this precedes, presides and accompanies that educational action in such a way that, in the daily work of teaching, it becomes a practical process that generates decisions and specific communications.

It is considered, therefore, as the set of integrated actions for the achievement of a goal in a certain period; it is the main action of the administration and it is the intermediate link between the planning and the concrete objectives that are intended to be achieved. It is the art of participatory anticipation of change, with the purpose of permanently creating strategies to guarantee the desired future of an organization. It is a way to align efforts and resources to achieve a certain purpose. It is about research to obtain knowledge about the observable phenomena to describe, understand and explain supported by theories and hypotheses.

The management processes have to do with governance and with the new balances and necessary integrations between the technical and the political in education: only through this strategic repositioning of the management practices of educational organizations can we speak of management. It involves abandoning simple approaches to assume complexity, revising conceptualizations about educational organizations as closed entities to think about them and imagine them as open cycles of action that display chained processes of action and purpose in relation to their environment, and always with restrictions to consider.
Teachers and officials stop being mere executors to become permanent decision makers; in this way, management is related to uncertainty, tensions, ambiguities and inevitable conflicts. And articulates the theoretical and practical processes to recover the meaning and raison d'être of governance, of the continuous improvement of quality, equity and relevance of education for all, of all levels of the educational system: the teams of teachers and educational institutions, classrooms, teaching and learning processes and educational managers.

Review the management is essential, from reviewing how they do what they do and what results they have, from a culture of collaboration to live the educational quality, act intentionally to change and learn to do things better.

The level of institutional management refers to how the institution translates what is established in educational policies, to the way in which the subsystems add their particularities to the general context. In the educational field, it establishes the lines of action of each one of the administrative bodies through the vision of projects and the effective articulation of a panoramic vision that integrates the state, regional, national and local levels.

The objective of management, therefore, is to achieve quality with equity, teacher professionalization and the consolidation of smart schools, taking ownership of the principles of autonomy, co-responsibility, transparency and accountability. It includes management administrative actions, personal policy, economic-budgetary, planning, programming, regulation and orientation. What implies the division of work, teamwork and openness to learning and innovation, as well as advice and guidance to professionalize the teaching activity, the organizational culture cohesive in a vision of the future, systemic and strategic interventions, this by both seek to remove bureaucratic practices.

This is how the concept of educational management can be associated with educational innovation projects, with attention to the following levels: 1) existing social economic structure; 2) the particular characteristics of the institutional dimension corresponding to a specific social formation; 3) existing organizational models; 4) interpersonal relationship processes and 5) individual participation. (Pacheco, Dugoing and Navarro, 1991). This requires systematic information on the substantive and adjective functions of an institution to have at hand the key resources for quality management.
Some management challenges that educational institutions have faced

In the field of educational decentralization some authors (Puryear, 1996, Bid, 1998, Londoño and Szekely, 1998, and Larrañaga, 1997), made some diagnoses that allowed to determine the problems and challenges to face in the past decade. The results were: prioritize the management and administration of educational centers, as well as produce models that evaluate the efficiency of education.

After 2010, the implementation of various programs aimed at improving quality and innovation at the various educational levels have generated new actions that have faced problems, both at the basic and middle and higher levels, of:

- Adoption of accreditation procedures for schools.
- Use of incentives to reward and sanction management performance.
- Use of focused technical assistance schemes.
- Introduction of greater demands oriented towards the accounting part, through the use of a broader registry of information methods.
- Benchmarking of management as a model for schools.
- Design of mechanisms for participation of the school community, the local community and external agents, as entrepreneurs, that generate "demands and support" for the improvement of management (Alvariño, C., Arzola, S., Brunner JJ, Recart, MO, Vizcarra R., 2000).
- Management seen from intergovernmental relations (Bracho, 2009).
- Linking higher education institutions with the different social, productive, service and transformation sectors.
- The evaluation models and the certification of knowledge in the different educational levels.
- The management and management models that prevail in each institution depending on their legal personality.

According to Braslavsky and Acosta (2006), there are six problems which consist of:
I. The specialists in management and educational policies have difficulties to construct a sense of the aims of management and educational policies.

II. Difficulties faced by specialists in management and educational policy to articulate the growing demand for intervention by a broad and heterogeneous group of actors in educational management processes.

III. There are multiple levels of management specifications and educational policy.

IV. Inability to design devices that counteract the institutional weakness derived from the educational policies of the decades of fiscal adjustment.

V. Isolation of the management of educational policies regarding management training that is carried out in institutions at the university level.

VI. Difficulty of assuming management and educational policies in specific contexts affected by challenges such as the strengthening of democratic governance, the acceptance of diversity, the fight against the growth of poverty and inequalities and the demand for transparency, efficiency and efficiency.

According to Whetten, Cameron and Kim (2016), a well-trained manager must have mastery of skills in three areas: a personal one in which the mastery of self-knowledge, stress management and creative problem solving is definitive in the direction of an organization; a second axis is the domain of interpersonal skills, which include motivation, communication, the use of power and influence and conflict management; and the third axis is that of group skills in which the competence of delegating, group formation and leadership stands out.

For management education, the challenges to be addressed are integrated into the following points.

1. Locate the level at which the management is carried out, basic level, middle level or higher level and in the latter, differentiate the undergraduate and postgraduate levels.

2. The student of the master's degree in administration and development of education must have a broad conceptual knowledge of the educational structure in Mexico.

3. It is necessary that the concepts of management and administration are differentiated, and of course the student must know what is the administrative process and relationship with management for the achievement of organizational objectives.
4. It is important to have a broad and deep knowledge of the field of education and especially of the educational level where management is intended to be applied (basic, upper secondary, undergraduate or postgraduate).

5. Relationship of institutional and school management depending on the functions of each educational level.

6. Raise awareness and generate reflection on the importance of the production, systematization and use of the information generated by the actors involved (Bracho, 2009).

7. Reflection on the conceptual and analytical aspects in the field of public administration and educational management (Benno, 2015).

8. Conceptual and analytical development of democratic management for quality education for all (Benno, 2015).

9. Articulate professional knowledge (conceptual and practical) with political knowledge (Braslavsky and Acosta, 2006).

10. Induce in the managers, managers and researchers, skills such as the following: detection of needs, alliances, negotiation of conflicts, anticipation of problems, proposal of alternatives based on a soli

Conclusions
Considering the relationship of the state of the art of management, as well as the elements that make up this concept, from its application to education, it is concluded that:

1. Training in the field of Management and Administration for the Development of Education meets the necessary elements and more, because as the guiding axis of this program is the research process in four semesters of methodology of the research, including the semester of homogenization for the people who attend the program.

2. The study program is based on three LGACs, which cover each of the elements that must be contemplated to acquire the knowledge, skills and attitudes to exercise the management.
   a) Strategic management for the planning, evaluation and development of educational institutions and systems in the paradigm of the knowledge society. It includes the review, analysis and evaluation from the educational policies, as well as the normative
legal framework of education in general and of institutions in particular. The way in which the management is inserted in the elements of the administrative process, administration, organization and direction including knowledge management and the relationship of education with sustainable development.

b) Educational models and innovation. It integrates aspects of educational trends within the framework of globalization and the challenges for management, as well as its application in new educational models including open and distance education, which has been an impact to expand coverage and cover inclusion objectives.

c) Training of managers and leaders for the management of academic projects, institutions and educational systems. It covers aspects of leadership leadership, educational supervision and culture and values in educational institutions, thus closing a cycle, which covers the different functions and areas of educational administration object of the practice of management.

3. The MAGDE study program is congruent with the knowledge, skills and attitudes required by management training. However, this implies a change in structure, as well as in the training of the actors involved in the management and a broad knowledge of the context. So, to take it to the field of educational management, the challenge is the permanent updating of the theory.

4. The program has the support to face the problems of management, according to Braslavsky and Acosta (2006). But the new learning environments print to the structure and to the organization a new dynamic that demands the transformation of the educational management, considering the contexts in which it is immersed.

5. The MAGDE study program has technological elements, infrastructure, knowledge and experience to face the challenges of teaching by teachers.
References


Instituto Internacional de Planeamiento de la Educación de la UNESCO, (IIPE/UNESCO, 2000), México.


<table>
<thead>
<tr>
<th>Rol de Contribución</th>
<th>Autor(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptualización</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Metodología</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Software</td>
<td>NO APLICA</td>
</tr>
<tr>
<td>Validación</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Análisis Formal</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Investigación</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Recursos</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Curación de datos</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Escritura - Preparación del borrador original</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Escritura - Revisión y edición</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Visualización</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Supervisión</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Administración de Proyectos</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
<tr>
<td>Adquisición de fondos</td>
<td>Rosa Amalia Gómez O. Carlos Topete Barrera</td>
</tr>
</tbody>
</table>