

El liderazgo directivo y la gestión en el nivel medio superior del Instituto Politécnico Nacional de México: una mirada desde los estudiantes

*Directive leadership and management in the middle-high level of the National
Polytechnic Institute in Mexico: A view from the students*

*A liderança e gestão no nível médio superior do Instituto Nacional Politécnico do
México: um olhar dos alunos*

Virginia Reyes Romero

Escuela Superior de Comercio y Administración. Unidad Santo Tomás, Instituto Politécnico
Nacional, México
vreyes@ipn.mx

María del Carmen Trejo Cázares

Escuela Superior de Comercio y Administración. Unidad Santo Tomás, Instituto Politécnico
Nacional, México
ctrejo@ipn.mx

Carlos Topete Barrera

Escuela Superior de Comercio y Administración. Unidad Santo Tomás, Instituto Politécnico
Nacional, México
ctopete@ipn.mx

Resumen

El liderazgo directivo, hoy por hoy, se ha convertido tanto en una competencia como en una estrategia emanada de las políticas educativas que demandan organismos internacionales en las que el director es considerado como el principal agente para realizarlas. Esta investigación tiene como objetivo identificar, desde la percepción de los estudiantes y derivando del movimiento que se gestó en el año 2014 que trajo como consecuencia el cambio de directivos a solicitud de la comunidad estudiantil, las competencias y características que son necesarias para ejercer el

liderazgo directivo y la gestión del nivel medio superior del Instituto Politécnico Nacional de México. Los métodos que se utilizaron fueron tanto cuantitativo como cualitativo con enfoque exploratorio y descriptivo. Para ello, se realizó un análisis teórico, así como de investigación empírica y con entrevista a expertos, sobre cómo el liderazgo directivo influye en el desarrollo de la gestión de la organización educativa.

Los instrumentos que se utilizaron fueron la entrevista a profundidad y el sondeo de opinión; se realizaron dos, el primero para identificar la actuación del director y el segundo para identificar las competencias y características que los estudiantes consideran necesarias para que el director ejerza un liderazgo para la gestión eficaz del nivel medio superior del Instituto. La muestra fue no probabilística con sujetos voluntarios; el primer sondeo se aplicó a 104 estudiantes de nivel medio superior y el segundo a 110 estudiantes, para un total de 224. En los resultados del primer sondeo se encontró que el 49% de los estudiantes reportó estar parcialmente de acuerdo con la actuación de su director. En el segundo sondeo, se encontró que el 60% de los estudiantes considera que el liderazgo de su director es adecuado. En cuanto a las competencias directivas para una gestión eficaz, el 71% de los estudiantes considera como las más importantes: trabajo en equipo, comunicación, liderazgo, relaciones interpersonales, toma de decisiones y manejo de conflictos; las medianamente importantes (con el 29%), negociación, delegación, gestión estratégica y autoconocimiento. Se concluye que es necesario realizar investigaciones para definir un perfil y un modelo de formación para los directores del nivel medio superior del Instituto Politécnico Nacional que permita enfrentar de manera adecuada las situaciones que se presenten en una sociedad cada vez más compleja y competitiva.

Palabras clave: Liderazgo, gestión, educación media superior.

Abstract

Management leadership has become both a competence and a strategy emanating from the educational policies demanded by international organizations in which the director is considered the main agent to achieve them. This research aims to identify the skills and characteristics necessary to exercise directive leadership and management in the high middle level of the National Polytechnic Institute of Mexico, derived from the perception of the students and the

2014 movement that resulted in a change of managers at the request of the student community. The methods used are both quantitative and qualitative, with an exploratory and descriptive approach. For this, a theoretical analysis was carried out, as well as empirical research and interviews with experts about how directive leadership influences the development of management of the educational organization.

The instruments used were an in-depth interview and an opinion poll; two of each were performed, the first one to identify the director's performance, and the second one to identify the competences and characteristics that students consider necessary for the director to exercise their leadership for an effective management in the upper middle level of the Institute. The sample was non-probabilistic with voluntary subjects; the first survey was answered by 104 students of the upper middle level, and the second by 110 students, for a total of 224 students. In the results of the first survey it was found that 49% of the students reported partially approving the performance of the director. In the second survey, it was found that 60% of the students consider that the leadership of their director is adequate. As for the leadership competences for effective management, 71% of students consider the following most important: teamwork, communication, leadership, interpersonal relationships, decision making and conflict management. In second place (29%) came negotiation, delegation, strategic management and self-knowledge. It is concluded that it is necessary to develop research to define a profile and a training model for the directors of the upper middle level of the National Polytechnic Institute that allow them to adequately deal with situations that arise in an increasingly complex and competitive society.

Key Words: Leadership, Management, Middle-High Education

Resumo

A liderança de gestão, hoje, tornou-se uma competição e uma estratégia emanada das políticas educacionais exigidas por organizações internacionais nas quais o diretor é considerado o principal agente para realizá-las. Esta pesquisa tem como objetivo identificar, a partir da percepção dos alunos e decorrentes do movimento que foi concebido no ano de 2014, que trouxe, como consequência, a mudança de gerentes a pedido da comunidade estudantil, as competências e características necessárias para exercer a liderança Gestão e gestão do nível médio superior do

Instituto Nacional Politécnico do México. Os métodos utilizados foram quantitativos e qualitativos com uma abordagem exploratória e descritiva. Para isso, foi realizada uma análise teórica, bem como pesquisa empírica e entrevista com especialistas, sobre como a liderança gerencial influencia o desenvolvimento da gestão da organização educacional.

Os instrumentos utilizados foram a entrevista em profundidade e a pesquisa de opinião; Foram realizados dois, o primeiro a identificar o desempenho do diretor e o segundo para identificar as competências e características que os alunos consideraram necessárias para que o diretor exercesse uma liderança para a gestão efetiva do nível médio superior do Instituto. A amostra não era probabilística com voluntários; A primeira pesquisa foi aplicada a 104 alunos do ensino secundário e a segunda a 110 alunos para um total de 224. Nos resultados da primeira pesquisa, verificou-se que 49% dos alunos relataram estar parcialmente de acordo com o desempenho de seus Diretor Na segunda pesquisa, verificou-se que 60% dos alunos consideram que a liderança de seu diretor é adequada. Em termos de competências de gerenciamento para gerenciamento efetivo, 71% dos alunos consideram o mais importante: trabalho em equipe, comunicação, liderança, relações interpessoais, tomada de decisão e gerenciamento de conflitos; (29%), negociação, delegação, gerenciamento estratégico e autoconhecimento. Conclui-se que é necessário realizar pesquisas para definir um perfil e um modelo de treinamento para os diretores do nível médio superior do Instituto Nacional Politécnico que permita lidar adequadamente com situações que surgem em uma sociedade cada vez mais complexa e competitiva.

Palavras-chave: liderança, gestão, ensino secundário superior.

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Introduction

At present, the Mexican educational system has been transformed taking into account the educational policies that are generated worldwide by international organizations focused on educational quality, and a more efficient and decentralized management of educational centers, among other aspects. In this context, the leadership emerges as one of the main factors that are committed to achieving them and improve the management of educational organizations, both internationally and nationally.

This article explores the perception of the students of the upper middle level of the National Polytechnic Institute of Mexico on the leadership, from the movement that was born in the year 2014 and that resulted in the change of managers at the request of the student community. Within this framework, the characteristics and challenges for this educational level, in general, and for the principals, in particular, are reviewed.

It presents an overview of trends and styles of managerial leadership, identifying the competencies needed to exercise it effectively and also discusses the impact of leadership in management.

In this sense, leadership, as pointed out by Pozner (2000), is composed of a set of processes that orient people and teams in a certain direction towards the achievement of excellence and organizational learning, primarily through non-coercive means.

In addition, this same author points out some practices that make the leadership of management to develop good educational management, for example, to inspire the need to generate transformations, generate a vision for the future and communicate it, promote teamwork, among others.

The Organization for Economic Co-operation and Development (OECD) mentions that an essential role of managerial leadership is to ensure that both students and teachers can continuously learn, develop and adapt to changing environments (OECD, 2009).

In this context, the National Polytechnic Institute at the upper middle level is not the exception, given the changes that are latent at the international and national level with the educational reform in terms of managerial leadership and results-oriented management.

This is why the present research responds to the questions "what are the competencies required by the directors of the upper middle level of the National Polytechnic Institute to develop effective management?" And "what characteristics should middle managers have to Exercise leadership "from the eyes of the students.

Recounting the story

The current transformations of Mexican education point to an educational reform that considers three agents that contribute to the success of this one:

“In the first place, the local community and, above all, the parents, the directors of the educational establishments and the teachers; Secondly, the public authorities and, finally, the international community.” (Delors, 1994).

In this context, expectations are focused on the quality of education and teaching, with criteria of equity, relevance and sustainability. The fulfillment of expectations is directly related to the performance of the director of the educational center, who is considered as the main agent of change to materialize what is established in the educational reform.

In the last ten years international organizations have focused their attention on upper secondary education, a highly complex work, since it has faced the dilemma of preparing for higher education or working life. In this way, the average education constitutes in itself a formative cycle, whose main task is to prepare the young people to exercise the citizenship and to learn to live in society. Both the World Bank (2005) and the Economic Commission for Latin America and the Caribbean (ECLAC, 2006), UNESCO (2005) and the Organization for Economic Co-operation and Development (OECD, 2010) agree that the main objective Of middle school is that young people have the opportunity to acquire skills, skills, knowledge, as well as the ability to continue to learn throughout life, and to be active, participatory and productive citizens. (National Institute for the Evaluation of Education, INEE, 2011).

On the other hand, in the national context, the Federal Government has also carried out reforms to the educational sector, recently incorporating the upper middle level. Thus, in 2008 begins the Comprehensive Reform of Higher Secondary Education (RIEMS) in accordance with educational policies issued by international organizations.

The RIEMS makes a universal recognition of the modalities and subsystems of the baccalaureate (technological baccalaureate, general baccalaureate, National College of Technical Professional Education (CONALEP), baccalaureate of the UNAM, baccalaureate of IPN), seeking to improve the relevance and relevance of all plans Of study and facilitate the transit between subsystems, through the creation of a National System of Bachillerato. The Reform is articulated in the guiding axes of education for the period 2013 to 2018: coverage, quality, equity, relevance, school and institutional management, and evaluation, declared in the Education Sector Program (2013-2018).

In the current sectoral education program, it is argued that there is a greater challenge due to the compulsory nature of upper secondary education (which translates into an accelerated increase in educational coverage), which is why it is intended to open new schools and expand The existing ones, as well as it is indispensable to reduce the dropout rate in this educational cycle. The average upper level enrollment has increased in each school year: in the 2000-2001 school year it was 2 955 thousand 783 students, and in the 2015-2016 school year it is 4 million 985 thousand 080 students; Increased by 40.70% in fifteen years (SEP, 2016). The Federal Government is committed to the goal that in 2018 the enrollment of upper secondary education is equivalent to 80% of the population of school age. In this way, higher education faces the challenges of coverage, equity, quality and relevance, which involve the directors of this educational level.

In 2014, the National Polytechnic Institute faced an unprecedented event: a student movement that manifested itself in a work stoppage at both the upper and lower levels of the Institute, which began at the School of Engineering and Architecture (ESIA) Zacatenco due to a protest for the change in their curricula.

Added to this situation, in mid-August of that same year, the modification to the curricula in several schools of the Institute generated nonconformity and rejection, in the academic units of the superior level as well as the average superior level; In this last one also the rejection of its incorporation to the National System of Bachillerato and to the Integral Reformation of the Superior Middle Education (RIEMS) was manifested. In addition, the approval of a new Internal Regulation of the IPN, in an extraordinary session of the General Consultative Council, extended the nonconformity towards most of the academic units of Mexico City and the metropolitan area. These two demands were the trigger of the movement called through social networks. The

Polytechnic General Assembly (AGP) was soon formed, with 89 students (33 from upper secondary education and 56 from higher education) representing different schools. (IPN, 2016).

The movement kept 41 of the 44 schools in the upper and lower levels of the IPN out of work. After 79 days of activity stoppage and eight sessions of the dialogue between Federal Government authorities and representatives of the Assembly, eight agreements and an engagement letter were signed, which the Director General assumed. The letter of commitment mentions that the dismissal of the directors of the academic units requested by the student community would be analyzed and that the dismissals would be in accordance with the current regulations. A possible resumption of activities was thus agreed.

It is worth mentioning that at the table of dialogue number two, the student community represented by the AGP and the director general of the National Polytechnic Institute requested the dismissal initially of twelve directors of the upper middle level and twelve of the upper level, arguing authoritarianism and bad Management of resources that they showed during their management. They pointed out the lack of openness to dialogue and that the processes of election to be director were not democratic or transparent, among other aspects (Future Education, 2014). Subsequently, it was requested the resignation of all the directors of the academic units of both levels.

Trends in managerial leadership

The problem raised in the previous paragraphs highlights the importance of the leadership needed to manage the educational service in different schools, centers and units. Leadership has undoubtedly become one of the most important and studied competencies in organizations in the public and private sectors for the training of its directors, both in business and in education.

The first studies on leadership have their origin in the business sector in the 1940s and 1950s, when several researches were developed focusing on the theory of traits, whose approach started from the premise that leaders are not made, Born with innate characteristics that lead them to perform prominently. In this way, the efforts were directed to discover what were the characteristics of the ideal personality of the leader. Hundreds of studies, however, could not find

personality characteristics, physical or intellectual related to successful leadership, or even the existence of an ideal leader, since it will always be linked to the context in which it is developed (Northouse, 2004 in Murillo , 2006). In education, as pointed out in Leithwood's specialized research at UNESCO (2014), leadership exerts a strong influence on the effectiveness and improvement of schools.

In this way, leadership has become a priority in the educational policy programs of the Organization for Economic Co-operation and Development (OECD) and its member countries. It has been pointed out that leadership plays a key role in improving school performance by influencing teachers' motivations and abilities as well as the environment and situation in which they work. Thus, leadership is essential for improving the effectiveness and equity of education (OECD, 2009). The OECD's experience and research highlight the importance of leadership and the role of managers as process leaders and the life of the school, as leadership contributes to students learning better. In this way, "an essential function of leadership is to ensure that both students and teachers can continuously learn, develop and adapt to changing environments" (OECD, 2009). For its part, Pozner (2000) mentions that leadership consists of:

“A set of processes that orient people and teams in a certain direction towards the achievement of excellence and organizational learning, primarily through non-coercive means.”

In this way, leadership is fundamental to achieve better management in organizations because it is considered both a strategy and a necessary competence for the directors of educational organizations and for international organizations as mentioned in previous paragraphs.

Leadership Styles

In leadership there are styles that influence the performance of the manager with respect to the management that he performs in the organization. The term "leadership style" refers to a leader's personal way of acting. Leadership style is based on the individual's own personality, on the way to understand relationships at work, and the values and ethical principles themselves, that is, it is a complex form that defines the type of behavior that each person carries Out in their different facets of their life. (Villa, 2013).

Subsequently, studies on leadership styles focused on behaviors and behaviors; The behavioral theory of leadership, developed in two lines of research: the first, referring to the characteristics of managerial work (that is, what activities, functions, responsibilities, assume the managers and how they distribute their time), and the second, Studies on the conduct of effective directors.

Thus, Murillo (2006) points out in the studies that identify the styles of leadership in the field of education, the proposal of Kurt Lewin, which continues and establishes three styles of leadership: authoritarian leadership, democratic leadership and Laissez faire leadership. Next, the characteristics of the main leadership styles are shown in table 1, in which the tendency of the leadership towards a more participative approach, with emphasis in the interpersonal relations and the communication, can be noticed. It is important to note that leadership styles are not mutually exclusive, and that in reality there are no leaders who have a pure style, rather one of them predominates.

Table 1. Características de los Estilos de liderazgo.

Autoritario	Democrático	<i>Laissez faire</i>	Transaccional	Distribuido	Transformacional
Liderazgo unidireccional. Poder y toma de decisiones concentrados en el líder.	Colaboración y participación de los miembros del grupo.	No ejerce su función, no se responsabiliza del grupo.	Proceso de intercambio entre líder y seguidores. Premio o castigo en función del rendimiento. Compuesto de dos factores: Recompensas contingentes y Dirección por excepción.	Participativo y colegiado. Otorga poder, autonomía y responsabilidad a sus colaboradores	Participativo, confianza en las personas, comunicación interpersonal, criterios de actuación basados en la ética y principios morales. Líderes actúan como agentes de cambio en la organización.

Fuente: Elaboración propia con base en Murillo (2006), Cayulef (2007), Villa (2013), Northouse (2013) y Jamal (2014)

In this way the question arises how to achieve effective leadership for the management of educational organizations? In order to answer this question, several authors have been reviewed that point out both the practices and strategies to achieve this, as shown in table 2. The different authors agree that people are fundamental to carry out effective leadership, which is reflected in better management of the organization, by giving recognition to people for their achievements, creating trust and a sense of loyalty among the members of the organization, fundamental factors for better results. Another aspect in which they coincide is the vision: to create it, share it and communicate it among all the members of the organization, creates an ideal environment and consolidates the spirit of loyalty and achievement to work as a team, as well as in a way Collaborative and participatory, which improves the performance of all members of the organization that manifests in effective leadership and, of course, better management.

Table 2. Prácticas y estrategias para el liderazgo eficaz en gestión.

Likert (1961)	Bennis y Nanus (1985)	Pozner (2000)	Kouzes y Pozner (2007)
<p>Fomento de relaciones positivas que aumentan el sentido de valía personal de sus integrantes.</p> <p>Mantener un sentido de lealtad del grupo.</p> <p>Conseguir altos estándares de rendimiento</p> <p>Tener conocimientos técnicos.</p> <p>Coordinar y planificar.</p>	<p>Atención mediante la visión.</p> <p>Significado mediante la comunicación.</p> <p>Confianza mediante posicionamiento.</p> <p>El despliegue del yo.</p>	<p>Inspirar la necesidad de generar transformaciones.</p> <p>Generar una visión de futuro y comunicarla.</p> <p>Promover trabajo en equipos.</p> <p>Brindar orientación que desarrolle el espíritu de logro.</p> <p>Consolidar los avances en las transformaciones.</p> <p>Actualizar el aprendizaje y acumular conocimiento.</p>	<p>Modelar el camino (alinear acciones con valores compartidos).</p> <p>Inspirar una visión compartida.</p> <p>Desafiar el proceso (buscar oportunidades, experimentar y tomar riesgos).</p> <p>Permitir que otros actúen (fomentar la colaboración creando confianza, fortalecer la autodeterminación).</p> <p>Alentar el corazón (reconocer contribuciones en comunidad).</p>

Fuente: Elaboración propia con base en Likert (1961), Bennis y Nanus (1985), Pozner (2000) y Kouzes y Posner (2007)

On the other hand, one of the most recent research on leadership in education is from Villa (2013), which shows a model of leadership competencies essential for training in competencies of educational leaders, which is composed of Five emphases and which is based on empirical research. These five emphases are: emphasis on strategic vision, emphasis on people, emphasis on institutional transformation, emphasis on learning and achievement, and emphasis on communication. In addition, there is another competition that he calls an emphasis on the management and administration of the educational center, which although not based on empirical research is suggested by relevant authors who emphasize this competence for the success of a leader.

Villa points out that leadership should emphasize a key dimension called strategic vision, which is one of the biggest deficits among school management teams. To do this, it is necessary to formulate a strategic vision and put it into practice through a project-based strategic plan involving teachers, non-teaching staff and educational community in keeping with the core values of the center (Villa, 2013).

The second emphasis is on people: it is to make people feel that they are important, that they are a value for the institution and that they are recognized, with the purpose of empowering them intellectually to use their knowledge, experience and motivation and to create a triple balance for The transition to a culture of empowerment: that is, leaders must share information, set boundaries, and replace the old hierarchy with self-directed individuals and teams (Villa, 2013). In this way, the competition consists of proposing participation and commitment by integrating individual and collective contributions in a spirit of collegiality from personal support and intellectual stimulation.

The third emphasis, in institutional transformation, points out that in order to achieve this, three factors are decisive: strategy, structure and culture. Thus, the competition is based on promoting a transformational culture through the participation of all staff and reducing tension and conflict, favoring a climate of collaborative contribution of individuals, unipersonal and collegiate bodies (Villa, 2013).

The fourth emphasis, in learning and achievement, requires diagnosing and offering guidelines to promote learning and achievement among teachers and students in the various curricular dimensions, and in achieving the center's priority objectives to achieve it.

The fifth, emphasis on communication, is based on a positive relationship with other people through an empathic listening and a clear and assertive expression of what you think and / or feel, verbal and nonverbal in and outside the institutional context .

The sixth is an emphasis on the management and administration of the school: for this, it is necessary to know the legal regime of public administrations, its administrative procedure, as well as the public function law in aspects related to the teaching function and the regulation of officials, Law on civil liability and educational administration, data protection law, labor risks law, among others (Villa, 2013).

The model proposed by Villa highlights the importance of training in competencies for the development of managerial leadership, emphasizing the strategic vision that the leader must develop in people and in their development to achieve transformations in the school through a suitable direction And are materialized in better management and results in the training of students, as well as a social recognition of the school.

Impact of leadership on management

Before addressing the concept of management it is necessary to make some precisions. In the seventies we spoke only of management understood as the management of resources in an organization, whether public or private for profit or not. In the educational field, school administration was understood as "carrying out educational practices that had to follow literally issues decided by others elsewhere, but mainly administrative issues with a low educational presence" (Pozner 2000). That in the classical theory of organizations and in managerial training the emphasis was on the similarity of schools with business from the point of view of management. This coincidence between a predominant theory and a common practice defines

school management as "activities that relate to planning, implementation, coordination, management and control of services" (Pozner, 2000).

On the other hand, the concept of management (called management by Peter Drucker) arose in the nineties, derived from managerial theory, understood as the best way to lead organizations. This concept was introduced to the educational sector as mentioned by Casassus (1999), a result of the educational reforms of that decade. Management was separated into two activities: planning and administration; Where planning refers to making plans, setting goals and determining actions to be followed, while the administration is in charge of performing predetermined actions. That is, there was a separation between the design action and the execution action. For this reason, he mentions that management refers to the integration of the two concepts, referring both to the planning process and to the administration of the design of educational institutions. Then, management refers to the strategic aspect and administration to the operational aspect. Thus, the management-administration binomial interacts with each other, so that good management is necessary to have a good administration, ie, good administration is fundamental for good management.

The same author, Casassus (1999), defines management as the ability to generate an appropriate relationship between the structure, strategy, systems, style, capacities, people, and the higher objectives of the organization in question. Or put another way, management is "the ability to articulate the resources available to achieve what is desired." In this context, managerial leadership plays an important role in the management of the organization because exercising it through the directors determines both the performance and the results they have in it, because leadership also influences the performance of The members of the organization. In addition, managerial leadership influences the institution in terms of the quality of education aimed at achieving educational goals, since principals are considered protagonists of transformation in education. Therefore, as Rojas and Gaspar (2006) point out, it is necessary for directors to possess conviction, ability, knowledge and intelligence and to channel their desires to improve education by relying on their skills, their social and symbolic capital.

On the other hand, in an interview with a university academic from Canada, held on March 3, 2017 at the Superior School of Commerce and Administration Unit Santo Tomas, IPN, it was mentioned that leadership in the historical development of humanity appears in Contexts of crisis, referring to the importance that this concept has in the processes of change and that has repercussions in the management of organizations. In this sense, he pointed out that leadership includes the culture of organizations, that the development of leadership is intrapersonal (starts within the person out) and that interpersonal relationships are essential to achieve effective leadership, which is embodied in improvements To the management of the organization.

On the other hand, in the upper middle level of the National Polytechnic Institute, it is becoming more evident the exercise of a managerial leadership that improves the management of its academic units, as became evident with the student movement of 2014, which showed on the one hand The lack of training and leadership of its directors, as well as the poor managements of the same, as the students expressed in the dialogues that the members of the polytechnical community represented by the Polytechnic General Assembly with the director general of the Institute Polytechnic National.

Method. The method used in the present research is qualitative to identify the competences and characteristics that are necessary both to exercise managerial leadership and to perform an effective management of the level of upper secondary education of the National Polytechnic Institute from the theoretical analysis, Empirical research and expert interview.

It is quantitative because through the application of opinion polls data are analyzed numerically to quantify the frequency of competencies and characteristics that are necessary for managerial leadership and effective management from the students' gaze.

Kind of investigation. It is exploratory and descriptive. It is exploratory because the subject of research (managerial leadership and management of the upper middle level of the National Polytechnic Institute) has been little studied. It is descriptive because it seeks to point out the competences and fundamental characteristics to exercise managerial leadership and management

in the upper middle level, and because the research describes the problem and defines the variables: managerial leadership and management.

Definition of variables. Leadership and management.

Instruments. For the qualitative part, the semi-structured and in-depth interview was used by two experts. For the quantitative part, two opinion polls were carried out. The first of the surveys was carried out with a survey consisting of three questions, answered by the Likert scale with four assigned values (totally agree, partially agree, partially disagree and totally disagree). A pilot test was conducted before the surveys were implemented. The Cronbach alpha obtained is 0.8 of reliability.

For the second survey a questionnaire was carried out with three open questions. The first concerns how students perceive the leadership of their principal. The second refers to the competencies required by the principal to exercise effective management, and in the third question students were asked to write at least five characteristics that the principal should have in descending order of importance.

Research Objective. Identify the competences and characteristics that are necessary to exercise leadership and management of the upper middle level of the National Polytechnic Institute, based on the perception of students.

Population and sample. The survey and the questionnaire were applied to three middle-level schools of the National Polytechnic Institute, one for each area of knowledge (ie one school in the physical-mathematical area, one in the social-administrative area and one in the medical-biological area). The sample was non-probabilistic with volunteers; The first survey was applied to 104 high school students and the second to 110 students. In total, 224.

Results

The breakdown of leadership and management paradigm

The student movement of 2014 represents a break from traditionalist management and authoritarian leadership, and the need to move towards more flexible leadership and more participatory management, in which the student community is more involved. However, in April 2016, another student movement emerged at the National Polytechnic Institute, derived from the

agreement 01/03/16 "which organically assigns the administrative units and decentralized bodies of the Ministry of Public Education" published in the Official Gazette Which mentions the affiliation of the National Polytechnic Institute to the under-secretariat of higher education under the Ministry of Public Education (SEP). This movement took place in the middle-level schools called Centers of Scientific and Technological Studies (CECyT), also known as vocational, which were closed for a month. At that time the educational authorities reacted by making a politically easy statement, saying that [the agreement] would only include higher education, so that upper secondary education would be excluded and therefore would disappear middle schools of the Institute . The polytechnic authorities clarified that the Institute was attached to the office of the secretary of Public Education, which caused disagreement and that the students of the upper middle level of the Institute carry out another student movement. In that situation, the director general of the National Polytechnic Institute stated that "decisions regarding the future of the Polytechnic are going to be taken by the Institute itself" and that "being attached to the office is a privilege, but also a recognition of the trajectory and Capacity of this great institution "(El Universal, 2016). With this second movement, the crisis of leadership and lack of training of its managers to face the situations presented at the National Polytechnic Institute is again evident.

On the other hand, in an interview conducted on May 11, 2017, a professor and official of the National Polytechnic Institute, who lived closely the movement of 2014, mentions that this was done in part because of the lack of tact of the managers for Attending to the problem at the time, the authoritarian position assumed by them, and non-opening to dialogue with the student community; That is, lacked political vision.

In this context, an opinion survey was conducted after the second work stoppage as a first diagnosis with students aged 15 to 18 years of the upper middle level. The sample was non-probabilistic and was conducted on a voluntary basis with 104 students. To this end, three questions were posed, each with four options of answers (totally agree, partially agree, partially disagree and totally disagree) in order to obtain a panorama of how the students perceive the performance of the directors of the Level of the Institute. The results are shown below.

The first question asked was: Do you agree with unemployment in vocations? Student responses are shown in Figure 1.

Figure 1. Primera pregunta del sondeo de opinión.

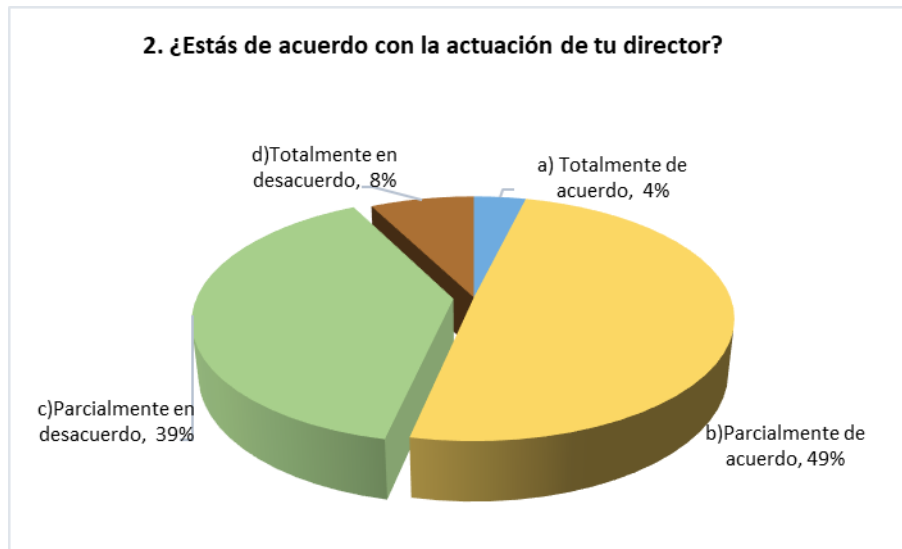


Fuente: Elaboración propia.

As shown in figure 1, the majority of the students, 74%, answered that they agreed (partially 50% and totally 24%) with the unemployment that occurred in the vocational, In addition, only a very small percentage (4%), was in complete disagreement with this strike.

Regarding the second question, "Do you agree with your director's performance?" The results, shown in figure 2, show that 53% agree (partially 49% and totally 4%), which reflects that students Are not convinced that the performance of their director is appropriate to manage the academic unit under their care.

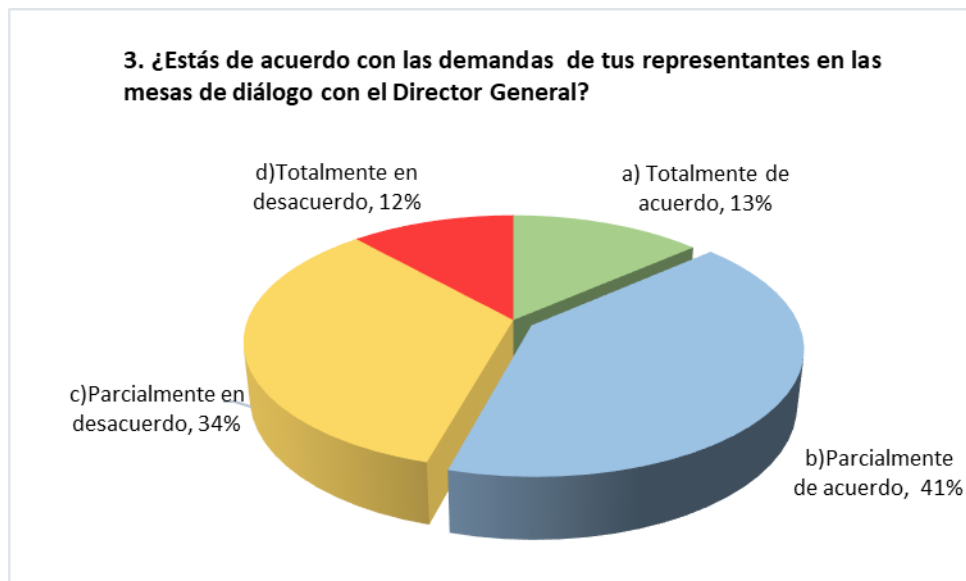
Figure 2. Segunda pregunta del sondeo de opinión.



Fuente: Elaboración propia.

The answers to the third question "Do you agree with the demands of your representatives at the dialogue tables with the Director General?" Are presented in figure 3.

Figure 3. Tercera pregunta del sondeo de opinión.



Fuente: Elaboración propia

As can be seen in figure 3, 54% of the students agree (partially 41% and totally 13%) with the demands of the representatives in the dialogue table, in contrast to 46% who do not agree (Partially 34% and totally 12%); It is perceived that the students are not fully satisfied with the demands of their representatives.

Based on the results of the opinion survey shows the importance of the director's performance and leadership in the management of upper-level academic units.

The proposal: Towards an emerging change in managerial leadership at the upper middle level

The upper middle level consists of 19 schools in three areas of knowledge (physical-mathematical sciences, medical-biological, and social and administrative), of which 15 are Centers of Scientific and Technological Studies (CECyT), a Center for Technical Studies (CET) and three multidisciplinary academic units: CECyT 16 Hidalgo, CECyT 17 León-Guanajuato and CECyT 18 Zacatecas. In the upper middle level, there are 37 technical courses in school mode, as well as three technical courses in non-school mode: in the area of physical and mathematical sciences, the technical career of software development; In the medical-biological area, the technical career of pharmaceutical chemist; And in the area of social and administrative sciences, the technical career of human resources management.

It should be mentioned that the largest number of schools in the upper middle level are dedicated to the physical-mathematical area: nine CECyT and CET; In the area of social and administrative sciences are four schools; And in the medical-biological area, two schools. In addition, there are three multidisciplinary units: CECyT 16 Hidalgo, CECyT 17 León-Guanajuato, and CECyT 18 Zacatecas, in which technical careers are taught in the three areas of knowledge (IPN, 2016).

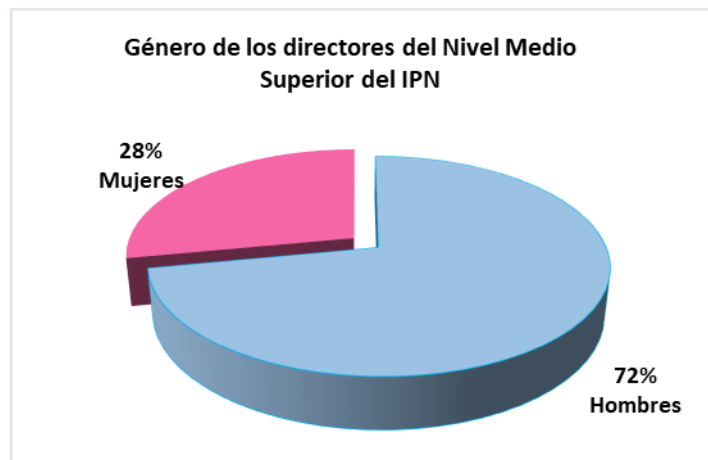
According to data from the National Polytechnic Institute, in the year 2016 there was an enrollment of 62,657 students in the upper middle level, which represents 36% of the total enrollment attended by the Institute.

Based on the above, the National Polytechnic Institute is immersed in a process of transformation in which an emerging change is necessary, in the managerial leadership in general, and in particular of the upper middle level; It has been stated that this educational level deserves special

attention, since the second student movement originated in this one, which makes evident the relevance of the leadership to manage the academic units of the average higher level of the Institute.

That is why the question arises who are the directors of the upper middle level? To answer it, the characterization of the directors of the upper middle level of the National Polytechnic Institute is presented below. The average age of the directors is 52 years and the average experience within the Institute is 24 years. As for the gender of middle managers, 72% are males and 28% females. See Figure 4.

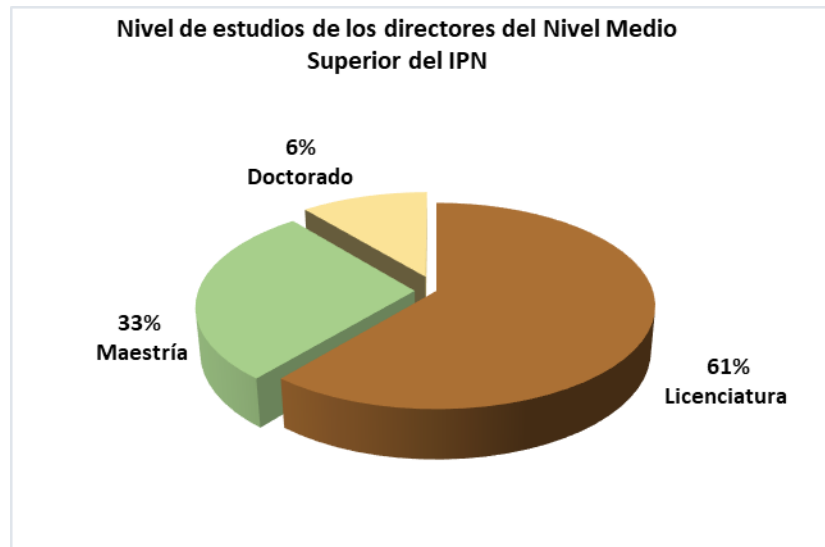
Figure 4. Género de los directores.



Fuente: Elaboración propia.

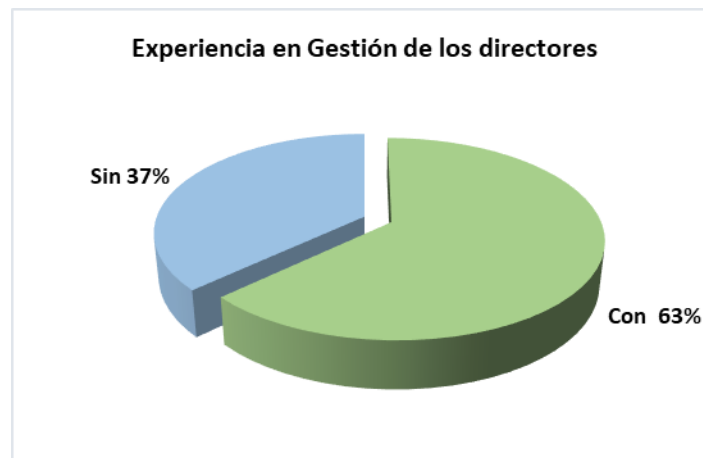
Figure 5 shows the level of studies of upper middle managers: 61% of the directors have undergraduate studies, 33% have master's degrees and 6% have doctoral degrees.

Figure 5. Nivel de Estudios de los directores.



Fuente: Elaboración propia.

It should be noted that the postgraduate studies of middle school principals are concentrated predominantly in education and administration. As for the management experience of the directors before assuming the position, it was found that 63% have management experience as Head of Department or as Assistant Director, whether academic, administrative, or educational services and social integration. The remaining 37% do not have experience in management, but performed academic functions as president of academy or counselor, as shown in Figure 6.

Figure 6. Experiencia en Gestión de los directores.

Fuente: Elaboración propia.

On the other hand, in an interview with a professor and official of the IPN, made on May 11, 2017, the interviewee mentions, based on his experience, the characteristics to be a good director and to have a better performance in his administration in the Institute National Polytechnic in its three levels of education (upper middle level, higher level and postgraduate). It is necessary, in the first place, to have a team of work in line with the position, with the profile and experience in administration, ie, that the members of the work team are not chosen by compadrazgos or camaraderie. He also mentions that human relations and management experience are fundamental for managerial leadership in a balanced way. In particular, the academic interviewed points out that in order to exercise managerial leadership in the National Polytechnic Institute, human relations are necessary, that is, to have good relations with the work team; As well as to know the Institution: its mission, its vision, the organic law, its regulations and to carry out collegial work. In addition, experience in management is required, for example managing budgets, so that the decision making is carried out with efficiency and effectiveness. In this sense, it indicates that it is essential to have a long-term vision and flexibility (in the sense that they adapt to changing conditions without losing track) for the leadership of the Institute to develop leadership. They are relevant to executive leadership, he explains, personal aspects such as having initiative, being innovative, tolerant of frustration (that is, do not be intimidated if things go wrong), tenacious and negotiator.

On the other hand, for the investigation, a second opinion poll was conducted in June 2017, almost three years after the 2014 movement, in order to identify the competences and characteristics perceived by the upper middle level students so that the directors have a better performance in the management of educational institutions and to identify if the leadership that the directors are doing is right or wrong and why they think so.

The sample was non-probabilistic and was performed voluntarily with 110 students. To do this, three questions were raised, the results of which are shown below. The first question was: How do you perceive the leadership of your director? With response options: 1) Adequate and 2) Inadequate and asked to, regardless of their response, explain why they considered it so.

Figure 7. ¿Cómo percibes el Liderazgo de tu director?



Fuente: Elaboración propia

As shown in Figure 7, 60% of students answered that the leadership role of their principal is appropriate. Among the wide range of responses provided by students are the following five grouped into categories as shown in Table 3.

Table 3. Respuestas de los estudiantes, agrupadas en categorías.

Categorías		
Servicios	Control	Interés
<p>1. La escuela ha mejorado en distintos aspectos como cafetería, la atención que se da en los departamentos, la intendencia, entre otros.</p> <p>2. A pesar de ser el director, se preocupa por los alumnos, como el caso del equipo de americano.</p>	<p>3. Ha tenido un buen control con el personal.</p>	<p>4. Ha mostrado interés por la institución y por los alumnos.</p>

Fuente: Elaboración propia.

Another answer that was found was 5) "Better than the previous one, but it has some flaws, it started well delivering material things, but I feel that it lacks more leadership."

These answers show that for the students the leadership that the director exercises is good because it is reflected in the facilities and services that they use, which indicates that the director has an interest in them.

However, the remaining 40% believe that leadership is inadequate, mainly for the following reasons:

- 1) Because he is not interested in the student community, he is hardly present at school, he only appears at the beginning of the semester three or four times, only attends important events, does not attend students, teachers and staff.
- 2) Apparently there are no improvements in school.
- 3) By the way he was elected, by levers and not democratically.
- 4) Because he does not listen to the demands of students and teachers and does not lead with a hard hand.
- 5) Its management is inadequate because it does not have much communication with the students, leaves all the responsibility to its cabinet and it disappears, says that there are no resources and the quotas are obligatory.

As you can see, there are conflicting opinions, in which students mention that there is no improvement on campus and others state otherwise.

Other answers are those that mention that he has an interest in the students, against others who point out that he does not care.

The second question in the opinion poll was: What are the competencies that the director demands to have effective management? In order to identify competencies according to their degree of importance. It should be mentioned that 71% of the students identified as more important the competences shown in table 4.

Table 4. Competencias directivas para una gestión eficaz.

Más importantes	Medianamente importantes
Trabajo en equipo	Negociación
Comunicación	Delegación
Liderazgo	Gestión estratégica
Relaciones interpersonales	Autoconocimiento
Toma de decisiones	
Manejo de conflictos	

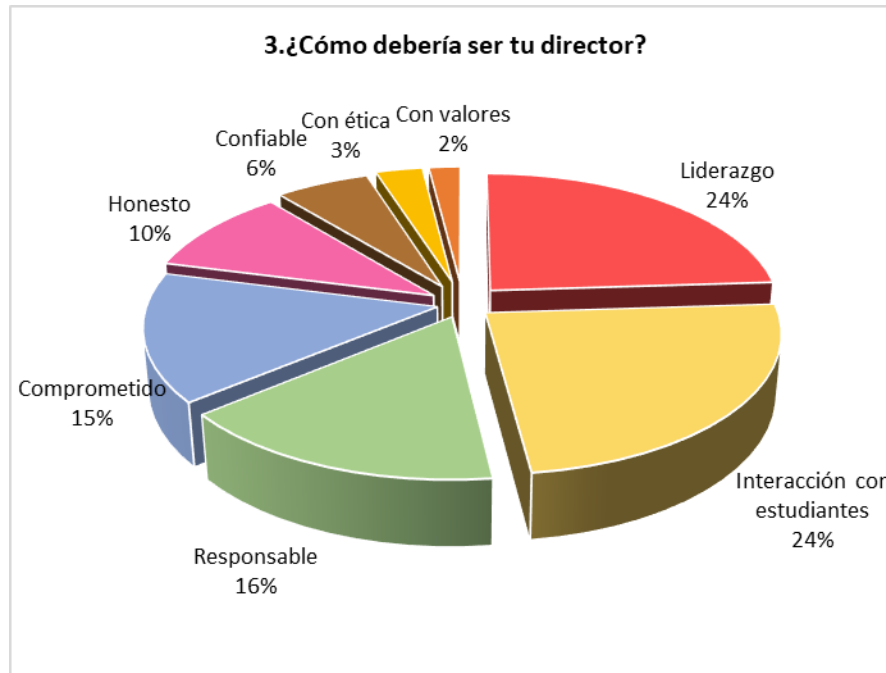
Fuente: Elaboración propia.

As can be seen in Table 4, the most important competencies for upper middle managers for effective management perceived by students are: teamwork, communication, leadership, interpersonal relationships, decision making and management Of conflicts. Moderately important are negotiation, delegation, strategic management and self-knowledge.

Question three was made in order to identify the characteristics of a good director. To do this, they were asked, "How should your director be? And they are asked to mention at least five characteristics in order of importance, where the first one they mention is the most important, with which the following results were obtained.

As can be seen in figure 8, leadership and interaction with students are those with the highest percentage (24%), followed by being responsible (16%), committed (15%), honest (10%), reliable (6%) with ethics (3%) and values (2%).

Figure 8. Características del director.



Fuente: Elaboración propia.

Based on the results obtained from the survey, students perceive six priority competencies for the director to perform an effective management: teamwork, communication, leadership, interpersonal relationships, decision making and conflict management; And four of medium importance such as negotiation, delegation, strategic management and self-knowledge.

On the other hand, based on the opinion of one of the experts interviewed, teamwork, human relations and management skills are essential for the director to develop leadership and efficient and effective management. Regarding the characteristics that the directors should have, the students point out that five main ones are: the leadership, the interaction with the students, being responsible, committed and honest.

Discussion

This paper deals with the topic of managerial leadership and management at the upper middle level of the National Polytechnic Institute. At present, managerial leadership is considered as both a competence and a strategy that determines the development of the management of the director of an educational organization. It has also become an educational policy strategy, as pointed out by international organizations such as the Organization for Economic Co-operation and Development (OECD, 2009), in which the director through his leadership is considered as an agent of change to achieve Materialize educational reforms and improve the management of educational organizations.

The objective was to identify the competencies and characteristics that are necessary to exercise managerial leadership and management of the upper middle level of the National Polytechnic Institute, based on students' perceptions. For this, a sample of 104 students was analyzed in a first opinion poll to know how well they were with the performance of its director. Subsequently, a second survey was applied to 110 students to identify the competencies and characteristics required for the middle manager to develop leadership and effective management in their school. The results show that the highest percentage is partially in agreement with the performance of its director, as well as with the leadership that is realized in its school.

On the other hand, six competencies were identified in greater percentage and of greater importance, from the perception of the students, for the director to carry out an effective management of his school: teamwork, communication, leadership, interpersonal relations, Decision-making and conflict management; Moderately important were negotiation, delegation, strategic management and self-knowledge. These findings mean that students do not see the director as the sole manager, but their performance also requires people to support it, as the importance of teamwork shows.

Similar results found in this research in relation to the competencies required by the principals were identified by the International Institute for Educational Planning (IIEP, UNESCO, 1999), which identifies five competencies: situational analysis for decision making, Leadership, and teamwork, as well as the proposed competencies for management professionalization proposed by Pozner (2000): challenges of education, strategic management, leadership, teamwork,

communication, participation and educational demand, anticipation, Problem solving, delegation and negotiation.

Whetten and Cameron (2005) propose a model of managerial competences from three dimensions: personal dimension (development of self-knowledge, stress management, analytical and creative solution of problems), interpersonal dimension (conflict management, employee motivation, communication Support) and group (empowerment and delegation, gaining power and influence, building effective teams and leading to positive change).

Another study was conducted by Villa (2013) in which he exposes competencies for leadership such as the emphasis on learning and achievement, on strategic vision, on people, on organizational transformation, on communication, and on management And administration of the educational organization.

Likewise, the results that were found regarding the competencies required for the director to carry out the management effectively are those reported by Vázquez, Liesa and Bernal (2016), who point out that leadership is required both as manager and pedagogical, Resources, interpersonal relationships, conflict management, communication processes, decision making, innovation and change.

Eight characteristics were also identified according to the highest percentage that the upper middle level director should have from the students' perspective: leadership, interaction with students, being responsible, committed, honest, trustworthy, ethical and values, considering these As one of the main findings of the research.

The results on the competences and characteristics required by the directors of the upper middle level of the National Polytechnic Institute coincide with some reported in the study by Solís (2010) who found that for managerial leadership and management require characteristics such as negotiator, communicator , Delegator, transmit confidence, as well as motivating, visionary and inspiring, among others he mentions. In addition, another coincidence that is mentioned is with respect to the importance of the work in equipment and the interpersonal relations.

On the other hand, limitations are presented since only one study was found for the competencies and characteristics required for managerial leadership and management in the upper middle level of the National Polytechnic Institute, which is a little studied subject. Another is in relation to the design of instruments that allow to identify in detail the perception of the students about the

performance of the directors. Regarding the strengths, the findings are found in relation to the characteristics that the directors must have, and the voluntary participation of the students.

CONCLUSIONS

The education sector is not exempt from the changes that have resulted from globalization and the educational policies that have been generated at the global level by international organizations, which focus on quality education, decentralization of educational services and management Educational organizations, among other aspects. These educational policies paradoxically point to two aspects: on the one hand, they seek quality education, with equity, relevance and sustainability; And on the other hand there is the mercantilist nature of education with the educational reforms that have been presented at both the international and national levels and which are acute in terms of the management of educational organizations and the decentralization of educational services, pointing to a Autonomy of management, noting that one of the main agents to achieve this is the director of schools betting on leadership leadership as a means to achieve it.

In this way, the role of the director as the main leader becomes more complex and increases the pressure on this agent of the education system to achieve a management focused on results as presented by the current reforms. In addition, with the compulsory high school education decreed in 2013 by the Federal Government, as part of basic education, the latter's requirement to implement the Comprehensive Reform of Higher Education (RIEMS) was increased. The creation of a National Baccalaureate System, together with a teaching and management professionalization, as well as the evaluation of teachers, managers and the same school in all educational institutions in the country of that educational level.

It should be noted that the National Polytechnic Institute initially addressed what was indicated by the Comprehensive Reform of Higher Education, changing its plans and curricula of this educational level in 2008 in terms of training in skills of Students, teachers and managers. However, in September 2014, an unprecedented event occurred, the student movement of 2014,

because the institute changed the curricula of both the upper and lower secondary levels (combined with the change of internal regulations). The movement resulted in a work stoppage and petitions pleading; Within these petitions the dismissal of directors of both the upper middle and upper levels was presented, which evidenced a crisis of authority, lack of leadership and training of its managers. The movement allowed the Institute to look inward to propose a way of directing and achieving the change demanded by the institution.

In this sense, the importance and importance of the leadership leadership for the management of the Institute is manifested. However, almost three years of the movement have not made significant progress to achieve the desired change in the Institution, which again emphasizes the relevance of the leadership leadership to materialize. Leadership is fundamental for institutional transformation because, when working directly with strategy, considering the structure, culture of the organization and, of course, the people who integrate it and who contribute with their knowledge, experience, motivation and Participation, it is possible to make the best decisions in a shared way for the organization.

With regard to the theories and empirical investigations that have been exposed in the work, it is pointed out the importance of exercising managerial leadership, because the director is considered the head of an organization and is the main agent for Effective management.

In the same way, the interviews conducted with experts highlight the relevance of the leader's self-knowledge, interpersonal relationships, teamwork to carry out effective leadership and improve results in the management of the organization. Likewise, the leadership styles that have been most adequate to exercise managerial leadership as a strategy for the management of organizations are the transactional and transformational leadership, which according to empirical research indicate that they are carried out in a mutual way : Both are necessary for the management of educational institutions, as well as the importance of distributed leadership, understood as the recognition that leadership is shared with other members of the organization: it is not the only leader, but there are several leaders In the organization, and by working together

they achieve better results. In this sense, the leader must be empowered to provide empowerment to his work team and to the people who contribute to the improvement of the organization.

In order to exercise managerial leadership within the Institute, it is necessary to emphasize the relevance of communication, which is indispensable to carry out and materialize the decisions that are made, since it allows forming links and securing better interpersonal relationships with the members of the organization.

In this way, in the research carried out, students perceive teamwork, communication, leadership, interpersonal relationships, decision-making and conflict management as the primary competences for the director of the higher middle level. As for the characteristics that the students consider relevant to the principal, leadership, interaction with students, being responsible, committed, honest, with ethics and values were identified.

On the other hand, within the challenges and challenges that the Institute faces for the upper middle level is to define a profile for the directors, which at present does not yet have. It is also important to define a model of training in competences for the directors of the institute's higher middle level in order to acquire, develop and enhance managerial leadership, among other competencies, to make a more appropriate management of Academic units, and can deal with adverse situations that arise in the future, that is, to act proactively. Management leadership is a key element to help the Institute change.

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