

POTENTIAL FOR INNOVATION AND INSTITUTIONAL MANAGEMENT AT THE NATIONAL UNIVERSITY OF CAÑETE-PERU

Potencial de innovación y gestión institucional en la Universidad Nacional de Cañete-Perú

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Abstract

This research part of the framework of the multiple and complex political, economic, social and cultural transformations posed by the current university system, arises from the need to develop accurate diagnoses of the innovative potential that public universities need in the country, to be at the avant-garde of private universities in the context of the requirements of the National Superintendence of Higher University Education (SUNEDU) and the National System for the Accreditation and Certification of Educational Quality (SINEACE). The objective of the research was to determine the degree of relationship that exists between the potential for innovation and institutional management in the management, teaching and administrative staff of the National University of Cañete. The research was applied type, correlational level, we worked with a transversal correlational design. The population was made up of 154 subjects among managers, teachers and administrators, and the sample was probabilistic and stratified consisting of 92 subjects. The level of potential for innovation that the university has is 75%, being qualitatively good, and in institutional management 73%, being very good, in the perception of the subjects evaluated. It is concluded based on the three dimensions and with a level of significance of 5%, that there is a direct and highly significant correlation ($\rho = 0.902$ and $p\text{-value}: 0.000 < 0.010$) between the innovation potential and the institutional management in the management, teaching and administrative staff of the National University of Cañete.

Keywords

Innovation, actor, capacity, educational management.

Resumen

La presente investigación parte del marco de las múltiples y complejas transformaciones políticas, económicas, sociales y culturales que plantea el sistema universitario actual, surge de la necesidad de desarrollar diagnósticos certeros del potencial innovador que necesitan las universidades públicas en el país, para estar a la vanguardia de las universidades privadas en el contexto de las exigencias de la Superintendencia Nacional de Educación Superior Universitaria (SUNEDU) y el Sistema Nacional de Evaluación Acreditación y Certificación de la Calidad Educativa (SINEACE). La investigación tuvo como objetivo determinar el grado de relación que existe entre el potencial de innovación y la gestión institucional en el personal directivo, docente y administrativo de la Universidad Nacional de Cañete. La investigación fue de tipo aplicada, nivel correlacional, se trabajó con un diseño correlacional transversal. La población estuvo conformada por 154 sujetos entre directivos, docentes y administrativos, y la muestra fue probabilística y estratificada conformada por 92 sujetos. El nivel de potencial de innovación con que cuenta la universidad es del 75%, siendo cualitativamente bueno, y en la gestión institucional el 73%, siendo este muy bueno, en la percepción de los sujetos evaluados. Se concluye en base a las tres dimensiones y con un nivel de significancia del 5%, que existe una correlación directa y altamente significativa ($\rho = 0,902$ y $p\text{-valor}: 0,000 < 0,010$) entre el potencial de innovación y la gestión institucional en el personal directivo, docente y administrativo de la Universidad Nacional de Cañete.

Palabras clave

Innovación, actor, capacidad, gestión educativa.



Introduction

The characteristics and conditions of today's world require educational institutions to design more efficient projects to face the challenges of development, the demands of society and the expectations of people. Therefore, education in general terms and training constitutions in particular, as open, comprehensive and flexible entities, must consider in their natural dynamics the possibility of incorporating quality elements to guide their actions to achieve greater impact and response.

In the country and within the framework of administrative decentralization and management autonomy, institutions have the opportunity to carry out critical and self-critical reflection processes, in order to determine the real and potential situation based on their vision and mission assumed as social responsibility. Definitely, innovation becomes one of the most effective actions when it is understood as the regulated inclusion of a new and necessary element for the continuous improvement of management and educational action.

Encouraged by the idea that the strengthening of the management capacity of the educational institutions of the university education system gives greater possibilities for experimentation and innovation, and expands the possibility of generating and developing appropriate actions to improve learning levels, respond, appropriately, to the educational demands of the environment and generate an institutional climate that motivates and stimulates the joint effort of the members of the educational community by increasing their commitment to the results, alternatives oriented to bring closer the decision-making process in administrative, curricular and pedagogical matters to educational and university centers are postulated.

These ideas have gained acceptance and generated consensus in different international events. The Ministers of Education of Latin America and the Caribbean, for example, indicated in point 6 of the Cochabamba Declaration the following:

That a new type of educational institution is required. It is essential that educational institutions be more flexible, with a high response capacity and endowed with effective pedagogical and management autonomy. Provide them with sufficient support to organize and execute their own educational projects responding to the needs and diversity of the community they serve, built collectively and assuming—together with state entities and other managers, teachers and administrators—the responsibility for the results (UNESCO, 2003).



The report of the International Commission on Education for the 21st Century to UNESCO, chaired by Jacques Delors, also recommends administrative decentralization and the autonomy of establishments because of the possibility they open for the development and generalization of educational innovations.

A rethinking of education is being carried out in the country with the intention of modernizing it through administrative regionalization (economic de-concentration and administrative decentralization), but in the absence of a budget, its progress is slow and therefore there are few strategic nationwide and regional plans that promote educational reforms at all levels, for educational innovation and continuous improvement of educational management.

Within the framework of this panorama, the National University of Cañete (UNDC) develops its academic and administrative activities in accordance with University Law 30220 and its own statute. The presence of this university is important since they train professionals to boost regional and national development. However, the efforts made in the country are not entirely sufficient, since the structural and cyclical changes of the national and world economy require new policy guidelines, in order to ensure that the future professional is a leader, competitive, complete, entrepreneur and with positive values, so he/she can access the labor market as a dependent worker and/or create his/her own company.

Therefore, the requirement of an administrative and academic process with an innovative character is indispensable if the faculties of business sciences, engineering, and agronomic sciences are required to provide quality education and that this is endorsed by the accreditation law of Peruvian universities.

In this dynamic, innovations in curricular designs, in pedagogical and didactic methods, in laboratories, in social projection, in scientific research and in academic and administrative management, are of the utmost importance, because in the end what the laws related to accreditation seek is the continuous improvement in the university system and this will be achieved with a culture of innovation through a daily self-assessment process of higher education institutions and in particular the university under study.

Nowadays, academic planning work is insufficient because the faculties have active curricula since 2014 and 2016. Since that time there have been no evaluations that have enabled curricular innovation. In this case, the UNDC has major disadvantages because the elaboration of the syllabus is routinely carried out according to the criteria of the teachers of



each subject. Generally, the theory is not embodied in the concrete reality, there is duplication of content, the evaluation methods are not often related to the syllabus or in any case there are outdated contents regarding the evolution of contemporary technology.

In this regard, according to Aguilar (2011), technology is understood as a set of knowledge, skills, and means necessary to reach a predetermined end. Others conceive it as a set of technical knowledge, scientifically ordered, that allow to design and create goods and services that facilitate the adaptation to the environment and the satisfaction of human needs and desires.

In addition, the articulated set of driving actions of the Engineering Faculty of the UNDC responds in the short term and is expressed through the Annual Work Plan of each Career Directorate, the Research Directorate, the Social Projection and University Welfare Directorate, where aspects related to the objectives, goals, programming of activities, budget and evaluation are detailed. Likewise, in the formulation and evaluation of the plans or programming of activities only the teachers appointed by the Organizing Commission participate. The contracted teachers, the students, and the graduates do not participate in these processes.

Similarly, the determination of who makes and how decisions are made and coordination are not clearly understood by teachers, students, and administrative staff. The agreements are taken by the Organizing Committee and are known only to the members, therefore, compliance with the provisions does not tend to a minimum of requirements, being these by obligation or spontaneous.

The lack of a defined plan of what is intended to be as an expression of the consensus of those who take part in the educational action and the absence of innovative educational proposals, which from reality, the characteristics of the environment and institutional potential, allow contextualization a pedagogical and management proposal, make educational work irrelevant regarding the demands and needs that are required of students for their optimal performance in individual, social and natural reality, and to attend to their needs according to their levels of development and maturation. Overcoming such limitations is a challenge and an urgent requirement.

Finally, within the framework of the minimum standards for self-assessment for accreditation purposes, in the five careers currently available to the university established by SUNEDU, this research becomes relevant because it constitutes an essential self-assessment instrument for the development and subsequent accreditation of these professional careers.



Regarding the background of the research, it is in the mid-1960s that innovation begins to be part of pedagogical discourse and school culture. In the USA, the proliferation of innovations in school education emerges as an alternative response to emerging social problems. It was thought that these problems could be addressed from the School if a series of reforms were applied. In this sense, the National Science Foundation (NSF) proposed to radically transform the teaching of science and mathematics in schools, by replacing the corpus of scientific knowledge with a new approach focused on search and discovery by means of experimentation, so that students and teachers can adapt quickly to changes in a technological society.

Due to the effect of this movement, reforms in social sciences and English also began to be considered. In 1965 another reform was launched whose purpose was to meet the educational needs of the most disadvantaged students to ensure equal opportunities in school education. Programs were also launched for the creation and dissemination of resources and materials that would facilitate teachers to receive the effects of change. The culture of innovation that is generated in this country has a great influence on the direction taken by educational innovations in other countries.

In this period, the technological approach dominates the notion of innovation and the way in which it is implemented. This, according to De la Torre (1994), “will be marked by the product’s seal, which is what interests scientific and technological knowledge of the moment. The model is inspired by industrial innovation strategies applied in developed countries” (p. 41). In the perception of Carbonell (2002), “educational innovation is considered as an external process defined by the knowledge of experts and legal requirements, reproducing in the school the technical and social division of work between people who think and plan” (P. 36). Under this approach, the school institution is conceived as a bureaucratic organization that does not take into account its complexity or dynamic interactions among its members.

From the decade of the 70s, the political approach and the cultural approach arose in contrast to the vertical model of innovation. The cultural approach understands innovation as a phenomenon of cultural relationships between experts who design innovation projects and teachers who filter, redefine and apply innovations according to their concrete reality. This approach considers the school or university institution as an organization with its own culture, which mediates the innovation process and its development. The ‘socio-political perspective’ possesses



innovation in its context and recognizes the interrelationships between professional, ideological, social and cultural interests of the directors, teachers and educational administrators expressed when implementing innovation and concretizing the teaching and learning processes.

According to Blanco and Messina (2000), when referring to innovations in Latin America, they point out that in the decade of the 70s and 80s there is a great development of innovative experiences in formal and non-formal education, many of them were respondents to the established system and they were nourished by different pedagogical currents that denounced, from practice, an academic education that did not promote critical thinking or autonomy. They also point out that in the framework of the reform processes of the 1990s that promotes greater participation of managers, teachers, and administrators, educational innovation has been associated more with international quality and competitiveness, since the central axis of all the reforms is the decentralization and greater autonomy of the centers in decision-making in order to improve the quality and equity of education.

In Latin America, one of the problems detected around innovation has to do with the lack of research processes and systematization of innovations. The study conducted by Abraham and Rojas (1997 in Blanco and Messina, 2000) says:

Based on the analysis of the information in the *Latin American Information and Documentation Network* (REDUC) until 1995, they report that just over 10% of the information corresponds to research in education. From the analysis of 50% of research information (335 investigations), it was found that only 62 contained descriptions or information on innovations and that the most used methodology was that of case studies and action research (p. 287).

In order to identify, select and disseminate the most significant and successful innovative experiences developed by the member countries of the Andrés Bello Agreement (CAB), nine meetings of innovators and researchers in education have been developed in Peru, Chile, Ecuador, Bolivia, Colombia, Venezuela, Cuba, Panama, and Spain. The respective reports have been published and disseminated from each of these meetings, and documentary research has been promoted such as the one presented in the book *State of the art on educational innovations in Latin America*. According to Blanco and Messina (2000), this book, based on the study of 193 innovations from 17 countries in the region, presents a vision on the origin, development, stagnation, and continuation



of innovative experiences, their main trends and the differences between countries and subregions.

The Innovemos Network of UNESCO (1993), through a website, seeks to promote the exchange and dissemination of innovative experiences, promote their evaluation, systematization, and research, build a conceptual framework on the processes of change in the region and the establishment of effective mechanisms for consolidation and continuity of innovations. This bank of innovations based on the application of a series of preliminary criteria to identify and select innovations, offers educational experiences, specially selected, that have research and/or evaluations that have shown that it is really an innovation and that have a positive impact on the transformation of educational practices and on the learning of students.

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In Chile, specifically in the *Educational Research Bulletin*, edited by the Pontifical Catholic University of Chile, reports on research projects related to the topic of educational innovation, among them, the study by Garay (1996), which exposes a comparison of two innovation projects developed in Chile: learning guidelines for a desirable school and educational improvement projects. The study analyzes the data collected through quantitative and qualitative techniques and tries to know the conceptions of Chilean teachers regarding the innovative process and the most appropriate models for its realization.

Likewise, Ríos (2000), in his study with exploratory-descriptive characteristics, is limited to professionally characterizing innovators and describing the main aspects of their innovations. The research uses a design that contemplates the presence of a group of teachers involved in educational improvement projects and a comparison group consisting of teachers who are not involved in such projects. The data collected from the sample is analyzed through descriptive statistics and subsequently performs an interpretive analysis of them.

In Peru, experiences of institutional and pedagogical innovation have been developed aimed at improving educational quality. According to Bello (et al., 1994), they have prepared a record of innovative experiences developed in urban areas. Pozzi and Zorrilla (1994) make a record of innovative experiences in rural areas, taking into account those that have been developed in cooperation between the State and international organizations, those that have been due to foreign NGO initiatives and those that were developed at the initiative of national groups.

Blanco and Messina (2000) say that Peru fundamentally informs about nongovernmental experiences, of local scope, especially concen-

trated in curriculum, teacher training and educational proposals to address diversity. Highlighting that all informed innovations promote the participation of the educational community, teacher training, materials development and the use of active methodologies.

This is how innovations in education appear linked to ideological, social and economic factors, and their consideration as such depends on the situation in which they emerge, who their promoters are and the extent and impact they have on the satisfaction of needs of the educational institution or society.

In Peru, a rethinking of education is taking place within the framework of another, of greater scope, that intends to modernize the State through decentralization and regionalization. The main indicator of this intention is the enactment of new education law, a new university law and the adoption of broad national reform plans.

Beyond the configuration of a new structure of the Peruvian educational system, in which the laws forge a different way of conceiving the institutions, the expectations and dynamics of their internal functioning, and in close articulation with these aspects raises the need for the institutions that make up the education system, to leave their endogamy and increasingly link to the communities in which they are inserted through consultative bodies and the world of production and work.

According to Espinoza (2000), the organization and government of the university is “in crisis not only because of the lack of its conceptual essence, but because of a bad administrative structure, product of a misunderstood internal democracy” (p. 196). This indicates that bureaucracy does not do any good to the first house of higher education, but rather contributes to its permanent backwardness and coexistence with the current social system.

Most universities, whether public or private, in their own definition, must reflect the change, the shift in the paradigm, they are in crisis because of their bad organization and poor administration. These respond to the interests of political-supporter groups that hegemonize bureaucratic control and, therefore, develop in an isolated context where there is no effective link to effectively use their human resources. Efforts are needlessly duplicated, and budgets that could well serve to effectively fulfill the primary functions of the university are misallocated.

For its part, teachers claim ‘university autonomy’, defends ‘its district of knowledge’ without highlighting in any way the principle of that autonomy. The different forms of organization were mostly ‘imported’ through faithful copies from other countries and as such belonging to





other realities. Thus the academic departments and institutes were conceived. In the universities these criteria are not discussed, rather the concern about the control of power is put on the table not with the positive intention of improving it, of overcoming it, but of manipulating it according to interest groups, to orient it towards persistent corporatism.

Then, Espinoza (2000) asks, “universities: organized anarchies or unstructured organizations?” Anarchy implies disorganization, disorder, where each person does their own thing without respecting any norm. There is “a well-organized mafia where anarchy is part of the system or is in organizational knowledge or culture” (p. 54). With this attitude, the university is against itself, since it is against the advancement and progress of its status and as such, lacks of input, creativity and new ideas for the benefit of the community. The reference of universities as “unstructured organizations” (Mintzberg and Raisinghani, 1986 in Espinoza, 2000) is in relation to the existence within them of uncoordinated units, both academic and administrative, the academic takes place through its system and the administrative, simultaneously, through its own.

Finally, Espinoza (2000) supports “the necessary university”. This indicates that it is a current proposal, realizable in a society such as Peru, which has the following characteristics:

- The university as a perception of the political, economic and social situation of the Latin American context.
- The development of criticism and knowledge as processes of apprehension.
- There is no ‘for tomorrow’, today is terribly demanding.
- An academically and administratively organized university that responds to regional requirements.
- A university that would question the social order and the debate of the current issues of society.
- The university reform has to be permanent; no university should be created once.
- Win the university for Latin America in order to be able to transform it into a national development agent.
- The new innovative project must be born from within the same university.

According to these and other studies carried out to date on the university, there is very little left to say, only to add that this institution, complex even in its definition, must fulfill very important functions within society, for which it is necessary and essential the innovation. This is how

its everlasting permanence accompanying civilization could only be due to its own structure supported by four solid columns in its conceptions: philosophy-science-humanism-technology (innovation), which made its own existence possible through centuries and against the onslaught of monarchical, democratic and dictatorial authorities.

The process of change that the Peruvian education system is experiencing is very complex, it requires being clearly aware that it is a phenomenon with multiple dimensions and a long-term task, but also with enormous repercussions in improving the quality of the education system. In the same way, the educational institution that is the university, considered in the new University Law 30220 as a forger of changes, as a seedbed of ideas, of theoretical and practical proposals, must among its objectives write down three basic questions that it needs to meet in society: scientific research, social projection and the formation of professionals at the service of the country.

Proposing a way to resolve the eventual stagnation of the schools, the higher institute or the university requires that managers, professors and administrative staff (educational actors) reflect critically on their pedagogical or administrative praxis as appropriate, and begin quickly with change processes, changes with meaning and effectiveness. Strengthen in the teachers attitudes of openness to change and tolerance of uncertainty that involves any process of change, for which there is no pre-established route or path that is not zigzagging; first it passes through the identification and definition of the potentialities and weaknesses that universities have to implement changes, hence the purpose of this research is to identify the potential for innovation and institutional management of the UNDC in the 2018-2019 period.

Based on the perceptions of educational actors (managers, teachers, and administrative staff) in relation to a set of skills related to self-assessment, problem definition, search for solutions, planning of actions, systematic execution of plans, the evaluation of the results and the integration of innovations in their culture, we can identify and describes the innovative potential of the educational institution, and then propose a set of recommendations that help the development of collaborative innovations, prioritizing collective and gradually more autonomous work, intrapersonal and interpersonal reflection of managers, teachers and administrative staff on their praxis and educational relationship strongly influenced by conscious and unconscious beliefs rooted in their thinking.

The research problem was formulated as follows: What is the relationship between the potential for innovation and the institutional ma-



nagement performed by management, teaching and administrative staff of the National University of Cañete de Lima, Peru? The objective was to determine the degree of correlation between the potential for innovation and the institutional management of the key actors of the UNDC. The hypothesis states that there is a direct and significant relationship between the potential for innovation and the institutional management of the management, teaching and administrative staff of the UNDC.

The research is important because it made it possible to generate and systematize useful information for the governing body of the university and to all the managers, teachers and educational administrators involved in innovation, to guide timely and effective decision making aimed at improving academic and administrative management of the university organization. The investigation is justified on the following criteria:

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- *Convenience*, that aspect is crucial, since this research is convenient for this time and space, as it served to know the levels of innovation and institutional management and thus extend it to other universities in the other regions.
- *Social relevance*, to the extent that managers, teachers, and administrators raise their social and moral conscience, and serve as a starting point for subsequent accreditation, and if the university improves, our society will also improve.
- *Practical implications*, the innovative potential of managers, teachers, and administrators was measured; In addition to the institutional management of the university of the study sample.
- *Theoretical value*, the information collected and processed within the university system, will support this and other similar research, as it will enrich the theoretical framework and/or body of knowledge that exists on the subject in question: The innovative potential and university institutional management.
- *Methodological utility*, because it allowed to implement scientific research and, use techniques and procedures to conduct our work and reach valid and reliable conclusions.

Before presenting the different perspectives that address the practice and development of innovation, the paradigms of scientific rationality that mark their orientation are described. This is because every concept and every educational problem that is theoretically addressed will have to be done in the light of the paradigmatic approaches to scientific rationality from which it starts.

Giroux (1980 in De la Torre, 1994) refers to three major structures of rationalities understood as the set of ideas, beliefs, attitudes, feelings, and practices that mediate the individual with his environment and that, are shared by the community of scientists who assume him.

Educational innovation is not an immovable field, the fundamental perspectives that have marked its practice and development have been projected from the paradigms of scientific rationality described in the previous paragraphs. In other words, behind each perspective lies a structure of rationality that bases its orientation. For House (1998), recounting its historical evolution distinguishes the following perspectives: technological, political and cultural. Leithwood (1990) adds the perspective oriented to the solution of problems, the same one that De la Torre (1994) assumes under the name of “integrative or strategic orientation”, in which innovation is explained as management and problem-solving.

In general, the authors cited agree on the idea that educational innovation involves phases and processes. According to Aguerrondo (1992), from the observation of a series of innovative experiences in Latin America, the planning and evaluation stages are incorporated. The incorporation of these two aspects provides a more complete picture of the process of endogenous development of innovations based on project strategy.

Regarding the stages of the innovation process, Chuquilin (2005) says that the new model proposal includes five stages: gestation, planning, execution, evaluation, and institutionalization. In each of the stages, a series of processes that interact with each other also affect each other. What happens at one stage of the innovation process affects the subsequent stages, generates new elements that influence the direction of the proposed change and condition, to some extent, the possibilities of permanence or abandonment of innovation. The stages of the proposed model are presented in Figure 1:

- *The gestation of innovation* is the process that leads to initiate innovation. It involves making decisions to generate it and determining its direction and scope in coherence with certain educational values. It takes into account aspects such as the level of awareness that members of educational institutions have about the problematic situation and the need to promote changes that contribute to overcoming that state of dissatisfaction.
- *Planning of the innovation* supposes to elaborate the proposal of innovation and implies the analysis of the reality and the determination of the educational needs on which it is going to



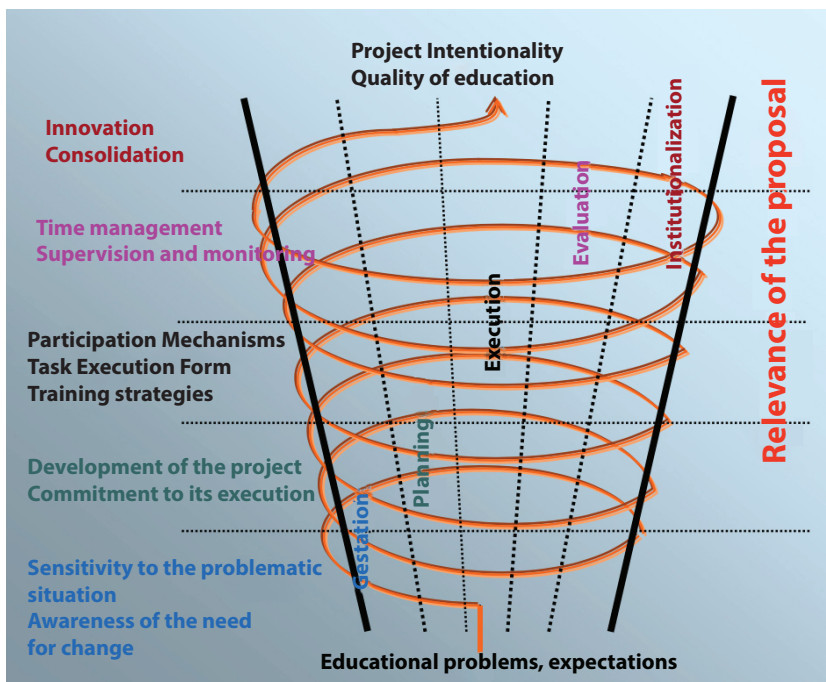
act, the determination of the content of the innovation and its systematic organization in plans, and the personal or organizational implications.

- *The execution of innovation* involves starting the set of activities that the innovation project implies, setting in motion a series of events that have to do, among other aspects, with the way in which educational actors participate in which elements related to specific roles converge, decision making and authorizations, training of personnel, resource assistance and organizational restructuring.

Figure 1

Stages of the innovation process: model used in the present investigation

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Source: Chuquilin, 2005

- *The evaluation of the innovation* is understood as a punctual and longitudinal process, which is about offering information, not only of the results, but also of the whole innovative process allowing to assess the degree of internalization and consolidation of the change. It has to do with time management, super-

vision, and monitoring. The evaluation, rather than a stage that is linked to the gestation, planning, execution, and institutionalization is consubstantial to each of them and involves issuing a value judgment to improve or reorient the traveled path, not only in each of them but also in the whole process.

- The *institutionalization of innovation* is understood as the progressive evolution of innovation towards its consolidation, that is, it strengthens and enriches itself in the educational organization.

The model is based on the assumption that the shared intention of the group of teachers, which was born in the reflection of their pedagogical practice was articulated around an innovation project, making possible in a progressive way, the transformative action that produces changes in reality and at the level of relationships between subjects.

Regarding the dimensions, according to Chuquilin, (2005) we have:

- *Capacity for critical and self-critical reflection*, which is the knowledge and reflexive assessment of educational problems, beginning with a certain capacity for self-criticism and criticism of teachers, in the face of their professional work, the reality of students and the social context in which they work by judging them and introducing new ideas from which they can be understood and solved.
- *The planning of actions*, which consists in the realization of plans and the evaluation of the innovative process, which involves a coherent organization of the activities that involve the innovative processes, with the purpose of enabling and stimulating efficiency in the performance of the different works. These are foreseen in methodically organized plans. It has an articulatory character and involves involving educational actors throughout the process.
- *The consolidation of innovation*, which assumes that it is no longer considered as something new and becomes a common way of doing things in the university organization.
- *The character of the institution*, which consists in the knowledge and achievement of the university in its desire for institutionalization.
- *The physical and technological infrastructure*, which includes the physical and technological aspects that the university must have in pursuit of its institutionalization and accreditation.



- *The organization and administration*, which is the type of organization that the university has for its management.

On the other hand, university institutional management assumes that the fundamental task in the redesign of university organizations is to review the dissociation between the specifically pedagogical and the generically organizational. This involves visualizing that the lever of educational transformations lies in integrated management of the strategic educational institution. Only a profound transformation of the way of working in education will allow the educational system to be placed in optimal conditions to move towards the strategic objectives that are challenging it, such as quality, equity, the relevance of the curriculum and professionalization of educational actions.

The transformation in which the Peruvian university system is immersed imposes a transition from a present model of university administration, rooted in the past, towards a present model launched towards the future, although many times it seems only a desire: strategic educational management.

A first approach to the concept of management is to recognize its affiliations. Management is an Anglo-Saxon term that is usually translated into Spanish as 'direction', 'organization', etc. But strictly, as Sánchez (2001) expresses, 'management' is a term that encompasses several dimensions and very specifically one: 'participation', the consideration that this is an activity of collective and not purely individual actors.

From a point of view more linked to organizational theory, university management is seen as a set of theoretical and practical processes horizontally and vertically integrated within the university system, to fulfill the social mandates. University management can be understood as the actions developed by the managers who pilot large organizational spaces. It is a synthesis capable of linking knowledge and action, ethics and efficiency, politics and administration, in processes that tend to the continuous improvement of educational practices, to the exploration and exploitation of all possibilities and to permanent innovation as a systematic process.

For Johnson and Evans (1997):

The types of leadership that characterize directors are done using a survey. There it has been identified that they use a large amount of personal power, cooperative conflict management and a supportive communication style, present the appropriate conditions to achieve the transforma-



tion of schools towards the production of a collaborative culture in their organization (p. 154).

In this brief review of work on institutional management, several issues are clear. The first refers to the repeated need of revision or identification of the processes of organizational transformation. In each of them, it is observed that the purpose of change is present in the evident organizational transition of each of these institutions; The interesting thing is to ask towards where do they transform. The second of the two questions is to ask about development and research about the power that is exercised in management or through management and conflict situations from which the organization of the school is made or transformed. In the case of the review of studies or research in Mexico City or Jalisco, none expressly refers to conflict management or power, although in some way they refer to these factors as one of the most common labor situations.

These three recurring aspects in the work, the transformation of management, power, and conflict, correspond to the three issues that will be addressed in this investigation. The first is the most comprehensive and refers to the direction of management transformation.

Regarding the new leadership role of the university in university administration, according to González and Ayarza (1997): "The organization of the structure of university personnel is characterized by a rigid and hierarchical structure in the administration sector. Here more flexible and flat structures and forms of autonomous organization should be used" (p. 114).

Although it is true, the structure of the personnel working in the universities is duly regulated and, in all cases, it is very rigid and hierarchical, in some university institutions in the provinces the control is almost nil and requires corrective action.

The university management increasingly develops towards management anointed with a strong orientation towards strategic development, planning, control, marketing and a modern system of information management.

The joint action of the professors with other scientific experts in the usual activities of the university extends to the control of projects, budgets, and resources. The university administration deals with the uncomplicated development of teaching and research activities and today provide information to the system for effective decision making. The administrative exercise with claims of the legal bureaucracy of a higher office is dead, although some administrative personnel have not yet managed to completely change their thinking. To make these changes it is necessary to adapt the structures and train the responsible people according to the changes.



Materials and methods

The scientific method is the active component that typifies science since the fundamental unit of science lies not so much in its content but in the adoption of a common method of approach and research. According to Pardinás (2004): “The method of scientific work is the succession of steps we must take to discover new knowledge or in other words, to test hypotheses that explain or predict behaviors of phenomena unknown so far” (p. 72). Without a doubt, all that humanity has achieved is thanks to the application of the scientific method.

On the other hand, this research is applied. In this regard, Ávila (2001) differentiates the type of applied research from descriptive research when he mentions that “applied research is interested in the application of knowledge to the solution of an immediate practical problem, seeks to know to do, to act, to build, to modify, is concerned about the immediate application of a concrete reality” (p. 38).

The study population was made up of 154 subjects, including managers, teachers and administrative staff of the UNDC. The sample was taken probabilistically and stratified.

Chart 1
Population and study sample

Population	Number	Percentage	Sample	Percentage
Managers	10	6,49	6	6,49
Teachers	105	68,18	63	68,18
Administrative	39	25,32	23	25,32
Total	154	100	92	100

Source: the authors

After selecting the appropriate research design (correlational/cross-sectional) and the representative sample (92 subjects) according to the study problem and objectives, the data on the study variables, dimensions, and indicators involved in the research were collected.

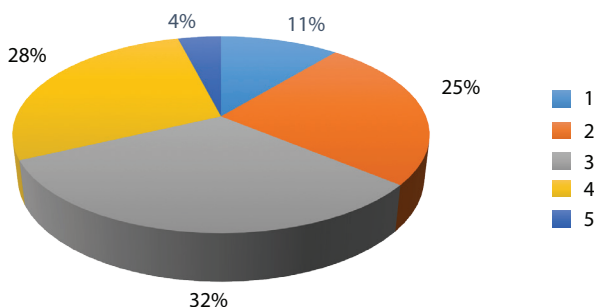
The research instrument we designed was the two Likert-type questionnaires, the same ones that passed through the criteria of Reliability (Cronbach’s Alpha = 0.974) and construct validation (Confirmatory Factor Analysis = 0.968). The respective authorization was requested from the university authority; In addition, informed consent was presented to the specified sample of the study, which was made up of 6 managers, 63 teachers, and 23 administrators.



Analysis and results

The first dimension was analyzed, for which the Likert typology was used, according to the equivalence: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree and 5 = Blank, the subject does not know/have an opinion.

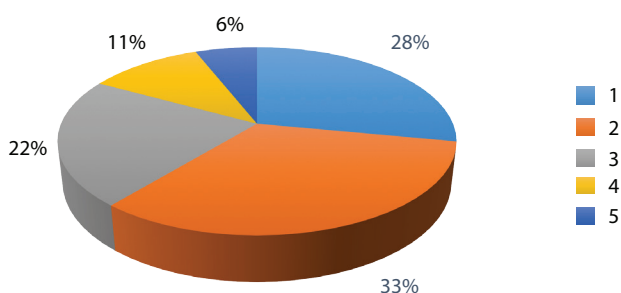
Figure 2
Capacity for critical and self-critical reflection



Source: the authors

Regarding the first dimension, capacity for critical and self-critical reflection, 32% responded that they agree with that capacity of the directors, teachers and administrative staff of the university. Then, 28% responded strongly agree. Also, 25% disagree, 11% strongly disagree and finally 5% answered blank. The vast majority of the subjects (managers, teachers, and administrators) responded that they agree that university staff has a good capacity for critical and self-critical reflection.

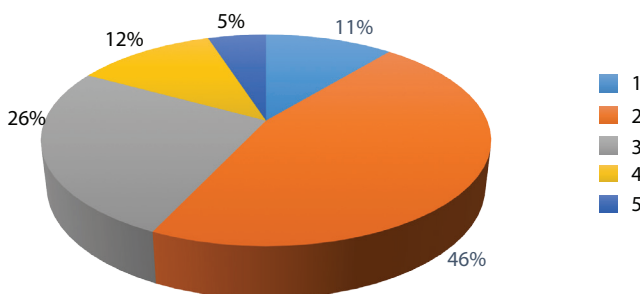
Figure 3
Action Planning



Source: the authors

Regarding the second dimension of the variable, planning of actions, 33% responded in disagreement with respect to said category. Also, 28% strongly disagree, 22% agree, 11% strongly agree and 6% responded blank. The vast majority of the subjects (managers, teachers, and administrators) responded that they disagree that the university staff has good planning of actions, which worries the university community. Now let's see the realization of plans.

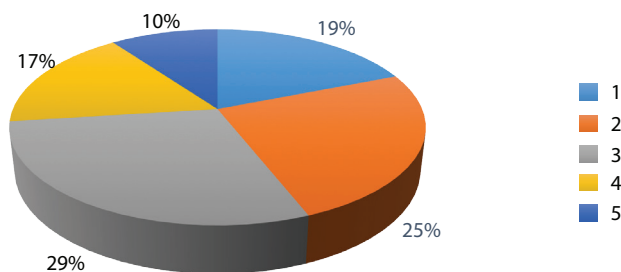
Figure 4
 Realization of the plans



Source: the authors

Regarding the third dimension of the variable, implementation of plans, 46% responded that they disagree with said capacity of the directors, teachers and administrative staff of the university. Then, 26% responded that they agreed. Also, 12% strongly agree, 11% strongly disagree and finally, 5% answered blank. The vast majority of the subjects (managers, teachers, and administrators) responded that they disagree that the realization of plans materializes. logically, if they are not planned, they will not be carried out. Let's now look at the evaluation of the actions taken.

Figure 5
Evaluation of the actions taken



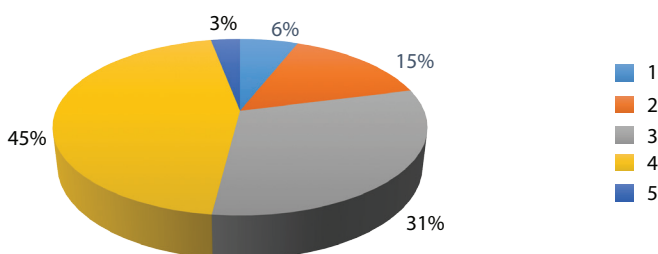
Source: the authors

Regarding the fourth dimension, 29% responded that they agree with that capacity. Likewise, 25% responded in disagreement. In addition, 19% strongly disagree, 17% strongly agree and finally, 10% answered blank. The vast majority of the subjects responded that they agree with the realization of the evaluation of the actions that were executed in the previous periods. Finally, the third and last dimension of variable 1 will be seen.

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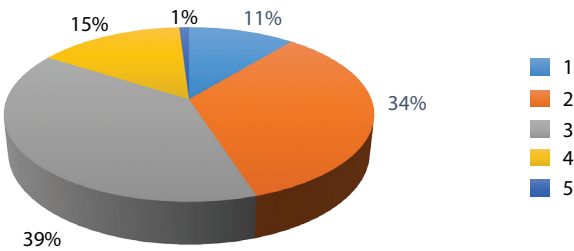
Figure 6
Innovation Consolidation



Source: the authors

With respect to this last dimension of variable 1, called consolidation of innovation, 45% responded that they strongly agree with that capacity. Then, 15% disagree, 6% strongly disagree and finally 3% answered blank. The vast majority of the subjects (managers, teachers, and administrative staff) responded that they agreed with the consolidation of the executed innovation. Regarding the second variable we have:

Figure 7
Affirmation of the character of the institution



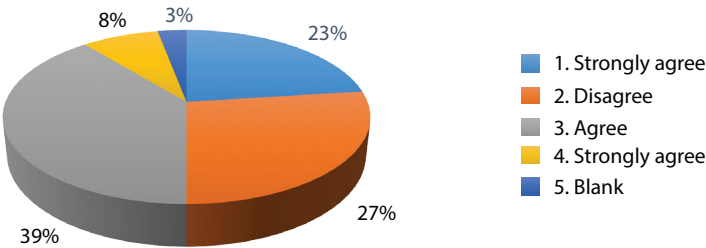
Source: the authors

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Regarding the first dimension of the university institutional management variable, called the affirmation of the character of the institution, 39% responded that they agree with said capacity. Then, 34% responded to disagree. Also, 15% strongly agree, 11% strongly disagree and to conclude only 1% answered blank. The vast majority of the subjects (managers, teachers, and administrators) responded that they agree with the affirmation of the nature of the UNDC. Now let's look at the second dimension:

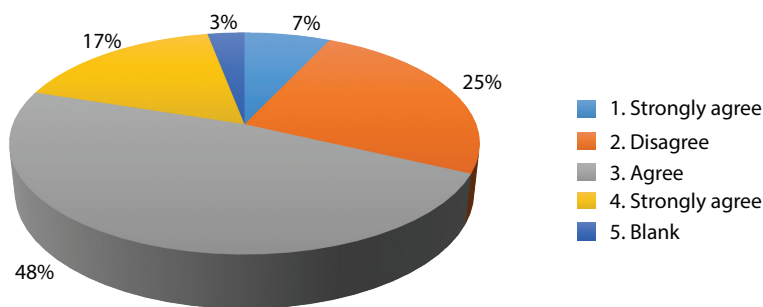
Figure 8
Physical and technological infrastructure



Source: the authors

Regarding the second dimension, called physical and technological infrastructure, 39% responded that they agree with that capacity. Then, 27% responded that they disagree. Also, 23% strongly disagree, 8% strongly agree and finally, 3% answered blank. The vast majority of the subjects (managers, teachers, and administrators) responded that they agree with the physical and technological infrastructure of the UNDC. Finally, the third dimension will be seen:

Figure 9
Organization and administration



Source: the authors

Regarding the third dimension, organization, and administration, 48% responded that they agree with that capacity. Then, 25% responded to disagree. Also, 17% strongly agree, 7% strongly disagree and finally, 3% answered blank. The vast majority of the subjects (managers, teachers, and administrators) responded that they agree with the organization and administration of the university.

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Hypothesis verification

Null H_0 Hypothesis: there is no direct and significant relationship between the potential for innovation and the institutional management of the educational actors of the UNDC.

Alternate H_1 Hypothesis: there is a direct and significant relationship between the potential for innovation and the institutional management of the educational actors of the UNDC.

Level of significance or risk: $\alpha = 0.05$.

The most appropriate statistic test for this case is Spearman's "rho".

Chart 2
statistic test calculation: general hypothesis correlation coefficient

			Innovation potential	Institutional management
Spearman's rho	Innovation potential	Correlation Coefficient	1.000	.902(**)
		Sig. (2-tailed)	.	.000
		N	92	92
	Institutional management	Correlation Coefficient	.902(**)	1.000
		Sig. (2-tailed)	.000	.
		N	92	92
** Correlation is significant at the 0.01 level (2-tailed).				

Source: the authors

Now, taking Hernández as a reference (et al., 2014), we have the following equivalence:

Chart 3
Statistic decision since rho = 0.902 and p-value = 0.000 < 0.010

Perfect negative correlation: -1
Very strong negative correlation: -0,90 a -0,99
Strong negative correlation: -0,75 a -0,89
Average negative correlation: -0,50 a -0,74
Weak negative correlation: -0,25 a -0,49
Very weak negative correlation: -0,10 a -0,24
There is no correlation: -0,09 a +0,09
Very weak positive correlation: +0,10 a +0,24
Weak Positive Correlation: +0,25 a +0,49
Average positive correlation: +0,50 a +0,74
Strong positive correlation: +0,75 a +0,89

Source: the authors

- *Statistical conclusion:* it is concluded that there is a direct and highly significant correlation between the potential for innovation and the institutional management of the educational actors of the UNDC.

Discussion and conclusions

As can be seen in the statistical charts, in the first dimension the capacity for critical and self-critical reflection, the innovation potential of the managers, teachers and administrative staff of the university is favorable, which is verified with the processed data. Likewise, regarding the institutional management variable, with the processed and organized data it can be evidenced that the university tends to improve its management in a gradual and ascending way, logically that this is directly related to the innovation potential of its actors (managers, teaching and administrative) which validates the research.

The potential of innovation that managers, teachers and administrative staff have for a better institutional management of the UNDC is acceptable, according to the statistical results at the average level of the surveys (29% agree and 24% strongly agree), on the perceptions and representations that managers, teachers, and administrative staff have about their educational task.

Considering the theoretical approaches and empirical results of this research, it is possible to think that in the university there are many favorable possibilities for the start of innovative processes. In this process, the central support is the permanent training of managers, teachers, and administrators, understood as the reflection and self-critical perception of their academic and/or administrative practice, to achieve a deep understanding and resolution of the problems in question.

The university plans its activities only at the level of managers and the coordinators or commissions that involve the innovative processes, with the purpose of enabling and stimulating efficiency in the performance of the different areas, but they have a weakness since the of short and medium-term plans are not developed with the full participation of the entire university community.

The capacity that the managers, teachers and administrative staff of the UNDC have to carry out, in a participatory manner, the activities foreseen in the development plans, which imply the implementation of the dynamics of change and improvement, are really limited since the simple majority of managers, teachers and administrators are not satisfied (42% disagree and 11% strongly disagree).

The ability that the managers, teachers and administrative staff of the university have to implement the strategies aimed at evaluating, through control and monitoring of objectives and goals, enriching and strengthening the proposals for improvement in the university organi-



zation, is relatively satisfactory given that Almost half of the respondents agree (29% agree and 17% strongly agree).

The UNDC, regarding its physical and technological infrastructure, has duly planned short and medium-term projects, which demonstrate the innovation potential of its management, teaching and administrative staff.

The ability that managers, teachers and administrative staff of the university have to consolidate innovation through the integration of innovative plans in the institutional culture and external projection is regular because the vast majority of respondents, at the average level, demonstrate compliance with the innovation consolidation (31% agree and 45% strongly agree). This indicates that the management, teaching and administrative staff are able to achieve the integration of innovation in their culture and to externally project themselves, despite the limitations to disseminate the experiences.

Faced with the challenge that occurs in higher education, innovation is required, primarily, at the structural level. Innovations or changes that can provide the university system with maximum social efficiency, without limitations or discrimination of any kind, depending on educational quality through strategic and transparent management must be undertaken.

The university points towards innovation, to the extent that the close teacher-student relationship integrates the business and society as a whole in its achievement.

University education in Latin American countries has brought about the creation of evaluation and accreditation systems that incorporated new autonomous approaches aimed at evaluation and accreditation that guarantee the quality of faculties, professional schools, and research institutes. In that sense, research provides the first foundations for the subsequent accreditation of the professional careers of business sciences, engineering and agronomic sciences in the province of Cañete.

Conclusions

- With a level of significance of 5%, it has been determined that there is a direct and highly significant correlation between the potential for innovation and the institutional management of the educational actors of the UNDC.
- There is a direct and highly significant correlation between the capacity for critical and self-critical reflection of management,



teaching and administrative staff, with the affirmation of the institution's character in the UNDC.

- In the same way, there is a direct and highly significant correlation between the planning capacity, the participatory realization of the activities and projects, and the implementation of the strategies of the managerial, educational and administrative personnel, with the physical and technological Infrastructure in the UNDC.
- And there is a direct, highly significant correlation between the ability to consolidate the innovation of management, teaching and administrative staff, with the respective organization and type of administration in the UNDC.



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