

Administrative management of education quality in the classroom at the University of Sonora

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Abstract

College students pursuing bachelor's degrees for the purpose of a better life and expectations of above-average income, however this is subject to placement in a job that meets your expectations and that this in turn demands professionals with skills and sufficient for the position occupied and, so the quality of the education they receive is of utmost importance so that graduates meet their goals knowledge. That is why at the University of sound exists within the institutional development plan programs that show concern for the formation of future graduates, education and quality management thereof together with the media, teachers and students converge on the classroom, where the transmission of knowledge and development of abilities and skills of future professionals is consummated, this study aims to identify which of the four dimensions pupils most important considered to achieve the quality of education they demand, for which teaching strategies, media, student engagement and teacher, and the relevance of the programs, which is to know which considered more influence on the quality of education they receive, for which it was conducted was studied a exploratory qualitative research type and cross - section and instrument for lifting the probabilistic method, where the results showed that the relevance of programs with $r = 782^{**}$ is used ** and secondly the teaching strategies with $r = 725^{**}$, which demonstrate that the knowledge that future professionals demand for quality training have to be cutting edge and methods of placement and assimilation of knowledge for the development of their competences have to be ad hoc kind of knowledge and skill to be developed, this for higher education institutions should be a work area and achieve continuous improvement to meet the demand of their students and / or future graduates.

Education, quality programs, instructional strategies, student, teacher

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Introduction

The University of Sonora with the aim to advance knowledge of current features, needs and trends market exchange professional work from the perspective of the graduates and employers, as well as carry out the analysis of their relevance, in order to promote changes in the graduate profiles to make them consistent with the competencies and skills demanded in the workplace, and thereby facilitate early job placement and professional achievement college graduate.

Its objectives are:

- To know work history and perception of graduates received vocational training in university classrooms, to have the necessary data review processes, adaptation and updating curricula.
- Seek feedback from employers regarding work performance of university graduates, to assess the social impact and impact on the economic and productive development of the public and private sectors.
- To know the perception that society has on the quality and results of the University of Sonora.
- Support actions to restructure the educational offer through studies of relevance of all undergraduate educational programs of the institution.

Lines of action

- Conduct a review of information collection instruments to include, where appropriate, the variables required according to the purposes of the various studies.
- Manage resources necessary to carry out the various studies through PIFI.
- Hiring conducting surveys to external entities.
 - Perform the capture, coding and analysis of relevant results.

- Perform editing the results of studies and disseminate them through the website of the institution and printed books.
- Design mechanisms for the results of studies graduates, employers and relevance are actually used in the restructuring of the curriculum.

Management goals

- Conduct studies every two years, graduates of all evaluable programs: BA in 2015 and 2017, and graduate in 2014 and 2017.
- Conduct studies of employers, every two years, the total assessable programs: BA in 2014 and 2016, and graduate in 2015 and 2017.
- Develop an annual survey of opinion of society on the results of the University of Sonora and publish (2014, 2015, 2016 and 2017).
- Integrate studies every two years, labor and educational relevance for total assessable degree programs of the institution and publish their results (2014 and 2016) (Institutional Development Plan 2013-2017).

Justification

The obligation of the institutions of higher learning to provide quality education is paramount to the demand society better prepared professionals to respond to current needs and generate added value to the economic environment in which they are immersed.

In this research is to know the variables that overall quality of professional graduates.

Objectives

General:

Analyze the variables that affect the quality of vocational education students, which gives the prompt insertion into the labor market

Specific:

Measure the perception or n with students about the variables:

- Didactic strategies
- The Commitment of the student and teacher
- The relevance of programs
- The Generating means learning environments

Goals:

Check that they are the means by which students achieve their expectations or n HOMEWORK they receive.

Methodology

Kind of investigation

This research is exploratory qualitative and cross - sectional and do not try to give an explanation of the problem, but only collect and identify general background, quantifications, themes and topics regarding the research, suggestions of related issues that should be examined in depth future research. Examine understudied issues or problems or that have not been addressed before; Investigate trends and identify potential relationships between variables.

Population and / or sample

Sampling

The investigation will be conducted through a simple and probabilistic random sampling, where all the elements of the universe, in this case the degrees of the Division of Economics and Management at the University of Sonora Sciences, will have the same probability of being selected; The size of the universe for determining the sample was taken from the students enrolled in undergraduate programs during the semester 2014-2, with a population size of 3943 students enrolled, information was taken from the Planning¹, the sample was determined by the following formula (Anderson, 2004).

Where:

Sample size $n =$

$N =$ Total Population $= Z = 1.96$ (for a confidence level of 95%)

$p =$ Proportion considered for maximum variance: $50\% = 0.50$

$q = 1 - p$ (in this case $0.50 = 0.50$)

$d =$ maximum error acceptable range (in this case it is considered 7%)

$$186.76 = \frac{3943 * 1.96^2 * 0.50 * 0.50}{0.07^2 * (3943 - 1) + 1.96^2 * 0.50 * 0.50} \quad (1)$$

¹http://www.planeacion.uson.mx/sie/alumnos/res_poblacion_his.php

Preparation of the questionnaire

To prepare the information collection instrument were taken into account the special characteristics of the study population and the work of Sanchez Hernandez and Haro (2008), Jantunen, A., (2005), Darroch, J., (2003) based on the above considering the following variables:

Education From Quality	Instructional strategies	Student commitment Teacher	Media	The relevance of Programs
Instructional strategies	Education From Quality	The commitment of the teacher to teach and students to learn	Having spaces that create learning environments	The objectives of programs may do matter
Teacher Student Commitment	The commitment of the teacher to teach and students to learn	Education From Quality	That are conducive learning environments for students and teachers	Time that are sufficient to meet the programs
Media	Having spaces that create learning environments	That are conducive learning environments for students and teachers	Education From Quality	That the means are conducive to the implementation of programs
The relevance of Programs	The objectives of programs may do matter	Time that are sufficient to meet the programs	That the means are conducive to the implementation of programs	Education From Quality

Figure 1 Matrix perception of educational quality.
Source: Prepared by the author

To prepare the instrument was based on the matrix quality perception of which four dimensions emerge and which independent reagents were developed to assess each.

- Strategies Pedagogical
- The commitment of the student and teacher
- The relevance of programs

- Generating means learning environments

To prepare the instrument was based on the Likert scale because it is an instrument of assessment, with seven point response 1 being strongly disagree and 7 totally agree.

Totally In Disagreement				Totally From Agreement		

Then questions containing the questionnaire for each of the dimensions listed for the instrument appear randomly grouped.

Data collection

Data will be collected through a test instrument designed and evaluated using a pilot plant for validation of the indicators used to analyze the study variables test.

Methods of data analysis

The indicators will be analyzed using statistical software IBM.SPSS.Statistics.v21 for MS Windows, developing a descriptive analysis of the results obtained by capturing information Likert scale. Additionally techniques appropriate to measure the frequency of the variables and the correlation applies statistical analysis. To do this, the Pearson coefficient, also known as P Pearson or simply R is calculated; and statistical test to assess the degree of reliability (Cronbach's alpha).

Theoretical framework

Administrative management

Management is a holistic approach to the management of an institution for the establishment of its goals, vision, mission, values, strategies, structure, organization, resources and means to achieve them, processes to carry out the activities to achieve the objectives with the application of resources, means or instruments, evaluation and improvement of their performance.

Administrative management in institutions of higher level requires several duties that lead to achieving the goals they deem relevant to the achievement of the vision it has set as a goal for the future and why should every day to work for effective achievement, so it is relevant a measured and transparent management of its budget, planning and scheduling plans and academic programs, training of human resources, effective communication and management in a timely and validated information for decision-making. A considerable part of these factors in turn depends on strong leadership that promotes effectively necessary to achieve the vision proposed measures.

These managers, while having deep knowledge in their professional area and vast experience in teaching, research or cultural diffusion, may lack the qualities, skills, experience and knowledge in the management of education institutions, which could hamper the achievement gear different educational subsystems to respond to environmental demands. Some of the qualities, characteristics or skills that should meet the directors of an educational institution, among others, can be summarized as follows:

- Academic Leadership (enjoy the recognition of students as a good teacher and appreciation of the community of the entity academic, have recognition as academic distinguished in teaching, in research y/or dissemination of culture).
- Strategic Attitude (vision and mission of the university, planning, management control, organizational structure, human resources management, communication and information).
- Know broadly higher education policies of UNESCO, OECD, SEP, ANUIES, CIEES, CONACYT and internal of the institution and the specific academic institution policies.
- Deeply know the laws of the institution collaterally including their collective labor contracts.
- Proactive, empathy, interdependence, creativity and consistency to seek consensus and reduce conflict, in conformity with the legislation of the institution.
- Maintaining good relations with graduates of the institution or n, with the productive sector and the government sector.
- Institutional and attachment to the university legislation.
- Love for the institution and for the welfare of society.
- Ethics and respect for the individual, regardless of gender, race, nationality, religion or ideology.

Administrative management as a means for achieving quality in education is at all times and in all educational organization the cornerstone of support can achieve the necessary changes to give some direction towards the vision that the organization has raised as a target goal.

Principle of managing for quality

The quality management system is a management organizations based on the principle of doing things right. But it assumes that to make things right the integrity of persons involved in the production process is as important as the effectiveness of leadership to lead the mission of the organization focused on meeting the needs of users, consumers or customers (Lepeley, 2001, pp. 6-7).

The client is a person who has a need and meet it acquires a product or service. Such acquisition gives the right to obtain the expected benefit and quality.

Customers are important, because if there were not people with needs or tastes for specific products or services, there would be demand and the organization would have no reason to exist.

- Implementing a model of quality management guides the organization in a direction that begins:
- Design a path to quality.
- Ensure the support of senior management.
- Inform people working in the organization or n about new principles underpinning the quality and training in the use of techniques MANAGERIAL t é or ñ to improve quality.
- Training of teams of specialists in quality management to lead and facilitate the implementation process.
- Disseminate quality management at all levels of the organization.
- Focus the mission and objectives to meet customers and their needs.
- Develop an organizational culture focused on the client.
- To promote creativity, innovation and experimentation processes to increase quality.

- Recognize and reward the achievements of quality.

Management in educational institutions. It assumed.

- High investments in
 - Installations and complex equipment
 - Products to advanced technology
 - ORGANISATION, information or ny conquest of markets
- Cost of senior staff
- Investments in formation or n
- High level of organization or n
- Technological or logical high level
- Variable dimensions from the big to the small university ñ a village school
- Safety and profitability guaranteed by the expansion or n (Cavassa, 2002, p a g. 20).

Industrial society has given way to a society of services and information. This requires a profound change in the skills and competencies needed in professional education (Ferrández, 2000), which until now were only necessary for certain positions. Institutions and professional success of the future will be those that are developing new capabilities to the new environment, which means that past success does not guarantee future success (Fernandez, 2001, p. XXV).

The new skills needed to adapt to the rapid and constant change will force education professionals to be flexible, adapt and live in a changing environment (Gonzalez Soto, 2000); to learn, unlearn and relearn; to be true leaders, creative and able to anticipate the developments (Fernandez, 2001, p. XXV)

Different concepts of educational quality

Quality Concept

It is often claimed that "quality" in education is a relative concept, for several reasons. It is relative to who uses the term and the circumstances in which it is invoked. Similarly, relativism has another perspective, since the quality is similar to the truth and beauty of nature, and is an ideal difficult to compromise. This leads to the conclusion that "quality" also is a term that carries the user settings, thus being highly subjective (Gonzalez, 2008, p. 249).

The word quality is understood and defined for a long time - several centuries ago, and its use indicates the final set of attributes of a product or service that lets you issue a value judgment about him. However, when we talk about educational quality and total quality we need to consider other reasons that have been defined according to own philosophies or systems which are concerned for the quality researchers as prestigious Deming, Crosby, and Juran. Quality is meeting the requirements in ISO 9000 standards, comply with the specification, establish a relationship of efficiency between the agreement and offered with received or expected, with those features of the product or service that really meets customer needs, understood as the value through benefit perceived by the customer leaves result in satisfaction, however when talking about quality in education is clear that we enter into another context, raising the value in all cases is to increase the benefit and also raise the quality to the customer in terms of qualitative and quantitative values.

When it comes to educational quality certainly we talk about other areas such as social, relevant education and socially contributes to national development, education to raise the level of development of society for the sake of a better quality of life, or any the social context (Ramírez, 1998, pp. 19-25).

Ernesto Schiefelbein: the definition of the quality of education must be related to the ability to meet the needs of the learner, and from that care capacity to learn, develop their full ability to examine their interests; examine their problems; analyze information that allows you to address these problems, and find the most appropriate solutions (Alvarez-Tostado, 1997, p. 60).

Pirsig (1976) relates quality with the Greek arete which means excellence << excellence function >> function as the elements considered each object, institution or individual has a special role to play. From this definition, the role of the teacher appears here as plan and provide a curriculum to their students and evaluate their success. But it should be an optimal curriculum for each student, a member of a class consisting of students from a variety of capacities and needs (Wilson, 1992, p. 34).

And how can you measure the quality of an education system? For the quality of an education system can be measured from the point of view that the goals that society assigns (Alvarez-Tostado, 1997, p. 18) are met.

Quality assurance

The phrase quality assurance refers to policies, attitudes, actions and procedures necessary to ensure that they maintain and raise the quality and therefore the quality is the responsibility of each institution, and it is expected that these are responsible for offering it (National Association universities and Institutions of Higher Education, 2001, pp. 38-45).

Quality assurance in higher education institutions is what society demands of them. Institutions today have the challenge of social demands, which calls for effective integration into the labor market of its graduates and they do not adopt the status of stragglers when completing their studies due to lack of capacity to perform professionally.

Society demands of educational institutions with the exercise of their activity ensure the requirements that the labor market demand for the integration of students, and to take experiences and ideas contributed by those who benefit from their activity (businesses, students, teachers, etc.) (Fernandez, 2001, p. XXVII).

Perhaps many customers (students and families) know not explain the required quality, but perceive, and so transmit it to other customers and potential customers; This is why you need to analyze and transform the processes of an institution; The product or service offered is the end result of one or more processes, and if the goal is to improve the product or service can only be achieved by working on processes and / or the end result. If processes improves the final result (Fernandez, 2001, p. 61) are improved.

Definition of educational quality assessment bodies

Today educational quality refers less memorization and the acquisition of higher level skills; equity no longer means the same for everyone, but meet the different needs in order to ensure equal learning opportunities, and efficiency is not measured by the lowest cost, but in terms of optimization of educational productivity, analyzing the relationship between inputs, processes and results.

These redefinitions are also implying the need to redirect the functioning of education systems to achieve defined in these terms results, which introduces directly the problem of management and the current difficulties of political, technical and administrative governance (UNESCO, 2004, p. 7).

The quality of the education system is not only in the level of student learning, but reflects the relations of coherence between all components of the system itself. In this perspective the quality of education comprises several dimensions: the relevance and significance, expressing the coherence between education and the needs of students and society, respectively; effectiveness, reflecting the coherence between expected aims- -the products and those actually achieved; the adequacy of resources of all kinds and efficiency of use, resulting coherence between inputs and processes with products made with them. The concept of quality cannot be dissociated from equity, it cannot be considered as good an unequal education. The quality of education also considers not only its short - term effects but also its impact on adult life. The concept of quality of the National Institute for Educational Evaluation (INEE) considers therefore all the components -context, inputs, processes and products with its elements and relationships between them ((INEE education system) 2006, p. 9).

Analysis and interpretation of results.

To verify the reliability of the instrument applied to research, test Cronbach Alfa, whose coefficient was .929, very fencing was applied to the unit, indicating that it is appropriate and validated to perform the necessary tests; in addition no sample questionnaire, which was 187 persons were excluded, and the instrument twenty questions have been accepted.

Summary prosecution of cases			
		N	%
cases	valid	187	100.0
	excluded	0	, 0
	Total	187	100.0

Table 1 Data validation. Source: Prepared by the author

Statistical reliability	
Cronbach	N elements
, 929	20

Table 2 Data validation. Source: Prepared by the author

For variables that generate quality professional training of graduates of degree, it means analysis per item and dimensions was made. Additionally correlation tests were made to corroborate matches on relevant variables.

Dimensions	item	Average Per item	Average per dimension
Instructional Strategies	1.-	5.89	6.01
	5.-	5.74	
	9.-	5.99	
	13.-	6.01	
	17.-	5.96	
Student teacher commitment	2.-	6.05	6.2
	6.-	6.26	
	10.-	5.91	
	14.-	6.25	
	18.-	5.95	
Media	3.-	6.04	6.18
	7.-	6.24	
	11.-	6.03	
	15.-	6.09	
	19.-	5.55	
Relevance of the	4.-	5.79	6.13
	8.-	6.05	
	12.-	6.06	

programs	16.-	6.07	
	3.-	6.04	

Table 3 Means analysis. Source: Prepared by the author

- Overall , the average was 6.17 indicating that in general, the perception is very close to totally agree, ad hoc to the scale used in the instrument (1 to 7). The perception is similar when average dimension are observed; if revised by item, identifies the most relevant for each of the dimensions that are above the average overall dimension and as follows:
- Instructional strategies. In this case the average dimension is below the global average, however, it can be obtained item most important that corresponds to the **use of technology by the teacher**, with the mean of 6.01.
- Commitment student teacher. This dimension is above the global average and are located Dos items above it. The item most important **teacher Commitment** corresponds to **the teacher**, with the average of 6.26.
- Means. É n also is above average and there ítems with the same situation. The most important is **that the classroom have an overhead projector**, with the average of 6.24.
- Relevance of programs. This dimension or n is below the global average, but if you can see an ítem which exceeds the global average and half of that dimension, which corresponds to **the students to know the content**, with the average 6.29. And dimension, the most important is the commitment of the student - teacher with the average of 6.2 which is above the global average.

An analysis of correlations to

Regarding the analysis of correlations, it is done in two ways: correlations between size and correlations of the items in each dimension to the overall perception of the dimensions. We must remember that the correlation analysis seeks to know the level of association between the variables studies, which, unlike the analysis of means, only the general perception of the opinion of the respondents is located. For the first case correlation shown in Table 4 and dimension the coefficients obtained to the array of perceived quality.

Quality education			Instruc- strategies	Comm- student cher	media	Relevance of grams
Spearman rho	EP	Correlation efficient	1,000	725 **	, 697 **	718 **
		Sig. (Bilateral)	.	, 000	, 000	, 000
	COM	Correlation efficient	725 **	1,000	, 668 **	, 688 **
		Sig. (Bilateral)	, 000	.	, 000	, 000
	MED	Cor relation coefficient	697 **	668 **	, 000	782 **
		Sig , (Bilateral)	000	000	,	000
	PER	Cor relation coefficient	18 ** ⁷	688 **	782 **	1, 000
		Sig , (Bilateral)	000	000	000	.

**. The correlation is significant at the 0.01 level (bilateral).

Table 4 Correlations between dimensions. Source: Prepared by the author

It is noted that all correlations are statistically significant, however, it should highlight the salient factors. First, the coefficient, 782 ** corresponds to the correlation being the relevance of programs with the media; that of 725 **, the correlation between teaching strategies and student engagement-teacher; and finally the correlation between teaching strategies with the relevance of programs with a coefficient of 718 **.

That is, the main correlation is found between the relevance of programs and teaching strategies, because as shown in Scheme 1 of which shows that the perception of quality based on the above items, the importance is clear media and student commitment - teacher.

ARRAY OF PERCEPTION OF EDUCATION QUALITY

Dimension s		r	Dimens ions		r
Instructional Strategies	.	470	MEDIA	.	599
	.	625		.	556
	.	721		1.-	740
	3.-	585		5.-	635
	7.-	617		9.-	655
STUDENT TEACHER COMMITMENT	.	555	RELEVANCE OF THE PROGRAMS	.	649
	.	652		.	736
	0.-	706		2.-	768
	4.-	621		6.-	695
	8.-	607		0.-	528

Table 5 Correlations of items in relation to the overall perception of the quality of education. Source: Prepared by the author

The correlation coefficients of the above table show the level of association of each of the items with the overall perception of quality in the professional training of graduates of Bachelor.

In this case the most important item in each dimension is identified, which will be more specific to identify the variables that generate quality.

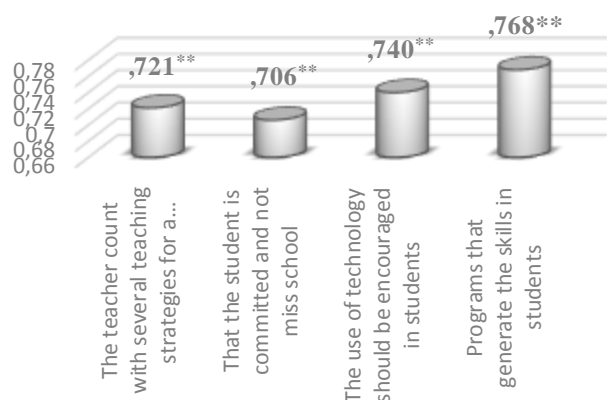


Figure 1 Most important item per dimension in the perception of educational quality. Source: Prepared by the author

There is a coincidence in the results observed in Chart No. 1 with Scheme 1 with respect to the dimension of the relevance of the curriculum with the dimension that most generates quality professional training of graduates of different degrees, specifically he found that it is important that programs generate skills in students, which is closely related to current educational requirements, which must learn to be, know and do, mainly; which complements the knowledge acquired in the classroom.

It was also important to promote the use of technology in students, which is also linked to the immersion of the information and knowledge society, where the role of technology is crucial.

Recommendations

In universities the search for the quality of its graduates formulates questions what should be done to achieve the quality of education of graduates ?; That is why this research answers some of the concerns of the question is in the air and told the students, those who demand institutions quality education tell us that degree programs coursing must be updated in order to have a quality education, and that is why we should pay special interest to the plaintiffs of education recognize institutions as those that offer quality education, on the other hand tell us that the media and teaching strategies are also considered influential in the quality of education and must follow special interest in ensuring that the pace so far has been held to be maintained, we must also maintain the interest of both teachers and students by training being received to achieve the quality of education that demand.

The classroom is where the future of the training of graduates converge and is where the management of institutions directly affects education, thus becoming the administrative management must focus their efforts on the variables that influence education quality for those who request it and meet the goal of educating and educate with quality.

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