

STUDENT PARTICIPATION IN THE  
EXTERNAL EVALUATION PROCESS,  
AN ELEMENT OF CONSOLIDATION IN  
THE CULTURE OF QUALITY OF THE  
BENEMÉRITA AUTONOMOUS UNIVERSITY  
OF PUEBLA.

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## ABSTRAC

This paper discloses the results of an investigation that has as one of its main objectives the determination of students' knowledge of the Benemérita Autonomous University of Puebla the processes regarding external reviews which are conducted on the bachelors programs, as well as on the quality of education that they are receiving. The investigation was conducted using a quantitative approach, with an instrument of 86 items to 300 students at three educational programs at the bachelor's level. The data were analyzed through a positive reaction algorithm and the inferred statistics were obtained as a result which indicate that there is disinformation and a lack of student involvement regarding the quality of their education, its evaluation, and impact in their professional development.

***Keywords:*** *Educational inclusion, attitude, knowledge and teaching practice.*

One of the main tasks in universities is to produce students that can be inserted, adapt and influence effectively in the workplace and to guarantee society that these students have the necessary elements to develop professionally. The Mexican Federal Government over the past two decades has implemented various educational policies aimed at improving the quality in higher education. One of them concerns the evaluation of educational programs of Higher Education, through the National Assessment and Accreditation of Mexico comprised of groups that evaluate individuals, educational programs and entire institutions at different levels.

In the specific case of the evaluation of undergraduate degree programs there are two instances that determine their quality. On one hand there is the Interagency Committee for the Evaluation of Higher Education (CIEES), composed of seven committees from different areas of knowledge that conduct evaluations through academic peers that assign a level (from 1 to 3, level 1 being the highest recognition). Secondly there is the Council for Higher Education Accreditation A.C. (COPAES) that supports 29 accreditation bodies from different areas of knowledge for the accreditation of programs. These awards are reflected in the Register of Good Quality Programs issued by the Sub Secretary of Higher Education. It should be noted that accreditation by a body recognized by the COPAES and Level 1 CIEES are equivalent in quality. Moreover, the Sub Secretary of Higher Education, within the Program for Strengthening Quality in Educational Institutions (PROFOCIE), formerly called the Integral Institutional Strengthening Program, notes that a Good Quality Program must have nine essential elements (SES, 2009).

- A wide social acceptance of the thorough training of graduates.
- High degree or graduation rates.
- Competent teachers in the generation, transmission and

- application of knowledge, organized in academic bodies.
- Updated and relevant curriculum
  - Processes and appropriate and reliable instruments for assessing learning.
  - Timely services for individual attention and groups of students.
  - Modern and sufficient infrastructure to support the academic work of teachers and students.
  - Efficient management and administration systems
  - Social service articulated with the objectives of the educational program.

This means that any program renowned for its quality should have the aforementioned points and likewise be palpable to the university community and to society in general. The universities that have good quality programs have as one of their main objectives to provide better training of their students.

From the point of view of the Benemérita Autonomous University of Puebla (BUAP) and in accordance with the University Model Minerva, the student is the main agent in the process of constructing knowledge, as a human being with desires to evolve with the possibility of identifying strategies that will best work to achieve their own learning.

Similarly, it is stated that the needs of the students are the starting point for developing educational experiences. It is in them that there exists a constant search for a balance between personal knowledge and curriculum knowledge. This will facilitate the student to take responsibility for their own learning (MUM, 2009), with students being the direct recipients of these benefits. How informed and involved are students regarding the quality of the educational programs at BUAP? While all of the evaluable degree programs offered by the BUAP are renowned for their quality, this article aims to show the importance of promoting the participation and knowledge of students regarding the quality of

their degrees. Students are often unaware of these issues, so the student opinion was taken as a means of verification in accordance with what external agencies state compared to the perception of the students.

From the point of view of Zhao Xiaoyang (2012) universities have to adopt to the suggestions of the students as a bridge of communication, as this information can contribute to the improvement of higher education by taking into account the experience that students live day to day in their degrees-although various positions state that student assessment is subjective and not always attached to reality. Similarly, Escudero (2003) mentions that the object of the evaluation process in higher education is to determine the change in students, but its function is wider than only making explicit this change to the students, parents and teachers. It is also a means to report on the effectiveness of the educational program. In this sense, if the objective of the evaluation is to determine the change in the students, then you have to involve them to generate greater awareness on the issue of educational quality.

On the other hand Leite, Santiago, Sarricò and Polidori (2006) believe that students are not traditionally seen as actors capable of evaluating assessment processes and that their views could have been simply ignored because of their interference with the professional experience of academics. With the vast majority of students, evaluation processes are considered a source of external information. However, these authors argue that students have the ability to assess, especially when it comes to training. In turn Carilli (2000) notes that student satisfaction with the institution is one of the most important indicators of institutional effectiveness.

ANUIES (ANUIES, 2012) in their paper “Inclusion of Social Responsibility”, aims to design among all actors involved in the development of higher education in Mexico, a strategy that makes it possible to have a model of assessment to promote academic

development with a reliable system of information in which the participation of institutions and actors to be evaluated in the design and implementation of assessment tools is required.

Within the process of the improvement and quality assurance in universities can be found a consolidation phase. The evaluation practices of educational programs have shifted from being a natural day to day process in Institutions of Higher Education to becoming mechanized. The Bricall report submitted in 2000 states that the desirability of measuring and evaluating the quality of teaching, research, services and organization was no longer a debate on college campuses because they are already common practice and widely accepted in universities. Rather the characteristics and each of the specific aspects of evaluation should be cause for analysis. (Bricall, 2000: 360)

According to this, it is important to look at the Benemérita Autonomous University of Puebla to see how students perceive the quality of the programs that they are taking, and their participation and knowledge about assessment processes and issues regarding quality education. Through this analysis, the consolidation of a culture of quality is favored that allows the development of a better institutional diagnosis.

## METHOD

The following section describes the progress made with a focus on a quantitative character. It is presented as an evaluative-explanatory-descriptive study that yielded information on the existing relationship between the dependent and independent variables expressed in Table I. These variables were made up the theoretical basis of the investigation, which were mainly established by the objective of determining student perception and satisfaction with the quality of their education programs. It is a non-experimental cross-sectional study.

**Subjects and population:** Population refers to the students of the Benemérita Autonomous University of Puebla that belong to quality programs, the Economic-Administrative Divisions of Higher Education (DES in Spanish) and DES of Natural Sciences.

The size that encompasses the three educational programs is 1200 students. The proportional sample of the number of students for the investigation consisted of 293 students, with a 95% confidence level, margin of error of 5%, and a level of heterogeneity of 50% .

It is an intentional probabilistic sample, as it took into account certain requirements for the inclusion with particular characteristics regarding assessment practices and the admission period of the educational programs. Three educational programs were selected out of fifteen from each DES, which were recognized as quality programs. Their characteristics for inclusion were: date of creation: a recently established program, an established program, and an older program. The second point was that they counted with a history of evaluation. The selected programs were: the Economic-Administrative DES, two education programs, Communication Sciences (newly created), Public Accounting (older program) and Pharmaceutical Chemistry/Biology (median creation). In the following the characteristics of each are described.

The Public Accounting Program has been offered since 1937 and is regarded as the best educational program for their awards in quality, obtaining Tier 1 from CIEES in 2000, and accreditation by the Accreditation Council on the Teaching of Accounting and Administration A.C. (CACECA) in 2008 and once again obtained Tier 1 in 2010 through CIEES. It is the first bachelor's BUAP to be evaluated internationally in 2013.

The Program in Communication Sciences is a relatively young program (offered since 1997). Its first recognition of quality came in in 2002 by the National Council for Education and Research in Communication Sciences (CONEICC) , which granted accreditation to the degree. In 2008 the program was



under evaluation by academic peers from CIEES, and obtained Tier 1 status. In 2010, the programs quality was ratified by the Accreditation Council for Communication (CONAC).

In the case of DES of Natural Science, the Pharmaceutical Chemistry/Biology Program offered by the Faculty of Chemistry, has CIEES Tier 1 accreditation, and was also accredited by COMAEF (Mexican Council for Accreditation of Pharmacy Education A. C) in 2013. Offered since 1965, it was chosen for the proper monitoring and attention they gave to the recommendations by the external agencies. The model was followed by all the other degrees, and thus there was an implementation of monitoring and attention to the recommendations in a systematic way on an institutional level.

**Table I.** Type of variables.

INDEPENDENT	DEPENDENT
Socio-demographic profile	Perception of quality education
Academic profile	Processes of evaluation
Own resources	Institutional management
Institutional resources	Teachers role
	Satisfaction of the service
	Curriculum

*Source:* own resource

Data collection was conducted through a survey type questionnaire with 86 items. The instrument was analyzed statistically using Cronbach's alpha, obtaining a value of 0.962, demonstrating the reliability and consistency of the items.

<b>STATISTICAL RELIABILITY</b>		
Cronbach Alpha	Cronbach's Alpha base on element type	No. of elements
.962	.960	86

Data collection was conducted through a questionnaire type survey. The design was performed using a base of a consistency matrix in which the research questions, objectives, variables, definition (operationalization of the variables) and possible items for each were reflected. The result was in a questionnaire of 86 items distributed into two parts, which determined the content of the independent and dependent variables and the number of items for each variable, as shown in Table II.

**Table II.** Number of items per variable.

<b>VARIABLE</b>	<b>NUMBER OF ITEMS</b>
Socio-demographic profile	7
Academic profile	5
Own resources	3
Institutional resources	2
Perception of quality education.	6
Processes of evaluation	8
Institutional management	19
Teachers role	14
Satisfaction of the service	12
Curriculum	10
<b>total items</b>	<b>86</b>

*Source:* Own resource

The data obtained were analyzed using a mathematical algorithm that extracts the percentage of the relative frequency of positive responses to the results issued by the students. In order to make a judgment evaluation, a rubric analytical<sup>1</sup> type scale was designed that determined the development phase of the dependent variables according to the student's perceptions.

This article only reports the results of the variable external evaluation process, where knowledge and active student participation in the processes of external evaluation carried out at the university was measure of its faculty and specifically its educational program. In this way there was the dissemination of results of evaluations or accreditations, raising the assumption that students are involved and know about the processes which their educational program is submitted.

According to the assumptions that students know and are involved in processes of external evaluation, it can be said that: The perception of students regarding this category reveals that student participation in these processes has not allowed them to contribute fully to the educational program.

Although students perceive the BUAP as a university nationally renowned for its quality, they do not share the same opinion when the same question is made regarding its faculty and its program. This means that students recognize the institutional quality but it is not palpable in their degrees in a fundamental manner.

Furthermore, involvement in the processes of external assessment by students is still in a developmental phase. You can assume that there is a certain level of student misinformation that

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1 Scale for the design of the rubric

80-100% Excellence phase

60-79% Grounded estimate with very good results

40-59% Reactive Approach -there is a good approach to plan

20-39% Development of the processes of educational services to achieve goals phase

0-19% Initial stage for implementing the necessary changes to the PE.

exists even in these evaluation processes, even though majority do not participate the dissemination of the results is acceptable with a reactive approximation.

It's necessary to work on student participation in the evaluation processes before, during and after the evaluations. This limits the knowledge and contributions they can make, which can also be seen reflected in the evaluation made by students if communication between faculty who benefit their training obtains a 44% positive reaction, in the same manner the dissemination of information on the evaluation and accreditation processes obtained a 47% positive response in a reactive approximation, as shown in Table No . III

**Table III.** Processes of external evaluation and their impact on participation and training of students (% of Positive reaction)

	<b>Variables in the Category of External Evaluation Processes.</b>	<b>No.</b>	<b>Media</b>	<b>% with a positive answer</b>	<b>Evaluation criteria</b>
1	Communication that benefits education	293	3.17	44	Approach factor
2	Information flow (Evaluation-accreditation)	293	3.26	47	Approach factor
3	Actions that improve/benefit PE	293	3.41	51	Approach factor
4	Knowledge of PBC indicators	293	2.96	40	Development phase
5	Involvement in external evaluation	293	2.87	35	Development phase

6	Your faculty disseminates the results of the evaluation process	293	3.29	50	Development phase
7	BUAP obtains prestige and recognition	293	4.24	80	Founded approach phase
8	Directors promote participation in the evaluation processes	293	3.25	47	Approach factor

Evaluation Criteria: 81- 100% Excellence phase, 61-80% Grounded Approach Phase, 41-60% Reactive Approach, 21-40% Development Phase, 0-20% Initial stage of implementation

A Student T test was also performed. This type of analysis allows for an assessment of the hypotheses through an analysis of statistical inference for the comparison of means. The Student T test for one sample compares the mean of one variable with a known value or hypothesized value with a confidence interval of 95% for the difference between the mean of the variable and the hypothesized test value as  $\mu$ , with values of 3, 3.5, 4 and 4.5. as shown in Table No.IV.

Determining the following significance scale:

VALUE	INTERPRETATION
4.5-5	Excellent****
4.0-4.4	Very Good***
3.5-3.9	Regular**
3.0-3.4	Acceptable*
<3	No acceptable

The criterion for validation are:  $t > 1.96$  Ho is rejected.,  $t < 1.96$  Ho is not rejected., And finally, expressed with (\*) the value  $\mu$  (mu) is used for the expected value of a variable

From the statistical inference there is a more precise assessment of the perceptions of students, so valued outcomes through student T show that during the bachelor programs information is provided about the external assessment processes (evaluation / accreditation) of the educational program. From these communication mechanisms benefits in the services to students develop which in turn creates better training opportunities. These three variables are shown in a range of acceptability. In other words, the information they receive is not sufficient, therefore the actions for improvement are less. Despite being recognized by students, they still do not have a high level of significance.

Another point addressed in this category has to do with the knowledge that students have regarding indicators that integrate a Good Quality Education Program. It was found that students do not know the quality indicators of their educational program, which is related to a lack of information provided prior, during and after these processes.

Paradoxically, though students do not know the elements of a quality program, they do recognize the BUAP has academic recognition and a national reputation, but without knowing what educational quality refers to. Of the 86 items, this is the one which received the highest evaluation criteria with  $\mu$  4.

The fact that students do not know the indicators that measure the quality of the educational programs has to do with the open participation of students in the construction of the evaluation, the visit and delivery of results. Many times the only students who participate are selected for the interviews performed by the evaluators. However it is necessary that the information flows in all directions regarding all of the processes, and is not only disseminated with some students.

Similarly, when the results are shared with the students, they are aware of the awards for quality without knowing what they are and what was the process was to obtain them. It is necessary that directors promote and encourage the interest of students

in these processes that will benefit their professional training, since from the student point of view directors are not promoting participation.

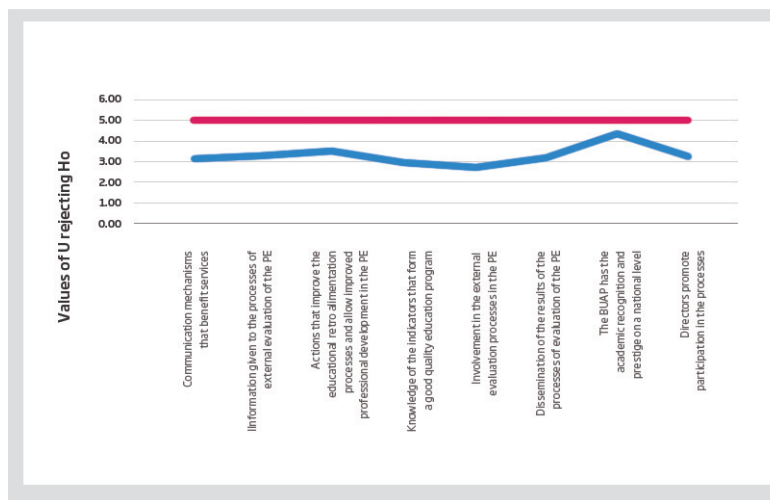
In general, for this category we can say that most of the variables are measured only in an acceptable way, not on a good level. Only one variable with an average of 4.24, and two variables with not acceptable values indicate that external evaluation processes that are conducted in educational programs are not having a significant impact in relation to the expectation of the BUAP, as shown in Figure I. Where the highest level or desired expectation about the results of the external evaluation would be a rating of 5 and the T calculated determines a globally acceptable value.

**Tabla IV.** T student impact on the processes of external evaluation

No.	Item	N	Media	T	Sign.	Validation Criteria <sup>2</sup>
1	Communication mechanisms that benefit services	293	3.17	3.031	.003	Acceptable*
2	Information given to the processes of external evaluation of the PE	293	3.26	4.054	.000	Acceptable*
3	Actions that improve the educational retro alimention processes and allow improved professional development in the PE	293	3.41	7.625	.000	Acceptable*
4	Knowledge of the indicators that form a good quality education program	293	2.96	-.637	.524	No acceptable
5	Involvement in the external evaluation processes in the PE	293	2.87	-2.079	.039	No acceptable

6	Dissemination of the results of the processes of evaluation of the PE	293	3.29	4.756	.000	Acceptable*
7	The BUAP has the academic recognition and prestige on a national level	293	4.24	5.065	.000	Very Good***
8	Directors promote participation in the processes	293	3.25	3.987	.000	Acceptable*

**Graph 1.** Impact of the processes of external evaluation



## CONCLUSIONS

It can be concluded that, although educational programs are recognized for their quality through external evaluation, and students identify the BUAP with national prestige, there is a gap of knowledge and student participation in evaluation processes. While some participate indirectly, such as in the interviews conducted by external evaluators, beyond these interventions it



is concluded that there is a need to disseminate and implement various strategies to keep students informed about what external evaluation represents to the benefit of their training, the elements that are assessed and the results that are obtained.

It is essential to take into account the views of students, not only because they provide valuable information of measurable quality indicators, but to meet their needs in compliance with the institutional mission and their professional development.

The lack of student participation in the processes of external evaluation is a factor that is affecting the way students value the quality of their educational programs, if the students have the necessary information on issues of educational quality and evaluation they can form student awareness, enabling feedback based on the quality of their training by students and graduates of the BUAP .

Finally it is proposed that at the institutional level, faculty and educational programs develop outreach and training, including extracurricular activities that address issues of educational quality; workshops on developing quality indicators given by institutional experts and guests who can share their experiences are developed in other national and international contexts; that there is an exchange of educational quality practices which generate greater co-responsibility in students, as well as links that will allow a contrast to the reality experienced by students, visualizing changes generated through evaluation and new trends that denote educational quality. There should be simultaneous y comparative studies performed periodically, and monitoring of student assessment to visualize changes in perception of educational quality issues.

## REFERENCES

- ANUIES** (2012) *Inclusión con responsabilidad social. Una nueva generación de políticas de educación superior / integrantes del Grupo de Trabajo Rafael López Castañares [et al.]* – México, D.F : ANUIES, Dirección de Medios Editoriales, 2012.
- CARILLI, VICENT.** (2000). *Student satisfaction at Southern Illinois University Carbondale*. Doctoral dissertation Southern Illinois University at Carbondale, Recuperado de: <http://www.lib.umi.com/dissertations/fullcit/3021507>
- BRICALL, J. M.** (2000) “Informe Universidad 2000”, Organización de Estados Iberoamericanos para la Educación la Ciencia y la Cultura, Barcelona España.
- ESCUADERO, T.**, (2003) “Desde los tests hasta la investigación evaluativa actual. Un siglo, el XX”, de intenso desarrollo de la evaluación en educación. *RELIEVE:*, v.9,n.1,p.11-43.
- LEITE DENISE, SANTIAGO RUI, SARRICO CLAUDIA, Y POLIDORI MARLIS** (2006) .Students’ perceptions on the influence of institutional evaluation on universities, *Assessment & Evaluation in Higher Education* V. 31, No. 6, December 2006, , ISSN 0260-2938 (print)/ISSN 1469-297X (online)/06/060625–14© 2006 Taylor & Francis. pp. 625–638
- MUM** (2009) *Modelo Universitario Minerva BUAP* <http://www.minerva.buap.mx/Documentos%20MUM3%20MUM%202%20Modelo%20Educativo%20Academico.html>
- SES** (2009). *Programa Integral de Fortalecimiento Institucional, Paradigma de un Programa de Buena Calidad*, SEP, México.
- SES** (2013). *Padrón de los programas acreditados por Organismos Reconocidos por el COAPES de los evaluados por los CIEES*, Subsecretaria de Educación Superior, México Recuperado de: <http://www.ses.sep.gob.mx/index.jsp>

**XIAOYANG, Z** (2012) *A Review on Service Quality and Student Satisfaction of Higher Education*, J. Luo (Ed.): *Soft Computing in Information Communication Technology*, AISC 158, pp. 115–122.