Planeación, seguimiento y evaluación de indicadores de calidad educativa: el caso de dos programas en la Universidad Autónoma de Sinaloa

Planning, monitoring and evaluation of educational quality indicators: the case of two programs at the Autonomous University of Sinaloa

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Resumen

El presente artículo analiza los indicadores de calidad educativa en dos programas de licenciatura de reciente creación en la Facultad de Arquitectura de la Universidad Autónoma de Sinaloa. La deserción escolar, el rendimiento académico, el desempeño docente y la atención institucional son indicadores que determinan, en parte, la calidad de los programas educativos. El diseño curricular de esta oferta educativa y la planeación de los cursos son producto de un proceso de análisis colectivo de la planta de profesores. Al concluir los dos primeros semestres la deserción escolar en la carrera de Diseño de Interiores y Ambientación es 33% y en la de Diseño Urbano y del Paisaje es de 14%. Se encuentra bajo rendimiento académico en la cohorte 2013-2018 de Diseño de Interiores y Ambientación y, en de la cohorte 2013-2018 de Diseño Urbano y del Paisaje bajo y medio rendimiento en el primero y segundo periodo respectivamente. Existe muy baja y baja correlación entre rendimiento académico, desempeño y antigüedad docente. En el caso de la antigüedad y el desempeño docente se detecta tendencia a una correlación negativa.

Palabras Clave: planeación, seguimiento, indicadores, calidad educativa.

Abstract

This article analyses the indicators of educational quality in two undergraduate programs of recent creation in the Faculty of Architecture of the Autonomous University of Sinaloa. Dropping out of school, academic performance, teacher performance, and institutional care taking are indicators that determine, in part, the quality of educational programs. The curricular design of this educational offer and courses planning are product of a process of collective analysis of the teachers staff. At the conclusion of the first two semesters school dropouts in the career of Atmosphere Interior Design is 33% and in Urban Design and Landscape is 14%. Low academic performance is found in the cohort 2013-2018 of Interior Design and Decoration, and in 2013-2018 cohort of Urban Design and Landscape low and medium performance in the first and second term respectively. There is very low and low correlation between academic performance, performance and Teacher seniority. In the case of antiquity and teacher performance a trend is detected to a negative correlation.

Key words: planning, monitoring, indicators, quality education.

Fecha Recepción: Octubre 2014 **Fecha Aceptación:** Diciembre 2014

Introduction

Infrastructure, human resources and educational equipment of higher education in Sinaloa State have been overwhelmed by the demand in recent years. In 2011, young people who did not achieve a place in the University marched through the streets to demand their right to education, after protests, meetings with university authorities and negotiations with elected popular representatives, the Rector declared that new groups in Mazatlan and Los Mochis will open for applicants in the area of health (Corrales, 2011).

The demand for higher education is increasing. The Rector of the Autonomous University of Sinaloa (UAS) informs the media that 45 thousand youths applied the Ceneval examination and declares that the Faculty and University infrastructure are not sufficient to

support all (Guerra, 2014), however, urged directors of academic units to intensify efforts in order to expand the educational offer and coverage. In this context the Faculty of Architecture of the Autonomous University of Sinaloa (FAUAS) offers two new careers, giving a chance to those who could not be placed in architecture career, do so in the careers of Interior Design and Decoration, and in Urban Design and Landscape. This solves a problem temporarily, as students entering these careers, maintain hope to be resettled in the career of architecture within a year, because his desire is to study a degree in architecture. In addition, to the not having considered these careers as a first option, students did not investigated on the professional field of this new educational offering. On the other hand, the problem of infrastructure remains, and some groups are moved to other facilities of the University that are not properly part of the Faculty of Architecture, thus creating a feeling of marginalization and identity loss.

The challenge that is facing is that the new educational offer must be of quality, while maintaining the quality of the Degree in Architecture monitoring and meeting the observations and recommendations of the Accreditation Committee. Some of the indicators are impacted by the increased enrollment that demands greater infrastructure, equipment and teaching staff, elements that if not increase at the same rate as enrollment, they will have to find strategies to achieve greater efficiency in all processes and resources. The new programs will not only require the above, but teaching, teaching and disciplining of teachers who serve students enrolled in new programs empowerment is necessary.

The increase in enrollment has placed it in a situation of conflict How to maintain the quality indicators of the degree in architecture has increased the number of students without increasing at the same rate infrastructure, equipment and ground ?, teachers How able to obtain quality indicators in the new educational programs and achieve their accreditation when evaluated? The answer to these questions leads us to think of a planning process and ongoing evaluation to keep an eye on the performance of academic actors, rational use of resources and optimize them as well as the results of performance through indicators of educational quality.

In the 2012-2013 school year, new careers started with 92 students in the Bachelor of Interior Design and Atmosphere and 86 degree in Urban Design and Atmosphere. During the first five years will gradually increase enrollment since no graduates until completed this period. Consequently the demand for infrastructure, equipment and staff will be permanent given the gradual increase of tuition up to the year 2017 with 800 students is the projected enrollment, if the opening of two groups remains a year for each of the new careers. In this situation what should the management team to ensure the educational quality of the new programs while maintaining quality standards in the program of Bachelor of Architecture? At first glance the relationship between the quality with which they attend to the students of the new races and the Bachelor of Architecture is detected, however, share the same building, the same floor of teachers, the same equipment and the same school environment will be many elements that will impact the new educational offer in the administrative structure in academic staff and perhaps the education and teaching dynamics in response to the styles of professional fields for which are forming Designers Interior and Planning.

It is imperative to establish collegial processes of planning, assessment, analysis of results and policy interventions in order to detect assertive processes rely on them to improve in the areas of opportunity detected in each period or school year.

The Faculty of Architecture since 2006 distinguishes itself by providing a quality education program to maintain a degree in architecture accredited by the organization recognized by COPAES, endorsing the quality in 2012 to be accredited by the National Architectural Accrediting Programs and Design of Living Space (ANPADEH) which is an internationally recognized accreditation body. Now, it features actors of educational processes, academic and research management challenge to maintain the quality of the degree in architecture and ensure the quality of the new programs once they meet the requirements to be evaluated, also achieved accreditation by the agencies concerned.

The new scenario that exists in the FAUAS demand actors of the same greater effort and optimize time and resources. It is therefore necessary initial evaluation, in order to have an appreciation and evaluation of the current situation, estimating the extent this corresponds

to the desired location. The diagnosis will reveal, understand and explain comprehensively the factors or causes that affect the operation of the School.

Another important aspect that must be addressed is planning to implement curriculum. The diagnosis is important for determining intervention strategies and definition of actions by actors item as well as the use of infrastructure and equipment resources. It is necessary to integrate work teams to plan the activities for the implementation of educational programs. Monitoring and evaluation activities will form part of the strategies as guiding elements in a dynamic and continuous improvement of educational process.

The main issue of this paper is how to integrate a team of teachers in the new educational programs that are willing to change their teaching and learning strategies in order to ensure compliance with a set of quality indicators previously established? How to ensure that the directors of the FAUAS make synergy with these groups of teachers and take as the main educational managers to facilitate the implementation of educational processes that have been planned?

One aspect that can not be ignored is the impact that half of the school year has led to the change of the Director of the School of Architecture and thus the integration of a new management team. The Bachelor of Interior Design and Atmosphere (DIA) is the one that has been most affected. He did not assign personnel Coordination Career and temporarily, is attended by the coordinator of the Degree in Urban Design and Landscape (DUP).

Another important problem that must be addressed by the authorities responsible for the recruitment of academic staff or assigning academic loads, is to make a real assessment of the teaching staff profile. You need to make a fair weighting of the aspects of the adequacy of the profile of the candidates to cover the academic load. Give weight to factors of the professional profile of teaching skills in the areas of knowledge of the vacancy load of experience in the professional field and teacher seniority. None of these factors alone can be above another in the understanding that aims to provide real support to students to facilitate learning processes for vocational training, ie, they should hire personnel meeting with educational and professional competencies required for the implementation of the respective educational program.

Theoretical Framework

One of the questions relates to the quality indicators to be verified in different parameters used to evaluate educational programs. It is very important indicator of terminal efficiency, quality educational program must maintain this indicator above 70%. Against this indicator are indicators of desertion, academic backwardness and poor academic performance. In an educational program or are starting cohort can not determine the terminal efficiency, however, we can work with the goal to achieve a high indicator, so it is necessary to pay attention to other indicators.

For example, if we want the indicator terminal efficiency is greater than 70%, the sum of the indicators dropout and academic backwardness must be less than 30%. The indicator of academic performance, when it is very low, is speaking of the possibility that students fall into academic lag or dropout due to the sense of academic frustration and low self unable to obtain qualifications to encourage them and reward their efforts and dedication.

And should pay attention and care to terminal efficiency indicator is necessary to keep in mind the profile of graduates prefiguring the kind of professional who wish to form.

According to Gonzalez, Castro and Banuelos (2011)

> … Profiles are not only the capabilities and skills. Behavior, behaviors, patterns, regularities and self-perception are what define. ... The properly expressed by students, it is contributing to the conclusion that there is a possible profile and that this is also necessary to take into account their previous school careers (p. 134).

This leads to the need to give greater attention to the student, in the case of the School of Architecture and in general, in all academic units of the UAS, it requires that the Institutional Program Tutoring better focus its work, the outlet making for patient education and support is based on knowledge, in school careers and the particular needs of students.

The fundamental purpose of the evaluation is to determine whether the implementation of a program or policy was able to produce the planned change. It is known for being helpful in making decisions, therefore, consider the needs and expectations of stakeholders; those

responsible for the program, which led him to practice, benefiting from the services, the companies employing graduates and society (Piccone, 2008)

To prepare the curriculum of the programs the opinion of entrepreneurs in the respective workplace contributing this to the definition of the graduate profile was considered. Above view of society, according to Torres and roses (2011), tends to be satisfied given the low cultural level, assessment supported by the results of the PISA test applied in 2007 where Mexico won the penultimate place and Finland the first Instead, a situation that led to Eduardo Andere to investigate the satisfaction of parents finding that Mexico was satisfied and Finland dissatisfied. Cultural constraints lead to lower demand from parents, does not mean we're good but they do not know what to demand. Given that you have a greater commitment and challenge if we really want to improve higher education, the university authorities, management teams should promote and lead to an innovative educational process, with consequent implications at the organizational level, to energize actors and optimize resources, which teachers, students and support staff to assume their new roles to implement new approaches by competencies, creating true learning communities.

By offering these programs ups, you have the opportunity to drive collective planning processes of the grounded semester activities in complexity theory, where the whole is greater than the sum of the parts, by the synergistic effects of the leading see the problem in a global context, in this case, the FAUAS as a system in which part are students, teachers, administrative, management team, infrastructure, equipment, laboratories, academic bodies, labor unions and student. We are all part of the system and our actions are stressed or depressed but always have an impact on the system, if we harmonize our actions the system will have greater capacity to move towards quality education for that, we need to know the potential of each of the parties and what the parties on their own can not provide if they are isolated from system (Morin, 1999). That is why together we must build scenarios that encourage curiosity, observation and critical thinking by developing questions, hypothetical approaches and drawing conclusions on the learning activities of students, teachers, administrators and managers, each will be document their practice, record and explain their experiences, use your journal to reflect on your practice, employ different styles and consistent with the learning resources. Teachers have to test responses and critical

reflection in learning with students applying or using knowledge gained. Students must have clarity of their academic purposes; work on the self, on how to be and leverage the benefits of the system to achieve its purposes. That is, the FAUAS, offers technical, media, infrastructure, human resources and tools for vocational training that must be evaluated to understand its impact on learning all facing the performance and practical actors professional (Santos Ortiz and Arredondo, 2014).

While implementing the program takes a year just in the assessment process have participated, program coordinators, teachers and students. The evaluation focused on the academic performance of students, dropouts, academic performance by learning units, in the assessment of students regarding the care and teacher performance regarding planning purposes of their courses.

Justification

The implementation of two new curricula naturally generates new challenges and expectations. The main challenge is to ensure FAUAS quality educational processes in the care of students in the new educational offer. To do this, you need a comprehensive strategy that includes, as a starting point, the diagnosis of the factors and actors involved in these processes.

Planning activities to achieve the objectives and goals established in each of the programs Learning Units of curricula, product performance and achievement level of skills that have been specified for each semester , it is performed taking into account the results of the diagnosis of internal and external factors, evaluation of previous semester and times and specific contexts in which each semester courses will be developed. Planning is flexible because it is considered that appropriate adjustments can be made at certain times of the critical path established according to the partial results. That is, if the partial assessments indicate that students are not achieving the level of knowledge, skills and attitudes expected, will have to restructure the teaching strategies; modify and / or consider new ones, without sacrificing the purpose of achieving the tasks set in the program.

Educational policies for the top level is that universities can receive extraordinary support to the extent that their educational programs are quality. The way to demonstrate this is by participating in quality assessment processes and acreditándolos educational programs. Thus, the new educational offerings, will be in condition to be evaluated in terms of completion of the first generation. At which must show a number of factors (parameters and indicators) of the learning processes of students and teachers, equipment and infrastructure plans and curricula, regulatory processes, structure and organization that combined administrative to achieve the formation of such graduates and the desired exit profile. This investigation is necessary because it contributes to the analysis of complex educational processes and outcomes.

You must have a strategy to determine the impact that the implementation of the new educational offerings because the current dynamics of the academic process, management, administrative and research at the Faculty of Architecture. This strategy is educational planning from a broad vision, that is, involving the evaluation of strategies, activities and goals set in order to be able to make adjustments and strengthen the development of programs and minimize negative effects, if they occur.

General Purpose

Plan, monitor and evaluate in context and collaboratively, strategies for the implementation of the curriculum of the degrees in Interior Design and Atmosphere and Urban Design and Landscape for the 2013-2014 school year. The purpose is to assess the extent to which academic products made by the students show proficiency of skills established for periods 1 and 2 of the respective curricula and learning the respective units that are part of them. To achieve this it is necessary to consider the participation of students, teachers and managers involved as well as a set of internal and external factors that determine the strategies and activities that some may or may not be realized and are part of the training process of students.

Specific objectives

A diagnosis of the main factors and actors involved in the implementation of the curriculum of the degree in Interior Design and Planning during the 2013-2014 school year.

Analyze educational planning stages of the learning units performed by teachers to detect the products to be subject / object of valuation.

Evaluating learning products made by students, educational processes developed by teachers, educational services and equipment that were used / required in implementing the curriculum.

Methodology

The methodology for the development of this research is the action-research -Methodology. The Head of the research project, participated in developing the curriculum for the degree programs in Interior Design and Planning, is part of the plant full-time teachers in the FAUAS and participate in regular meetings, doing the faculty, for assessment and analysis of results of teaching strategies implemented in groups of two degrees.

Profile analysis did teachers currently assigned the academic load of teaching in these degrees. Teacher performance is a determining factor in the quality of an educational program, teachers are directly responsible for quality education, more so in recent programs, be provided for students because no other students to support them with suggestions on how to develop strategies for their schooling only have teachers and they are also experimenting with new strategies and contents. This type reflections were made and will be pursued in the group of teachers in these programs.

Evaluate material resources; infrastructure and equipment. Input is already known that there is a shortage of spaces, more classrooms, workshops and laboratories are required. Designing teaching strategies possible under current conditions apply gap spaces where students and teachers are aware of that and make the resources to achieve maximum levels of competencies that are expected to develop and demonstrate through products made in

each semester. A similar assessment will have to do with the academic equipment that is available to students and teachers to support the educational process. We refer to Internet services, library, computer center and laboratory environment.

Each teacher makes a judgment about the level of achievement in the Learning Unit that was responsible, he does, taking as reference the planning of the course and the results obtained, locate deviations and analyzes the causes that originated them. With this material, a forum for critical analysis among the group of teachers involved in each degree in order to identify the factors and their influence on the level of achievement of results is performed. This analysis will be considered in making decisions about teaching strategies to be implemented in future courses.

Students also participate in the evaluation of the results of these early periods. They presented on public display for the school community and academic products obtained were questioned about the achievements made and the shortcomings detected in the own work and that of their peers in the same cohort. In making the criticism, they are proof of the level of learning achieved while making awareness of what they can achieve in future work. By making criticism of other work, they can realize the proficient level with their peers and what they can learn from them, implicitly, the benchmark is the proper work presented, even if an assessment of all the work is done by treating to find work that most reflects the expected level of competence.

Results

The results correspond to indicators of academic quality after a year of implementing educational programs and degrees in DIA DUP. For the first two periods of the curriculum of each degree, academic performance by cohort, academic achievement by subject, school dropouts from the first to second quarter, the teacher performance assessment and correlations between these indicators it is presented

Academic Performance by cohort

In the present it is understood to mean achievement scores obtained by the student in each period of the curriculum. In Table 1, the academic performance of the 2013-2018 Cohort Bachelor shown; Interior Design and Atmosphere (mean = 7.43) and Urban Design and Landscape (mean = 7.38) for the period 1 corresponding study plan.

Tabla 1:
Rendimiento académico por carrera en el Periodo 1

Carrera	N	Media aritmética	Desv. Est.	Desv. Est. Mancom.	t de student	Regularidad académica
Diseño de Interiores y Ambientación	92	7.43	2.19	2.11	0.16	63%
Diseño Urbano y del Paisaje	86	7.38	2.02			34%

The difference in academic performance of these cohorts, in this period, is very small (0.05) so, just mere formality is applied the "t student" test to determine whether or not statistically significant. The result is that there is no evidence to say that a cohort have had better academic performance than the other.

In order to make an assessment of academic performance the following convention provides: high academic achievement, when arithmetic is equal to or greater than nine; average academic performance, the arithmetic mean is greater than or equal to eight and less than nine; low academic performance, the arithmetic mean is less than eight.

According to the above, we can say that in general, students in these cohorts have low academic performance in Period 1. The analysis of this result may have explanations according to certain references that are defined for it. In this case, external references discard the achievement of cohorts of peer education programs offered at other institutions of higher education. We try to build your own from the academic performance achieved in each of the learning units. This is because we will position ourselves on continuous improvement of the learning process which involves the constant search for teaching strategies that contribute most to raise the skill levels of students and thus their academic performance.

In Table 2, the academic performance of the 2013-2018 Cohort Bachelor shown; Interior Design and Atmosphere (mean = 7.92) and Urban Design and Landscape (mean = 8.07) for the period 2 corresponding study plan.

Tabla 2:
Rendimiento académico por carrera en el Periodo 2

Carrera	N	Media aritmética	Desv. Est.	Desv. Est. Mancom.	t de student	Regularidad académica
Diseño de Interiores y Ambientación	62	7.92	1.83	1.69	-0.52	71%
Diseño Urbano y del Paisaje	74	8.07	1.56			62%

The academic performance of cohorts improvement in Period 2 with respect to that obtained in Period 1. degree in Interior Design and Atmosphere as performance goes from 7.43 to 7.92 0.49 better points difference according to the "Student t test "it is not statistically significant. In the case of a degree in Urban Design and Landscape changes from 7.38 to 8.07 0.69 points better. When comparing the academic performance of Period 1 and Period 2 with 99% confidence, we can say that the cohort of Urban Design and Landscape has improved academic performance in period 2 compared to that obtained in period 1 .

Notwithstanding the foregoing, if the results that both cohorts obtained in Period 2 are compared, the difference is not statistically significant and the fact that the cohort of Urban Design and Landscape show a significant improvement in performance is that in the Period 1, its performance was below the cohort of Interior Design and Atmosphere while the Period 2 was over, ie, achieved greater academic performance.

According to the levels set value for the achievement we can say that in Period 2 Cohort DIA still academic performance low (mean <8.0) while Cohort DUP reaches an average academic performance (arithmetic mean > 8.0).

Achievement of units of learning

The analysis of the achievement of units of learning aims to reflect on the level of influence of the factors; content (area of knowledge), educational (skill in teaching skills), students (management of certain learning strategies) or some other factor. This will require having a history of what happens in several cohorts to allow the accumulated results can serve as endpoints to the new results, as well as innovation in teaching strategies that are being implemented in each school year.

In Table 3, the academic performance in each of the learning units for the period 1 curriculum of the Bachelor of day is displayed. The arithmetic mean () and standard deviation (SD) of the eight learning units are 7.54 and 0.73 respectively. If we establish the confidence interval [] = [6.80, 8.27] to find learning units whose academic performance is close to that of the arithmetic mean, the learning units that are outside this range are those with a significant difference.

Tabla 3:

Rendimiento académico por unidades de aprendizaje de la cohorte DIA. Periodo 1

	Unidades de Aprendizaje							
	1[a]	2[b]	3[c]	4[d]	5[e]	6[f]	7[g]	8[h]
MEDIA ARITMÉTICA	7.42	7.88	7.34	7.23	7.65	7.92	8.71	6.13
desviación estándar	2.48	1.95	2.62	2.58	1.71	2.19	2.31	2.18

Compiled using data provided by the Department of School Control

to Interior Design Methodology; b Basics design; c media representation in the plane; d basic representation techniques; and Classic styles; f History of the Classical ancient art; g Mathematics applied to the design; h techniques and research tools

According to the above, the course "Techniques and means of investigation" (6.13 <6.80), is below the lower limit of the range, a situation that invites further analysis of the diversity of situations that arose during development of course, for the purpose of finding new teaching strategies in order to raise the academic performance in future courses. Moreover, the subject "Mathematics applied to design" (8.71> 8.27), presents a greater than the upper limit academic performance, so should also be to analyze the teaching strategies used that

lead to this result. In this case, in order to replicate the educational processes that facilitate student learning, raise their level of knowledge and academic performance.

The factors that must be evaluated for an explanation of why they have fared better, there are some that input can be discarded. The factor, pupil, can be neglected in the analysis since they are actors in all subjects, therefore they are not the variable that makes the difference. Another factor is the area of knowledge, that is, if the content is easy to understand and assimilate, you expect high academic achievement, however, have indicators to the contrary at a lower academic performance would be expected. What makes the difference may be in teaching strategies implemented by the teacher in the learning strategies that implemented students in assessment strategies and products that show the level of mathematical enabling students.

Tabla 4:

Rendimiento académico por unidades de aprendizaje de la cohorte DIA. Periodo 2

	Unidades de Aprendizaje							
	1[a]	2[b]	3[c]	4[d]	5[e]	6[f]	7[g]	8[h]
MEDIA ARITMÉTICA	8.29	7.13	8.46	7.40	8.31	8.40	7.85	7.48
desviación estándar	2.22	1.90	1.50	1.97	1.20	1.52	1.39	2.25

Compiled using data provided by the Department of School Control

Workshop on Basic Space Designs Housing; b) Anthropometry and Ergonomics; c) Applied Geometry; d) Advanced Rendering Techniques; and styles of the nineteenth century; f) Vanguards of the nineteenth century g) Materials and Construction Systems; h) Learning Communities

In Table 4, the academic performance in each of the learning units for the period 2 curriculum of the Bachelor of day is displayed. The arithmetic mean () and standard deviation (SD) of the eight learning units are 7.92 and 0.52 respectively. If we establish the confidence interval [] = [7.40, 8.44] to find learning units whose academic performance is close to that of the arithmetic mean, the learning units that are outside this range are those with a significant difference.

According to the above, the subject "Anthropometry and Ergonomics" (7.13 <7.40), is below the lower limit of the range, a situation that invites further analysis of the diversity of situations that arose during development of the course , for the purpose of finding new

teaching strategies in order to raise the academic performance in future courses. Moreover, the subject "Applied Geometry" (8.46> 8.44), presents a greater than the upper limit academic performance, so should also be to analyze the teaching strategies used that lead to this result. In this case, in order to replicate the educational processes that facilitate student learning, raise their level of knowledge and academic performance.

And we express the possible factors that must be analyzed to find explanations that lead to a subject that has achieved academic performance well above the arithmetic mean of all the subjects contained in the period. It explained above that students may not be the factor that makes the difference, then, should deepen the analysis of teaching strategies implemented and the profile of teachers. I say this because in the curriculum has been considered that the main factors of the educational process are the students, teachers and content. If students are not the factor of difference, then it must be the teachers and the mastery of specific teaching skills, the content and level of educational development in the area of knowledge and the respective strategies of teaching, learning and assessment undertaken.

Tabla 5:

Rendimiento académico por unidades de aprendizaje de la cohorte DUP. Periodo 1

	Unidades de Aprendizaje							
	1[a]	2[b]	3[c]	4[d]	5[e]	6[f]	7[g]	8[h]
MEDIA ARITMÉTICA	7.91	8.25	7.83	7.79	7.76	5.61	8.34	7.70
desviación estándar	1.78	2.06	2.18	2.15	2.28	2.41	2.53	2.63

Compiled using data provided by the Department of School Control

Taller urban landscaping I; b Drawing the urban landscape; c Introduction to the study of the environment; d structure and functioning of ecosystems; and Sustainability; f Applied Mathematics; g Topography; h Technical Thought

In Table 5, the academic performance in each of the learning units for the period 1 curriculum of the degree in DUP shown. The arithmetic mean () and standard deviation (SD) of the eight learning units are 7.65 and 0.86 respectively. If we establish the confidence interval [] = [6.79, 8.51] to find learning units whose academic performance is

close to that of the arithmetic mean, the learning units that are outside this range are those with a significant difference.

According to the above, the subject "Applied Mathematics" (5.61 <6.79), is below the lower limit of the range, a situation that invites further analysis of the diversity of situations that arose during the course development, to effect seek new teaching strategies in order to raise the academic performance in future courses. This result is very extremes, while the main factor is the standard deviation is greater than that obtained in any of the other periods studied (Table3, Table 4 and Table 6).

It is very contrasting results obtained in the course "Applied Mathematics" shown in Table 5 (the lowest value = 5.61) and that obtained in the same subject shown in Table 3 (highest value = 8.71). This reinforces the idea that -alumnos- is not the determining factor such as extremes results (8.71 - 5.61 = 3.1). No other pair of subjects showing greater difference 3.1 points, while corresponding to different areas of knowledge. Consequently, the hypothesis that has to do with the profile of teachers, ie teachers who taught these courses implemented very different teaching strategies is consolidated, so mind document which are applied in groups degree in DIA, analyze the level of mathematical enabling students and their feelings about these results.

Tabla 6:

Rendimiento académico por unidades de aprendizaje de la cohorte DUP. Periodo 2

	Unidades de Aprendizaje							
	1[a]	2[b]	3[c]	4[d]	5[e]	6[f]	7[g]	8[h]
MEDIA ARITMÉTICA	8.39	7.51	8.51	7.65	8.34	6.81	8.70	8.66
desviación estándar	1.31	1.79	1.22	1.44	1.11	2.04	1.08	1.19

Compiled using data provided by the Department of School Control

Talle r to Urban Design and Landscape II; b Descriptive Geometry; c Land Use d Natural Resources; Theory and Outer Spaces; f Statistics; g Cartography h Learning Communities

In Table 6, academic performance in each of the learning units for the period 2 curriculum degree in DUP shown. The arithmetic mean () and standard deviation (SD) of the eight learning units are 8.07 and 0.68 respectively. If we establish the confidence interval [] =

[7.40, 8.75] to find learning units whose academic performance is close to that of the arithmetic mean, the learning units that are outside this range are those with a significant difference.

According to the above, the course "Statistics" (6.81 <7.40), is below the lower limit of the range, like previous similar cases must be analyzed to discover major flaws in the teaching strategies implemented seeking to make changes appropriate to promote educational processes that facilitate student learning and better results than, for this subject and in this period, have been obtained.

Of the four periods analyzed (the first two for each race), this is the first in which the average is at an average academic performance, a situation that is reflected in the fact that in five learning units have a level average academic performance.

Academic regularly

It will be understood as an index of academic regularly to students in the cohort who have accredited all subjects, for each period of the curriculum, in the set time considering the optimal development of the plan's implementation and strengthening of educational quality from the vision of a high rate of terminal efficiency.

Tabla 7:

Regularidad académica de las cohortes en el Periodo 1 y Periodo 2

Alumnos	DIA				DUP			
	Periodo 1		Periodo 2		Periodo 1		Periodo 2	
Regulares	64	69.6%	44	71.0%	58	67.4%	46	62.2%
Que deben 1 o 2 asignaturas	14	15.2%	16	25.8%	23	26.7%	27	36.5%
Que deben 3 o 4 asignaturas	6	6.5%	2	3.2%	1	1.2%	1	1.4%
Que deben 5 o más asignaturas	8	8.7%	0	0.0%	4	4.7%	0	0.0%
Total	92	100%	62	100%	86	100%	74	100%

Compiled using data provided by the Department of School Control

In Table 7, we can see the behavior of the regularity or irregularity academic cohorts whose school career are analyzed. In the case of the degree in DIA in line it -Regulares- is shown

that 64 of 92 students in the cohort credited all subjects Period 1, constituting 70% of this academic regularly. 28 students flunked one or more subjects, ie, 30% of students have academic irregularity.

Now, if we analyze the corresponding period 2 of the previous cohort data, we found that 44 of 62 students have proved all the subjects of that period, that is, you have 71% of academic regularly. Virtually the percentage of academic regularly stays in both periods. Although the regular academic indicator is maintained, a factor that can not be overlooked is the desertion, something that will be discussed in the next section.

In the same Table 7, we can see that in the degree in DUP that 58 of 86 students in the cohort credited all subjects for the Period 1, constituting 67% of this academic regularly. 28 students flunked one or more subjects, ie, 33% of students have academic irregularity.

Now, if we analyze the corresponding period 2 of the previous cohort data, we found that 46 of 74 students have proved all the subjects of that period, that is, you have 62% of academic regularly. It has increased by 5% academic irregularity to settle at 38% in this period. Whereas in this cohort and in this period the highest academic performance is achieved, while the arithmetic mean of the performance by learning units is 8.07 (although the maximum, according to valuation levels is an average academic performance) and it also has the highest rate of irregularity, it can be shown that have been required higher academic level, academic rigor implemented by faculty demands the utmost effort of students.

he above situation and the last valuation lead to a quality education, whether students, particularly irregular, greater support and attention to their learning needs and training is provided. This is where lies the importance of work such as this, they allow to detect this kind of needs to make decisions in a timely intervention to improve the indicators.

Dropout

We assume as the cohort dropout students who are of the cohort and abandoned the race. In the particular case, cohorts of this study are I consists of students who enrolled in the Bachelor of Interior Design and Atmosphere, and Urban Design and Landscape in August

2013. The UAS, has instituted an annual enrollment period, therefore, officially to students who have dropped out of school at the beginning of the school year is recorded. However, in the control system of school students who have dropped out from grades semiannual report is detected. The reasons why a student leaves the cohort can be motivated by different reasons; his family moves to another city, he discovers that the race was not what I expected, for economic reasons for the support of the studies, disapproval or poor academic performance or other reasons. Regardless of the causes for the desertion, the student dropout consider having initiated a generational cohort of a race you do not enroll in any of the periods established for that cohort according to the curriculum. That is, if the student enrolls in another run of the Faculty or the University, are still considered a deserter but cohort has been enrolled in another cohort.

Formula (1) is used to determine the dropout rate

$$T_{DC} = \frac{N_{AD}}{N_{AC}}(100); \qquad (1)$$

donde

T_{DC} = It is the dropout rate in the cohort

N_{AD} = Number of students in the cohort who dropped

N_{AC} = Number of students in the cohort (which began in 2013)

Dropouts, academic backwardness, failure and terminal efficiency are indicators of the same phenomenon that manifests itself in the quality of education but due to the complex dynamics where, family, social and institutional factors intertwine individual order to determine the Student existential conditions.

According to Rodriguez and Leyva (2007) dropouts in Public Higher Education Institutions from 1999 to 2003 was 36% and 28.8% in private. Although these data are for more than a decade, the efforts of educational policy is to improve accountability indicators. An indicator that distinguishes quality educational programs is to achieve a completion rate above 70%, therefore, while not completed cohort dropout indicator is very important to monitor the efficiency reference terminal.

According to this and the data shown in Table 7, considering the number of students admitted (Period 1) and those who remain in Period 2, which are those who signed the Period 3, you have to Index Cohort dropout DIA is 33% and Cohort DUP is 14%.

Returning cohort data DIA, one can say that academic irregularity is not the main factor of desertion. The fact that the dropout indicator is greater than the academic irregularity, that not everyone who is reproved who deserted and defected regular students are strong arguments to support such a claim.

Regardless of the causes of attrition, this situation puts the institution in the need to improve the level of attention to students; first general academic aspects of the educational process and academic performance and then on specific aspects of students to meet their needs. In the first case, seeking direct support to teachers, performing better planning of courses, implementation of teaching strategies that promote the development of the skills and abilities of students, improving the academic infrastructure and equipment available to students in a point, incorporate parents in the educational process of their children. In the second case, through the mentoring program, you can implement a process of interviews with students to meet specific needs. Once these are known, provide appropriate care channeling such support specialized University staff according to each case.

We are talking about the first cohort graduated in DIA, which already has 33% attrition and therefore the completion rate indicator increased 70%, to which they aspire and quality programs will not make it. Many studies indicate that most attrition occurs when going from first to second grade, but in this case is very high. Steps must be taken to address that in the coming years to reduce the desertion minimum values, for example, that in the four years remaining does not exceed 7% to aspire to a completion rate of 60%.

The cohort dropout DUP is 14%, is high but manageable value because it allows aspire to have a completion rate of 80%. In general, the behavior of this cohort shows better indicators cohort DIA. The high academic indicator irregularity is that the students have failed one or two subjects, a situation that can be remedied if students are provided with the proper academic counseling prior to the submission of the special examinations scheduled in the coming period for this purpose.

School Quality Management

The fact that each educational program to have coordination is an important factor in program implementation. Promote planning various academic activities such as curriculum courses, remedial courses, exhibitions, study groups, panel discussions and seminars on professional issues conference, days of evaluation results, monitor implementation of actions and goals, assessment and attention the needs of students and staff, are just some of many that can be made when good communication between all stakeholders in the school is maintained. Coordination of career should be the main link students and teachers with the director and the governing body needs to be known, advances and retreats to encourage the participation of all in decision-making leading to the development and implementing appropriate that any action will translate into improved academic indicators strategies.

In the academic units in the Autonomous University of Sinaloa it is possible to implement a form of matrix management where responsibilities of the actors are always higher than the control elements and look increasingly manifestations of power (Hall, 2014). To do this it must be remembered that educational institutions are complex, as are the fabric of mental structures that are set in motion during the learning process, that is, responsibility should be focused on facilitating the learning process and that in These are not only aimed at students, also managers, teachers and technical support staff. In today's knowledge societies, we are all learners, success is in the attitude, willingness and determination to achieve it.

In a recent study (Romero, Rodriguez and Velázquez, 2014) on the school management of the management teams in the UAS, they say there is evidence to suggest that management teams have a real chance to improve school management and thus indicators of whether implement an institutional policy that promotes a model of comprehensive and systematic management, based on cooperative planning of coordinated actions between academic units. Document and take our own experiences could take in the short term to increase our level of development, which could be promoted by establishing possible goals step by step, and promoting incentives to recognize staff whose experiences in school management provide better results , which can operate at the level of motivation to continue the path of continuous improvement in management.

Timely to the academic needs of students and teachers care, effective communication and good relationship with the staff contributes to higher quality indicators. According to Pedraja and Rodriguez (2004, p.1), "the senior management team has an influence on the process of making strategic decisions and thus on the performance or efficiency of the organization," this is so when it is exercised a collaborative and participative leadership. This attention, talking about the management of the management team, starting with the responsibility for coordinating the work of each degree. To meet and socialize indicators of educational quality of each program with stakeholders and request the respective assessment and proposals for improvements, this is where the key to engaging stakeholders and making them partners in the process of improvement is.

In recent years we have experienced the process of evaluation of educational programs that are recognized for their quality only if they are accredited by external agencies. This is an important quality path forward, however, such an assessment is focused on the verification of the result of internal processes which can slow the process of improvement. Actually, we have no scientifically argued procedures to proactively manage quality improvement processes, difficult to apply this methodology to this view (Carrillo, Pons, and Payares Vergara, 2010). We are faced with the opportunity to create a methodology for effective and efficient management of processes that directly affect the quality, which requires further research to how to improve the different factors involved in the quality of educational programs; teaching, management, research and services.

We can not keep on repeating, always doing the same thing, when we are offering new courses, that in itself is a change, it is a chance to show the novelty and thus ourselves as subjects in search of changes to improve processes Educational transform ourselves, we have to remain in a continuous evaluation of the educational process investigating what is reflecting on the difference of what you may have to decide what to do, speaking and innovating to improve, because the natural state Man is the permanent search for the novelty, because we are subjects of education (Cerletti, 2008), we are all apprentices in the new structures of knowledge societies, we are learning communities where we have the opportunity to learn from each other; teachers learn from students and how they learn this,

as students learn from teachers and the selection of teaching strategies implemented learn to learn.

All this complexity of interactions, the management team should be a major player in management to improve processes and the environment in which they develop, maintain openness to learning constantly improving support and services demanded by the actors of the processes learning. Thus, one must understand the participation of a management team that assumes as principles participatory and collaborative leadership that acts in a context permeated by a matrix combining school organization for decision-making, strategy development and implementation of intervention actions vertical positions and horizontal. At the risk of some loss of control given the environment of uncertainty brought about by the rapid social changes in all aspects and recognizing that the responsibility for what is necessary to invite, arguing and convincing the various actors involved in setting increase and achieving academic goals. These are the challenges of the executive management team given the current circumstances that are experienced and project for the development of new educational programs in the Faculty of Architecture of the Autonomous University of Sinaloa.

Teacher evaluation

For a teacher who takes their teaching performance with professionalism is constantly reflecting on their practice. Analyzes the most efficient teaching strategies to facilitate the learning process of students. He is interested in how students receive and assess these strategies and is willing to share with his colleagues trying to strengthen the union, from individual analysis to collective analysis. Is clear that teamwork provides better results alone, the natural and social context is a facilitator of learning.

Professionalism of teachers has as main reference the level of student learning, therefore the opinion of these on teacher performance, the teaching strategies used, acts and practices mobilized during the performance of their class deserves a valuation special. Therefore, in the Autonomous University of Sinaloa and therefore the Faculty of Architecture in the

evaluation of teaching performance is implemented from the perspective of students. The analytical categories of teacher evaluation are:

- Plan process for learning
- Use of Time
- Content Management
- Facilitating interactions
- Strategies for learning
- Use of information and communications technology
- Learning Assessment
- Satisfaction with teacher performance

For the 29 questions grouped data in each of the categories is performed. It is to know the students' perceptions of very specific activities to be undertaken by the teacher. For example, regarding the planning of the learning process is investigated if presented to the group, if it is explained how the themes, teaching strategies, evaluation criteria and whether the course was developed as planned will be addressed. Regarding the use of time investigates attendance, punctuality and if the time scheduled for the class is used to develop the program content. As for content management students are asked if the teacher dominates and extended with academic solvency issues, if shown to be updated and if clarifies the doubts that arise.

Today the social and labor relations of new forms of coexistence are based on royalties for negotiation, teamwork, trust and solidarity. It is therefore training must attend this part and the teacher should encourage such behavior in the classroom, this category facilitation of interactions concerns and to know how much does the teacher about students are asked whether Professor communicating clearly, if you open for dialogue, if it encourages or promotes classroom participation, whether encourages interaction among students to develop the topics and facilitate learning, whether encourages and creates an atmosphere of

trust, respect and good treatment and if you organize activities and / or tasks to be developed as a team.

Each of the categories of teacher performance is evaluated by assessing students a set of questions by averaging the opinions of students for each category for each teacher and each academic unit of the Autonomous University of Sinaloa. In the case at hand, we present the results of the assessment of teacher performance by learning units, because the triad teacher-student-content, content is the meeting point and mark the set of interactions between students and teacher, whose result is learning and knowledge development.

In Table 8, the results of the evaluation of the students regarding the educational performance of teachers who gave four Unit Learning Period 1 degree in DIA is. The analysis of these results learning units and b) is made by analytic categories a).

a) Analysis by cohort learning units DAY: Term 1

In the first period of the degree in Day Six teachers are evaluated, of which two have bachelor and four are masters in science. In terms of teaching experience, mostly gained a degree in architecture, the range of teaching this age group of teachers is 6.47 to 33.18 years with an average of 16.76 years of teaching experience. You can say it's a good group of teachers education level and teaching experience for performance and practical courses. As for the theoretical treatment of the courses it is considered to have the skills for it, as the level of education the advice and teaching experience is gained mainly in the degree in architecture, which is a race with strong affinity in areas of knowledge development discipline and professional field.

For this analysis the arithmetic mean () is obtained and standard () deviation of the analytical results of each learning unit for each category. With these data, the confidence interval is stable [] to locate which language or learning units are above or below this range, because it is the case where there is difference statistically representative. Of which are above the range may be further research by going to the teachers involved to describe us extensively teaching strategies implemented to socialize in the claim transform and adopt to

implement them in other learning units in future courses. Which are below the range, repeating the above process, only to discard the strategies are not providing good results.

Tabla 8:
Evaluación del desempeño docente por unidades de aprendizaje de la cohorte DIA, Periodo 1

Unidades de aprendizaje	Categorías analíticas							
	A	B	C	D	E	F	G	H
Método del Diseño de Interiores	86	70	88	88	75	79	95	76
Fundamentos Básicos del Diseño	91	76	91	81	87	81	87	70
Medios de Representación en el Plano	**68**	62	**81**	**62**	**51**	**17**	**75**	**8**
Técnicas de Representación Básica	94	**93**	95	95	93	91	92	88
Media aritmética	85	75	89	82	76	67	87	61
desviación estándar	11.4	13.1	5.9	14.2	18.6	34.1	8.5	35.9

With the data shown in Table 8 and following the procedure described in the preceding paragraph the confidence interval is obtained [61, 95]. No learning units have an arithmetic mean value of which is above this range. It is the arithmetic average teacher performance in Media Representation in Plano is 53 points on the scale of 1 to 100, indicating the need not replicate the same strategies in future courses, however, requires innovation implemented other teaching strategies, changing attitudes and behaviors regarding implemented in this course, when you teach future courses. In other words, they should be disposed strategies that are not being well received by students, is the best way to ensure that quality education is provided and that educational processes are learner-centered and learning. Thus it is shown that teachers learn from our experiences which are accumulated to achieve ever higher levels of professionalism in the teaching profession.

a) Analysis by cohort categories DAY: Term 1

Considering the arithmetic mean of each category in Table 8, it is obtained that the confidence interval is [] = [68, 88]. Accordingly category that is above this range is content management (C = 89), indicating that students perceive teachers with high level of knowledge. In the educational process that is a very important element, there is a popular

saying no one can give what he has- not translated into teacher performance-no teacher can teach non-knows-what in this case it is recognized that the teachers involved in teaching courses learning units shown in Table 8, have high mastery of the subject content, which is updated and clarified doubts of students.

Categories of teacher performance assessment which are below the confidence interval are: Strategies for learning (E = 67). This should be assessed by the teachers involved in teaching courses learning units contained in Table 8, to find possible causes of these results, develop new strategies to implement them in future courses.

a) Analysis by cohort learning units DAY: Term 2

In this second period of the degree in DIA nine teachers are evaluated, of which five are undergraduate and four are masters in science. In terms of teaching experience, mostly gained a degree in architecture, the range of teaching this age group of teachers is 6.55 to 22.82 years with an average of 12.53 years of teaching experience.

In Table 9, the assessment data for students of teaching performance of teachers who gave seven units corresponding to Period 2 learning curriculum degree in DIA do is. With the data displayed is the arithmetic mean and standard deviation of the nine categories for each learning unit and then the arithmetic mean (88) and standard deviation (7) of the average of the seven units of learning encounters which the confidence interval is set [] = [81, 95] and to define learning units have similar results and those whose differences are statistically significant.

According to the above learning units in which students considered a good teaching performance of teachers who taught the courses they are: Anthropometry and Ergonomics (96) and applied geometry (98). On the day of evaluation of curricular courses scheduled from 7 to January 9, 2015, it will be invaluable to teachers exposed to the collective strategies used. The analysis and adoption of best teaching practices are the best references to go strengthening and professionalizing the teaching staff. This will become the best teacher training strategy where teachers with more seniority are able to learn from teachers who have less teaching experience and vice versa, this is how current learning communities where everyone can learn from all work is question retain the provision and attitude to it.

Tabla 9:
Evaluación del desempeño docente por unidades de aprendizaje de la cohorte DIA, Periodo 2

Unidades de aprendizaje	CATEGORÍAS ANALÍTICAS							
	A	B	C	D	E	F	G	H
Taller de Distribución de Espacios Básicos de Vivienda	88	80	**84**	**78**	76	84	89	76
Antropometría y Ergonomía	97	93	97	95	96	92	100	97
Geometría Aplicada	100	92	97	**98**	**98**	**96**	100	**100**
Técnicas de Representación Avanzada	88	93	93	81	79	**78**	**85**	**65**
Vanguardias del Siglo XIX	**67**	**63**	87	83	79	83	92	83
Materiales y Sistemas Constructivos	98	71	91	88	82	86	100	98
Comunidades de Aprendizaje	91	85	95	94	89	87	85	78
Media aritmética	90	82	92	88	85	87	93	85
Desviación estándar	11.2	11.9	5.2	7.6	9.0	6.0	7.0	13.3

The opposite to this is the result of the evaluation of teaching performance of teachers who taught the learning unit Vanguards of the nineteenth century where the arithmetic mean is below the lower limit of the confidence interval (80 <81), which indicates that teachers who taught other subjects of the semester implemented, according to the students, better teaching strategies, best group dynamics, better behavior and attitudes during the development of the classes. Learning or experience of teachers who taught this learning unit, for the simple fact that you are getting the lowest valuation of the students, should be cause for reflection to innovate with new strategies and not hold to repeat practices which are not being well received by students.

a) Analysis by cohort categories DAY: Term 2

Utilizing the arithmetic mean of each analytical category of Table 9, it is determined that the confidence interval is [] = [84, 91]. Accordingly, the category that is above this range is content management (C = 92) and assessment of learning (G = 93), indicating that students perceive teachers with high level of knowledge and good learning assessment strategies. Students in this cohort, continue to recognize the content management professors this semester

The categories of teaching performance whose value is below the range is use of time (B = 82). One of the challenges we have is that teachers in the training process have to fight against evil social customs, sometimes simply and with the aim of reflecting on them or

fight them, with some degree of resignation is our say-so cultural. In this case, the use of time is measured through regular attendance, punctuality and the use of class time to focus / exposure / discussion / reflection of the topics covered according to the course syllabus and planning for it.

Punctuality, responsibility and respect are values, like many others, practiced, which show the ways to fulfill our daily tasks and dealings we have with the people who interact. In other studies (Romero, Rodriguez and Ruelas, 2012) is that punctuality is one of the values requires more professionals in the labor market. If during training, timeliness practiced consistently, this will become a habit and not generate any problem, on the contrary, the punctuality helps raise self-esteem and reduce stress due to the satisfaction of feeling that is fulfilled time responsibilities, ie punctuality is not only being on time for an appointment is reached within the time agreed upon fulfilling previously agreed activities. Be on time, doing the task without prior reading topic, unveiled and sleep in class, that's disrespectful and it's like not reach, it is academic simulation is trying to express interest if he did not have. This kind of thing is what teachers have to fight to be able to say that we are providing a quality education.

a) Analysis by learning units, cohort DUP: Term 1

In this first period of twelve o'clock DUP degree in which six teachers have bachelor are four and two science teachers hold the degree of doctor involved. In terms of teaching experience, mostly gained a degree in architecture, the range of teaching this age group of teachers is 6 months to 25.21 years with an average of 5.17 years of teaching experience.

Tabla 10:
Evaluación del desempeño docente por unidades de aprendizaje de la cohorte DUP, Periodo 1

Unidades de aprendizaje	CATEGORÍAS ANALÍTICAS							
	A	B	C	D	E	F	G	H
Taller de Diseño Urbano y del Paisaje	**81**	77	89	81	74	79	**70**	**60**
Dibujo del Paisaje Urbano	**83**	**75**	**74**	**73**	**66**	75	77	69
Introducción al Estudio del Medio Ambiente	92	88	94	92	86	79	82	61
Estructuras y Funcionamiento de Ecosistemas	**100**	**100**	**78**	95	**100**	**100**	**100**	**100**
Sustentabilidad	95	92	97	**96**	95	97	93	81
Matemáticas Aplicadas	90	82	83	88	76	**62**	91	72
Topografía	97	89	96	89	89	74	98	78
Técnicas del Pensamiento	93	**75**	92	86	84	85	88	73
Media aritmética	91	85	88	87	84	81	87	74
Desviación estándar	7	9	9	8	11	12	10	13

In Table 10, the assessment data for students of teaching performance of teachers who taught the seven learning units for the period 1 curriculum of the degree in DUP do is. With the data displayed is the arithmetic mean and standard deviation of the eight categories for each learning unit and then the arithmetic mean (85) and standard deviation (10) of the average of the seven units of learning encounters which the confidence interval is set [] = [77, 93] and to define learning units have similar results and those whose differences are statistically significant.

According to the data of Table 10, the best teacher performance as teachers had taught structures and ecosystem functioning (97). This data contrasts with the fact that they are also considered as the least content domain have (78) factor must be considered for the delivery of future courses.

Teachers who receive the lowest valuation of their teaching performance are the workshop taught Urban Design and Landscape (76) and drawing Cityscape (74), valuation is below the lower limit of the confidence interval.

a) Analysis by categories, cohort DUP: Term 1

The arithmetic mean (85) of the arithmetic mean of the eight analytic categories and respective standard deviation (5) to determine the confidence interval [] = [79, 90] in which

all analytical categories are located whose distance arithmetic mean is less than or equal to one standard deviation. The analytical categories that are above this range is planning for the learning process (91). The creation of the degree in DUP was the result of a process of collective curriculum courses and subjects in the first half were carefully planned and it is expected that this valuation made by students.

The lower valuation category is the recommendation made by teachers for future courses (74). The average age of the teachers who taught classes in this period is 4.23 years. This means you are in an intense training process because they are relatively young.

a) Analysis by learning units, cohort DUP: Term 2

In this case the evaluation students make an assessment of teacher performance of nine teachers of which only one has a master's degree and other degrees. The age range of teaching this group of teachers is 11 months to 16.71 years with an average of 6.97 years of teaching experience.

In Table 11, the data of the evaluation of teaching performance students of teachers who gave seven units corresponding to Period 2 learning curriculum degree in DUP do is. With average evaluation obtained for each learning unit the arithmetic mean (84) and standard deviation (12) with which the confidence interval [], are calculated = [72, 96].

Tabla 11:
Evaluación del desempeño docente por unidades de aprendizaje de la cohorte DUP, Periodo 2

Unidades de aprendizaje	CATEGORÍAS ANALÍTICAS							
	A	B	C	D	E	F	G	H
Taller de Diseño Urbano y del Paisaje II	92	83	90	88	82	81	83	69
Geometría Descriptiva	92	76	93	81	**72**	**23**	**65**	**24**
Recursos Naturales	89	73	**86**	82	79	86	89	72
Teoría de Espacios Exteriores	97	91	**97**	95	90	92	95	83
Estadística	86	74	90	87	83	81	96	78
Comunidades de Aprendizaje	**100**	**95**	96	**100**	**93**	93	100	83
Media aritmética	93	82	92	89	83	76	88	68
Desviación estándar	5	9	4	7	8	27	13	23

The learning unit is below this range is Descriptive Geometry (66), this implies that teachers who taught it should reflect on the teaching strategies, behaviors and attitudes implemented during development of the course for the purpose of more precisely locate the things that definitely have to discard, which is in a position to improve and innovate with new strategies in future courses.

a) Analysis by categories, cohort DUP: Term 2

The arithmetic mean (84) of the arithmetic mean of the eight analytic categories and respective standard deviation (8) to determine the confidence interval [] = [75, 92] in which all analytical categories are located whose distance arithmetic mean is less than or equal to one standard deviation. The analytical categories that are above this range is planning for the learning process (93). The creation of the degree in DUP was the result of a process of collective curriculum courses and subjects in the first half were carefully planned and it is expected that this valuation made by students.

The lower valuation category is the recommendation made by teachers for future courses (68). The average age of the teachers who taught classes in this period is 6.97 years. This means you are in an intense training process because they are relatively young, adding that the race is newly created and courses is the first time you are given.

Correlation analysis

a) The case of a degree in DAY

Through correlation analysis is the strength of the relations between the academic performance of students, teacher performance as assessed by students and teaching experience in terms of age of the teachers teaching. The meeting point of these factors involved in the educational process is the thematic content of the learning units.

In Table 12, the results of academic performance obtained by students in 11 learning units degree in DIA is. For those same subjects will have the results of the evaluation to teacher

performance by the students and the average age of teachers who taught the respective courses.

With the data shown is Table 12, correlations are determined using the formula (2) with the Pearson correlation coefficient is obtained.

$$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} \qquad (2)$$

Tabla 12:
Rendimiento académico de alumnos, desempeño y antigüedad docente por asignaturas

	UNIDADES DE APRENDIZAJE	Rendimiento Académico	Desempeño Docente	Antigüedad
1	Metodología del Diseño de Interiores	7.42	82	17.18
2	Fundamentos básicos del diseño	7.88	83	6.47
3	Medios de representación en el plano	7.34	53	19.71
4	Técnicas de representación básica	7.23	93	22.82
5	Taller de Diseños de Espacios Básicos de Vivienda	8.29	82	15.99
6	Antropometría y Ergonomía	7.13	96	10.21
7	Geometría Aplicada	8.46	98	9.95
8	Técnicas de Representación Avanzada	7.4	83	10.21
9	Vanguardias del Siglo XIX	8.4	80	12.31
10	Materiales y Sistemas Constructivos	7.85	89	6.55
11	Comunidades de aprendizaje	7.48	88	9.48

The results are shown in Table 13. The first observation is that very low correlation (r = 0.124) between academic achievement and teacher performance is shown. It can be interpreted that students evaluate teacher performance, fairly and according to the analytical categories that have been used in the instrument, regardless of the qualification they have obtained in the course.

According to Berenson, Levine and Krehbiel (2001) and since r2 = 0.015, means that 1.5% of the variation in teacher performance assessment can be explained by the variation of the academic performance of students. That is, the results of the evaluation of teacher

performance are not based on the grades of the students. The strength of the association between these variables is very weak so one can not explain the other.

The second observation is that there is a low negative correlation of age with the academic performance of students (r = -0.31) and teacher performance (r = -0.38). We are clear that this is a case study, and as such can not be generalized, however, striking that the correlation is negative which means is that the higher age group teaching teachers, decreased academic performance students' academic performance and teachers.

Tabla 13:

Correlaciones en la licenciatura en DIA

	Rendimiento Académico	Desempeño Docente	Antigüedad
Rendimiento académico	1.00	0.12	-0.31
Desempeño docente	0.124	1.00	-0.38
antigüedad	-0.31	-0.38	1.00

While there is some independence of academic achievement and teacher performance (first observation), the evaluation of teaching performance is rather teaching skills related to teaching behaviors that crawl the years of experience.

These results are being heavily influenced by the media data for representation in the plane due to; on the one hand the lowest evaluation is obtained to teacher performance in the eleven subjects discussed during the two periods of the race (almost 20 points below the lower limit of the confidence interval) and on the other, the aging of teaching experience is the second highest in the group of teachers who taught subjects. At one point, following the recommendations of Berenson et al (2001) could be eliminated here in order to see if it is possible to construct a nonlinear regression model that best explains the behavior of the relationship between variables.

a) The case of a degree in DUP

In teaching courses in the 14 learning units 16 which includes the curriculum of the degree in DUP in the first two periods they involved 19 teachers. These teachers evaluate the academic performance of students and what is reported in the "Academic Performance" column of Table 14, is that corresponding to the cohort in each learning unit. "Teacher performance" column is the result of evaluating students on the performance of teachers who gave the corresponding courses do. The fact that the average age of teachers who have taught courses. This age is in college and not necessarily giving the learning unit.

Tabla 14:
Rendimiento académico de alumnos, desempeño y antigüedad docente por asignaturas

	UNIDADES DE APRENDIZAJE	Rendimiento Académico	Desempeño Docente	Antigüedad
1	Taller de diseño urbano de paisaje I	7.91	76	8.16
2	Dibujo del paisaje urbano	8.25	74	1.8
3	Introducción al estudio del medio ambiente	7.83	84	0.3
4	estructura y funcionamiento de ecosistemas	7.79	97	0.3
5	Sustentabilidad	7.76	93	12.75
6	Matemáticas aplicadas	5.61	80	4.36
7	Topografía	8.34	89	1.8
8	Técnicas del pensamiento	7.7	84	2.13
9	Taller de Diseño Urbano y del Paisaje II	8.39	84	5.07
10	Geometría Descriptiva	7.51	66	13.23
11	Recursos Naturales	7.65	82	8.16
12	Teoría de Espacios Exteriores	8.34	92	10.15
13	Estadística	6.81	84	2.13
14	Comunidades de aprendizaje	8.66	95	8.81

Tabla 15:

Correlaciones en la licenciatura en DUP

	Rendimiento Académico	Desempeño Docente	Antigüedad
Rendimiento académico	1.00	0.29	0.11
Desempeño docente	0.29	1.00	-0.14
antigüedad	0.11	-0.14	1.00

The results of the correlation analysis are shown in Table 15. It can be seen that there is positive correlation with academic performance (low, r = 0.29) teacher performance and seniority (very low, r = 0.11). In addition, we can see that there is very low (very low, r = -0.14) negative correlation between teacher performance and seniority. This means that there is a slight tendency to decrease in teacher performance with increasing seniority of teachers and vice versa.

Conclusions

Needless to say, this is a case study and therefore can not make generalizations and extrapolations to other cases although it is similar careers. The results are important for decisions to implement improvement strategies that give better attention to students translating this into better indicators of the quality of programs of DIA and DUP.

According to the consideration that academic achievement is low when the GPA is better to eight (8.0), we find that the cohort of DIA has had this level of performance, while the cohort of DUP at Time 1 was under and in period 2 achieved an average academic performance (when the GPA is more or less equal to eight and nine). Collective reflection on the academic weaknesses shown by the students regarding the learning requirements contained in the evaluation strategies can help improve learning strategies in future courses, this is an important task for the group of teachers who teach the courses during the six months from January to June 2015. The purpose of this reflection on teaching practice is the development of intervention strategies is to raise the academic performance of cohorts from more efficient school management and teacher performance.

An important aspect of this type of research is that it is at the moment is developing the training process and have the opportunity to implement intervention strategies to improve and influence the quality indicators. Under investigation, thinking, speaking, evaluating a series of events and educational outcomes at the same time the training process, thus, can meet the needs of teachers, students and managers, likewise, equipment and infrastructure all product knowledge of quality indicators and improvement proposals that the actors do as a result of collective reflection on the aspects that are considered relevant to innovate with certain teaching strategies.

Surprising that the academic performance of students, teachers performance assessment and seniority plant teachers show low or very low correlations, especially in the case of old showing negative correlations because traditionally It expects the existence of moderate to high correlations.

The increasing involvement of teachers in the process of assessment and planning curriculum courses each semester start is made, is becoming the best strategy for reflection and analysis of teaching practice. Knowledge of indicators of academic quality: student learning units, semester, cohort and teacher are the main stimulus to continue giving meaning to the planning, the development of teaching strategies and the establishment of academic goals by teachers and race coordinators. In general, these processes are those that have triggered the biggest academic synergy between groups of teachers and management team for each sector and actor was found meaning and interest to engage in the process of improvement that exists in the FAUAS.

The important thing about the above is that you have the opportunity to further research and monitoring of this case study, a situation that invites other cases of replicate any race at any university. Doing so is a good strategy to intervene in a timely manner to improve educational processes, it will be placing training processes alongside the scientific and technological progress, leaving behind the constant lament that in the educational systems is where changes They are always on the series or are heavy systems to mobilize immediately to changes demanded by the way social and labor sectors. That is, planning, monitoring and evaluation of educational processes and the impact on quality indicators is a field that is not being adequately served by educational researchers in institutions of higher

education, which is a necessity to the demands of social product of scientific and technological advance that gives the knowledge increasingly shorter periods of validity, so that the plans and curricula need to be updated according to these demands.

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