

Eficiencia terminal en Escuela de Medicina de Veracruz: una comparación entre dos modelos educativos

Dropout rate in Medical School of Veracruz: a comparison between two educational models

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Resumen

Desde la implementación del modelo educativo flexible en la Universidad Veracruzana se han suscitado cambios académico-administrativos tales como la programación académica y el uso de reportes de consulta del sistema integral de información, por mencionar algunos. El objetivo del presente trabajo es hacer un análisis comparativo entre el modelo educativo anterior (rígido) y el modelo educativo actual (flexible), en función del egreso y eficiencia terminal de los alumnos del programa de Medicina Campus Veracruz-Boca del Río.

La metodología utilizada se aplicó mediante el manejo de los reportes de consulta que arroja el sistema de información universitaria y la recopilación de documentos de dos generaciones de alumnos (hoy egresados) de acuerdo a su año de ingreso.

Los resultados permitieron identificar las ventajas y áreas de oportunidad del modelo actual, así como las fortalezas y debilidades de los diversos reportes que genera el sistema institucional, lo que permitió presentar una propuesta para su mejora.

Palabras clave: modelo educativo, eficiencia terminal, egreso.

Abstract

Since Universidad Veracruzana introduced the Flexible Educative Model, many academic-administrative changes have occurred, for example, the academic programming, the usage of inquiry reports of the integral information system, among others. The objective of this work is to do a comparative analysis between the former Rigid Educative Model and the current Flexible Educative Model, based on drop outs and the graduation rate of Medical School students at Veracruz-Boca del Rio campus. Methodology was based on the managing of the inquiry reports of the university information system, as well as data gathering applied to two generations of students (today graduates) according to the year of entry.

Results permitted to identify the advantages of the current model, as well as the strength and weakness of the diverse reports generated by the institutional system, which also permitted to prepare an improving proposal.

Key words: educational model, graduation rate, graduates.

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Introduction

Development

Within the educational framework, one of the key indicators that determine the proper functioning of universities and also involves school student performance is the terminal efficiency in administrative parameters is related to the cost-benefit, however, it is to recognize that this conception is reductionist to the complexity that represents the educational phenomenon, where the level of student learning, teacher professionalization and content of the curriculum, are also worthy dimensions of quality.

Policies established by the Ministry of Education frame the terminal efficiency as the number of regular students who complete their curriculum at a set time (SEP, 2005). This leads to an overview of spending on education considering dropout and failure rates.

This expenditure can be reflected in a cost-effective, noting that an essential condition for the allocation of resources in public universities is its performance, ie efficiency; thus, the benefit is determined by the objectives and institutional goals match the goals of the state and federal government for the country's development, while the cost of graduate is determined on the basis of their stay considering his generation, in other words, years of its entry and exit (Pierre Vielle, 1977).

This means that any educational institution creates benefits in terms of their teachers, alumni and society in general.

As a result, terminal efficiency is established as a key indicator for educational institutions, although in reality this value is relative and can be considered as graduates, graduates or those recorded at the beginning and end of a program of studies; moreover, it does not determine the value development of an educational institution to be added as other parameters such as enrollment, school performance and other no less important.

There are many denominations of the terminal efficiency, in some cases it is considered the total number of students who complete their curriculum, regardless of which may be of different generational cohorts.

Some authors define terminal efficiency as the ratio of income for the first time in a generation and the completion of their studies within the time set by the program; They acknowledge that the discharge is independent of the diploma (Camarena et al., 1983).

On the other hand, the rate of terminal efficiency, according to the National Institute for Educational Evaluation (INEE) in Mexico, is a relationship between the "estimated number of students who graduate from certain educational level or type in a given cycle school for every 100 new students, enrolled many school years behind as long as the level "(INEE, 2010).

The Organisation for Economic Co-operation and Development's calculated by dividing the number of graduates compared to those who entered "n" years earlier and completed their studies (OECD, 2006) graduate.

For example, between 2010 and 2014, the National Autonomous University of Mexico had a graduation in their degree programs from 54 to 56% (UNAM, 2015).

In these constructs, the terminal efficiency takes different paths, the fact is that educational policies currently considered essential to this indicator to measure the success of a generational cohort and therefore the performance of the school.

To date, the terminal efficiency is one of the key indicators in higher education, however, it is necessary to consider some variables that determine reality transit time student, as the failure rate, making the student later longer set by a program. Another aspect is the dropout condition that occurs for various reasons, causing students do not complete their studies and impacting the efficiency of terminal generation to which they belong.

At the Universidad Veracruzana, in addition to the above, it presents another important aspect in the regulatory framework: the transfer, which occurs when a student applies for change to other regions of the institution offering the same program.

To make the analysis of the terminal efficiency of this educational institution, it is necessary to note that the curriculum 1990 were integrated into a rigid model, so students egresaban as interns, not headlined immediately but gradually and often they remained as interns for various reasons.

In a rigid plan, if the student fails must wait at least one year to re-take the subject, holding longer in the program. It was not until 1999 that the Veracruzana University as a public institution formally began changing its rigid to flexible model model with 16 academic

programs, aimed at the formation of the student, ie, training in 4 dimensions: intellectual, human, social and professional, with a focus on competencies, which operates to date in its educational programs. One of the advantages is the incorporation of social service and receptional experience in the curriculum, which have a credit value. This allows the student completes its curriculum and have only after performing the administrative process to get your title.

On the other hand, the flexibility of the model considers time content and space, that is, any student can set the time in which he shall send his career according to the provisions of the program (maximum and minimum time standard), space, as it can take courses from another program, and the content, because it can determine the credits that will take in each school year considering the minimum and maximum set (Beltran, 2005).

It is worth mentioning that the incorporation of educational programs in this system was gradual and that several of them now are in the stage of curricular or redesign update from a diagnosis that identifies the strengths, weaknesses and problems with those who have faced. This represents an area of opportunity for each of the programs in improving their quality standards and achieving one of the goals set by the 2013-2018 National Plan of Mexico, an arduous task for educational institutions responsible for the human capital formation, in which is included the practitioner of health (National Plan 2013-2018)

Within this aspect, an essential aspect in society is health policy, which seeks to strengthen protection measures and health promotion and disease prevention to ensure service quality. Therefore, graduates of this discipline must respond to these conditions covering a profile according to social needs.

One of the programs offered by the Universidad Veracruzana is a degree of Surgeon in its five campuses. Also, the Faculty of Medicine Campus Veracruz, Boca del Rio, remained with a rigid model from 1995 to 2006, since then market conditions and needs were different. In this model, students concluded their studies degree in general medicine in seven years (5 years curriculum, 1 year internship and one year of social service), running as an intern until they submit their degree examination and / or any other form established by the institutional rules for their degree. This could vary "n" number of years, so that there was a discharge, but not terminally efficiency as already mentioned.

For 2007, the University at current educational model that allows students to pursue their curriculum according to the times set by the program was incorporated: in minimum time (6 years), a standard time (7 years), or maximum (9 years) time, according to your needs and dedication.

With this background the terminal efficiency indicator is analyzed, taking clear that this only represents a small part of the educational phenomenon, but still can be a benchmark for comparing the previous model with the current.

Operationally information recovered through the files and the Integrated University Information System (SIIU) in paragraph students; these data were analyzed for comparison intraprogramas considering the last two generations of rigid plan and the first two of the current model.

In the following analysis scheme was Considered:

The inflow and outflow of the same generational cohort taking into account the temporary and permanent low of students who for various reasons decided not to continue the program permanently and / or temporary, and students who for various reasons flunked and were delayed in graduation.

The Integrated University Information System (SIIU), reports concentrate students enrolled, students enrolled in second registration, reporting of students with temporary low and deregistration, summary of students enrolled-reinscribed-graduates and reporting of the population were considered school alumni, in this case the generations 2007 and 2008 for the flexible system (SIIU, 2015).

In the case of rigid system, the documents found in the archives of the School for the last two generations 2005 and 2006 (Archives, 2015) were analyzed.

Results

In the rigid plan according to Table I desertion of 16.39% (20 students) and 11.82% (13 students) for generations 2005 and 2006 respectively is identified due to retirements and transfers. Therefore, 122 and 110 students enrolled, only 102 and 97 students passed through the whole curriculum.

Table I. real Inscribed, lower and / or transfers Rigid Plan

PLAN RIGIDO				
Generación	inscritos	bajas/traslados	Indice de Deserción	reales inscritos
2005	122	20	16.39	102
2006	110	13	11.82	97

In the flexible plan, Table II shows a dropout rate of 8.54% and 18.79% in the generations 2007 and 2008 respectively, noting that in 2008 there were students that reach the curriculum returners current model, increasing low tuition but also for various reasons.

Table II real Inscribed, lower and / or transfers Flexible Plan

PLAN FLEXIBLE					
Generación	Inscritos	Bajas	Traslados	Índice de deserción	Reales inscritos
2007	113	4	5	8.54 %	104
2008	152	24	3	18.79 %	128

When comparing the two models is identified in the actual registered egress (rigid plan) and terminal efficiency (flexible plan). See Table III.

Table III Comparison of rigid and flexible Model Model

PLAN RIGIDO					PLAN FLEXIBLE					
Generación	reales inscritos	Egreso	titulados	índice de titulación	Generación	reales inscritos	Egreso	Eficiencia Terminal	Indice de Eficiencia Terminal	en tránsito
2005	102	102	92	90.20	2007	104	82	82	79	22
2006	97	97	94	96.91	2008	128	99	99	77	6

Also, the table above shows a higher rate of titration in the rigid plan, however, it is important that the titration was given progressively, ie generation 2005 concluded his studies in 2011, the closing date of this study (August 2015) have graduated 92 students from a total of 102 over 4 years. This means ten graduates are still as interns, something that does not happen in

the flexible model, where in 2007 the generation of 104 enrolled, 82 graduated, being the terminal efficiency, so just processed its title and professional certificate.

Another essential aspect is the retirements and transfers made, as currently most students who do not complete their studies do so because of personal and / or economic conditions, which has a negative effect on the terminal efficiency if taken into account year of income generation.

Furthermore, the residence time of each generation in the flexible model is determined by the minimum time, the standard time and the maximum time. Table IV shows the breakdown of the timing of exit; in generating 2007, the highest proportion of graduates (36.18%) occurred in the standard period, and in 2008 the largest outflow was in a period longer than the minimum but less than the standard (51.97%), ie, time spent on the program was six and a half years including social service and receptional experience, a condition that in the rigid model is six years with quality internship.

Table 4. Frequency distribution of the number of periods required to complete the curriculum.

Generación)2007)				Generación)2008)		
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Comparative analysis considered low and / or transfers, however, according to the concepts presented in the terminal efficiency, Table V shows the comparative models based on income generation.

Table V. Comparison of rigid and flexible models considering the year of income generation.

PLAN RÍGIDO					PLAN FLEXIBLE					
Generación	inscritos	Egreso	titulados	índice de titulación	Generación	inscritos	Egreso	Eficiencia Terminal	Índice de Eficiencia Terminal	en tránsito
2005	122	102	92	75.41	2007	113	82	82	72.57	22
2006	110	97	94	85.45	2008	152	99	99	65.13	6

Again, the highest percentage of graduates is presented in the rigid model, but as already mentioned, this degree was obtained in different years (2011-2015), which does not happen with the flexible model, where the qualification was obtained in the year when students covered all (100%) of the credits of the curriculum.

All this information is critical in making decisions of those responsible for each of the programs and seek to improve them.

Conclusion

The terminal efficiency is a key indicator in educational institutions. In this case, the current model of the Universidad Veracruzana, implemented at the Faculty of Medicine Campus Veracruz-Boca del Rio, has allowed the student to pursue their studies in a range of 6 to 9 years, including social service, which courses in adherence to standards in the health sector. In this way, the student gets the advantage that at the end of their studies just have to make the administrative process for their degree and professional certificate.

On the other hand, this model has eliminated the internship, although it must be recognized that there are still weaknesses that can be areas of opportunity to further raise the terminal efficiency and reduce attrition.

Finally, the management of Integral University System as a subsystem students is a very useful management tool that allows the examination of educational programs and streamline the management of school procedures.

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