Accreditation of university courses and its influence on the continuous improvement of the curriculum: a comparative study

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Abstract

SINAES, the official accreditation body in Costa Rica, created by Law 8256, guarantees the quality of public and private higher education. Since 2010, the University has voluntarily joined SINAES, accrediting five programs. A specialized department advises on self-assessment processes for accreditation, including professionals in quality management and curriculum. This paper presents the results of an evaluation model that includes accreditation criteria, which is organized into components, criteria, standards and evidence, assessing the context, resources, educational process and results. A comparative analysis of Nursing, Architecture and Law identifies common and differentiated criteria based on quantitative and qualitative studies. In addition, the alignment with the institutional mission, the availability of resources and viability are evaluated. This methodological model systematizes objectives, actions and resources for a detailed comparative analysis.

KEYWORDS: HIGHER EDUCATION, ACCREDITATION, CURRICULUM, CONTINUOUS IMPROVEMENT, INTEGRATED MANAGEMENT SYSTEMS.

Introduction

The official accreditation body for university courses in Costa Rica is SINAES, created by Law 8256 [1], to ensure the quality of public and private higher education. In 2010, the Universidad Autónoma de Centro América voluntarily joined SINAES, and since then has accredited five courses; three of which have maintained their accreditation status for several periods. The University has a department that provides advice to courses for self-assessment processes with a view to accreditation and incorporates professionals in quality management and curriculum for self-assessment and monitoring of actions related to these processes.

The quality assessment model for undergraduate courses is organized by components, criteria, standards and evidence, which evaluate the relation with the context, resources, educational process and results [2]. Based on the evaluation of the evidence, the criteria that present an opportunity for improvement are identified; therefore, a commitment to improvement is designed.

From this accreditation model, updating educational programs involves evaluating criteria linked to various components such as those related to Correspondence with the context, Curriculum, Information and Resources Center, Equipment and materials, Teaching-learning methodology, Research, Extension and Student performance. Taking these criteria as a reference, a comparative analysis of the Nursing, Architecture and Law careers at the University is carried out.

In addition to the differences inherent to these disciplines, each degree has its own particularities in terms of the characteristics of the labor market, training, teaching methodology and curriculum management, among other aspects. Therefore, the processes of updating the curriculum may coincide or differ in some tasks; this implies that the objectives and indicators for continuous improvement will be assumed in a particular way.

Theoretical framework

Integrated Management Systems (IMS) have become a fundamental piece for higher education institutions seeking to guarantee quality in all their processes. IMS allow the coordination and control of the various management systems in an organization, facilitating continuous improvement and operational efficiency [3].

Self-assessment models in universities are intrinsically related to IMS, as both mechanisms seek to identify areas for improvement and ensure compliance with quality standards. Self-assessment is a key tool within IMS, as it allows institutions to identify strengths and weaknesses in their processes and establish improvement plans based on objective evidence [4]. Self-assessment, when integrated within an IMS, becomes a continuous process that fosters a culture of quality and institutional responsibility.

The SINAES self-assessment model is based on the participation of universities and programs in an internal diagnostic process. This process involves the detailed analysis of five main areas: (1) institutional mission and vision, (2) pertinence and social relevance of the program, (3) curricular design, (4) human and physical resources, and (5) teaching-learning processes [5]. The self-assessment is complemented by external evaluation by academic peers, who validate the institution's internal findings and recommendations [6].

The impact of self-assessment and accreditation processes on Costa Rican universities has been broad and multifaceted. First, accreditation has become a seal of quality that reinforces public confidence in academic programs and increases the competitiveness of universities both nationally and internationally [7]. Furthermore, empirical studies suggest that accredited universities tend to significantly improve their infrastructure, academic staff, and teaching resources [8].

Method

First, to compare the updated curricula of the careers, the common and differentiated criteria included in the improvement commitments were identified. These criteria are supported by the results of quantitative studies of the populations that evaluate the curriculum, namely, students, professors, graduates, employers and administrative staff of the University. Also included are the qualitative evaluations and analysis of external peers, who make up a team of disciplinary experts who are unrelated to the University, and with training specific to each discipline.

The relevance of these criteria to the institutional mission and vision of each program was then analyzed through the projected impact of improvement actions. The availability of resources available to the program and the University and their viability were considered, since some of the quality indicators were only partially achieved; this allowed the identification of success indicators.

Thirdly, information on the objectives, actions, schedules, those responsible and budgets assigned to each career was collected and organized, which allowed for systematic structuring for comparative analysis. This methodological procedure is a model that includes recommended aspects for evaluation designs [9] that include the definition of the object of the evaluation, the evaluation design, the definition of criteria and categories of analysis, as well as their weightings.

Results

As a result of the analysis process of all the criteria and indicators that are related to changes and improvements to the study plan in the 3 mentioned careers, 6 analysis categories were established (Table 1).

Table 1. Categories of analysis based on criteria and indicators related to changes and improvements in the curriculum in 3 university careers.

Category of analysis	Architecture	Law	Nursing
1. **Redesign and curriculum update**	Comprehensive redesign with a focus on updating entry and exit profiles and thematic areas.	Update according to the needs of the context and constructivism.	Update based on discipline and current situation.
	Curricular flexibility through the exchange of credits for academic activities.	Curricular flexibility through elective courses.	Restructuring of the course sequence to improve theoreticalpractical integration
2. **Integration of theory and practice**	Integration of courses that link theory with practice.	Inclusion of legal research methods and methodological strategies to address changes in the context.	Integration of teaching strategies to encourage scientific practices in at least 50% of the courses.
3. **Multidisciplinarity and humanism**	Inclusion of multidisciplinary courses and focus on developing key skills for the 21st century.	Incorporation of a multidisciplinary approach as a graduation requirement and consolidation of the humanistic approach.	Proposal for changes based on consultation with graduates, ensuring curricular flexibility and graduation options.
4. **Global competencies developments**	Readings and materials in other languages in the courses.	Readings and academic activities in another language.	Inclusion of teaching materials and readings in another language in 100% of the courses.
	Subscription to specialized magazines.		Inclusion of English lessons in the curriculum.
5. **Academic evaluation and monitoring**	Updating grade tests and developing instruments to assess skills and abilities.	Promoting a culture of evaluation and quality management in the career.	Mechanisms for extra-class consultation and course updates establishment.
	Annual meetings to review and update the curriculum.	Curriculum update based on a needs assessment.	
6. **Educational and methodological innovation**	Incorporation of teaching strategies that encourage research, critical and reflective thinking.	Professor training in philosophical and methodological principles, as well as in the integration of information technologies in the educational process.	Didactic strategies to encourage scientific practices and consultation mechanisms in each course.
	Updating learning assessment methods in courses.		

Based on the 6 categories of analysis above, a weighted assessment process was carried out to define the level of relevance of each category, according to each degree (Chart).

Chart 1. Weights assigned to each analysis category, according to university degree.

Assigned rating	Comparison Category	Career		
		Architecture	Law	Nursing
10	Redesign and update of the curriculum	10	7	10
8	Integration of theory and practice	8	6	8
7	Multidisciplinarity and humanism	5	7	5
6	Global competencies development	4	4	6
8	Academic evaluation and monitoring	8	5	6
7	Educational and methodological innovation	7	5	5
46	Sum	42	34	40
	Percentage	91%	74%	87%

Discussion

In the case of Architecture, a profound renewal of the curriculum of 91% of the study plan, highlighting theoretical-practical integration, and the inclusion of professional skills. In the Law program, emphasis is placed on continuous updating of the curriculum in response to contextual changes, with a strong focus on interdisciplinarity, also integrating global competencies (74% of redesign). Compared to Nursing, which reflects the need to adapt and restructure the curriculum to respond to both the current demands of the discipline and the needs of students, maintaining a balance between theory and practice, and promoting the inclusion of global competencies (87% of redesign).

Conclusions

This work reflected three points of agreement in the careers subjected to this study. Firstly, curricular flexibility and multidisciplinarity stand out, since all courses integrate elements related to this, and promote a multidisciplinary approach from their plans. The second is the global approach, since the three disciplines recognize the importance of incorporating global content, such as readings in other languages, academic activities and courses in English; and finally, innovation in education, since all the careers implement didactic and methodological strategies to improve learning, based on the updating of evaluation methods.

Limitations and Future Research

The limitation of this type of research is that the curriculum is not neutral. There are always internal and external interests that can delay the implementation of changes. Future prospective studies will make it possible to keep the study plans updated, anticipating the needs of the work market.

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