

Integrated quality assurance model and its impact on the accreditation of university professional careers

[Modelo integrado de aseguramiento de la calidad y su impacto en la acreditación de carreras profesionales universitarias]

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Resumen

El objetivo de la presente investigación es presentar los resultados de implementar un Modelo integrado de aseguramiento de la calidad y el análisis de su impacto en la acreditación de carreras profesionales universitarias de una universidad privada peruana, con varios campus a nivel nacional. Con ello, la investigadora desea contribuir con un granito de arena en la superación de los bajos índices de avance en los procesos de Licenciamiento y Acreditación reportados por el SINEACE; así como, el mínimo posicionamiento que tienen las universidades peruanas en los rankings y ratings globales. Finalmente, los resultados obtenidos son relevantes en tanto se requiere que los estándares de calidad de la educación superior universitaria en nuestro país despeguen para alcanzar niveles competitivos en la región y en el mundo. La metodología utilizada se basó en un estudio observacional, analítico, de corte longitudinal retrospectivo de 52 procesos de acreditación de carreras profesionales, de una universidad privada peruana, durante los años 2017-2019 y 2020-2022. La diferencia entre ambos periodos lo constituye la implementación de un Modelo integrado de aseguramiento de la calidad, basado en un modelo de calidad propio que, de acuerdo con los datos analizados, derivó en un impacto positivo en los procesos de acreditación de las carreras profesionales, concluyendo que el implementar el modelo integrado de aseguramiento de la calidad a través de los niveles operativo, táctico y estratégico facilitó además el involucramiento general de la institución en los procesos de acreditación y de calidad en general, favoreciendo las condiciones organizacionales, el rol más colaborador de la oficina de calidad y el mayor apoyo y soporte de la Alta Dirección de la Universidad.

Palabras clave: Calidad educativa; Acreditación, Modelo integrado de aseguramiento de la calidad, Procesos, Competitividad

Abstract

The objective of this research is to present the results of implementing an integrated quality assurance model and the analysis of its impact on the accreditation of university professional courses at a private Peruvian university, with several campuses nationwide. With this, the researcher wishes to contribute with a grain of sand in overcoming the low rates of progress in the Licensing and Accreditation processes reported by SINEACE; as well as the minimal positioning that Peruvian universities have in global rankings and ratings. Finally, the results

obtained are relevant as it is required that the quality standards of university higher education in our country take off to reach competitive levels in the region and in the world.

The methodology used was based on an observational, analytical, retrospective longitudinal study of 52 professional career accreditation processes, from a Peruvian private university, during the years 2017-2019 and 2020-2022. The difference between both periods is the implementation of an integrated quality assurance model, based on its own quality model that, according to the data analyzed, resulted in a positive impact on the accreditation processes of professional careers. Concluding that implementing the integrated quality assurance model through the operational, tactical and strategic levels also facilitated the general involvement of the institution in the accreditation and quality processes in general, favoring organizational conditions, the most collaborative role of the quality office and the greatest support and support of the Senior Management of the University.

Keywords: Educational quality; Accreditation, Integrated quality assurance model, Processes, Competitiveness.

1. Introduction

The research is conceived in response to the problematic reality existing in Peru with respect to the quality of university professional training and how universities should implement quality assurance systems that have a positive impact on it, allowing them to meet high quality standards established by authorized third parties and achieve the Accreditation of their professional careers.

In the Americas, the United States has been developing accreditation processes since the 1800s, driven by ensuring the quality of educational service and generating policies that ensure the transfer of credits and equivalences between different educational institutions at the national and international level. Each accrediting agency defines its own quality model, which contains the quality requirements that every professional career must meet if it wishes to be accredited. In the 90s, the focus of quality assessment was focused on institutional inefficiency, lack of transparency, low scientific productivity, inefficiency of the academic body and low impact on learning, among others; while now the greatest challenge focuses on the institutional effectiveness supported by the quality cycle (Guzmán, 2017).

In Peru, Law No. 28740 of May 2006 created the National System of Evaluation, Accreditation and Certification of Educational Quality (SINEACE), in order to "guarantee society that public and private educational institutions offer a quality service", in July 2007 the Regulations of this Law were approved and in December 2008, the first "Quality Model for the Accreditation of University Professional Careers" (Resolution of the Board of Directors No. 002-2008-SINEACE-P), with which university professional careers could only be evaluated for accreditation purposes.

Our neighbors to the north have been evaluating their university careers for more than 200 years, while we have only 16. In this way, in October 2014 the "National Assembly of Rectors" (ANR), an institution in charge of regulating the creation and operation of universities, as well as the granting of degrees and degrees, was deactivated in our country. This gave way, through University Law No. 30220 enacted in July 2014, to the creation of the "National Superintendence of University Higher Education (SUNEDU), responsible for licensing universities in compliance with basic quality conditions, to offer the service of higher education.

In addition to licensing and accrediting, universities also seek to be competitive in comparative Rankings and Ratings; however, the position of Peruvian universities in world rankings is still limited. For example, in the QS World University Rankings 2022-2023, a Peruvian university only appears after the first 300 places; The World University Rankings 2023 includes a Peruvian

university after the first 500 places; and in the Academic Ranking of World Universities 2022, published by World Class Universities, no Peruvian university appears.

SUNEDU, 14 years after its creation, reported that 54% of the country's regions are at an initial level with respect to the institutional licensing process, 35% are at a medium level and only 12% are at an important level of progress. The regions with a significant level of progress are metropolitan Lima, Callao and Tacna. Likewise, with respect to accreditation processes, 69% of Peruvian regions are at a starting level with respect to the accreditation process at the institutional level, 31% are at a medium level, and 0% are at an important level. As can be seen so far, adequate quality management in Peruvian universities is a crucial need for the future development of the country (SINEACE, 2022).

Quality is a subjective term with many meanings, which is why there is a lack of rigor and conclusions in fundamental aspects such as the relationship between quality and profitability or the lack of consensus in cumulative research on its effects; therefore, clarifying its definition favors constructive dialogues around it (Camisón et al., 2006). On the other hand, the term educational quality implies the satisfaction of the needs and expectations of all stakeholders such as students (main), families (secondary), society and business (tertiary), as well as managers and internal administrators. If the concept of educational quality is clarified, it also clarifies the path to follow to achieve the objectives of satisfying stakeholders, securing the future of countries and ensuring the profitability of organizations. In this sense, it is also important to recognize that quality is made by people who are motivated and trained to do so (Senlle & Gutiérrez, 2005)

Modern trends show that universities are searching for new solutions to increase efficiency and improve quality by considering approaches of quality system development that link with strategy and include extensive analysis of risks, processes and stakeholders (Medne et al., 2020).

Quality management comprises the "set of actions and tools that aim to avoid possible errors or deviations in the production process and in the products or services obtained through it". In the case of universities, quality management is "the systematic application of models already created and adopted internationally to manage organizations" (Senlle & Gutiérrez, 2005). A model is the representation of an object, a system or an idea without being the entity itself (Silva et al., 2014). Not managing quality is costly, as it has to be reviewed, fixed or repeated for the non-achievement of results, being that, in the case of education, it is even more serious because its impact affects people's lives. Currently, higher education institutions must not only maintain their relevance through compliance with "basic quality conditions", but also aspire to accredit compliance with high quality standards through accreditation processes and demonstrate their competitiveness through their participation in rankings and ratings.

The objective of this research is to present the results of implementing an integrated model of quality assurance in the accreditation of university professional careers.

2. Materials and Methods

An observational, analytical, longitudinal retrospective study of 52 professional career accreditation processes was carried out at a Peruvian private university with several campuses nationwide, during the years 2017-2019 and 2020-2022. During the first three years, the professional careers focused on complying with the quality model of a specific accreditation agency, trying to adapt to the quality requirements demanded by this model, while, in the following 3 years, they worked to comply with a single quality model of their own.

The population, therefore, is made up of the 52 processes of accreditation of professional careers carried out during these two periods. The techniques and instruments used to collect the

information were in-depth interviews and documentary review. For the in-depth interview, an In-depth Interview Guide was prepared to record the assessment and expert judgment of the directors whose professional careers developed accreditation processes in both periods, while for the documentary review, a record of the results of the Decision Reports of the accrediting agencies was prepared.

The method developed contemplated 4 stages:

Stage 1: Identification of the accreditation processes developed during the years 2017 and 2022, differentiating them into 2 groups before and after the implementation of the quality assurance system.

Stage 2: Review of the accreditation agreements issued by the accrediting agencies for the professional careers evaluated in the established range of years, and interviews were conducted with the career directors who had evaluated their respective professional careers in both periods.

Stage 3: Analysis of the integrated quality assurance system, to describe its essence and understand the reason for the positive impact generated, seeking to obtain knowledge that could be shared with other universities.

Stage 4: Treatment of the data collected through the in-depth interview and documentary review in a spreadsheet, to analyze the changes and impacts achieved.

3. Results

Stage 1: Identification of the accreditation processes developed during the years 2017 and 2022:

During the period 2017-2019, 25 accreditation processes were identified: 22 processes with the SINEACE agency, 2 processes with the ICACIT agency and a single international process with the ABET agency.

During the 2020-2022 period, 27 accreditation processes were identified: 6 processes with the SINEACE agency, 13 processes with the ICACIT agency, one international process with the ABET agency and 7 international processes with the CONAED agency.

The second period contemplated additional challenges to the first, such as the COVID-19 pandemic and the evaluation of 2 careers simultaneously on several campuses.

Stage 2: Review of the accreditation agreements issued by the accrediting agencies and interviews with the directors of careers with evaluations in both periods:

Through the accreditation agreements, the achievement of accreditation or not, as well as the time of its validity, was verified. On the other hand, from the interviews with the career directors, the critical aspects at each stage were identified, as well as the good practices, the obstacles, as well as their vision on the way of working before and after the implementation of the integrated quality assurance system.

Stage 3: Analysis of the integrated quality assurance system:

The Integrated Model of Institutional Quality Assurance considered the creation of its own Quality Model that considered the quality requirements of the following external regulatory entities: a) SUNEDU-Compliance with basic quality conditions, b) SUNEDU-Renewal of institutional license, c) SINEACE-Undergraduate, d) ICACIT, e) CONAED, f) IAC-CINDA.

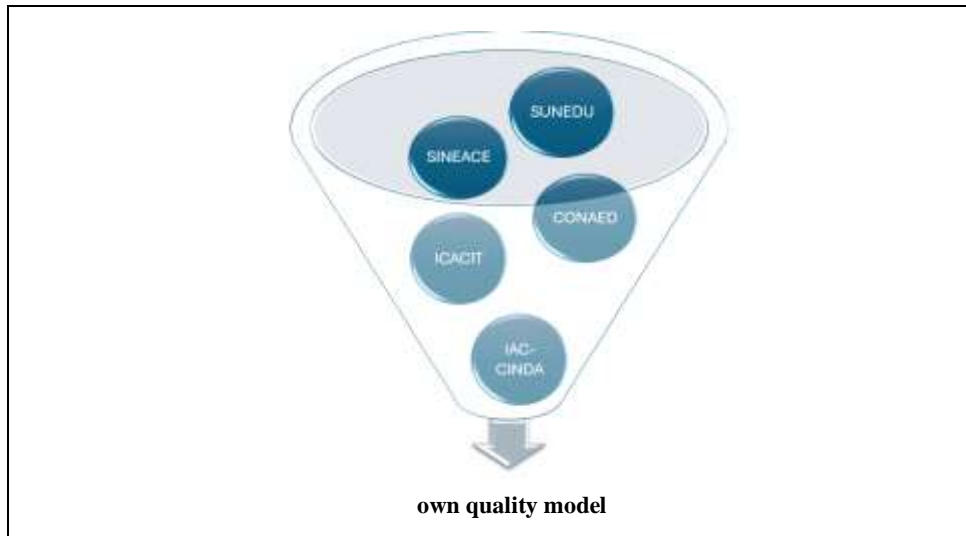


Figure 1. Illustration on the own quality model

The own Quality Model considered dimensions, criteria and quality standards. For each quality standard, a requirements format was designed to detail the specifications that had to be met in order to meet both internal and external quality requirements, specifying the organic unit responsible for their care.

Considering the Integrated Quality Assurance System, the Integrated Quality Assurance System contemplated the generation of three cycles of continuous improvement, through 3 levels:

a) Operational Level: In each institutional area, the Operational Plan was worked on, an annual planning instrument that contains the goals that the area must execute during the year, the activities to achieve them, the evidence of their execution, the scheduling of the execution, as well as the person responsible and the resources necessary to do so. This Plan constituted a permanent management document, monitored 2 times a year in its compliance by the institutional quality area. The essence of this plan is that it included activities aimed at complying with the quality standards of the Quality Model itself, while the responsibility for compliance with quality standards was deployed throughout the organization through this plan.

b) Tactical Level: Annually, the Institutional Self-Assessment was developed, to globally verify compliance with the Own Quality Model. The process included

- Collection of evidence in accordance with the requirements of the Own Quality Model.
- Application of satisfaction surveys to students, graduates, teachers and administrative staff.
- Physical audit of infrastructure and equipment.
- Internal audit of the institution's processes.

The result of the institutional self-assessment was consolidated in the Corrective and Improvement Actions Matrix, a formal repository of all those improvement opportunities identified and from which improvement actions were prioritized that should be executed through the Operational Plan for the following year.

c) Strategic Level: The Matrix of corrective and improvement actions led to the preparation of the Quality Management Plan, aimed at monitoring compliance with goals aimed at compliance and promotion of quality with institutional scope.

What is explained in this section is illustrated through the following graph:

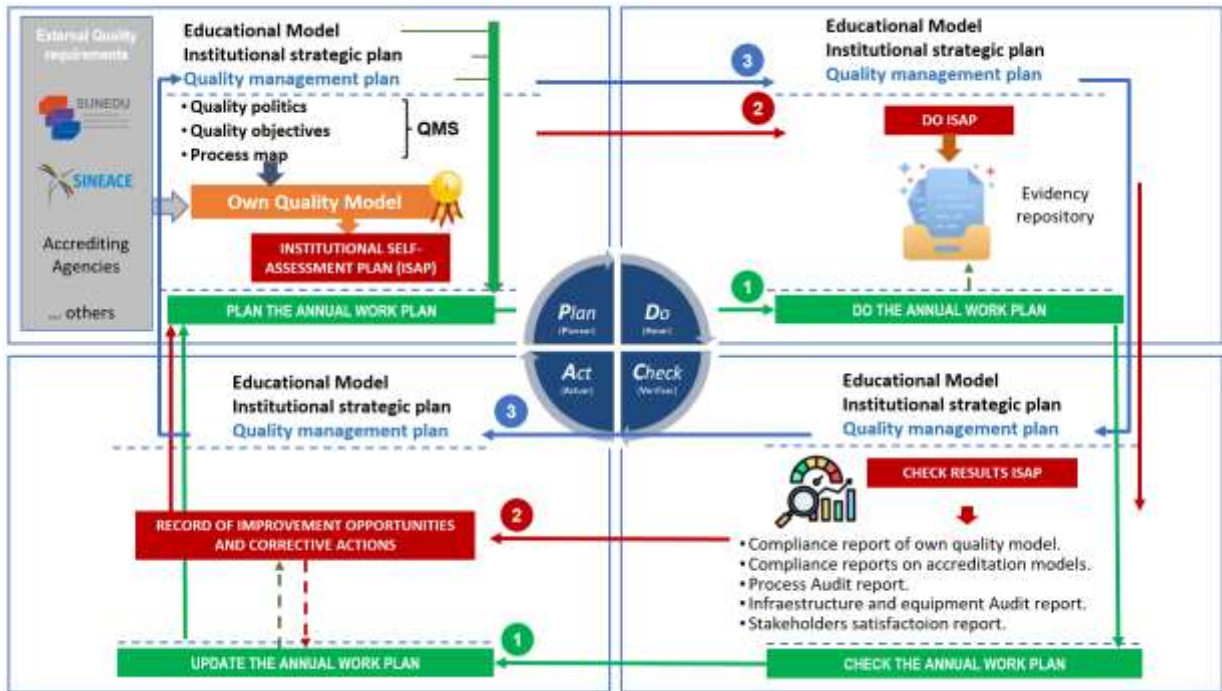


Figure 2. Integrated quality assurance model.

Stage 4: Processing of the data collected.

The data were processed, and the following results were obtained:

Table 1: Quality assurance model

| Criteria | 2017-2019 | 2020-2022 |
|-------------------------------|--|-----------------------------------|
| Scope | Focuses on a single quality model | Integrates various quality models |
| Maturity Level | Well | Very good |
| Human component: | | |
| Quality Committee. | One on each campus | Single intercampus |
| Support Teacher. | 12 Hrs. only the year of external evaluation | 28 Hrs. permanent |
| Institutional Quality Office. | Guiding role | Collaborative role |
| Senior Management | Reduced support | Committed support |

Table 1 shows that the Integrated Quality Assurance Model, based on its own quality model, increased the institution's maturity level in quality management, facilitated the simultaneous development of accreditation processes on several campuses at the same time, and better involved Senior Management in quality processes.

Table 2: Accreditation processes for university professional careers

| Indicator | 2017-2019 | | 2020-2022 | | Variation |
|---|-----------|------|-----------|-------|-----------|
| | Q | % | Q | % | |
| # Careers evaluated. | 25 | | 27 | | +2 |
| % Effectiveness (Accreditations achieved) | 23 | 92 % | 27 | 100 % | +8 |
| % High Effectiveness (Accreditations achieved for the maximum period of validity) | 6 | 24 % | 16 | 59 % | +35 |
| % International accreditations | 1 | 4 % | 8 | 30 % | +26 |
| % No accreditations | 2 | 8 % | 0 | 0 % | -8 |
| # Accrediting agencies | 3 | | 4 | | +1 |

Table 2 shows the positive impact generated by the Integrated Quality Assurance Model in the second period, after its implementation. The number of careers evaluated, the effectiveness of the results, the improvement in the validity times of the accreditations achieved increased, we worked with more international accrediting agencies and no accreditation was lost.

4. Conclusions

The objective of presenting the results of implementing an Integrated Quality Assurance Model, based on its own quality model and the analysis of its impact on the accreditation processes of university professional careers of a Peruvian private university, was achieved.

Analyzing the results of the accreditation processes of careers before and after applying the Integrated Model of University Quality Assurance, it is possible to observe improvements in all the indicators evaluated:

- +2 increase in the number of professional careers evaluated for accreditation purposes.
- Increase by +1 in the number of accrediting agencies with which we worked.
- Increase of +8 in the percentage of accreditation processes of careers that culminated in accreditation.
- Increase by +35 in the percentage of accreditation processes of careers that culminated in accreditation for the maximum period of validity granted by the accrediting agency.
- Increase of +26 in the percentage of accreditation processes of careers that culminated in accreditation.
- Reduction by -8 in the percentage of accreditation processes of careers that culminated in non-accreditation

The implementation of an integrated quality assurance model allowed the institution to organize how to face and make sustainable its continuous improvement processes to comply with internal and external quality requirements.

In this sense, the strategy of integrating the requirements into their own Quality Model favored the development of common accreditation processes in all professional careers, regardless of the agency with which they had decided to accredit. This in turn promoted more collaborative work between the actors of the same intercampus professional careers, with the institutional quality office and with the University's Senior Management.

Likewise, the implementation of the Integrated Quality Assurance Model through 3 levels: operational, tactical and strategic facilitated the general involvement of the institution in the accreditation processes of professional careers.

Based on the above, it is concluded that the implementation of an integrated quality assurance model favors the organizational conditions to coordinate and be more effective in the desired

results, in addition, it developed integrated intercampus accreditation processes, promoted a more collaborative role on the part of the quality area and promoted greater support and support from the institution's Senior Management.

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ANNEX 01.**SEMI-STRUCTURED IN-DEPTH INTERVIEW GUIDE**

Objective: To know the perceptions, judgments and evaluations of the career directors who had the opportunity to accredit their professional careers, both in the period 2017-2019, and in the period 2020-2022.

Study population: 4 career directors who had the opportunity to accredit their professional careers, both in the period 2017-2019, and in the period 2020-2022.

| People to be interviewed | Career | ACRED1 | ACRED2 |
|--------------------------|--------|--------|--------|
| Director | T-DER | 2018 | 2022 |
| Director | C-CIV | 2018 | 2022 |
| Director | C-ISC | 2018 | 2022 |
| Director | T-IND | 2018 | 2020 |

Protocol:

The directors will be summoned by videoconference to conduct the in-depth interview.

They will be told that the interview seeks to identify the characteristics of the accreditation processes developed by their professional careers at two different times.

Interviewees will be informed that their names will be kept confidential in the results reports.

In-depth interviews will be applied.

The information will be recorded in a spreadsheet.

The interview will conclude by thanking the collaboration of the career directors, in this research that seeks to propose an integrated model of quality assurance that positively impacts the accreditation of university professional careers.

Interview Guide:

Good morning / afternoon / evening

Thank you very much for accepting this in-depth interview to know your perception, judgment and assessment of the accreditation processes experienced in your professional careers during the periods 2017-2019 and 2020-2022.

We will ask questions, to which we will have to answer for each period:

| Question | Period 2017-2019 | Period 2020-2022 |
|---|---------------------|---------------------|
| 1. In what years was your professional career accredited between 2017 and 2022? | | |
| 2. What characteristics about the process experienced to accredit your professional career do you remember from each period in which it was accredited? | | |
| 3. What success criteria do you consider contributed to achieving the accreditation of your professional career in each period? | | |
| 4. What aspects of improvement do you consider the accreditation processes of your professional career left in each period? | | |
| 5. What role did the quality committee that led the accreditation process of your professional career play in each period? | | |

| | | |
|---|--|--|
| 6. Do you consider that the quality committee really played a crucial role in achieving the accreditation of the professional career? Why? | | |
| 7. What were the characteristics of the accreditation teacher who accompanied the accreditation process of the professional career? (# Hours, permanence in time (years), impact) | | |
| 8. What role did the quality office play in the accreditation processes of your professional career? | | |
| 9. How much did the accreditation action plan provided by the quality office and added to its Annual Operational Plan contribute? | | |
| 10. What role did the university's senior management play in the accreditation processes of your professional career? | | |
| 11. What facilities did the university's senior management provide to obtain the accreditation of your professional career? | | |
| 12. Describe the quality assurance system that your professional career had in each period. | | |