



ID del documento: SHE-Vol.2.N.6.002.2025

Strategic plan development: A methodological proposal for public higher education institutions

Desarrollo del plan estratégico: Una propuesta metodológica para instituciones públicas de educación superior

Autores:

Karen Morales Muñoz¹, Naxia Alfaro Arriagada², Yisleny Pino Sandoval³, Fernanda Gutiérrez Gutiérrez⁴, Jorge Hochstetter Diez⁵

¹Universidad de La Frontera, Temuco, Chile, karen.morales@ufrontera.cl, <https://orcid.org/0000-0002-4342-6082>

²Universidad de Aysén, Aysén, Chile, naxia.alfaro@uaysen.cl, <https://orcid.org/0009-0006-0362-6190>

³Universidad de La Frontera, Temuco, Chile, yisleny.pino@ufrontera.cl, <https://orcid.org/0009-0008-5518-4181>

⁴Universidad de La Frontera, Temuco, Chile, fernanda.gutierrez@ufrontera.cl, <https://orcid.org/0000-0002-8112-8860>

⁵Universidad de La Frontera, Temuco, Chile, jorge.hochstetter@ufrontera.cl, <https://orcid.org/0000-0002-8494-8100>

Corresponding Author: Karen Andrea Morales Muñoz, karen.morales@ufrontera.cl

Reception: 08-march-2025 **Acceptance:** 25-april-2025 **Publication:** 15-june-2025

How to cite this article:

Morales Muñoz, K., Alfaro Arriagada, N., Pino Sandoval, Y., Gutiérrez Gutiérrez, F., & Hochstetter Diez, J. (2025). Strategic plan development: A methodological proposal for public higher education institutions. *Sapiens in Higher Education*, 2(6), e-20602. <https://doi.org/10.71068/xqrdns61>



Resumen

Los Planes Estratégicos en educación son herramientas que permiten evaluar los objetivos y directrices institucionales que orientan el desarrollo y crecimiento de las organizaciones. Actualmente, la ausencia de una metodología específica de planificación estratégica en la educación superior evidencia una brecha significativa, lo que genera procesos fragmentados que dificultan una gestión institucional efectiva. Este artículo busca llenar este vacío presentando una propuesta metodológica para implementar una planificación estratégica orientada a la gestión de la calidad educativa en una institución pública de educación superior ubicada en el sur de Chile. La metodología propuesta implica un proceso paso a paso para la creación de un plan estratégico centrado en el desarrollo institucional, el posicionamiento actual y futuro de la institución a nivel económico, financiero y estratégico, y la viabilidad técnica, económica y financiera del proyecto institucional. Se divide en una etapa de diseño y una etapa de formalización, que constan de seis y dos fases, respectivamente. Esta metodología no solo es replicable, sino que también puede adaptarse a la realidad de cualquier institución pública de educación superior. El objetivo es mejorar continuamente los procesos educativos, beneficiando al máximo número de estudiantes mediante el desarrollo de sus habilidades y competencias, a la vez que se promueven prácticas sostenibles. Estas prácticas integran principios de sostenibilidad, garantizando un desarrollo ético y a largo plazo, proporcionando así un marco integral para otras instituciones que buscan alcanzar objetivos similares. El alcance de este estudio y la metodología propuesta se extiende a las instituciones de educación superior estatales de América Latina, proporcionando herramientas concretas, compartiendo buenas prácticas y contribuyendo al establecimiento de mecanismos de autorregulación para la mejora continua de la educación.

Palabras clave: planificación estratégica, instituciones de educación superior públicas (IES), gestión de la calidad en educación, metodología de planificación estratégica.

Abstract

The Strategic Plans in education are tools that allow for the evaluation of institutional objectives and guidelines that orient the development and growth of organizations. Currently, the absence of a specific strategic planning methodology in higher education underscores a significant gap, leading to fragmented processes that hinder effective institutional navigation. This article aims to fill this void by presenting a methodological proposal to implement strategic planning oriented to the management of the quality of education, implemented in a public institution of higher education located in the south of Chile. The proposed methodology involves a step-by-step process for creating a strategic plan focused on institutional development, current and future positioning of the institution on economic, financial, and strategic levels, and the technical, economic, and financial feasibility of the institutional project. It is divided into a design stage and a formalization stage, consisting of six and two phases, respectively. This methodology is not only replicable but can also be adapted to the reality of any public higher education institution. The goal is to continuously improve educational processes, benefiting the maximum number of students by developing their skills and competencies while promoting sustainable practices. These practices integrate sustainability principles, ensuring long-term and ethical development, thus providing a comprehensive framework for other institutions aiming to achieve similar objectives. The scope of this study and the proposed methodology extends to state higher education institutions in Latin America, providing concrete tools, sharing best practices, and assisting in establishing self-regulation mechanisms for continuous improvement in education.

Keywords: strategic planning, public higher education institutions (HEIs), quality management in education, strategic planning methodology.



1. INTRODUCCIÓN

When new challenges arise in an organization, the need to adapt to them also emerges, and decisions must be made that allow it to implement changes that improve the way processes are being carried out (Pineda and Cortés, 2018). Higher education institutions are continuously facing challenges, which may arise from various sources, such as changes in the evaluation processes, they undergo or modifications in educational models, legislative changes, and student needs, among others (Jeliazkova and Westerheijden, 2002). In this scenario, institutions must have the capacity to adapt quickly, which implies not only recognizing these challenges but also making strategic decisions to improve organizational processes significantly (Duchek, 2020). On the other hand, incorporating education for sustainability leads to a deeper understanding of global issues, making members of the university community and the institution itself agents of change in their local environments (Lozano et al., 2017). Sustainability should be seen not only as a tool to face current challenges but also as an ethical and social requirement in the training of professionals, as well as in the actions of institutional entities (Gibson et al., 2013).

In this context, strategic planning emerges as a crucial process that enables an organization to leverage opportunities and confront threats posed by change. This process allows decision-makers to gather, analyze, and process relevant internal and external information about the institution, to evaluate its current status and level of competitiveness. This, in turn, helps anticipate environmental challenges and determine the appropriate course of action (Álvarez, 2014). In addition, to address contemporary challenges within the pedagogical, administrative, and broader university community, and given the necessity for efficient adaptation, integrating a sustainability approach into strategic planning becomes essential (Gibson et al., 2013). This approach provides a framework for achieving proposed goals and enhancing organizational management by clearly considering the institution's strengths, weaknesses, opportunities, and threats. Successful institutions often possess, even in simple forms, precise plans for managing their affairs. Conversely, organizations that fail to manage their issues adequately risk failure and obscurity (Clarke, 2010).

Quality education hinges directly on the administrative management quality of an institution (Murillo and Román, 2019). Prioritizing the implementation, certification, and monitoring of quality management systems is therefore essential for optimizing human and economic resources, fostering efficient operations, and achieving institutional goals (Murillo and Román, 2019). As knowledge and technology expand rapidly, institutions face disparities in pedagogical, administrative, and community processes, necessitating comprehensive strategic planning for institutional development (Murillo and Román, 2019; Pérez et al., 2021). Effective integration of Information and Communication Technologies (ICT) must consider diverse dimensions, and stakeholder needs while ensuring strategic plans incorporate broader educator participation and decentralized decision-making (Carvalho et al., 2021; Fuster, 2008).

Currently, there is no widely accepted methodology for the development of strategic plans in higher education institutions, revealing a significant gap in this area. This lack of a standardized approach often leads to fragmented and inconsistent planning processes, which



can hinder the ability of institutions to effectively navigate the complex landscape of higher education. The absence of a shared methodology for strategic planning in higher education presents a substantial challenge.

This article aims to address this critical gap by contributing to the field of strategic planning in higher education, proposing a comprehensive methodology for the development of an institutional strategic plan, which is designed to be fully replicable and adaptable to the various and diverse contexts of higher education institutions, providing a pathway that can be easily followed. This will provide concrete tools for strategic planning, share best practices, and assist in establishing self-regulation mechanisms for continuous improvement in education. Furthermore, this proposal is designed to be dynamic, allowing for continuous feedback and adjustment. This adaptability ensures that institutions can tailor the methodology to their unique needs and circumstances, promoting a more responsive and resilient strategic planning process. By bridging the gap between theory and practice, this article provides a valuable resource that can significantly improve the strategic capabilities of higher education institutions, ultimately contributing to their long-term success and sustainability. Ultimately, this methodology seeks to enhance the management of educational quality in public higher education institutions by addressing the ongoing challenges that directly influence the execution and development of strategic plans, contributing to practical knowledge within quality management in higher education.

In the ever-evolving landscape of higher education, institutions must navigate a complex array of challenges to sustain their development and provide quality education. This requires a comprehensive approach that integrates strategic planning and a steadfast commitment to educational quality, without forgetting the increasingly relevant role of information and communication technologies (ICT). These elements are crucial for aligning institutional goals with societal needs, enhancing administrative and academic processes, and ensuring that the highest standards of education are maintained. This section explores the essential role of strategic planning in aligning institutional goals with societal needs, the transformative impact of ICT on educational and administrative processes, and the importance of maintaining high standards of educational quality.

Strategic planning

To address the challenges presented by the current international landscape and government policies aimed at economic and social development, it is imperative to adopt a strategic management approach (Peñate et al., 2024).

Barahona et al. (2023) assert that strategic planning significantly enhances an organization's competitiveness by enabling informed decision-making, continuous monitoring of implemented strategies, and effective execution of actions to achieve set objectives and goals. This approach ensures the delivery of quality services with optimal efficiency in operations, thereby highlighting robust organizational management.

Strategic planning in education is indispensable for ensuring quality education that meets the needs of both students and contemporary society. It entails establishing precise goals and



objectives, identifying essential resources, devising strategies and actions to accomplish these goals, and continuously evaluating and adapting this process (Bryson, 2018; Lovik, 2014).

There are countless strategies that an institution can implement based on its objectives and resources. However, it is crucial to select a strategy that effectively addresses or mitigates the specific needs of the organization within the context of its activities (Bryson, 2018). It is also important to note that no single measure can adequately demonstrate an organization's performance on its own; therefore, a combination of performance indicators is essential to ensure a comprehensive and accurate assessment (Johnsen, 2015).

Educational services hinge significantly on the individuals providing them, making their specialized knowledge and service-oriented attitudes pivotal in maintaining quality (Özkan et al., 2021). Emphasizing these aspects, alongside leveraging technology, becomes imperative (Ertmer and Ottenbreit-Leftwich, 2013). Strategic planning aims to empower organizational members to influence goal-setting and engage in continuous improvement processes—encompassing planning, acting, observing, and reflecting (Bryson, 2018). Effective educational planning integrates both inductive and deductive approaches, fostering innovation through diverse planning methods that eschew standardization, promote dynamic discourse, and allow flexibility. These principles are crucial for enhancing educational quality, requiring educators to adopt a holistic and systematic approach to integrating them into planning processes. Moreover, planners well-versed in urban dynamics, planning theory, and practice contribute significantly to fostering diversity in both individual and social values (Özkan et al., 2021).

The significant challenge in management lies in determining how, when, and why to take action. Effectively responding to each situation demands reflection, reasoned argumentation, collaboration, empathy, and an expansive exploration of potential courses of action (Robbins et al., 2017). Management entails not only fulfilling planned objectives but also overseeing human resources, being accountable to stakeholders, and providing leadership that fosters transformative change within the organizational context (Daft and Marcic, 2013). This includes aligning actions with the organization's identity, purpose, and mission, fostering knowledge and innovation, and transparently communicating achievements and impacts to stakeholders (Fontalvo et al., 2021).

Pedraza et al. (2020) highlight the importance of focusing on achieving customer and user loyalty, where quality is demonstrated in practical actions, by providing quality services to its users, increasing the performance and competitiveness of the organization, and through cooperation between entities in the education sector, enhancing the quality of education as a whole. The organization's strategy reflects the purpose and direction, which is fundamental to the outline of any change project and the design of the organization's processes (Carrasco, 2019).

Guiding strategic planning, programming, and institutional evaluation means that educational management fosters the generation of an open, complex, adaptable environment, which allows for deep and critical reflection from a systemic viewpoint on institutional improvement, giving impetus to innovation. The planning that is adapted to the educational scenario is the participatory strategy based on action research. This strategy is integral in that



it seeks to solve problems holistically (Delgado-Denham, 2020). In addition, it must provide continuous, organized, and planned training for its members.

Meza et al. (2021) highlight the importance of optimizing educational management in terms of teamwork, process quality, and executive leadership. In pursuit of educational quality, they generate in educators the desire to perform adequately. They indicate that there is a positive and direct correlation between teaching performance factors and improvement in educational management. Thus, Jiménez (2019) also proposes that there is a relationship between educators, managers, students, and the community involved in the quality of education.

Aligning the educational model and institutional management, evaluating the indicators to obtain adequate parameters that allow for the assessment of institutional performance according to the expected results, evidencing the achievements and impacts. The ISO 21001 standard is an instrument that can provide a management structure that allows the effective integration of legal requirements and high-quality factors for a program and the continuous pursuit of improvement (Fontalvo et al., 2021). Systematizing proposals and concepts that are proper for the business environment and adapting them to the educational context. The process management (PM) model can be defined as a first-level quality management model. It allows the integration of other standards in the function of an organizational system, identifying a context of intervention, establishing a strategy, and defining an operational structure of processes. Also, incremental improvement and an impact on stakeholders (Fontalvo et al., 2021).

Integration of ICT in education

For the authors Moreno and Paredes (2015), improving the quality of education is the most essential objective of integrating ICT and education. Managing ICT involves the integration of technological, human, and organizational aspects, and it is for the latter that educational institutions must ensure that their members take ownership of ICT by applying it in processes and procedures to ensure success and demonstrate the impact it will have on the organization. To support management and leadership in educational organizations, ICT is incorporated in four areas as outlined by Hepp et al. (2017): administrative management, academic management, curriculum management, and pedagogical management. Both educators and members of the management team state that ICT has a positive effect on the development of educational management, favoring the coordination and organization of management processes. In addition, they say that its use will always be a challenge and that they will constantly capacitated in order to keep up to date with the latest developments (Vásquez and Reyes, 2022). Betancourt (2015) (cited by Rivera and Suconota, 2018) states that managers play a crucial role in fostering the adoption and application of technological strategies among educators, managers, and students to increase the performance of each to optimize the creative functioning of the work. It is recommended that school leaders understand that the use of these tools is a valuable resource that favours decision-making and the institution of new practices (Hepp et al., 2017).

However, despite the fact that ICT has been increasingly incorporated into the educational sphere, as it contributes to pedagogical processes, it has yet to be internalized as much in the



administration area of educational centers. Authors like Vásquez and Reyes (2022) declare that the implementation of Information and Communication Technology as a methodological tool to build learning processes is an essential challenge for the education sector as a whole. However, the management team may not be taking advantage of this opportunity, either due to a lack of familiarity with the technology or a lack of resources, which compromises the effective development of quality educational management.

Bermeo et al. (2020) understand the relevance of e-learning and the use of technological tools, virtual environments, information, and communication technologies as vital instruments for adequate access to knowledge, interaction, and collaborative work among participants.

Educational quality

Educational quality in higher education today encompasses a multifaceted approach that goes beyond traditional metrics to include student learning outcomes, experiences, and the broader impact on societal needs. Strategic planning should prioritize defining clear learning outcomes that align with institutional goals and student needs. This involves setting measurable objectives for student learning and development, encompassing both cognitive and non-cognitive skills essential for success in today's society (Kezar and Holcombe, 2018).

It enables institutions to proactively design and implement initiatives that enhance teaching effectiveness, curriculum relevance, and student engagement. Moreover, effective strategic planning involves establishing iterative cycles of feedback and improvement. Institutions should implement robust mechanisms for collecting, analyzing, and acting upon data related to educational outcomes and stakeholder feedback. This continuous improvement process allows for timely adjustments to policies, programs, and resources to enhance educational quality (Bloch et al., 2021).

In addition, investing in faculty and staff development is essential for maintaining and improving educational quality. Strategic planning should allocate resources and provide opportunities for professional growth aligned with institutional priorities and educational goals. This includes training in innovative teaching practices, technology integration, and cultural competence to effectively meet the diverse needs of students (Bloch et al., 2021).

Emphasizing continuous improvement, strategic planning integrates feedback loops and data-driven decision-making processes that involve stakeholders at every level—from faculty and students to administrators and community partners. This inclusive approach not only ensures the responsiveness of educational programs but also fosters a culture of collaboration and innovation. Strategic planning should incorporate mechanisms for gathering and incorporating diverse perspectives into decision-making processes. This ensures that educational programs and services reflect the needs and aspirations of all stakeholders, thereby fostering a sense of ownership and commitment to shared goals (Canul and López, 2024).

At the same time, establishing rigorous monitoring and evaluation frameworks is critical for assessing progress toward educational quality objectives. Strategic planning should incorporate metrics and assessment tools to track student learning outcomes, program



effectiveness, and institutional performance. Regular evaluation allows institutions to identify strengths and areas for improvement, ensuring accountability and transparency to stakeholders (Canul and López, 2024).

Furthermore, strategic planning supports initiatives aimed at promoting equity, diversity, and inclusion (EDI) within educational settings, addressing systemic barriers and creating pathways for underrepresented groups to thrive. By embracing EDI principles, institutions not only enhance educational access and success but also cultivate a supportive environment where all students can achieve their full potential. Ultimately, strategic planning serves as a cornerstone for educational quality, facilitating institutions' adaptability to meet current and future challenges while advancing the broader mission of preparing students to contribute meaningfully to society (OECD, 2023).

Strategic planning provides a framework for institutions to effectively manage their resources, set and achieve goals, and adapt to changing environments. The integration of ICT plays a pivotal role in this strategic planning methodology. By leveraging ICT, institutions can improve communication, streamline administrative processes, and adopt innovative teaching and learning practices. This not only enhances operational efficiency but also supports the development of a more responsive and adaptive educational environment. A strong commitment to educational quality is at the heart of this strategic planning methodology. Quality management ensures that all institutional efforts are focused on improving student outcomes and experiences. The proposed methodology for strategic planning in higher education institutions developed in the following section integrates the key elements of strategic planning, ICT, and educational quality. By doing so, it provides a comprehensive framework that supports sustainable growth, enhances institutional effectiveness, and ensures the delivery of high-quality education. This methodology is designed to be adaptable to the unique context of each institution, making it a valuable tool for higher education leaders committed to driving excellence and fostering a culture of continuous improvement. This approach ensures that institutions not only meet but exceed the expectations of their stakeholders, including students, faculty, and the wider community.

2. METODOLOGÍA

For the elaboration of this methodology, three main focuses were taken in general terms, which are related to the way of understanding administrative sciences within the educational context: administration and management, elaboration of methodology and the elaboration of a Strategic Plan.

In the first instance, to understand how the institution works and to develop the diagnosis, a study of the literature and best practices was carried out, and the theory and definitions put forward by Sánchez (2020) were used, who, when talking about administrative sciences, points out that administration and management do not mean the same thing; they are activities and at the same time actions of a complementary nature, which are specific to the latter. The author defines them as:

I. Administration: the proper and correct arrangement of a company's resources to achieve the optimization of the corresponding development to achieve profits or earnings.



II. Management: allows the development of productive activities in a company, with the purpose of generating profitability of the factors that interest the development of the company.

On the other hand, in the case of the elaboration of the methodology, the basis used was what was said by Jiménez (2019), who states that management allows the development and intervention of those involved to facilitate transformation and build new scenarios that are aligned with the institutional purposes. This implies that the organization reflects on the educational results, where there is shared leadership, which favours collaborative work, the social participation of all the guarantors and the generation of innovative practices in line with the context. In addition, English and Hill (1995) were used as an additional reference, who point out that beyond restructuring an educational center, since this implies leaving some things as they are and moving on, a total transformation is required, that is, touching and changing all its processes. As a quantitative approach, Bloch, et al. (2020), who state that there is a need for more inclusive methodologies and longitudinal studies, more rigorous quantitative analyses of the effects of working with a quality management approach to complement other methods, were taken as a quantitative approach.

To integrate each of the parts that make up this research, the ISO 21001:2018 and 9001:2015 standards were taken, to be incorporated into the institution as indicated by the authors Arribas (2015) and Espinoza and Prieto (2020), who conclude that there is a relationship between implementing and adapting the ISO quality management system (QMS) in educational centers for the improvement of their school organization and results. However, it is important to note that these standards are focused more on the business environment, and therefore, to bring them to educational management, it is established to review management through processes, and to develop and implement it in this institution, part of the methodology proposed by Bravo (2019) was used.

Finally, leadership implies a change in the institution and a transformational approach was adopted, as defined by Manes (2004). For the implementation of an educational quality management system, ICTs were incorporated as a means to improve educational quality, using what was said by the authors Rivera and Suconota (2018, p. 484), who describe them as "a toolbox that favours innovation, production, curricular transformation and the contribution to educational quality, based on the profile of the teacher as the educational manager". The following methodology is designed based on the basic methodology for the construction of a strategic plan presented by the authors Kaplan and Norton (2012) and the implementation of process management.

3. RESULTADOS

This chapter presents the results obtained from the systemic analysis of the educational organization and the methodological proposal derived. The methodology is based on three fundamental pillars: process governance, communication strategy and organizational learning. These pillars address coordination and decision-making, communication actions to achieve strategic objectives and collective learning processes that facilitate the cultural



transformation of the institution. Through a participatory approach, it seeks to strengthen strategic management and promote continuous improvement of educational quality. This chapter details each phase of the methodological process, from the evaluation of the existing strategy to the formulation and formalization of the institutional strategic plan.

Methodological proposal

In order to design the methodology, the organization was analyzed in a systemic way, where different elements that make up the management of education in the organization were identified. Among these are the scope and limitations of the current Institutional Strategic Planning, current legal regulations, quality criteria and standards for institutional accreditation of the Chilean University Subsystem, university governance, and internal institutional regulations, among others.

As a result of the analysis, a methodology is proposed that is sustained by three fundamental pillars identified during the process of first approaching the institution.

These pillars are as follows:

I. Pillar I. Governance of the process. Coordination and decision-making mechanisms are needed to advance the process appropriately. Stakeholders are identified, namely the student body, academic body, stakeholders, graduates and employers, representatives of higher authorities, and collaborating personnel members.

II. Pillar II. Communication strategy. A set of communication actions that are carried out to achieve the objectives set out in the strategic planning process.

a. Launch strategies: defining actions that are conducted to give the first impression of the elaboration process of strategic planning.

b. Visibility strategies: defining actions for the visibility of the process to the entire university and external community.

c. Confidence-building strategies are actions that seek to ensure that the student and academic collaboration bodies have a positive perception of the institution's process development.

d. Positioning strategies: actions that seek to make the different levels of the organization aware of the characteristics and work values of the planning office, in other words, a quality collaborative unit that contributes to the development of its planning functions in search of both continuous institutional improvement and the positioning of the collegiate bodies in the process of formulating strategic planning.

III. Pillar III. Organizational learning. Within the framework of collective knowledge production and co-construction, change gradually takes place, transforming its culture through the involvement and participation of the university community. Díaz and Villafuente (2022) point out that the main benefits of being in the educational community are:

a. Strategic management is fundamental to improving the quality of education.

- b. Strategic planning promotes positive change by moving education institutions from a realistic state to a desired and achievable state.
- c. Strategic management is a fundamental tool for organizational development.
- d. One of the most essential purposes of strategic planning is to strengthen collective learning.

Design of the methodological proposal for the elaboration of a strategic plan

As a result of the analysis of best practices in literature, Figure 1 shows the elaboration process, which involves two stages: design and formalization. The first stage is subdivided into six phases: methodological, evaluation of the existing strategy, analysis of the external context, analysis of the internal context, strategic guidelines, and strategy planning. The second stage is subdivided into two phases: formulation and formalization of the strategic plan. Each institution must be able to incorporate characteristics specific to its context in the development of each phase.



Figure 1: Scheme of stages and phases of the Institutional Strategic Planning Elaboration Process.

Design Stage

I. Phase 1: Methodological

In the methodology phase, the actions to implement the Institutional Strategy are designed, the objectives for the development of this strategy are defined, and the deadlines for each one are established.

- In this case, the objectives are as follows:
- Develop and validate the methodology.
- Identify lines of development and institutional commitments.
- Review national and international higher education regulations.
- Elaborate and validate the timeline of the communication process and strategy.

II. Phase 2: Evaluation of the existing strategy

The current strategy has a clear understanding; two processes will be conducted in which information will be collected, and the results will be presented to give a clear picture of the institution's situation before the new strategic plan is drawn up. These are:

- Evaluation of the degree of perception of the mission, vision, and values



Data collection is a process in which data are collected using the survey instrument developed by the authors Aranda et al. (2007). Its target population is academics, collaborating personnel, students, graduates, and employers.

Through this evaluation, it will be possible to know the perception of the university community regarding dimensions such as the integral training of professionals, its contribution to national development, an integral and inclusive vision, knowledge generation, relevance to the environment, and the promotion of values. This way, it is possible to understand the point of view of the university community in relation to its mission, vision, and values and to establish an action plan based on these results.

- Presentation of results and learning seminar

After having obtained the necessary information, a seminar is organized to present the results and lessons learned in order to elaborate the new institutional strategy plan and to address the following aspects:

- Gaps from previous strategic planning.
- Gaps in the institutional strengthening plan.
- Opinion of the institutional self-assessment process.
- Other instruments associated with the university strategy.

III. Phase 3: Analysis of the external context

Phase 3 of this methodology involves gathering information to understand the environment in which the educational institution operates. This means getting to know the type of alliances and agreements it has, as well as identifying its needs, strategies, and challenges. In this way, it is possible to develop planning that involves all areas of the educational institution and propose strategies to be promoted in the short, medium, and long term.

In this process, instruments must be developed to collect and analyze primary information about the different sectors of society with which this educational institution is linked. Thus, to obtain an external view of the environment in which it is inserted from the regional, national, and international levels.

Based on this phase of the process, the following objectives are defined:

- a) To ascertain the opinion on the role that should be attributed to the educational institution from the point of view of relevant interest groups in the Region.
- b) Identify global, national, and regional trends for 2030.
- c) Diagnose and identify institutional challenges and potential strategic allies in the local, regional, national, and international territory.
- d) Analyse the competition in the educational subsystem, positioning, and educational offer.



This process should culminate in the reflective presentation of the results to validate the information obtained and elaborate and verify the conclusions. This stage of phase 3 should consider the use of tactics to extract meaning from the data, such as comparison or contrast, pointing out patterns and themes, triangulation, and the search for negative cases.

IV. Phase 4: Analysis of the internal context

This internal analysis allows the institution to examine the in-house overview to assess its resources, assets, characteristics, competencies, capabilities, and competitive advantages. In short, it allows the identification of strengths and weaknesses, which is helpful in the decision-making, strategy formulation, and implementation processes.

To achieve this process and be aware of the institution's different areas of development, members, users, and administrative personnel must be included. Discussion groups must be created, and strategies jointly elaborated to enable the integral development of all those involved. Above all, the quality of the service being provided must be improved.

In this case, the internal analysis phase is implemented in three sub-steps that will create a complete picture of the institution. These are:

- Review of official documentation

Official documents are analyzed and understood as all kinds of official public documents, records, and materials available as sources of information (Latorre et al., 2021).

- Focus groups/group interviews

Group interviews are held to collect information on various topics and understand the opinions of the different sectors of the educational community. The target audience for these focus groups or group interviews is administrative staff, academics, students, the management team, graduates, and employers.

The topics covered in these interviews mainly focused on the institution's advantages over other higher education organizations, the community's vision of the institution, the factors that may be essential to achieving the proposed goals, the contributions that each member can make to the institution, and the overall vision for the institution in the next 5 to 10 years.

- Collaborative workshops

The collaborative workshops aim to carry out an institutional SW analysis (Strengths and Weaknesses) with respect to the five dimensions of the new criteria for institutional accreditation of the University Subsystem of the National Accreditation Commission (CNA).

These workshops should be developed with the administrative staff, the academic staff, the student body, and the management team. The main topics to be addressed in these workshops are:

- a) Strategic management and institutional resources.
- b) Internal quality assurance.
- c) Links with the environment.



d) Research, creation, and innovation.

For each dimension, a workshop is held to collaboratively generate the institution's strengths and weaknesses in comparison with the CNA's 14 criteria.

For each of the sub-stages included in this phase, a presentation and validation of the results are carried out, and the information is socialized. The foundations for the elaboration of the strategic guidelines that will later be implemented in the educational institution are laid out.

Finally, the results of phases 3 and 4 are socialized with the university community, ending the diagnosis phase and starting the phase of elaborating the strategic guidelines.

V. Phase 5: Strategic guideline

In order to create the strategic guidelines on which this new strategic planning will be based, two methods are used to gather information and their joint elaboration. Firstly, an in-depth interview is conducted with the university authorities to understand and get their opinion on the basis of the five dimensions identified in phase 4 and thus collectively develop the objectives and goals of the institutional strategic planning. Within the methodology presented, this step is fundamental, as it allows decisions to be made in vital areas of the project's development. Without this step, it would be much more complex to carry out the improvement of quality management in an institution.

The second method is the realization of workshops addressed to the different actors that directly influence the university community. Each workshop focuses on one of the following themes:

- Quantitative SWOT Analysis Matrix Preparation (Ponce, 2007).
- Preliminary drafting of mission, vision, and values.
- Elaboration of the value proposition.

After these workshops, the results are shared, and based on this information, progress is made in the elaboration of strategic planning.

VI. Phase 6: Strategy planning

As seen in Figure 1, Phase 6 is the last phase of the design stage. In this stage, strategy planning is elaborated through the implementation of two workshops involving different bodies of the educational community.

In the first workshop, the focus should be on the elaboration of the strategy map, which is composed of three main dimensions: organizational strategy, competitive strategy, and operational strategy. These three dimensions should be complemented with the dimensions previously defined in the diagnosis stage. In this way, the strategy map can be elaborated in a participatory manner, allowing for the integration of the perspectives of each of the actors involved.



Considering this, the value proposition and the mission must be elaborated on, considering the goals elaborated collectively for each of the dimensions and the perspectives with which the map is created. These perspectives are as follows:

- Sustainability and financial sustainability.
- University community.
- Processes.
- Learning and growth.

The second workshop focuses on developing the integral scorecard, which establishes the objective, indicator, goal, frequency, and strategic initiative for each strategic dimension from each of the perspectives mentioned above.

Once both workshops have been conducted, the products obtained will be presented to validate them through review and recommendations to be made by each of the bodies involved in the strategy development process.

Formalization Stage

As already shown in Figure 2, the proposal has two stages: the design stage and the formalization stage. This second stage is composed of two phases, in which the elaboration of the institutional strategic plan is concluded.

VII. Phase 7: Formulation

Following the chronology of the phases mentioned above, phase 7 establishes the process in which the planning is developed as a draft and provided to the team that must validate the proposal. This team should be composed of university authorities and experts, who should be present throughout the process as the team that validates the results of each of the phases mentioned and described throughout this document. In this way, it is possible to ensure the verification, validation, and participation of the bodies involved in the process, which is fundamental for this methodology to work in a participatory manner.

Therefore, for this phase, an occasion for the validation of the proposal should be considered as a workshop in which the university authorities review the proposal and generate iterations of improvement with all perspectives. It is vital to keep in mind the strategies outlined in Figure 2:





Figure 2: Strategies and dimensions for the review and validation of the strategic planning proposal.

VIII. Phase 8: Formalization

Finally, the last step is the formalization of the proposal, which is carried out once the university board's validation has been completed. This safeguards and improves the proposal. After the final review, the plan is formalized through a decree, which must be socialized with the university community.

4. DISCUSIÓN

This study attempts to provide an overview of the use of a methodology that is inclusive, participatory, and relevant to the needs of the educational institution, taking into consideration the vision and perspective of each of the members of the institution throughout the process. Generates a sense of belonging and reduces reluctance to change, making the transition more accessible and more bearable, especially for the institutional leadership, which is essential to ensure an effective and sustainable transition to an improved strategic model (Leicht et al., 2018). In addition, the sustainable perspective of this methodology is evidenced by considering the long-term impacts on the educational community and the environment, and the active participation of stakeholders in the process allows for the incorporation of sustainable practices in strategic decisions (Murga-Menoyo, 2017).

This methodological proposal establishes simple, transparent, and pertinent processes, concretely constituting the stages with their workflow, determining the importance of enacting from the initial stage the study of the institution, recognizing the significance of understanding the current situation and assessing the impact of existing operations (Lozano et al., 2017), before elaborating the design and subsequent execution of this. Likewise, the adaptability of the methodology highlights the potential for sustainable change in other similar educational institutions.

The methodology was used and presented to the higher authorities of an accredited Chilean public higher education institution, which has eight undergraduate programs with an enrolment of more than 600 students. It was analyzed, and it was decided to implement it for 14 months. Currently, phase 4 is being implemented, and for reasons of confidentiality and sensitivity of the information, it is not possible to publish the results of the implementation of the previous phases.

Finally, the culminating stage should be socializing the results and launching the strategy to the entire community. While it is essential to track opinions and perspectives constantly, it is also essential to publish them at all levels, which will ensure a higher level of accomplishment and the achievement of the milestone.

5. CONCLUSIÓN

This study's contribution to the field of strategic planning in higher education consists of a comprehensive methodology for developing an institutional strategic plan. This methodology aims to enhance the management of educational quality in public higher



education institutions by addressing ongoing challenges that influence the execution and development of strategic plans, thereby contributing to practical knowledge within quality management in higher education. Additionally, the methodology is designed to be fully replicable and adaptable to the various contexts of higher education institutions.

As observed in the design stage of the proposal, particularly concerning the diagnosis, it is essential to consider both external and internal factors. This comprehensive assessment not only identifies the existing guidelines of the institution but also lays the foundation for new guidelines to improve the quality of education from a sustainable perspective. By considering the opinions, participation, and viewpoints of community members throughout the process, changes are generated across all areas and collaborative spaces, leading to constant improvement in all aspects of the institution. Examining each dimension of the institution from a sustainable perspective establishes a framework to guide actions, ensuring the institution not only responds to current challenges but also prepares for a sustainable future. This involves the responsible management of resources and the promotion of an educational culture that fosters environmental and social awareness, thereby contributing to building a more sustainable and resilient institution.

Moreover, the integration of processes must be holistic and systematic, understanding the internal dynamics within the relationships among the various actors in the educational community. It is also crucial to consider the different internal and external factors that directly or indirectly influence the implementation of new changes and may create obstacles in the execution of processes. This methodology aims to overcome these difficulties by providing a step-by-step explanation of how these processes should be carried out, emphasizing high participation levels from members and not restricting it to a strategic group or the management team. Inclusivity is key to ensuring the effectiveness and long-term sustainability of implemented changes. By considering environmental and social aspects at every stage, a more comprehensive and responsible integration is promoted, thus strengthening the institution's capacity to adapt and thrive within the context of sustainable development.

Similarly, the proposed methodology asserts that the participation of university authorities is indispensable, as they provide fundamental support for achieving objectives and goals. They have the power and means to decide and influence crucial areas that facilitate project development. Identifying the type of leadership within university authorities is vital, as it helps define the best strategy to execute the institutional plan, given their direct support for the changes or potential generation of conflicts and resistance (Meneses & Tomás, 2017).

Ultimately, the various stages described in this article converge in the collaborative development of a plan established through shared goals and actions to improve the institution's management processes, considering all factors, opportunities, strengths, and weaknesses. This methodology proposes using multiple tools and combined techniques. However, what is presented here should not remain merely descriptive; decision-making must weigh each dimension. Examining each dimension from a sustainable perspective provides a framework to guide actions, ensuring the institution responds to today's challenges and prepares for a sustainable future. This approach gives a clear sense of the



deficiencies to be strengthened and the strengths to be maintained at the operational level, offering a framework for the necessary actions.

This article served its purpose to provide concrete tools for strategic planning, share best practices, and assist in establishing self-regulation mechanisms for continuous improvement in education. Furthermore, it aims to develop and enhance the collaborative culture between institutions of similar characteristics. Through these efforts, we intend to foster continuous improvement in educational processes, ultimately benefiting future professionals and contributing to the comprehensive development of their skills and competencies.

REFERENCIAS BIBLIOGRÁFICAS

- Aranda Gutiérrez, H., Pérez Manning, F., & Méndez Salcido, M. D. (2007). Evaluación del grado de cumplimiento de la misión, visión y valores en una institución de educación agrícola superior. *Revista Mexicana de Agronegocios*, 40(20), 271–280. <https://www.redalyc.org/pdf/141/14102008.pdf>
- Arribas, J. (2015). Análisis y valoración de la aplicación de los Sistemas de Gestión de la Calidad según la norma ISO 9001 y su incidencia sobre las dimensiones organizativas y los resultados de los centros educativos (Tesis doctoral). Universidad Nacional de Educación a Distancia. <https://dialnet.unirioja.es/servlet/tesis?codigo=62507>
- Álvarez Miranda, J. (2014). Propuesta de herramienta de planificación estratégica para la gerencia educación de fundación Minera Escondida. <https://repositorio.uchile.cl/bitstream/handle/2250/116383/Alvarez%20Miranda%20Jorssy.pdf>
- Barahona, R. J., Martínez, A., & Haro, A. (2023). Planificación estratégica y niveles de competitividad en la empresa pública municipal para la gestión integral de residuos sólidos. *Prometeo Conocimiento Científico*, 3(2), e22–e22. <https://prometeojournal.com.ar/index.php/prometeo/article/view/22>
- Bermeo-Giraldo, M. C., Rojas-Acevedo, D., Herrera-Ruiz, J. C., & González-Rendón, L. F. (2020). Evolución y tendencias investigativas sobre estrategias de gestión de conocimiento en instituciones de educación superior. *Revista Virtual Universidad Católica del Norte*, 60, 202–227. <https://revistavirtual.ucn.edu.co/index.php/RevistaUCN/article/view/1170>
- Bloch, C., Kalpazidou Schmidt, E., & Vukasovic, M. (2021). Does quality work work? A systematic review of academic literature on quality initiatives in higher education. *Assessment & Evaluation in Higher Education*, 46(5), 701–718. <https://www.tandfonline.com/doi/full/10.1080/02602938.2020.1813250>
- Bravo, J. (Coord.). (2019). Gestión de procesos, una necesidad vital. Santiago de Chile: Evolución. https://www.academia.edu/6236588/Gestion_de_Procesos_Juan_Bravo_Carrasco
- Bryson, J. M. (2018). Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement (6th ed.). John Wiley & Sons. <https://www.researchgate.net/publication/382254675>
- Canul Alcocer, J. A., & López Gamboa, G. E. (2024). La comunicación interna en organizaciones educativas de nivel superior: Una revisión sistemática (2012–2022). *Revista Panamericana de Pedagogía*, (37), 54–71. <https://revistas.up.edu.mx/RPP/article/view/3031>
- Carrasco Bravo. (2019). Gestión de procesos, una necesidad vital. Evolución. ISBN 978-956-7604-32-6
- Carrizo, D., & Alfaro, A. (2018). Método de aseguramiento de la calidad en una metodología de desarrollo de software: un enfoque práctico. *Ingeniare. Revista chilena de ingeniería*, 26(1), 114–129. <https://scielo.conicyt.cl/pdf/ingeniare/v26n1/0718-3305-ingeniare-26-01-00114.pdf>
- Carvalho, M., Silva, S., Ribeiro, A., & Coelho, P. (2021). What about us? Teachers' participation in schools' strategic action plans. *Participatory Educational Research*, 8(3), 156–175. <https://dergipark.org.tr/en/download/article-file/1343392>
- Clarke, G. (2010). Action planning. *Hemophilia Organization Development*, 2(1), 1–12.
- Cota Luevano, J. A. (2017). Método para evaluar el clima organizacional del área docente de un



- Centro de Bachillerato Tecnológico de Cd. Obregón, Sonora. Ciencias Administrativas, 5.
<https://revistas.unlp.edu.ar/CADM/article/view/3130/5060>
- Dedeo Özkan, S., Özlü, S., & Beyazli, D. (2021). Studio culture in planning and design education: The case of Turkey. *Online Journal of Art & Design*, 9(3).
<https://doi.org/10.53675/ojad.985836>
- Delgado-Denham, F. O. (2020). Gestión de la planificación estratégica participativa de la comunidad educativa en el proceso de construcción del proyecto educativo de centro. *Revista Boletín Redipe*, 9(5), 221–237.
<https://revista.redipe.org/index.php/1/article/view/990>
- Díaz Pérez, A., & Villafuerte Álvarez, C. A. (2022). Planeamiento estratégico de la educación. *Comunicación*, 13(2), 161–171.
<https://mail.comunicacionunap.com/index.php/rev/article/view/681>
- Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246. <https://www1.wfh.org/publication/files/pdf-1241.pdf>
- English, F., & Hill, J. (1995). Total Quality Education. *Revolucionemos la enseñanza con las ideas de Deming. Transformación de las escuelas en placenteros lugares de aprendizaje. México: EDAMEX.*
- Espinoza, P., & Prieto, W. (2020). Quality management systems (QMS) in educational institutions: Educational quality in the social state of law. *The International Education and Learning Review*, 8(4), 253–264.
<https://dialnet.unirioja.es/servlet/articulo?codigo=8164121>
- Fuster Pérez, J. P. (2008). La planificación estratégica: una propuesta metodológica para gestionar el cambio en políticas de innovación educativa. *Revista Iberoamericana de Educación*, 46(1), 3. <https://rieoei.org/RIE/article/view/2013>
- Fontalvo, T. J., Delahoz-Dominguez, E. J., & Morelos, J. (2021). Diseño de un sistema integrado de gestión de la calidad para programas académicos de educación superior en Colombia. *Formación Universitaria*, 14(1), 45–52. https://www.scielo.cl/scielo.php?pid=S0718-50062021000100045&script=sci_arttext
- Gibson, B., Hassan, S., & Tansey, J. (2013). Sustainability assessment: Criteria and processes. Taylor & Francis. <https://doi.org/10.4324/9781849772716>
- García Mora, Á. G. (2021). Propuesta metodológica para relacionar el plan estratégico y los recursos utilizando árboles indexados.
<https://dspace.ups.edu.ec/handle/123456789/21617>
- Hepp, P., Avalos, B., Bravo, C., & González, L. (2017). Desafíos para la integración de las TIC en las escuelas: Implicaciones para el liderazgo educativo (Informe Técnico 2).
<https://www.lidereseducativos.cl/wp-content/uploads/2017/09/IT-02-2017.pdf>
- Jeliazkova, M., & Westerheijden, D. F. (2002). Systemic adaptation to a changing environment: Towards a next generation of quality assurance models. *Higher Education*, 44, 433–448.
<https://doi.org/10.1023/A:102115317478>
- Jimenez-Cruz, J. (2019). Transformando la educación desde la gestión educativa: hacia un cambio de mentalidad. *Praxis*, 15(2), 223–235.
https://www.researchgate.net/publication/341842168_Transformando_la_educacion_desde_la_gestion_educativa_hacia_un_cambio_de_mentalidad
- Jiménez, J. (2019). Transformando la educación desde la gestión educativa: hacia un cambio de mentalidad. *Praxis*, 15(2), 223–235.
<https://revistas.unimagdalena.edu.co/index.php/praxis/article/view/2646>
- International Organization for Standardization. (2018). ISO 21001:2018. Organizaciones educativas – Sistemas de gestión para organizaciones educativas – Requisitos con orientación para su uso. Secretaría Central de ISO.
<https://www.iso.org/standard/66934.html>
- Kaplan, R., & Norton, D. (2012). The execution premium: Linking strategy to operations for competitive advantage. Boston: Harvard Business Press.
- Kezar, A. J., & Holcombe, E. M. (2017). Shared leadership in higher education. American Council on Education. <https://www.acenet.edu/Documents/Shared-Leadership-in-Higher-Education.pdf>
- Latorre, A., Del Rincón, D., & Arnal, J. (2021). Bases metodológicas de la investigación educativa.



- Ediciones Experiencia. <https://sitraiemsorg.wordpress.com/wp-content/uploads/2024/06/bases-metodologicas-de-la-investigacion-educativa-latorre.pdf>
- Leicht, A., Heiss, J., & Byun, W. J. (2018). Issues and trends in education for sustainable development (Vol. 5). UNESCO Publishing.
- Lozano, R., Barreiro-Gen, M., Lozano, F. J., & Sammalisto, K. (2017). Connecting competencies and pedagogical approaches for sustainable development in higher education: A literature review and framework proposal. *Sustainability*, 9(10), 1889. <https://www.mdpi.com/2071-1050/9/10/1889>
- Lovik, E. G. (2014). Revitalizing strategic planning at community colleges. *Planning for Higher Education*, 42(2). <https://www.researchgate.net/publication/269572803>
- Manes, J. (2004). Gestión estratégica para instituciones educativas: Guía para planificar estrategias de gerenciamiento institucional. Buenos Aires: Granica.
- Meza Revatta, L. F., Torres Miranda, J. S., & Mamani-Benito, O. (2021). Gestión educativa como factor determinante del desempeño de docentes de educación básica regular durante la pandemia Covid-19, Puno-Perú. *Apuntes Universitarios*, 11(1), 23–35. <https://doi.org/10.17162/au.v11i1.543>
- Meneses Riquelme, G., & Tomás i Folch, M. (2017). Validación de un cuestionario para evaluar las actitudes del profesorado universitario ante la innovación curricular. *Acción Pedagógica*, 26(1), 106–119. <https://www.researchgate.net/publication/325398560>
- Moreno Crespo, W., & Paredes Salazar, N. T. (2015). La gestión de las TIC y la calidad de la educación, medida por los resultados de las evaluaciones escolares estandarizadas. *Libre Empresa*, 12(1), 137–163. <https://revistas.unilivre.edu.co/index.php/libreempresa/article/view/854>
- Murga-Menoyo, M. Á. (2017). Universidades en transición. Hacia una transformación institucional orientada al logro de la sostenibilidad. *Revista Iberoamericana de Educación*, 73, 61–84. <https://rieoei.org/rie/article/view/273>
- Murillo, F. J., & Román, M. (2019). Retos en la evaluación de la calidad de la educación en América Latina. *Revista Paraguaya de Educación*, 8(1). https://www.researchgate.net/profile/F_Javier_Murillo/publication/338116744
- OECD. (2023). Equity and inclusion in education: Finding strength through diversity. OECD Publishing. <https://doi.org/10.1787/e9072e21-en>
- Pedraza, C., Oñate, Y., Contreras, I., & Álvarez, R. (2020). Estrategias de marketing para la internacionalización de PYMES comerciales de Riohacha (Colombia). *Revista Espacios*, 41(21), 27. <https://www.revistaespacios.com/a20v41n21/a20v41n21p27.pdf>
- Peñate Santana, Y., Villa González del Pino, E. M., & Pons Murguía, R. Á. (2024). Revisión sistemática de la Dirección Estratégica en las Instituciones de Educación Superior. *Estrategia y Gestión Universitaria*, 1–24. <https://portal.amelica.org/ameli/journal/780/7804818005/html/>
- Pérez López, E., Vázquez Atochero, A., & Cambero Rivero, S. (2021). Educación a distancia en tiempos de COVID-19: Análisis desde la perspectiva de los estudiantes universitarios. *RIED. Revista Iberoamericana de Educación a Distancia*. <https://revistas.uned.es/index.php/ried/article/view/27855/22055>
- Pineda, M., & Cortés, G. (2018). Cambio y adaptación organizacional. Una revisión de la literatura. *Revista Espacios*, 39(37), 1–16. <https://www.revistaespacios.com/a18v39n37/a18v39n37p05.pdf>
- Ponce Talancón, H. (2007). La matriz FODA: Alternativa de diagnóstico y determinación de estrategias de intervención en diversas organizaciones. *Enseñanza e Investigación en Psicología*, 12(1), 113–130. <https://www.redalyc.org/pdf/292/29212108.pdf>
- Rivera, D., & Suconota, E. (2018). Las TIC en la gestión de los procesos educativos. *Razón y Palabra*, 22(3), 481–509. <https://dialnet.unirioja.es/servlet/articulo?codigo=6553807>
- Rivera, D., & Suconota, E. (2018). Las TIC en la gestión de los procesos educativos. *Razón y Palabra*, 22(3_102), 481–509. <https://www.ub.edu/obipd/wp-content/uploads/2020/09/tic.pdf>
- Sánchez, M. (2013). ¿Administración o gestión educativa? Un ejercicio conceptual. *Memoria Electrónica del Congreso Nacional de Investigación Educativa*, 1, 1–12. https://www.researchgate.net/publication/339830611_Administracion_o_Gestion_educat



iva_Un_ejercicio_conceptual

Sánchez Betancourt, & Del Valle, M. (2015). Las TIC como recurso de optimización en la gestión administrativa y educativa de la organización escolar.

<http://mriuc.bc.uc.edu.ve/handle/123456789/553>

Vásquez Luzón, R., & Reyes Alcequiez, K. (2022). La tecnología de la información y la comunicación en el desarrollo de la gestión educativa. Revista EDUCARE–UPEL-IPB–

Segunda Nueva Etapa 2.0, 26(2), 331–347. [https://revistas.investigacion-](https://revistas.investigacion-upelipb.com/index.php/educare/article/view/1714)

[upelipb.com/index.php/educare/article/view/1714](https://revistas.investigacion-upelipb.com/index.php/educare/article/view/1714)

Conflicto de Intereses: Los autores afirman que no existen conflictos de intereses en este estudio y que se han seguido éticamente los procesos establecidos por esta revista. Además, aseguran que este trabajo no ha sido publicado parcial ni totalmente en ninguna otra revista.