



Academic quality assurance: planning strategy for Ecuadorian universities

Aseguramiento de la calidad académica: estrategia de planificación para universidades ecuatorianas

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ABSTRACT

Quality planning provides higher education institutions with the tools to ensure successful performance and transparency to society. The research was conducted with the aim of proposing a strategy for quality planning in higher education institutions to enable sound decision-making in the interests of improving management and academic excellence. For the development of the research process, 65 university administrators were selected and surveyed to determine the current state of quality planning in their institutions. Among the main results are the diagnosis of the main shortcomings in quality planning, the identification of processes, sub-processes and activities, the proposal for a quality improvement plan and the proposal for quality planning criteria.

Descriptors: educational quality; educational efficiency; university ranking. (Source: UNESCO Thesaurus).

RESUMEN

La planificación de la calidad permite a las instituciones de educación superior contar con las herramientas para garantizar el éxito en su desempeño y la transparencia a la sociedad. La investigación se realizó con el objetivo de proponer una estrategia para la planificación de la calidad en instituciones de educación superior para la toma de decisiones acertadas en aras del perfeccionamiento de la gestión y la excelencia académica. Para el desarrollo del proceso investigativo se seleccionan 65 directivos de universidades a los cuales se les aplica una encuesta para conocer el estado actual de la planificación de la calidad en sus instituciones. Entre los principales resultados se puede mencionar el diagnóstico con las principales insuficiencias en la planificación de la calidad, la identificación de los procesos, subprocesos y actividades, la propuesta de un plan de mejoras de la calidad y la propuesta de criterios de planificación de la calidad.

Descriptores: calidad de la educación; eficiencia de la educación; clasificación académica de universidades. (Fuente: Tesaurus UNESCO).

Received: 28/09/2025. Reviewed: 09/10/2025. Approved: 21/10/2025. Published: 30/10/2025.

Research articles section



INTRODUCTION

In the university teaching context, quality planning is essential for achieving academic relevance and excellence in higher education institutions. In this regard, the rise of technology, globalisation, artificial intelligence and changing social demands require universities to adopt dynamic management strategies that promote research, continuous improvement and institutional sustainability. According to Guerra et al. (2022), these dynamics require adaptive and systematic institutional responses.

Consequently, the incorporation of teaching and learning technologies, the development of strong research and innovation processes, and the rise of links with society and businesses require the planning of resources and processes that contribute to responding to these demands efficiently and effectively. This, together with international quality assessment and accreditation processes, requires universities to guarantee compliance with up-to-date quality standards and high academic rigour. In this regard, Holguín et al. (2024) emphasise the importance of these quality assurance mechanisms.

Thus, quality planning is vital for higher education institutions as it ensures that academic offerings contribute to the development needs of the territories and the reality of the labour market. As Chiquito et al. (2022) point out, the application of quality planning mechanisms allows for the continuous improvement of key processes and functions in higher education (teaching, research and outreach), which ensures that graduates have the necessary skills to perform effectively in the labour market. This perspective is reinforced by Naranjo and Espinoza (2023), who highlight the direct link between planning and employability.

Well-executed planning enables the implementation of policies, strategies, and legislation that contribute to institutional quality accreditation and the achievement of competitiveness and excellence. Following this line of analysis, Arjona et al. (2022) argue that this helps higher education institutions to obtain elements that contribute to their institutional accreditation and the achievement of international recognition. For their part, Loor and Lituma (2022) complement this approach by highlighting the international dimension of these processes. From another perspective, authors such as Mora and Morales (2021) and Flores et al. (2022) consider that quality planning establishes guidelines for identifying the expectations of users (students and the community) and designing academic products that meet their needs. They also consider that planning should include the design of policies and objectives that guarantee high quality standards and the competitiveness of higher education institutions.

In line with the above, Guadalupe and Zúñiga (2023) and Giménez and Acosta (2024) consider that the transformations of recent years in higher education systems have imposed the need to adopt policies based on the pursuit of a more just, prosperous, supportive and sustainable world. To this end, universities must place greater importance on planning, whether strategic, operational or quality-related, as a strategy for achieving high standards of quality and academic excellence. On the other hand, Fierro et al. (2023) consider in their research that planning is a vital tool for improving the educational process and ensuring the quality of education. In their study carried out at the Riobamba Higher Technological Institute, they determine the impact of academic planning on student satisfaction. In this regard, they were able to statistically demonstrate that the relationship between these two variables is direct, positive, and high, which implies that, in addition to all the advantages mentioned above, academic planning is a determining factor in student satisfaction.

In addition to the above, based on their analysis of institutional limitations, Ordóñez et al. (2022) consider that one of the main constraints in higher education institutions is related to planning, specifically the planning of teaching and non-teaching human talent. In this regard, the aforementioned authors state that this is a problem that is exacerbated by the need for tools to monitor and control the performance of these workers. Thus, the conclusions of the study by Ordóñez et al. (2022) showed a direct relationship between planning and the quality of teaching management.



On the other hand, taking into account the relationship of another indicator, such as substantive university functions, Sillo et al. (2023) conducted research to establish the relationship between quality planning and the management of substantive university functions. In this regard, the aforementioned authors analysed the advantages and limitations of institutional planning, as well as its contribution to the quality of university management. Therefore, they presented procedures for planning institutional processes and achieving improvements in the quality of institutional standards. This background and the state of the art analysed highlight the need for quality planning and its relationship with university management in order to achieve high standards of quality and reputation for higher education institutions. However, the need to implement mechanisms that allow the academic authorities of Ecuadorian universities to efficiently plan academic, human and material resources in order to achieve the academic excellence prescribed in current legislation is also recognised.

Based on the above, the current research was carried out with the aim of proposing a strategy for quality planning in higher education institutions in Ecuador for sound decision-making in the interests of improving management and academic excellence.

METHOD

The research was conducted using a mixed approach, with a quantitative focus for the processing of survey data and qualitative elements for the characterisation of the proposed strategy. Due to its nature, it was classified as applied research aimed at offering concrete institutional planning tools for university administrators.

The scope of the study was descriptive-propositional, as it sought to characterise the current state of quality planning in Ecuadorian higher education institutions and, based on this, to design a strategy that would facilitate decision-making based on relevant and reliable information.

The study population consisted of 65 academic managers from higher education institutions in Ecuador who participated voluntarily and gave their consent to collaborate in the research. The methodological process was carried out in three phases:

1. The first phase consisted of a documentary review of international quality standards used by national higher education systems.
2. The second phase involved the application of a structured survey to the participating managers to diagnose the state of quality planning in their institutions, evaluating 18 indicators grouped into eight dimensions: strategic planning (mission, vision, policy and quality objectives), process management (identification of processes, activities and work procedures), institutional leadership, knowledge of the context (development projections and student needs), decision-making (relevant information and stakeholder participation), quality standards, institutional communication and compliance auditing. The measurement was carried out using a four-level ordinal scale (Poor, Fair, Good, Excellent).
3. The third phase involved analysing the data obtained and designing an improvement strategy that integrated specific actions, identified substantive processes and defined quality criteria adapted to the Ecuadorian context.

To ensure the reliability of the instrument, Cronbach's alpha coefficient was applied, obtaining a value of 0.89, which indicated high internal consistency and confirmed the reliability of the survey for measuring the dimensions and indicators related to quality planning in the institutions analysed. Consequently, the information was processed using frequency and percentage analyses to identify the main limitations in quality planning, which provided the basis for the strategy proposal presented in this study.



In terms of ethical considerations, the research was conducted in accordance with the principles of the Declaration of Helsinki and current institutional regulations. Informed consent was obtained from all participants, who were informed about the objectives of the study, the voluntary nature of their participation, and their right to withdraw at any time without consequences. The confidentiality of the information collected and the anonymity of the participants were guaranteed in the processing and presentation of the results. The data obtained were used exclusively for academic and research purposes, without compromising the identity of the individuals or institutions involved.

RESULTS

The results achieved after years of study are detailed below. First, the diagnosis of the survey of 65 academic directors was addressed, which provided an overview of the situation of quality planning in higher education institutions in Ecuador. Subsequently, the proposed strategy for improving quality planning is described, which includes concrete actions, identification of substantive processes, and quality criteria adapted to the institutional context:

1. Diagnosis of quality planning in higher education institutions

The results of the survey of the 65 directors are presented in Table 1.

Table 1. Responses from academic managers on quality planning in HEIs

Indicators evaluated	M	R	B	E
1. Existence of an institutional mission that incorporates quality aspects	4	57	14	-
2. Presence of an institutional vision that considers quality aspects	5	52	18	-
3. Quality policy consistent with institutional mission and vision	11	61	3	-
4. Quality plan recognised by the university community	2	43	30	-
5. Definition of institutional quality objectives	7	49	19	-
6. Specific regulations for quality planning	15	44	16	-
7. Identification of institutional processes	12	49	14	-
8. Definition of activities for each institutional process	18	50	7	-
9. Work procedures established for each activity	7	35	33	-
10. Management leadership to implement quality in processes	3	18	47	7
11. Knowledge of development projections for the area of influence	26	47	2	-
12. Identification of student needs	19	38	18	-
13. Availability of relevant information for management decisions	15	29	18	13
14. Participation of the university community in decision-making	27	30	16	2
15. Institutionally recognised quality standards	8	54	23	-
16. Effectiveness of institutional communication	14	39	20	2
17. Knowledge of quality requirements in processes	27	48	-	-
18. Audit procedures to verify quality standards	29	40	6	-

Note: P = Poor; A = Average; G = Good; E = Excellent

The data collected allows us to identify the following situations in the institutions evaluated:

80% of managers indicated that their institution lacks a mission that adequately integrates quality aspects.

77% indicated deficiencies in the institutional vision regarding the incorporation of quality elements.

96% reported a lack of a quality policy aligned with the institutional mission and vision.

Approximately 60% stated that their institutions do not have a quality plan recognised by the university community.



74% pointed to the lack of clearly defined institutional quality objectives.

92% acknowledged the lack of specific regulations related to quality planning.

80% reported problems in identifying institutional processes and defining corresponding activities.

Fifty-six per cent indicated that their institutions do not have established working procedures for activities.

A high level of recognition of managerial leadership for quality implementation was identified.

97% stated that they were unaware of development projections for their area of influence.

Seventy-five per cent indicated that their institutions have not identified student needs.

59% indicated a lack of relevant information for decision-making and limited participation of the university community in these processes.

83% acknowledged the absence of institutionally recognised quality standards.

Seventy per cent rated institutional communication as ineffective.

All participants stated that they were unaware of the quality requirements for institutional processes.

95% reported the absence of audit procedures to verify compliance with quality standards.

2. Quality planning strategy for higher education institutions

Taking into account the results of the diagnosis carried out in higher education institutions and once the main limitations in quality planning have been identified, the following strategy is proposed:

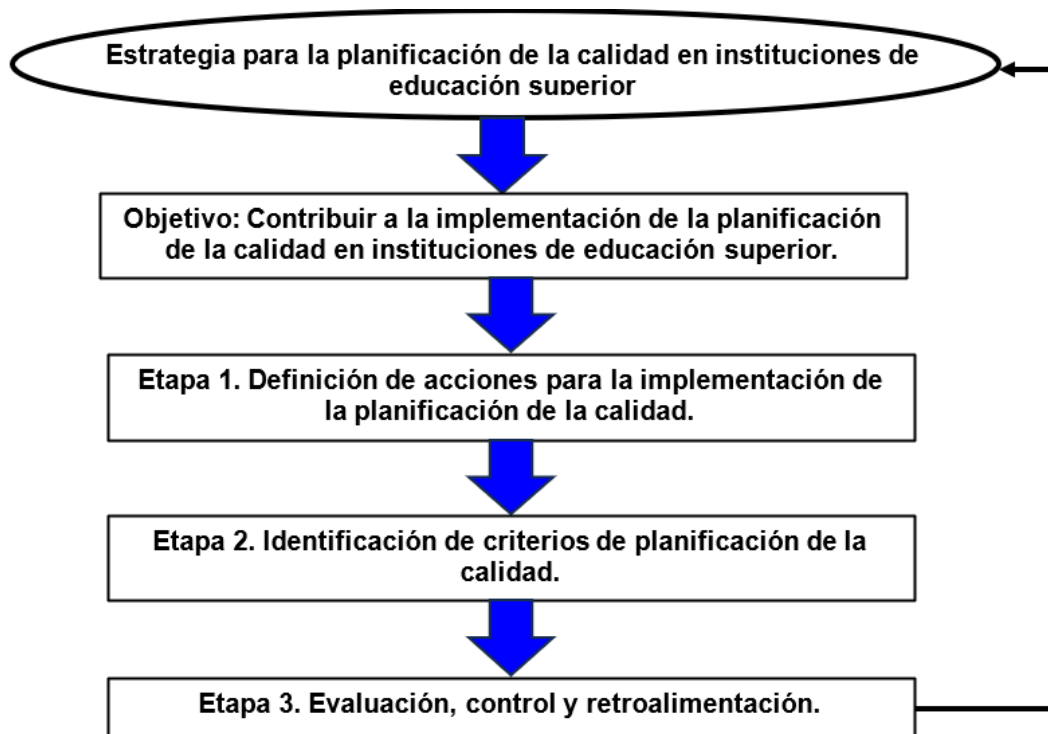


Figure 1. Strategy for quality planning in HEIs. Own elaboration.

Stage 1. Actions for quality planning

Table 2 presents the actions to be taken to mitigate the shortcomings detected in quality planning in HEIs.

Table 2. Actions for quality planning in HEIs.

Action	Date of implementation	Responsible
Adapt the institution's mission and vision in line with quality	First half of 2025	Higher collegiate body IES
Design and approve the quality policy for higher education institutions	First half of 2025	Higher collegiate body of HEIs
Draw up the IES quality plan	First half of 2025	Higher education institution governing board
Define and approve the IES quality objectives	First half of 2025	Higher education institution governing board
Develop the IES quality regulations	First half of 2025	IES Governing Board
Develop work procedures for the substantive and non-substantive functions of IES	First half of 2025	Higher education institution governing board
Prepare a document outlining the development needs of the areas of influence of HEIs	First half of 2025	Higher education institution governing board
Define the quality requirements for university processes	First half of 2025	Higher education institution governing board
Establish quality standards for each process at the IES	First semester of 2025	IES Governing Board
Develop procedures for auditing compliance with quality standards.	First half of 2025	IES Board of Directors

Source: Own elaboration.

- a) Identification of HEI processes and activities

Table 3 presents the processes, sub-processes and activities of the three essential functions of HEIs (teaching, research and outreach).



Table 3. Processes and activities of the substantive functions of HEIs

Process	Sub-processes	Activity
Teaching	Admissions	- Registration - Enrolment - Level and parallel assignment
	Academic planning	- Curriculum design (macro, meso and micro) - Approval of the academic calendar - Timetable preparation
	Training	- Development of the teaching and learning process - Development of tutoring and student monitoring - Updating educational platforms - Frequent and partial assessments - Exams and integrative projects
	Learning assessment	- Student assessment - Syllabus monitoring - Teaching performance assessment
Teaching	Degrees and qualifications	- Defence of degree projects - Graduation
	Teacher training	- Teacher training - Pedagogical and didactic updating for teachers - Events for sharing teaching experiences
Research	Curriculum innovation	- Updating curricula and syllabuses - Development of innovative teaching trends - Definition of research areas and lines of inquiry - Development of institutional policies for research - Definition of research funding
	Research planning	- Preparation of the institutional research plan - Approval of the teaching distribution for research - Approval of research centres and groups - Identification of research needs - Presentation of research project profiles
	Research projects	- Review of project profiles by the project committee - Approval of project profiles by the collegiate body - Implementation of approved project activities - Monitoring and control of project implementation - Training in research processes
	Training of researchers	- Training in scientific writing - Doctoral and postdoctoral training - Publication of research books - Publication of scientific articles with high global impact (Scopus and Web of Science)
Research	Scientific output	- Publication of articles in regional databases - Presentation of research reports - Organisation of national and international scientific events and conferences
	Scientific dissemination	- Dissemination of research results in institutional journals and newsletters
Links with society	Innovation	- Protection of intellectual property - Transfer of knowledge to society - Development of technology parks - Community cultural events
	University outreach	- Conferences and continuing education - Community sporting events - Community service projects - Community service programmes
	Community outreach projects	- Inter-institutional agreements - Partnerships with the public and private sectors - Participation in inter-institutional networks
	Pre-professional internships	- Inter-institutional agreements for pre-professional internships - Development of pre-professional internships in work environments

Source: Prepared internally.



Stage 2. Identification of quality planning criteria

To identify quality criteria, an international review of the standards used by national higher education systems for quality assurance is carried out. Table 4 below presents the quality standards for the teaching process as an example of the present study:

Table 4. *Quality criteria for the teaching process in HEIs*

Criterion	Specification
Relevance of academic offerings	- The academic offerings of the HEI respond to the needs and demands of society and contribute to the socio-economic development of the area of influence.
Quality of the teaching staff	- Fourth-level training and refresher courses for teaching staff according to their level of commitment
Retention rate	- Ratio between students entering a cohort and those completing the semester (n). The semester to be taken into account for determining this criterion must be defined according to the degree programme.
Learning assessment	- Existence of transparent assessment tools related to learning outcomes.
Student satisfaction	- Mechanisms that demonstrate the level of student satisfaction with the educational process.
Graduation rate	- Number of students who graduate within the stipulated time frame for the programme versus the number of students who enrolled in the last semester of the programme.

Source: Own elaboration.

DISCUSSION

The state-of-the-art analysis highlights the need to implement quality planning in the management of higher education institutions, not only to support decision-making but also to ensure compliance with high standards of quality and competitiveness. In this scenario, we agree with Chica & Erazo (2024) and Baltodano & Leyva (2024) that academic institutions and programmes must meet the standards of quality and excellence required for higher education. In this regard, the diagnosis carried out shows that the vast majority of institutions do not include aspects related to quality planning and management in their mission and vision. In the same vein, more than 70% of managers state that their institutions have neither a quality policy nor a quality plan, nor do they have objectives to guide institutional quality. Fernández et al. (2024) recognise in their research that universities do not integrate planning with management, which limits their performance.

Likewise, it is evident that more than 80% of the institutions included in the study do not have regulations related to quality planning and have not identified processes, sub-processes, and activities. According to Vilca et al. (2024), these aspects are essential for quality assurance in higher education institutions. Consequently, the institutions assessed do not have established working procedures, are unaware of development projections in their areas of influence and state that they do not know the needs of their students. These elements are fundamental in quality planning, as not knowing the expectations and needs of users ensures that academic programmes and projects are designed that are relevant and tailored to social demands (Correa et al., 2024).

On the other hand, the managers included in the study stated that more than 50% of the institutions do not have relevant information for decision-making and that not all stakeholders participate in decision-making, an element that, in the opinion of Sánchez et al. (2024), is essential to ensure transparency and objectivity in educational management. Thus, the limitations identified in the diagnosis of quality planning in higher education institutions were taken into account in designing the quality improvement plan proposed as a result of the research. This plan includes adapting the strategic planning of HEIs to incorporate quality-



related issues, approving and implementing quality policies and plans, defining quality objectives, and establishing quality standards.

CONCLUSION

Quality planning is a very useful tool for the management of higher education institutions as it contributes to raising quality and competitiveness standards. Thus, university authorities must adopt quality planning paradigms for decision-making with a view to increasing quality standards, competitiveness and transparency in the academic and administrative processes of these institutions.

The diagnosis of the current state of quality planning in HEIs revealed that there are limitations related to the failure to align the mission and vision with quality management, the absence of quality policies and plans, the lack of quality objectives and the lack of relevant information for decision-making. It also recognised that processes and activities have not been identified, there are no established work procedures and there are no quality planning standards.

The proposed strategy and the actions designed contribute to quality planning in higher education institutions, as it defines and identifies the processes, sub-processes, and activities of HEIs, proposes quality planning criteria, and presents a quality improvement plan that helps to minimise or mitigate the shortcomings identified in the diagnosis.

FINANCING

Non-monetary

CONFLICT OF INTEREST

There is no conflict of interest with individuals or institutions linked to the research.

ACKNOWLEDGEMENTS

To UNIANDES.

REFERENCES

- Arjona, M. D. P., Lira, A. L., & Maldonado, E. A. (2022). Quality management systems and educational quality in public higher education institutions in Mexico. *RETOS. Journal of Management and Economics Sciences*, 12(24), 268–283. <https://doi.org/10.17163/ret.n24.2022.04>
- Baltodano, G., & Leyva, O. (2024). Quality evaluation criteria in higher education in Mexico. *Journal of the Academy*, (10), 200–230. <https://www.journalacademy.net/index.php/revista/article/view/190>
- Chica, A. A., & Erazo, J. C. (2024). Importance of strategic planning in higher education institutions. *Conrado*, 20(96), 129–138. <http://scielo.sld.cu/pdf/rc/v20n96/1990-8644-rc-20-96-129.pdf>
- Chiquito, G. P., Ponce, C. V., & Mendoza, A. (2022). Internationalisation and strategic planning in support of higher education quality in Ecuador. *Scientific Series of the University of Computer Sciences*, 15(7), 133–141. <https://dialnet.unirioja.es/servlet/articulo?codigo=8590727>
- Correa, N., William, J., Guerra, R. M., Iglesias, A., & Pérez, J. (2024). Maturity models of internal quality assurance systems in higher education institutions. *Electronic Journal of Quality in Higher Education*, 15(2), 33–63. <https://revistas.uned.ac.cr/index.php/revistacalidad/article/view/5563>
- Fernández, E., García, M., & Rubio, I. (2024). Strategic planning, results-based management and organisational learning: Contextualisation in higher education institutions. *EduSol*,



- 24(86), 168–182.
<http://scielo.sld.cu/pdf/eds/v24n86/1729-8091-eds-24-86-168.pdf>
- Fierro, T. M., Martínez, G. N., Aguilar, J. A., Andino, M. G., & Merino, E. C. (2023). Academic planning and student satisfaction at the Riobamba Higher Technological Institute. *LATAM Latin American Journal of Social Sciences and Humanities*, 4(1), 1179–1187. <https://latam.redilat.org/index.php/lt/article/view/329>
- Flores, D. A., Artola, M. D. L., & Tarifa, L. (2022). Quality planning of processes at the Cordillera Higher Technological Institute. *University and Society*, 14(S2), 76–83. <https://rus.ucf.edu.cu/index.php/rus/article/view/2761>
- Giménez, C., & Acosta, L. (2024). University strategic planning: Education for global citizenship and intercultural competencies. *Higher Education and Society*, 36(1), 262–284. <https://ess.iesalc.unesco.org/index.php/ess3/article/view/v36i1-sg-2>
- Gómez, B., Plaza, N., Fuente, M., & Hernández, Y. (2024). Procedure to assess quality improvement in a postgraduate training programme. *Journal of Social Sciences*, 30(1), 122–139. <https://dialnet.unirioja.es/servlet/articulo?codigo=9370028>
- Guadalupe, K. W., & Zúñiga, H. C. (2023). Strategic planning for higher education institutions. *RECIAMUC*, 7(2), 614–625. <https://reciamuc.com/index.php/RECIAMUC/article/view/1150>
- Guerra, R. M., Acosta, D. A., Dávila, N., Correa, N., & Valencia, M. B. (2022). Certification of management systems and quality accreditation in higher education. *Revista Iberoamericana de Educación*, 88(1), 67–84. <https://rieoei.org/RIE/article/view/4779>
- Holguín, N. A., Delgado, K. Y., Guerra, J. J., Loor, M. D., Reyes, M. J., & Candelario, A. J. (2024). Strategic planning in higher education: Best practices and challenges. *Science and Development*, 27(4), 703–711. <https://revistas.uap.edu.pe/ojs/index.php/CYD/article/view/2780>
- Loor, K., & Lituma, C. (2022). Planning to strengthen internal quality assurance at the State University of the Santa Elena Peninsula (UPSE), Ecuador. *Acreditas*, (8), 22–24. <https://www.acreditas.com/index.php/acreditas/article/view/125>
- Mora, M. J., & Morales, L. F. (2023). State of the art on prospective planning in public higher education organisations in Costa Rica. *Education Management*, 9(2), 1–18. <https://revistas.ucr.ac.cr/index.php/gestedu/article/view/55966>
- Naranjo, N. B., & Espinoza, E. J. (2023). Strategic indicators as tools for planning management in a public higher education institution. *Perspectives on Economic and Legal Sciences*, 13(2), 85–100. <https://cerac.unlpam.edu.ar/index.php/perspectivas/article/view/7088>
- Ordoñez, A. F., Lui, W. A., & Merino, J. (2022). Strategic planning in teaching management at an Ecuadorian higher education institution. *Conciencia Digital*, 5(1.3), 68–88. <https://cienciadigital.org/revistacienciadigital2/index.php/ConcienciaDigital/article/view/1964>
- Sánchez, R. F., Avalos, V. G., Burbano, Á. B., & Gavilanes, M. A. (2024). Administrative and legal decision-making in higher education in the 21st century. *Revista Cubana de Reumatología*, 26, 1319. <https://revreumatologia.sld.cu/index.php/reumatologia/article/view/1319>
- Sillo, J. E., Romero, A. J., & Carrera, P. M. (2023). Strategic planning process in university quality management. *Ingenium et Potentia*, 5(1), 1183–1194. <https://dialnet.unirioja.es/servlet/articulo?codigo=9367874>



Vilca, M., Saavedra, P., Huaman, R., & Rojas, E. A. (2024). Quality assurance policies in higher education: A systematic review. *Comuni@cción*, 15(1), 105–116.
<https://doi.org/10.33595/2226-1478.15.1.105>

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