



## Revolutionizing Excellence: A Futuristic Framework for Graduate Certification

### Revolucionando la Excelencia: Un Marco Futurista para la Certificación de Posgrado

### Révolutionner l'excellence: un cadre futuriste pour la certification des cycles supérieurs

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#### ABSTRACT

**Introduction:** Higher Education faces the challenge of exploring postgraduate certification systems that meet academic demands and are comprehensively aligned with the Sustainable Development Goals. This approach seeks to strengthen relationships between the university, the workplace and

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society, ensuring that training not only responds to academic needs. **Objective:** Analyze how a holistic approach in postgraduate certification contributes significantly to professionals' academic and research training. **Method:** A systematic bibliographic review was used, from which an evaluative and reflective analysis was carried out. **Results:** A proposal is made to achieve excellence in postgraduate studies, supported by theoretical foundations. The outline of the postgraduate academic research certification ladder was designed within the coordination of Scientific Dissemination of the Research Unit of the Faculty of Medical and Life Sciences of Universidad Da Vinci de Guatemala. In addition, the bases for implementing this postgraduate degree's proposed investigative academic certification ladder are described. **Conclusion:** Postgraduate certification becomes an academic badge, a testament to the collective commitment to building a future that is not only prosperous but also sustainable and ethical. This proposal's success lies not only in ineffective implementation but in the ability to inspire lasting change in how we educate and prepare the leaders of tomorrow.

**Keywords:** Certification, Postgraduate certification, Research, Society, Working world, Medical, Life

## RESUMEN

**Introducción:** la Educación Superior enfrenta el desafío de explorar sistemas de certificación de posgrado que satisfagan las demandas académicas y que se alineen de manera integral con los Objetivos de Desarrollo Sostenible. Este enfoque busca estrechar las relaciones entre la universidad, el ámbito laboral y la sociedad, garantizándose que la formación no solo responda a las necesidades académicas. **Objetivo:** analizar cómo un enfoque holístico en la certificación de posgrado contribuye de forma significativa a la formación de académica e investigativa de los profesionales. **Método:** se utilizó el método de la revisión bibliográfica sistemática, a partir de la cual se realizó un análisis valorativo y reflexivo. **Resultados:** se hace una propuesta para lograr la excelencia en el posgrado; sustentada en fundamentos teóricos. Se diseñó el esquema de la escalera certificativa académica investigativa de posgrado dentro de la coordinación de Divulgación científica de la Unidad de Investigación de la Facultad de Ciencias Médicas y de la Vida de la Universidad Da Vinci de Guatemala. Además, se describen las Bases para la implementación de la propuesta de escalera certificativa académica investigativa de este posgrado. **Conclusión:** La certificación de posgrado se convierte en un distintivo académico, en un testimonio del compromiso colectivo de construir un futuro que sea no solo próspero, sino también sostenible y ético. El éxito de esta propuesta reside no solo en la implementación efectiva, sino en la capacidad de inspirar un cambio duradero en la forma en que educamos y preparamos a los líderes del mañana.

**Palabras clave:** Certificación, Certificación de posgrado, Investigación, Sociedad, Mundo laboral, Médicas, Vida

## RÉSUMÉ

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**Introducción:** L'enseignement supérieur est confronté au défi d'explorer des systèmes de certification de troisième cycle qui répondent aux exigences académiques et qui sont pleinement alignés sur les objectifs de développement durable. Cette approche vise à renforcer les relations entre l'université, le lieu de travail et la société, en garantissant que la formation ne répond pas uniquement aux besoins académiques. **Objectif:** Analyser comment une approche holistique de la certification postuniversitaire contribue de manière significative à la formation académique et de recherche des professionnels. **Méthode:** La méthode de revue bibliographique systématique a été utilisée, à partir de laquelle une analyse évaluative et réflexive a été réalisée. **Résultats:** Une proposition est faite pour atteindre l'excellence dans les études postuniversitaires; soutenu par des fondements théoriques. Les grandes lignes de l'échelle de certification de recherche universitaire postuniversitaire ont été conçues dans le cadre de la coordination de la diffusion scientifique de l'unité de recherche de la Faculté des sciences médicales et de la vie de l'Université Da Vinci du Guatemala. En outre, les bases pour la mise en œuvre de l'échelle de certification académique d'investigation proposée pour ce diplôme de troisième cycle sont décrites. **Conclusion:** La certification de troisième cycle devient un insigne académique, un témoignage de l'engagement collectif à construire un avenir non seulement prospère, mais également durable et éthique. Le succès de cette proposition ne réside pas seulement dans sa mise en œuvre efficace, mais aussi dans sa capacité à inspirer un changement durable dans la manière dont nous éduquons et préparons les dirigeants de demain.

**Mots clés:** Certification, Certification postuniversitaire, Recherche, Société, Monde du travail, Médical, Vie.

## INTRODUCTION

In the current panorama of Higher Education, the challenge arises of searching for postgraduate certification systems that not only respond to academic demands but are also aligned with the Sustainable Development Goals (SDGs) contained in the 2030 Agenda, which in turn strengthens the relationship between the university, the world of work and society. <sup>(1)</sup>

Higher education institutions face the reality of training highly trained professionals committed to sustainability and global progress, laying the foundations for developing new concepts in postgraduate certification.

In this development context, the question arises: How can we create a certification system that not only evaluates academic knowledge but also integrates crucial aspects related to social responsibility, equity, contribution to the SDGs, and continuous professionalization? This article explores an innovative and avant-garde approach toward postgraduate certification, proposing a conception that goes beyond the traditional evaluation of academic competencies, embracing a comprehensive and futuristic perspective that reflects the commitment to the fundamental principles of the 2030 Agenda. <sup>(1)</sup>

The researchers believe that as higher education becomes an agent of change and social transformation, it is essential to design certification systems that promote academic excellence,

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research leadership, global awareness, and ethical, social, and business responsibility. This article aims to analyze how a holistic approach in postgraduate certification contributes significantly to the academic and research training of professionals, which allows them to lead processes with a vision of the future, ethics, and unwavering commitment to the sustainable development of society.

Recognizing this situation leads the authors to consider the dynamic environment of higher education and the need to evolve postgraduate certification systems, a process that becomes increasingly evident. Beyond the traditional evaluation of academic knowledge, the challenge arises of integrating fundamental aspects related to social and business responsibility, equity, entrepreneurship, academic, investigative, and solution-providing leadership, as well as contributing to the fulfillment of the Objectives of Sustainable Development (SDG) in a context of continuous professionalization.<sup>2</sup>

An in-depth analysis is carried out of how a holistic approach in postgraduate certification can contribute to rethinking new strategies in the training of professionals who not only excel in the academic and research field but also lead the processes of sustainable development with a futuristic vision, ethics, and a socioeconomic, multicultural and environmental commitment.

Higher Education Institutions must not only aspire to certify knowledge but also to train agents of change who, through their expertise, can contribute significantly to constructing a more just, equitable world in harmony with the fundamental principles of the 2030 Agenda.

## METHOD

In correspondence with the position of Hernández Sampieri, Fernández, & Batista in 2010<sup>(3)</sup> and Iñiguez Rueda 2019<sup>(4)</sup>, an evaluative and reflective analysis of systematic bibliographic review was carried out.

The articles selected for the bibliographic review were from indexed databases with scientific support. Their object is university academic management, research, postgraduate training, and sustainable processes in university training in Spanish or English. The exclusion criteria. Exclusion Criteria: Articles not written in clear, coherent, and scientific language, and the databases in which they were published were not indexed or had proven scientific support.

In reviewing and selecting the studies, once duplicates were identified and eliminated, the titles and abstracts were reviewed to confirm their relevance to the topic. Those who did not meet this criterion were excluded. Subsequently, the remaining articles were read to extract the necessary information for the research. The organization of this information was carried out following the objectives and approaches of the study. In the review, 25 articles were found, and 15 articles were selected.

## RESULTS

Formalization and institutional recognition vary across cultures and educational systems. Over time, graduate education has evolved to become a distinctive part of higher education institutions.<sup>(1,3)</sup>

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The first universities were established in Europe during the Middle Ages and the Renaissance. These institutions, such as the University of Bologna in the 11th century, laid the foundation for higher education and, eventually, specialization in more advanced areas of knowledge. <sup>(2)</sup>

During the 19th century, many European and American universities began to develop more formalized graduate programs, including master's and doctoral programs. Harvard University, for example, awarded its first Ph.D. in 1873. <sup>(1,3,4)</sup>

Throughout the 20th century, graduate education expanded and diversified throughout the world. New disciplines and research programs were created, and the importance of obtaining graduate degrees was consolidated in many academic and professional fields.

Higher education institutions have adopted and adapted postgraduate education in different parts of the world according to their traditions and needs. Today, it is already a reality assumed by state policies in an important part of the world that postgraduate education has become essential for academic research and the training of experts in specific fields.

The researchers believe that postgraduate education has evolved, and its recognition has gradually taken shape as educational institutions of higher education have responded to the changing demands of the knowledge society.

## **The postgraduate situation in Latin America and the Caribbean is diverse and reflects challenges and advances in the region.**

In recent decades, there has been a significant increase in the offering of graduate programs in the region. Many universities and research centers have expanded their offerings to meet the growing demand for advanced education. <sup>(2)</sup>

Despite the growth, access and equity challenges in accessing graduate programs persist. There are socioeconomic, cultural, and geographic gaps that limit the access of specific population groups to postgraduate education. <sup>(4)</sup>

International collaboration is being established between universities, postgraduate programs, and research centers to improve postgraduate education. These alliances have among their results the design of joint projects and academic exchange programs. <sup>(5)</sup>

Postgraduate education carries regional research and development. Many graduate programs are research-oriented and contribute to advancing knowledge in various disciplines.

A growing specialization is observed in thematic areas of regional relevance. This includes programs focused on sustainability, environment, and Latin American studies.

On the other hand, the trend towards the internationalization of postgraduate programs is becoming more substantial, with an increase in the participation of students and academics from other countries and the adoption of international standards in evaluating and crediting programs. <sup>(4.5)</sup>

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This development is accompanied by its concern about the financing of postgraduate programs. Many students depend on scholarships and grants to finance their studies, and institutions struggle to ensure adequate resources for developing and maintaining quality programs. <sup>(6)</sup>

There is a growing concern related to the quality and accreditation of graduate programs. Some countries have implemented accreditation systems to ensure quality standards, but challenges remain. <sup>(6)</sup>

The authors affirm that postgraduate education in Latin America and the Caribbean is experiencing significant changes. However, challenges related to access, equity, and financing persist.

## **How to achieve excellence in postgraduate studies.**

The researchers affirm that a revolution in excellence in the futuristic framework for Graduate Certification and sustainable development implies considering various aspects, from the structure of graduate programs and the organization of these programs to the alignment with the principles of sustainability, quality with a holistic approach of equity, interculturality, and social, ethical and business responsibility. <sup>(7)</sup>

Aspects to be considered:

- ✓ Develop postgraduate programs with a curricular design that integrates technological, research, and academic aspects with soft skills, social responsibility, business, and ethics, with a marked tangible contribution to the SDGs.
- ✓ Incorporate courses on sustainable development, environmental sustainability, social equity, corporate responsibility, and ethical management.
- ✓ Promote inter, multi, and transdisciplinary in postgraduate education by encouraging collaboration between different areas of knowledge to address complex contextual problems from multiple perspectives.
- ✓ Adopt innovative methodologies that encourage active participation, experiential learning, and the practical application of knowledge in real projects linked to sustainability.
- ✓ Develop assessment methods beyond traditional exams, including project evaluation, participation in sustainable initiatives, and the ability to apply knowledge in real-world contexts.
- ✓ Establish solid alliances with companies and organizations committed to sustainability, providing opportunities for students to work on real projects and gain practical experience.
- ✓ Encourage applied research that contributes to solving practical problems related to sustainable development from an integrative perspective, generating valuable knowledge for society and the socioeconomic, cultural, environmental, and business environment.
- ✓ Incorporate training in transversal skills such as leadership, entrepreneurship, resilience, assertive communication, critical thinking, and problem-solving, essential for leading sustainable initiatives.
- ✓ Implement mentoring and tutoring programs that connect students with successful professionals in sustainability. This provides guidance and professional development opportunities.

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- ✓ Develop accreditation systems that value the effective integration of sustainable practices in postgraduate programs, recognizing it in sustainable training.
- ✓ Guarantee diversity and inclusion in graduate programs, creating educational environments that reflect global reality and prepare students to work in diverse and multicultural complex contexts.
- ✓ Regional and international collaboration, with a focus on relevant thematic areas.

By implementing these aspects within the design of graduate programs, a revolution in excellence in Graduate Certification can be achieved. This is possible because the programs are placed at the heart of sustainable development to constitute the platform of knowledge and skills so that professionals can answer the sustainability challenges of socioeconomic, intercultural, environmental, and technological development.

## Foundations of the proposal

The proposal to revolutionize excellence in Graduate Certification and its alignment with sustainable development must be based on solid principles that address the complexities of the current educational environment and the changing needs of society. On the other hand, these foundations not only guide the creation and execution of postgraduate programs but also ensure that higher education contributes significantly to training ethical, competent professionals committed to sustainable development and improving society.

### Among these fundamentals are:

- ✓ **Holistic Approach:** It allows us to recognize the interconnection of academic knowledge, practical skills, ethical values, and socioeconomic, academic, cultural, social research, and business responsibility in postgraduate training. It ensures that graduates acquire advanced technical knowledge and are equipped to address real-world challenges ethically and sustainably.
- ✓ **Alignment with the SDGs:** They constitute the guiding framework for the postgraduate program's curricular structure and objectives. The SDGs provide a global foundation for addressing critical sustainability challenges and ensure that graduate education directly contributes to social and environmental goals.
- ✓ **Flexibility and Adaptability:** Allows the design of flexible programs that adapt to the changing needs of the work environment and allow students to personalize their learning experience. The rapid change in society and technology requires programs that dynamically adjust to maintain relevance and effectiveness.
- ✓ **Integration of Emerging Technologies:** Incorporate emerging technologies and innovative methodologies to improve the quality of teaching and the practical application of knowledge. Advanced technologies allow for more interactive, collaborative, real-world problem-solving learning experiences.
- ✓ **Emphasis on Applied Research:** It allows the promotion of applied research that directly impacts the resolution of practical problems and contributes to sustainable development. Applied

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research strengthens the connection between academia and the world of work, providing tangible solutions to sustainable challenges.

✓ **Collaboration and Alliance Networks:** Promote collaboration between academic institutions, companies, government, and civil society organizations to enrich the postgraduate experience. Collaborations provide practical opportunities, additional resources, and a broader view of sustainable challenges and opportunities.

✓ **Ethics and Social and Business Responsibility:** Integrate ethics and social and business responsibility as fundamental training components, preparing students to make informed and ethical decisions in their respective fields. Competent, competitive, ethical professionals who are academic and investigative are essential to lead positive changes and contribute to sustainability in their communities and work environments.

✓ **Continuous Evaluation and Improvement:** Establish continuous evaluation mechanisms that allow programs to be adapted according to feedback, graduate results, and market trends. Continuous improvement ensures the relevance and effectiveness of graduate programs over time.

✓ **Access and Equity:** Ensure that graduate education is accessible to diverse students, promoting inclusion and equity. An inclusive graduate education better reflects the diversity of perspectives necessary to address global challenges comprehensively.

This analysis leads researchers to assert that the "graduate academic research certification ladder" is a progressive system of academic certifications that students obtain as they advance in their graduate training and research in their field of study. This ladder includes different levels of certification, such as diplomas, certificates, or specific academic degrees; each represents an achievement and level of competence in academic research. It involves a gradual structure that allows students to advance from beginners to more advanced levels as they acquire research skills, knowledge, and experience.

The tiered design allows students to specialize and excel in their study area while promoting continued development in academics and research. Figure one is presented below; the principal author created the source.

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**Fig. 1. Diagram of the UI-FCMV-UDV postgraduate academic-research certification ladder**



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To achieve the proposal success, several key elements facilitate the sustainable development of the UI-FCMV-UDV postgraduate academic research certification ladder, so the researchers understand a few considerations for their implementation.

Ensure the support and commitment of the educational institution to carry out the proposed changes. This includes support from senior management, faculty, and other relevant stakeholders, involving all stakeholders and decision-makers, such as teachers, students, employers, and industry experts. Obtaining their opinion and participation will contribute to an acceptable and effective change.

On the other hand, it is essential to ensure the adequate allocation of financial and technological resources to implement the proposed improvements. This may include investment in emerging technologies, professional staff development, and infrastructure upgrades, accompanied by detailed strategic planning that includes clear objectives, milestones, timelines, and necessary resources. Careful planning will contribute to a smooth and effective implementation.

A determining factor for the effective development of the proposal is to promote continuous training and development for academic, administrative, and technical staff. This is crucial to ensure that everyone is prepared to adopt new methodologies and technologies, supporting this action with a marketing strategy designed with a futuristic outlook and high reach, guaranteeing effective communication channels.

Those developing the proposal must outline actions aimed at continuous monitoring, evaluation, and feedback to draw up dynamic plans for continuous improvements and address challenges in real time. Flexibility and adaptability allow educational and work needs to be taken into account.

By addressing these elements, the chances of success in the implementation of the proposal are increased, ensuring that the proposed changes are not only carried out but also generate a positive and sustainable impact on graduate education. (See figure 2, source idem to 1)

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**Fig. 2 Bases for the implementation of the proposed UI-FCMV-UDV postgraduate academic research certification ladder**



The design and development of a postgraduate academic research certification ladder must consider contemporary and updated approaches that reflect the trends and demands in higher education and research in the knowledge society, so it must have an inter, multi and transdisciplinary approach, base learning on the competency approach and evidence medicine. Its design must consider the use of educational technologies.

In the same way, educational activities must focus on students by personalizing learning with support, even in an online modality, promoting autonomy, self-reflection, and active participation. Establishing alliances and collaborations between companies, industry, and professionals in the field to ensure that the program's content is aligned with the needs and expectations of the labor market.

This leads researchers to ensure, from a broad and updated conception of what the academic and research postgraduate course should be in a higher education institution in today's society, that a proposal of this type must be designed and developed fully. Under global and intercultural perspectives to prepare students for work in international and diverse environments. For this reason, soft skills, including critical thinking, effective communication, teamwork, and problem-solving, must

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be developed in the training process. For this reason, the practical application of research in clinical and community settings must be promoted to address real health problems and improve medical care.

Combining these approaches in designing and developing a certification ladder will contribute to the comprehensive and updated preparation of postgraduate professionals in academic research.

## DISCUSSION

García Rodríguez and Riveros Rodríguez, in 2023 <sup>(10)</sup> in their research assert that the implementation of an educational management proposal based on the balanced scorecard (BSC) for teacher training in digital competencies implies substantial benefits and significant challenges. Among them is the improvement of the quality of educational processes and the continuous evaluation of the entire teacher training process to identify needs. Lazo Pérez in 2019 <sup>(11)</sup> and Acevedo and Lazo in 2022 <sup>(12)</sup> propose that an inter, multi and transdisciplinary approach is necessary, as well as a strong commitment from management to the active participation of teachers and directors, adaptability to address emerging challenges in the implementation and monitoring process.

In this sense, in Ecuador, Ordóñez Cuenca, García Tinisaray, and Martínez Guerrero in 2022 <sup>(13)</sup> affirm that the State and Higher Education Institutions (IES) have not yet adjusted their curricula to align with the economy, industry, and society, which limits the integration of professionals into a world of globalization that imposes new educational models with innovative methodologies and integrative approaches, as well as the development of skills to face the challenges of the fourth industrial revolution.

In this regard, Mérida-López, Quintana- Orts and Extremera in 2022 <sup>(14)</sup> affirm that to achieve the expected results in postgraduate education, the programs must be redesigned based on the needs of the students. It considers the strengthening of soft skills and the need for institutional support. Likewise, Salas Durazo and García Hernández in 2022 <sup>(15)</sup> ensure that the strategic planning of material and human resources, systematic evaluation, and contextualization are fundamental for successful postgraduate studies in educational institutions.

Higher education institutions must take measures in today's society (called the knowledge society, which arises in a globalized society). To update its entire epistemological and methodological scaffolding. In the same way, the academic investigative postgraduate course must be understood as the strategically designed systematic process, which serves as an inter, multi, and transdisciplinary connection between postgraduate training processes, society, and the world of work due to its training and investigative purpose.

Integrating a holistic approach encompassing advanced science and technological innovation knowledge, soft skills, ethics, and social responsibility will enrich the educational experience and prepare graduates to lead with a vision for the future. Its strategic alignment with the SDGs ensures that every step in graduate education directly impacts building a more equitable, sustainable, and ethical future.

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The flexibility and adaptability of the proposal will not only respond to the changing dynamics of the work and technological environment but will also encourage innovation and creativity among students. Integrating emerging technologies and active collaboration with companies and organizations will strengthen the connection between academia and practice, allowing applied research to address real problems and contribute to tangible solutions.

## CONCLUSIONS

The proposal addresses the current challenges in Postgraduate Higher Education, recognizing the importance of assuming innovative and holistic paradigms for training professionals committed to sustainable development.

Ultimately, graduate certification becomes an academic badge and a testament to the collective commitment to building a prosperous, sustainable, and ethical future. This proposal's success lies not only in ineffective implementation but in the ability to inspire lasting change in how we educate and prepare the leaders of tomorrow.

## FINANCING

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## CONFLICTS OF INTEREST

No conflicts of interest are declared.

## BIBLIOGRAPHIC REFERENCES

1. Unesco. La UNESCO y los objetivos de desarrollo sostenible. [Internet]; 2015. Accessed December 26, 2023. Available at: <https://es.unesco.org/sdgs>.
2. Krainer A. Interculturalidad y educación superior, una mirada crítica desde américa latina. Revista de la educación superior. 2021; 50(199). [online].; 2015. Accessed December 26, 2023. Available at: [http://www.scielo.org.mx/scielo.Php?script=sci\\_arttext&pid=s0185-27602021000300027](http://www.scielo.org.mx/scielo.Php?script=sci_arttext&pid=s0185-27602021000300027)
3. Hernández Sampieri, Fernández, & batista, metodología de la investigación. 2010. [Internet]; 2015. Accessed December 26, 2023. Available at: <https://eco.biblio.unc.edu.ar/cgi-bin/koha/opac-detail.pl?biblionumber=22128>
4. Iñiguez Rueda I. Fundamentos epistémicos de la investigación cualitativa y cuantitativa: consensos y disensos. 2019. Revista digital de investigación docencia universitaria, 32. [Internet]; 2015. Accessed December 26, 2023. Available at: <http://www.scielo.org.pe/pdf/ridu/v13n1/a08v13n1.pdf>

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5. Quiroga S G. Experiencias de vinculación universitaria en las américas. Capacitación, investigación y extensión en gestión del riesgo de desastre. Revista de estudios latinoamericanos sobre reducción de riesgos de desastres. 2023; 7(1). [Internet]; 2015. Accessed December 26, 2023. Available at: <https://www.revistareder.com/ojs/index.php/reder/article/view/110>
6. Araujo S. El posgrado en la argentina. La acreditación en perspectiva comparada. Revista integración de conocimiento. 2020; 9(9): p. 11.29.). [Internet]; 2015. Accessed December 26, 2023. Available at: <https://revistas.unc.edu.ar/index.php/integracionyconocimiento/article/download/27592/29064/81882>
7. Pérez J CH. Formación docente a nivel de postgrado en latinoamérica. Revista cultura, educación y educación. 2019; 10(2). [Internet]; 2015. Accessed December 26, 2023. Available at: <https://dialnet.unirioja.es/descarga/articulo/7823421.pdf>
8. Guerra Bretaña R M, Sosa Vera R C, Roque González R, Ramos Azcuy F J. Experiencias cubanas de planificación para la continuidad en programas de posgrado en tiempos de covid-19. Revista signos. 2022; 14(2). [Internet]; 2015. Accessed December 26, 2023. Available at: <https://revistas.usantotomas.edu.co/index.php/signos/article/view/7782>
9. García Rodríguez J A, Riveros Rodríguez M A. Propuesta de gestión educativa basada en el cuadro de mando integral para capacitación docente en competencias digitales. [Internet]. 2023. [Cited: 2024, January] available at: <https://hdl.handle.net/10901/26905>.
10. García Rodríguez J A, Riveros Rodríguez M A. Propuesta de gestión educativa basada en el cuadro de mando integral para capacitación docente en competencias digitales. [Internet]. 2023. [Cited: 2024, January] available at: <https://hdl.handle.net/10901/26905>.
11. Lazo Pérez M A. Tecnología de salud desde una mirada de ciencia. 2019. [Internet]. 2023. [Cited: 2024, January] available at: <https://www.medigraphic.com/pdfs/revcubtecsal/cts-2019/cts191a.pdf>
12. Acevedo Ayala J, Lazo Pérez M A, Medina Borges R M. Ciencia, salud y tecnología en chile. [Internet]. 2022. [Cited: 2024, January] available at: <https://www.ricsh.org.mx/index.php/ricsh/article/view/196>
13. Ordóñez Cuenca J A, García Tinisaray D K, Martínez Guerrero J S. Perspectivas de la educación superior en ecuador. [Internet]. 2023. [Cited: 2024, January] available at: [https://www.researchgate.net/profile/daysi-garcia/publication/362293699\\_perspectivas\\_de\\_la\\_educacion\\_superior\\_en\\_ecuador/links/62e1a5669d410c5ff3696169/perspectivas-de-la-educacion-superior-en-ecuador.pdf](https://www.researchgate.net/profile/daysi-garcia/publication/362293699_perspectivas_de_la_educacion_superior_en_ecuador/links/62e1a5669d410c5ff3696169/perspectivas-de-la-educacion-superior-en-ecuador.pdf)
14. Mérida-López S, Quintana-Orts C, & Extremera N. Exigencias académicas en estudios de posgrado a distancia y sus vínculos con el agotamiento y la regulación de las emociones propias.

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Revista internacional de pedagogía e innovación educativa, 3(1), 139–154. 2022. [Internet]. 2023. [Cited: 2024, January] available at: <https://doi.org/10.51660/ripie.v3i1.118>

15. Salas Durazo I A, García Hernández A K. La retribución social en los posgrados de la universidad de guadalajara.2023. [Internet]. 2023. [Cited: 2024, January] available at: [https://www.researchgate.net/profile/ivan-salas-durazo/publication/367635535\\_la\\_retribucion\\_social\\_en\\_los\\_posgrados\\_de\\_la\\_universidad\\_de\\_guadalajara\\_diagnostico\\_institucional\\_y\\_guia\\_para\\_el\\_desarrollo\\_de\\_proyectos/links/63d977d8c97bd76a824eb4cd/la-retribucion-social-en-los-posgrados-de-la-universidad-de-guadalajara-diagnostico-institucional-y-guia-para-el-desarrollo-de-proyectos.pdf](https://www.researchgate.net/profile/ivan-salas-durazo/publication/367635535_la_retribucion_social_en_los_posgrados_de_la_universidad_de_guadalajara_diagnostico_institucional_y_guia_para_el_desarrollo_de_proyectos/links/63d977d8c97bd76a824eb4cd/la-retribucion-social-en-los-posgrados-de-la-universidad-de-guadalajara-diagnostico-institucional-y-guia-para-el-desarrollo-de-proyectos.pdf)

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