



## CREATIVE THINKING: A SYSTEMATIC REVIEW OF THE LITERATURE OF THE LAST FIVE YEARS

Gerardo Alfonso Sanmartin Orbe<sup>1</sup>  
Marcia Elizabeth Castro Barrera<sup>2</sup>  
Jandry Geomar Chuni Gaona<sup>3</sup>

### ABSTRACT

**Objective:** This research aims to analyze the integration of creative thinking in educational and work environments in the last five years.

**Theoretical Framework:** This systematic review analyzes the integration of creative thinking in educational and work environments, focusing on the pedagogical and methodological strategies that have been shown to be effective in the development of this skill. Through the review of recent studies, innovative approaches that encourage creativity in students are identified, such as the use of audiobooks, artistic projects and active methodologies such as design thinking.

**Method:** The PRISMA method was used to ensure a rigorous approach to data selection. An exhaustive search was carried out in databases such as Scopus, SciELO, Redalyc, Dialnet, Erih Plus, Latindex and the César Vallejo University, which made it possible to compile relevant studies published in the last five years.

**Results and Discussion:** The results of the systematic review indicate that the development of creative thinking is essential in educational and work environments, highlighting the need to implement innovative pedagogical strategies. The inclusion of active methodologies, such as design thinking and the use of audiobooks, are crucial to foster creative skills in students, preparing them to face real challenges in a constantly changing world.

**Implications of the Research:** The integration of creative thinking in educational and work environments is essential to prepare students for the challenges of today's world.

**Originality/Value:** Generate a comprehensive approach to creative thinking, through the analysis of various pedagogical strategies and their impact in educational and work environments.

**Keywords:** Creative Thinking, Creative Skills, Education, Educational Environment, Work Environment.

## PENSAMENTO CRIATIVO: UMA REVISÃO SISTEMÁTICA DA LITERATURA DOS ÚLTIMOS CINCO ANOS

### RESUMO

**Objetivo:** Esta pesquisa tem como objetivo analisar a integração do pensamento criativo nos ambientes educacional e de trabalho nos últimos cinco anos.

**Estrutura teórica:** Esta revisão sistemática analisa a integração do pensamento criativo no ambiente educacional e de trabalho, com foco nas estratégias pedagógicas e metodológicas que se mostraram eficazes no desenvolvimento desta habilidade. Através da revisão de estudos recentes, são identificadas abordagens inovadoras

<sup>1</sup> César Vallejo University, Peru. E-mail: [gsanmartin@ucvvirtual.edu](mailto:gsanmartin@ucvvirtual.edu)

Orcid: <https://orcid.org/0000-0001-6453-881X>

<sup>2</sup> National University of Education UNAE, Ecuador. E-mail: [marcia.castro@unae.edu.ec](mailto:marcia.castro@unae.edu.ec)

Orcid: <https://orcid.org/0009-0000-9598-0512>

<sup>3</sup> National University of Education UNAE, Ecuador. E-mail: [jandry.chuni@unae.edu.ec](mailto:jandry.chuni@unae.edu.ec)

Orcid: <https://orcid.org/0009-0006-5618-076X>



que estimulam a criatividade nos alunos, como o uso de audiolivros, projetos de arte e metodologias ativas, como o design thinking.

**Método:** O método PRISMA foi utilizado para garantir uma abordagem rigorosa na seleção dos dados. Foi realizada uma busca exaustiva em bases de dados como Scopus, SciELO, Redalyc, Dialnet, Erih Plus, Latindex e Universidade César Vallejo, o que permitiu compilar estudos relevantes publicados nos últimos cinco anos.

**Resultados e discussão:** Os resultados da revisão sistemática indicam que o desenvolvimento do pensamento criativo é essencial nos ambientes educativos e de trabalho, destacando a necessidade de implementar estratégias pedagógicas inovadoras. A inclusão de metodologias ativas, como o design thinking e a utilização de audiolivros, são cruciais para fomentar competências criativas nos alunos, preparando-os para enfrentar desafios reais num mundo em constante mudança.

**Implicações da Pesquisa:** Integrar o pensamento criativo nos ambientes educacionais e de trabalho é essencial para preparar os alunos para os desafios do mundo de hoje.

**Originalidade/Valor:** Gerar uma abordagem abrangente ao pensamento criativo, através da análise de diversas estratégias pedagógicas e seu impacto nos ambientes educacionais e de trabalho.

**Palavras-chave:** Pensamento Criativo, Habilidades Criativas, Educação, Ambiente Educacional, Ambiente de Trabalho.

## PENSAMIENTO CREATIVO: UNA REVISIÓN SISTEMÁTICA DE LA LITERATURA DE LOS ÚLTIMOS CINCO AÑOS

### RESUMEN

**Objetivo:** Esta investigación tiene como objetivo analizar la integración del pensamiento creativo en los ámbitos educativo y laboral en los últimos cinco años.

**Estructura teórica:** Esta revisión sistemática analiza la integración del pensamiento creativo en el entorno educativo y laboral, centrándose en las estrategias pedagógicas y metodológicas que han demostrado ser eficaces en el desarrollo de esta capacidad. A través de la revisión de estudios recientes, se identifican enfoques innovadores que estimulan la creatividad en los estudiantes, como el uso de audiolibros, proyectos de arte y metodologías activas, como el pensamiento del diseño.

**Método:** El método PRISMA se ha utilizado para garantizar un enfoque riguroso de la selección de datos. Se realizó una búsqueda exhaustiva en bases de datos como Scopus, SciELO, Redalyc, Dialnet, Erih Plus, Latindex y la Universidad César Vallejo, lo que permitió recopilar estudios relevantes publicados en los últimos cinco años.

**Resultados y discusión:** Los resultados de la revisión sistemática indican que el desarrollo del pensamiento creativo es esencial en los ambientes educativo y laboral, destacando la necesidad de implementar estrategias pedagógicas innovadoras. La inclusión de metodologías activas, como el pensamiento del diseño y el uso de audiolibros, son cruciales para fomentar las habilidades creativas en los estudiantes, preparándolos para enfrentar desafíos reales en un mundo cambiante.

**Implicaciones de la investigación:** Integrar el pensamiento creativo en entornos educativos y laborales es esencial para preparar a los estudiantes para los desafíos del mundo de hoy.

**Originalidad/Valor:** Generar un enfoque integral del pensamiento creativo, a través del análisis de diversas estrategias pedagógicas y su impacto en los ambientes educativos y laborales.

**Palabras clave:** Pensamiento Creativo, Habilidades Creativas, Educación, Entorno Educativo, Entorno Laboral.

RGSA adota a Licença de Atribuição CC BY do Creative Commons (<https://creativecommons.org/licenses/by/4.0/>).





## 1 INTRODUCTION

Creative thinking has become a topic of growing interest in the educational and professional field, given its fundamental role in innovation and solving complex problems. In a world characterized by rapid and constant change, creative skills are essential to adapt and thrive (López et al, 2023). However, despite its importance, there are multiple challenges in promoting and developing creative thinking in different contexts. Therefore, Fuentes (2024) points out that among the challenges of creative thinking are the lack of effective methodologies for its teaching, resistance to change in traditional educational environments and the poor evaluation of the results of programs aimed at promoting creativity.

Creative thinking is a skill that transcends disciplines and contexts, being essential for innovation and progress in today's society. However, despite its importance, it has been observed that, in general, it is not possible to develop this skill in various environments, especially in education and work (Muñoz, 2021). This problem raises serious questions about how new generations are preparing to face the challenges of the future.

In this sense, in the educational context, many teaching systems are still based on traditional methods that prioritize memorization and repetition over critical and creative thinking. Which has led to an environment where students are encouraged to follow instructions and avoid the risk of making mistakes (Vásquez, 2021). The lack of spaces for experimentation and exploration limits students' ability to think creatively. This situation is aggravated by curricular demands that focus attention on measurable academic results, leaving little room for the development of creative skills.

Likewise, the problem extends to the workplace, where companies face a growing challenge related to the need to innovate in an increasingly competitive market. However, many workers come from an educational system that has not adequately encouraged their creative thinking (Carrillo et al., 2019). This results in a work environment that may lack the skills necessary to generate innovative ideas or solve complex problems. A lack of creative thinking can limit not only the individual growth of workers, but also the innovative potential of organizations.

Therefore, from the above, an important problem is evident, which is that, despite the efforts made to integrate creative thinking in educational curricula and work dynamics, many individuals and organizations still face significant barriers that They limit your ability to think creatively. This raises questions about the most effective strategies for developing this skill and how its impact on academic and professional performance can be measured. For this reason,



for this systematic review the following research question has been posed: How has creative thinking been integrated into educational and work contexts during the last five years?

Likewise, to answer this research question, the general objective has been established to analyze the integration of creative thinking in educational and work environments in the last five years. Therefore, the following specific objectives have been defined: identify the most used pedagogical strategies to promote creative thinking in formal and informal education, evaluate the impact of these methodologies on the development of creative skills among students and professionals and propose recommendations based on evidence collected on effective practices.

## 2 THEORETICAL REFERENCE

Creative thinking has been the object of study in various disciplines, reflecting its importance in human development and its application in educational and work contexts. Creative thinking is defined as the ability to productively participate in the creation, evaluation and improvement of alternatives that can lead to original and effective solutions (De Cássia et al., 2021). This definition highlights the active nature of creative thinking, emphasizing that it is not only about generating ideas, but also about evaluating and improving them. Furthermore, it is recognized that this competence can be developed through practice and is essential for advancement in various areas of human knowledge.

In this sense, in the educational field the integration of creative thinking has acquired greater relevance. A study carried out in Colombia found that the introduction of creative and eye-catching processes instead of traditional routines stimulates curiosity and innovation among students (Bermeo & Urquina, 2021). The integration of creative thinking in education includes the implementation of interdisciplinary projects and the use of digital technologies that facilitate more interactive learning. On the other hand, it has been shown that educational environments must be conducive to promoting creative thinking. Creating flexible and collaborative spaces can help students feel more comfortable experimenting with new ideas (Villegas, 2021).

Creative thinking not only refers to the ability to generate original ideas, but also encompasses the ability to solve problems innovatively and think divergently. According to Campos et al. (2023) creative thinking allows students to explore beyond the limits of what they know, challenging the established and fostering deeper, more meaningful learning. In this sense, it is considered that all students must develop this competence and that its stimulation



must begin at home and be complemented at school, where teachers have a fundamental role in creating an environment conducive to the development of creative thinking (Astudillo et al., 2023).

Similarly, in a study carried out in Ecuador, it was found that some teachers apply certain teaching strategies for the development of creative thinking in students. However, for these strategies to be effective, it is essential that educational environments are established that value and promote creativity (Quiroz & Cedeño, 2023). Therefore, this implies not only having adequate physical spaces, but also a school culture that encourages experimentation and accepts error as part of the learning process. In this sense, teachers must be seen as facilitators of creative learning and who are willing to adapt their methods and actively get involved in innovative projects.

In the workplace, creative thinking is considered a key element for innovation. Organizations are increasingly recognizing the need to foster an environment where workers can develop their creative skills. However, many organizations face significant challenges in cultivating a creative culture. The lack of adequate training and fear of failure can inhibit employees from proposing innovative ideas (Loor & Rodríguez, 2022). Therefore, it is essential that companies invest in training programs that not only teach technical skills but also foster a creative culture among their workers.

As seen in this literature review, although progress has been made in recent years in the integration of creative thinking in both educational and work contexts, significant challenges still persist. For this reason, the need to reform pedagogical and work approaches to create environments more conducive to creativity is evident. As the demands of today's society change rapidly, it is of utmost importance to continue researching and developing effective strategies that enable people and organizations to not only adapt to these changes, but also lead them through creative innovation.

### **3 METHODOLOGY AND MATERIALS**

The methodology used for this systematic review will be based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method. This method is recognized and widely used to guarantee transparency and rigor in the development of systematic reviews. In addition, it provides a structured guide that ranges from the identification of relevant studies to the selection, evaluation and synthesis of data. By applying the PRISMA method, the aim is not only to identify and analyze the existing literature on the integration of



creative thinking in educational and work environments, but also to ensure that the process is replicable and that the findings are presented in a clear and understandable manner.

The PRISMA method provides a checklist that helps researchers consider all key aspects of the search process, from the sources of information to the strategies used, contributing to a more complete and reliable review. It should be noted that the information search process was carried out in databases such as Scopus, SciELO, Redalyc, Dialnet, Erih Plus, Latindex and the César Vallejo University. Therefore, the use of this method not only optimizes the search methodology, but also strengthens the validity of the findings on how creative thinking has been integrated into educational and workplace contexts over the past five years.

Likewise, some inclusion and exclusion criteria were applied to select relevant articles related to the topic of the systematic review. Among the inclusion criteria are the following:

1. Year of publication: studies published in the last five years were analyzed.
2. Type of study: only studies that present reliable data such as scientific articles and systematic reviews were selected.
3. Language: only articles published in Spanish or English were considered.
4. Thematic relevance: studies related to the integration of creative thinking in educational and work environments were analyzed.

On the other hand, the exclusion criteria are the following:

1. Year of publication: studies conducted before 2019 were not considered.
2. Type of study: personal opinion documents and studies that do not provide reliable data were excluded.
3. Language: articles published in languages other than Spanish or English were eliminated.
4. Thematic relevance: studies that are not related to the topic of integrating creative thinking in work and educational environments were not analyzed.

In the search for relevant information for this systematic review, Boolean operators were used to optimize the results obtained from the selected databases. The operators (AND, OR) were used strategically in the search formula to combine key terms related to creative thinking in educational and work contexts. For example, the OR operator was used to include synonyms and related terms, such as “creative thinking” OR “creativity” OR “creative development,” which broadened the scope of the search by capturing variations in the terminology used by different authors. On the other hand, the AND operator was applied to ensure that the results included all relevant concepts, as in "education" OR "educational environment" AND "pedagogical strategies" “work environment”, which ensured that the selected studies addressed both the educational context as well as specific methodologies.





This combination of Boolean operators allowed a more precise and effective search, facilitating the identification of relevant articles that contribute to the objectives of the systematic review. The search formula used was: ("creative thinking" OR "creativity" OR "creative development") AND ("education" OR "educational environment" OR "training" OR "work" OR "work environment") AND ("strategies pedagogical" OR "methodologies" OR "impact" OR "creative skills").

To illustrate the information selection process in this systematic review, a flow diagram based on the PRISMA method was used, which provides a clear and structured visual representation of the stages of identification, selection, eligibility and inclusion of studies. This diagram allowed us to effectively visualize how the search was carried out in the selected databases and how the inclusion and exclusion criteria were applied in each phase of the process. Thus, the initial identification of relevant articles was carried out, the diagram shows the total number of records obtained, followed by the duplicates eliminated and the studies that were excluded after reviewing titles and abstracts. The stages followed for this process are the following:

1. Identification: an exhaustive search was carried out in the selected databases using the defined search formula. All results obtained were recorded.
2. Duplicate Removal: Duplicate articles were removed.
3. Initial review: the titles and abstracts of the identified studies were reviewed to apply the inclusion and exclusion criteria. Those that do not meet the established requirements were eliminated, and the number of articles excluded at this stage was documented.
4. Eligibility evaluation: the selected studies were evaluated in their entirety to determine if they meet the inclusion criteria. How many studies were assessed and how many were excluded at this stage were recorded, along with the reasons for their exclusion.
5. Final registry: the total number of studies that meet all the criteria and that were included in the systematic review was presented. This step finalizes the diagram, providing a clear view of the flow of information throughout the process.

Now, to systematize the information collected from the articles selected in this review, a data extraction matrix was used, which allowed the most relevant findings to be organized and analyzed in a structured manner. This matrix is a key tool that facilitates the comparison and synthesis of information, ensuring that all important aspects of each study are considered. Table components included:

1. Author(s).
2. Year of publication.



3. Objective of the study.
4. Type of study.
5. Results on creative thinking in educational and work environments.
6. Conclusions.

The use of the data extraction matrix allowed a systematic and efficient organization of the information collected from the selected articles, which facilitated comparative analysis between the different studies. By structuring the data into key components, such as objectives, type of study, results and conclusions, it was possible to identify important elements in the integration of creative thinking in educational and work environments.

This tool not only streamlined the information synthesis process, but also ensured that all relevant aspects of each study were considered, contributing to a deeper and more informed understanding of the topic. Furthermore, the matrix facilitated the identification of gaps in the existing literature and allowed the formulation of evidence-based recommendations on effective practices to foster creative thinking. For this reason, the data extraction matrix was essential to structure the analysis and enrich the conclusions of this systematic review.

## 4 RESULTS AND DISCUSSION

**Table 1**

*Data extraction*

Author(s)	Year	Objective of the Study	Methodology	Main Results	Conclusions
Varías.	2022	Analyze innovative concepts and strategies that are implemented in classrooms.	Exploratory documentary technique. A systematic search of scientific articles was carried out on various reliable platforms.	The results reveal that the strategies not only encourage students' independence and responsibility, but also enable them to make informed decisions about their own learning, adapting to the demands of each educational situation. This is essential to develop critical thinking and creativity skills that will be useful throughout their lives.	The study concludes that the development of creative thinking is key for students to acquire autonomy, solve problems in an innovative way and value the diversity of ideas. By fostering a creative learning environment, both students and teachers benefit and contribute to a more enriching educational process.
Monteza.	2021	Explore the relationship between teaching strategies and creative thinking	Documentary review of 50 articles published in reliable databases.	The results indicate that, to develop creative thinking in students, it is necessary that national curricula explicitly include the development	It is concluded that creative thinking is an essential skill in all aspects of our life. Whether in the professional, artistic or





		in the secondary educational context.		of these skills in all areas of knowledge. Furthermore, it is essential that teachers are trained to use innovative teaching strategies that allow students to think critically and creatively.	cultural field, the ability to generate original and innovative ideas allows us to overcome established limits and achieve exceptional results. By fostering creative thinking in students, we are preparing them to meet real-world challenges with innovative solutions.
Loor & Rodríguez	2022	Analyze how creative thinking strategies can promote entrepreneurship in high school students of the rural school "María Piedad Castillo de Levi" in Paján, Manabí.	A non-experimental mixed (qualitative and quantitative) approach was used. Data collection was carried out through surveys administered to 153 second- and third-year high school students, and an interview with the vice-rector.	The results show that teachers are including entrepreneurship content in their study plans, but the implementation of active methodologies such as design thinking is still incipient. A greater effort is required to integrate these tools into the educational process and promote the development of entrepreneurial skills in students.	This study concludes that to promote entrepreneurship through creative strategies, it is essential to use methodologies such as design thinking, which equip students with lifelong skills.
Bermeo & Urquina	2021	Improve the creative skills of seventh grade students at the La Cabaña Educational Institution, Main Campus, in Salado Blanco, Huila, through the implementation of artistic projects.	Qualitative approach, action research method and observation technique.	The results show that the plastic arts have been an effective tool to stimulate the development of specific skills in the area in seventh grade students, strengthening their personal and social growth. Through the plastic arts, students were able to express their experiences creatively, using various artistic elements to analyze their environment.	The study concludes that to enhance students' ability to generate original ideas and develop creative thinking, it is essential to implement didactic proposals focused on the plastic arts.
Carrillo et al.	2019	Analyze the results of a research that explored the perceptions and actions of companies in relation to the promotion of creativity and innovation.	Quantitative, descriptive and transversal method.	The results reveal that entrepreneurs and employees underestimate their own creative potential, and the conception of creativity is limited to the generation of radically new ideas, ignoring the importance of creativity in routine tasks. Additionally, workers face organizational barriers that inhibit their creativity, such as lack of training, risk aversion, and limited autonomy.	This study concludes that, although companies recognize the importance of creativity and innovation as drivers of growth, significant gaps persist in the implementation of effective strategies to promote them. It is imperative to develop continuing training programs that cultivate these skills in the younger generations.



Astudillo et al.	2023	Propose pedagogical strategies that promote creative thinking in the area of Social Sciences in basic education.	Synthetic, analytical, deductive-inductive, inductive-deductive method, modeling and qualitative approach.	The results indicate that Social Sciences, thanks to their interdisciplinary nature, provide an ideal framework for the development of creative thinking. Through strategies such as dramatization and simulation, students can construct new knowledge and develop critical analysis skills when confronting moral and social dilemmas.	It is concluded that to train individuals capable of facing the challenges of today's world, it is necessary to promote the development of creative thinking in the field of Social Sciences. This involves designing learning experiences that allow students to construct their own knowledge and develop problem-solving skills.
Merecí & Cedeño.	2021	Determine the impact of art and culture classes on the development of creative thinking of third grade students at the Carlos María Castro school.	Qualitative-quantitative approach, exploratory, descriptive and bibliographical.	The results obtained suggest that current pedagogical practices in the area of art education are not taking full advantage of the potential of creative activities to develop students' cognitive and socio-emotional skills.	The study concludes that current pedagogical practices in the area of art education are not taking full advantage of the potential of creative activities to develop students' cognitive and socio-emotional skills.
Carranza	2021	Study different research on creative thinking to understand what it is, how it develops and how it can be improved.	Descriptive analytical methodology through the study of 50 articles.	The results of this study reveal that developing creative thinking should be a priority in education, as it is essential to solve problems and adapt to a constantly changing world. Although it can be encouraged in any subject, it does not seem to be a central objective in teaching practice.	The study concludes that it is essential that teachers update themselves on the latest research in the field of creativity and apply the most effective strategies to encourage the development of this thinking in their students. In this way, they will be able to contribute to forming more critical, innovative citizens capable of facing the challenges of the 21st century.
Vásquez.	2021	Identify the pedagogical strategies proposed in scientific literature to promote creative thinking in the context of basic education.	Documentary review of 60 articles.	The results of this review reveal that creative thinking can be fostered in educational institutions through a variety of strategies, such as gamification, the use of technology and the development of social skills. These strategies, applied transversally in the curriculum, allow students to develop the necessary skills to face real-world challenges.	This study concludes that to foster creative thinking in the classroom, it is necessary for teachers to provide their students with opportunities to explore different perspectives, solve problems openly, and collaborate with their peers. Additionally, it is important that teachers model creative attitudes and foster a climate of respect and trust in the classroom.

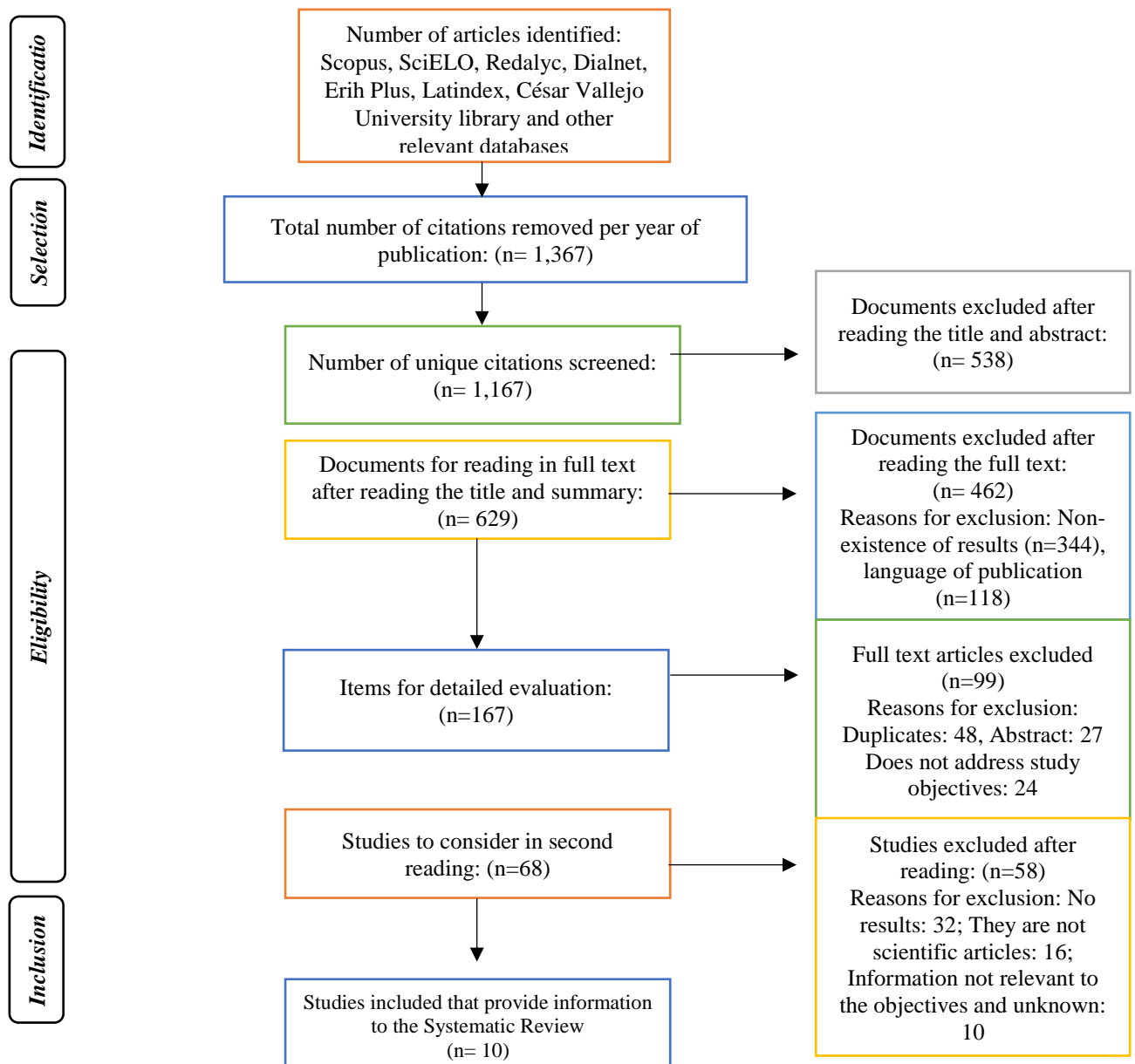


Pin & Cevallos.	2021	Analyze the use of audiobooks to improve the creativity and reading comprehension of students at a school in the Eloy Alfaro parish.	Qualitative-quantitative approach and analytical-synthetic scientific method.	The results show that 80% of the students surveyed consider that the use of audiobooks has contributed to the development of their creative thinking and has improved their participation in reading activities. However, 20% of students do not share this opinion.	The study concludes that audiobooks are a powerful tool for cultivating creative thinking in students. By immersing them in imaginary worlds and stimulating their imagination, audiobooks encouraged the generation of original ideas and the ability to solve problems in innovative ways.
-----------------	------	--	---	--	--

Source: Own elaboration

**Figure 1**

*Search diagram*





The use of the data extraction matrix in this systematic review has made it possible to effectively organize and synthesize the information from various studies on creative thinking in educational and work environments. For example, Varias (2022) emphasizes that innovative strategies in the classroom not only promote student independence and responsibility, but are also crucial for developing creative skills that will be useful throughout their lives. This idea is complemented by the findings of Monteza (2021), who maintains that it is essential that national educational curricula explicitly include the development of creative thinking in all areas of knowledge, which underlines the need for adequate teacher training in innovative methodologies.

On the other hand, Loor & Rodríguez (2022) highlight the relevance of integrating strategies such as design thinking to promote entrepreneurship among students, adding that these methodologies not only develop creative skills, but also prepare young people to face real challenges in the workplace. However, Carrillo et al. (2019) warn about the existence of organizational barriers that limit creative thinking in the work environment, such as lack of training, which indicates that the development of creative thinking must be a joint effort between educators and employers.

In the educational field, Bermeo & Urquina (2021) demonstrate how the plastic arts can be an effective tool to stimulate creativity in high school students, which highlights the importance of diversifying pedagogical strategies to include artistic approaches. In this sense, Bermeo & Urquina propose that the plastic arts can be an effective strategy for the development of creative thinking. Likewise, Astudillo et al. (2023) reinforce this idea by proposing pedagogical strategies in Social Sciences that encourage critical and creative thinking through dramatizations and simulations, mentioning that interdisciplinary contexts are ideal for this purpose.

Likewise, Pin & Cevallos (2021) propose the use of strategies such as the use of audiobooks for the development of creative thinking in students. According to their research, using audiobooks not only improves reading comprehension, but also stimulates imagination and creativity by immersing listeners in imaginary worlds. This listening immersion allows students to visualize narratives more vividly, fostering their ability to think creatively and solve problems innovatively.

Although many studies agree on the need to promote creative thinking both in education and in the workplace, Merecí & Cedeño (2021) point out that current pedagogical practices in arts education are not fully taking advantage of their potential to develop cognitive and socio-emotional skills. Which suggests that there is still a long way to go to effectively integrate



creative thinking at all educational and work levels. Therefore, promoting an environment that values and stimulates creative thinking is essential to developing individuals capable of innovating and adapting to a constantly changing world, which is vital for both their personal and professional development.

## 5 CONCLUSIONS

The systematic review carried out on creative thinking in educational and work environments has revealed the growing importance of this skill in the comprehensive training of students and professionals. The studies analyzed, such as those by Varias (2022) and Monteza (2021), highlight that the development of creative thinking is not only essential for autonomy and problem solving, but also allows individuals to adapt to a constantly changing world. change. The implementation of innovative pedagogical strategies, such as the use of active methodologies and the promotion of a collaborative learning environment, has been identified as a key factor in developing thinking in students.

Likewise, the findings indicate that creative strategies not only benefit students, but also positively impact the work environment. Research such as that of Carrillo et al. (2019) and Loor & Rodríguez (2022) suggest that fostering an organizational culture that values creativity can lead to greater innovation and competitiveness in companies. However, significant challenges remain, such as a lack of adequate training and organizational barriers that limit workers' creative potential. For this reason, it is essential that both educators and business leaders work together to create spaces where creative thinking is valued and promoted as a fundamental resource for personal and professional growth.

Furthermore, it has been noted that the integration of creative thinking into specific disciplines, such as the arts and social sciences, can offer unique opportunities to develop critical and analytical skills. Studies such as those by Bermeo & Urquina (2021) and Astudillo et al. (2023) emphasize how artistic activities and interdisciplinary strategies can stimulate creative expression and critical analysis among students.

In conclusion, this systematic review highlights the urgent need to integrate creative thinking at all educational and work levels. As there are increasingly complex challenges in today's society, it is essential to prepare future generations with creative skills that allow them to not only adapt, but also lead with innovation. Therefore, it is concluded that it is of utmost importance to prioritize teacher training in creative methodologies, as well as promote educational and organizational policies that foster an environment conducive to creative



thinking. In this way, it will be possible to train people capable of contributing significantly to today's society through innovative and effective solutions.

## REFERENCIAS

- Astudillo, A., Lozada, M., Carrión, E., González, L., Cetre, R., Alban, M., & Mcias, J. (2023). Methodological strategies in creative thinking skills: area of social sciences. *South Florida Journal of Development*, 4(5), 2209–2223. <https://doi.org/10.46932/sfjdv4n5-030>
- Bermeo, E. & Urquina, L. (2021). Creative thinking: a study from the plastic arts. *Revista UNIMAR*, 39(2), 171-174 DOI: <https://doi.org/10.31948/>
- Campos, E., García, M., & Arcana, M. (2023). Creative thinking in elementary school students: systematic revision. *Varona, Revista Científico Metodológica*, (77), [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1992-82382023000200009&lng=es&tlng=en](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1992-82382023000200009&lng=es&tlng=en)
- Carranza, M. (2021). Creative thinking: A holistic study in education. *Revista Innova Educación*, 3(4), 123-132. <https://doi.org/10.35622/j.rie.2021.04.009>
- Carrillo, A., Caballero, F., & Roque, R. (2019). Training in Creativity and Innovation: Studying perceptions and practices of Young Local Entrepreneurs. *RICEA Revista Iberoamericana de Contaduría, Economía y Administración*, 8(15), 1-28. <http://dx.doi.org/10.23913/ricea.v8i15.122>
- De Cássia, T., De Souza, D. & Da Silva, L. (2021). Development of creative thinking in the educational field. *Revista Latinoamericana de Estudios Educativos*, 17 (1), 164-187. <https://doi.org/10.17151/rlee.2021.17.1.9>
- Fuentes, P. (2024). The Difficult Place of Creativity in the Current School System. *Ciencia Latina Revista Científica Multidisciplinar*, 8(3), 10067-10082. [https://doi.org/10.37811/cl\\_rcm.v8i3.12140](https://doi.org/10.37811/cl_rcm.v8i3.12140)
- Loor, J., & Rodríguez, G. (2022). Creative thinking strategies for the design of entrepreneurship projects. *Revista Científica Sinapsis*, 21(1). <https://doi.org/10.37117/s.v21i1.610>
- López, E., González, E., & Morales, A. (2023). Fostering Creativity and Creative Thinking as Higher Education Innovationr. *Zincografía*, 7(13), 161-185. <https://doi.org/10.32870/zcr.v7i13.197>
- Merecí, E., & Cedeño, L. (2021). Art Education Strategies as an enhancer of the development of creative thinking in elementary school students. *Dominio De Las Ciencias*, 7(6), 1205–1224. <https://doi.org/10.23857/dc.v7i6.2390>
- Monteza, D. (2021). Teaching strategies for creative thinking in secondary school students: a systematic review. *Revista Innova Educación*, 4(1), 120-134. <https://doi.org/10.35622/j.rie.2022.01.009>





- Muñoz, C. (2021). Approaches, theories and research on creative thinking. A review study. *Revista Innova Educación*, 4(1), 157-171. <https://doi.org/10.35622/j.rie.2022.01.012>
- Pin, L., & Cevallos, A. (2021). Use of audiobooks for the development of creative thinking in upper elementary students. *Dominio De Las Ciencias*, 7(1), 86–100. <https://doi.org/10.23857/dc.v7i1.1630>
- Quiroz, Y., & Cedeño, L. (2023). The plastic arts as enhancers of creative thinking in high school students of circuit 13D07 of the Chone canton. *Dominio De Las Ciencias*, 9(2), 1813–1831. <https://doi.org/10.23857/dc.v9i3>
- Varías, I. (2021). Creative thinking strategies in primary education classrooms. *Revista Innova Educación*, 4(1), 39-50. <https://doi.org/10.35622/j.rie.2022.01.003>
- Vásquez, S. (2021). Creative thinking strategies: a view from basic education. *Revista Innova Educación*, 3(4), 110-122. <https://doi.org/10.35622/j.rie.2021.04.008>
- Villegas, E. (2021). Teaching strategies to promote creative thinking in classrooms. *Revista Innova Educación*, 4(1), 109-119. <https://doi.org/10.35622/j.rie.2022.01.008>