



Influence of creative writing on the development of critical thinking Influencia de la escritura creativa en el desarrollo del pensamiento crítico

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ABSTRACT

The development of critical thinking is one of the fundamental competencies in contemporary education systems. The aim of this review article is to analyse the influence of creative writing on the development of critical thinking. Twenty-seven scientific articles were selected and subjected to content analysis for the processing of the information presented in the results section. The conclusion is that creative writing has a significant influence on the development of critical thinking, combining metacognitive processes, constructivist and sociocultural approaches, as well as the use of emerging technologies. Therefore, creative writing not only encourages self-reflection and self-regulation, but also promotes higher cognitive skills such as analysis, synthesis and evaluation, which is achieved through activities that integrate strategic planning, collaboration and formative feedback as essential elements for meaningful learning.

Descriptors: creative writing; problem solving; critical thinking. (Source: UNESCO Thesaurus).

RESUMEN

El desarrollo del pensamiento crítico constituye una de las competencias fundamentales en los sistemas educativos contemporáneos. El artículo de revisión tiene como objetivo analizar la influencia de la escritura creativa en el desarrollo del pensamiento crítico. Se seleccionaron 27 artículos científicos a los cuales se les sometió al análisis de contenido para el procesamiento de la información presentada en la sección resultados. Se concluye que la escritura creativa influye significativamente en el desarrollo del pensamiento crítico, al combinar procesos metacognitivos, enfoques constructivistas y socioculturales, así como el uso de tecnologías emergentes. Por lo tanto, la escritura creativa no solo fomenta la autorreflexión y la autorregulación, sino que también promueve habilidades cognitivas superiores como el análisis, la síntesis y la evaluación, lo cual se logra mediante actividades que integran la planificación estratégica, la colaboración y la retroalimentación formativa como elementos esenciales para el aprendizaje significativo.

Descriptorios: escritura creativa; resolución de problemas; pensamiento crítico. (Fuente: Tesaurus UNESCO).

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articles section



INTRODUCTION

The development of critical thinking is one of the fundamental competencies in contemporary education systems, in that it allows students to analyse, evaluate and synthesise information in a reflexive, well-founded way that is oriented towards the resolution of complex problems. In this context, creative writing is positioned as a pedagogical strategy that, from a constructivist and sociocultural approach, promotes self-regulation of learning, metacognitive reflection and the construction of meaningful knowledge. Various studies have shown that creative writing not only encourages the expression of original ideas, but also challenges students to question their own assumptions, consider alternative perspectives and construct solid arguments (Ahmad, Sanober, & Cheema, 2024; Almelhi, 2021).

Creative writing, as an educational practice, aligns with the principles of active pedagogy, which emphasises student-centred learning, social interaction and authentic problem solving; in this sense, its implementation in the classroom fosters meaningful learning, in which students not only acquire knowledge, but also develop transferable skills, such as creativity, self-regulation and critical thinking (Espinola-Calderón et al., 2023; Gonzales-Soto et al., 2020).

Based on the above, the review article aims to analyse the influence of creative writing on the development of critical thinking.

Theoretical framework

The following are the reference aspects of the variables under study:

Critical thinking

From a pedagogical perspective, critical thinking is defined as the ability to analyse, evaluate and synthesise information in a reflective and reasoned manner, with the aim of making informed decisions and solving complex problems. According to Sternberg et al., (2024), critical thinking includes higher cognitive skills such as interpretation, analysis, evaluation, inference and self-regulation. These skills are essential in the educational environment, as they allow students to approach problems from multiple perspectives, construct solid arguments and actively participate in meaningful learning processes.

In the framework of competency-based education, critical thinking is developed through activities that challenge students to reflect on their own thought processes, question their assumptions and consider alternative perspectives. In this sense, creative writing is presented as an effective pedagogical strategy, in that it requires students to generate original ideas, reflect on the coherence and relevance of their arguments and critically evaluate the content, as well as the structure of their texts (Nasution & Afrianti, 2022; Sastra, Rahim, & Sari, 2023).

Creative Writing

From a pedagogical perspective, creative writing is defined as a process of textual production that combines artistic expression with critical reflection, allowing students to explore ideas, emotions and experiences in an original and meaningful way; this process involves not only creativity, but also the activation of metacognitive skills, such as planning, monitoring and evaluating one's own learning (Piñeiro, 2023). According to Almelhi (2021), creative writing encourages critical thinking by challenging students to explore complex ideas, question assumptions and construct reasoned arguments.

From a constructivist approach, creative writing is conceived as an activity that promotes active and meaningful learning, in which students construct their own knowledge through interaction with their environment and the resolution of authentic problems. In this sense, Espinola-Calderón et al. (2023) argue that creative writing, when implemented in a collaborative environment, allows students to interact with their peers, share ideas and receive feedback, which enriches their ability to critically analyse and evaluate information.

Relationship between creative writing and critical thinking

The relationship between creative writing and critical thinking is based on the capacity of both practices to activate higher cognitive processes, such as analysis, evaluation and synthesis.



According to Ahmad et al., (2024), creative writing allows students to reflect on their own thought processes, identify their strengths and weaknesses, and develop strategies to improve their performance. This metacognitive approach is essential for the development of critical thinking, as it encourages self-regulation of learning and the construction of autonomous knowledge.

Likewise, creative writing encourages critical thinking by challenging students to consider multiple perspectives and to construct solid and well-founded arguments; in this order, Gonzales-Soto et al. (2020) point out that creative writing, when combined with action research approaches, allows students to explore complex problems from different angles and develop innovative and reflective solutions, which aligns with the principles of critical pedagogy, which seeks to empower students to actively participate in the transformation of their social and educational reality.

METHOD

The review article focused on a descriptive documentary typology, centred on the compilation, analysis and interpretation of information from secondary sources, which allowed for the description and analysis of the relationship between creative writing, critical thinking, creativity, technology and innovative pedagogical approaches.

A search was carried out in recognised academic databases, such as Scopus, Web of Science, PubMed, DOAJ and Google Scholar, prioritising articles published in indexed, high-impact journals. Twenty-seven scientific articles were selected and subjected to content analysis for the processing of the information presented in the results section.

RESULTS

In consideration of the articles scrutinised, the results of the documentary review are presented:

Creative writing as a metacognitive strategy

Creative writing, in its essence, not only involves the production of original texts, but also the activation of metacognitive processes that allow students to plan, monitor and evaluate their own learning. According to Teng & Yue (2023), metacognitive strategies applied to creative writing enhance critical thinking by fostering self-regulation and conscious reflection on the writing process; this allows students to identify their strengths and weaknesses, question their own assumptions and construct well-founded arguments. From a pedagogical perspective, creative writing is aligned with Zimmerman's self-regulated learning model, which emphasises the importance of strategic planning, self-assessment and feedback in the development of complex cognitive skills (Zulma-Lan, 2006). In this sense, creative writing is not only a means of expression, but also a space for critical reflection and knowledge construction.

Constructivist and sociocultural approaches to creative writing

Constructivism, as a theoretical basis, holds that learning is an active process in which students construct their own knowledge through interaction with their environment and the resolution of meaningful problems. In this context, Wang et al., (2024) share that creative writing activities guided by constructivist principles, such as peer assessment and collaborative activities, promote the development of critical thinking by involving students in processes of analysis, synthesis and evaluation of ideas.

From a sociocultural perspective, creative writing also benefits from social interaction and mediated learning. According to Vygotsky, cognitive development occurs in a social context, therefore cultural tools, such as language, play an essential role in this process. In this sense, creative writing activities that encourage collaboration and the exchange of ideas, such as those mentioned by Lorenz & Bush (2022), not only strengthen language skills, but also promote critical thinking by exposing students to multiple perspectives and approaches.

Impact on the development of higher cognitive skills

Creative writing, by requiring the generation of original ideas and their coherent organisation, activates higher cognitive skills such as analysis, evaluation and synthesis. According to Dilekçi



& Karatay (2023), curriculum design that integrates 21st-century skills such as creativity and critical thinking allows students to approach complex problems in an innovative and reflective way. This curricular approach is aligned with the competency-based learning model, which seeks to develop skills that are transferable and applicable in diverse contexts. Likewise, creative writing encourages critical thinking by challenging students to question their own assumptions and consider multiple perspectives. Therefore, Meirbekov et al. (2022) point out that the digital tools used in creative writing can facilitate this process by providing students with access to a wide range of resources and perspectives, which enriches their ability to critically analyse and evaluate information.

Challenges and pedagogical considerations

Despite the obvious benefits, the implementation of creative writing as a pedagogical strategy presents certain challenges, according to Zhao (2024), the use of artificial intelligence tools in creative writing can limit the development of critical thinking if students rely excessively on these technologies to generate content, from a pedagogical perspective, it is essential to balance the use of technologies with reflective practices that allow students to develop their own analytical and creative skills. Likewise, creative writing requires a pedagogical approach that integrates formative feedback and teacher support. According to Teng & Yue (2023), effective feedback is essential for the development of critical thinking, as it allows students to identify areas for improvement and reflect on their own learning process. In this sense, teachers play a crucial role as mediators and facilitators of learning, providing guidance and support throughout the writing process.

Psychological and cognitive benefits of creative writing

As well as its academic benefits, creative writing has a positive impact on students' psychological well-being, which in turn influences the development of critical thinking. According to Mundy et al. (2022), creative writing can act as a form of therapy that allows students to express their emotions, reflect on their experiences and develop greater self-awareness, this self-awareness is fundamental for critical thinking, as it allows students to reflect on their own thought processes and consider alternative perspectives. On the other hand, creative writing encourages creativity, which is a component of critical thinking, according to Sternberg et al. (2024), creativity and critical thinking are closely related, in that both involve the ability to generate original ideas, analyse information in a reflective way and construct solid and well-founded arguments, this link reinforces the importance of integrating creative writing into educational programmes as a strategy for the integral development of students.

Challenges in implementing creative writing

Despite its many benefits, implementing creative writing in the classroom presents certain pedagogical challenges. According to Shidiq (2023), the use of artificial intelligence tools in creative writing can limit the development of critical thinking if students rely too heavily on these technologies to generate content. Therefore, it is essential that teachers design activities that balance the use of technologies with reflective practices that allow students to develop their own analytical and creative skills. Creative writing therefore requires a pedagogical approach that integrates formative feedback and teacher support. According to Ramírez-Montoya et al. (2022), effective feedback is essential for the development of critical thinking, as it allows students to identify areas for improvement and reflect on their own learning process. In this sense, the role of the teacher as a mediator and facilitator of learning is crucial to ensure that creative writing becomes a transformative tool in the classroom.

Critical thinking and creativity

From a pedagogical perspective, critical thinking and creativity are superior cognitive skills which, although different, complement each other in the learning process. According to Zulfikar et al. (2022), the creative problem solving (CPS) model shows that creativity not only involves the generation of original ideas, but also the ability to critically evaluate them in order to solve complex problems, which can be integrated into creative writing activities, where students not only produce original texts, but also reflect on the coherence, relevance and structure of their ideas, thus strengthening their capacity for analysis and evaluation.



For their part, Vasli et al. (2023) argue that critical thinking cannot develop in isolation, as it is influenced by emotional factors such as self-esteem; in this sense, creative writing, by encouraging self-reflection and personal expression, becomes a pedagogical tool that not only strengthens creativity, but also promotes critical thinking by providing a safe space for students to explore their ideas and emotions, this link between cognitive and socio-emotional skills reinforces the need for comprehensive pedagogical approaches that consider the student as a multidimensional being.

Technology as a learning mediator

In the context of education 4.0, technology is presented as a mediator in the teaching-learning processes, facilitating both creativity and critical thinking. According to Ramírez-Montoya et al. (2022), digital tools and open innovation approaches allow students to interact with knowledge in a dynamic way, promoting self-regulation, collaboration and the resolution of complex problems. In the case of creative writing, emerging technologies, such as advanced word processors and online collaboration platforms, can facilitate the generation of ideas, the organisation of texts and peer feedback, thus enriching the learning process.

However, Marzuki et al. (2023) warn of the risks of over-reliance on artificial intelligence (AI) tools in creative writing. Although these technologies can improve the accuracy and organisation of texts, they can also limit students' ability to critically reflect on their own writing processes. This challenge raises the need for a balanced pedagogical design, in which technology is used as a means to enhance learning, but without replacing students' cognitive and creative skills. From a pedagogical perspective, this implies that teachers should mediate the use of these tools, promoting reflective and self-regulated practices.

Project-based learning and problem solving

Innovative pedagogical approaches, such as project-based learning (PjBL) and the creative problem solving (CPS) model, offer an effective framework for integrating creativity and critical thinking in the classroom. According to Zulyusri et al. (2023), PjBL fosters these skills by involving students in authentic projects that require the application of knowledge and skills in real contexts. This approach can be adapted to creative writing through projects that challenge students to create original texts based on problems or issues relevant to their environment, thus promoting meaningful and contextualised learning.

Similarly, the CPS model described by Zulfikar et al. (2022), combines creativity and critical thinking in a structured process that includes problem identification, idea generation and solution evaluation. This model can be particularly useful in creative writing activities, where students must address narrative or thematic problems in an innovative and reflective way, these strategies not only promote the development of higher cognitive skills, but also foster autonomy and self-regulation in learning.

Creative writing as a pedagogical tool

Creative writing, as a pedagogical strategy, is configured as an integral tool for the development of cognitive, emotional and social competences, although some references, such as that of Vicol et al. (2024), focus on the development of creative writing skills in primary school students, their findings are relevant for all educational levels, this study comments that creative writing not only fosters imagination and written expression, but also lays the foundations for the development of higher cognitive skills, such as critical thinking, at later stages, this reinforces the importance of introducing creative writing from an early age as a pedagogical practice that promotes comprehensive learning.

On the other hand, Porrás-Segovia et al. (2024), provide a different perspective when analysing the therapeutic impact of creative writing on the management of depression and suicidal ideation. Although this approach focuses on clinical contexts, their results suggest that creative writing can be a powerful tool for fostering self-reflection and self-awareness, skills that are fundamental for the development of critical thinking. This emotional and cognitive impact reinforces the idea that creative writing has not only academic value, but also personal and social value, making it a transformative pedagogical practice.



Pedagogical challenges and considerations

Despite the clear benefits, the implementation of innovative pedagogical approaches that integrate creative writing, technology and the development of critical thinking presents certain challenges, according to Marzuki et al. (2023), one of the main challenges is to ensure that technological tools do not replace students' cognitive skills, but rather complement them. This requires careful pedagogical design that combines the use of technologies with reflective and collaborative strategies, thus promoting balanced and meaningful learning. Likewise, Ramírez-Montoya et al. (2022) comment on the importance of teacher training in the use of emerging technologies and innovative approaches. Teachers must play a mediating role, providing guidance and feedback that fosters both creativity and critical thinking. This mediating role is essential to ensure that pedagogical practices are effective and meaningful, and that students develop transferable skills that enable them to face the challenges of the contemporary world.

CONCLUSION

It is concluded that creative writing significantly influences the development of critical thinking by combining metacognitive processes, constructivist and sociocultural approaches, as well as the use of emerging technologies. Therefore, creative writing not only encourages self-reflection and self-regulation, but also promotes higher cognitive skills such as analysis, synthesis and evaluation, which is achieved through activities that integrate strategic planning, collaboration and formative feedback as essential elements for meaningful learning. From a constructivist perspective, creative writing allows students to construct knowledge through social interaction and problem solving, while from a sociocultural approach, critical thinking is reinforced by exposing students to multiple perspectives and the use of language as a mediating tool.

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REFERENCES

- Ahmad, A., Sanober, R. S., & Cheema, M. I. (2024). ESL Learners Attitude towards Metacognition Approach for Learning Creative Writing at University Level. *Journal of Development and Social Sciences*, 5(1), 01-14.
- Almelhi, A. M. (2021). Effectiveness of the ADDIE model within an E-learning environment in developing creative writing in EFL students. *English Language Teaching*, 14(2), 20-36.
- Dilekçi, A., & Karatay, H. (2023). The effects of the 21st century skills curriculum on the development of students' creative thinking skills. *Thinking skills and creativity*, 47, 101229.
- Espinola-Calderón, J. L., Terrones-Marreros, M. A., Alcalde-Mosqueira, M. R., & Gerónimo-Miguel, O. S. (2023). La conversación literaria y su influencia en el desarrollo del pensamiento crítico en estudiantes [Literary conversation and its influence on the development of students' critical thinking]. *Revista Arbitrada Interdisciplinaria Koinonía*, 8(Supl. 2), 99–111. <https://doi.org/10.35381/r.k.v8i2.2864>
- Gonzales-Soto, V. A., Hernández-Fernández, B., Mendoza-Banda, T. Y., & Ruiz-Pérez, A. (2020). El pensamiento crítico y creativo: Un caso desde la investigación-acción [Critical and creative thinking: A case from action-research]. *Conrado*, 16(76), 79–84.
- Lorenz, L., & Bush, E. (2022). Critical and creative g and photovoice: Strategies for strengthening participation and inclusion. *Health Promotion Practice*, 23(2), 274–280. <https://doi.org/10.1177/15248399211055714>



- Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2), 2236469.
- Meirbekov, A., Maslova, I., & Gallyamova, Z. (2022). Digital education tools for critical thinking development. *Thinking Skills and Creativity*, 44, 101023.
- Mundy, S. S., Kudahl, B., Bundesen, B., Hellström, L., Rosenbaum, B., & Eplov, L. F. (2022). Mental health recovery and creative writing groups: A systematic review. *Nordic Journal of Arts, Culture and Health*, 4(1), 1-18.
- Nasution, T., & Afrianti, D. (2022). Critical discourse analysis in the classroom: A critical language awareness on early children's critical thinking. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(5), 4992-5002.
- Piñeiro, M. D. R. N. (2023). Leer, escribir, jugar. Libros infantiles para la escritura creativa/Reading, writing, playing: children's books for creative writing. *TEJUELO. Didáctica de la Lengua y la Literatura. Educación*, 37, 39-68.
- Porrás-Segovia, A., Escobedo-Aedo, P. J., Carrillo de Albornoz, C. M., Guerrero-Jiménez, M., Lis, L., Molina-Madueño, R., ... & Alacreu-Crespo, A. (2024). Writing to keep on living: A systematic review and meta-analysis on creative writing therapy for the management of depression and suicidal ideation. *Current Psychiatry Reports*, 26(7), 359-378.
- Ramírez-Montoya, M. S., Castillo-Martínez, I. M., Sanabria-Z., J., & Miranda J. (2022). Complex thinking in the framework of education 4.0 and open innovation—a systematic literature review. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(1), 4. <https://doi.org/10.3390/joitmc8010004>
- Rao, I. S., Jeevan, S., & Ahmad, A. (2023). Impact of Metacognitive Strategies on Creative Writing of ESL Students at College Level in District Lahore. *Global Language Review*, VIII, 315-324.
- Rivas, S. F., Saiz, C., & Ossa, C. (2022). Metacognitive strategies and development of critical thinking in higher education. *Frontiers in psychology*, 13, 913219.
- Sastra, P. Z. M., Rahim, F. R., & Sari, S. Y. (2023). Development of critical and creative skills-based interactive learning media for high school physics learning. *Jurnal Eksakta Pendidikan (JEP)*, 7(1), 13-25.
- Shidiq, M. (2023, May). The use of artificial intelligence-based chat-gpt and its challenges for the world of education; from the viewpoint of the development of creative writing skills. In *Proceeding of international conference on education, society and humanity*, 1(1), 353-357.
- Sternberg, R.J., Lin, S., & Nguyen, E. C. K. (2024). Are "extracurricular" activities really extracurricular? The activities that matter least in school are the ones that best teach real-world critical and creative thinking. *Journal of Intelligence*, 13(1), 1. <https://doi.org/10.3390/jintelligence13010001>
- Teng, M. F., & Yue, M. (2023). Metacognitive writing strategies, critical thinking skills, and academic writing performance: A structural equation modeling approach. *Metacognition and Learning*, 18(1), 237-260.
- Vasli, P., Mortazavi, Y., Aziznejadroshan, P., Esbakian, B., Ahangar, H. G., & Jafarpoor, H. (2023). Correlation between critical thinking dispositions and self-esteem in nursing students. *Journal of Education and Health Promotion*, 12, 144. https://doi.org/10.4103/jehp.jehp_1481_22
- Vicol, M. I., Gavriluț, M. L., & Măță, L. (2024). A Quasi-Experimental study on the development of creative writing skills in primary school students. *Education Sciences*, 14(1), 91.
- Wang, H. C. (2021). Exploring the relationships of achievement motivation and state anxiety to creative writing performance in English as a foreign language. *Thinking Skills and Creativity*, 42, 100948.



- Wang, X. M., Huang, X. T., Han, Y. H., & Hu, Q. N. (2024). Promoting students' creative self-efficacy, critical thinking and learning performance: An online interactive peer assessment approach guided by constructivist theory in maker activities. *Thinking Skills and Creativity*, 52, 101548.
- Zhao, D. (2024). The impact of AI-enhanced natural language processing tools on writing proficiency: An analysis of language precision, content summarization, and creative writing facilitation. *Education and Information Technologies*, 1-32.
- Zulfikar, Z., Azis, Z., & Nasution, M. D. (2022). Students' critical thinking ability through the application of the creative problem solving (CPS) model assisted by autograph. *JMEA: Journal of Mathematics Education and Application*, 1(3), 142–147.
- Zulma-Lanz, María. (2006). Aprendizaje autorregulado: el lugar de la cognición, la metacognición y la motivación [Self-regulated learning: the place of cognition, metacognition and motivation]. *Estudios pedagógicos (Valdivia)*, 32(2), 121-132. <https://dx.doi.org/10.4067/S0718-07052006000200007>
- Zulyusri, Z., Elfira, I., Lufri, L., & Santosa, T. A. (2023). Literature study: Utilization of the PjBL model in science education to improve creativity and critical thinking skills. *Jurnal Penelitian Pendidikan IPA*, 9(1), 133–143.

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