



## C A P Í T U L O 1

# WRITING EDUCATIONAL RESEARCH: LEARNINGS AND FUTURE CHALLENGES IN THE ERA OF GENERATIVE AI

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**ABSTRACT:** In the following chapter we present a literature review on authorship development in the field of educational research. The review is divided into two sections: firstly, we present the current approaches that have served as a theoretical framework for the study of authorial voice formation in Mexico; secondly, we offer an updated review of the research challenges posed using Generative Artificial Intelligence (GAI). Within this panorama, discursive genres continue to be the predominant approach to explain the construction of specialized discourse, while there is a growing interest in approaches based on biographical methods. For its part, the review of the challenges of incorporating GAI into the field points to a divergence between forms of work that enhance specific aspects of written production. Many of these constitute opportunities to rethink the teaching of academic writing, especially as a strategy to promote critical and creative literacies that enhance the training of specialized authors.

**KEYWORDS:** Literacy, Authorship, Educational Research, Artificial Intelligence, Academic Writing

**RESUMEN:** En el siguiente capítulo presentamos un estado del arte sobre la formación de autoría en el campo de la investigación educativa. La revisión expuesta se divide en dos apartados: en primer lugar, damos a conocer los enfoques vigentes que han servido de marco teórico para el estudio de la formación de la voz autoral en México; en segundo lugar, ofrecemos una revisión actualizada sobre los retos para la investigación que supone el uso de la Inteligencia Artificial Generativa (IAGen). Dentro de este panorama, los géneros discursivos continúan siendo el enfoque

predominante para explicar la construcción de un discurso especializado, a la vez que existe un creciente interés en aproximaciones basadas en métodos biográficos. Por su parte, la revisión sobre los retos de incorporar la IAGen apunta hacia una divergencia entre formas de trabajo que potencian aspectos específicos de la producción escrita. Buena parte de estos constituyen oportunidades para repensar la enseñanza de la escritura académica, sobre todo como una estrategia para impulsar usos críticos y creativos que potencien la formación de autores especializados.

**PALABRAS CLAVE:** Literacidad, autoría, investigación educativa, inteligencia artificial, escritura académica

## INTRODUCTION

The formation of educational researchers in Mexico has been a significant national educational effort in recent decades, with its primary focus on strengthening postgraduate studies (Avilez Morgado, 2024). The growth of programs offering specializations, master's degrees, and PhDs in educational research (ER) and related areas has revealed issues in academic reading and writing. Although some of these issues resemble those found in other fields (Castro Azuara & Sánchez Camargo, 2016; Carrasco Altamirano et al., 2020), ER has distinctive features that emphasize the need for specific research questions and criteria.

In this context, key questions arise: What is the role of academic literacy in training new generations of educational researchers? What learning experiences and practices have established researchers developed as professional authors in this field? This paper argues that, to answer these questions from a national perspective, the educational research community has conducted studies using four explanatory approaches and models, which include study designs with multi- and interdisciplinary perspectives that deepen our understanding of the phenomenon.

Explanations based on discourse genre theory (Brambila, 2020; Hernández Ramírez, 2018), studies of scientific trajectories (Hamui Sutton & Jiménez Loza, 2012), biographical perspectives (Quesada Mejía & Hernández-Zamora, 2020; Rojas Ramírez, 2022), the intercultural approach (Hernández-Zamora, 2019; Silas-Casillas & Lombardi González, 2021), field theory (Avilez Morgado, 2024), and educational ethnography (Rojas Ramírez, 2024) form a body of current knowledge that details the challenges faced by novice authors in their process of becoming educational researchers who write and publish in high-impact journals and prestigious publishers.

However, the arrival of Generative Artificial Intelligence (GenAI), which started in November 2022, has challenged some of the core research assumptions in key works. Under the banner of this technology, the meanings and methods used in academic literacy for training researchers are currently going through a process

of transformation and adaptation. Recently, a wealth of academic literature has emerged, although it remains limited in the Mexican context, analyzing the educational uses that GenAI requires for textual work in training educational researchers. Furthermore, this body of work highlights issues related to access, use, and cognitive gaps (Ramírez Martinell et al., 2014) that impact critical appropriation capacity, as well as the urgent need to include an axiological dimension analysis.

The hypothesis suggests that integrating GenAI will continue to reshape the landscape of written research culture overall, especially concerning AI itself. This shift would not lead to the gradual disappearance of traditional forms of academic reading and writing, but rather their enhancement, combination, reinterpretation, and diversification across various levels of the digital environment. Emerging literacy practices may continue to favor the development of those community members who have access to the necessary material and symbolic conditions—that is, both availability and access (Kalman, 2003)—which ensures the critical utilization of this technology. Meanwhile, individuals who lack the opportunities and means to access these resources will face exclusionary dynamics that could hinder their academic development.

## **AUTHORSHIP, SCIENTIFIC *HABITUS*, AND MASTERY OF DISCURSIVE GENRES**

In Mexico, the works of Carrasco Altamirano (2011; 2014; 2020; 2021) serve as the starting point for studies on academic and scientific trajectories that examine authorial development. This author's research focuses on postgraduate programs across various fields of knowledge, with the overall goal of exploring the formation of scientific *habitus* through an analysis of the reading and writing practices that academics incorporate into their scientific work. Drawing mainly on Bourdieu (1976) and Bazerman (1988), this author's work emphasizes the different roles researchers assume in their scientific fields, which involve working with various discursive genres and gradually adopting legitimate literary practices. New authors edit texts, proofread drafts, specialize in describing methods and instruments, gather information for specific sections, conduct bibliographic searches, and perform numerous other activities before becoming professional authors recognized by their community of practice.

### **Authorship and Appropriation of Academic Voices**

Soriano Peña (2013; 2017) incorporates the Ibero-American approach of New Literacy Studies (Cassany, 2010; Hernández-Zamora, 2005; Zavala, 2002) to describe the development of the authorial voice as an expression of identity. Developing this

critical literacy involves understanding the logic of textually mediated knowledge production, an element that grants the power of symbolization and a sense of belonging. In line with Freire (1991) and Kalman (2003), becoming an author represents a political act that involves reading and intervening in the context through the enunciation of one's own words.

Navarrete Quezada (2021) explores the thinking of Mikhail Bakhtin. This researcher uses the concept of *heteroglossia* to highlight the specific challenges that thesis writers face when preparing their degree projects. Mastery of academic writing, she points out, is related to the incorporation of research tools and the researcher's emotional and affective maturity. The authors go through various research experiences subject to validation and recognition dynamics, a process that involves different types of possible hardships that they must overcome.

## **BEING A PROFESSIONAL AUTHOR WITH A HISTORY AND CULTURE BUILT IN**

Autobiographical and autoethnographic proposals (Hernández-Zamora, 2020; Rojas, 2022; 2024) represent recent qualitative approaches to understanding how professional authors are formed in the field of educational research. These perspectives analyze the cultural meanings and formative experiences that the community itself recognizes or considers valuable for interpreting the construction of its subjectivity. From these viewpoints, being an author is an enculturation process in which literate individuals participate in numerous literacy events: they undergo continual review and assessment, access different communities of practice where they are read and given feedback, receive invitations to collaborate on publication projects, produce outreach texts, and engage in other activities with texts that foster the development of academic literacies.

Thus, authorship emerges from the development of an academic culture that, through various institutions, creates the material and symbolic conditions necessary for the formation of research groups and spaces, along with editorial mechanisms for publishing and sharing academic texts. It is a collective and generational phenomenon involving social movements, policies to promote scientific growth, and the establishment of research centers and postgraduate programs.

## **BEING A PROFESSIONAL AUTHOR AS A RESULT OF A CURRICULUM AND METHODOLOGICAL TRAIT**

Influenced by Carlino's (2005) ideas, Ramírez Ruedas (2013) has further examined the teaching of academic reading and writing as a learning space for which all educational stakeholders within the university are responsible. Learning

to read and write does not mean mastering neutral, quantifiable, and transferable communication skills; rather, it results from a curriculum and how academic and disciplinary communities organize themselves to integrate these literacies throughout their educational programs.

Initiatives stemming from academic literacy (Carlino, 2015; Padilla, 2019) challenge approaches that view academic writing as merely a skill or a set of techniques recommended for research development (Martínez-Rizo, 1997; 2020). Although the characteristics of academic writing are often described using a set of widely recognized properties—such as clarity, conciseness, objectivity, and rigor—these are commonly found in books and manuals on research methodology. However, the development of academic or disciplinary literacy results from an educational process that emphasizes the epistemic potential of reading and writing genres specific to each field of knowledge or discipline.

## **GENAI AND ACADEMIC WRITING: PRELIMINARY FINDINGS FROM SYSTEMATIC REVIEWS (2023-2025)**

The impact of GenAI on academic writing has sparked unprecedented interest in the global scientific community, providing an opportunity for innovation and dialogue with insights from the Mexican context. Google Scholar records show about 6,500 academic publications from 2023 to 2025 (in both English and Spanish) that specifically explore the relationship between GenAI and academic writing in higher education.

Given this situation, a tertiary systematic review was carried out following the approach by Kitchenham and Charters (2007), which exclusively synthesizes knowledge from secondary reviews, defined as studies that systematically analyze previous systematic reviews. The review focused on three research questions: RQ1: What benefits and limitations do systematic reviews identify regarding the use of generative artificial intelligence in university academic writing? RQ2: How does using GenAI tools like ChatGPT affect the development of authorial formation, critical thinking, intellectual autonomy, and academic integrity based on systematized evidence? And RQ3: What knowledge gaps still exist in systematic research concerning the application of GenAI in academic writing within higher education?

The search was conducted on the SpringerLink platform using the following search string: “academic writing” AND (“Artificial Intelligence” OR ChatGPT) AND “higher education” AND (“systematic review” OR “scoping review”). This search was limited to the period 2023–2025, initially identifying 17 documents classified as *Review Articles*, a category that generally groups works without original empirical research that present critical syntheses of literature, such as systematic reviews. The full

text of each review was analyzed to verify that it included a detailed description of its search strategy, inclusion and exclusion criteria, and evidence synthesis procedure. As a result, five systematic reviews and scoping reviews that met these methodological criteria were selected. Thus, this preliminary tertiary review synthesizes findings derived from a total of 11 secondary studies of high methodological rigor, collectively covering 490 primary studies. Based on this overview, the detailed analysis of the findings is organized below according to the three research questions posed.

Regarding the benefits and limitations identified in systematic reviews about the use of GenAI in university academic writing (RQ1), the studies reviewed confirm that GenAI, such as ChatGPT, improves technical aspects of academic writing: enhancing grammar, style, and coherence, and aiding tasks such as idea generation, literature review, and draft editing (Aljuaid, 2024; Khalifa & Albadawy, 2024). Additionally, Imran and Almusharraf (2023) demonstrate that ChatGPT can serve as a writing assistant by offering real-time feedback and stylistic suggestions in university settings. Shorey et al. (2024) build on these benefits by showing that ChatGPT acts as a virtual writing assistant, providing immediate feedback, helping organize manuscripts, and managing references. Ma (2025) verifies its role in fostering creativity, critical thinking, and personalized learning through conversational interaction and natural language processing capabilities.

Regarding how using GenAI tools affects critical thinking, intellectual autonomy, and academic integrity (RQ2), Aljuaid (2024) and Shorey et al. (2024) warn that relying too heavily on ChatGPT can damage originality and critical thinking by replacing thoughtful reflection with automated output. This risk arises with the concept of “intellectual imposture,” where automatically generated content is presented as one’s own without understanding or mastery of it. Ansari et al. (2023) note that, although ChatGPT makes academic tasks easier because of its convenience, there are serious worries about the accuracy of its responses, academic honesty, and the impact on cognitive development when students rely too much on the tool. Salih et al. (2025) add that teacher training should include prompt engineering skills and assessment methods that can tell the difference between proper support and unsupervised automatic work.

Finally, regarding knowledge gaps about the use of GenAI in academic writing in higher education (RQ3), studies agree that current literature mainly focuses on functional benefits and efficiency measures, while overlooking key qualitative aspects. Shorey et al. (2024) and Ma (2025) emphasize the lack of detailed research on subjective experiences, emotional factors, and the effects on students’ identity development as academic authors. Similarly, Salih et al. (2025) point out the limited number of studies exploring how AI is changing institutional processes such as teaching planning, responsible co-authorship, and professional development for educators.

In conclusion, Sinikallio et al. (2025) highlight the importance of integrating GenAI-assisted argumentative learning tools that strengthen structured critical thinking, address the limitations of automatic generative texts, and encourage explicit reasoning. This is especially relevant in educational settings related to software engineering and social sciences.

## CONCLUSIONS

The role of academic writing in shaping educational researchers was analyzed, especially before and after the rise of GenAI. The findings show that, although the four theoretical approaches identified still provide solid explanations of authorial development, these approaches were created in a context before today's technological upheaval. In this regard, the arrival of GenAI in 2022 not only introduces a powerful tool for written production but also presents a fundamental theoretical challenge: are these frameworks still adequate to understand the new ways subjects engage with academic writing when they coexist with generative technologies? This analysis demonstrates that GenAI is transforming both the practices and conditions of academic authorship. The findings reveal that GenAI does not just introduce a new technological tool but also changes how individuals learn to write, argue, and build academic knowledge.

GenAI positions itself as a resource that enhances the technical effectiveness of the writing process across multiple areas: from idea generation to final text editing (Khalifa & Albadawy, 2024). It improves grammar, textual coherence, and clarity in writing, as evidenced by Aljuaid (2024) and Naznin et al. (2025). These time-consuming and effortful functions are optimized, especially in situations where students encounter language barriers or limited teacher support (Shorey et al., 2024; Xiao et al., 2024). The reviews agree that extensive use of tools like ChatGPT can hinder the development of critical thinking, intellectual independence, and reflexivity, which are vital aspects of academic authorship. Likewise, Ma (2025) and Sinikallio et al. (2025) highlight the importance of incorporating pedagogical approaches that enhance argumentation, critical judgment, and metacognition to counteract the automation of writing.

These findings confirm that GenAI is transforming the ecosystem of written culture in higher education. Traditional forms of authorship are being reshaped, expanded, and diversified. In this new context, unequal access to the technologies and knowledge needed for critical appropriation poses risks of academic exclusion. As Kalman (2003) warns, full participation in literacy practices depends not only on the availability of tools but also on the sociocultural conditions that enable their meaningful use, that is, their appropriation. Balalle and Pannilage (2025) stress that this challenge must be addressed through institutional policies that protect academic integrity and ensure the ethical use of AI.

The scientific relevance of these findings lies in their demonstration of a profound transformation in the possibilities for academic authorship, which requires a critical review of traditional explanatory models. The rise of the phenomenon of “intellectual imposture” and new forms of human-machine collaboration forces us to rethink notions of originality, agency, and evaluation in research formation.

From a social and educational perspective, this evidence is essential for developing policies that close the gaps in access to and use of GenAI. In contexts like Mexico, where discussion of these issues is still not well documented in the reviewed literature, it becomes crucial to promote the development of teaching methods that foster critical, contextualized, and reflective use of these tools. Clearly defined ethical frameworks must be established to differentiate between legitimate technological assistance and replacing cognitive processes that learners should develop themselves. Ultimately, the pedagogical challenge is to redesign both teaching and assessment so that not only the final product is valued but also the process of knowledge building and the researcher’s ability to critically engage with the proposals generated by artificial intelligence.

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