Revista Digital de Investigación y Postgrado
ISSN: 2665-038X
ISSN-L: 2665-038X
omar.escalona@iesip.edu.ve
Instituto de Estudios Superiores de Investigación Y Postgrado
República Bolivariana de Venezuela

Hernández Campillo, Thais Raquel

Artificial intelligence literacy and content curation: challenges and opportunities for teachers and university students in France

Revista Digital de Investigación y Postgrado, vol. 7, no. 13, 2026, January-July, pp. 115-133
Instituto de Estudios Superiores de Investigación Y Postgrado
San Cristóbal, República Bolivariana de Venezuela

DOI: https://doi.org/10.59654/btctmw45

Available in: https://www.redalyc.org/articulo.oa?id=748583301008

https://doi.org/10.59654/btctmw45

Artificial intelligence literacy and content curation: challenges and opportunities for teachers and university students in France

Alfabetización en inteligencia artificial y curación de contenidos: desafíos y oportunidades para docentes y estudiantes universitarios en Francia

Thais Raquel Hernández Campillo*
Professor, Department of Multimedia and Internet Professions, University Institute of Technology of Blois, University of Tours, France..

Abstract

Universities exist to produce science and create new knowledge. Therefore, the work of university professors is increasingly diversifying, and research is seen as an activity, a support tool for the improved development of the pedagogical function. However, for some, research is viewed as complex, costly, and without implications for classroom teaching. Given this reality, the objective of this research is to evaluate the quality of professor-researchers, based on the Efficiency, Efficacy, and Effectiveness aspects of this doctoral thesis, which emerges from one of the dimensions of the research project in Scientific Research Quality Management at UNAN-Managua. The methodology was characterized by a constructivist paradigm, a mixed approach, and an explanatory study type based on the time of occurrence of the events and the recording of information. The study was retrospective, and, depending on the period and sequence of the study, it was cross-sectional. Methods, techniques, tools, and instruments were used to collect and process data..

Keywords: quality, teacher-researcher, efficiency, efficacy, effectiveness, research.

Resumen

Las universidades están para producir ciencia, crear nuevo conocimiento, por lo cual el quehacer del docente universitario comienza cada vez más a diversificarse y la investigación es una actividad, un instrumento de apoyo para el mejor desarrollo de la función pedagógica; pero para algunos la investigación lo ven como algo complejo, costoso y sin implicaciones para la docencia en las aulas. Ante esta realidad el objetivo de esta investigación es evaluar la calidad de los docentes en la investigación desde la eficiencia, eficacia y efectividad, que surge de una de las dimensiones de la tesis doctoral en Gestión de la Calidad de Investigación Científica, UNAN-Managua. La metodología se caracterizó por un paradigma constructivista, enfoque mixto, tipo de estudio explicativo, de acuerdo con el tiempo de ocurrencia de los hechos y registro de la información, el estudio es retrospectivo y según el período y secuencia del estudio es transversal, se utilizaron métodos, técnicas, herramientas e instrumentos para recolectar y procesar datos.

Palabras clave: calidad, docente investigador, eficiencia, eficacia, efectividad, investigación.

How to cite this article (APA): Hernández, C. T. R. (2026). Artificial intelligence literacy and content curation: challenges and opportunities for teachers and university students in France. *Revista Digital de Investigación y Postgrado*, 7(13), 111-128. https://doi.org/10.59654/btctmw45

Introduction

Artificial intelligence (AI) has been progressively integrated into various spheres of contemporary society. Experts and scientists project that this technology will play an increasingly decisive role in sectors such as the economy, health, and education. We are facing a technological revolution that demands deep adaptations in social dynamics and in the automated processes that transform daily life. In this context, diverse perspectives emerge: some seek to understand the scope of this revolution, while others aim to guide the already visible changes.

Higher education constitutes one of the areas where these tensions manifest most intensely. AI is significantly transforming teaching and learning, while simultaneously posing ethical and moral challenges associated with its misuse. Hence, there is a need to promote training that fosters a critical and ethical use of these technologies, both among university students and faculty.

The United Nations Educational, Scientific and Cultural Organization (Unesco) has emphasized the uniqueness of AI compared to other digital tools applied in education. According to this agency, artificial intelligence is distinguished by its ability to mimic human behaviors, automatically generate content from multiple sources, and raise moral and academic responsibilities. These particularities demand specific competencies that transcend traditional digital literacy (Unesco, 2019, 2024a).

For its part, the European Union has oriented its approach to artificial intelligence towards fostering scientific research and economic development (European Commission, 2025a). This framework rests on two fundamental pillars: excellence, understood as the coordination of policies, resources, and investments to develop robust, high-performance systems; and trust, based on the creation of legal frameworks that guarantee a safe and responsible use of AI. In this vein, the AI Act, the first European legal framework on the subject, regulates associated risks and positions Europe as a global leader.

In France, AI has decisively impacted the economy, society, and the educational sphere. Its application in teaching is subject to respect for republican values, personal data protection, pedagogical freedom, and environmental sustainability. The Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche (2025) acknowledges that AI poses challenges for traditional education by modifying learning methods, lesson preparation, and assessment, although it also offers valuable opportunities for teaching and institutional management.

In this line of thought, French researchers and authorities have explored multiple dimensions of AI use among university faculty and students. Among recent work, notable studies include those analyzing the degree of adoption of language models like ChatGPT (Agulhon & Schoch, 2023; Sublime & Renna, 2024), the integration of AI into teaching and learning processes (Many, Shvetsova & Forestier, 2024; Modolo, 2025), and faculty preparation for its disruptive potential (Bidan & Lebraty, 2024). To these are added official reports directed at the highest educational authorities—such as that by Pascal et al. (2025)—which document the actual uses, challenges, and opportunities of AI in French higher education.

Another reference is the AI DL – Data Literacy in the Age of AI for Education project (France Éducation International, n.d.), which seeks to strengthen digital citizenship through data and information literacy supported by AI tools, especially generative AI. This program aims to equip educational stakeholders with critical competencies to face contemporary challenges such as deepfakes and fake news.

The results of this research an these initiatives show that integrating AI into higher education opens

opportunities to enrich teaching and institutional management, but also generates ethical dilemmas and risks of bias that require rigorous attention. Therefore, it is essential to incorporate AI literacy into university education, understood as the ability to understand its functioning, identify its biases, and employ it critically and responsibly.

In a scenario of automated information production, content curation acquires a strategic role. This practice allows for filtering, validating, and contextualizing information generated by artificial intelligence systems, fostering more reflective and ethical learning. Integrating content curation into teaching and student practices can strengthen skills in searching, analyzing, and verifying sources in an informational environment increasingly mediated by AI.

However, academic literature often addresses AI literacy and content curation separately, limiting the understanding of their combined potential. This theoretical gap constitutes the foundation and originality of the present study, whose objective is to analyze how content curation can be integrated into the AI literacy of university faculty and students in France.

Methodology

The present study adopts a qualitative approach, given its interpretive nature and focus on understanding phenomena through processes. This approach, with its non-linear and cyclical design, facilitates the flexible organization of the researcher's work (Calle, 2023). According to Lim (2024), qualitative methodology is indispensable due to its capacity to offer information on complex social phenomena, generate people-centered understandings, address real-world problems, and respond quickly to social changes.

As the main empirical method, a systematic literature review was applied, which allowed for examining, evaluating, and synthesizing existing academic production to understand the context, establish antecedents, and identify trends related to the object of study (Susanto et al., 2024). The methodology proposed by Gómez et al. (2014) was followed, recognized for its applicability to diverse knowledge areas and its usefulness for determining the relevance and originality of sources. This methodology comprises four phases: problem definition, search, organization, and analysis of information.

The problem definition was articulated with the purpose of the study: to analyze the integration of content curation within artificial intelligence literacy among teachers and students in higher education in France. The review period was delimited between 2018 and 2025, coinciding with the start of European policies on artificial intelligence, including milestones such as the creation of the High-Level Expert Group on AI, the European AI Alliance, and the Coordinated Plan on AI driven by the European Union.

The information search was conducted in scientific databases and academic repositories, including ScienceDirect, Scopus, Google Scholar, HAL, and CAIRN, the latter two specialized in French research. Following the principles of digital information retrieval, search operators and equations were applied in French and English, such as: "higher education in Europe" + "artificial intelligence"; "AI literacy in France" AND "content curation"; "content curation" AND "higher education"; as well as "artificial intelligence" OR "generative artificial intelligence".

As a result, 858 sources were retrieved. After applying exclusion criteria—removing citations, patents, conference proceedings, duplicate records, and research unrelated to the French context—104 documents focused on artificial intelligence were obtained, although most addressed technical aspects without reference to literacy or content curation. Finally, 20 sources were selected (see Appendix 1)

based on the following criteria: (a) theoretical or empirical studies on AI in French higher education, (b) primary sources (books, articles, reports, or theses), and (c) proposals aimed at acquiring digital competencies among teachers or students.

For organizing and analyzing the documents, two content curation tools were used: Zotero and Notion. Zotero was employed as a bibliographic manager and PDF annotator, enabling the classification of articles, creation of tags, and management of citations through its integration with Word. Notion was used for note-taking and categorizing information according to the thematic axes of the review. Its flexible interface allowed for the creation of a database with the retrieved articles and the extraction of metadata (title, author, year, journal, and keywords).

Furthermore, theoretical methods were applied, such as analysis-synthesis, historical-logical, and induction-deduction, which guided information processing and the construction of the theoretical framework. Analysis-synthesis allowed for deconstructing the contributions identified in the literature (definitions, conceptual frameworks, experiences in France and Europe) to integrate them into an interpretative model. Induction-deduction facilitated the identification of patterns in empirical studies and their comparison with theoretical frameworks on digital and AI literacy. Finally, the historical-logical method made it possible to trace the evolution of the concept of digital literacy towards AI literacy and its relationship with content curation in the French context.

As a methodological instrument, a thematic guide for the literature review was developed (see Appendix 2). It allowed for organizing the selected articles into predefined categories: concepts, digital competencies, experiences of teachers and students, and links between artificial intelligence and content curation. This tool facilitated the identification of patterns and theoretical gaps and ensured a systematic review coherent with the study's objectives. Moreover, its application favors research reproducibility and aligns with the logic of content curation by establishing filters and criteria that refine and prioritize relevant information.

Finally, the study acknowledges some limitations. A deficit of research specifically focused on AI literacy in French higher education is evident, as well as a lack of work addressing content curation in this context. Furthermore, some of the French literature consulted is not indexed in international databases like Scopus or Web of Science, limiting its visibility. On the other hand, the emerging nature of AI literacy implies conceptual frameworks still under development. Lastly, although the thematic guide contributed to a systematic organization, any classification carries a component of subjectivity. Consequently, the results of this review should be interpreted as an initial approximation to the phenomenon and not as an exhaustive representation of the French higher education system.

Results and Discussion

Artificial intelligence literacy: Concept and relevance

Artificial intelligence is part of everyday life. Applications based on this technology directly influence how we live and interact, both with technology and with other people. As AI evolves, the boundary between humans and machines becomes increasingly blurred. Examples of this include smart home appliances, voice recognition features on mobile phones, or applications that facilitate language learning. Virtual assistants like Siri, Alexa, or Gemini respond to queries about the weather or news, while smartwatches monitor physical activity and well-being. The more integrated technology is in daily life, the less perceptible its presence becomes, as its purpose is to minimize friction between the user and the device.

In line with these advances, interest in the application of AI in education has grown significantly. However, "research on artificial intelligence in educational settings seldom defines the term" (Stolpe & Hallström, 2024, p. 2).

Various international organizations have attempted to define this concept. Unesco (2024b) defines AI as a digital system capable of processing and analyzing data from its environment to act autonomously based on specific objectives. The European Parliament (2020) describes it as a machine's ability to perform cognitive functions characteristic of humans, such as reasoning, learning, creating, and planning. In France, the Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche (2025) conceives it as a digital system based on probabilistic algorithms that uses datasets to produce outcomes comparable to human cognitive activity. This organization distinguishes two main types of AI: predictive, when models classify data, anticipate risks, or identify trends, and generative, when models produce new content such as text, images, sounds, or videos.

Considering the potential of this technology, as well as the ethical and social implications of its use, several authors argue that all citizens should receive training in artificial intelligence (Markus et al., 2024; Olari & Romeike, 2024; Stolpe & Hallström, 2024). In this regard, education is needed that allows teachers and students to understand what AI is, how it works, what its biases are, and how to interact with it critically, ethically, and effectively.

From this perspective, artificial intelligence literacy emerges as an essential pathway for developing competencies that facilitate leveraging its benefits and mitigating its risks in the educational and social spheres. Capelle (2024) defines it as a set of competencies that enables people to critically evaluate AI systems, as well as to communicate and collaborate effectively with them. This literacy is supported by other competencies included in the European Digital Competence Framework, such as information and data management, thus configuring a multiliteracy approach where various interrelated literacies converge.

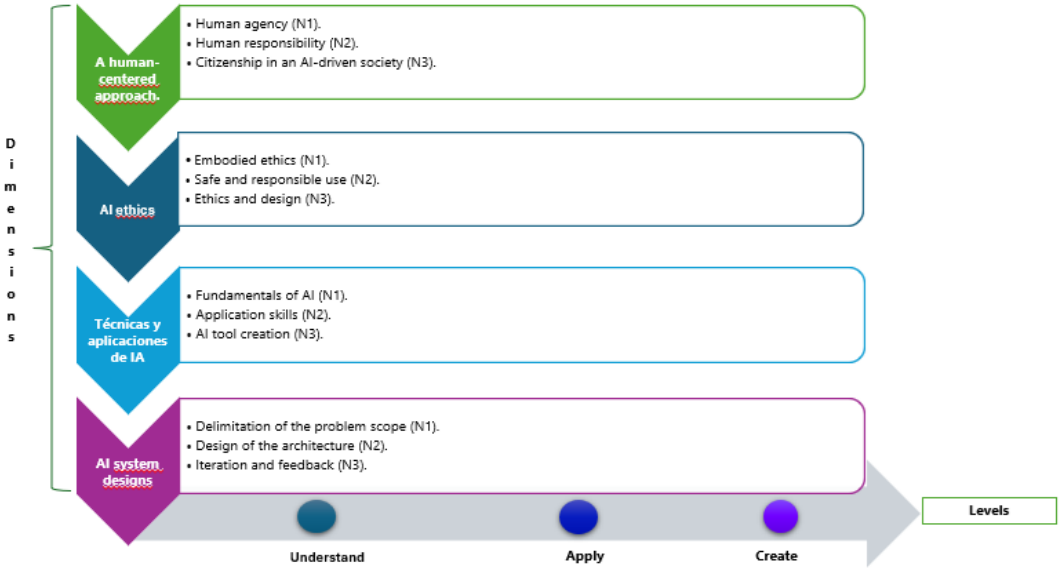
In the French context, several studies have addressed the changes generated by AI in teaching and learning processes, as well as concerns stemming from its indiscriminate use by students. Agulhon and Schoch (2023) highlight the advantages of ChatGPT for supporting the drafting of academic papers and other educational tasks, but warn of the risks related to the reliability and quality of its responses. The authors emphasize the importance of combining AI's potential with human expertise to avoid technological dependence and the weakening of critical thinking.

For his part, Modolo (2025) examines how the integration of AI transforms higher education by redefining the traditional roles of teachers and students. From a critical perspective, he posits that this technology acts as a disruptive tool capable of modifying pedagogical practices, generating new power dynamics, and complicating learning assessment processes. Complementarily, Devauchelle (2025) analyzes the impact of AI not only on teachers and students but also on the staff responsible for teacher training. According to the author, in France, the use of AI remains limited, primarily confined to the preparation of classes and school assignments, although both its potential and the ethical challenges it entails are recognized.

The reviewed studies agree on the need for a reference framework to guide the integration of artificial intelligence literacy in higher education. In response, Unesco (2025a) developed a Framework for AI Competencies for Students, which aims to prepare students to become responsible and creative citizens in the digital age, as well as to support teachers in its pedagogical integration. This document defines 12 competencies organized into four dimensions and three levels of progression.

Figure 1

AI competency framework for students.

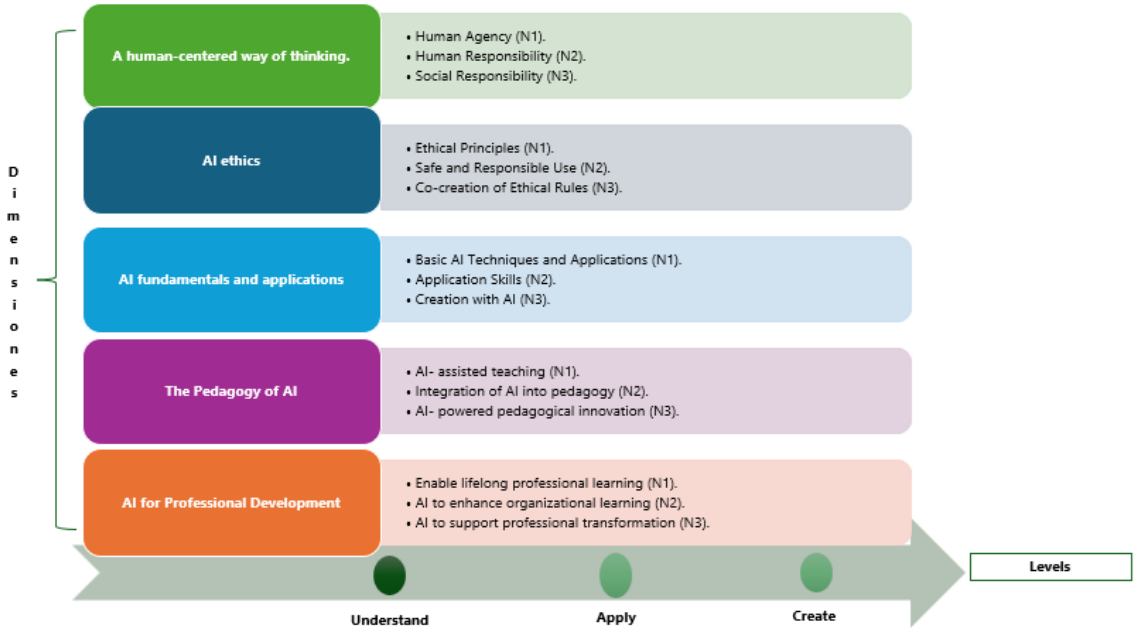


Note: Original elaboration based on Unesco (2025a).

Furthermore, Unesco (2025b) developed the AI Competency Framework for Teachers, aimed at those who use this technology to enhance learning. This framework, structured around 15 competencies distributed across five dimensions and three levels, is founded on principles such as the protection of teachers' rights and the strengthening of human agency, emphasizing that "human flourishing must remain at the heart of the educational experience. Technology must not and cannot replace teachers" (p. 14).

Figure 2

AI competency framework for teachers



Note: Author's own elaboration based on Unesco (2025b)

In line with this international interest, France has developed multiple initiatives to promote artificial intelligence competencies among teachers and students, aiming to foster a safe, effective, and ethical use of these tools. Principles and guidelines for the responsible use of AI at all educational levels have been established (Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, 2025), along with practical resources for higher education: massive open online courses, manuals, digital tools, national portals, guides of good practices, experimental experiences, and institutional training programs (France Éducation International, n.d.; Université de Nantes, 2024).

These actions are complemented by funding initiatives under the *France 2030 program*, which allocates 54 million euros to the transformation of companies, educational institutions, and research centers. Among the funded projects is AI DL – Data Literacy in the Age of AI for Education, focused on the critical use of artificial intelligence in education and its integration into teaching practices (European Commission, 2025). Furthermore, France participates in European projects such as Erasmus+, which promote AI literacy in higher education.

Educational digital content curation as a key competency

Content curation constitutes an effective resource in the face of information overload. This concept, originating in the fields of marketing, journalism, and communication, has been progressively incorporated into the educational context. According to Hernández et al. (2022), content curation in university teaching work comprises the search, selection, and dissemination of relevant information for a course, with the goal of facilitating the learning of disciplinary content. For students, this practice plays an essential role in understanding a topic and in collaborative work, as it involves compiling, selecting, organizing, editing, and sharing meaningful information (Ramírez, 2024).

In this way, content curation encompasses subprocesses such as the retrieval, storage, organization, presentation, and dissemination of digital information. In a context where artificial intelligence has exponentially multiplied the production and circulation of data, curation is configured as a competency for filtering and critical evaluation, enabling the distinction between reliable information and content generated without quality control, the verification of sources and biases, and the selection of resources aligned with specific informational objectives and needs. Consequently, it is constituted as an act of advanced information literacy, indispensable in environments mediated by artificial intelligence.

Simultaneously, artificial intelligence can enhance the curation process. This approach has been explored in journalism, marketing, and advertising, where the adoption of intelligent tools for creating personalized content is analyzed, redefining traditional communication practices (La-Rosa et al., 2025). Codina and Lopezosa (2024) show how AI tools can streamline curation processes in journalism and present AI-powered search engines applicable to academic contexts (Codina, 2023).

The findings of this research are transferable to higher education, where teachers and students can apply AI tools in content curation. At this educational level, managing reliable information to support an argument or develop a viewpoint constitutes a common practice, which corresponds to the curation process, whether as part of learning activities or teaching preparation.

The following table presents artificial intelligence tools applicable to each phase of the content curation process, highlighting that AI does not replace curation but enhances its value through the interpretation, contextualization, and ethical re-reading of information:

Table 1

Integration of artificial intelligence tools in content curation phases

Process phase	Main objective	Recommended AI tools	Potential uses by teachers/ students
Seaarch	Locate relevant and up-to-date information	Perplexity AI, Elicit, Semantic Scholar (IA Search), Consensus	Formulate questions in natural language or specific prompts; identify relevant scientific sources; compare evidence or study results.
Selection	Evaluate and filter the quality of information.	Scite.ai, Scholarcy, Research Rabbit, Explainpaper	Summarize scientific articles; verify whether a study has been cited positively or critically; compare different sources on the same topic.
Storage and organizations	Classify, tag, and preserve curated content.	Notion AI, Symbaloo AI Obsidian + plugins IA, Diigo IA	Save articles and notes with automatic metadata; create connected knowledge bases; tag and relate key concepts.
Creation (with added value)	Reinterpret and contextualize curated information; generate educational materials.	ChatGPT, Copilot, Claude, Gemini, Canva Magic Write, Gamma App, Notion AI. Its use should be combined with the content curation techniques proposed by Guallar (2021).	Write interpretive and critical texts; design infographics, presentations, or teaching materials; recontextualize texts according to students' level.
Dissemination	Share curated content in digital or academic environments	LinkedIn + IA, Medium, Substack con asistencia IA, Padlet, Wakelet, Pearltrees, Moodle con IA plugins	Publish annotated resource collections; generate automatic summaries or visualizations; create repositories or collaborative learning spaces.

Nota: Elaboración propia.

Most of the identified tools offer free or academic versions, facilitating their integration into university projects without requiring major investments. However, the limitations of freemium plans (number of searches, storage space, or advanced features) demand strategic and mindful use.

In France, research on content curation in higher education is still scarce, and as of this review, no studies explicitly linking it to artificial intelligence or AI literacy have been recorded. Nevertheless, relevant work providing valuable information to the academic community has been identified, such as Knauf and Falgas (2020), who integrate content curation into a master's-level communication course on information search and retrieval, and Kemp (2018), whose doctoral thesis proposes a system based on curation and big data exploration services to facilitate digital information retrieval. Other significant studies were excluded from the analysis for not meeting the methodological selection criteria.

In the age of artificial intelligence, educational digital content curation is established as a key competency, not only for its instrumental value but also for its critical dimension. Teachers and students must be able to identify and manage the risks associated with the intensive use of intelligent tools, including

technological dependency, algorithmic biases, and information overload (infoxication). These phenomena threaten cognitive autonomy and learning quality, but they justify the need to strengthen curation as a reflective practice, ensuring training in how to filter, contextualize, and transform information, thereby reintroducing human judgment into an increasingly automated environment.

Intersection Between AI literacy and content curation

Content curation occupies an intermediate position between traditional digital literacy (searching, using, and communicating information) and artificial intelligence literacy (understanding how AI systems function and are trained). It also teaches how to formulate questions, prompts, or search criteria strategically, involves interpreting algorithmic results by recognizing their non-neutral nature, and fosters ethical responsibility in the selection and dissemination of AI-generated information. In this sense, content curation can be understood as a practice that develops the critical evaluation of artificial intelligence systems.

On the other hand, content curation enables the exercise of AI literacy as part of the learning and knowledge production process. In this context, teachers can design personalized learning environments based on materials filtered, validated, and adapted with the help of ChatGPT, Perplexity, or Semantic Scholar. Students, in turn, train in the critical selection of results from search engines or generative assistants, evaluating those most pertinent to their learning and academic projects.

The intersection between AI literacy and content curation redefines informational competencies in higher education. It is no longer just about accessing or communicating information, but about understanding the algorithmic mediations that structure knowledge production and circulation. From this perspective, the curation process becomes a metacognitive exercise: by interacting with AI tools, the user learns to reflect on their own processes of search, selection, and creation, developing a critical awareness of technology's role in knowledge construction.

Integrating content curation into AI literacy also entails rethinking the ethical and formative role of the university. Institutions can leverage curation practices to promote a responsible and transparent use of artificial intelligence, fostering source traceability, authorship attribution, and respect for epistemic diversity. In this way, curation ceases to be an individual practice and transforms into an institutional competency that upholds academic integrity in AI-mediated environments.

This convergence between AI literacy and content curation also opens the possibility of transforming pedagogical practices. Instead of focusing solely on transmitting information, teachers can guide students towards the collaborative construction of knowledge through the critical interpretation of AI-generated results. Curation, in this context, acts as a bridge between the technical understanding of artificial intelligence and its reflective application in real learning contexts.

Challenges of AI literacy in the french higher education context

In France, the deployment of artificial intelligence literacy faces several structural obstacles. One of the main ones is the digital divide, highlighted by the Conseil économique, social et environnemental (CESE), which warns that approximately one-third of the population feels disconnected from digital technologies, including young people and inhabitants of areas with limited internet access (Meyer & Tordeux, 2025). Furthermore, OECD reports on the digital divide in education point to inequalities in connectivity, available digital resources, and competencies, which prevent all students from having

equitable access to AI-mediated educational practices (Burns & Gottschalk, 2019; OECD, 2023).

Secondly, the training of teachers and students is insufficient to meet emerging challenges. A report by the Commission on Economic Affairs presented to the French Senate notes that the training offering in AI is modest, both in initial and continuous training systems, and that existing programs do not adequately cover the ethical, technical, and pedagogical dimensions of artificial intelligence (Hoffman & Golliot, 2024). Nevertheless, projects like AI4T seek to fill this gap through open manuals and MOOCs aimed at teachers, but their scale is still too limited to impact the entire higher education system.

Finally, there is a clear need for integrated educational policies that embed AI literacy and content curation within university curricula. The frameworks for the use of AI in education, established by Unesco and the Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche in France, set out principles and guidelines for the responsible use of artificial intelligence. While these documents are the result of extensive international and national study, it is considered pertinent to move from principles to practical implementation in specific curricular modules.

Similarly, the report on artificial intelligence in higher education presented by the Minister responsible for Higher Education and Research identifies several priority actions to transform French universities into active agents of this change, including institutional structuring, specialized teacher training, and the social appropriation of knowledge in artificial intelligence.

Conclusions

The review conducted confirms that artificial intelligence literacy is emerging as a new axis of digital competence in higher education. Beyond the instrumental acquisition of technological skills, it involves understanding how AI systems are designed, trained, and operated, as well as the ability to critically analyze their impact on knowledge production and circulation processes. Its relevance lies not only in technical mastery but in the development of an ethical and critical awareness that enables teachers and students to act as informed digital citizens in algorithm-mediated environments.

Within this framework, educational digital content curation emerges as a key competency complementary to artificial intelligence literacy. Far from being a merely technical task, curation constitutes a cognitive and pedagogical practice that involves the ethical search, selection, evaluation, contextualization, and dissemination of information. In the age of artificial intelligence, this practice acquires a new dimension: it allows for filtering informational overabundance, identifying algorithmic biases, and adding value through human interpretation, thereby contributing to the formation of critical and autonomous thinking.

The intersection between artificial intelligence literacy and content curation constitutes a space for active learning where interaction with intelligent tools becomes a formative opportunity. When teachers use artificial intelligence to design personalized materials or students learn to formulate prompts and evaluate results generated by automated systems, both exercise a practical, situated, and critical literacy. This convergence redefines the pedagogical function: educational actors cease being passive consumers of information and transform into reflective curators and creators of knowledge, aware of the technological mediations involved in its construction.

In the French context, artificial intelligence shows significant advances and challenges. France has a

solid institutional foundation, including ministerial plans, frameworks for AI use, and innovation projects like AI4T, which aim to guide the integration of AI into the education system. However, digital divides, access inequalities, and deficits in teacher and student training persist, limiting a critical and equitable appropriation of these technologies. The institutional reports reviewed underscore the urgency of articulating public policies that integrate AI literacy within university curricula, ensuring its teaching is not limited to technical competencies but incorporates ethical, epistemological, and pedagogical dimensions.

Collectively, the results of this research suggest that artificial intelligence literacy, understood through the practice of content curation, can become a transformative axis for higher education. Integrating both competencies into the training of teachers and students would foster the development of a critical academic citizenship, capable of using artificial intelligence not as a substitute for human thought, but as an instrument to enhance understanding, creativity, and responsibility in the collective construction of knowledge.

Privacy: Not applicable.

Funding: This work did not receive any funding.

Declaration on the use of artificial intelligence: The author of this article declares that no Artificial Intelligence was used in its preparation.

References

Agulhon, S. and Schoch, P. (2023). ChatGPT et l'éducation : révolution numérique ou dépendance excessive à l'IA ? En F. Guénot (Ed), L'IA éducative. *L'intelligence artificielle dans l'Enseignement* (117-123). Studyrama/Bréal. https://hal.science/hal-04260498v1

Alwaqdani, M. (2025). Investigating teacher's perceptions of artificial intelligence tools in education: potential and difficulties. *Education and Information Technologies*, 30, 2737-2755. https://doi.org/10.1007/s10639-024-12903-9

Bidan, M. and Lebraty, J.F. (2024). Enseignants-chercheurs et ChatGPT4 : un chapitre récursif. En F. Chevalier et C. Fournier (Eds), *Pratiques pédagogiques innovantes : Construire la pédagogie de demain* (333-345). EMS Éditions. https://doi.org/10.3917/ems.cheva.2024.02.0333

Bolaño-García, M. and Duarte-Acosta, N. (2024). Una revisión sistemática del uso de la inteligencia artificial en la educación. *Revista Colombiana de Cirugía*, 39(1), 51-63. https://doi.org/10.30944/20117582.2365

Burns, T. & Gottschalk, F. (2019). Educating 21st Century Children: Emotional Well-being in the Digital Age. *Educational Research and Innovation*, Editorial OECD, https://doi.org/10.1787/b7f33425-en

Calle, S. E. (2023). Diseños de investigación cualitativa y cuantitativa. *Ciencia Latina Revista Científica Multidisciplinar*, 7(4), 1865-1879. https://doi.org/10.37811/cl_rcm.v7i4.7016

Capelle, C. (2024). *Littératie des données et intelligence artificielle : quelle traduction des politiques publiques dans l'offre de formation des enseignants ?* [Ponencia]. EUTIC 2024, Générations numériques : complexité, controverses, et défis, Ténérife, Îles Canaries. https://hal.science/hal-04748083v1

Codina, Ll. (2023). Buscadores alternativos a Google con IA generativa: análisis de You.com, P*erplexity AI y Bing Cha. Infonomy*, 1(1), 1-21. https://doi.org/10.3145/infonomy.23.002

Codina, Ll. and Lopezosa, C. (2024). Curación de contenidos en periodismo: características generales y uso de buscadores con inteligencia artificial. En F. Murcia-Verdú, R. Ramos-Antón, (Eds), *La inteligencia artificial y la transformación del periodismo. Narrativas, aplicaciones y herramientas* (157-178). Salamanca: Comunicación Social Ediciones . https://www.comunicacionsocial.es/media/comunicacionsocial/files/book-attachment-9183.pdf

Commission européenne (2025a). *Approche européenne de l'intelligence artificielle. Commission européenne*. https://digital-strategy.ec.europa.eu/es/policies/european-approach-artificial-intelligence

Commission européenne (2025b). France : De nouveaux outils pour l'enseignement grâce à l'intelligence artificielle. *Eurydice*, *Commission européenne*. https://eurydice.eacea.ec.europa.eu/news/france-new-tools-teaching-thanks-artificial-intelligence

Devauchelle, B. (2025). Les enseignants, les formateurs et les cadres éducatifs français face à l'intelligence artificielle. *Revue internationale d'éducation de Sèvres*, 4. https://doi.org/10.4000/146vm

France Education International (sf). *AI DL - Data Literacy in the Age of AI for Education*, https://www.france-education-international.fr/expertises/cooperation-education/projets/ai-dl-data-literacy-age-ai-education

Gómez, L.. E., Fernando, N. D., Aponte, M. G., and Betancourt, B. L.A. (2014). Metodología para la revisión bibliográfica y la gestión de información de temas científicos, a través de su estructuración y sistematización. *DYNA*, 81(184), 158-163. https://doi.org/10.15446/dyna.v81n184.37066

Guallar, J. (9 de mayo 2021). *Técnicas de curación de contenidos. Los Content Curators*. http://www.los-contentcurators.com/category/guia-basica-de-curacion/

Hoffman, E. and Golliot, A. (2024). *Les effets de l'intelligence artificielle sur l'activité économique et la compétitivité des entreprises françaises*. Asamblée Nationale, Commission des affaires économiques. Présidence de l'Assemblée nationale, https://www.assemblee-nationale.fr/dyn/17/rapports/cion-eco/l17b1862_rapport-information

Kemp, G. (2018). *CURARE : curating and managing big data collections on the cloud* [Tesis doctoral, Université de Lyon]. HAL Science ouverte. https://hal.science/tel-02058604v1

Knauf, A. y Falgas, J. (2020). Les enjeux de l'hybridation pour l'apprentissage coactif. *Distances et Médiations des Savoirs*, 30. https://doi.org/10.4000/dms.5073

La Rosa, L., Ortega, F. E. and Perlado, M. (2025). Inteligencia Artificial en el periodismo, el marketing y la publicidad: una revisión sistématica de la literatura. *Espejo de Monografías de Comunicación* Social, (36), 33-53. https://doi.org/10.52495/c2.emcs.36.p114

Lim, W. M. (2024). What Is Qualitative Research? An Overview and Guidelines. Australasian Marketing Journal, 33(2), 199-229. https://doi.org/10.1177/14413582241264619

Many, H., Shvetsova, M. and Forestier, G. (2024). Transformation numérique : comment enseigner (avec) l'IA générative dans l'enseignement supérieur ? Études & Pédagogies, 161-175. https://doi.org/10.20870/eep.2024.8100

Meyer, E. and Tordeux, M. (2025). Pour une intelligence artificielle au service de l'intérêt général. Editorial Conseil économique, social et environnemental, https://www.lecese.fr/travaux-publies/pour-une-intelligence-artificielle-au-service-de-linteret-general

Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche (2025). L'IA en éducation : Cadre d'usage. Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, https://www.education.gouv.fr/media/227697/download

Modolo, L. (2025). L'intelligence artificielle, une opportunité pour l'enseignement supérieur ?. Management et Datascience, 9(1). https://doi.org/10.36863/mds.a.42627

Organización de Naciones Unidas para la Educación, la Ciencia y la Culture, Unesco (2019). Consensus de Beijing sur l'intelligence artificielle et l'éducation. International Conference on Artificial Intelligence and Education, Unesco, https://unesdoc.unesco.org/ark:/48223/pf0000368303

Organización de Naciones Unidas para la Educación, la Ciencia y la Culture, Unesco (2024a) Qué debe saber acerca de los nuevos marcos de competencias en materia de IA de la Unesco para estudiantes y docentes. Unesco Inteligencia artificial. Recuperado de https://www.unesco.org/es/articles/que-debe-saber-acerca-de-los-nuevos-marcos-de-competencias-en-materia-de-ia-de-la-unesco-para?hub=32618

Organización de Naciones Unidas para la Educación, la Ciencia y la Culture, Unesco. (2024b). De qué hablamos, cuando hablamos de inteligencia artificial?. Unesco Office Montevideo and Regional Bureau for Science in Latin America and the Caribbean, Consejo Latinoamericano de Ciencias Sociales, Editorial Unesco. https://unesdoc.unesco.org/search/0a892879-3bc2-4ac3-9dc4-74544f315a85

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, UNESCO (2025a) AI competency framework for teachers. Editorial Unescohttps://doi.org/10.54675/AQKZ9414

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, (2025b). AI competency framework for students. Editorial Unesco, https://doi.org/10.54675/JKJB9835

Organización para la Cooperación y Desarrollo Económico, OECD (2023). Shaping Digital Education: Enabling Factors for Quality. Equity and Efficiency, Editorial OECD, https://doi.org/10.1787/bac4dc9f-en

Parlement européen (2020). Intelligence artificielle : définition et utilisation. Parlement européen. https://www.europarl.europa.eu/topics/fr/article/20200827STO85804/intelligence-artificielle-definition-et-utilisation

Pascal, F., Taddei, F., de Falco, M. and Gallié, E.P. (2025). *IA et Enseignement Supérieur : formation, structuration et appropriation par la société. Ministère chargé de l'Enseignement supérieur et de la Recherche*,

https://www.enseignementsup-recherche.gouv.fr/sites/default/files/2025-07/rapport-intelligence-artificielle-et-enseignement-sup-rieur-formation-structuration-et-appropriation-par-la-soci-t--37540.pdf

Ramirez, J. M. (2024). *Curación de contenidos comunicativos y aprendizaje colaborativo.* [Tesis de pregrado, Universidad Nacional de Educación Enrique Guzmán y Valle]. Repositorio Universidad Nacional de Educación Enrique Guzmán y Valle. https://repositorio.une.edu.pe/handle/20.500.14039/11749

Stolpe, K. and Hallström, J. (2024). Artificial intelligence literacy for technology education. *Computers and Education Open*, 6, 1-8. https://doi.org/10.1016/j.caeo.2024.100159

Susanto, P., Yuntina, L., Saribanon, E., Soehaditama, J. and Liana, E. (2024). Qualitative Method Concepts: Literature Review, Focus Group Discussion, Ethnography and Grounded Theory. *Siber Journal of Advanced Multidisciplinary*, 2(2), 262-275. https://doi.org/10.38035/sjam.v2i2.207

Université de Nantes (2024). *Les IA en éducation et formation : actions et ressources.* Université de Nantes. https://www.univ-nantes.fr/universite/vision-strategie-et-grands-projets/des-usages-de-lia-en-education-et-formation

Article received: June 27, 2025.
Article accepted: August 1, 2025.
Approved for layout: August 15, 2025.
Publication date: January 10, 2026.

About the author

***** Thais Raquel Hernández Campillo is a Professor in the Department of Multimedia and Internet Professions at the University Institute of Technology of Blois, University of Tours, France. She is a Researcher at the Laboratory for Information and Mediation Practices and Resources (EA 7503) at the University Institute of Technology of Tours, University of Tours, France. Email: thais.hernandez@univ-tours.fr

Appendix

Appendix 1

Academic publications on content curation and artificial intelligence literacy included in the review

Author / Year	Country or context	Tipe of study	Objective	Key findings o r contributions	Relevance to the review
Stolpe y Hallström (2024)	Sweden Europe	Theorical	To analyze and critically discuss the components of AI literacy in relation to technological literacy.	AI literacy integrates scientific-technological knowledge and socio-ethical understanding. A conceptual framework for AI literacy is proposed.	Fundamenta la necesidad de alfabetización en IA.
Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche (2024)	France	Theorical	To provide a framework for the use and understanding of AI in education in accordance with ethical, legal, and environmental principles.	It defines objectives, principles, obligations, and ethical guidelines for the educational use of AI.	Conceptualization and challenges of AI literacy in France.
Markus, Pfister, Carolus, Hotho y Wienrich (2024)	Germany Europe	Theorical	To design online training to improve the understanding of AI in relation to virtual assistants.	Increased understanding and critical use of AI, as well as positive attitudes towards virtual assistants.	It reinforces the need for AI literacy.
Olari y Romeike (2024)	Germany Europe	Mixto	To enable students to understand how AI systems work.	A compendium of key concepts for designing AI learning plans.	It proposes conceptual competencies for AI literacy.
Capelle (2024)	France	Mixed-Methods	To analyze the relationship between data literacy and AI literacy in teacher training.	It identifies data literacy as an essential component of AI literacy.	Necessary competencies for teachers and students.
Unesco (2025a)	International	Theorical	To define the knowledge, skills, and values that teachers must master in the age of AI.	AI competency framework for teachers.	A central reference on AI literacy and teaching.

Unesco (2025b)	International	Theorical	To define the knowledge, skills, and values that teachers must master in the age of AI.	AI competency framework for teachers.	A central reference on AI literacy and teaching.
Agulhon & Schoch (2023)	France	Theorical	To examine the benefits and challenges of ChatGPT in higher education	Rational use of ChatGPT; risks linked to the reliability of information.	Benefits and challenges of using AI in higher education.
Modolo (2025)	Morocco, Democratic Republic of the Congo, and Cameroon.	Empirical	To analyze how AI is transforming higher education and its social implications.	Redefinition of teacher and student roles; inequalities in access to AI.	Changes and challenges arising from AI in higher education.
Devauchelle (2025)	France	Theorical	To explore the impact of AI on teaching and teacher training.	Tensions and perceptions of French teachers regarding the integration of AI.	Challenges and impact of AI in French higher education.
France Éducation International (s.f)	France	Theorical	To promote data literacy and the critical use of AI in education.	The "AI-DL: Data Literacy in the Age of AI for Education" project.	AI literacy initiatives in France.
Universidad de Nantes (2024)	France	Practical	To offer AI training resources for university teachers.	Resources, events, articles, courses, and training tools.	Institutional resources for teacher literacy.
European Commission (2025)	France Europe	Theorical	To present projects promoted by France in the field of educational AI.	Funding for AI innovation and training projects.	Financial and institutional support for AI literacy.
Hernández, Hernández, Legañoa & Campillo (2022)	International	Theorical	To analyze the integration of content curation into teachers' informational competencies.	Content curation is confirmed as an informational competency that strengthens teachers' digital literacy	Content curation as a key teaching competency.
Ramírez (2024)	International	Empirical	To examine the benefits of content curation in collaborative learning.	Implementation of content curation in students' collaborative learning.	Content curation as a key student competency.
La-Rosa, Ortega-Fernández & Perlado (2025)	Spain Europe	Empirical	To analyze the scientific production on generative AI in journalism, marketing, and advertising.	Predominance of marketing in publications; Spain leads research on AI applied to journalism.	Application of AI in content curation and personalization.

Codina & Lopezosa (2024)	Spain Europe	Theorical	To demonstrate the application of AI tools in the phases of content curation.	Identification of search engines and prompts for digital curation processes	Integration of AI into the phases of content curation.
Codina & Lopezosa (2024)	Spain Europe	Theorical	To demonstrate the application of AI tools in the phases of content curation.	Identification of search engines and prompts for digital curation processes.	Integration of AI into the phases of content curation.
Codina (2023)	Spain Europe	Empirical	Comparative analysis of alternative search engines to Google with generative artificial intelligence.	General characteristics of types of search engines. Functional and interface analysis of search engines; recommendations for academic use.	AI tools applied to information curation.
Knauf & Falgas (2020)	France	Empirical	To strengthen digital skills through curation and information management.	Experiments with master's students in communication on digital content monitoring.	Intersection between AI literacy and content curation.
Kemp (2018	France	Empirical	To propose a service-based system for curating and exploring big data.	"CURARE" model for information exploration and extraction through data analysis.	

Appendix 2

Thematic guide to the documented bibliographic review

1. Artificial intelligence literacy in higher education.
   1.1. European context.
   1.2. Concept and relevance.
   1.3. Necessary competencies for teachers and students (frameworks and theoretical proposals).
   1.4. Recent initiatives in Europe and France (state programs, universities, policies).

2. Content curation as a key competency.
   2.1. Definition and phases.
   2.2. Integration of ai into content curation phases: use of tools.
   2.3. Risks: Dependence, bias, information overload.
   2.4. Incorporation into the training of university teachers and students.

3. Intersection between AI Literacy and Content Curation.
   3.1. Conceptual Approach: Curation as a Bridge between Digital Literacy and AI Literacy.
   3.2. Practical-Pedagogical Approach: How Teachers and Students Practice this Literacy.
   3.3. Epistemological or Formative Approach: Why Does This Intersection Redefine Informational Competence in Higher Education?
   3.4. Institutional or Ethical Approach: How Can Content Curation be Integrated into University AI Literacy Policies or Strategies?

4. Challenges of AI literacy in the context of higher education in france.
   4.1. Digital divide and access inequalities.
   4.2. Insufficient training of teachers in ai and curation.
   4.3. Need for educational policies that integrate content curation and ai literacy into curricula.