Chapter 5 / Capítulo 5

Emerging pedagogies: AI, territory, and situated knowledges (English Version)
ISBN: 978-9915-9854-1-1
DOI: 10.62486/978-9915-9854-1-1.ch05
Pages: 49-68

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Facilitate, create, reflect: the new role of teachers in literacy for writing, teaching, and learning with generative artificial intelligence

Facilitar, crear, reflexionar: el nuevo rol docente en la alfabetización para escribir, enseñar y aprender con inteligencia artificial generativa

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ABSTRACT

This chapter proposes a new university literacy framework in response to the rise of generative artificial intelligence (GAI), articulated around three inseparable verbs: writing, teaching, and learning with discernment. Drawing on situated experiences in teaching and faculty development, it presents a structured proposal (the EEA-AI Program) that includes micro-protocols, pedagogical artifacts, and communities of practice (AI-CoP), with a focus on process-based assessment, responsible co-authorship, and ethical data governance. Beyond a technical approach, it advances an andragogical, emotional, and decolonial framework that questions uncritical platform use, warns of the risks of technological dependency, and defends the teaching role as an ethical, political, and pedagogical mediator. The chapter offers impact indicators, replicable classroom designs, and a teacher–student governance manifesto that can inform institutional policy. The thesis is clear: it is not enough to use AI; we must decide how, when, and for what purposes—grounded in a critical, situated, and human-centered pedagogy. Generative AI enhances literacy only if institutions safeguard professional judgment, intellectual autonomy, and educational justice through concrete policies and mechanisms, aligned with recent international guidelines. This is the new literacy: technological in its means, radically human in its ends.

Keywords: New Literacy; Generative Artificial Intelligence; Writing–Teaching–Learning; Teaching Role; Teacher Education; Communities Of Practice; Process-Based Assessment; Educational Governance.

RESUMEN

Este capítulo propone una nueva alfabetización universitaria frente al avance de la inteligencia artificial generativa (IAG), articulando tres verbos inseparables: escribir, enseñar y aprender con criterio. A partir de experiencias situadas en docencia y formación profesoral, presenta una propuesta estructurada (Programa EEA-IA) que incluye microprotocolos, artefactos pedagógicos y comunidades de práctica (CoP-IA), con enfoque en evaluación por procesos, coautoría responsable y gobernanza ética de datos. Más allá del enfoque técnico, se plantea un marco andragógico, emocional y descolonial, que cuestiona el uso acrítico de plataformas, advierte sobre los riesgos de dependencia tecnológica y defiende el rol docente como mediador ético, político y pedagógico. El capítulo propone indicadores de impacto, diseños de aula replicables y un manifiesto de gobernanza docente-estudiantil, que puede orientar políticas institucionales. La tesis es clara: no basta con usar IA; hay que decidir cómo, cuándo y para qué, desde una pedagogía crítica, situada y humanamente centrada. La IAG potencia la alfabetización si las instituciones resguardan el juicio profesional, la autonomía intelectual y la justicia educativa

mediante políticas y dispositivos concretos, en línea con orientaciones internacionales recientes. Esa es la nueva alfabetización: tecnológica en los medios, radicalmente humana en los fines.

Palabras clave: Nueva Alfabetización; Inteligencia Artificial Generativa; Escribir-Enseñar-Aprender; Rol Docente; Formación Docente; Comunidades De Práctica; Evaluación Por Procesos; Gobernanza Educativa.

La inteligencia artificial no es el problema, el problema son los intereses que la controlan.
- Claudio Martínez

INTRODUCTION

From technological shock to discerning literacy

Increasingly, in many classrooms and learning environments, flawless work no longer excites. A university professor received a perfect essay: it was well written, referenced, and coherent. Everything was correct. Too correct?

She suspected AI use, but instead of banning it, she asked the student to show and explain how she arrived at that conclusion. Prompts, decisions, drafts, corrections. The essay did not change much. However, the professor did.

That day, she understood that evaluating with AI is not about rewarding the product, but accompanying the process. That teaching is no longer about having all the answers, but asking good questions. The role of the teacher does not die with technology; it transforms into judgment and care. Moreover, the human connection remains the actual algorithm of learning.

In less than three years, AI went from being a laboratory curiosity to widespread practice in universities. The most cited statistic from its initial takeoff—100 million users in two months on ChatGpt—marked a change in scale and pace for reading, writing, assessment, and tutoring (Hu, 2023). The pandemic had already forced an abrupt digitization that affected more than 1,6 billion students, leaving a trail of gaps and lessons for recovery (UNESCO, 2020).

However, beyond the technical amazement, the debate about AI is no longer just technological: it is political. As journalist Claudio Martínez (2025) warns, "artificial intelligence is not dangerous; corporations are. The problem is not the hardware, but those who pull the strings of the business"[1].

In this context, talking about AI is not about "learning to use tools" but deciding who governs their use, for what purposes, and with what pedagogical and rights safeguards. The UNESCO Guide to AI in Education emphasizes a human-centered approach, use policies, and institutional capacities (UNESCO, 2023, pp. 2–4). At the same time, the *Horizon Report* describes AI as a cross-cutting force in teaching and assessment, with scenarios for responsible adoption (EDUCAUSE, 2024, pp. 10–17).

[1]Agrego con Martínez (2025) la IA es en realidad una herramienta para promover el mayor cambio político, cultural, económico, social, educativo, laboral y cognitivo en la historia de la humanidad. Un cambio tan dramático que nos obliga a replantearnos el rol de los seres humanos sobre la Tierra. […] La IA desata pasiones. Promueve un debate binario que nos tiene enredados. Es maravillosa y terrible, es luz y sombra, es esperanza y peligro, es progreso y a la vez retroceso del factor humano. […] No tiene sentido preocuparse por los fierros y las aplicaciones. Se debe poner la mirada en los que manejan los hilos del negocio.

The hypothesis of this chapter is twofold:

1. New literacy requires knowing *when* and *why* to use IAG, *how* to document its intervention, and *when* to say no when it conflicts with ethical or learning criteria (UNESCO, 2023, pp. 2–4).
2. The new teaching role integrates three functions: facilitating (designing experiences), creating (prototyping artifacts and practices), and reflecting (governing the process with traceability and judgment).

This chapter takes a critical, situated approach to examining how to train university teachers to write, teach, and learn with generative artificial intelligence without losing their judgment, ethics, or autonomy. Through six shifts in the teaching role, three recent training experiences, and a 12-week proposal (EEA-IA Program), criteria, artifacts, and protocols are outlined to govern the process with traceability and pedagogical meaning. In addition, key tensions, classroom testimonials, an institutional roadmap, and a toolbox for building a new literacy are presented: human-centered, technically sustainable, and politically conscious. More than teaching how to use AI, it is about teaching how to think with and about it, from the South and with our own voice.

DEVELOPMENT

State of the art and direction of the debate (2019-2025)

a) Minimum consensus. The literature positions AI as a lever for redesigning curriculum, personalization, and assessment, while cautioning about the symbolic replacement of teachers by the "automation of judgment" (Holmes, Bialik & Fadel; UNESCO IESALC, 2023). The 2023 UNESCO Guide on IAG in education and UNESCO's AI in education page converge on three axes: a human-centered approach, institutional capacity-building, and responsible-use policies with an equity perspective.

b) Adoption and dependence. The AI Index records the concentration of momentum in IAG and its weight in investment and business deployment, which requires universities to negotiate judiciously and ensure portability and auditing in their ecosystems. The Horizon Report (EDUCAUSE) identifies IAG as a structural trend in teaching and assessment and invites scenarios with governance and impact analyses.

c) Communities of practice and value. The recent work of Wenger-Trayner updates the theory of social learning with a framework for value creation in spaces of learning; it provides solid support for redesigning teaching communities of practice that document processes and results with IAG.

d) Learning society. Philosopher José Antonio Marina insists that survival and progress depend on learning at the speed of the environment; his "learning society" provides an ethical and political lens to avoid subordinating educational goals to platform or market logic. He considers, and I agree, that "critical thinking is our defense against manipulation and fanaticism."

e) Narrative dispute. A critical current—visible in Latin American technology journalism—warns that the most significant risk is not "AI itself," but the corporate architectures that channel it and concentrate power. This view complements the governance recommendations and emphasizes public interest and educational democracy.

f) Lessons from the pandemic. UNESCO documents that the hasty technological shift left many behind and cannot be repeated in a technocratic key (West, 2023).

Andragogical-critical framework: from "knowing how to use" to forming criteria

We propose a four-layer framework:

1. Pedagogical-didactic: design of experiences, sequences, and process-based

assessment (the journey is as important as the result, i.e., the journey matters as much as the product).

2. Critical-digital: biases, privacy, intellectual property, data governance, and socio-technical effects. (UNESCO, 2023).

3. Technical-instrumental: assistant management, augmented search, multimodal generation, and light analytics.

4. Socio-emotional: caring for relationships, empathic communication, handling dilemmas, and digital well-being.

Three andragogical principles underpin the proposal: self-direction (each teacher manages their own learning path), contextual relevance (technology is justified by the pedagogical problem, not the other way around), and horizontality (peers who co-design, observe, and evaluate). This framework is operationalized in communities of practice (CoP) that create documented value (Wenger-Trayner).

Six shifts in the role of teachers

These six shifts are not a methodological fad, but rather a roadmap for teaching in a classroom where AI operates as a "third actor," forcing us to move from **using tools** to governing the process. *Facilitating* is no longer about explaining better, but about designing experiences with purpose, criteria, and traceability; *creating* involves prototyping (rubrics, *joint displays*, guides) rather than recycling templates; *reflecting* requires auditing what was used, how, and why; *co-evaluating* shifts the figure of the "teacher-judge" toward peers with standard criteria and evidence; *governing data* means negotiating minimum clauses (portability, auditing, non-exclusivity, privacy, pedagogical feedback) and not just accepting terms; and *weaving community* means building Communities of Practice that document value and scale learning. Together, the focus shifts from the product to the meaningful process, aligned with a human-centered approach and real institutional capacities for responsible deployment of IAG (UNESCO, 2023; EDUCAUSE, 2024, pp. 10–17; Wenger-Trayner, 2020).

1. Facilitate: from "explaining" to designing experiences with direction, purpose, and intentionality, clear criteria, and process-oriented *prompts* (no shortcuts).

2. Create: from "using or applying templates" to pedagogical prototyping (rubrics, *joint displays*, traceability guides).

3. Reflect: from "correcting" to auditing (what, how, and why AI was used; what the person decided).

4. Co-evaluate: from "teacher-judge" to peers who evaluate with shared criteria and evidence of the process.

5. Govern data: from "accepting terms" to negotiating minimum clauses (portability, auditing, non-exclusivity, privacy, pedagogical feedback). (UNESCO, 2023; EDUCAUSE 2024).

6. Weaving community: from "isolated courses" to Communities of Practice (CoP) that sustain practices, document value, and scale learning. (Wenger-Trayner, 2020).

Embracing these shifts means committing to a contemporary literacy where criteria, ethics, and evidence are non-negotiable. Every task leaves a trace, every decision is justified, and every improvement is shared online. When *facilitating, creating, reflecting, co-evaluating, governing data, and weaving community* become everyday practices, IAG ceases to be a shortcut and becomes a pedagogical scaffolding at the service of professional judgment and educational justice. This is the promise: to move from classrooms that "use AI" to institutions that are accountable for its use, with clear policies and learning communities that nurture

human connection as a condition for meaningful learning.

Situated experiences (2024–2025)

These three experiences—a faculty refresher day, a graduate research seminar, and a 90-day Community of Practice—function as *situated laboratories* where generative AI ceases to be a technical demonstration and becomes verifiable pedagogical-andragogical scaffolding. In all of them, the emphasis shifted from "what AI produced" to how it was produced (purpose, criteria, *prompts*, iterations, human editing, and data ethics), so that the quality of learning was evident in the traceability of the process and in teacher-student metacognition rather than in the brilliance of the final product.

E1. Faculty update: "AI for writing and teaching" (intensive workshop)

- Challenge: design a 90-minute class with a goal, active activity, and brief rubric.
- Use of AI: teams obtained outlines in minutes, but the leap in quality came during auditing: generalities, irrelevant assumptions, and vague bibliographies.
- Change of approach: we introduced a process rubric (justification of use, traceability of *prompts*, human editing, quality criteria, ethics/data).
- Result: clearer sequences, more specific *feedback*, and metacognition about when IAG helps and when it hinders.

E2. Research seminar (postgraduate): brief state of the art (800–1,000 words)

- Methodology: joint display process↔product: (A) purpose, (B) *prompts* and iterations (captures), (C) human edits and their "why," (D) criteria applied, (E) final product.
- Effects: greater conceptual density and situated voice; reduced temptation to "copy/paste" because we evaluated the process.

E3. 90-day community of practice (CoP-IA)

- Pace: biweekly meetings; guaranteed failures; pilot *showcase*.
- Deliverables: bank of *annotated prompts*, AI course policy, governance matrix.
- Impact: evaluative consistency between departments, better traceability of productions, and minimal agreements on authorship/ethics. (Wenger-Trayner & Wenger-Trayner, 2020).

The common outcome of these experiences is twofold: changes in practice (clearer sequences, specific *feedback*, temptation to "copy/paste" downwards) and changes in culture (agreements on authorship, shared data, and criteria that transcend subjects). The CoP-IA operated as a value creation device that captures, compares, and consolidates what works, accelerating transfer between departments and semesters (Wenger-Trayner & Wenger-Trayner, 2020). Thus, when the classroom and the community are articulated, IAG ceases to be a shortcut and becomes a responsible practice: documented, discussed, and scalable.

Five pedagogical tensions (and how to make them productive)

In the transition to teaching mediated by generative artificial intelligence (GAI), inevitable tensions emerge that should not be suppressed, but rather harnessed as drivers of reflection and pedagogical redesign. The speed of the tools, the immediacy of the results, and the apparent efficiency they promise test the epistemological patience of teaching and the ethics of the process. These tensions reveal what is at stake: it is not just a matter of learning to use new technologies, but of revising the ways of thinking, evaluating, and accompanying human learning in an automated environment (UNESCO, 2023, pp. 2–4).

In this context, the five tensions—speed vs. meaning, product vs. process, efficiency vs. agency, homogenization vs. situated voice, and help vs. dependence—function as thermometers of pedagogical maturity. Each one invites us to balance the human and the technological, to recognize when AI brings clarity and when it dilutes judgment, and to remember that teaching with AI does not mean surrendering to it. Turning these tensions into learning requires a reflective teacher, capable of sustaining pause, purpose, and critical questioning as the core of the educational act (West, 2023).

1. Speed vs. meaning: AI accelerates drafts; meaning comes from purpose, context, and criteria (UNESCO, 2023). Solution: purpose first before the first *prompt*.
2. Product vs. process: grading only the final text encourages shortcuts. Evaluating processes (iterations, edits, justifications) builds critical thinking.
3. Efficiency vs. agency: automation cannot take away the power to decide. Designing tasks with informed choices creates balance.
4. Homogenization vs. situated voice: models tend toward the generic; local anchors (data, cases, regional literature) restore uniqueness.
5. Help vs. dependency: IAG as a 24/7 tutor is valuable; avoid outsourcing thinking with "AI-free blocks" to sustain reading and independent judgment (West, 2023).

Table 5.1. Five pedagogical tensions (and how to make them productive)

Tension	Risk	Teaching strategy
Speed vs. meaning	Quick prompts without comprehension or purpose	Apply the "purpose first" principle before the first prompt; include tasks with blocks without AI to promote slow reading and reflection.
Product vs. process	Evaluate only the final result and reward shortcuts	Implement process rubrics, joint displays, and co-evaluations that highlight iterations, edits, and justifications.
Efficiency vs. agency	AI decides for the student, reducing autonomy.	Design tasks with justified decisions and reflective portfolios that show human agency in the use of AI.
Homogenization vs. situated voice	Generic, decontextualized, and culturally neutral productions.	Incorporate local anchors (data, cases, regional references) and encourage situated writing with identity and territory.
Help vs. dependence	Delegating critical thinking and losing one's own judgment.	Alternate AI/handwriting and promote critical reading exercises of AI outputs to sustain cognitive autonomy.

Ultimately, the challenge is not to avoid tensions, but to manage them with pedagogical-andragogical awareness. Contemporary university teaching requires spaces for dialogue where academic teams discuss cases, document decisions, and learn from mistakes, as recommended by UNESCO (2023). In these exchanges, tension ceases to be an obstacle and becomes transformative energy: it allows for the revision of criteria, the redefinition of objectives, and the construction of new, more horizontal and transparent forms of support.

When managed wisely, these tensions are not obstacles but pillars of a new literacy: slow to think, quick to adapt, ethical in decision-making. Teaching with AI matures not when it avoids polarities, but when it turns them into formative dialogues. Thus, artificial intelligence ceases to be a shortcut and becomes relational intelligence: a technology at the service of pedagogical judgment, where the educational purpose continues to set the pace of learning and human meaning remains at the center of the process (UNESCO, 2023; West, 2023). Moreover, here are some uncomfortable but necessary questions: What if banning AI is more irresponsible than

using it without criteria? What kind of teacher would you be if you delegated your decisions to a language model?

Emotions also educate: voices from the classroom (learning environment)

Teaching and learning with artificial intelligence generate not only pedagogical tensions, but also emotional ones. Anxiety, fascination, mistrust, insecurity, dependence: the technological leap has shaken certainties. Therefore, any redesign of roles and practices must also start from the emotional care of the process. These voices show that AI literacy is not just a change of tools, but also an internal transformation:

Testimonial 1 – Teacher

> *"I used to feel confident explaining things, but now I wonder if what I teach will be replaced by a tool. I have caught myself secretly consulting ChatGPT, as if seeking approval. What I find most difficult is not the technique, but accepting that the role of the teacher is changing... and that I do not have complete control of the classroom."*
> - Public Management Professor, 23 years of experience

Testimonial 2 – Student-Participant

> *"AI helped me write faster, but it also made me feel less authentic. Sometimes I do not know if what I am submitting is mine or the system's. When I am asked to show the process I used, I feel more comfortable because I can explain the decisions I made. I do not want college to be just a place to submit pretty texts made by machines."*
> - Doctoral student in Administrative Sciences, 2nd semester

These voices remind us that any educational transformation involving technology also implies a subjective transformation. The classroom is no longer just a space for transmitting content, but an emotionally charged environment where fears, tensions, resistance, and searches for meaning come into play. If we do not address these emotional and hy dimensions—the insecurity of the teacher who feels they are losing control, the student's doubt about their own authorship—we risk imposing innovation without humanity.

That is why AI literacy cannot be reduced to technical skills. It also requires a pedagogy of connection, mutual recognition, and reflective accompaniment. Taking care of the process is not just about drawing up prompts and justifying decisions: it is about emotionally supporting those who are learning to live, think, and teach in a world that has changed overnight. In this transition, support and pedagogical judgment are as important as governance and traceability. The emotional aspect also educates and must have a legitimate place in any educational innovation policy.

Innovative proposal: EEA-AI Program (Writing-Teaching-Learning with AI)

The EEA-AI Program (Writing–Teaching–Learning with AI) proposes a 12-week immersion to establish stable practices that integrate generative AI without losing judgment, ethics, or academic voice. Its logic is progressive: first, strengthen responsible co-authorship in writing (weeks 1-4), then turn AI into a didactic scaffold with process evaluation (weeks 5-8), and finally, consolidate student self-direction and metacognition (weeks 9-12). Operational micro-protocols support each module—from "Purpose First" to "Blocks without AI"—and common artifacts (process rubric, *joint display*, course policy, and governance matrix) that ensure traceability and ethical care.

More than a sequence of workshops, EEA-AI is an instructional design with governance: every

assessable product requires evidence of the process (prompts, iterations, human edits, and pedagogical justification), and every teaching pilot is shared within the community, promoting standard criteria and continuous improvement. Thus, *writing* ceases to be delegated to the machine and becomes a taming of the process; *teaching* involves designing experiences and co-evaluations with explicit criteria; and *learning* is based on informed decisions, reflection, and a cognitive balance between automated assistance and deep human work.

Objective: to establish stable practices for writing, teaching, and learning with AI in 12 weeks without compromising judgment, ethics, or academic voice.

Module 1. WRITING with AI: responsible co-authorship (weeks 1–4)

- Goal: move from generic drafts to texts with a situated voice.
- Micro-protocols:
- MP-1 Purpose-First: define the objective, audience, and three criteria before the first *prompt*.
- MP-2 *Prompt* chain: idea → outline → paragraphs → bibliography → human editing with tracked changes.
- MP-3 Triple local anchor: one piece of contextual information, one regional reference, and one example of your own.
- Evidence: *joint display* + process rubric.

Module 2. TEACHING with AI: design and evaluation by processes (weeks 5–8)

- Goal: turn AI into a teaching scaffold, not a shortcut.
- Micro-protocols:
  - MP-4 Critical reading of outputs: compare two AI responses, detect biases/gaps, and *re-prompt* with criteria.
  - MP-5 Traceable assignment: all submissions include *prompts*, iterations, and pedagogical justification.
  - MP-6 Guided co-evaluation: peers apply the process rubric and propose improvements.

Module 3. LEARNING with AI: self-direction and metacognition (weeks 9–12)

- Goal: for each person to choose tools judiciously and reflect on their learning.
- Micro-protocols:
- MP-7 Personal AI plan: what I will use/avoid, why, and with what limits (mid-course review).
- MP-8 Reflective portfolio: evidence of mistakes, retries, and decisions.
- MP-9 Non-AI blocks: reading sections and hand-drawn maps for cognitive balance.

Program artifacts (due at the end of the course)

- Process rubric (10 pts), *joint display* template, course policy, and governance matrix.

At the end of the program, we expect three visible effects: (1) texts with a situated voice and verifiable sources, thanks to the chain of prompts and purposeful human editing; (2) process-based teaching, with rubrics that reward decision justification and iterative improvement; and (3) more autonomous students, able to choose when to use AI, how to document it, and when to dispense with it in order to sustain understanding and judgment. These achievements are not accidental: they derive from aligning goals, micro-protocols, and evaluative artifacts in a

coherent ecology.

The sustainability of the model lies in the fact that everything is documented and transferable: *joint displays* and course policy facilitate the replication of good practices across departments, while the governance matrix provides an institutional basis for negotiating data portability, tool non-exclusivity, and auditing, when appropriate. With this, AI ceases to be a contingent resource and becomes a governed curricular component, with clear responsibilities and evidence of pedagogical value.

Finally, EEA-AI is a strategic invitation: to move from "using AI" to being accountable for its use, articulating the technical, the ethical, and the didactic. Suppose the institution adopts these artifacts and measures results (traceability, quality of *feedback*, satisfaction with the process, local anchoring). In that case, it will be able to scale the experience without losing the human-centered learning. The program does not promise shortcuts; it offers shared criteria, concrete tools, and a path for writing, teaching, and learning with AI to be synonymous with better pedagogy and greater educational justice.

To facilitate the implementation of the EEA-IA Program, a structured summary is presented below that articulates: the 12 steps (in 3 modules), the six verbs of the new teaching role (facilitate, create, reflect, co-evaluate, govern, and weave community), and the four fundamental pedagogical artifacts (process rubric with AI; joint display template Process ▫ Product; course policy for responsible co-authorship; and ethical checklist for data, privacy, and traceability).

Table 5.2. The new literacy: in 12 steps, 6 verbs, and 4 artifacts

Module	Main verb	Key operational step	Essential associated artifact
Writing with AI (weeks 1–4)	Create	MP1. First purpose	Joint display
	Create	MP2. Chain of prompts	Process rubric
	Create	MP3. Triple local anchor	Course policy
Teaching with AI (weeks 5–8)	Facilitate	MP4. Critical reading of outputs	Process rubric
	Co-evaluate	MP5. Traceable task	Joint display
	Co-evaluate	MP6. Guided co-evaluation	Course policy
Learning with AI (weeks 9–12)	Reflect	MP7. Personal AI plan	Reflective portfolio
	Reflect	MP8. Mistakes and retries	Process rubric
	Reflect	MP9. Blocks without AI	Ethical data checklist
Sustainability	Govern	90-day community of practice	Governance matrix
	Document	Shared resource kit	Course policy
	Build community	Evaluation of value created	Joint display

This summary turns the proposal into a concrete, applicable, and assessable roadmap. The 12 steps are not a technical recipe, but rather a training itinerary that articulates action, criteria, and evidence. Each verb represents a shift in the role of the teacher in relation to artificial intelligence: it is no longer a matter of transmitting content or monitoring the use of tools, but instead of facilitating experiences, creating meaningful environments, reflecting on decisions made, co-evaluating with others, governing the technological process, and weaving community. The four artifacts—rubric, joint display, course policy, and ethical checklist—ensure that AI is not an invisible shortcut, but a visible, traceable, and pedagogical scaffolding. Taken together, this framework enables a new literacy: technological in means, deeply human in ends.

Communities of Practice (CoP-AI) and governance: from the one-off workshop to the teaching ecosystem

Communities of Practice in Artificial Intelligence (CoP-AI) emerge as a structural response to the risk that pedagogical innovations will be confined to isolated experiences. Their purpose is to transform the "one-off workshop" into a sustainable teaching ecosystem, where knowledge is collaboratively built, documented, and shared. Inspired by the Wenger-Trayner framework (2020), these communities operate under the 6C Model: Capture, Share, Create, Critique, Curate, and Care, ensuring that learning produces not only individual results but also collective value. In this environment, governance is not conceived as bureaucracy, but as a necessary bureaucracy that ensures the conditions for teaching and learning with ethics, autonomy, and consistency (UNESCO, 2023; EDUCAUSE, 2024; Romero-Pérez, 2014).

6C Model: Capture → Share → Create → Critique → Curate → Care.

Minimum structure (6 roles): host; curator; documenter; friendly critic; leading practitioner; institutional liaison.

30-60-90 rhythm:

- 30 days: needs map; rules of the game (traceability, authorship, transparency).
- 60 days: two classroom pilots + *showcase* with evidence.
- 90 days: shared kit (rubrics, annotated *prompts*, guides) and policy recommendations.

Governance matrix (course and institution)— aligned with UNESCO/EDUCAUSE—:

1. Data portability and outputs (avoid vendor lock-in).
2. External algorithmic audit when applicable.
3. Non-exclusivity of platforms.
4. Privacy and informed consent.
5. Pedagogical feedback (open training and materials).
6. Ethical-technical committee with faculty-student representation.

After the first 90 days, the CoP-IA achieves a balance between exploration and structure: after 30 days, basic needs and rules for traceability and transparency are recognized; at 60 days, the first pilots emerge in classrooms and showcase spaces; and at 90 days, a shared kit—rubrics, annotated *prompts*, guides, and policy recommendations—is consolidated that can be reused, adapted, and scaled. This 30-60-90 rhythm turns scattered innovation into institutionalizable learning, demonstrating that digital educational transformation requires time, support, and accumulated evidence (Wenger-Trayner, 2020).

The governance matrices derived from these communities provide the ethical and operational framework to sustain change: data portability, platform non-exclusivity, auditing where applicable, informed consent, and pedagogical feedback. Together, these measures ensure that AI does not replace human judgment, but rather expands its reach under conditions of equity and transparency. In this sense, CoP-AI is more than just spaces for exchange: they are devices for the democratic governance of knowledge, where each teacher assumes joint responsibility for the ethical, critical, and educational use of artificial intelligence (UNESCO, 2023; EDUCAUSE; Wenger-Trayner, 2020).

Toolbox for new literacy

The toolkit for new literacy translates the pedagogical and ethical principles underpinning this chapter into concrete instruments. It is not a technical repertoire but rather an articulated

system of devices that enables the teaching, evaluation, and documentation of the use of generative artificial intelligence (GAI) with transparency, traceability, and educational meaning. Each tool—rubric, *joint display*, course policy, and ethical checklist—fulfills a function in the ecosystem: ensuring that every interaction with AI leaves a verifiable trace of the process and promotes self-regulation by both teachers and students.

Ultimately, this toolbox represents a cultural shift: from outcome-focused assessment to assessment as evidence of thinking; from the uncritical use of tools to their use with pedagogical criteria and justification. Its application turns each academic assignment into an act of responsible co-authorship, making the human decisions behind each AI-generated text, graphic, or argument visible. Thus, technology is reinscribed within pedagogy-andragogy, and not the other way around (UNESCO, 2023; EDUCAUSE, 2024).

Process assessment rubric with IAG (10 points)

The process assessment rubric with IAG (10 points) turns "new literacy" into verifiable practice: it not only grades *what* is delivered, but *also how* it was thought out and decided. Its five criteria—pedagogical justification, traceability, quality/criteria, ethics and data, and critical reflection (0–2 each)—require that all AI-generated output explicitly state what it was used for, what was requested (prompts), how it evolved (iterations), what the person edited, and what they learned from the process. The golden rule is inescapable: if Ethics and Data = 0 or Traceability = 0, the delivery requires review because there is no guarantee of the process or of the protection of rights.

1. Pedagogical justification (0–2): why AI here (problem, purpose, criteria).
2. Traceability (0–2): visible *prompts*, iterations, and human editing.
3. Quality and criteria (0–2): alignment with learning outcomes; reasoned corrections.
4. Ethics and data (0–2): treatment of sources, licenses, privacy, biases.
5. Critical reflection (0–2): what worked, what did not, what would you change.

Golden rule: if "Ethics and data" or "Traceability" = 0, the submission requires revision.

Joint display template Process ↔ Product (portfolio)

- A. Purpose and quality criteria.
- B. Prompts/iterations (key captures or transcripts).
- C. Human edits (what you changed and why).
- D. Rubric applied (achievement marks/adjustments).
- E. Final product and future improvements.

Course policy for writing-teaching-learning with AI

- Permitted use (e.g., brainstorming, structure, examples) and restricted use (e.g., final draft without human editing).
- Traceability is mandatory (attach *prompts* and edits).
- Verifiable sources and licenses; no sensitive data is uploaded to unapproved services.
- Co-authorship statement: explain the role of AI in the submission. AI is not accepted as an author; responsibility always lies with humans.
- Proportional penalties for concealment or falsification of the process.
- Accessibility and equity: alternatives for those who cannot use specific tools.

Ethics and data checklist (for each task)

- Is consent obtained if personal data is uploaded?

- Has the necessary anonymization been done?
- Have sources and licenses for materials been indicated?
- Have the biases and corrective *re-prompts* been recorded?
- Is there a local/exportable copy (portability)?

To implement it robustly, he suggests peer calibration (teachers co-correct 3–5 samples), anchor examples by level (2–1–0), and formative feedback that points to decisions for improvement: refine the purpose before the first prompt, make changes between drafts explicit, cite sources and licenses, and justify corrections according to the course rubric. The rubric is read alongside the portfolio (*joint display*): A) purpose/criteria, B) prompts and iterations, C) human edits and why, D) applied rubric, E) final product and improvements. Thus, the grade ceases to be an opaque judgment and becomes a narrative of learning.

In addition, the rubric acts as a bridge to course policy (permitted/restricted use, co-authorship declaration, proportional sanctions) and the ethical checklist (consent, anonymization, licenses, biases, portability). Together, these instruments reduce shortcuts (product only) and encourage judgment, transparency, and responsibility: those who use IAG must be accountable for their process and data; those who evaluate must make visible what they value and why. In this way, IAG ceases to be an "invisible shortcut" and becomes a documented pedagogical scaffold.

Three classroom designs that work

The three classroom designs that work—*AI-guided reading*, *From outline to article*, and *Debate with* data—represent practical experiences that demonstrate how generative artificial intelligence (GAI) can be integrated into the classroom without replacing human thought, but rather provoking its critical activation. Each design is based on a common principle: AI as a starting point, not an end point. Through exercises in contrast, editing, and bias analysis, students learn to discern between the plausible and the true, between the automatic and the argued, strengthening their reading, writing, and critical thinking skills.

These models were designed to be replicable, brief, and scalable, and to adapt to any area of knowledge. They share three pillars: (1) purposeful and traceable tasks, (2) evaluation through documented processes, and (3) reflective and collaborative closure, where human decisions that give meaning to learning are recorded. Thus, the classroom becomes a laboratory for critical literacy where technology is evaluated as much as the content it produces.

D1. AI-guided reading (90 min)

- *Warm-up:* AI produces a "perfect" summary.
- *Activity:* teams detect gaps and biases; *re-prompt* with criteria; compare with the source text.
- *Closing:* each team records which human decisions maintained the meaning.

D2. From outline to article (2 weeks)

- *W1:* AI suggests two outlines; the group merges and justifies them; the teacher provides criteria.
- *S2:* writing with joint display; co-evaluation; final version + authorship letter (what the AI did and what I did).

D3. Debate with data (1 week)

- AI lists arguments for/against; the class incorporates local data and primary

sources; submission: position paper with process appendices.

In the AI-guided reading design, the machine-generated "perfect summary" serves as a trigger for careful reading. By detecting omissions, simplifications, or biases, teams learn that deep understanding requires active distrust, which reinforces critical competence in the face of automated texts. This exercise reinstates the value of error and contrast as sources of knowledge, in line with the proposal for dialogic and transparent assessment (UNESCO, 2023, pp. 2–4).

The second design, From Outline to Article, shows how IAG can serve as a tool for initial structuring but not for final authorship. The chain of prompts and the *authorship letter* clearly distinguish human participation in the review, in the selection of sources, and in the text's tone. This process not only improves writing but also trains the ability to argue editorial decisions, a key indicator of advanced literacy (EDUCAUSE, 2024, pp. 10–17).

Finally, Debate with Data teaches that AI can broaden the horizons of information, but judgment—what evidence to include, how to interpret it, what biases to deactivate—remains human. When students incorporate local data and primary sources, the debate acquires territorial anchoring and social relevance. Together, these three designs turn AI into an agent of pedagogical reflection, demonstrating that technological innovation only makes sense when it strengthens critical thinking, situated voice, and the ethics of shared learning (UNESCO, 2023; EDUCAUSE, 2024).

Impact indicators (light monitoring)

Assessing the impact of integrating generative artificial intelligence (GAI) into teaching requires simple, transparent, and sustainable metrics. The light monitoring indicators proposed here do not seek to quantify technocratic performance, but rather to verify cultural and pedagogical transformations: traceability of processes, clarity of *feedback*, satisfaction with learning, local anchoring of productions, and sustained participation in communities of practice. Each indicator measures a qualitative change in the way teaching and learning with AI are conducted: more reflection, greater coherence, and stronger connection to the context (UNESCO, 2023).

The purpose of this system is not to monitor, but to highlight the educational value that emerges when AI use is documented and supported. Traceability, transparency, and territorial anchoring serve as evidence of institutional maturity, and the minimum figures established (70 %, 80 %, 75 %, 60 %) operate as thresholds for continuous improvement. Thus, the indicators serve as a tool for academic governance, enabling quality to be monitored without losing sight of the human dimension of learning (EDUCAUSE, 2024).

- Complete traceability in ≥70 % of submissions (prompts + iterations + human editing).
- Improved *feedback* (clarity in rubrics) ≥20 % according to internal scale.
- Student satisfaction with the process (not just the grade) ≥80 %.
- Locally anchored productions (≥1 piece of local data/example per assignment) ≥75 %.
- Participation in CoP (≥1 documented pilot/period): ≥60 %.

These indicators align with UNESCO's calls for institutional capacity and with the pathways for preparing for IAG in higher education outlined by EDUCAUSE.

Thus, monitoring these indicators provides institutions with an objective basis for feedback

on teacher training policies and programs. Detecting progress in traceability or clarity of feedback, for example, not only improves courses but also strengthens the culture of pedagogical accountability. This approach responds to UNESCO's (2023) call to build institutional capacities for the ethical adoption of IAG, ensuring that each technological innovation is accompanied by evidence of equity and meaningful learning.

In the long term, consolidating these lightweight monitoring mechanisms will enable a transition from initial enthusiasm to organizational maturity in artificial intelligence. Evaluation will then no longer be about control, but rather about learning from collective experience, transforming data into decisions and metrics into lessons learned. In this way, the university positions itself as a living laboratory for new literacy, where indicators measure not obedience, but judgment, autonomy, and shared responsibility (EDUCAUSE, 2024; UNESCO, 2023).

DISCUSSION

Literacy with AI, educational justice, and knowledge sovereignty

The discussion on literacy with artificial intelligence (AI) cannot be limited to the technical domain of tools; it must be part of a broader ethical and political framework that articulates educational justice, knowledge sovereignty, and institutional autonomy. From this perspective, literacy is not measured by the amount of technology used, but by universities' ability to make informed decisions, protect rights, and sustain educational processes that keep the human element at the center (UNESCO, 2023, pp. 2–4). AI can be a vehicle for expanding access and diversifying the voices of knowledge. However, it can also deepen inequalities if adopted without reflection on the interests and architectures that sustain it.

The notion of practical human-centeredness proposed by UNESCO (2023) takes on operational meaning here: protecting equity, learning, and rights is not achieved through declarations, but through concrete pedagogical tools. Rubrics, *joint displays*, course policies, and governance matrices are tangible ways to ensure traceability, co-responsibility, and data ethics. Thus, AI literacy becomes a living policy of educational justice, where every teaching decision is also an act of cognitive sovereignty in the face of global technological concentration (EDUCAUSE, 2024, pp. 10–17).

- Practical human-centeredness. UNESCO guidelines propose safeguarding learning, equity, and rights in the deployment of AI. The chapter breaks down these guidelines into specific devices: process rubrics, *joint displays*, course policies, and governance matrices.
- Dependency vs. autonomy. The AI Index shows that AI is concentrated among a few players; therefore, universities must combine commercial tools with open alternatives and include clauses that prevent *lock-in* and enable auditing practices.
- Learning communities. CoPs are not an organizational embellishment: they are the engine for sustaining change, sharing failures, and creating documented value (Wenger-Trayner).
- Learning society. If, as Marina suggests, we must learn at the pace of the environment, the key is not to chase after every tool, but to establish criteria and traceability as the core of the new literacy: writing, teaching, and learning with AI without losing our judgment.

The tension between dependence and autonomy forces universities to design balancing strategies: combining commercial solutions with open alternatives, negotiating portability and audit clauses, and promoting local critical capacity on the algorithms that mediate knowledge

production (Stanford HAI, 2024). In this way, AI ceases to be an external service and becomes an institutional field of learning where its biases, limitations, and implications for knowledge management are discussed. Technological sovereignty is not limited to infrastructure, but also involves cultural appropriation and ethical training for those who use it.

In this vein, Communities of Practice (CoPs) and the idea of a learning society (Marina, 2023) offer a collective approach to sustaining transformation. CoPs guarantee continuity, memory, and evaluation of created value; the learning society urges us not to pursue novelty, but to establish criteria and traceability as forms of intellectual freedom. Thus, literacy with AI is equivalent to teaching people to think independently, to share knowledge without subordination, and to reclaim education as a space for emancipation and the sovereignty of knowledge (UNESCO, 2023; Wenger-Trayner, 2020; Marina, 2023).

Artificial Intelligence, yes, but with educational rebellion: decolonial literacy

> There is no political freedom without freedom of thought; nor freedom of thought without freedom to teach.
>
> *Simón Rodríguez, "American Societies" (1842)*

Generative artificial intelligence is not neutral. Its training logic, cultural frameworks, and control architectures respond to specific geopolitical interests. To consider its incorporation into education without questioning the model of knowledge it reproduces is, at best, naive and, at worst, collaborationist.

From Our America, it is not enough to teach how to "use AI." We need to teach how to read it, discuss it, and dispute it. As Simón Rodríguez warned in the 19th century, educating is not about repeating foreign models, but inventing so as not to err.

In this vein, teaching AI literacy without reviewing its biases, its silences, and its technocratic assumptions is simply changing masters. Paulo Freire already warned that it is not a matter of adapting the oppressed to the system, but of changing the system with the knowledge of the oppressed.

Enrique Dussel and Aníbal Quijano reminded us that all epistemology has a geography: thinking is also a political act. AI trained in English, using data from the North, producing homogeneous, territory-less texts, cannot be the new universal standard of knowledge.

Therefore, this literacy cannot be merely "new"; it must also be ours. With a situated voice, with local anchoring, with epistemic disobedience.

As Rodríguez himself might have said: "In America, we do not just teach people to read letters; we teach them to read the world with discernment and with their own voice. AI cannot be a new form of cognitive colonization. It has to be the pencil with which we write our freedom."

That is the difference between "using AI" and teaching how to think with AI from the South: transforming the algorithm into a critical tool, rather than automatic dogma. That is also literacy.

Closing: key ideas and minimum commitments

This conclusion summarizes the chapter's itinerary in key ideas and minimum commitments: a reminder that new literacy is not about mastering functionalities, but about forming judgment,

documenting processes, and nurturing the pedagogical bond. If AI enters the classroom, it must do so under clear rules, with traceability and purpose; otherwise, technology becomes noise rather than learning.

Five key ideas

1. First, the criteria; then, the tool.
2. The process is as important as the product.
3. To document is to educate: without traceability, there is no deep learning.
4. Localizing writing breaks algorithmic homogeneity.
5. Nurture the connection: AI improves; the pedagogical relationship produces meaning.

Five institutional commitments

- Course policy and governance (portability, auditing, privacy, non-exclusivity, pedagogical feedback).
- Teacher training pathways (microcredentials) and *classroom laboratories*.
- Communities of practice with shared resources and evaluation of value created.
- Mixed infrastructure (approved services + open options) with data protection.
- Impact monitoring with process, equity, and informed satisfaction indicators.

The new literacy is not about "using AI," but about learning to decide with traceability how AI enters (or does not enter) our writing, teaching, and learning practices.

First, we assume five simple and demanding convictions: criteria before tools, process as valuable as product, documentation as a formative act, situated writing to break algorithmic homogeneity, and care for human connection as a compass. These ideas are not slogans: they translate into everyday decisions about what tasks to assign, what evidence to demand, and how to give meaningful feedback.

Second, we commit the institution to five operational pillars: AI policy and governance (portability, auditing, privacy, non-exclusivity, pedagogical feedback); training itineraries and classroom laboratories; communities of practice that share resources and measure value created; mixed infrastructure that protects data and avoids dependencies; and impact monitoring with indicators of process, equity, and informed satisfaction. When these pillars are activated, innovation ceases to be episodic and becomes installed capacity.

Finally, the message that runs through the entire chapter is clear: the new literacy is not about "using AI," but about learning to decide with traceability how, when, and for what purpose it enters—or does not enter—our writing, teaching, and learning practices. That is the threshold of a truly contemporary education: technological by means, deeply human by ends.

Manifesto for teacher-student governance of AI in university education

Faced with the growing incorporation of generative artificial intelligence (GAI) into university teaching, writing, and learning practices, higher education institutions have an unavoidable responsibility to ensure ethical, pedagogical, and political conditions that do not delegate the educational direction to market logic or technocratic automatisms.

This chapter has shown that AI is not a shortcut but a process that must be guided by professional judgment, teacher-student participation, and clear policies. Therefore, we propose

this minimum institutional commitment for universities, faculties, schools, and departments that wish to implement AI literacy that is human-centered, situated, and sustainable.

Minimum institutional commitments

1. Explicit course policy on the use of AI, responsible co-authorship, and process-based assessment, available to teachers and students.
2. Data and tool governance, with clear clauses on portability, privacy, platform non-exclusivity, and informed consent.
3. Continuing teacher training in AI literacy: methodological, technical, ethical, and emotional, through workshops, microcredentials, and classroom labs.
4. Support for Communities of Practice (CoP-IA) that design, document, and share models, mistakes, and collective learning.
5. Mixed infrastructure that combines auditable commercial services with open tools and avoids institutional technological dependence.
6. Impact assessment with process indicators, traceability, local anchoring, and student satisfaction, beyond product metrics.
7. Teacher and student representation on any committee that regulates, adopts, or implements AI technologies in academic processes.
8. Pedagogical accountability, ensuring that each technological innovation is evaluated for its educational value, not its novelty.

This is not a technical protocol or a symbolic manifesto. It is a realistic, operational, and critical roadmap designed to prevent the university from becoming an unethical automation laboratory or a passive consumer of corporate platforms.

By committing to these minimum standards, institutions not only protect rights but also strengthen their educational sovereignty and pedagogical identity. Without these pillars, any use of AI risks emptying the university of its most profound meaning: to be a place where thought is nurtured, discussed, and constructed in freedom.

This manifesto can be adopted, adapted, or signed by teaching communities, departments, graduate programs, academic networks, and university authorities as a starting point for institutional policies on the educational use of AI.

EPILOGUE

It is not enough to teach reading with Artificial Intelligence. We must teach students to think without fear, to write with discernment, and to live with autonomy. Education cannot be the new face of the algorithm. It must remain the human face of the future.

Because AI can generate text, but cannot give it meaning. It can produce answers, but it cannot formulate the questions that transform. It can optimize processes, but it cannot replace the bond that educates.

The future of the university is not decided in code, but in the classroom. Moreover, the classroom will continue to be a space of resistance, of invention, of shared humanity. That is the new literacy: technological in its means, radically human in its ends.

This chapter is not just a didactic proposal or a conceptual framework. It is an invitation to rethink the university as a space of pedagogical resistance in the age of algorithms. By articulating technical, emotional, political, and ethical literacy, it becomes a significant contribution to the

debate on artificial intelligence in education. If this work circulates, I hope it will be discussed, cited, and, above all, used: in teacher training programs, curriculum redesigns, and institutional governance mechanisms. Because more than teaching how to use AI, it is about teaching how to decide with judgment, justice, and humanity.

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DECLARATION OF CONFLICTS OF INTEREST

There are no conflicts of interest.

FUNDING

No specific grants have been received from funding agencies in the public, commercial, or non-profit sectors.

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