

ARTIFICIAL INTELLIGENCE FOR EDUCATORS: STRATEGIES, TOOLS, AND APPLICATIONS

Module 1 – Introduction to AI and its Application in Educational Contexts

- Welcome and Course Orientation:

Introduction to objectives, methodology, session dynamics, and assessment criteria; initial warm-up activity exploring prior experience and expectations regarding AI in education (guided brainstorming).

- What is AI?:

AI vs Generative AI, a brief history, capabilities, and limitations; recent evolutionary milestones; fitting chat models, agents, and automated workflows into educational settings; data privacy and security best practices.

- Exploring AI resources:

A high-level overview of the diverse AI tools available and their potential educational applications.

- Plenary and Group Reflection:

Shared evaluation and synthesis of session learnings.

Module 2 – Generative Text AI: Securing High-Quality Outputs

- Session Introduction:

Recapitulation and workflow overview for Session 2.

- Generative Text AI Models – ChatGPT, Gemini, Claude, DeepSeek:

Comparative overview (capabilities, limitations, usage modes, and optimal use cases), model evolution, and continuous learning strategies.

- Practical Workshop – Hands-on Exploration of AI Models:

Small-group investigation addressing authentic classroom challenges (planning, assessment, feedback, resource creation), followed by a group debrief on findings and limitations.

- Practical Workshop – Talking to AI (Prompt Engineering):

Fundamentals of prompt engineering; structuring prompts effectively; deploying AI as an "expert practitioner"; critical iteration and practical application.

- Plenary and Group Reflection:

Shared evaluation and synthesis of session learnings.

Module 3 – Ethical, Safe, and Responsible AI Use in Education

- Session Introduction:

Recapitulation and workflow overview for Module 3.

- AI Fundamentals, Alignment, and Sustainability:

Technical foundations of AI model training, fine-tuning, and alignment mechanisms; environmental, social, and sustainability footprint of AI; systemic technical limitations (hallucinations, validation bias); cybersecurity and data protection standards.

- Misuse, Security, and Impact on Individuals::

Deepfakes, misinformation, jailbreaking techniques, prompt injection, and unethical applications (e.g. harassment, impersonation); establishing professional boundaries and referral procedures.

- Educational Impact and Academic Integrity:

Consequences for learning, academic integrity, and assessment; student empowerment (metacognition, self-explanation, rubrics, counter-examples); proactive communication with families.

- Ethical Prompt Engineering Mini-Module:

Roles, context, boundaries, and verifiable outputs; integrating guardrails into prompts; using AI as a critical study companion.

- AI Detection Tools:

Types, accuracy limitations, and cautious application.

- NotebookLM:

Source grounding, visible citations, and auto-generated study features (outlines, audio/video summaries, quizzes, flashcards).

- Group Activity – Is AI Use Inevitable?:

Case-study group work analysing specific scenarios regarding AI misuse, proposing solutions, and presenting to the cohort.

- Plenary and Group Reflection:

Shared evaluation and synthesis of session learnings.

Module 4 – Creative Applications of AI in Education

- Session Introduction:

Brief recap and workflow overview for Module 4.

- Practical Workshop – Multimedia AI tools:

Guided exploration by category featuring mini-demos and best practices across image, video, voice synthesis, music, avatar, diagram, and presentation tools.

- Practical Workshop – AI as Co-Designer and Prompt Coach:

Core design workflows (scripts, instructions, rubrics, storyboards); refining prompts across tools; tiered templates and feedback iteration.

- Practical Workshop – Applied Tool Experimentation:

Group work focused on addressing a real-world educational challenge through resource creation, followed by group evaluation of resource quality.

- Plenary and Group Reflection:

Shared evaluation and synthesis of session learnings.

Module 5 – AI Automations and Agents

- Session Introduction:

Recapitulation and workflow overview for Module 5.

- AI Agents in Education:

Chatbots vs AI agents; establishing purpose, conversational flow, knowledge bases, and ethical boundaries; instructional design and success criteria; evaluation models (quality, bias, utility, maintenance).

- Practical Workshop – Designing AI Agents:

Exploration, design, and configuration; peer testing and review.

- AI Automations Applied to Education:

Key concepts (workflows, APIs), practical scope, process mapping, conditional logic, triggers, anonymisation, and data security; case examples (rubrics, automated emails, student reminders, report drafts).

- Final Project – Applied AI in Education (Part I):

Selecting a deliverable type (A. Creative Resource; B. Educational Agent; C. Simple Automated Workflow), defining the educational problem, and establishing a project action plan.

- Plenary and Group Reflection:

Shared evaluation and synthesis of session learnings.

Module 6 – Final Project Development, Synthesis, and Feedback

- Session Introduction:

General recapitulation and overview of final learning.

- Final Project – Applied AI in Education (Part II):

Continuation and completion of projects using quality, ethics, privacy, accessibility, and traceability checklists; short presentations (8-10 mins) followed by peer feedback.

- Course Synthesis:

Summarising key takeaways and establishing shared best-practice principles.

- Course Conclusion and Evaluation:

Participant survey and evaluation dialogue for continuous improvement.



Nicolás Parra Rojas.

Coordinador de formación Erasmus +.

EVOLearn360.

C/ Dr. Jesús Marín López, 30500 Molina de Segura, Murcia.