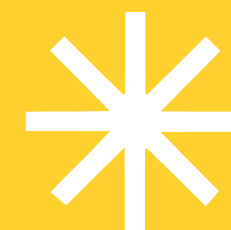


INTEGRATING CRITICAL AI LITERACY IN LANGUAGE TEACHER EDUCATION WITH A MULTILITERACIES LENS.



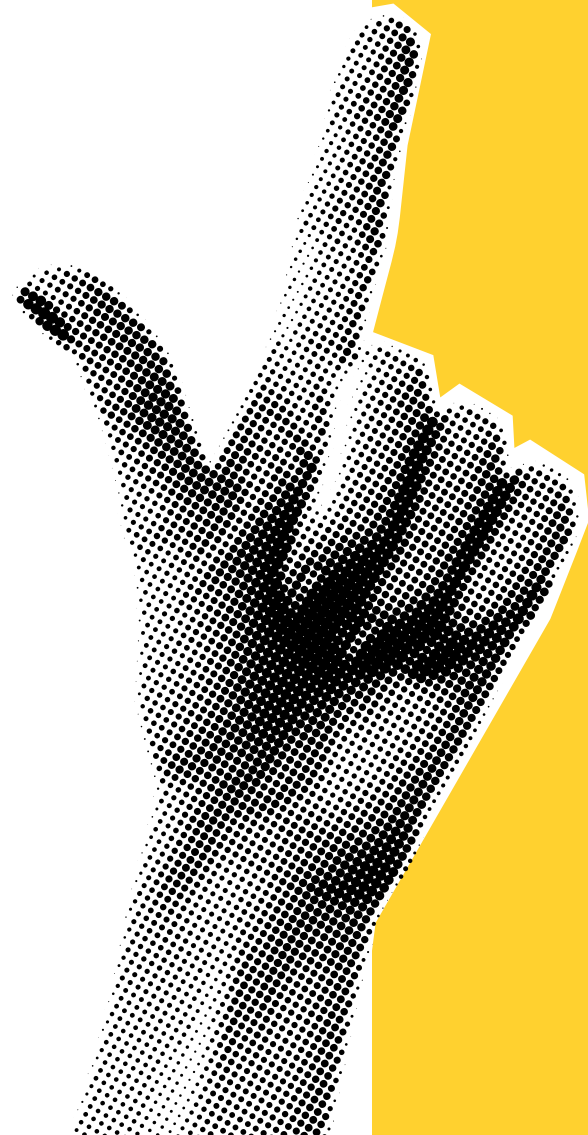
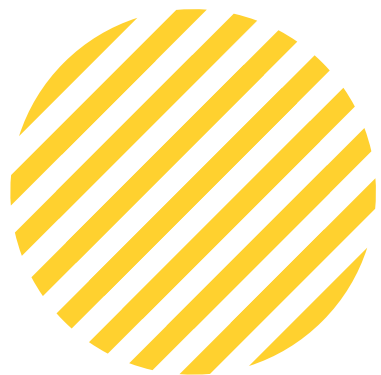
**AOIFE AHERN + ALICIA
HERNANDO**



**COMPLUTENSE
UNIVERSITY OF MADRID**

OUTLINE

- 1. Rethinking AI literacy**
- 2. Redesigning learning tasks**
- 3. Making learning visible**
- 4. Emerging patterns**
- 5. Conclusions**



WHY CRITICAL AI LITERACY?

From technical skills to
pedagogical judgement

Beyond AI tools

- 01 AI literacy has become a key challenge in initial teacher education.
- 02 Most studies focus on AI tools and material generation.
- 03 Future teachers need to develop pedagogical judgement, not only technical skills.

OUR PERSPECTIVE

From multiliteracies to critical AI literacy

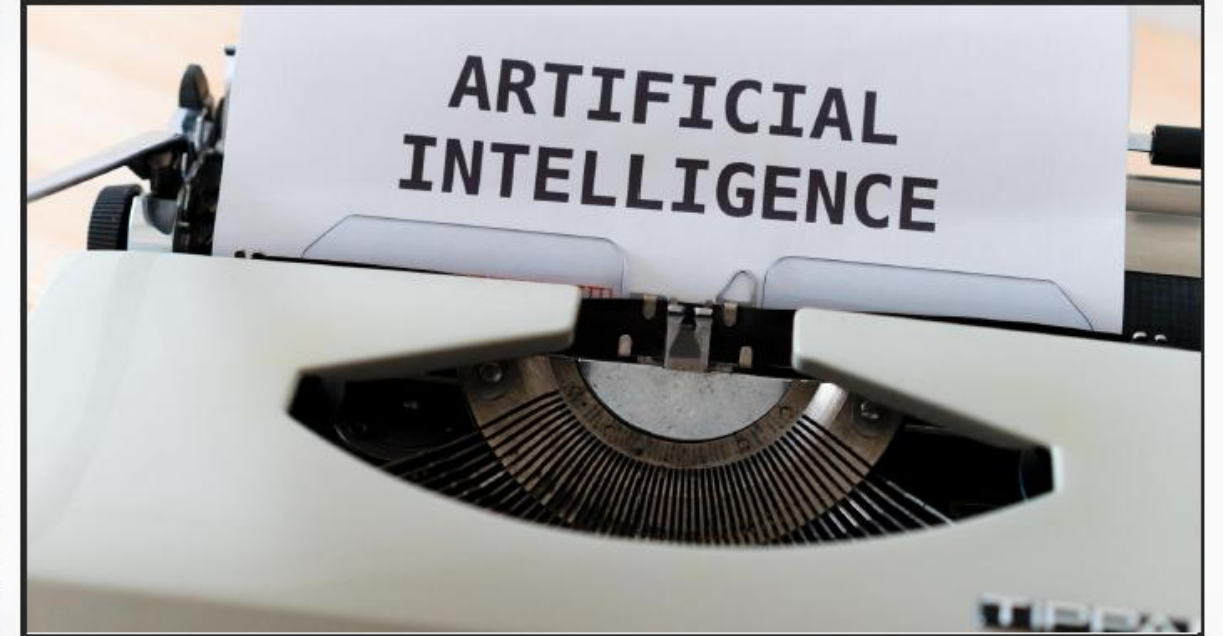


Multiliteracies framework.

Learning goes beyond using digital tools to create texts.



Students develop the ability to make **meaning**, **reflect**, **collaborate** and make informed decisions



Critical AI literacy in language teacher education. AI is embedded across language pedagogy courses rather than taught as a separate topic.

TWO PEDAGOGICAL DESIGNS. PROJECT OVERVIEW

2023-2024

2025-2026

 **92 pre-service teachers**
(GB 50 ES 42)

 **13 AI narratives** (GB 6 ES 7)

 **School implementation**
(Pre-primary & Primary)

 **133 pre-service teachers**
(GB 50 ES 83)

 **30 instructional materials**
(GB 30 ES 15)

 **133 portfolios** (GB 50 ES 83)

 **1 reflection questionnaires**



A two-year pedagogical redesign across two language teacher education modules

1 2023-2024

GB **LITERACY**. Main **task**: AI narratives.
Application: Student teacher readings.

2 2023-2024

ES **LANGUAGE ACQUISITION**. Main **task**: AI narratives.
Application: School Week Book.

3 2025-2026

GB **LITERACY**. Main **task**: Reading assessment design
Application: Reflection.

4 2025-2026

ES **LANGUAGE TEACHING + TEACHING SPANISH AS AN ADDITIONAL LANGUAGE**.
Main **task**: Instructional materials design.
Application: Reflection.

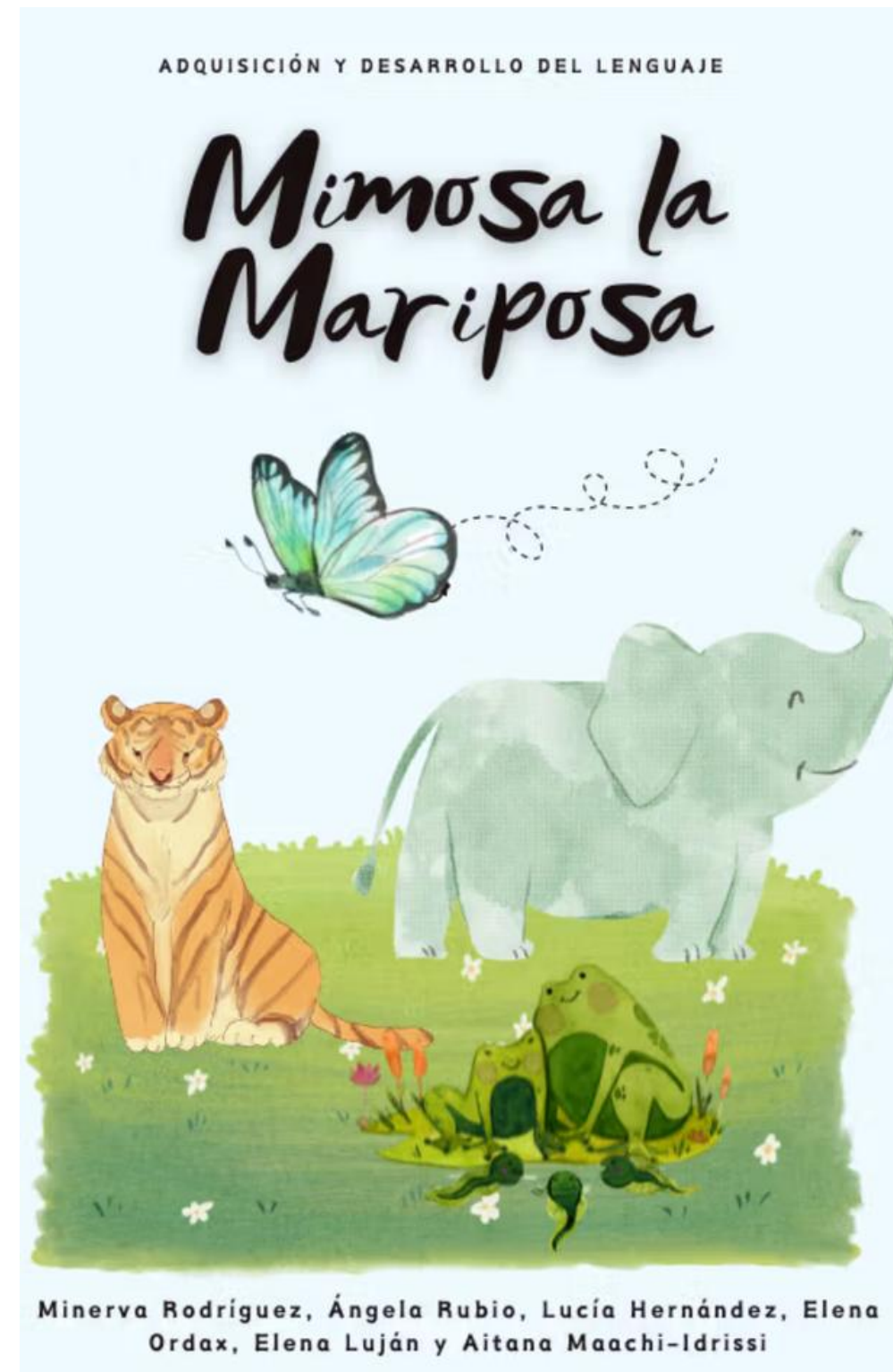
STAGE 1. FOCUS ON THE PRODUCT

👁️ AI-generated multimodal narratives

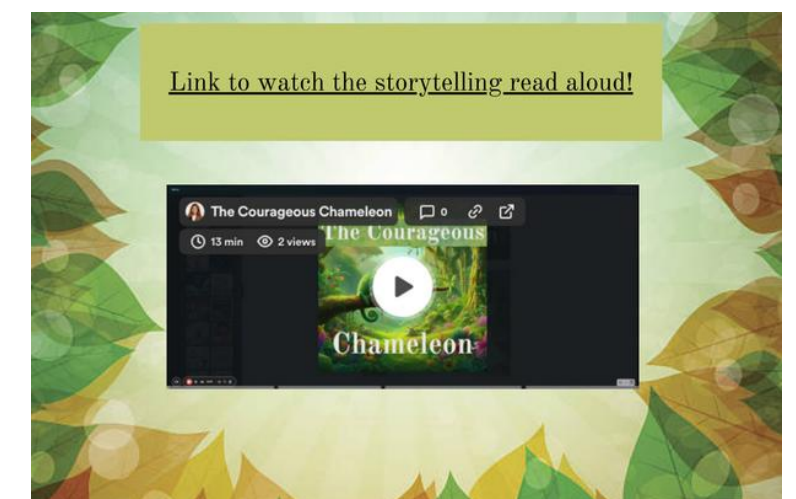
Students designed multimodal stories with generative AI for pre-primary and primary learners.

🌐 Classroom implementation

Students implemented their stories in pre-primary and primary classrooms through storytelling and reading activities.



Once upon a time, in a vibrant classroom filled with the energy of new beginnings, there was a young boy called Oscar, who was new to the school and had just arrived in Spain from Nigeria, a country in Africa. Oscar didn't speak much Spanish, and he felt lost among the new faces and unfamiliar words.



An unexpected limitation...

Although students produced high-quality multimodal artefacts, we collected very limited evidence of the learning processes behind them.

We wanted to document...

- 01 Creative decision-making
- 02 AI use and negotiation
- 03 Professional learning

PROJECT

2023-2024

STAGE 2. FOCUS ON THE PROCESS

PROJECT

2025-2026

What changed?

2023-2024



AI for creating products. Final artefacts.



Product
assessment.

2025-2026



AI as an object of pedagogical reflection. Learning processes.



Process
documentation



From creating with AI to thinking critically about AI



STAGE 2. REDESIGNING AI TASKS

 **Goal: Not learning AI tools, but developing professional judgement.**

AI tools: ChatGPT, Gemini, Diffit, Suno... **Students were asked to...**



Critically evaluate AI-generated materials.



Adapt and justify their decisions.



Reflect on the teacher's role.

MAKING LEARNING VISIBLE

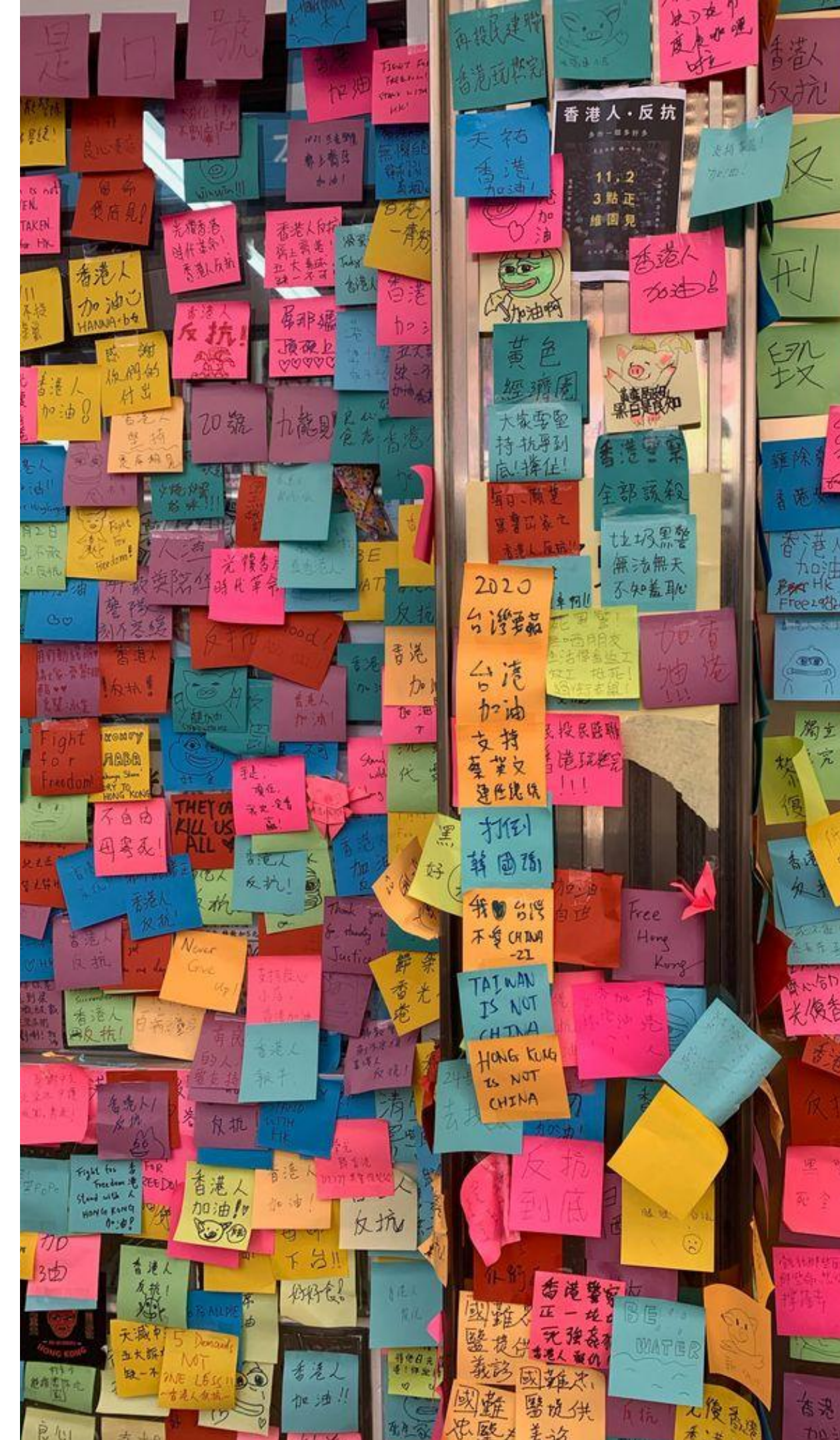
DOCUMENTATION

- Paper portfolios
- Digital portfolios
- Weekly self-assessment
- AI acknowledgements

REFLECIÓN

- Reflection tasks
- Evidence of learning
- Evidence of decision-making

Reflection became part of the learning process rather than simply a source of research data.





children's pop, playful energy, acoustic guitar, upbeat 4/4 with snappy ba



Remix



FINDING 1.

AI became an object of pedagogical reflection



AI-generated song



Critical evaluation



Adaptation



Teaching sequence

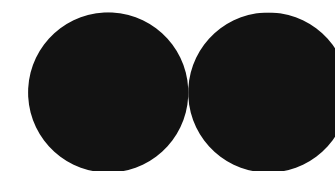
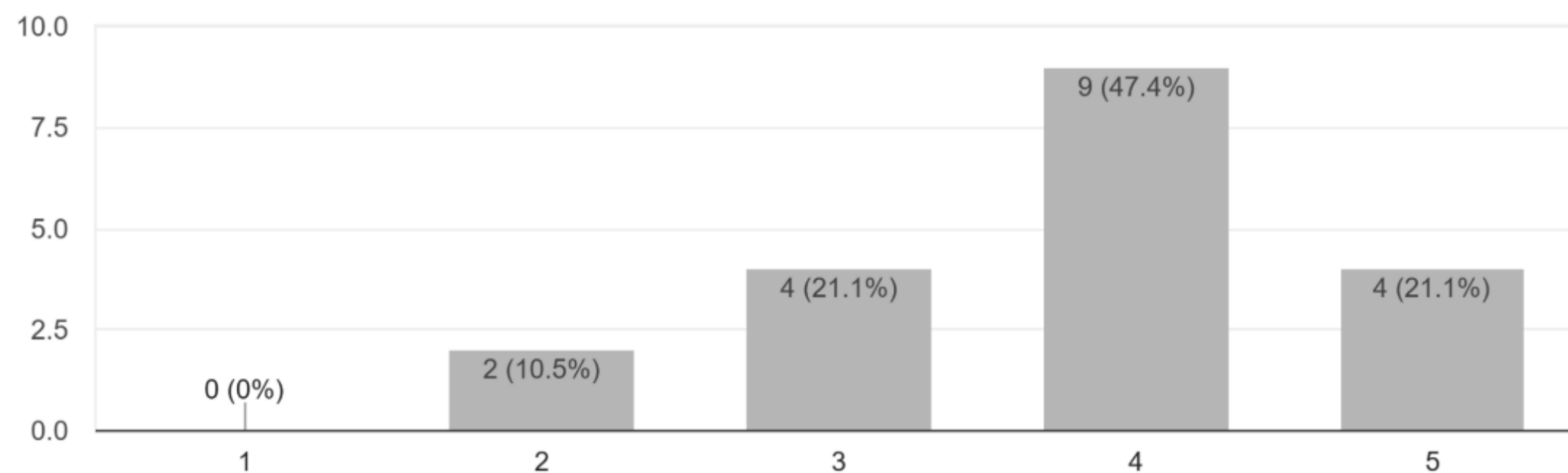
Students moved beyond **using AI** to **evaluating AI-generated materials**.

St group 3: Sometimes, the materials created by AI are not **perfectly adapted to the students' level** or may include small mistakes, so it is important **for teachers to review and adjust** them carefully. Relying too much on AI could also **reduce the teacher's own creativity** when designing materials. In the end, no one knows the students better than their own teacher. For this reason, it is very important that teachers adapt and personalise all materials according to the individual needs of their learners.

FINDING 2.

Professional judgement remained central Questionnaire (English Literacy module, n = 19)

AI can create correct and fair assessment materials (texts for reading, comprehension questions for literal, inferential and evaluative/ critical levels of comprehension) to evaluate children's learning
19 responses



Most students agreed that AI can generate useful assessment materials. They recognised AI as a valuable educational resource, but not as a substitute for pedagogical judgement.

St. group 4: *When using AI tools, us teachers have to keep in mind that it is **not a text written by an expert** but by something that takes information from various sources. It may seem that these tools make our life easier, but we always have to keep in mind that it is **our job to revise their work and decide if it is useful for us or not**, and if not, try again or use a different resource.*

FINDING 3.

Portfolios revealed changes in pedagogical thinking

PROJECT

2025-2026

SHIFT 1

From knowledge transmission to meaningful language education

Teaching language is helping students communicate, read the world and actively participate in society through creating real, meaningful situations, instead of repetitive and rote-based teaching.

SHIFT 2

From describing tasks to justifying pedagogical decisions

We would include more text with additional information and a greater variety of comprehension questions... We cannot say that we trust the AI-generated text until we check that the information is reliable.

SHIFT 3

From AI as a tool to AI as an object of pedagogical reflection

Students progressively justified **why** AI-generated materials needed to be revised, adapted and critically evaluated before classroom use.

Conclusions

What changed?

- **pedagogical** rather than technological
- **learning** became **visible**
 - focus shifted from product to **process** + developing professional judgement.

A remaining challenge

Not all students developed a critical stance towards AI. Some continued to accept AI-generated content without revision; use AI mechanically to complete tasks.

Developing AI literacy means...

... pedagogical judgement, not simply learning to use AI tools.



THANK YOU

For Your Attention



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