

AI Literacy in Foreign Language Learning

Introductory theory handout: from tool use to responsible participation

Purpose of this handout

- This handout supports the introductory theory section of a face-to-face module on student AI literacy, verification and responsible AI use in foreign language learning.
- It expands the presentation notes into a participant-facing resource that can be used during the session and kept for later reference.
- The central message is that AI literacy is not equal to chatbot use. It involves understanding, critical judgement, ethical awareness, verification, self-reflection and responsible participation.

1. Why AI literacy matters now

AI is already present in learners' everyday information, communication and creativity practices. Learners encounter AI through search engines, translation tools, writing support, recommendation systems, grammar checkers, chatbots and generative tools. As a result, AI literacy is no longer only a specialist topic for computer science; it has become part of general education, language education and digital citizenship.

In foreign language learning, this shift is especially visible. Students may use AI to translate, paraphrase, practise speaking, generate examples, receive feedback, check grammar, prepare presentations or improve academic writing. These uses can support learning, but they can also encourage over-reliance, superficial production, fake citations, unverified information and unclear authorship.

Key point for participants

- The main question is not simply whether students can use AI.
- The stronger question is whether they can explain, evaluate and justify their AI use responsibly.
- Language learners need to know when AI helps, when it misleads and when human judgement must take priority.

2. A working definition of AI literacy

For this module, AI literacy means the capacity to understand, use, evaluate, create with and act responsibly around AI systems. This definition is pedagogical: it is designed for teachers, teacher trainees and students who need to make practical decisions about AI-supported learning.

AI literacy is not only...	AI literacy also includes...
operating a tool	critical judgement
prompt engineering	ethical decision-making
generating fluent text	verification and revision
knowing a definition	confidence and responsible application
using AI often	reflecting on when and why to use AI

This distinction is important because many classroom activities stop at “try this AI tool”. A stronger AI literacy activity asks learners to explain what they did, compare alternatives, verify output, revise responsibly and justify final decisions.

3. Core domains of AI literacy

The literature commonly presents AI literacy as a multidimensional competence. Ng et al. (2021) organise it around four broad aspects: knowing and understanding AI, using and applying AI, evaluating and creating with AI, and engaging with ethical issues. For foreign language learning, each area can be translated into classroom practice.

Domain	Meaning	Foreign language example	Evidence of learning
Know & understand	Recognise AI systems, basic concepts, data, models and limitations.	Students discuss why a chatbot can sound fluent but still give incorrect grammar advice.	Short explanation, concept check, classification rationale.
Use & apply	Use AI tools purposefully in everyday and learning contexts.	Students use AI for B1 speaking practice or vocabulary review with teacher-provided constraints.	Prompt, interaction record, revised product.
Evaluate & create	Question outputs, compare alternatives and create with AI.	Students compare AI-generated model paragraphs, identify weak points and revise one version.	Comparison notes, revision log, justification.
Ethical issues	Consider bias, privacy, transparency, authorship, responsibility and social impact.	Students write an AI-use statement and avoid entering private or sensitive data.	Disclosure note, ethical decision checklist, reflection.

4. AI literacy and AI competency

Recent research distinguishes between knowing about AI and applying AI effectively in real contexts. This is useful in teacher education because students may know what AI is, but still be unable to use it responsibly in authentic tasks.

Design test

- Can learners explain their AI-assisted decision?
- Can they identify what they accepted, rejected or changed?
- Can they justify why AI was useful, limited or inappropriate in this task?

AI literacy: knowing what and why	AI competency: applying well and reflectively
recognising AI systems	using AI for purposeful goals
understanding data and model limitations	collaborating with AI and other people
evaluating outputs and risks	acting with confidence and self-reflection
knowing ethical principles	making accountable decisions in real tasks

5. AI literacy is interdisciplinary and communicative

AI literacy connects digital competence, data literacy, algorithmic awareness, computational thinking, ethics and citizenship. In language education, it is also communicative. Prompts, feedback, register, stance, voice, audience awareness, authorship and revision all involve language choices.

- Digital competence: accessing, evaluating, communicating, creating and acting safely online.
- Data and algorithms: understanding that AI systems work with patterns, training data, probabilities and model limitations.
- Human-centred ethics: recognising bias, privacy issues, rights, responsibilities and social consequences.
- Communicative competence: deciding how AI-mediated language should sound, who it is for, what it means and whether it remains the learner's work.

ELT implication

- AI literacy can be integrated into writing, speaking, vocabulary, translation, feedback, academic reading and project work.
- The strongest tasks make language learning and AI judgement visible at the same time.

6. What implementation research suggests

Research on AI literacy implementation shows that classroom practice remains uneven. A systematic review of K-12 AI literacy found two broad approaches: direct learning experiences and theoretical or curricular perspectives. A repeated limitation is that many activities focus on technical or applied skills without rigorous assessment of learning outcomes.

For language education, the key implication is that AI literacy should not be isolated from the subject. It is more powerful when embedded in meaningful tasks: evaluating sources, improving drafts, comparing translations, checking vocabulary, preparing presentations, designing dialogues or reflecting on authorship.

7. A teachable progression for AI literacy materials

The following progression translates the frameworks into a practical sequence for materials design. It can be used to plan a 20-minute activity, a full lesson or a longer module.

Notice	Understand	Test	Create	Reflect
Where is AI?	How does it work?	Can we trust it?	What can we design?	Should we use it?
Classify familiar tools.	Explain data, patterns and limitations.	Compare, verify and identify risks.	Revise, adapt or design a product.	Justify decisions and future use.

8. Five classroom-ready activity types

Activity type	How it works	Useful FL learning adaptation
AI or not?	Students classify familiar tools and justify their reasoning.	Classify translation, spellcheck, grammar feedback, recommendation and chatbot tools.
Bias detective	Students compare AI outputs for fairness, stereotypes and missing perspectives.	Compare how AI describes speakers, cultures, accents, countries or language varieties.

Prompt ladder	Students revise a weak prompt into a precise, ethical and contextualised one.	Improve a prompt for B2 writing feedback so it guides revision without rewriting the whole text.
Data-to-decision	Students use a small dataset to see how categories shape predictions.	Analyse how labels such as level, genre, register or error type influence feedback.
Human-in-the-loop	Students use AI feedback, then accept, reject or revise with reasons.	Students ask for feedback on a paragraph, then annotate which suggestions they used and why.

Material designer's rule

- Every AI task should include both a product and a reflection. Without reflection, students may learn tool dependence instead of AI literacy.

9. Assessing AI literacy

AI literacy assessment should combine cognitive, practical and reflective evidence. It should not be reduced to tool-use frequency or a single questionnaire score.

Evidence type	What it measures	Examples
Knowledge evidence	Understanding of AI concepts, limitations and responsible use.	Concept checks, explanations, short quizzes, classification tasks.
Performance evidence	Ability to use, compare, verify, revise and justify AI-supported work.	Prompts, AI-assisted products, revision logs, source checks, comparison tables.
Dispositional evidence	Confidence, perceived ability, ethical awareness and self-reflection.	AI-use diary, exit ticket, reflective commentary, self-assessment checklist.

10. Risks and responsibilities

Responsible AI literacy prepares learners for uncertainty, not perfect answers. In practice, this means teaching students to question fluent outputs, recognise limits and remain accountable for their final work.

- Bias: AI reflects human choices, training data, social inequalities and power relations.
- Reliability: generative AI can produce plausible but inaccurate outputs, including invented references.
- Privacy: learners need to understand data disclosure, consent and the risks of entering personal information.
- Sustainability: AI systems have material and environmental costs that should be considered in responsible-use discussions.
- Academic integrity: students need clear rules about authorship, disclosure, acceptable support and prohibited substitution.

11. Design principles for AI literacy materials

Principle	Practical meaning
Contextualise	Use real learner problems, such as feedback, translation, revision, source checking or speaking practice.

Make thinking visible	Ask learners to show prompts, revisions, sources and decisions.
Blend modes	Use discussion, unplugged examples, projects, dictionaries, corpora and AI tools.
Build agency	Students decide when AI helps and when it should be avoided.
Co-design locally	Teachers adapt tasks to curriculum, age, language level, assessment rules and school conditions.

12. Quick participant worksheet

Use these prompts during the introductory theory section or as a short transition into the hands-on activities.

A. My current AI use: Which AI tools do I already use for language learning, teaching, writing, translation or feedback? What do I use them for?

B. Trust check: What type of AI output do I usually trust too quickly: grammar explanations, vocabulary examples, summaries, sources, translations, feedback or style suggestions?

C. Verification plan: Which reliable sources or tools can I use to check AI-generated language and content?

D. Responsible-use boundary: What is one acceptable AI-supported learning behaviour and one behaviour I would not accept in my classroom or study context?

E. One rule: Write one student-friendly AI-use rule for a foreign language course.

13. A 45-minute sample lesson structure

Time	Stage	Activity	Assessment evidence
0–5 min	Hook	AI or not? Quick classification of familiar tools.	Classification rationale.
5–15 min	Concept input	Explain data, patterns, probability and limitations with examples.	Concept check.
15–28 min	Guided task	Students prompt an AI system, compare outputs and identify risks.	Prompt and output evaluation.
28–38 min	Creation	Students revise a text or product and document decisions.	Revision log.
38–45 min	Reflection	Exit ticket: When should I use, question or avoid AI?	Reflection ticket.

14. Final takeaways

- AI literacy is not simple tool use; it is responsible participation with AI systems.
- Foreign language learning tasks should require students to explain, compare, verify, revise and justify.
- Verification is a language-learning skill: students need to check grammar, vocabulary, register, facts, sources and cultural appropriacy.
- Good AI-supported tasks protect human agency by making learners responsible for decisions and final products.
- Assessment should include knowledge, performance and reflection.

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