

2023-1-DE02-KA220-ADU-000155302 -

AI in ADU

Artificial Intelligence in

Adult Education and Self-Learning:

Providing personalized and adaptive learning  
experiences with emphasis on language  
learning

# AI IN LANGUAGE LEARNING

A Guide for

Educators [ ENGLISH ]



Co-funded by  
the European Union



# AI in Language Learning: A Guide for Educators

**Target Audience:** Language teachers, trainers, and educators seeking to understand and integrate AI tools into their teaching practices.

**Goal:** To equip educators with the knowledge, strategies, and best practices for effectively leveraging AI to enhance language instruction, personalize learning, and manage workload, while addressing ethical considerations.

# AI

2023-1-DE02-KA220-ADU-000155302 - AI in ADU | Artificial Intelligence in Adult Education and Self-Learning:  
Providing personalized and adaptive learning experiences with emphasis on language learning



© 2025, "AlinADU" Project.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

# TABLE OF CONTENTS

Introduction .....	4
Navigating the New Landscape: AI in Language Education .....	4
How This Guide Can Support Your Teaching .....	4
Understanding AI's Potential Role in Your Classroom .....	4
I. Foundations: Understanding AI for Educators .....	5
A. What AI Means for Language Teaching .....	5
B. Overview of AI Tool Categories for Education .....	6
C. Rationale for AI Integration: Key Benefits.....	7
Recommended videos / webinars for further insight on the topic .....	8
II. Practical Integration Strategies & Pedagogy.....	10
A. Models for AI Integration.....	10
B. Designing Effective AI-Powered Learning Activities .....	11
C. Managing AI in the Classroom.....	12
III. Selecting, Evaluating, and Managing AI Tools .....	15
A. Criteria for Choosing Educational AI Tools .....	15
B. Evaluating AI Tool Effectiveness in Your Context .....	16
C. Curating a School/Department AI Toolkit.....	17
IV. AI for Specific Language Skills Teaching.....	19
A. Teaching Listening Skills with AI .....	19
B. Teaching Speaking & Pronunciation with AI.....	21
C. Teaching Reading Skills with AI .....	23
D. Teaching Writing Skills with AI.....	26
E. Teaching Vocabulary & Grammar with AI.....	27
F. Teaching Pragmatics & Intercultural Competence with AI: (EMPHASYS) .....	29
V. AI for Assessment and Feedback.....	31
A. Leveraging AI for Formative Assessment .....	31

B. AI in Summative Assessment .....	31
C. Providing Effective Feedback with AI Support .....	32
VI. Ethical Considerations, Challenges & Solutions .....	34
A. Data Privacy and Security: Upholding Learner Trust.....	34
B. Bias, Equity, and Accessibility: Ensuring AI Serves All Learners .....	35
C. Academic Integrity & Critical AI Use: Redefining Original Work.....	35
D. Addressing Educator Concerns & Barriers: Supporting the Supporters.....	36
VII. Developing AI Literacy & Future-Readiness .....	38
A. Essential AI Competencies for Educators.....	38
B. Cultivating AI Literacy in Students.....	38
C. Preparing for the Future of AI in Education.....	39
VIII. Case Studies: AI in Action.....	42
A. Case Study 1: Using AI chatbots for conversational practice in a beginner class.....	42
B. Case Study 2: Leveraging AI writing assistants for feedback in an academic writing course.....	44
C. Case Study 3: Implementing an AI-powered platform for personalized grammar drills.....	46
D. Case Study 4: Using AI for pronunciation feedback with intermediate learners.....	49
E. Case Study 5: Employing AI tools for vocabulary building and review.....	51
F. Case Study 6: Integrating AI content generation for lesson planning efficiency.....	53
Conclusion .....	56
Embracing AI as a Partner in Language Education .....	56
Next Steps for Your Professional Journey .....	56
Further Resources and Communities for Educators.....	56



# INTRODUCTION

## NAVIGATING THE NEW LANDSCAPE: AI IN LANGUAGE EDUCATION

The rapid evolution of artificial intelligence (AI) is reshaping classrooms and redefining the ways teachers and learners interact with language. From chatbots that provide conversational practice to adaptive platforms that personalize learning pathways, AI tools are no longer futuristic add-ons—they are now part of the everyday educational landscape. For language educators, this presents both exciting opportunities and important challenges.

## HOW THIS GUIDE CAN SUPPORT YOUR TEACHING

This guide is designed to help educators navigate this new terrain with confidence. It provides clear explanations of what AI is (and what it is not), showcases practical teaching applications, and highlights research-based insights into effective integration. You will find ready-to-use strategies, examples of classroom activities, and case studies that demonstrate how AI can enhance language teaching while preserving your professional expertise at the center of the learning process.

## UNDERSTANDING AI'S POTENTIAL ROLE IN YOUR CLASSROOM

At its core, AI should be seen as a partner in teaching rather than a replacement for teachers. Its value lies in automating repetitive tasks, offering immediate feedback to learners, and creating new opportunities for practice and engagement. Yet, it also comes with limitations—such as occasional inaccuracies, cultural biases, or ethical concerns—that require teacher oversight. By understanding both its potential and its pitfalls, you can harness AI to personalize instruction, foster learner confidence, and free up more time for what matters most: guiding, motivating, and inspiring your students.

## I. FOUNDATIONS: UNDERSTANDING AI FOR EDUCATORS

### A. WHAT AI MEANS FOR LANGUAGE TEACHING

#### **Demystifying AI** — core concepts educators need

AI in classrooms typically refers to software that uses machine learning (ML) and natural language processing (NLP) to analyze, generate, or adapt text, audio and other materials; the recent wave—generative AI—produces fluent, human-like text and media using large language models (LLMs) (Roll & Wylie, 2016; Bender et al., 2021). In practice for language teachers this means: tools that analyze learner responses (NLP), generate practice items or model conversations (generative AI / LLMs), and adapt sequences (ML-based adaptive engines). (Roll & Wylie, 2016; Bender et al., 2021).

#### **Capabilities and limitations**

What AI can do well: personalization (tailoring difficulty and practice to learners), fast formative feedback on grammar and coherence, scalable content generation (exercises, sample dialogues), and automation of repetitive tasks like draft scoring and lesson scaffolding (Ogunleye et al., 2024). (Ogunleye et al., 2024).

Where AI falls short: LLMs can produce plausible-sounding but incorrect or fabricated statements (“hallucinations”), reflect biases present in their training data, and cannot reliably replicate human empathy, ethical judgment, or deep formative diagnostic insight without careful human oversight (Bender et al., 2021; Kasneci et al., 2023). These shortfalls mean teachers must treat AI outputs as assistive rather than authoritative. (Bender et al., 2021; Kasneci et al., 2023).

#### **Shift in teacher role**

AI changes the day-to-day balance of tasks: teachers increasingly act as facilitators who design learning experiences, curate and critique AI outputs, coach higher-order skills (critical thinking, pragmatics, intercultural communicative competence), and manage ethical/integrity issues. Effective integration calls for teacher AI-literacy (knowing tool strengths/limits), pedagogical judgement, and classroom rules for acceptable AI use (Crompton et al., 2024; British Council, 2024). (Crompton et al., 2024; British Council, 2024).

## B. OVERVIEW OF AI TOOL CATEGORIES FOR EDUCATION

Below are practical categories, what they do, and short teacher-facing notes.

### **Content creation & lesson-planning assistants**

Tools that draft lesson outlines, produce example dialogues, create quizzes or vocabulary lists from a prompt. They speed up course design but require teacher review to ensure accuracy, cultural fit, and alignment with learning outcomes (examples: AI writing assistants, LLM-based syllabus helpers). (Ogunleye et al., 2024).

Real-world example: Large language models are being used by major language platforms to accelerate course production (e.g., industry reports of Duolingo using generative AI to expand course offerings). (Peters, 2025).

### **Interactive practice & simulation tools**

Chatbots, simulated conversational partners, pronunciation coaches and role-play simulators that allow low-stakes, repeatable speaking practice. These are powerful for fluency and confidence but must be scaffolded with corrective feedback and opportunities for real interaction. (See empirical studies of chatbot speaking practice in the language literature). (Zaim et al., 2025; MDPI; examples summarized in review literature).

### **Automated assessment & feedback platforms**

Automated writing evaluation and formative scoring systems can provide immediate grammar, coherence, and organization feedback; useful for iterative writing practice but imperfect for nuance, pragmatic appropriateness, or creativity. Use rubrics and human moderation for summative decisions. (Crompton et al., 2024).

### **Adaptive learning systems**

Systems that use knowledge-tracing and reinforcement learning / ML to sequence exercises tailored to each learner's knowledge state (e.g., research prototypes and commercial adaptive platforms). These aim to maximize practice efficiency by giving the right item at the right time. They are most effective when their learning model is transparent to teachers and when teachers curate content. (See adaptive learning literature and models for language exercises). (Chen et al., 2023; Cui & Sachan, 2023).

### Plagiarism detection & writing support

Tools that detect similarity or probable AI-generated text (e.g., Turnitin's AI-writing reports) and writing assistants that give suggestions (e.g., Grammarly). These support integrity and writing development but must be used carefully to avoid false positives and to protect multilingual/multilearner populations. (Turnitin product documentation; Grammarly education offerings). (Turnitin, 2024; Grammarly, n.d.).

## C. RATIONALE FOR AI INTEGRATION: KEY BENEFITS

### Personalizing instruction & differentiation

AI can build individualized practice sequences and adjust task difficulty dynamically, freeing teachers to focus on higher-order support. Systematic reviews show personalization and scaffolded practice as recurring benefits across GenAI/AI-in-education studies. (Ogunleye et al., 2024).

### Automating time-consuming tasks

Routine tasks such as preliminary grading, initial feedback on drafts, and first-draft lesson materials can be automated, which returns teacher time to planning pedagogy and one-to-one mentoring (Crompton et al., 2024).

### Timely, individualized feedback

Students gain immediate, formative responses on drafts, pronunciation attempts, or comprehension checks—important for language acquisition's frequency of practice. However, teachers must monitor feedback quality and guide learners about when to accept or challenge AI suggestions (Kasneci et al., 2023).

### Engagement and motivation

Conversational agents and gamified, adaptive tasks increase practice opportunities and learner engagement, especially for self-study outside class. Empirical work reports positive attitudes but flags overreliance and reduced face-to-face interaction if not balanced by teacher design. (British Council; Crompton et al., 2024).

### Expanded practice outside class

AI chatbots and on-demand adaptive exercises allow learners to practice writing and speaking whenever convenient, which supports the quantity of input/output necessary for language

gains. This value is robust across recent reviews, but effectiveness depends on designing tasks that require active learner processing (Ogunleye et al., 2024; Cui & Sachan, 2023).

## RECOMMENDED VIDEOS / WEBINARS FOR FURTHER INSIGHT ON THE TOPIC

**British Council** — “Artificial intelligence and English language teaching” (webinar / report summary)

Short webinar where British Council researchers present their systematic review and teacher survey findings. Useful for practitioner framing and global teacher voices. (British Council / TeachingEnglish).

Link to watch: [https://www.youtube.com/live/tLWsKcq2XZQ?si=ZoR25gw9Lx\\_wVnFa](https://www.youtube.com/live/tLWsKcq2XZQ?si=ZoR25gw9Lx_wVnFa)

**UNESCO / UNU** — “Generative AI and Education” webinar (recording)

Policy-level and practitioner guidance on generative AI’s opportunities and risks for education systems; good for policy context and ethical framing. (UNESCO webinar video).

Link to watch: [https://youtu.be/mu6PZV0l\\_lo?si=ueRvcfC1AU4L4ZKY](https://youtu.be/mu6PZV0l_lo?si=ueRvcfC1AU4L4ZKY)

**British Council TeachingEnglish YouTube short**: “How is AI affecting English language teaching?”

Practitioner-oriented short video summarizing the report’s classroom implications and teacher recommendations — quick for busy teachers.

Link to watch: <https://youtu.be/s--PHqP85bw?si=ZdXATgqEznu8k6k7>

## References

Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of stochastic parrots: Can language models be too big? *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency (FAccT '21)*, 610–623. <https://doi.org/10.1145/3442188.3445922>.

Chen, J.-Y., Saeedvand, S., & Lai, I.-W. (2023). Adaptive learning path navigation based on knowledge tracing and reinforcement learning (arXiv:2305.04475). <https://arxiv.org/abs/2305.04475>.

Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: Affordances and challenges. *British Journal of Educational Technology*, 55(6), 2503–2529. <https://doi.org/10.1111/bjet.13460>.

- Cui, P., & Sachan, M. (2023). Adaptive and personalized exercise generation for online language learning(arXiv:2306.02457). <https://arxiv.org/abs/2306.02457>.
- Edmett, A., Ichaporia, N., Crompton, H., & Crichton, R. (2024). Artificial intelligence and English language teaching: Preparing for the future (2nd ed.). British Council. <https://doi.org/10.57884/78EA-3C69>.
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, Article 102274. <https://doi.org/10.1016/j.lindif.2023.102274>.
- Ogunleye, B., Zakariyyah, K. I., Ajao, O., Olayinka, O., & Sharma, H. (2024). A systematic review of generative AI for teaching and learning practice. *Education Sciences*, 14(6), Article 636. <https://doi.org/10.3390/educsci14060636>.
- Peters, J. (2025, April 30). Duolingo said it just doubled its language courses thanks to AI. *The Verge*. <https://www.theverge.com/> (article by Jay Peters; see *The Verge*).
- Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26(2), 582–599. <https://doi.org/10.1007/s40593-016-0110-3>.
- Turnitin. (2024). AI writing detection model (product guidance). Turnitin. <https://guides.turnitin.com/hc/en-us/articles/28294949544717-AI-writing-detection-model>.
- Grammarly. (n.d.). Grammarly for Education / AI writing assistant. <https://www.grammarly.com/edu>.

### **Selected additional resources**

- Zaim, M., Arsyad, S., Waluyo, B., Ardi, H., Al Hafizh, M., Zakiyah, M., Syafitri, W., Nusi, A., & Hardiah, M. (2025). Generative AI as a cognitive co-pilot in English language learning in higher education. *Education Sciences*, 15, 686. <https://doi.org/10.3390/educsci15060686>. (Example empirical study of student attitudes and uses.)

## II. PRACTICAL INTEGRATION STRATEGIES & PEDAGOGY

### A. MODELS FOR AI INTEGRATION

Integrating artificial intelligence into existing educational models does not require overturning traditional teaching, but rather rethinking it in an inclusive way—leveraging the strengths of emerging technologies to enhance the effectiveness of the learning process. The models presented below offer educators tested approaches to incorporating AI tools into their daily practices in a purposeful and pedagogically grounded manner.

#### Supplementing Traditional Instruction

AI can be used as a support tool alongside traditional lectures and instructional materials. Educational chatbots, virtual tutors, or automated response systems can provide students with immediate clarification, personalized exercises, or alternative explanations—especially in classrooms with large or diverse groups of learners.

For example, a language teacher may conduct a listening activity during class and then assign a follow-up exercise through an AI assistant that provides individualized feedback on pronunciation and vocabulary. This approach maintains the traditional framework while expanding its reach, allowing students to learn at their own pace and according to their personal needs.

#### Blended Learning Frameworks

Blended learning models combine in-person instruction with asynchronous digital activities. Within this framework, AI can deliver adaptive content, analyze student performance, and suggest personalized learning paths. Teachers remain in control of the instructional design, while AI supports ongoing monitoring and differentiation.

For instance, an AI platform might detect grammatical difficulties in individual students during an English module and recommend specific reinforcement worksheets or targeted video tutorials. The teacher can then incorporate these resources into classroom activities to support a more equitable learning experience.

## Flipped Classroom Approaches Using AI

In a flipped classroom model, students explore theoretical content at home, reserving classroom time for practical, cooperative, and hands-on activities. AI can provide micro-content, interactive quizzes, and personalized learning sequences for students to complete independently, along with automatic feedback that prepares them for in-class application.

A practical example is the use of an AI assistant that guides students in analyzing an argumentative text prior to the lesson. During class, the teacher can focus on oral presentation and debate, already aware of potential misunderstandings flagged by the AI system.

## B. DESIGNING EFFECTIVE AI-POWERED LEARNING ACTIVITIES

Integrating artificial intelligence into instructional design means reimagining the teacher's role—not simply as a transmitter of content, but as a facilitator of personalized, dynamic, and meaningful learning experiences. AI can be leveraged to create student-centered activities aimed at developing complex skills and fostering active engagement.

### Aligning AI Tasks with Specific Learning Objectives and Outcomes

Every AI-supported activity should be designed based on clear curricular goals—not merely out of enthusiasm for new technologies. The use of AI is justified only when it serves the acquisition of specific skills and knowledge. For example, a task where a student uses an AI assistant to improve the coherence of an argumentative essay should be structured to strengthen revision and text cohesion skills—not to replace the writing process entirely.

Educators must define precisely what they want students to learn through the use of AI, and construct the task in such a way that learning outcomes can be assessed using transparent criteria.

### Moving Beyond Basic Drills: Fostering Higher-Order Thinking with AI

Although AI technologies are often used for basic drills (e.g., grammar, vocabulary, translation), their real potential lies in promoting critical thinking, reflection, and argumentation. Activities

such as comparing AI-generated responses, analyzing automated outputs, or evaluating their relevance can stimulate judgment, metacognitive awareness, and student autonomy.

For instance, a student might receive three possible endings for a narrative text from a chatbot and be asked to evaluate them based on stylistic coherence, narrative plausibility, and emotional impact—then justify their choice and propose an alternative version.

## C. MANAGING AI IN THE CLASSROOM

The integration of AI into everyday teaching practices requires not only technical and instructional design skills, but also strong pedagogical and relational management. It is essential to ensure that AI tools are used consciously, responsibly, and consistently—both to promote fairness in the learning process and to avoid dependency, automation bias, or distortions of the educational experience.

### Setting Clear Expectations and Guidelines for AI Use

For AI integration to be effective in the classroom, it is crucial to establish shared rules, usage limits, and clear pedagogical purposes from the outset. Students should know what they can and cannot do with AI tools, and understand that these tools are meant to support learning—not to replace personal effort and responsibility.

A class agreement or an ethical use charter can help formalize these principles. For example, using chatbots to brainstorm or rephrase ideas may be allowed during early drafting phases but not for final submissions. It is equally important to communicate transparently about the limitations of AI tools, such as inherent biases, potential errors, or lack of contextual understanding.

### Balancing AI-Driven Activities with Human Interaction and Collaboration

AI should not replace human interaction but rather complement it intelligently. Activities involving digital tools should be integrated with moments of dialogue, group work, metacognitive reflection, and teacher-student interaction. Without this balance, learning risks becoming overly individualized, isolating, or passive.



A good practice is to structure a learning task in three phases: first, an individual session with an AI tool (e.g., receiving suggestions for a writing topic); second, peer discussion in pairs or small groups; and third, a whole-class reflection led by the teacher. In this structure, AI serves as a catalyst for social and cognitive interaction—not a substitute for it.

### Monitoring Student Use and Providing Guidance

Students' independent use of AI tools must be accompanied by active pedagogical supervision. Teachers should not simply provide access to these tools, but also monitor their use, collect feedback, identify potential issues, and guide students toward critical and reflective usage.

Some AI platforms offer integrated monitoring features that track usage patterns, frequency of interaction, progress, or anomalies, however, human oversight remains essential, individual conferences, learning journals, or short oral or written reflections can provide valuable insights into the actual impact of AI on students' learning experiences.

### REFERENCES

- Baillifard, A., Gabella, M., Banta Lavenex, P., & Martarelli, C. S. (2023). Implementing learning principles with a personal AI tutor: A case study. arXiv. <https://arxiv.org/abs/2310.00154>
- Cornell University. (2023). Ethical AI for Teaching and Learning. Center for Teaching Innovation. <https://teaching.cornell.edu/teaching-resources/designing-your-course/ethical-ai-teaching-and-learning>
- Dwivedi, Y. K., Hughes, L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., ... & Wade, M. R. (2023). Ethical principles for artificial intelligence in education. *Education and Information Technologies*, 28, 4695–4716. <https://doi.org/10.1007/s10639-023-11530-z>
- Ghimire, A., & Edwards, J. (2024). From guidelines to governance: A study of AI policies in education. arXiv. <https://arxiv.org/abs/2401.00489>
- Murphy, R. F. (2019). Artificial Intelligence Applications to Support K-12 Teachers and Teaching: A Review of Promising Applications, Opportunities, and Challenges. RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RR3220.html](https://www.rand.org/pubs/research_reports/RR3220.html)
- Owoc, M. L., Sawicka, A., & Weichbroth, P. (2021). Artificial Intelligence technologies in education: Benefits, challenges and strategies of implementation. arXiv. <https://arxiv.org/abs/2109.03594>



SMU Learning Sciences. (2025, January 19). How to use AI in the classroom ethically and responsibly. Southern Methodist University. <https://blog.smu.edu/ai-in-classroom-ethically>

TeachAI. (2024). AI Guidance for Schools Toolkit. <https://teachai.org/toolkit>

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education*, 16(39). <https://doi.org/10.1186/s41239-019-0171-0>



# AI

### III. SELECTING, EVALUATING, AND MANAGING AI TOOLS

The nature of education has been changing lately and nowadays looks nothing like the traditional model. The reason behind this shift is Artificial Intelligence. All online tools have transformed the learning landscape for good. However, for educators this shift has caused them a few challenges. This topic of the Guide for Educators will provide a framework for selecting, evaluating, managing AI tools to ensure they are used in an effective, ethical way that enhances teaching and learning.

#### A. CRITERIA FOR CHOOSING EDUCATIONAL AI TOOLS

When thinking of which AI tool to select during the process of choosing educational AI tools, it is essential to evaluate the decision in a multifaceted way and consider specific criteria when making a decision. The criteria are as follows:

**Pedagogical soundness:** Alignment with learning principles.

It is essential to understand how technology fits in the learning objectives that are set for each case. Specifically, regarding the role of AI in education, it is to assist and improve the educational objectives. To achieve the above, it is crucial to take into account how AI could fit into existing and well-established pedagogical frameworks. Therefore, when trying to fit AI in education, the person in charge should always have in mind that this added tool has to support learners and provide them with personalized learning paths.

**Accuracy and Reliability of the AI.**

The level of accuracy and reliability of the AI tool that the educator will choose to fit into the educational framework they will be using is crucial since, in the case of false information, students' learning experience might be affected. In order to make sure that the chosen AI tool creates trustworthy learning results, the educator needs to evaluate the quality and integrity of the data that this specific AI tool is trained on. To achieve the above, the educator shall look for research or case studies to validate their claims for the tool's effectiveness.

**Ease of Use (for teachers and students).**

At this point it is important to keep in mind that the level of difficulty affects its use. When an AI tool is hard to use, both by teachers and by students, its usefulness is automatically reduced. In the case of using an AI tool, both educators and learners should be able to use it easily.

### **Data Privacy and Security Standards / Compliance.**

It is unacceptable to compromise the learners' data protection when choosing the AI tool the educator will use. Primarily, they should have in mind if the tool is verified to conform with data protection laws, especially GDPR. The chosen tool should use strong security mechanisms for encryption, data collection, data use, storage, etc.

### **Cost and Accessibility (Institutional licenses vs individual).**

An AI tool's potential value in terms of time saved and improved learning process shall never be evaluated against its cost. The educator shall always take into consideration various licensing arrangements of the existing tools and take into account that trial versions are offered for free to save as many resources as possible.

### **Integration Capabilities (with LMS, etc.).**

An educator, when selecting an AI tool to integrate into their topic, should always have in mind the user experience and how it can be enhanced and work with the flow through interaction with the existing school systems, like, for example, the Learning Management System. Hence, the educators should have in mind the question, "How well will this new AI tool be integrated into the current IT setup?"

## **B. EVALUATING AI TOOL EFFECTIVENESS IN YOUR CONTEXT**

Once the AI tool is implemented, it is required to continue its evaluation in order to test its impact on teaching and learning.

### **Methods for monitoring student engagement and performance with the tool.**

An AI tool in education does not only contribute to increasing the interactivity of the material, but also it contributes to tracking the engagement and the involvement of the learners at all points of the material. These tools have the ability to track the learners' interactions, the trends in their participation, and even, in some cases, the expressions on their faces. When having these inputs, it is easy to monitor learners' performance and also understand if the tool is working or not.

### **Strategies for gathering student feedback on AI tools.**

Receiving direct and honest feedback can be counter striking; however, it is crucial in all cases. Specifically in the AI tools' integration in learning, receiving feedback from learners is helpful. Through focus groups, interviews, and questionnaires, raw data can be gathered, and then during the analysis, these data can be managed by another AI tool that could help come to a conclusion. What is important is that all learners who will be sharing their feedback must be honest and critical.

### **Assessing alignment with specific course/institutional learning outcomes.**

It is crucial to understand that in order to keep track of the AI tool's success rate, it is required to assess the tool on a regular basis and track whether it is helping the learner or not. This assessment can also take place through grading students' performance when it comes to quality in relation to time management and the results when using the AI tool in comparison to others who are not using it.

## **C. CURATING A SCHOOL/DEPARTMENT AI TOOLKIT**

Promoting a unanimous list of authorized and suggested AI tools will lead to having a curated list of AI tools that are secure and trustworthy within an organization, school, etc.

### **Process for recommending and vetting tools.**

First of all, a clear and transparent procedure for assessing and recommending new AI tools must be created. This list shall be drafted with careful examination following the standards that were described earlier. What is more, educators must be involved in this procedure to make sure that these tools that are selected fit the demands of the learners.

### **Providing guidance and basic training on selected tools.**

All educators must have access to training on AI tools as a way to guarantee an ethical and efficient use of the selected AI tools. It would be beneficial if these kinds of AI tools that are related to real-world use in a classroom and the associated ethical issues could be covered in various professional development programs. There are only a few organizations providing low-cost or even free tools and training tailored to educators.



### Staying updated on new and improved tools.

In our world, artificial intelligence evolves quickly, and staying up to date is sometimes challenging, and it requires a lot of time and energy. However, all educators shall remain up to date as much as possible. Therefore, one good tactic that an educator can follow is to subscribe to international learning communities and follow reliable sources in educational technology. A well fitted example would be courses the European School Education Platform offers, specifically on teaching with AI, tools and techniques. At this point, it is essential to state that in order to maintain the level and the success rate of these AI tools that the educators will be using, they need to test them regularly and report any obstacle.



# AI



## IV. AI FOR SPECIFIC LANGUAGE SKILLS TEACHING

### A. TEACHING LISTENING SKILLS WITH AI

Listening comprehension is foundational to language learning. Advances in AI provide powerful opportunities to enrich, diversify, and individualize listening practice. Below we discuss how AI can help generate varied listening materials, leverage transcription tools, recommend tools for self-study, and provide practical tips for teachers.

#### Using AI for Generating Varied Listening Materials

AI can produce or adapt listening content along several dimensions:

- Accents and dialects: Generative audio or text-to-speech (TTS) systems now often allow selection of different dialects, regional accents, speech rates. This helps learners become accustomed to variation in pronunciation, intonation, rhythm.
- Speech speeds: AI tools can slow down or speed up audio, sometimes in a graded way (e.g., starting slow, then moving toward normal speed), to scaffold comprehension.
- Authentic vs simplified content: AI can generate scripted dialogues or narratives at learner levels (e.g., simplified vocabulary, syntax) as well as more authentic material (news reports, interviews), allowing scaffolding from easier to harder input.

#### Practical Tips for Educators:

1. When using TTS, choose voices that approximate native speakers and vary accents when possible; always check intelligibility for your learners.
2. Use AI-generated material to fill gaps where authentic recordings (with target accent or speed) are unavailable. Supplement with authentic input eventually.
3. Blend slower, scaffolded listening with faster “real-world” audio in each module to gradually raise comprehension comfort.

#### Leveraging AI Transcription Tools for Comprehension Activities

Transcription tools convert speech to text, automatically. They offer many pedagogical affordances:

- Annotation and gap-fill activities: Teachers can have learners listen once, then use the transcript to fill missing parts, identify misheard words, compare their hearing with transcript version.
- Shadowing & dictation: Learners can listen and try to write what they hear, then check against transcript; helps with phoneme discrimination and listening-for-sounds practice.

- Comprehension & vocabulary focus: Learners can identify unknown words in transcript, mark up discourse markers, features like reductions, linking, or weak forms, then listen again to detect them.

### Practical Tips for Educators:

1. Always review automatically generated transcripts carefully: AI transcriptions are improving fast but still make errors (especially with noisy audio, speaker overlap, non-standard accents). Correct obvious errors before using with learners.
2. Use transcripts as scaffolding: provide transcripts after one listening, or partial transcripts (with blanks or simplified) to encourage active listening.
3. Encourage learner reflection: ask what parts of the transcript they found hard, why (speed, accent, linking etc.), then focus next listening task on those features.

### Recommending AI Tools & Resources for Learner Self-Study

Below are tools and resources that learners can use independently for listening skill development. Teachers can recommend or integrate them in self-study plans.

Tool / Resource	What It Offers	How to Use It for Listening Skills
<b>Twee</b>	Teachers can create comprehension questions, transcripts, gap-fills from authentic videos (e.g. YouTube/TED) quickly via link.	Assign students YouTube video + transcript gap-fill using Twee; then discuss in class errors or misheard parts.
<b>Beelinguapp</b>	Provides bilingual texts + audio in "side-by-side reading / karaoke reading" format. Learners listen while following along with text, seeing translation.	Use for lower to mid-level learners to build comprehension and reading together; encourage listening for gist first, then listening again reading text.
<b>Yabla</b>	Interactive video content with dual captions, slower playback, vocabulary tools, cloze games embedded in videos.	Assign Yabla videos at home; in class, play at normal speed and then slowed; use its cloze games for comprehension checks.
<b>Xeropan</b>	Offers video-based interactive lessons with real-life videos, AI "speakbots" assisting in pronunciation and listening comprehension.	Use for self-study: learners can do the listening parts, see transcript or captions, then practice speaking via bots; teacher can monitor via classroom version.

### Practical Classroom Implementation Ideas

1. Listening Stations: Set up a module where students rotate through stations: one station uses AI-generated accent variation, another uses transcription and summarizing, another uses comprehension quiz based on video.
2. Blended Listening Homework: Assign learners two pieces: one from an AI-TTS-generated source (controlled vocabulary), one authentic (e.g. podcast, Yabla). In class compare experiences.
3. Peer-review with transcript: Students listen silently, write down what they heard, then compare in pairs using the transcript; discuss differences; teacher leads listening again focusing on problem areas.

## B. TEACHING SPEAKING & PRONUNCIATION WITH AI

### Introduction

The acquisition of language comprises numerous skills, such as reading, writing, listening, and speaking. Established teaching methods often find it difficult to accommodate the specific needs of learners, particularly in the cultivation of targeted skills. AI technologies offer innovative strategies to bridge these gaps, fostering personalized learning experiences that enhance language proficiency. By embedding AI tools within language education, teachers can support more efficient pronunciation analysis, low-stakes conversational practice utilizing chatbots and avatars, and stimulating role-playing and simulation tasks.

### Utilizing AI tools for pronunciation analysis and feedback

One of the most significant elements of language learning is the mastery of pronunciation, which can greatly impact communication effectiveness (Sun, 2023). AI-based tools, such as speech recognition software and pronunciation assessment applications, are specifically designed to assist learners in identifying and correcting their pronunciation errors. For example, Google's speech-to-text API and dedicated applications like Pronunciation Coach analyze learners' speech patterns, providing immediate feedback and suggestions for improvement. These tools employ sophisticated algorithms that assess pitch, tone, and phonetic accuracy, enabling learners to enhance their pronunciation in real-time.

Instructors can leverage these AI tools by integrating them into their lesson plans, allowing students to practice and evaluate their pronunciation autonomously. Additionally, incorporating such technology not only individualizes the learning experience but also instills confidence in students to practice without fear of judgment, thereby enhancing their overall language acquisition experience.

## Employing Chatbots and Avatars for low-stakes conversational practice

One more crucial contribution of artificial intelligence to language learning is the establishment of chatbots and avatars that enable low-stakes conversational practice. Tools such as Duolingo and ChatGPT harness natural language processing (NLP) to engage learners in dialogue, allowing them to practice their language skills in a vibrant yet low-pressure environment (Godwin-Jones, 2018). These AI-based platforms can simulate conversations with native speakers, providing learners with authentic context and immediate feedback, which traditional classroom experiences may not replicate.

The application of chatbots can enhance linguistic skills and boost students' confidence. They allow learners to engage and receive real-time corrections as they converse, encouraging ongoing dialogue practice without the stress of anxiety. This replicates the immersion effect, which is critical for language retention and fluency, enabling learners to build their conversational skills gradually (Zhao et al., 2018).

## Designing AI-Supported Role-Playing and Simulation Tasks

AI is a key player in role-playing and simulation tasks, which are essential for cultivating language skills in practical contexts. Language learners frequently find it difficult to apply their language skills in real-world situations, which is crucial for developing fluency and comprehension. AI platforms can create immersive environments where students engage in simulated role-playing tasks that replicate real-life scenarios, such as ordering food at a restaurant or making travel arrangements online.

These AI-enhanced simulations enable educators to design complex scenarios that accommodate different language proficiency levels. Through role play, learners practice their conversational skills, vocabulary usage, and contextual comprehension. Furthermore, instructors can create branching scenarios where learners make decisions and receive feedback based on their choices, thereby enhancing both engagement and learning outcomes (Kukulska-Hulme, 2020).

The incorporation of artificial intelligence (AI) tools in language education is revolutionizing the methods by which educators enhance learners' abilities.

AI-driven technologies—like pronunciation assessment, dialogue systems, and role-playing exercises—facilitate more tailored, engaging, and efficient language learning opportunities.

## References

Godwin-Jones, R. (2018). Chatbots and Conversational Agents in Language Learning. *Language Learning & Technology*, 22(3), 2-7.

Kukulska-Hulme, A. (2020). Mobile Language Learning: Current Developments and Future Directions. *Educators and Learners in a Mobile World*, 30(1), 14-26.

Sun, W. (2023). The impact of automatic speech recognition technology on second language pronunciation and speaking skills of EFL learners: a mixed methods investigation. In: *Frontiers in Psychology*.

Zhao, Y., Liu, Y., & Hsu, C. (2018). The Use of Chatbots in Education: A Review. *Interactive Learning Environments*, 26(6), 785-796

## C. TEACHING READING SKILLS WITH AI

Our approach focuses on providing practical, pedagogically sound strategies that are relevant to adult learners, who often have specific goals, limited time, and a wealth of life experience to draw upon. The structure below expands on the excellent starting points listed in the document.

### Introduction

The project approach to AI is considering the AI tools not as a replacement for deep reading, but as a powerful co-pilot for both educators and learners. For adult learners, AI can break down barriers like complex texts, limited time for study, and lack of immediate support, thereby fostering greater autonomy and confidence in their reading abilities.

This part provides a comprehensive, practical, and pedagogically sound input that equips educators with concrete strategies for leveraging AI to enhance adult reading skills effectively and responsibly.

### Scaffolding and Differentiating Reading Materials with AI

This expands on the idea of using AI to adapt text complexity and provide support.

- Pre-Reading Support:
- Vocabulary Activation: Use AI tools to scan a text and automatically generate a list of key vocabulary with definitions, example sentences, and even translations. This prepares the learner for the reading task.
- Background Knowledge Generation: For texts on unfamiliar topics, ask an AI assistant to produce a brief, easy-to-understand summary of the necessary background context or historical information.
- During-Reading Support:



- Text Simplification: Leverage AI-powered text simplification tools to create multiple versions of a single article (e.g., A2, B1, B2 levels). This allows a mixed-ability adult class to work with the same core content.
- In-Context Scaffolding: Encourage learners to use browser extensions or AI reading assistants that can provide instant definitions, synonyms, or explanations for difficult words or phrases just by highlighting them. Scaffolding enhances accessibility and inclusivity in literacy instruction, particularly for learners with limited vocabulary or background knowledge (Chiu et al., 2022). Tools like Google's Read Along or platforms such as Rewordify and ChatGPT can tailor texts to learner levels, fostering comprehension without oversimplification (Xie et al., 2023).

### Developing Active Reading and Critical Analysis Skills

This goes beyond simple comprehension and moves toward higher-order thinking skills, a crucial aspect of adult education.

- AI-Generated Comprehension and Analysis Questions:
- Prompt AI to create a variety of question types based on a text:
  - Factual Recall: "What were the three main reasons cited...?"
  - Inference: "What might the author's motivation be for writing this?"
  - Critical Thinking: "Critique the author's main argument. What evidence is weak or missing?"
- Educator's Role: Emphasize that the educator's expertise is vital for vetting, refining, and selecting the most relevant AI-generated questions to guide discussion.
- AI as a "Socratic" Dialogue Partner:
- Design activities where learners "debate" with an AI. They can paste a text into a large language model (LLM) and prompt it to "Act as a critic of this text and challenge its main arguments." The learner then has to defend their interpretation of the text, strengthening their analytical skills.
- Use AI to summarize a complex article, and then task the students with evaluating the AI's summary for accuracy, bias, or omissions. This teaches both summarization and critical evaluation skills.

Engaging with AI as a "thinking partner" can promote metacognitive awareness and deeper engagement with texts, enhancing critical reading abilities (Luckin et al., 2016). Studies have shown that learners who interact with AI-based Socratic dialogue systems demonstrate improved argumentation and evaluation skills (Yin et al., 2022).

## Employing AI Translation Tools for Deeper Pedagogical Insight

This reframes translation from a "cheat" to a powerful learning tool, as suggested in the initial outline.

- Comparative Analysis:
- Have learners translate a short, nuanced paragraph from the target language into their native language.
- Then, have them ask an AI to do the same translation.
- The core of the activity is the comparison: *Where did the translations differ? Why might the AI have chosen a different word or phrase?* This leads to rich discussions about connotation, idiom, and nuance.
- Exploring Idiomatic Language:
- When an idiomatic expression is encountered, learners can ask an AI to provide a literal translation, the actual meaning, and several alternative ways to express the same idea. This helps deconstruct figurative language.

AI translation tools such as DeepL or Google Translate can support contrastive analysis and raise learner awareness of lexical and syntactic differences, which are often overlooked in traditional classroom settings (Garcia & Pena, 2021). These tools are especially helpful for adult learners who are already fluent in their native language and benefit from comparative learning strategies (Tsai, 2022).

### Best Practices for Implementation in the Adult Learning Classroom

This subsection is crucial for ensuring that the strategies are effective and responsible.

- The Educator as a Facilitator: The teacher's role shifts from being the sole source of knowledge to being a designer of AI-powered learning experiences and a guide who helps learners make sense of AI outputs.
- Teaching Prompt Engineering: Dedicate a session to teaching adult learners how to ask AI for what they need. For example, show them the difference between "translate this" and "translate this paragraph for a B1 level learner of English and explain the key idioms."
- Focus on the Process, Not Just the Output: The goal is not just to get a "correct" answer from the AI, but to use the tool to engage more deeply with the text. The learning happens during the process of analysis, comparison, and evaluation.
- Ethical Considerations: Remind educators to guide discussions on when using an AI summarizer or translator is an effective learning strategy versus when it constitutes academic dishonesty. This aligns with the guide's focus on critical AI use.



Responsible implementation of AI in adult education requires digital literacy skills and ongoing guidance. Adult learners benefit when educators establish clear ethical boundaries around AI use and promote reflective learning practices (OECD, 2021). Moreover, teaching prompt engineering is aligned with current trends in AI literacy, which is increasingly recognized as a core 21st-century skill (Chan, 2023).

## References

- Chan, J. (2023). Prompt engineering in education: Teaching learners to collaborate with AI. Educational Technology Research and Development.
- Chiu, T.K.F., Lin, T.J., & Lee, M.H. (2022). Scaffolding with AI: Supporting reading comprehension in diverse classrooms. *Computers & Education*, 182, 104472.
- Garcia, I. & Pena, M.I. (2021). Machine translation and language learning: Challenges and opportunities for deeper learning. *Language Learning & Technology*, 25(3), 78–92.
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L.B. (2016). *Intelligence Unleashed: An argument for AI in Education*. Pearson Education.
- OECD (2021). *AI and the Future of Skills: Learning from AI Experts and Data*. OECD Publishing.
- Tsai, Y. (2022). Cross-linguistic comparison using AI tools in adult second language education. *TESOL Journal*, 13(2), e00602.
- Xie, H., Chu, H.C., Hwang, G.J., & Wang, C.Y. (2023). AI-based learning support systems in adult education: A systematic review. *Educational Technology & Society*, 26(1), 100–117.
- Yin, B., Hadwin, A.F., & Winne, P.H. (2022). Supporting metacognition in reading with AI-based dialogue systems. *Journal of Learning Analytics*, 9(2), 112–130.

## D. TEACHING WRITING SKILLS WITH AI

Harnessing AI in writing instruction doesn't merely automate text editing—it can help educators rethink writing pedagogy, shifting toward formative, iterative, and reflective learning processes. This section explores how AI tools can support writing development in three key ways:

### Using AI Writing Assistants for Formative Feedback on Grammar, Style, and Structure

AI tools such as Grammarly, ChatGPT, or automated writing evaluation platforms (e.g., eRevise) can offer real-time, personalized feedback on syntax, vocabulary, and textual structure, reducing workload for teachers and enabling frequent practice.

- These tools have been shown to approximate human feedback in clarity and consistency, especially in large classes where individual guidance is hard to deliver [Studies in Technology Enhanced Learning+2Keys to Literacy+2SpringerLink+2arXivSpringerOpen](#).
- Studies in EFL contexts demonstrate that Grammarly-like feedback increases revision frequency, writing fluency, cohesion, and learner confidence [SpringerLink](#).

### Teaching Students How to Interpret and Act on AI Writing Feedback

To foster critical engagement, students should be guided not merely to accept AI suggestions, but to interpret, evaluate, and decide whether—and how—to use them.

- Mixed-method research finds students often value both human and AI feedback: AI offers specificity and speed; human input provides context, encouragement, and dialogue [Wall Street Journal+15SpringerOpen+15Studies in Technology Enhanced Learning+15ScienceDirect](#).
- Experimental platforms like Scraft use AI to ask Socratic questions, prompting learners to think deeper rather than passively implement suggestions [arXiv](#).

### Designing Process-Writing Tasks Incorporating AI Tools

Effective writing instruction emphasizes iterative drafting, feedback, revision cycles, and reflection. AI tools can be integrated within this process rather than used solely as final-check mechanisms.

- Tools like eRevise provide formative guidance on how to use evidence in response-to-text writing, significantly improving draft revisions
- Combined analytics and human feedback interventions in reflective writing contexts show that AI-enhanced feedback increases engagement and performance, especially for learners with lower self-regulation skills

## E. TEACHING VOCABULARY & GRAMMAR WITH AI

The development of vocabulary and grammar knowledge is fundamental to language proficiency. Artificial Intelligence offers new methods to teach these core skills in ways that are more adaptive, engaging, and contextually relevant. When integrated thoughtfully, AI tools can

personalize instruction, provide richer examples, and sustain learner motivation through gamified approaches.

### **Leveraging Adaptive Platforms for Personalized Drills and Practice**

AI-powered adaptive learning platforms can dynamically adjust vocabulary and grammar tasks based on a learner's performance history. Systems such as Lingvist, Memrise, or Duolingo employ machine learning algorithms to identify strengths, weaknesses, and forgetting curves, then deliver targeted exercises at optimal intervals.

For vocabulary acquisition, this means prioritizing items the learner is at risk of forgetting (spaced repetition) while gradually introducing new terms at a manageable cognitive load. In grammar practice, adaptive platforms can pinpoint recurring errors — for example, misuse of verb aspects — and present targeted drills until mastery is achieved.

This approach aligns with the principles of form-focused instruction and interleaving, ensuring that learners receive the right challenge at the right time, while avoiding redundancy for mastered content.

### **Using AI to Generate Contextualized Examples and Exercises**

While traditional textbooks often present vocabulary and grammar in isolated sentences, AI tools can generate examples embedded in authentic, dynamic contexts. Large language models (LLMs) can create sentence banks, dialogues, or short reading passages that incorporate target vocabulary and structures in varied, meaningful ways.

For example, when teaching the present perfect tense, an AI could produce multiple contextually rich scenarios — from informal conversations to formal reports — illustrating nuanced usage. Similarly, for vocabulary, AI can generate thematic word sets accompanied by example sentences, collocations, and idiomatic expressions.

Importantly, educators should review and adapt AI-generated content to ensure cultural appropriateness, accuracy, and alignment with learners' goals. Used in this way, AI becomes a creative assistant for generating diverse materials that human teachers can refine.

### **Employing AI-Powered Gamification for Review and Retention**

Gamification — the application of game-like elements in learning — can increase engagement and long-term retention. AI-enhanced gamified platforms not only offer points, badges, and leaderboards, but also adapt the challenges to the learner's evolving skill profile.

For vocabulary, this might involve “boss battles” where learners must apply recently studied terms in varied contexts, or AI-generated quizzes that get progressively more difficult as the

learner improves. Grammar gamification can include interactive storytelling where learners choose the next step based on correctly formed sentences, or AI chatbots that simulate role-play scenarios requiring accurate grammar use.

Because AI can track learner performance in real time, gamified review sessions can be customized for optimal cognitive challenge — maintaining engagement without overwhelming the learner.

## Conclusion

AI-driven vocabulary and grammar instruction moves beyond static drills toward personalized, contextualized, and motivational learning experiences. By combining adaptive platforms, AI-generated contextual examples, and gamification, educators can better cater to diverse learner needs, promote sustained engagement, and improve retention. However, successful integration depends on pedagogical oversight: AI suggestions should be reviewed for linguistic accuracy, cultural appropriateness, and alignment with broader learning objectives.

## References

- Godwin-Jones, R. (2020). Emerging technologies: Using mobile devices for vocabulary learning. *Language Learning & Technology*, 24(2), 1–17.
- Lin, C.-H., Warschauer, M., & Blake, R. (2016). Language learning through social networks: Perceptions and reality. *Language Learning & Technology*, 20(1), 124–147.
- Nation, I. S. P. (2013). *Learning Vocabulary in Another Language* (2nd ed.). Cambridge University Press.
- Peters, E., & Webb, S. (2018). Incidental vocabulary acquisition through viewing L2 television and factors that affect learning. *Studies in Second Language Acquisition*, 40(3), 551–577.
- Sundqvist, P., & Sylvén, L. K. (2016). *Extramural English in Teaching and Learning*. Palgrave Macmillan.
- Vesselinov, R., & Grego, J. (2016). *The effectiveness of Duolingo: A study of language learning outcomes*. City University of New York.

## F. TEACHING PRAGMATICS & INTERCULTURAL COMPETENCE WITH AI: (EMPHASYS)

Teaching a language has been changing lately with the presence of AI in the process. In this section, an educator will get to understand how AI can be used in order to support the language teaching process, like, for example, intercultural competency and pragmatics, as well as how AI can be utilized successfully in the classroom.

Pragmatics is the study of how context shapes meaning, and intercultural competence is the capacity to speak across cultural boundaries. For the purposes of effective communication in the real world, pragmatics and intercultural competence are essential.

### **Simulated conversations:**

Chatbots and discussion systems that are driven by AI are able to produce a dynamic environment that will allow learners to cultivate their critical practical skills. These AI tools, by recreating real-life encounters, allow learners to practice their speaking and negotiation skills in a variety of different contexts. For example, a learner using a chatbot could practice their negotiation skills by simply interacting with it.

### **Creating Sociopragmatic Awareness:**

The well established ChatGPT, one of the Large language models (LLMs) has the ability of exposing a learner to specific social scenarios that call for a linguistic response. Sociopragmatic knowledge in other words is the comprehension of how language is employed in different social contexts. Through LLMs learners have the opportunity to examine and assess the appropriateness and civility of AI-generated responses. However, at this point it is important to state that AI – generated responses might occur biases in the data training of the AI which might cause the AI-generated language to lack pragmatic appropriateness.

### **Cultural Scenarios and Simulations:**

An AI tool has the ability to present a real-life cross-cultural situation to a learner within a safe and low risk learning environment in which the learners can practice their communication skills. More specifically, in this setting, a learner can understand better the cultural norms and the perspectives by putting themselves in various cultural situations using, for instance, VR simulations. These AI-driven solutions can help bridge the gap between theoretical understanding and real-world application.

### **Personalised Learning and Feedback:**

AI tools can determine what a learner's needs are, but also their learning preferences and cultural background, in order to offer activities and materials that are tailored to their needs and preferences in order to help them improve their intercultural communication skills.

## V. AI FOR ASSESSMENT AND FEEDBACK

The integration of Artificial Intelligence (AI) into language education has opened new possibilities for assessing learners' progress and providing timely, tailored feedback. When used effectively, AI can support both formative and summative assessment, as well as enhance the quality and efficiency of feedback delivery. However, its use requires pedagogical insight, critical evaluation of limitations, and thoughtful alignment with learning objectives.

### A. LEVERAGING AI FOR FORMATIVE ASSESSMENT

Formative assessment refers to ongoing checks of learner progress that inform teaching and help students self-regulate their learning. AI can play a central role in making formative assessment more immediate, data-rich, and adaptive.

#### **Using AI quizzes and drills for progress checks**

Modern AI-powered platforms can dynamically generate quizzes, vocabulary drills, and grammar exercises tailored to a learner's current level and recent performance. For example, adaptive spaced repetition systems like Duolingo's Smart Review or Quizlet's AI-generated flashcards adjust difficulty and content in real time. This enables teachers to monitor learner progress between classes without manually designing each exercise.

#### **Analyzing AI platform data to identify learner difficulties**

AI analytics tools can aggregate performance data across tasks to detect patterns of misunderstanding. For instance, a learning management system with AI integration might flag that a student consistently struggles with past tense forms or specific pronunciation patterns. Teachers can then design targeted interventions, such as short remedial modules or peer support activities.

#### **AI tools for providing instant feedback on practice activities**

Instant feedback is one of AI's strongest contributions to formative assessment. Tools like Grammarly for writing or ELSA Speak for pronunciation can highlight errors, suggest corrections, and offer model outputs within seconds. This reduces learner frustration, increases motivation, and allows students to engage in more practice within the same timeframe.

While AI can automate routine corrective feedback, teachers should still review results periodically to ensure that corrections are accurate, culturally appropriate, and aligned with the syllabus.

### B. AI IN SUMMATIVE ASSESSMENT

Summative assessment evaluates overall achievement at the end of a unit, term, or course. The role of AI in this space is growing, but it requires careful oversight to ensure fairness, validity, and reliability.



### **Possibilities and limitations of AI for grading**

AI grading systems can handle certain formats well, such as multiple-choice questions or short-answer responses with clearly defined correct answers. For essays, large language models (LLMs) can assess coherence, grammar, and vocabulary use, and speech recognition systems can evaluate pronunciation and fluency. However, subjective aspects — creativity, argument quality, pragmatic appropriateness — still require human judgment. Blind reliance on AI grading risks reinforcing biases present in training data.

### **Using AI plagiarism detection tools responsibly**

Tools like Turnitin, Copyleaks, or GPTZero can flag potential plagiarism, including AI-generated content. While these tools are valuable, they must be used with caution: false positives can occur, and overreliance can create a culture of mistrust. Best practice involves combining AI detection with teacher review, giving students the opportunity to explain or revise flagged work.

### **Designing assessments that measure skills beyond AI capabilities**

To prevent assessments from being gamed by AI tools, educators can design tasks that emphasize critical thinking, personal reflection, or collaborative problem-solving. For example, oral examinations requiring spontaneous responses to unpredictable prompts, or projects based on local experiences, are less likely to be completed successfully by AI alone.

## **C. PROVIDING EFFECTIVE FEEDBACK WITH AI SUPPORT**

Feedback is most impactful when it is timely, specific, and actionable. AI can support teachers by handling initial, lower-level analysis, freeing them to focus on deeper learning needs.

### **Using AI for initial error identification**

AI systems can efficiently detect grammar mistakes, mispronunciations, or structural weaknesses. For example, in a writing task, AI might highlight all subject-verb agreement errors, enabling the teacher to focus on thematic coherence and argumentation in their follow-up comments.

### **Teaching students to understand and utilize AI-generated feedback**

Many learners need explicit guidance to interpret AI feedback effectively. Without this, they may either accept AI suggestions uncritically or disregard them entirely. Educators should model how to evaluate AI feedback, cross-check corrections, and apply suggestions in new contexts.

### **Combining AI feedback with personalized teacher comments**

Research consistently shows that human feedback remains essential for learner motivation and deeper understanding. A balanced approach might involve AI handling the mechanical corrections, while the teacher adds comments on stylistic choices, cultural appropriateness, or

strategic learning tips. This “human-in-the-loop” model combines efficiency with pedagogical depth.

### Conclusion

AI has the potential to transform assessment and feedback in language learning by making them more adaptive, immediate, and data-informed. However, technology should complement — not replace — the expertise and empathy of educators. The most effective implementations blend AI’s capacity for rapid analysis with the human ability to interpret nuance, build trust, and inspire learners. For educators in adult education, this means embracing AI as a partner in the teaching process while remaining vigilant about its limitations and ethical implications.

### References

- Boud, D., & Molloy, E. (2013). *Feedback in Higher and Professional Education: Understanding it and doing it well*. Routledge.
- Ellis, R. (2009). A typology of written corrective feedback types. *ELT Journal*, 63(2), 97–107.
- Redecker, C., & Johannessen, Ø. (2013). Changing assessment—Towards a new assessment paradigm using ICT. *European Journal of Education*, 48(1), 79–96.
- Susnjak, T. (2022). ChatGPT: The End of Online Exam Integrity? arXiv preprint arXiv:2212.09292.
- Warschauer, M., & Liaw, M.-L. (2011). Emerging Technologies for Autonomous Language Learning. *Studies in Self-Access Learning Journal*, 2(3), 107–118.
- Winke, P., & Isbell, D. (2017). The use of automated scoring in the assessment of second language speaking. *Language Testing*, 34(4), 475–499.



## VI. ETHICAL CONSIDERATIONS, CHALLENGES & SOLUTIONS

Integrating AI into our classrooms is not just a technical challenge, but an ethical one. As educators of adults, we have a profound responsibility to protect our learners, ensure fairness, and model responsible digital citizenship. This section moves beyond identifying problems to offering concrete strategies and solutions. Viewing these ethical considerations not as barriers, but as guideposts for best practice, will allow us to leverage AI's potential safely and effectively.

### A. DATA PRIVACY AND SECURITY: UPHOLDING LEARNER TRUST

The foundation of a safe learning environment is trust. Adult learners, in particular, must be confident that their personal information and intellectual work are protected.

- **The Challenge:** Many AI tools are commercial products that collect user data. Without clear protocols, we risk exposing learner data and violating privacy norms like GDPR.
- **Solutions and Strategies:**
- **Practice Your Duty of Care:** Before adopting any tool, ask: "What data does this tool collect? Where is it stored? Who has access?" Prioritize tools with clear, simple privacy policies. Whenever possible, use institutionally licensed versions that offer greater data protection than free, personal accounts.
- **Establish Clear Classroom Protocols:**
  - Instruct learners to avoid using personal, identifying information in public-facing AI tools. Encourage the use of institutional email addresses or even pseudonyms where appropriate.
  - Create a simple "Data Safety Statement" in your syllabus that outlines which tools will be used and for what purpose. Transparency is key to building trust.
- **Choose Compliant and Vetted Tools:** Work with your institution to create a "recommended list" of AI tools that are vetted for GDPR compliance and data security. This saves individual educators time and reduces risk for everyone.

The European Commission emphasizes that AI tools used in education must align with the GDPR and promote "trustworthy AI" that is lawful, ethical, and robust (European Commission, 2021). Educators should also consider adopting the EDPS Guidelines on AI and Data Protection in Schools which suggest routine audits of tools and stronger digital rights education for learners (EDPS, 2022).



## B. BIAS, EQUITY, AND ACCESSIBILITY: ENSURING AI SERVES ALL LEARNERS

AI systems inherit biases from the data they are trained on. Our role is to be critical users who ensure these tools empower, rather than marginalize, our diverse adult learners.

- **The Challenge:** AI can perpetuate cultural, linguistic, or gender stereotypes. Furthermore, reliance on cutting-edge tools can create a digital divide, disadvantaging learners with less digital literacy or access to technology.
- **Solutions and Strategies:**
- **Turn Bias into a Teachable Moment:** Instead of just avoiding biased content, use it as a learning opportunity. Task learners with critiquing an AI's response. For example: "Ask the AI to generate an image of a 'successful leader.' Let's analyze the results together. Who is represented? Who is missing?"
- **Prioritize Accessibility:** Favour AI tools that are free, browser-based, and do not require high-end hardware. For activities requiring a specific tool, provide in-class time and support for learners who may lack access at home.
- **Actively Select and Adapt Tools for Diversity:** When choosing tools for language learning, check if they can handle a variety of accents in pronunciation practice or if they recognize diverse cultural contexts. Use AI to generate varied scenarios, but always apply your own expertise to filter out or adapt content that may be stereotypical.

Studies show that large language models tend to reflect dominant cultural norms unless explicitly trained for equity and inclusion (Bender et al., 2021). Accessibility should also be redefined to include not only physical access but cognitive access—offering multiple modes of input (text, voice, simplified text) for neurodiverse or less confident readers (UNESCO, 2023).

## C. ACADEMIC INTEGRITY & CRITICAL AI USE: REDEFINING ORIGINAL WORK

The fear that students will use AI to "cheat" is widespread. The most effective solution is not to ban these tools, but to teach a new, more sophisticated form of academic integrity.

- **The Challenge:** The line between using AI as a supportive tool and using it for plagiarism can be blurry.
- **Solutions and Strategies:**
- **Co-Create an AI Use Policy:** Begin the course by having an open discussion with your learners about AI. Collaboratively define what constitutes "acceptable use" (e.g., brainstorming, checking grammar, summarizing research) versus "unacceptable use" (e.g., submitting an AI-generated essay as one's own).



- Design "AI-Proof" Assignments: Shift assessment away from tasks that AI can easily complete. Focus on:
  - Personal Reflection: Tasks that require learners to connect course content to their own life or work experience.
  - In-Class Activities: Presentations, debates, and group work.
  - Process-Based Assessment: Grade the drafts, outlines, and a written reflection on how they used AI as a tool in their process.
- Teach Critical Evaluation of AI Output: Make "verifying AI output" a core competency. Design activities where learners must fact-check an AI-generated text, critique its arguments, or improve its writing. This builds higher-order thinking skills while promoting ethical use.

According to the Council of Europe's Digital Citizenship Education Framework, the key to responsible AI use lies in cultivating learners' critical digital competence—their ability to question, contextualize, and co-construct meaning with technology (Council of Europe, 2021). Embedding reflective practices around AI into the curriculum promotes both academic honesty and lifelong learning habits.

## D. ADDRESSING EDUCATOR CONCERNS & BARRIERS: SUPPORTING THE SUPPORTERS

For AI integration to be successful, educators themselves need support. Acknowledging and addressing the real-world barriers of time, training, and confidence is essential.

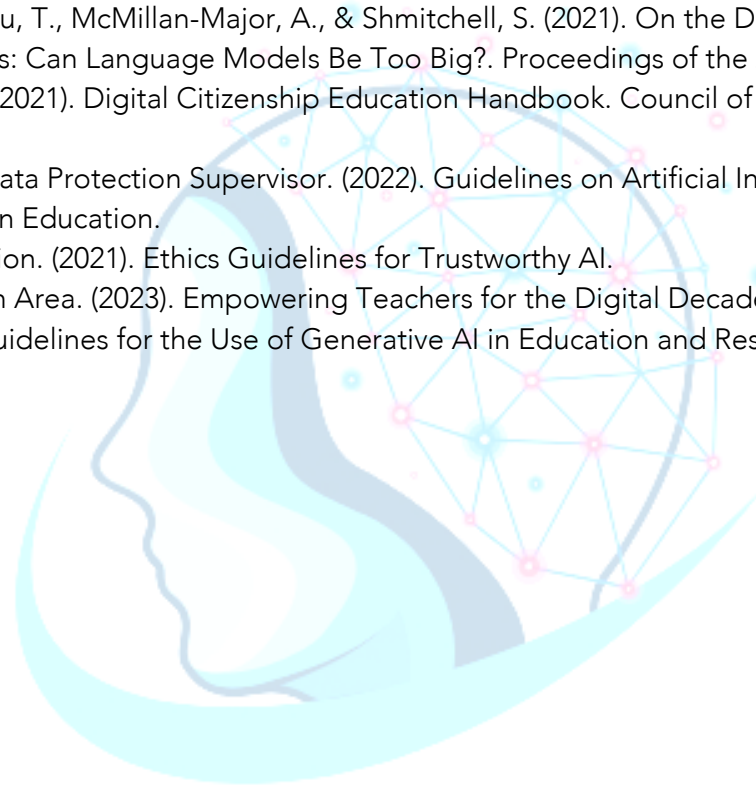
- The Challenge: Many educators feel overwhelmed, lacking the time to learn new technologies, the training to use them effectively, and the confidence to manage them in the classroom.
- Solutions and Strategies:
  - Start Small, Solve a Real Problem: Don't try to overhaul your entire curriculum at once. Identify one time-consuming task (e.g., creating grammar exercises, finding level-appropriate texts) and find one simple AI tool to help. Small wins build confidence.
  - Build a Community of Practice: You are not alone. Partner with a few colleagues to experiment with AI tools. Schedule regular, informal check-ins to share what's working, what's not, and to provide peer support. This is more effective than top-down, one-off training sessions.
  - Curate, Don't Hunt: The number of AI tools is overwhelming. Rely on trusted sources—professional organizations, educational technology journals, and institutional resource lists—to find reliable information and recommendations. Your energy is best spent on pedagogical integration, not endless searching.



Erasmus+ key actions encourage educator digital upskilling through peer networks, local communities of practice, and the inclusion of AI training in continuing professional development (CPD) frameworks (European Education Area, 2023). Investing in teacher confidence and fluency with AI ensures sustained, ethical integration rather than sporadic use or avoidance.

### References

- Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?. Proceedings of the 2021 ACM FAccT.
- Council of Europe. (2021). Digital Citizenship Education Handbook. Council of Europe Publishing.
- EDPS – European Data Protection Supervisor. (2022). Guidelines on Artificial Intelligence and Data Protection in Education.
- European Commission. (2021). Ethics Guidelines for Trustworthy AI.
- European Education Area. (2023). Empowering Teachers for the Digital Decade: Policy Paper.
- UNESCO. (2023). Guidelines for the Use of Generative AI in Education and Research.



# AI



## VII. DEVELOPING AI LITERACY & FUTURE-READINESS

The fast-paced growth of AI tools in the educational domain necessitates a prompt and proactive approach to cultivating AI literacy among both educators and students. As AI technology continues to develop, it is essential to formulate a framework for competence regarding its integration into the educational landscape. This essay explores the competencies required for educators and the crucial role of promoting AI literacy in students, thereby establishing a basis for future readiness in a world that is becoming more automated.

### A. ESSENTIAL AI COMPETENCIES FOR EDUCATORS

To navigate the complexities associated with AI in education, educators must first develop a solid understanding of AI's capabilities and limitations. This includes acknowledging not only the potential benefits of AI tools—such as personalized learning experiences and automated administrative tasks—but also the ethical considerations and biases that are embedded within these technologies. Luckin et al. (2016) assert that while AI can improve educational outcomes, a lack of awareness regarding its limitations may lead to the improper use of tools and a failure to address important ethical issues.

Beyond foundational knowledge, educators must also hone their skills in the selection, integration, and evaluation of AI tools from a pedagogical perspective. This competency involves identifying which technologies are genuinely beneficial for teaching and learning processes and assessing their compatibility with curricular goals. As noted by Peter et al. (2020), educators should practice reflection when integrating AI into their classrooms to ensure that these technologies enhance rather than detract from the educational experience. It is vital for educators to assist students in the effective and ethical application of AI. Educators play a mentoring role in navigating moral complexities, highlighting the importance of academic integrity, privacy concerns, and the potential societal impacts of AI technologies. The support provided by educators can empower students to utilize AI tools responsibly, creating an environment of trust and ethical awareness.

### B. CULTIVATING AI LITERACY IN STUDENTS

As society becomes more intertwined with AI technology, it is of utmost importance to cultivate AI literacy in students. This begins with explicit instruction on the functioning of AI tools. Understanding the mechanics behind AI not only reinforces technical skills but also fosters a sense of agency and adaptability among students. By comprehending how algorithms operate, students develop a foundation for engaging with AI critically (Yasuda, 2021).

Furthermore, instilling critical evaluation skills for AI-generated information is essential in an age where misinformation can proliferate rapidly. Students must learn to assess the credibility of sources, recognize biases in AI outputs, and develop strategies for distinguishing between

human-generated and AI-generated content. This critical lens prepares students to navigate a complex digital landscape effectively, fostering informed decision-making (Mouza et al., 2020).

Lastly, promoting responsible digital citizenship in the era of AI is crucial for creating a generation capable of navigating ethical complexities. This encompasses teaching students about digital rights, data privacy, and the ethical implications of AI in society. Encouraging responsible online behavior can empower students to become conscientious digital citizens, ultimately fostering a culture of respect and accountability in their interactions with technology (Ribble, 2015).

Developing AI literacy and future readiness requires a multifaceted approach centered on essential competencies for educators and students. By equipping educators with the necessary knowledge and skills to effectively integrate and evaluate AI technologies, and by fostering a culture of critical evaluation and responsible digital citizenship among students, we can prepare for an increasingly AI-driven future. The landscape of education is evolving, and our readiness to embrace these changes hinges on our commitment to cultivating AI literacy today.

### C. PREPARING FOR THE FUTURE OF AI IN EDUCATION

The rise of AI and its integration into the educational domain presents both considerable opportunities and challenges for educators. As the educational environment transforms with technological advancements, it has become imperative for educators to stay updated on emerging trends, modify their teaching practices, and engage in ongoing professional development to effectively prepare students for a future enhanced by AI.

A particularly transformative trend in educational technology is the adoption of virtual reality (VR) and augmented reality (AR). These immersive technologies can significantly enhance engagement and facilitate experiential learning that transcends traditional classroom boundaries. For example, VR can immerse students in historical events or scientific explorations, providing a level of engagement that static learning materials cannot offer (Dede, 2009). Simultaneously, AR can overlay digital information on real-world environments, aiding in complex subjects such as anatomy or engineering (Azuma, 1997). Educators must remain informed about these technologies, understanding their potential applications and limitations, to effectively integrate them into curricula.

In conjunction with VR and AR, advanced AI tutors are emerging as promising educational resources. These tools can provide personalized learning experiences, adapting to the individual needs and learning styles of students. Research has demonstrated that AI-powered platforms improve student outcomes by delivering tailored content, offering immediate feedback, and analyzing performance data to identify areas requiring further attention (Koh et al., 2018). As these technologies proliferate, educators will need to adapt their teaching



practices, moving away from a one-size-fits-all approach toward a more customized pedagogical framework that leverages the capabilities of AI.

To support this shift, educators must engage in ongoing professional development that emphasizes technology integration. Professional development programs should equip teachers with the knowledge and skills necessary to effectively utilize emerging technologies, including hands-on experience with VR/AR and AI tools. Furthermore, these programs should highlight critical thinking, problem-solving, and collaboration—skills essential for navigating a technologically advanced future (Darling-Hammond et al., 2017). Educators who are proficient in the latest educational technologies will be better prepared to foster a culture of innovation in their classrooms.

To conclude, educators must cultivate a mindset of lifelong learning. The rapid pace of technological advancement necessitates teachers continually seek out new knowledge and skills. Building collaborative networks with peers can facilitate the sharing of best practices and resources, leading to a more informed and adaptive teaching cohort (Trust & Horrocks, 2016). Educators can also participate in online courses, workshops, and conferences focused on emerging technologies to stay updated on the latest developments.

#### References:

- Azuma, R. (1997). A survey of augmented reality. *Presence: Teleoperators and Virtual Environments*, 6(4), 355-385.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute.
- Dede, C. (2009). Immersive Interfaces for Engagement and Learning. In *Proceedings of the IEEE*, 97(6), 1032-1040.
- Koh, J. H. L., Chai, C. S., & Lim, W. Y. (2018). The Role of Artificial Intelligence in Education: A Review. *International Journal of Information and Education Technology*, 8(5), 343-348.
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An Argument for AI in Education*. London: Pearson.
- Trust, T., & Horrocks, B. (2016). Professional Development for Technology Integration: A Study of Preservice Teachers' Experiences. *Journal of Digital Learning in Teacher Education*, 32(1), 16-27.
- Mouza, C., Nandakumar, R., & Tinker, R. (2020). Preparing Teachers for the Integration of Artificial Intelligence in Education: Key Competencies and Challenges. *International Journal of Artificial Intelligence in Education*, 30(1), 175-200.



Peter, T., Hu, J., & Evans, E. (2020). A Framework for Navigating the Ethical Maze of AI in Education. *Educational Technology Societies*, 25(3), 51-63.

Ribble, M. (2015). Digital Citizenship in Schools. *International Society for Technology in Education (ISTE)*.

Yasuda, T. (2021). Promoting AI Literacy in Education: Opportunities and Challenges. *Education and Information Technologies*, 26, 5751–5770.



# AI

## VIII. CASE STUDIES: AI IN ACTION

### A. CASE STUDY 1: USING AI CHATBOTS FOR CONVERSATIONAL PRACTICE IN A BEGINNER CLASS.

#### Summary / Research snapshot

Tai and Chen (2024) conducted a randomized, mixed-methods experiment with elementary-level EFL learners to evaluate whether daily practice with a generative AI chatbot (CoolE Bot) improves speaking outcomes compared with conventional classroom practice. Eighty-five elementary school students participated in a three-week summer program. Participants were randomly assigned to one of three conditions: (1) Individual interaction with the chatbot (I-Bot), (2) Paired interaction with the chatbot (P-Bot), or (3) No-bot control (conventional classroom speaking activities). All groups received topic prompts and teacher-designed worksheets to guide practice; chatbot groups used these prompts to interact with CoolE Bot for approximately 45 minutes per day. Data sources included pre-/post- speaking tests, quantitative scoring of oral performance, and semi-structured interviews with participants.

#### Key findings

- Both the I-Bot and P-Bot groups achieved significantly higher post-test speaking scores than the No-Bot group, with medium to large effect sizes reported for overall speaking ability.
- There were no statistically significant differences between individual and paired chatbot interaction modes — both configurations were effective.
- Qualitative interviews revealed learners appreciated the chatbot's human-like conversational style, varied topical prompts, low-stakes practice environment, and immediate, structured opportunities to speak; several learners reported reduced speaking anxiety and increased confidence.
- Teachers noted that the chatbot provided additional speaking opportunities that were difficult to replicate in the same quantity with classroom-only teacher-led practice.

#### Pedagogical implications for beginner (elementary) classes

1. AI chatbots can safely supplement classroom practice. For beginners who need high quantities of guided oral practice, chatbot interactions supply repeatable, non-judgemental turns that increase speaking time-on-task.
2. Both individual and small-group/paired formats work. Use either single-student chats (for focused fluency practice) or paired interactions (students jointly plan or negotiate a dialogue with the bot).



3. Design matters: Provide structured prompts and vocabulary scaffolds (worksheets or cue cards) to keep conversation within learners' ZPD; unstructured chatting risks frustration or off-topic exchanges.
4. Balance authenticity and error correction: Chatbots can model coherent, human-like turns, but teacher monitoring is essential to catch model errors, cultural/pragmatic mismatch, or unsuitable language.
5. Confidence & affect: Chatbot practice often reduces speaking anxiety; pair chatbot tasks with communicative classroom tasks so learners transfer confidence into real peer interaction.

### Practical classroom steps (ready to use)

Session design (one 45-minute daily session; 3 weeks suggested as in the study):

1. Warm-up (5 min): Activate topic vocabulary with flashcards or choral drill.
2. Scaffolded prompt & worksheet (5 min): Provide a one-page worksheet listing target phrases, example questions, and 6 conversation prompts.
3. Chatbot interaction (individual or paired) (25–30 min):
  - Individual: student logs into the bot and completes 3–4 prompt cycles (ask, respond, follow-up).
  - Paired: two students plan a short interview and take turns asking the bot questions and reporting answers.
4. Reflection & teacher check (5–10 min): Students note one phrase they learned, one pronunciation difficulty, and one follow-up question for class discussion. Teacher picks 2-3 students to model a corrected version.
5. Exit task (homework): Short recorded 1-minute retell or role-play using vocabulary; optionally upload audio to LMS for teacher quick checks.

### Assessment ideas:

- Pre/post oral rubric (0–4 scale) on pronunciation intelligibility, lexical range for topic, grammatical accuracy, fluency/pausing, and communicative completeness.
- Speaking log: students record minutes of chatbot practice and self-rate confidence (1–5).
- Qualitative check: one short post-treatment interview or learner reflection on anxiety/confidence.

### Practical tips & cautions

- Preview and vet chatbot output. Run sample prompts yourself to check for unsuitable phrasing, factual errors or cultural mismatches.



- Control topics and vocabulary. For beginners, constrain the chatbot to a set of topics and provide turn-taking frames (e.g., “Ask three ‘Where’ questions about places”). Prompt-engineering templates help keep the bot on task.
- Train learners in prompts & interaction routines. Teach how to ask clarifying questions, ask for repetition, and request slower speech or simpler vocabulary.
- Privacy & data protection. Ensure compliance with school policy; avoid collecting or storing unnecessary learner data in external chatbots.
- Combine with human feedback. Use in-class minutes to focus on features (pronunciation, pragmatic choices) that the bot cannot fully address.

#### Replication checklist (materials & minimal tech)

- Chatbot access: account for the chosen bot (CoolE Bot in the study; other options: Tutoring-style bots, school-deployed LLM agents, or custom EduBots).
- Worksheets: 1-page conversational prompts with 8–10 guiding questions and target vocabulary.
- Recording device: smartphone or school tablet for short speaking assessments.
- Rubrics: pre/post speaking rubric and scoring sheet.
- Time: 25–45 minutes per session for 2–3 weeks for measurable gains (the study used daily 45-minute sessions over three weeks).

#### Reference:

Tai, T.-Y., & Chen, H.-J. (2024). Improving elementary EFL speaking skills with generative AI chatbots: Exploring individual and paired interactions. *Computers & Education*, Article 105112. <https://doi.org/10.1016/j.compedu.2024.105112>.

## B. CASE STUDY 2: LEVERAGING AI WRITING ASSISTANTS FOR FEEDBACK IN AN ACADEMIC WRITING COURSE.

More and more AI powered writing tools nowadays help learners by providing them with constructive feedback on their academic writing tasks. The following case study explores how these AI powered tools can be effectively integrated into a writing course.

### Enhancing writing quality and efficiency

Research has shown that AI tools can increase the effectiveness and the performance of a learner regarding their writing tasks, especially those who struggle with English. Through multiple AI-powered tools, learners nowadays have the opportunity to edit their writing thanks



to the power of AI tools to provide real-time feedback on grammar, syntax, and writing style before submitting any written task.

### **Fostering critical thinking**

The so-called “iterative revision” with an AI-powered tool can be succeeded by educators helping learners incorporate feedback into their writing process. In such a case, a learner might be asked to submit first a draft of their writing work, then they will receive feedback from the AI-powered tool, they will have to edit the first draft and incorporate the feedback, and only then could they have their work peer-reviewed. This approach is excellent at assisting learners to develop their critical thinking skills as they are choosing which recommendation to take into consideration.

### **Providing personalised feedback**

It has been proven that sometimes AI-powered tools can offer more personalized and constructive feedback to learners than an educator, especially in big courses. What is more, it has also been proven that AI tools are in charge of the improvement in writing areas, the organization, and content creation in a few cases.

### **Addressing ethical considerations**

In general, AI’s use has awakened ethical dilemmas in regard to ethical questions about plagiarism and academic integrity. At this point, it is essential that educators provide detailed instructions about how these AI tools should be used. What is more, it would be beneficial to have thorough conversations with the learners about all ethical considerations regarding the use of AI.

### **The importance of human engagement**

Although AI-powered tools can be useful, they cannot work as a complete replacement of a human. Meaning that the most effective approach is to blend AI-generated feedback with traditional teaching methods and peer review. A perfect example could be the Sequential approach. Through this approach, students firstly receive AI feedback on their initial draft. Then they apply the received feedback, and only then they proceed with the peer reviewing process. It is essential that learners are taught to use AI tools in a critical manner and understand their limitations and biases before using them.

## C. CASE STUDY 3: IMPLEMENTING AN AI-POWERED PLATFORM FOR PERSONALIZED GRAMMAR DRILLS.

### Improving grammar accuracy through adaptive learning

In this case study, we examine the implementation of an AI-powered platform—GrammarBoost AI—in a blended learning environment aimed at adult learners of English at A2–B1 levels. The goal was to offer tailored grammar exercises that adapt in real time to the learner’s performance, ensuring a gradual progression in difficulty and targeting specific areas of improvement.

The AI system used diagnostic pre-tests to identify gaps in the learner’s grammar knowledge (e.g., verb tenses, conditional forms, article usage), and then generated exercises accordingly. Students received instant feedback, including short explanations and links to micro-lessons.

Preliminary observations showed measurable improvements in grammar accuracy within six weeks of regular use, especially among learners with previously fossilized errors. Students reported a higher sense of agency and motivation due to the personalised pacing and goal-tracking features.

### Supporting learner autonomy and engagement

A key pedagogical benefit observed was the shift toward more autonomous learning. With the AI platform available both in and outside class hours, learners began to take more responsibility for their own progress, choosing when and how long to train specific grammar topics.

The platform’s gamified elements (badges, streak counters, progress maps) further sustained motivation, particularly among younger adult learners. Teachers integrated the platform into weekly lesson plans, using analytics dashboards to review class-wide trends and inform subsequent instruction.

### Blending AI with teacher-led scaffolding

To avoid the risk of over-reliance on automated correction, the implementation strategy included weekly “reflection tasks” in which learners analyzed the AI-generated feedback and discussed it with peers or the teacher. For instance, after a set of exercises on passive forms, learners were asked to write a short paragraph using the target structure and submit it for human feedback, comparing it with the AI suggestions.

This blended model preserved the role of the educator as a mediator of understanding, while the AI took care of immediate correction and personalization.

### Addressing limitations and ethical concerns

The pilot phase also highlighted some limitations. The AI sometimes over-corrected stylistic choices that were grammatically acceptable but less frequent. In other instances, platform suggestions lacked nuance or contextual awareness (e.g., differences between formal and informal registers).

Moreover, a dedicated session was organized at the beginning of the course to discuss ethical use of AI tools: learners were informed about data collection practices, the importance of critical thinking when accepting corrections, and the non-substitutive role of technology in the writing process.

### Conclusion

Overall, the integration of an AI-powered grammar platform proved to be a valuable complement to traditional instruction. The most effective outcomes were observed in contexts where teachers framed AI not as a shortcut, but as a training partner in a larger learning ecosystem. Future iterations of the project aim to integrate writing, listening and pronunciation features within the same adaptive system, offering a more holistic skill-development experience.

### References

- Baillifard, A., Gabella, M., Banta Lavenex, P., & Martarelli, C. S. (2023). Implementing learning principles with a personal AI tutor: A case study. arXiv. <https://arxiv.org/abs/2310.00154>
- Baten, K., & Håkansson, G. (2015). Developmental sequences in second language acquisition. *Language Learning*, 65(S1), 123–152. <https://doi.org/10.1111/lang.12105>
- Chu Hui Youn, C. H., Abdul Rahim Salam, A. R., & Rahman, A. A. (2025). AI-Driven Tools in Providing Feedback on Students' Writing: A systematic review. *International Journal of Research and Innovation in Social Science*, IX(III), 58–70. <https://dx.doi.org/10.47772/IJRISS.2025.903SEDU0006>
- Cornell University. (2023). Ethical AI for Teaching and Learning. Center for Teaching Innovation. <https://teaching.cornell.edu/teaching-resources/designing-your-course/ethical-ai-teaching-and-learning>

- Dwivedi, Y. K., Hughes, L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., ... & Wade, M. R. (2023). Ethical principles for artificial intelligence in education. *Education and Information Technologies*, 28, 4695–4716. <https://doi.org/10.1007/s10639-023-11530-z>
- Ebadi, S., & Bashir, S. (2021). The role of AI-based grammar checkers in L2 writing: Accuracy and learner perceptions. *Journal of Educational Technology & Society*, 24(1), 102–114. <https://www.jstor.org/stable/26914187>
- Ghimire, A., & Edwards, J. (2024). From guidelines to governance: A study of AI policies in education. arXiv. <https://arxiv.org/abs/2401.00489>
- Graham, S., et al. (2023). The potential of AI feedback to improve student writing. *FutureEd*. <https://www.future-ed.org>
- Hockly, N. (2019). Focus on the learner: Personalization and artificial intelligence. *Modern English Teacher*, 28(1), 54–57.
- Kim, T. W., & Tan, Q. (2023). Repurposing text-generating AI into a thought-provoking writing tutor. arXiv. <https://arxiv.org/abs/2304.10543>
- Kukulska-Hulme, A. (2020). Learning grammars with adaptive mobile tools. In M. Thomas (Ed.), *Technology-enhanced language learning for specialized domains* (pp. 151–170). Routledge.
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An Argument for AI in Education*. Pearson Education. <https://doi.org/10.13140/RG.2.2.16217.93287>
- Mekheimer, M. (2025). Generative AI-assisted feedback and EFL writing: A study on proficiency, revision frequency and writing quality. *Language Learning & Technology Journal*. <https://doi.org/10.1007/s44217-025-00602-7>
- Murphy, R. F. (2019). *Artificial Intelligence Applications to Support K-12 Teachers and Teaching: A Review of Promising Applications, Opportunities, and Challenges*. RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RR3220.html](https://www.rand.org/pubs/research_reports/RR3220.html)
- Owoc, M. L., Sawicka, A., & Weichbroth, P. (2021). Artificial Intelligence technologies in education: Benefits, challenges and strategies of implementation. arXiv. <https://arxiv.org/abs/2109.03594>
- Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.
- SMU Learning Sciences. (2025, January 19). How to use AI in the classroom ethically and responsibly. Southern Methodist University. <https://blog.smu.edu/ai-in-classroom-ethically>

Suraworachet, W., Zhou, Q., & Cukurova, M. (2022). Impact of combining human and analytics feedback on student engagement and performance in reflective writing tasks.

arXiv. <https://arxiv.org/abs/2211.08222>

TeachAI. (2024). AI Guidance for Schools Toolkit. <https://teachai.org/toolkit>

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education*, 16(39). <https://doi.org/10.1186/s41239-019-0171-0>

Zheldibayeva, R., Nascimento, A. K. O., Castro, V., Kalantzis, M., & Cope, B. (2025). The Impact of AI-Driven Tools on Student Writing Development: A case study from the CGScholar AI helper project. arXiv. <https://arxiv.org/abs/2501.08473>

Zhang, H., Magooda, A., Litman, D., Correnti, R., Wang, E., Matsumura, L. C., Howe, E., & Quintana, R. (2019). eRevise: Using natural language processing to provide formative feedback on text-evidence usage. arXiv. <https://arxiv.org/abs/1908.01992>

## D. CASE STUDY 4: USING AI FOR PRONUNCIATION FEEDBACK WITH INTERMEDIATE LEARNERS.

### Introduction

This study explores the effectiveness of two ASR-equipped language learning websites—I Love Indonesia (ILI) and NovoLearning (NOVO)—in improving Indonesian students' English vocabulary and pronunciation. It responds to the challenges in traditional EFL classrooms in Indonesia, where speaking skills often receive little emphasis. Students frequently lack vocabulary and struggle with pronunciation, due in part to limited feedback and few speaking opportunities.

### Challenges

The research was driven by multiple barriers to effective speaking instruction in Indonesian EFL contexts. These include teacher-centered methods, large class sizes, limited student participation, grammar-focused textbooks, and minimal classroom time for speaking. Outside class, students also lack access to speaking partners.

Indonesian learners face specific pronunciation difficulties stemming from differences in the phonology of Indonesian and English. These include mismatched spelling-pronunciation patterns, unfamiliar vowel and consonant sounds, and absence of features like stress and vowel length in Indonesian.

## Methodology

A quasi-experimental study was conducted with 232 first-year vocational high school students (222 male, 10 female) in Indonesia, aged 14–17. The students were divided into three groups: Group A (ILI users), Group B (NOVO users), and a control group receiving regular instruction.

Vocabulary was assessed using a three-part test covering 40 English words from the narrative Malin Kundang. Part 1 tested receptive multiple-choice knowledge, Part 2 used word-translation matching, and Part 3 involved productive gap-filling. Pronunciation was assessed through pre- and post-test recordings from a subset of 24 students, analyzed both by expert raters and the Automated Phonetic Transcription Comparison Tool (APTct).

The two-week intervention totaled six hours and used five main ASR activities: i-watch (video), i-read (text + images), i-hear (listening), i-pronounce (pronunciation practice), and i-speak (extended speaking). ILI provided basic feedback ("excellent"/"try again"), while NOVO gave detailed phonetic guidance.

## Results

Both ASR platforms led to significant gains in receptive vocabulary compared to the control group, with no notable differences between ILI and NOVO. However, productive vocabulary gains were minimal across all groups, suggesting the need for longer or more intensive interventions.

In pronunciation, ASR users showed significant improvement, while the control group did not. Expert ratings and APTct data both confirmed this, with a strong correlation (-0.778) between the two methods. Specific improvements were noted in challenging words like hijack and ragged, though some vowel and final-sound issues remained.

Students responded positively to the ASR tools, expressing pride in their pronunciation achievements. Teachers also endorsed the tools, though technical issues such as recognition errors were reported.

## Conclusion

ASR-equipped websites significantly improved students' receptive vocabulary and pronunciation, making them a promising tool in overcoming limitations of traditional Indonesian EFL instruction. Immediate, automated feedback—regardless of complexity—appears key to these improvements.

ASR fosters a low-pressure environment for speaking practice, addressing cultural reluctance to speak in class. However, such tools should supplement, not replace, teacher-led instruction. Cultural relevance, as seen through the use of Malin Kundang, also enhanced student engagement.



Future research should involve more balanced samples, longer interventions, and integration of peer feedback. Developing pronunciation assessment tools tailored to learner intelligibility could also help. Overall, the study highlights the potential of culturally contextualized ASR systems to support vocabulary and pronunciation development in EFL learners.

**Reference:**

Bashori, M., van Hout, R., Strik, H., & Cucchiarini, C. (2022). 'Look, I can speak correctly': learning vocabulary and pronunciation through websites equipped with automatic speech recognition technology. *Computer Assisted Language Learning*, 37(5–6), 1335–1363

## E. CASE STUDY 5: EMPLOYING AI TOOLS FOR VOCABULARY BUILDING AND REVIEW.

### Introduction

This case study explores the outcomes of AI-supported vocabulary learning technologies, as synthesized in a recent systematic review focused on K-12 education, with several studies originating in European contexts. The aim is to illustrate how AI can enhance vocabulary acquisition through immersive and adaptive platforms, thereby offering insights transferable to adult education settings.

### Context

Published in March 2025, the systematic review examined 30 empirical studies conducted between 2015 and 2023 on AI-supported L2 vocabulary acquisition, with a considerable portion of research emerging from European educational environments. These studies highlighted growing interest in AI solutions—such as intelligent tutoring systems and augmented or virtual reality tools—that target vocabulary learning through engaging, interactively rich experiences.

### The Challenge

Learners often face substantial challenges in memorizing and retaining extensive vocabulary in a second language. Traditional methods, including rote memorization and static drills, frequently result in low motivation and poor long-term retention. Educators thus struggle to find strategies that make vocabulary learning effective, engaging, and sustainable, especially in immersive and multilingual European educational settings.



## AI Tool & Strategy

The AI tools reviewed fell primarily into two broad categories. First, Intelligent Tutors—adaptive systems that personalize learning content, monitor progress, and adjust exercises accordingly. Second, Immersive Technologies—AR and VR environments that contextualize vocabulary in real-world scenes, offering multisensory engagement to enhance memorability. This dual approach combines cognitive personalization with contextual immersion to boost learning outcomes.

## Implementation Process

In the respective studies summarized, implementation followed a pattern of introducing AI-based systems into classroom instruction. Educators selected target word sets appropriate for learners' proficiency. Students interacted with adaptive tools that presented vocabulary through quizzes and personalized review schedules, while immersive tools enabled them to engage with words within realistic digital environments. Learning gains were measured through pre- and post-tests, retention drills, and engagement metrics.

## Results

Across the reviewed studies, AI-supported approaches consistently outperformed traditional vocabulary learning methods. The pooled effect size for retention gains across diverse contexts was a solid Cohen's  $d$  of 0.61 (95% CI: 0.52–0.70), indicating a moderate to strong positive effect. Immersive tools such as AR flashcards and VR scenarios were especially effective: they enhanced motivation, promoted long-term memory, and reduced cognitive overload through rich sensory input and context-driven learning.

## Conclusion

This case study affirms that AI-enhanced vocabulary instruction—via adaptive intelligent tutoring systems and immersive AR/VR environments—can significantly improve both retention and learner engagement compared to traditional methods. For adult education, particularly in European projects, the implications are clear: integrating AI technologies that personalize content and contextualize learning can make vocabulary acquisition more effective, motivating, and sustainable. Educators should consider blending these AI tools into their courses but remain mindful of pedagogical alignment and accessibility to ensure equitable impact.

## References

Yang, Y. (2025). AI-supported L2 vocabulary acquisition—a systematic review from 2015 to 2023. *Education and Information Technologies*.



## F. CASE STUDY 6: INTEGRATING AI CONTENT GENERATION FOR LESSON PLANNING EFFICIENCY.

### Leveraging Generative AI to Optimize Business English Lesson Planning

#### Introduction

This case study examines the integration of generative artificial intelligence (AI) into the lesson planning practices of an English as a Foreign Language (EFL) educator. It highlights how AI can reduce planning time, increase lesson relevance, and boost learner engagement in adult education contexts.

- **Context:** This case study follows Anna, an educator teaching a "Business English" course to a group of adult learners at a B1 proficiency level. Her class is diverse, with students from various professional fields, including marketing, IT, and human resources.
- **The Challenge:** Anna's primary challenge was the significant amount of time required for lesson planning. To keep learners engaged, she aimed to use materials and scenarios that were relevant to their different professional lives. Sourcing and adapting texts, creating level-appropriate exercises, and designing varied activities for each lesson often took her 60-90 minutes of preparation time, which was unsustainable.
- **AI Tool & Strategy:** Frustrated with the time drain, Anna decided to pilot a new strategy: using a generative AI tool (in this case, a large language model like Gemini) as a "Lesson Planning Assistant." Her goal was not to automate her job but to delegate the most time-consuming content creation tasks, allowing her to focus on refining the materials and facilitating the class.
- **Implementation Process:** For a lesson on "Effective Cross-Cultural Communication in the Workplace," Anna followed a three-step process:
  1. **Content Generation:** She prompted the AI: "Generate a 250-word text for B1-level English learners about three common challenges in cross-cultural business communication. Include examples for each challenge."
  2. **Activity Creation:** She then used the AI-generated text as a foundation for her next prompts: "Based on the text above, create 1) five comprehension questions, 2) a vocabulary matching exercise with key terms, and 3) a role-playing scenario where an IT project manager from Poland needs to resolve a misunderstanding with a client from Japan via video call."
  3. **Expert Review and Refinement:** Anna reviewed all the generated content. She rephrased two questions to be clearer, replaced one vocabulary term with a more relevant synonym, and added a specific detail to the role-play to make it more authentic. This "human-in-the-loop" approach took about 15 minutes but ensured the quality and pedagogical soundness of the materials.

This “human-in-the-loop” model echoes best practices suggested in emerging AI-pedagogy literature, emphasizing the synergy of automation with educator expertise (Luckin et al., 2016).

### Results (Observed Outcomes)

The results of this pilot were immediate and significant:

- **Drastic Time Reduction:** Anna reduced her preparation time for this lesson from over an hour to approximately 25 minutes. The majority of the time was spent on the high-value task of refinement, not the tedious task of creation.
- **Enhanced Relevance and Differentiation:** The AI made it easy to create highly relevant and varied content. For the next lesson, she could simply ask the AI to adapt the role-play for "a marketing manager and a client from the USA," allowing her to differentiate content for her learners with minimal extra effort.
- **Improved Learner Engagement:** Learners responded very positively. They found the custom-made reading texts and, in particular, the tailored role-playing scenarios to be more engaging and directly applicable to their professional lives than generic textbook examples.

### Conclusion (Reflections & Lessons Learned)

This case study demonstrates that integrating AI into lesson planning can be a powerful strategy for improving efficiency and enhancing the quality of instruction opportunity for pedagogical improvement (Kukulska-Hulme, 2021).

Anna's key reflections were:

- **AI is a Lever, Not a Crutch:** The value of the AI was not in replacing her, but in augmenting her skills. It handled the heavy lifting of content creation, freeing her to use her professional expertise for curation, refinement, and focusing on the learners themselves.
- **Prompting is a Professional Skill:** Anna realized that learning to write clear, specific prompts is a key competency for the modern educator. A well-crafted prompt yields high-quality, relevant content that requires minimal editing.
- **Focus Shifts to Higher-Value Work:** By delegating routine tasks, Anna could invest her limited time in more impactful areas, such as providing individual feedback, observing student interaction, and thinking more creatively about her overall course design. This experiment successfully turned a barrier (lack of time) into an opportunity for pedagogical improvement



## References

- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
- Kukulska-Hulme, A. (2021). Will mobile learning change language learning? Re-framing language learning through the lens of mobile-assisted learning. *ReCALL*, 33(3), 229–242. <https://doi.org/10.1017/S0958344021000110>



# AI



## CONCLUSION

### EMBRACING AI AS A PARTNER IN LANGUAGE EDUCATION

Artificial intelligence is not a passing trend—it is an integral part of the future of education. For language teachers, the key lies in using AI responsibly and purposefully: as a support for personalization, feedback, and innovation, while ensuring that human expertise and empathy remain at the heart of learning.

### NEXT STEPS FOR YOUR PROFESSIONAL JOURNEY

As you continue your professional journey, consider starting small: experiment with one AI tool that addresses a real challenge in your teaching, gather feedback from your learners, and refine your approach. Build on this gradually, aligning each tool with your pedagogical goals. Remember, successful integration comes not from replacing proven practices but from enhancing them with new possibilities.

### FURTHER RESOURCES AND COMMUNITIES FOR EDUCATORS

The landscape of AI in language education is evolving quickly, and staying informed is essential. Engage with professional communities such as the British Council Teaching English network, EU Erasmus+ teacher forums, or special interest groups in TESOL and IATEFL. Explore the resources listed at the end of each section in this guide and take advantage of ongoing webinars, toolkits, and case studies. By connecting with colleagues globally, you can share experiences, troubleshoot challenges, and shape the responsible use of AI in education together.

Ultimately, the promise of AI is best realized when educators take the lead—bringing creativity, criticality, and care to the forefront of AI-enhanced language learning.