

AI-Supported Translation and Multilingual Learning Support for Linguistic Inclusion

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Learning objective

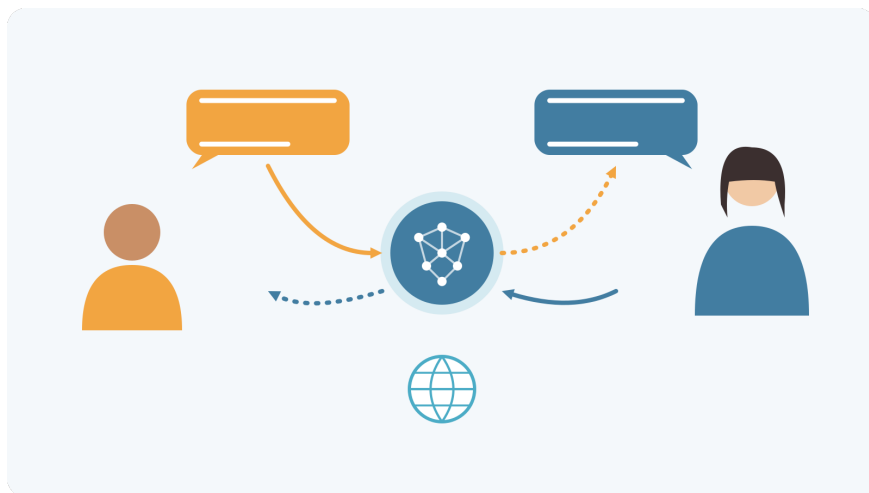
In many schools, learners with different first languages learn together – young people with refugee backgrounds, learners from minority language communities, or adults who are retraining in a new country. Not speaking the language well doesn't prevent someone from being an excellent professional, but the language gap can still be a serious barrier to integration.

The learning content explores how artificial intelligence can help overcome language barriers. By the end of the learning, teachers will be able to use AI tools to support real-time translation, simplify explanations, facilitate multilingual learning, and develop vocabulary. They will also understand the limitations of these tools and critically review their outputs for potential mistranslations and inaccuracies in subject-specific content.

Introduction: understanding first, language along the way

A student may know a great deal about engines, cooking, or electrical circuits, yet still struggle to follow the teacher's explanations if they do not fully understand the language of instruction. Since AI tools can be a great help in acquiring technical terminology, it is worth placing the emphasis on this in the early stages of teaching. A solid command of technical language will also help students express themselves with growing confidence and nuance in everyday language.

Tools for translation and multilingual support



AI can mediate a conversation between people who do not share a language

Text translation

DeepL, Google Translate and general AI assistants translate worksheets, instructions and messages. AI assistants can also explain, rephrase and answer questions about the text in the learner's language.

Camera translation

Pointing the camera at a sign, a label or a page of a manual shows the translation on the screen (e.g. Google Translate or Google Lens).



Translation with a camera (Source: ChatGPT)

Conversation and live speech translation

Conversation modes translate spoken dialogue in turns; newer services such as live translation in Google Translate (with headphones, over 70 languages, availability depending on country) or DeepL Voice translate speech almost in real time.



Translate live while speaking (Source: ChatGPT)

Translated captions

Video platforms and meeting tools (e.g. Teams, Meet) can show captions translated into another language – in meeting tools this often requires a paid licence.



Subtitling during a meeting (Forrás: ChatGPT)

Advantages and Disadvantages of AI in Translation

Adapting to the learner's language level

A traditional translation tool can translate a text into another language, but it does not take into account who will be reading it, and you cannot “have a conversation” with it. One of the main advantages of language models, by contrast, is that they can simplify the wording and use shorter sentences on request, adapting the language level to the user's needs.

Glossaries

If we want a language model to consistently follow our preferred technical terminology when translating specialist texts, we can provide it with a glossary, which it can then use consistently throughout the translation.

Did you understand?

One of the greatest advantages of language models is that they can respond to feedback about whether the learner has understood the explanation and adjust their style and language level accordingly. During the conversation, the learner can ask follow-up questions such as, “What does this term mean?” The model can then provide a more detailed explanation, illustrate it with examples, and/or ask questions to “check” whether the learner has really understood. Whether the interaction takes place in writing or through speech makes little difference: during translation, the language model can act as a kind of learning companion.

The general limitations of AI tools naturally also apply to translation. Language models tend to generate confident, fluent text even when the content is incorrect. Traditional machine translation can often be recognized by awkward or unnatural sentences. However, errors made by a language model can be embedded in polished, fluid prose, creating an appearance of

reliability. Teachers should therefore put particular caution, especially when translated content is intended to be used as teaching material.

Strategies for multilingual learning support

Simplified explanations and language-level adaptation

Often the best support is not a full translation but an explanation in simpler language, in the language of instruction. AI can rewrite a text at a given level of the Common European Framework of Reference for languages (CEFR), e.g. A2 or B1, add a short summary in the learner's first language, or produce a bilingual version side by side.



The same content adapted to different language levels

Example prompt for language-level adaptation

Rewrite the attached text about brake inspection at CEFR level A2 in Hungarian. Keep all technical terms in Hungarian, and after each term give the Ukrainian equivalent in brackets. Add a 3-sentence summary in Ukrainian at the end. Mark any term where you are not sure of the translation.

Vocabulary scaffolding

Vocational terminology is where learners most need support – and where translation tools most often fail. A **bilingual glossary** for each unit, with the term in the language of instruction, its translation, a simple explanation and a picture, helps learners understand now and learn the workplace vocabulary for the future. AI can draft the glossary; the teacher or a professional should check it. Some tools (e.g. DeepL glossaries) can be told to always translate a term in a fixed way.

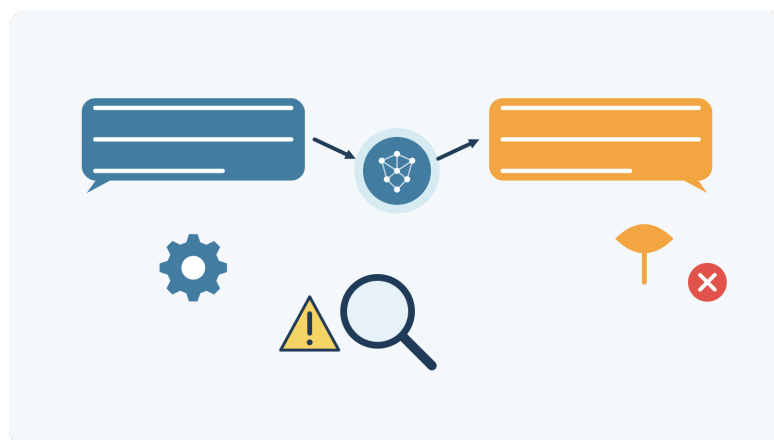


A verified bilingual glossary is the backbone of vocational language support

Multilingual learning support in practice

- Pre-teach the key terms of the next lesson in both languages.
- Let learners use their first language for thinking and discussing, and the language of instruction for the final answers (translanguaging¹).
- Check understanding with short questions rather than just asking “Did you understand?”
- Use translation for communication with parents, while keeping important documents in verified versions.

Risks and how to manage them



A fluent translation can still be wrong – especially for technical terms and safety instructions

Mistranslated vocational terms: many technical words have an everyday meaning too. A “nut” may be translated as the fruit, as a screw’s mounting particle or as a strange or funny person. Such errors make instructions meaningless or dangerous.

¹ Translanguaging means that multilingual speakers use the languages available to them flexibly and in complementary ways to understand, learn, and express themselves. For example, a student whose first language is Arabic and who is learning English reads a text in English during class. To understand it better, they take notes in Arabic or discuss the text in Arabic with a classmate. They then answer the teacher’s questions in English. Throughout the learning process, the student uses both languages: Arabic supports their understanding, while English enables them to express what they have learned.

Safety-critical content: safety instructions, hazard warnings and operating procedures must not rely on unverified machine translation. Use officially translated versions or have them checked by a competent speaker.

Cultural inaccuracy: forms of address, politeness, idioms, examples and images may not fit the learner's culture; humour and irony are especially risky.

Overreliance: if every text is always translated, the learner has less reason to develop the language of instruction. Plan how support can be gradually reduced.

Privacy and assessment: do not paste personal data into translation tools, and agree clear rules on whether translation tools may be used in tests.

Quality check for translated materials

- Keep the original text next to the translation.
- Back-translate important details into the original language and compare.
- Use a verified glossary and ask the AI to mark uncertain terms.
- Ask a colleague, a learner or a parent who speaks the language to review key materials.

Takeaways for teachers

AI tools make language teachers' work easier and can also be a great help to students and adults who are learning in a language other than their mother tongue. Key lessons and tips:

- AI-powered translation provides instant access to content – combined with the gradual development of the language of instruction.
- An explanation simplified to the right language level is often more useful than a full translation of the text.
- It is worth creating a glossary of bilingual technical terms, as AI makes mistakes most often when translating terminology.
- Never rely on unchecked machine translation if a text contains safety-critical information.
- Respect cultural differences, support learner autonomy, and plan for the gradual reduction of support.

References

- Council of Europe (2020): Common European Framework of Reference for Languages – Companion Volume.
- Google (2025–2026): Live translate with headphones in Google Translate. Google Blog and Translate Help.
- DeepL: Glossary feature documentation.

Links

- CEFR Companion Volume: coe.int/lang-cefr
- Google Translate live translate: support.google.com/translate
- DeepL glossary: deepl.com/features/glossary

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