

Chapter 7

Unlocking STEM Potential: Leveraging AI to Support Multilingual Learners – Pritha G. Roy, Uma E. Sarkar, Kelly L. Knight, and William Franz Lamberti

AI Resources for K-12 STEM Teachers

This is a list of AI resources provided by Tosin Adetoro. The summaries of each resource were generated by ChatGPT on January 29, 2025.

[Canva](#) (templates for almost anything)

- Canva can help create visually engaging resources like infographics, presentations, and posters that simplify complex STEM concepts for multilingual learners.
- Templates can be customized to include visual aids, diagrams, and multilingual text to cater to diverse language needs.

[Grammarly](#) (writing assistant)

- Grammarly assists multilingual learners in improving their writing by providing real-time grammar, spelling, and style suggestions.
- It can help bridge language gaps, especially for students who are still mastering English, and can be used to check scientific writing for accuracy and clarity.

[Diffit](#) (differentiates resources)

- Diffit helps differentiate instruction by providing resources at varying levels of complexity.
- This can be especially helpful for multilingual learners in STEM, as it allows teachers to tailor content to students' language proficiency and cognitive levels, ensuring the material is both accessible and challenging.

[Turnitin](#) (plagiarism detection)

- Turnitin can help ensure academic integrity by detecting plagiarism in student submissions.
- For multilingual learners, this tool encourages original thought and helps them understand proper citation practices, which are especially important in STEM research and writing.

[Education Copilot](#) (create individualized learning paths and lesson plans)

- Education Copilot allows teachers to create personalized learning paths and lesson plans for multilingual learners.
- It can tailor STEM content based on students' proficiency levels in both the subject matter and language, providing scaffolding and differentiated resources to meet diverse needs.

[Dreambox](#) (differentiates Math and Reading)

- Dreambox adapts math and reading lessons to the learner's pace, offering personalized pathways.
- For multilingual learners in STEM, it provides a way to strengthen foundational skills in math and literacy, crucial for understanding technical content in these subjects.

[Gradescope](#) (streamlines grading process)

- Gradescope helps teachers efficiently grade assignments and assessments, including STEM-related projects and papers.
- For multilingual learners, it allows teachers to provide timely, specific feedback that can help them improve their language skills and academic understanding.