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## SOME AI-BASED EDUCATIONAL TOOLS

A lot of Educational Technology (Edtech) companies and research institutes invest in AI-based tools and software to facilitate teaching and learning, from Intelligent Tutoring Systems to more specific applications like automatic test generation or foreign language learning. Yet most of these AI in Education (AIEd) tools are beginning to be used in the classroom by pupils and teachers.

### AI-BASED TOOLS ALREADY EXPERIMENTED IN THE CLASSROOM

In 2021 a survey of K12 education in Europe listed some AIEd tools that have been created as part of international or national projects. Those tools and shared under creative commons licences or as open educational resources<sup>1</sup>, among which:

- [Lalilo](#) (FR): adaptive learning to read
- [Adaptiv'Math](#) (FR): a teaching assistant for teaching and adaptive learning for mathematics

### OTHER EXAMPLES OF AI-BASED RESOURCES RELATED TO LANGUAGE LEARNING AND MATHS

A lot of other tools can be found on the Web. Here are some of them.

[Duolingo for Schools](#): A free management layer on top of the Duolingo language learning application to get visibility and a level of control over the students' experience on Duolingo.

[Adaptiv'langue](#) (FR): Each student completes a diagnostic test in which the teacher is informed of the student's level and that of the class in the skills being worked on. The student's progress



in the application is determined by his or her success rate in the exercises that are proposed to help him or her progress without demotivating him or her.

[EF Hello](#) or [AndyChatbot](#) (EN): Mobile Apps for learners to have conversations in English as a foreign language

[AXIOME](#) (FR): Teaching assistant to diagnose gaps in mathematics and personalise the learning paths of pupils from 11 to 18.

[Checkmath](#) (EN): Support for mathematics learning on mobile phone for pupils from 11 to 13.

[Photomath](#): Mathematical solver using on mobile phone to scan, recognize and display solving steps of the maths problem.

[Orange](#): Open source machine learning and data visualization. Build data analysis workflows visually, with a large, diverse toolbox.

## AI IN EDUCATION MAPPING

To discover other AI-based resources, you can visit the website of The International Observatory on the Societal Impacts of AI and Digital Technology (OBVIA) <sup>2</sup>. It brings together thoughts and news on the "Education and Empowerment" research theme, the aim of which is "Reflecting on how to improve digital literacy and ways to mobilize AI and digital technology to increase accessibility to education and training, and to support learning."

## HOW TO FIND YOUR WAY THROUGH THE MULTITUDE OF EDUCATIONAL RESOURCES ON OFFER?

AI-based tools like those mentioned above are at the core of AI in Education. A template to analyse the characteristics of these tools at the scientific, technical, regulatory, and ethical levels, will be proposed later in this training. The objective is to give teachers a better understanding of the resources they use or that their students use.

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1. [European Schoolnet. "Artificial Intelligence Role in K12 Education: Agile Collection of Information", 2021, Brussels, Belgium.](#) ←
  2. [Research theme on AI, education and learning](#) ←