Metadata

- Id: EU.AI4T.O1.M1.3.2t
- Title: 1.3.2 Some AI-based Educational Tools
- Type: text
- Description: Discover the functionalities of some tools for experimentation
- Subject: Artificial Intelligence for and by Teachers
- Authors:
  - AI4T
- Licence: CC BY 4.0
- Date: 2022-11-15

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 only 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 and shared under creative commons licences or as open educational resources[1], 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

AXIθME (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 more AI-based resources, you can visit the International Observatory on the societal impacts of artificial intelligence and digital technology (OBVIA) Wesite[2]. It collects and displays the tools and projects on the application and scope of artificial intelligence in education. The objective is to enable users to learn more about the numerous educational resources available that rely on artificial intelligence and allows consulting the database "Various initiatives on AI in education".

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.

---

1. European Schoolnet. "Artificial Intelligence Role in K12 Education: Agile Collection of Information", 2021, Brussels, Belgium. ↩
2. Various initiatives on AI in education ↩