ELEARNINGNEWS ARTICLE

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ELearning tools that use artificial intelligence

Pros and cons of eLearning tools AI based and how to leverage the latest applications to enrich learning experiences

Optimize productivity

eLearning, coupled with the traditional training approach, is essential to be more productive in the classroom and to maximize the benefits of the time spent in the classroom. eLearning tools enable students and educators to make the learning experience more enjoyable and productive in the classroom, for both virtual and in-person learning. The EdTech market is expected to be worth $404 billion in 2025, new technologies based on Artificial Intelligence (AI) are constantly emerging and educators are seizing the opportunity to optimize learning paths. Educators can leverage AI EdTech tools to improve their teaching strategies and streamline some processes. However, questions remain about the reliability of this technology. In this article, we take a closer look at some of the leading AI-powered tools and how you can use them to make life easier for students and educators.

The benefits of artificial intelligence in education

Ideally AI does not devalue classroom teaching, but it enhances it in many ways. There are six intriguing benefits of integrating AI into education:

1. **Personalization**: It can be extremely difficult for a teacher to figure out how to meet the needs of each individual student in their class, yet AI systems easily adapt to each student's individual learning needs, and can target instruction based on to its strengths and weaknesses.
2. **Tutoring:** AI systems can assess a student's learning style and pre-existing knowledge to provide personalized support based on her characteristics and needs.
3. **Assessment**: AI can help grade exams using an answer key, but it can also compile student performance data and even do more abstract assessments like essays. These tools also help create a meritocratic environment in the classroom: assessments are in fact impartial.
4. **Feedback on course quality**: If many students answer a question incorrectly or wrongly during an exam, AI can pinpoint specific information or concepts students are missing, so teachers can make targeted improvements with specific teaching materials.
5. **Immediate Feedback for Students**: Some students may be insecure or shy about speaking out or receiving critical feedback in class, but with AI, students can feel more comfortable making the mistakes necessary to learn and receive feedback. feedback they need to improve.
6. **Automating administrative tasks** is one of six potential benefits highlighted. A large part of the development of AI in education is also centered around reducing the time teachers spend on rote and tedious bureaucratic tasks, to free up more time for more meaningful tasks.

How AI fits into education

According to **author Bernard Marr**, AI will have a massive impact on education, and points out that AI is not a threat to teachers. Indeed, AI is not here to replace teachers, but rather to provide better education in the future. The author envisions a future hybrid education model designed to get the most out of our AI-powered systems and our teachers. In fact, the data showed a 47.5% growth in the use of artificial intelligence in education in the United States from 2017 to 2020, in the pre-pandemic period. Marr outlines the potential of AI to help our education improve:

- Differentiated and personalized learning
- Automation of administrative tasks
- Tutoring and support outside the classroom
- Universal access for all students

AI-powered teaching tools and how to use them in the classroom

Adaptive learning systems

Adaptive learning systems can use artificial intelligence algorithms to provide personalized learning experiences for each student. These systems are designed to identify each student's strengths and weaknesses and provide them with activities that help them fill in the gaps. In the more advanced systems it is possible to provide didactic contents to students in different forms according to the needs to achieve the same educational objective. For example, the system is able to recognize that student X learns more easily with video content and student Y through written texts and can offer video content to X and written content to Y to achieve the same educational goal.

Language learning applications

AI-powered language learning apps use various AI algorithms, such as machine learning and natural language processing. This way you personalize lessons and provide real-time feedback to students based on their results. You can also use the app's data to monitor your progress and identify areas for improvement to tailor future lessons. One of the benefits of using AI-enabled language learning apps is that they foster error-driven learning without diminishing self-confidence since students are able to unobtrusively evaluate the mistakes they make along the way. path.

Curriculum platforms based on artificial intelligence

AI-powered curriculum tools help educators design and implement learning paths that are more meaningful to students and that are focused on building a strong academic curriculum. These tools are able to analyze data on student performance, interests and learning preferences to provide personalized curriculum recommendations. This tool helps educators tailor teaching to the individual needs of students.

Grammar tools

AI-powered grammar tools help students improve their writing skills by providing real-time feedback on grammar, spelling, and syntax errors. You can start by integrating them into your teaching material, for example, as part of your writing assignments or as a vocabulary exercise.

Analysis of student data

AI-powered student data analytics can process large amounts of information, such as grades, attendance records, and behavioral data. As educators, you can identify patterns for improving curriculum design and adjust learning pathways accordingly. For example, these tools can collect data and show that many students struggle with a particular concept within the curriculum. As a result, educators can modify lesson plans and break down the problematic concept into more manageable subtopics.

Evaluation app

AI-powered grading apps help to automatically grade each assignment in a way that saves educators time and effort. At the same time students receive immediate feedback, so they can identify gaps as quickly as possible and seek further resources. In fact, receiving immediate feedback on a task is much more useful for learning purposes than receiving the same feedback weeks later, when we have forgotten most of the information.

Accessibility tools

Accessibility tools based on artificial intelligence greatly help students with special learning needs to access educational materials. Here are some examples:

- Speech recognition tools transcribe spoken language into written text, helping people with hearing impairments and those who may have difficulty reading and writing.
- Text-to-speech tools read text aloud to help visually impaired students and those with reading difficulties.
- Caption generation tools automatically generate captions for videos and other multimedia content.

- Language translation tools translate text and speech into different languages to improve student understanding and knowledge retention.

Chatbots

Chatbots provide students with support and guidance, helping students conduct research and better understand complex materials. For example, chatbots can be used to find study materials or the right bibliographies for their essays. However, these types of AI tools need monitoring by educators, as students may use them to search for inappropriate content or even copy the chatbot to carry out assigned tasks.

The cons of artificial intelligence: 6 reasons to be skeptical

1. **Costs**: When you look at the costs of installing, maintaining and repairing these systems, it is clear that AI is still expensive. Only the most funded schools can take advantage of artificial intelligence.
2. **Addiction**: If we rely on machines to make daily activities more efficient, we risk dependence on technology, an issue that is becoming increasingly sensitive especially for the new generations.
3. **Lack of personal connection**: While intelligent machines enhance the educational experience, they should not be seen as a substitute for personal interaction. Over-reliance on these machines to grade or give advice can lead to educational failures that harm students more than help them.
4. **Unemployment**: Making teaching more efficient could create less demand for educators. With the advent of MOOCs, class size is no longer a determining factor in the quality of education and the implementation of AI could mean a decrease in aids and teaching assistants.
5. **Efficient Decision Making**: Computers are getting smarter every day. They are demonstrating not only the ability to learn, but also to teach other computers. However, it is questionable whether they are able to implement intuition-based decision-making in new situations, as is often the case in the classroom. Not to mention the human element of training, which sees the teacher not only as a figure who gives information, but who is able to make his students grow as people.
6. **Information Loss**: When a problem such as a particular natural event or a blackout occurs and an AI needs to be fixed, how much information will be lost? And what would be the consequence of this loss of information?

Let's wait and see

By harnessing the power of AI EdTech tools, educators can deliver high-quality education to more students, ultimately leading to a more equitable and effective education system. However, AI is a machine, so it requires constant human monitoring in some way. We can and must ask ourselves many questions about the effectiveness and ethics of these systems, but only time will tell which of these systems will survive and to what extent they will have an impact on the world of education.