ARTIFICIAL INTELLIGENCE IN EFL TEACHING

INTELIGENȚA ARTIFICIALĂ ÎN PROCESUL DE PREDARE A LIMBII ENGLEZE CA LIMBĂ STRĂINĂ

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Abstract: Inteligența artificială (IA) a revoluționat diverse domenii, inclusiv educația. În domeniul predării limbii engleze ca limbă străină (EFL), IA oferă oportunități promiștoare pentru îmbunătățirea învățării și predării limbilor străine. Acest articol își propune să exploreze aplicațiile bazate pe IA în predarea limbii engleze și să discute poțiunile sale beneficilor și provocării. Acesta examinează utilizarea chatboturilor care au la bază IA, sistemelor de tutoriat inteligent și platformelor de învățare adaptivă. În plus, articolul subliniază importanța integrării eficiente a tehnologiilor cu inteligență artificială cu abordările pedagogice pentru a crea medii de învățare optime. Pe baza cercetărilor existente, acest articol contribuie la popularizarea potențialului inteligenței artificiale în predarea limbii engleze ca limbă străină și oferă profesorilor o listă de instrumente utile ce au la bază inteligența artificială.

Cuvinte cheie: Inteligența artificială, limba engleză ca limbă străină, predarea limbii engleze, beneficii și provocări.

Abstract: Artificial Intelligence (AI) has revolutionized various domains, including education. In the field of English as a Foreign Language (EFL) teaching, AI offers promising opportunities for improving language learning and instruction. This article aims at exploring the applications of AI in EFL teaching and discusses its potential benefits and challenges. It examines the use of AI-powered chatbots, intelligent tutoring systems, and adaptive learning platforms. Furthermore, the article highlights the importance of the effective integration of AI technologies with pedagogical approaches to create optimal learning environments. Based on existing research, this article contributes to the popularization of the AI potential in EFL teaching and provides EFL teachers with a list of useful AI tools.

Keywords: Artificial Intelligence, English as a Foreign Language, teaching English, benefits, and drawbacks.

Introduction

The process of transition to automation of production and application of artificial intelligence (AI) in almost all spheres of social life is becoming inevitable and includes both positive and negative aspects. Among the benefits of AI usage, developers and scientists working on the implementation of artificial intelligence consider simplification and reduction of time for routine operations, improving the quality of services in social spheres (education, healthcare, municipal structures, etc.); assistance in navigation, recognition of people and objects. On the other side, there are some drawbacks like lack of transparency, accountability as well as an understanding of how artificial intelligence technologies are designed, work and will develop in the future, and the danger of the use of artificial intelligence by dishonest users.

The major problem of the present research is to investigate the benefits and the drawbacks of AI use in the process of EFL teaching, to put them on the scale and decide what outweighs them. The objectives of this research are to identify the AI tools which might be used by teachers in the process of teaching English as a foreign language, as well as provide guidelines on how and when to use them.

Research Methodology

This study is exploratory and interpretative in nature as it consists in the identification of some exact AI tools and their practical use in the process of EFL teaching. Every tool is accompanied by a description, ideas of its use, and its advantages. The AI tools are examined from the perspective of an EFL teacher and not the student, so the tools might be useful in the process of planning, designing lessons, or in the assessment of students’ work.

After the Second World War, some researchers began the process of working on the creation of intelligent machines and computer programs simulating human intelligence. The English mathematician
Alan Turning, gave a lecture on artificial intelligence in 1947 mentioning that AI is mostly about computer programming and not building machines [1, p.4].

The term Artificial Intelligence was coined by emeritus Stanford Professor John McCarthy in 1955, was defined by him as “the science and engineering of making intelligent machines” emphasizing the machines which were programmed to behave like humans for instance playing chess, writing an essay, article and others [2, p.1].

The AI pioneer Marvin Minsky in 1968 defined Artificial Intelligence as “… the science of making machines do things that would require intelligence if done by men” [3, p.438]. Firstly, it acknowledges the central goal of artificial intelligence research, which is to enable machines to perform tasks that traditionally require human intelligence. Furthermore, the definition emphasizes the fundamental idea that AI aims to replicate human-level intelligence, highlighting the aspiration to achieve a high degree of cognitive functionality in machines. However, it is important to note that AI encompasses broader aspects beyond mimicking human intelligence, such as machine learning, data analysis, and problem-solving techniques.

As it might be seen from the definitions above AI refers almost to all the domains of human life, however, the present article is destined to investigate the use of AI in the domain of education and namely EFL teaching. A big number of researchers like Gao [4, p. 322-324] and Klimova [5, p. 663-665] consider AI beneficial in the process of teaching English which is intended to simplify teacher’s work providing the EFL teachers with more time for real communication with students. AI in EFL teaching gained popularity together with the limitations caused by the COVID-19 pandemic as the teachers had to face the provocation of doing all the teaching online with the help of Informational Technologies (IT).

Artificial Intelligence has already become an important part of EFL teaching process for teachers and students as it simplifies and speeds up the preparation process for practical classes and lectures, it can analyze and report on projects, coursework, and diploma papers prepared by students, and helps analyze huge amounts of data, and automate routine and repetitive tasks. AI provides improved access to information for teachers and learners, gives learners access to the best lecture courses from different universities in different countries, provides enhanced decision-making capabilities and shows greater efficiency.

Teachers use artificial intelligence to better understand and assess their learners, their needs, their abilities, their qualities, to create a more engaging virtual environment, and to align the learning process with the data.

Moreover, AI helps to identify early warning signs of learning difficulties in a particular learner and facilitates a more effective analysis of data collection on possible changes in the learning process, and adjusting it to the learner's capabilities. Hence, AI simplifies learning and makes it more understandable and psychologically comfortable for learners.

AI might simplify the teacher’s work by providing personalized feedback and advice to help individual learners achieve their goals. AI can also be used to create virtual interactive experiences to help learners practice social interaction and develop communication skills. Artificial intelligence technologies provide automatic reminders and rewards to keep learners motivated.

Thus, AI is gradually changing the structure of the educational process, making it accessible and dynamic, simplifying and automating complex tasks such as grading and creating individual learning plans. It also provides deeper data analysis to help learners learn more effectively. AI-powered personalized learning is becoming increasingly targeted, providing learners with tailored content and real-time feedback. In addition, AI-powered tools such as chatbots help teachers and learners interact more effectively, streamlining the process of EFL learning.

Findings

Nowadays it is considered that the role of the teacher must be revised and changed. Thus, instead of being a transmitter of professional and social knowledge, teachers will become consultants and artificial intelligence technologies will perform the everyday tasks of teachers. Through AI-assisted foreign language teaching, grading, and documenting, teachers will have more time to coordinate instruction and mentor, learning more about students' psychological profiles and abilities in order to build interpersonal interactions with learners. Teachers with a higher level of IT skills will be able to try out their roles as data scientists, analyzing, and using the data from the training.

Particular attention is paid to the introduction of chatbots in the process of foreign language learning. Artificial intelligence-based language learning chatbots provide individual responses in response to
learners’ messages, i.e. they give feedback, help develop communicative and organizational skills, can assess a student’s work, or give advise on how to improve the work. This removes the language and psychological barrier that arises when learning a foreign language with a teacher, due to the fear of making a mistake, as well as it takes over a big amount of work from the teacher.

The table below includes a list of AI tools that are intended to simplify the teacher’s work in the context of EFL teaching. The present table is the result of the author’s research and comprises information about AI tools, applications, and extensions.

**Table 1: AI tools for EFL teaching**

<table>
<thead>
<tr>
<th>AI tool name</th>
<th>What is it?</th>
<th>What can it do?</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://you.com/">https://you.com/</a></td>
<td>a search engine built on artificial intelligence; provides users with a personalized search experience while also keeping their data 100% private.</td>
<td>- write paragraphs, essays, articles, blogs, social media posts, and it is possible to change the tone of your writing and the audience; - answer your questions, discuss with a chatbot; - provides the user with video and audio materials selected from multiple sources of information simultaneously, including web pages, news articles, social media, and more.</td>
</tr>
<tr>
<td><a href="https://tinywow.com/">https://tinywow.com/</a></td>
<td>a set of free online tools; can help you with your tasks.</td>
<td>- create documents in any format; - take notes in a skilful way; - make a list of smth; - merge different format files; - have a conversation with the user; - write a paragraph, an essay, an article, etc.</td>
</tr>
<tr>
<td><a href="https://app.educationcopilot.com/">https://app.educationcopilot.com/</a></td>
<td>an online platform; provides educators with tools and resources to improve their teaching.</td>
<td>- create multimedia workshops which include videos, images, quizzes; - can be personalized to a student’s needs; - the teacher can monitor student’s progress, and provide feedback directly on the platform; - create lesson plans, handouts and presentations based on the topic, and the level.</td>
</tr>
<tr>
<td><a href="https://chat.openai.com/">https://chat.openai.com/</a></td>
<td>a natural language processing AI chatbot; allows users to have human-like conversations</td>
<td>- generate personalized responses as you would have a discussion with your colleague; - write lesson plans, any type of text and even improve it; - create exercises/ texts based on the vocabulary; - make a list of vocabulary items based on a topic; - help formulate the aim and objectives of the lesson.</td>
</tr>
<tr>
<td><a href="https://www.classpoint.io/">https://www.classpoint.io/</a></td>
<td>a PowerPoint presentation tool kit; offers ready-made slides with gamification elements, interactive quizzes and handy tools</td>
<td>- generate quiz questions based on the provided information; - provide the teacher with advanced inking tools; - include a timer, name picker, embedded browser, whiteboard, draggable objects; - convert the presentation into a PDF</td>
</tr>
</tbody>
</table>
The present table displays only twelve AI tools useful for EFL teachers which are destined to simplify and accelerate the teacher’s work in order to devote the time to real students, who need assistance and guidance. Even if the list might be continued with many other useful AI tools, the essence is that every EFL teacher should adapt the necessary tools, applications, and programs depending on the working environment and the specific needs of their students.
environment and learners’ needs.

**Discussions**

As might be seen from the chart above AI tools possess a big range of advantages in EFL learning and teaching. One interesting finding is that AI can support language acquisition by providing learners with language input, feedback, and practice opportunities. AI can also help learners to develop their language skills, such as grammar, vocabulary, and pronunciation, through interactive and engaging activities.

One of the most important findings is that AI can enhance student engagement by providing learners with interactive and immersive learning experiences. AI-based tools can utilize gamification techniques, such as leaderboards, badges, and rewards, to motivate learners and make learning more fun. AI can also provide learners with real-time feedback and support, which can boost their confidence and motivation.

Furthermore, AI can personalize learning experiences by adapting to the needs and preferences of individual learners. AI-based tools can analyze learner data, such as learning style, progress, and performance, to provide customized learning activities and recommendations. AI can also provide learners with language input and feedback that is tailored to their specific needs and goals.

At the same time, AI-assisted Language Teaching also presents potential drawbacks and challenges, such as the lack of human interaction and the potential for technology failure. AI may also face challenges in accurately analyzing learner data and providing customized learning activities. Moreover, there may be concerns about the ethical and privacy implications of using AI in education. Additionally, careful consideration must be given to the balance between AI-driven instruction and human interaction to preserve the social and affective aspects of language learning.

Maintaining pedagogical integrity is also a crucial consideration in the use of AI in EFL education. While AI can undoubtedly help teachers provide more efficient, tailored, and personalized instruction, it must be used in conjunction with sound pedagogical principles. Teachers must ensure that AI-assisted tools and features are not used in place of human interaction and that they are always used in support of the teacher’s primary role as an educator.

**Conclusions**

This study set out to investigate the impact of AI tools in the process of EFL teaching, as a result, it might be concluded that the integration of AI technology in EFL education has the potential to revolutionize the way we teach and learn. Undoubtedly, AI-assisted tools and applications can greatly enhance the language learning experience by providing personalized, efficient, and tailored instruction.

However, teaching with AI systems requires a careful balance between the benefits of technology and the importance of human interaction in teaching and learning. By understanding the potential applications, ethical considerations, and best practices for AI in EFL teaching, the teachers take the most of these new and exciting opportunities in the field.

In conclusion, Artificial Intelligence has the potential to revolutionize EFL teaching and learning. While there are still challenges to be addressed, such as ensuring privacy and maintaining pedagogical integrity, the benefits of AI-assisted language teaching are numerous, from personalized learning experiences to increased student engagement and language acquisition. As the technology continues to evolve, we can expect to see even more innovative applications of AI in EFL education, driving the field forward and providing new opportunities for students and teachers alike.

**Bibliography:**

2. Manning C. Standford University Human-centered Artificial Intelligence. URL:https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf (visited on 29.06.2023)
URL: https://link.springer.com/article/10.1007/s10639-022-11194-2 (visited on 29.06.2023)