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TEACHING ENGLISH IN THE ARTIFICIAL INTELLIGENCE CONTEXT

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ABSTRACT:
THIS PAPER EXPLORES THE TRANSFORMATIONS IN THE FIELD OF TEACHING ENGLISH AS A FOREIGN LANGUAGE, AS A RESULT OF THE CURRENT SUBSTANTIAL DEVELOPMENT OF THE ARTIFICIAL INTELLIGENCE. THE DEVELOPMENT OF TECHNOLOGY IS THE STARTER OF A NEW, MODERN SOCIETY, COMPOSED OF DIGITAL NATIVES FOR WHOM ANY LEARNING PROCESS LIES ON THE BASIS OF A DIGITAL LEARNING TOOL. THIS STUDY AIMS TO ANSWER SOME INTRIGUING QUESTIONS REGARDING THE PRESENT, BUT FOREMOST THE FUTURE OF FOREIGN LANGUAGES TEACHING IN THIS SOCIAL CONTEXT.

KEY WORDS: ARTIFICIAL INTELLIGENCE, AI TOOLS, DIGITAL NATIVE, EFL

1. INTRODUCTION AND CONTEXT OF THE STUDY

Teaching English for specific purposes in the modern age is a challenge for teachers in spite of the support that the internet has created for a sustainable learning process in the past years. It is clear that artificial intelligence has led to an increased interest in different cultural fields and of course in the sphere of teaching foreign languages. A common cultural term to name the human being throughout history has been ”homo sapiens”, the intelligent creature. Time has proven that the evolution of a technology – based society has lead to higher challenges, the expectations of homo sapiens have evolved to a higher level. Throughout history the scientific world has tried to understand the mechanism of the human brain. The main conclusion of this long research regards the complexity of the human intelligence. The advent of artificial intelligence goes beyond the limit of understanding to the level of creating the intelligence. This is the point that turns the history of the world to new horizons, filled with unknown data, which cause enthusiasm, but also fear.

According to Stuart Russell and Peter Norvig, the authors of an extensive study on this topic, the term was first coined in 1956[1]. The British scientist Alan Turing, a pioneer in the field of computer science, in his 1950 paper *Computing machinery and intelligence* analysed the possibility to create artificial intelligence through an experiment. The main purpose of this research was to find an answer to the question: Can we distinguish between human intelligence and AI? Turing made some predictions and speculations about the future

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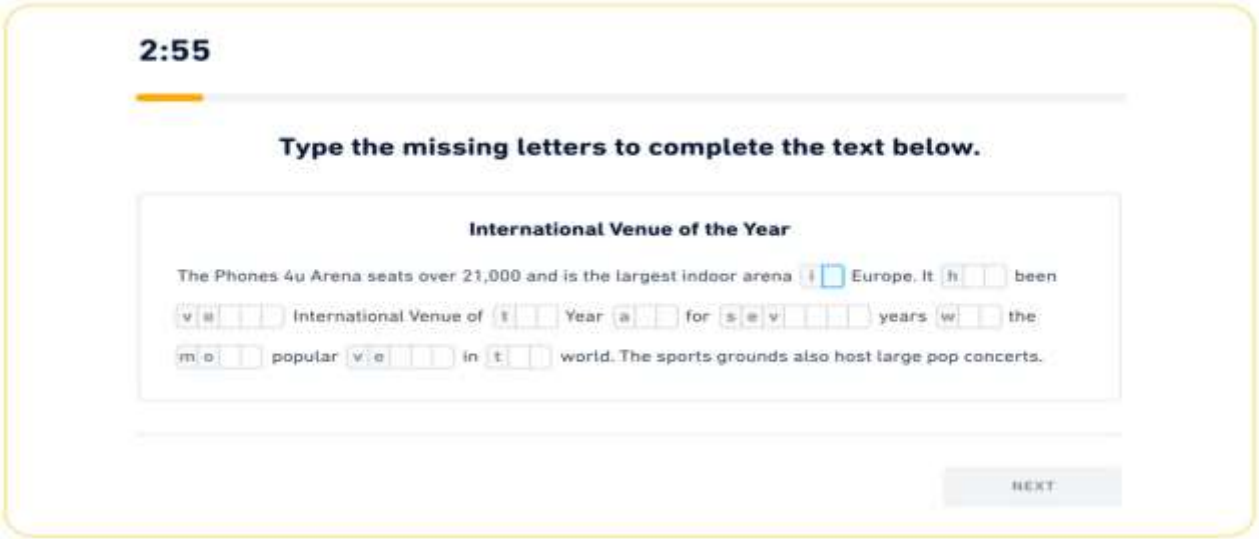
of AI and machine intelligence. He suggested that it might be possible to create machines that could simulate human intelligence to some extent. He also anticipated the development of machines that could learn and adapt over time. He discussed the idea of ”machines that can learn from experience”[2]. Turing contemplated wether machines could be designed to exhibit creativity and also raised questions regarding ethical issues. His ideas were visionary, but this was just the initial stage as the field of artificial intelligence has evolved in ways that nobody could have anticipated. Research in this domain has developed and nowadays, according to Russell and Norvig:

“AI currently encompasses a huge variety of subfields, ranging from the general (learning and perception) to the specific, such as playing chess, proving mathematical theorems, writing poetry, driving a car on a crowded street, and diagnosing diseases. AI is relevant to any intellectual task; it is truly a universal field”[1].

2. AI TOOLS FOR TEACHING ENGLISH AS AN EFL

With the advent of AI-powered language learning tools, students and professionals have found innovative ways to improve their language skills. The internet plays an essential role in the field of teaching English. Computer science specialists have created AI – powered adaptive learning platforms, using data analytics and machine learning to personalize English language instruction. All research intiatives in this domain are meant to optimize and improve the efectiveness of these systems. An example in this direction are the AI-powered language learning platforms that can analyze the proficiency of different learners, regardless of their langauge level. There are popular platforms such as Duolingo, Rosetta Stone, Babbel or Memrise. Each has its own approach and features, but they all offer a personalized approach to help learners progress at their own pace. We are going to try to briefly present each one of them.

Duolingo offers English courses for non-English speakers, using an interesting approach, based on games, in order to make the learning process more attractive and engaging. Below we present an example of read and complete exercise for which the learner has 3 minutes to type in the missing letters[3].



Another interesting example is the following called Read and Select.[4]

For this exercise, the learner has to click on the real English words, having the opportunity to repeat the process if necessary. In this case the application counts th subscores of the learner.

Rosetta Stone is a platform based on the use of immersive techniques, focusing on visual aid and contextualization, popular for its interactive lessons.

Babbel is a language learning application utilizing real-life conversations, whereas Memrise insists on words associations between the native language and the foreign language.

All these language-learning platforms have some common aspects: gamification and visual aid. It has been proven in modern pedagogy that these two elements are a significant support in the learning process. The researcher in education, professor John Hattie talks about these aspects in his book *Visible learning for teachers. Maximizing impact on learning*:

”Learning is not always pleasurable and easy; it requires over-learning at certain points, spiraling up and down the knowledge continuum, building a working relationship with others in grappling with challenging tasks. Students appreciate that learning is not always pleasurable and easy, and indeed can engage with and enjoy the challenges that learning entails. This is the power of deliberate practice and concentration. It also requires a commitment to seeking further challenges – and herein lies a major link between challenge and feedback, two of the essential ingredients of learning. The greater the challenge, the higher the probability that one seeks and needs feedback, but the more important it is that there is a teacher to provide feedback and to ensure that the learner is on the right path to successfully meet the challenges” [5] (p. 17).

The idea of introducing a challenge in the learning process represents the core of using AI in the teaching system. AI creates the challenge that the digital native learner needs to get to a successful result.

NLP or Natural Language Processing is a fundamental AI technique that enables machines to understand and generate human language. NLP powers various language learning applications, such as chatbots, virtual language tutors, and language assessment tools. Virtual Speech Recognition can analyze a learner's pronunciation and provide feedback on their spoken English. This is particularly helpful for improving speaking and listening skills. AI can be used to analyze English texts, including books, articles, and online content. By identifying and highlighting key vocabulary, grammar structures, and contextual usage, AI can help learners focus on important aspects of the language. AI-powered chatbots and virtual tutors can engage in conversations with learners. They provide real-time feedback on grammar, vocabulary, and pronunciation, making the learning process interactive.

All these platforms, applications and AI tools created especially for the digital learning system are extremely efficient and give rapid and satisfying results for those who

want to acquire a foreign language. „Researchers in this domain have proven this through their impact studies. One example in this direction has been identified by the Chinese professor Ling Wei in the article *Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning* :

”This study contributes to evidence-based language pedagogy, offering valuable insights to educators and researchers interested in incorporating AI-powered platforms into language classrooms. The results support the notion that AI-mediated language instruction holds promise in revolutionizing language learning, and it highlights the positive impact of AI-driven educational technologies in the realm of language education.”[6].

Artificial intelligence promotes engagement, is tailored to suit the profile of the learner and provides immediate feedback and personalized assignments to generate a positive result of the learning process.

3. TRADITIONAL VERSUS MODERN IN TEACHING FOREIGN LANGUAGES TECHNIQUES

In the history of teaching English there have been several popular methods chosen by educators in this domain, some of them more efficient, others less. The Grammar translation method is the most popular among the traditional ones. It was considered by Stern ”simple and efficient” [7] (p.453). The approach is deductive, with the emphasis on conscious learning. The native language of the students is intensively used, the techniques used being translations, reading texts, grammar and vocabulary exercises.The roles of the teacher are following: manager, coordinator and evaluator of the students, the interaction in the classroom taking place especially between the teacher and the students (frontal approach). The Audio-Lingual method has developed in the USA during the Second World War. The main objective is that students learn to use the language in a communicative mode, through the presentation of vocabulary and grammar in dialogues that are learned by repretition and imitation.Grammar is taught inductively. The exercises that develop the ability to receive written messages and the ability to express themselves in writing are based on the activities of communication. The techniques used are: dialogues, role-playing games, rehearsals, grammar and vocabulary exercises. The students' native language is not used.The teacher is the one who controls the students and the one who provides the language model, the students being imitators. There is interaction between the teacher and the students, but also between the students. Students' errors are not considered essential. The assessment is oral. The last traditional method is called Presentation, Practice, Production. This is the British variant of the Audio-Lingual method according to Jeremy Harmer [8] (p. 80). It consists of three stages. In the first stage, the teacher introduces the elements of the language that must be assimilated. The third stage refers to the use of the language presented and assimilated in an original way by the students. As with the Audio-Lingual method vocabulary and grammar are taught inductively. The model is the teacher, who coordinates the activity and it is a method based on communication.

All these traditional methods of language learning, based on memorizing vocabulary lists or attending classroom lectures, often fail to provide learners with the context and real-life application necessary for long-term retention. As a result, many students struggle to remember and use new words effectively in conversation. This is where AI-based language learning tools appear providing a more interactive and engaging experience that improves vocabulary retention.

The AI can adapt to the learner's skill level, providing personalized feedback and guidance to help them improve. In modern pedagogy the teacher has to give special attention

to senses in the teaching process. The linguistics specialist Mihaela Manasia emphasized this aspect in her paper, explaining that "senses allow us to formulate hypotheses regarding the nature and characteristics of the objects we perceive" [9]. This personalized approach ensures that learners get the support they need to progress at their own pace without feeling overwhelmed or discouraged.

Furthermore, AI language learning tools can provide instant feedback on a learner's use of vocabulary, grammar and syntax, allowing them to identify and correct errors in real time. This immediate feedback loop is crucial for reinforcing correct language use and preventing the formation of bad habits. Additionally, AI can provide alternative ways to express the same idea, exposing learners to a wider range of vocabulary and helping them develop a more nuanced understanding of the language.

Another advantage of AI language learning tools is their ability to provide a safe and non-judgmental environment for learners to practice their skills. Many language learners experience anxiety or embarrassment when speaking with native speakers, which can hinder their progress. AI language platforms remove this barrier by providing a patient and supportive conversation partner who is permanently available allowing learners to practice without fear of judgment.

4. CONCLUSION

In conclusion, AI-based language learning tools play an essential role in the language development of learners around the world. By providing personalized, context-rich learning experiences, these tools help improve vocabulary retention and general language skills. As AI technology continues to advance, we are likely to see even more innovative and effective language learning solutions emerge, further revolutionizing the way we acquire and retain new languages.

Traditional methods to teach foreign languages, in our case English, have not passed the test of digitalization. Young learners nowadays are digital natives, their brains function in perfect connection to the AI world.

Learning and teaching English in this digitalized world we are living has become an easier task for the learners and an incresingly challenging one for the teachers. Are we prepared to face this rapid and overwhelming development in the field of artificial intelligence, that influences the learning process? We do not know, but it is obvious that the teaching system has to adapt to all these transformations. Specialists that teach English have to be familiarised with AI tools, such as NLP, speech recognition, text analysis or chat box and virtual tutors.

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