THE ILLUSION OF COMPETENCE: ANALYZING THE METACOGNITIVE GAP IN AI-ASSISTED LANGUAGE LEARNING: A CASE STUDY OF UNIVERSITY STUDENTS

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ABSTRACT

This study examines the role of Artificial Intelligence in education and its impact on students' mental processes through three main theories. First, the "Illusion of Knowledge" theory is analyzed, which studies how quickly students mistake ready-made information provided by AI for their own knowledge. Second, the concept of the "Metacognitive Gap" is examined; this theory serves to determine what psychological state a student experiences when they see the difference between how high they assess their own knowledge level and the real result they show without the help of AI. Third, the "Automation Bias" theory is studied, which examines the rate at which users blindly trust the information coming from technology without analyzing it. These theoretical foundations are examined among 30 university students to examine the scientific and numerical aspects of why students prefer to "get things done" rather than learn in depth.

***Keywords**: AI dependency, Illusion of Knowledge, Cognitive Self-Deception, Automation Bias, Language Learning*

INTRODUCTION

In the current era of globalization, learning foreign languages has become a vital necessity for a person, regardless of his field of study. In recent years, the effective use of educational technologies in the teaching process has developed dramatically, and this has not only made the teaching process much easier, but also served to accelerate the process. In particular, Artificial Intelligence (AI) is fundamentally changing the methodology of teaching languages. As noted by Hockly (2023), AI tools offer unprecedented opportunities for personalized learning.

Since the method and way of learning provided by artificial intelligence are based on the personal needs and types of students, it has become very popular among learners. Previously, students relied only on ready-made textbooks and teachers, today interactive AI tools such as chatbots and adaptive platforms allow for individualization of the language learning process. Students can adapt the learning process to their own pace, time and way. According to Hockly (2023), AI-driven platforms provide a level of differentiation that was previously impossible in traditional classrooms, allowing learners to receive personalized linguistic input.

Although Artificial Intelligence (AI) allows students to individualize the learning process and receive feedback, there is a theory that when using any method or innovation in learning, students accept it with great interest and this is considered temporary, with an initial peak of interest and then gradually fading away over time(Fryer & Carpenter, 2006)**.**That is, students use AI enthusiastically at first because it is very interesting, but over time it becomes a habit and their motivation may decrease. Secondly, AI makes the student's work much easier. For example, AI can prepare a complex essay or translation in seconds. This can affect the student's goal of learning the language. The student now begins to strive to complete the language task faster(Reinders, 2020)**.** Because learners do not define their goals when using AI, they are fooling themselves into thinking that they are learning a conscious language without knowing it. The simple answers given by the AI seem to make their work easier at first, but in the end, the goal of mastering the language does not show any results.

Based on the above problems, the main goal of this study is to study the real impact of AI-based language learning tools on university students' motivation based on real experiments based on concrete data and information.

1. Does AI really teach the student something or does it just stop the brain from working and give a finished product?

2. Why does the student think "I know", but when left without AI (in offline tests or live communication) the result drops sharply. In fact, wouldn't it be better if AI taught him first?

3. Does the ready-made nature of AI responses diminish the student's critical thinking and their ability to self-correct during the learning process?

METHODS

The empirical part of the study was conducted with the participation of 30 third-year students of the Faculty of Foreign Language and Literature of the Uzbek State University of World Languages. 100% of the participants were girls, and their

average age was 20.4 years. When selecting participants, students who regularly used Artificial Intelligence tools in their daily tasks, such as writing essays and translating, were selected. To ensure the accuracy and integrity of this study, the participants' English level was at the B2-C1 level, which allows them to understand and analyze the complex answers given by the AI. The study was conducted during the spring semester of 2026, based on the students' personal beliefs and approaches.

The study used a two-part questionnaire developed in Google Forms to collect data. This is because it preserves the anonymity of the researcher and the accuracy of the data. In order to ensure the accuracy and correctness of the instrument, the questions were divided into three groups, and each group consisted of 5 questions.

Group 1: This group consisted of 5 questions aimed at measuring the level of students' analysis of AI tools or their readiness to accept them without testing.

Group 2: 5 questions that explore the difference between high self-confidence formed as a result of tasks performed with AI and real-world results in a non-AI environment.

Group 3: Whether the student uses AI as a tool for analyzing and providing feedback on what they have learned from "deep learning" or as a method of "Task completion". 5 related questions The numerical data were evaluated on a 5-point Likert scale,more precisely,the answers were:

1.1 point — Strongly Disagree

2. 2 point — Disagree

3. 3 point — Neutral

4. 4 point — Agree

5. 5 point — Strongly Agree

In addition, open-ended qualitative questions were included to explore the students' personal views on the subject of AI addiction, if they had personal opinions and answers, they were also taken into account.

The data collection process lasted 3 days during the last week of April during the spring semester of 2026. Initially, the participants were explained the objectives and goals of the study and were informed that their anonymity would be maintained and that their names would be used only for academic and scientific purposes. They were told to try to be as anonymous as possible in the questionnaire, that their usage habits would be analyzed based on numbers and that they would not be involved in any personal repetition. The link to the questionnaire was distributed through Telegram groups. When answering the questions in block 2, the participants were asked to recall and compare their results from exams they had recently taken without the help of AI. Filling out the questionnaire took an average of 10-15 minutes. The

collected numerical data was statistically analyzed, and the opinions in the open-ended questions were analyzed to identify common patterns.

RESULTS

The results of the study revealed students' attitudes towards Artificial Intelligence and their changes in the learning process and views on the subject in three main areas:

Group 1: Cognitive Analysis and Trust in AI

The first group of questions examined the extent to which students analyze the answers given by AI. The results showed that students' mental abilities are declining and a strong trust in AI is forming:

- 73.3 percent of participants (22 students) admitted that they almost never check grammatical errors in essays written by AI.
- The average score for the statement "I check the accuracy of the information given by AI with facts before submitting an assignment" was only 2.2 points out of 5 points.
- 60 percent of students said that they would add words suggested by AI to their text, even if they did not fully understand their meaning, or would answer based on its opinion.

Group 2: The Mental Gap and Self-Confidence

his section measured the difference between a student's confidence in their ability to complete tasks when using AI and their actual knowledge in a non-AI environment or in live interviews and exams.

Statement	Mean Score (1–5)	Agreement Rate (%)
When I use AI, I feel as if I am at a C1 level.	4.6	90%
I can produce the same quality of writing without AI assistance.	1.8	15%
In exams without AI, I feel "lost" and anxious.	4.2	80%

- The results confirmed the existence of a "mental gap": while 90 percent of students felt like they were a strong expert with AI, their self-confidence dropped by 65 percent in an environment without it, and they even said that they were afraid of not knowing enough and Maybe even confused.
- These students were found to accept the results achieved with AI as they were.

Group 3: Learning Tool vs. Task Completion

The third group determined whether students were actually using AI as a learning tool or simply as a way to complete tasks:

- For 70 percent of students, the main goal of using AI was not to understand the subject in depth, but to complete the task faster .
- Only 20 percent of participants ask the AI to explain their mistakes; the remaining 80 percent of students seek a direct answer.
- 66.7 percent of students agreed that "It is more important for me to get a grade than to gain real knowledge.

DISCUSSION

The results showed that 90% of students feel like professionals when working with AI. This phenomenon is called the "Illusion of Knowledge". When students easily complete a complex task with the help of AI, they mistakenly accept the capabilities of AI as their own knowledge. However, the 65% drop in confidence as a result of the tasks completed by AI proves that the knowledge has not been transferred to the student's long-term memory, but has only been attached to the AI tools. The students' confusion of personal knowledge with AI was observed at a very high rate.

The results of the Group 1 test show that students are forming blind trust in AI. This is a very dangerous indicator, because language learning is a process of drawing conclusions from mistakes. Unfortunately, it is possible to see what happens when students do not know the exact purpose of AI before using it. If a student does not check the error given by AI, his critical thinking will be stunted. The most painful point of the study is the "predominance of grades over knowledge" for 66.7 percent of students. Students are bypassing the complex learning process and going straight to the result. This changes the fundamental nature of education. Rather than learning any knowledge, it becomes a matter of striving to get a good grade. If this situation continues, students will always rely on something to learn, but in real life they will become professionals with fragmented knowledge. As a result, they will not be able to demonstrate their knowledge in real life, in interviews and live conversations. This leads to psychological difficulties, low self-confidence and stress due to the difference between real knowledge and their state.

CONCLUSION

In conclusion, this study showed that, while AI creates convenience and ease in the process of learning languages, it also creates a false sense of knowledge in

students that they do not actually have. The high level of confidence in working with AI (90%) and the sharp decline without its help (65%) indicate that the learning process has become a mere task, not a real knowledge.

The results of the study confirm that prioritizing grades over knowledge discourages students from scientific research and ties them to technical tools. If the education system does not take measures against such situations, there is a risk of the formation of "false experts" in the future who have diplomas but cannot independently express their opinions in real situations. To reduce these risks, it is necessary to promote the use of AI in the educational process not as a means of obtaining a finished product, but as a means of analyzing errors and analyzing one's own knowledge. The main goal should not be for technology to replace humans, but rather to make the complex learning process easier

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