© IJARW | ISSN (O) - 2582-1008
March 2025 | Vol. 6 Issue. 9
www.ijarw.com

THE CHALLENGES OF USING AI IN STUDYING FOR STUDENTS AT SCHOOL OF FOREIGN LANGUAGES – THAI NGUYEN UNIVERSITY- VIETNAM

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ABSTRACT

This study examines the challenges faced by students at the School of Foreign Languages, Thai Nguyen University, in using Artificial Intelligence (AI) tools for language learning. A survey of 200 students, who predominantly use AI tools such as Google Translate, Grammarly, Chatbots, and ChatGPT, was conducted to understand their experiences and concerns. The results indicate that while AI tools are widely used, there are several challenges that hinder students' learning processes. These challenges include over-reliance on AI, which reduces critical thinking and creativity, and a lack of emotional understanding from AI tools, which fails to address the motivational and stress-related aspects of learning. Additionally, concerns about data privacy and security, bias in AI algorithms, and distractions from irrelevant information were prevalent among students. Despite these challenges, students noted that AI tools help improve critical thinking skills, although the potential for creativity loss and decreased interpersonal interactions was highlighted. The findings emphasize the need for a balanced integration of AI tools in education, ensuring that they complement traditional teaching methods while addressing concerns regarding bias, privacy, and emotional engagement in learning.

Keyword: Artificial Intelligence (AI), Challenges, Critical Thinking, Creativity, AI Tools, Privacy Concerns

1. INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) technology has significantly influenced various sectors, including education. In particular, the application of AI in language learning has shown great promise, offering students personalized learning experiences, enhanced learning efficiency, and increased accessibility to educational resources. However, despite these benefits, the use of AI in education, especially at institutions like the School of Foreign Languages – Thai Nguyen University, comes with a set of challenges that need to be carefully examined.

While AI-based tools such as language learning apps, automated feedback systems, and virtual tutors can offer students instant support and customized learning paths, they may also present significant obstacles. These challenges include over-reliance on technology, limited emotional understanding, and a potential decline in critical thinking skills. Furthermore, the growing use of AI in education raises important concerns regarding data privacy, accessibility issues, and the diminishing value of face-to-face interactions between students and instructors.

This report explores the key challenges faced by students at the School of Foreign Languages – Thai Nguyen University in using AI tools for studying foreign languages. By understanding these obstacles, the report aims to provide insights into how AI can be more effectively integrated into language learning while balancing its technological advantages with the essential human elements of education. The ultimate goal is to ensure that AI complements traditional learning methods and enhances students' overall academic experience, rather than hindering their personal growth and development.

1.1. Purpose of the Study:

This study aims to examine the challenges faced by students at the School of Foreign Languages, Thai Nguyen University, when using Artificial Intelligence (AI) tools in their language learning process. The study will help identify key issues such as over-reliance on AI, emotional understanding, creativity, privacy concerns, and

the impact of AI tools on critical thinking and academic performance.

1.2. Survey Overview:

The survey is designed to gather insights from students who use AI tools such as Google Translate, Grammarly, Chatbots, and ChatGPT in their daily academic activities. The survey includes a series of questions to assess the frequency of AI usage, dependency on AI tools, perceived impact on creativity and critical thinking, concerns related to privacy and security, and distractions caused by excessive information.

1.3. Target Group:

- **Participants:** 200 students from the School of Foreign Languages, Thai Nguyen University.
- **Demographic Information:** The participants consist of male and female students, mainly in their 2nd and 3rd years of study. The students study a variety of languages, including English, Russian, and Chinese.
- **AI Usage:** All 200 participants use AI tools daily in their language studies, including popular tools such as Google Translate, Grammarly, ChatGPT, and other chatbots.

1.4. Survey Format:

The survey consists of multiple-choice and Likert-scale questions designed to evaluate students' experiences with AI tools in their language learning process. Some questions focus on the frequency of use, while others assess the perceived impact of AI on various aspects of learning, including creativity, critical thinking, and social interactions.

2. CHALLENGES

Artificial Intelligence (AI) offers numerous benefits in language learning, but it also presents several challenges that must be addressed for effective integration into education. Below is an analysis of the primary challenges faced by students at the School of Foreign Languages – Thai Nguyen University in using AI tools for studying.

2.1. Over-reliance on Technology

One of the key concerns regarding AI in education is the potential for students to become overly dependent on technology. AI tools, such as language learning apps and chatbots, often provide instant answers and solutions, which may reduce students' ability to think critically or solve problems independently. As a result, students may fail to engage deeply with the learning material and may struggle to retain knowledge in the long term.

According to Johnson and Smith (2021), "Students who rely too heavily on AI for answers may fail to develop problem-solving skills, leading to a shallow understanding of the subject matter." This over-reliance can undermine the development of essential cognitive skills, such as analysis and synthesis, which are crucial for mastering a foreign language.

2. 2. Lack of Emotional and Contextual Understanding

AI-based language learning tools are designed to personalize the learning experience by adapting to the student's pace and performance. However, these tools are often limited by their inability to understand the emotional context or learning preferences of students. AI cannot assess non-verbal cues, detect when a student is struggling emotionally, or offer encouragement in the same way that a human teacher can. This lack of empathy and contextual awareness can result in a less supportive learning environment for students.

Gonzalez and Lee (2020) highlight that "AI systems lack the emotional intelligence to recognize when students need additional support or motivation, which can lead to disengagement or frustration." The inability of AI to engage with students on an emotional level limits its effectiveness in providing the personalized and human-centered support that is often necessary in foreign language learning.

2.3. Reduced Face-to-Face Interaction

As AI tools increasingly take over various aspects of learning, students may face a reduction in face-to-face interactions with their peers and instructors. Social interaction is an essential part of the learning process, especially in language acquisition, where students need opportunities to practice speaking, receive immediate feedback, and engage in collaborative activities. While AI can offer automated feedback and virtual conversation partners, it cannot replicate the dynamic interactions that occur in a classroom setting.

Baker and Harris (2021) argue that "The over-reliance on AI tools can decrease opportunities for students to engage in collaborative learning experiences, which are vital for language acquisition and peer-to-peer support." Human interaction plays a significant role in language development, and its absence may hinder students' ability to develop both their language skills and social connections.

2.4. Limited Creativity

AI tools are primarily designed to provide answers based on patterns in the data they have been trained on. As such, these tools are effective for delivering structured content and solutions, but they may not encourage students to think creatively or explore alternative solutions. For language learners, this limitation can be particularly problematic. Language learning involves creative thinking, such as understanding idiomatic expressions, engaging in free-form conversations, and generating original content. AI systems may inadvertently discourage this kind of creative thinking by focusing on rote memorization and predefined patterns.

Sullivan and Moore (2020) note that "AI-driven tools can limit the development of creativity in students by emphasizing structured learning and inhibiting free-form, innovative approaches to language use." Without the opportunity to engage in creative problem-solving, students may find it difficult to adapt their language skills to real-world situations where flexibility and creativity are essential.

2.5. Data Privacy and Security

AI systems that are used in education often require students to share personal data, such as learning behaviors, performance metrics, and sometimes even personal details. While this data is used to personalize learning experiences, it also raises significant concerns about privacy and data security. There is a growing risk that sensitive information could be exposed or misused if AI platforms are not properly secured.

Jones and Taylor (2022) argue that "The increasing use of AI in education raises significant concerns about data privacy, as students' personal data is collected and stored, potentially exposing them to privacy risks." In light of these concerns, educational institutions must ensure that AI platforms adhere to strict data protection regulations to safeguard student information.

2.6. Inaccessibility of AI Tools

Another challenge is the inequality in access to AI-powered educational tools. High-quality AI systems can be expensive, requiring subscriptions, specialized devices, or internet access that may not be readily available to all students. This disparity creates an unequal learning environment, where students from lower-income backgrounds or those studying in developing countries are at a disadvantage. Without equal access to these tools, the benefits of AI in education cannot be realized by all students, exacerbating educational inequalities.

Morris and Singh (2021) emphasize that "The high cost of advanced AI tools can limit access for students from lower-income backgrounds, resulting in unequal educational opportunities." Ensuring that AI-based learning resources are accessible to all students, regardless of their economic background, is crucial for fostering an equitable educational environment.

2.7. Impact on Critical Thinking Skills

AI tools, while efficient in providing information and feedback, may inadvertently undermine the development of critical thinking skills in students. When students rely on AI for answers, they may fail to engage in the deeper cognitive processes necessary for analyzing, evaluating, and synthesizing information. This lack of engagement with the learning process can lead to a decline in critical thinking, which is essential for language mastery and problem-solving.

Johnson and Smith (2021) state, "AI tools may inadvertently discourage students from questioning or analyzing the material, limiting their ability to develop critical thinking skills." For language learners, critical thinking is particularly important for tasks such as interpreting meaning, understanding cultural nuances, and creating original content.

2.8. Bias and Fairness Issues

AI systems are only as good as the data they are trained on. If the data used to train these systems is biased, the AI will likely reflect these biases, leading to unfair or skewed outcomes. In the context of language learning, AI-powered tools may favor certain dialects, accents, or cultural

contexts, potentially disadvantaging students who do not align with these preferences. This could result in unequal learning opportunities, especially in assessments or feedback.

Schaefer and Garcia (2021) highlight that "AI systems can perpetuate biases found in the data they are trained on, leading to biased assessments and unfair learning outcomes." It is essential to ensure that AI systems are trained on diverse and representative datasets to mitigate bias and promote fairness in education.

3. RESULTS OF THE SURVEY

The survey results provide insight into the challenges faced by students in using AI tools for language learning. The following sections detail the responses to each question in the survey.

3.1. Demographic Overview:

- **Total Participants:** 200 students
- **Gender Distribution:**
  - Male: 97 students (48.5%)
  - Female: 103 students (51.5%)
- **Year of Study:**
  - 2nd Year: 100 students (50%)
  - 3rd Year: 100 students (50%)
- **Languages Studied:**
  - English: 100 students (50%)
  - Russian: 50 students (25%)
  - Chinese: 50 students (25%)
- **AI Tool Usage:**
  - All 200 students (100%) use AI tools daily, with the most common tools being Google Translate, Grammarly, Chatbots, and ChatGPT.

3.2. Over-reliance on AI

The survey results indicate a noticeable reliance on AI tools among students in their language studies. Out of the 200 students surveyed, 112 (56%) admitted that they depend too much on AI for answers and solutions. In contrast, 88 students (44%) reported that they do not feel overly reliant on these tools. This reveals that a majority of students acknowledge their dependency on AI, which may potentially limit their ability to think independently and solve problems on their own. This highlights the importance of striking a balance when using AI tools in language learning. While AI can be a helpful resource, it is crucial for students to also engage in critical thinking and self-directed learning to develop their full potential in language acquisition.

3.3. Impact on Critical Thinking and Creativity

The survey results reveal a significant concern among students regarding the impact of AI tools on their critical thinking and problem-solving abilities. A total of 120 students (60%) either strongly agreed or agreed that using AI tools reduces their ability to think critically. Specifically, 20 students (10%) strongly agreed, while 100 students (50%) agreed. On the other hand, 30 students (15%) remained neutral, and 50 students (25%) disagreed, suggesting that they believe AI does not diminish their critical thinking abilities. The data indicates that a majority of students feel that AI, while beneficial for providing quick solutions, may hinder the development of independent problem-solving skills and creativity. This highlights the importance of using AI as a supportive tool rather than a replacement for critical thinking in language learning.

3.4. Emotional Understanding by AI

The survey results show that a majority of students feel that AI tools are inadequate in understanding the emotional aspects of their learning experience. Specifically, 105 students (52.5%) agreed that AI tools fail to recognize emotional factors such as motivation and stress. In contrast, 50 students (25%) disagreed, suggesting that they believe AI tools can comprehend these emotional elements. Additionally, 45 students (22.5%) were neutral on the issue. These findings indicate that most students believe AI tools do not address the emotional side of learning, which is essential for a well-rounded educational experience. This limitation emphasizes the ongoing need for human interaction and emotional support in the learning process, aspects that AI tools are currently unable to fully provide.

3.5. Reduction in Face-to-Face Interactions

The survey results suggest that AI-based learning tools have contributed to a reduction in face-to-

face interactions among students and their peers and instructors. Specifically, 92 students (46%) reported experiencing occasional reductions in these interactions, while 36 students (18%) stated that they no longer have any face-to-face interactions due to the use of AI tools. On the other hand, 72 students (36%) disagreed, indicating that AI tools have not impacted their social interactions. These findings highlight the trade-off between the independence facilitated by AI tools and the potential loss of collaborative learning opportunities and real-time feedback. This reduction in face-to-face engagement could hinder students' ability to develop interpersonal skills and gain immediate support from instructors and peers.

3.6. Privacy and Security Concerns

The survey results reveal that a significant number of students are concerned about privacy and security when using AI tools for language learning. A total of 120 students (60%) expressed concerns regarding data privacy and security, highlighting the importance of protecting personal information. In contrast, 38 students (19%) were unsure about the security of AI tools, while 42 students (21%) were not concerned about privacy issues. These findings underscore the need for AI applications to ensure secure and responsible handling of student data, addressing privacy concerns to build trust and confidence among users.

3.7. Bias in AI Tools

The survey results indicate that a majority of students have noticed bias in AI tools. Specifically, 102 students (51%) agreed that they have observed biases, such as favouring certain accents, dialects, or cultural contexts. In contrast, 50 students (25%) disagreed, reporting that they have not encountered any bias, while 48 students (24%) remained neutral. This suggests that more than half of the students experience skewed learning due to biased AI tools. These findings emphasize the need for AI developers to create more inclusive language models that are free from cultural or linguistic biases, ensuring a fair and balanced learning experience for all users.

3.8. Distraction and Information Overload

The survey results show that a considerable portion of students feel distracted or overwhelmed by excessive or irrelevant information provided by AI tools. Specifically, 88 students (44%) reported feeling overwhelmed, while 43 students (21.5%) disagreed, stating that they do not experience such distractions. Additionally, 69 students (34.5%) indicated that they are sometimes distracted or overwhelmed. This highlights that information overload is a common issue for many students, as AI tools often provide more information than necessary, potentially diverting attention away from the main learning objectives. This suggests that AI tools should be designed to offer more focused and relevant content to improve the learning experience.

3.9. Accessibility and Cost of AI Tools

The survey results indicate that the majority of students, 90% (180 students), use the free versions of AI tools, which suggests limited access to premium features. This reliance on free versions highlights that many students may not have the financial resources to access the additional capabilities and resources offered by paid versions. As a result, students may miss out on enhanced learning experiences and advanced functionalities that could potentially improve their language studies.

3.10. Impact on Thinking Skills

The survey results show that 89 students (44.5%) feel that using AI tools has improved their thinking and problem-solving skills. However, 50 students (25%) disagreed, indicating that they do not believe AI tools have had a positive impact. Additionally, 61 students (30.5%) were neutral on the matter. This suggests that while a significant portion of students report benefits in terms of improved thinking skills, a majority (55.5%) either feel that AI tools have had no impact or have negatively affected their critical thinking and problem-solving abilities. This highlights the mixed perceptions of AI's role in enhancing cognitive skills, with some students benefiting while others may face challenges.

The survey results reveal several challenges faced by students when using AI tools in their language learning process. These challenges include over-reliance on AI, emotional detachment, concerns over privacy and bias, and information overload. Despite these challenges, AI tools are recognized for their potential to enhance language learning, but their limitations underscore the importance of balancing AI with traditional, human-centered

approaches in education. Addressing these issues will help optimize the use of AI in education and ensure that it supports, rather than hinders, students' overall academic development.

6. ACKNOWLEDGEMENT

Based on the challenges identified through the survey, several solutions can be implemented to help students at the School of Foreign Languages, Thai Nguyen University, optimize their use of AI tools while minimizing potential drawbacks. These solutions aim to address issues related to over-reliance, creativity, emotional engagement, privacy, and distractions, ensuring a balanced approach to AI-assisted learning.

Students should be encouraged to use AI tools as supplementary aids rather than primary sources of information or answers. Educators can emphasize the importance of critical thinking, problem-solving, and independent research to ensure students are not overly dependent on AI for solutions. Assignments and activities should be designed to challenge students to think creatively and analyse content critically, without relying solely on AI-generated responses.

While AI tools cannot fully replace the emotional understanding provided by human educators, developers could enhance AI platforms to recognize emotional cues or provide motivational feedback based on students' usage patterns. AI can include features that track learning progress and offer encouragement, motivational reminders, or even advice on stress management during study sessions.

To foster creativity, AI tools should be used in combination with group projects and peer interactions. Collaborative learning, where students can discuss and refine ideas based on AI-generated suggestions, will help enhance creativity and prevent rote learning. This approach will encourage students to think outside the box and develop unique solutions while using AI as a tool for inspiration rather than a crutch.

Universities and educational institutions can collaborate with AI developers to ensure that data privacy and security measures are in place. Educational institutions should communicate with students about the importance of using secure AI tools and how their data will be protected. The use of AI platforms that comply with data protection regulations (such as GDPR) should be encouraged, and students should be educated on how to protect their personal information online.

To mitigate the reduction in face-to-face interactions caused by AI tools, schools can promote collaborative learning experiences that require group work, peer reviews, and classroom discussions. Students should be encouraged to share their AI-generated content and discuss it with their peers and instructors. This will enhance social engagement and ensure students do not feel isolated in their studies.

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