

AI Dependency in Foreign Language Learning: A Survey of Writing Proficiency among A2-Level German Education Students

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ABSTRACT

The integration of artificial intelligence (AI) in foreign language education has brought about significant changes, yet it raises concerns regarding technological dependency and cognitive independence. This study employed a descriptive qualitative method, utilizing an online questionnaire to analyze the impact of AI dependency on the A2-level writing abilities of Class B, Batch 2025 students in the German Language Education program at UNIMED. Findings reveal a universal adoption of AI (100%), with 60% of students relying on it for nearly every task, leading to "fleeting" vocabulary retention, a loss of personal writing style, and a psychological paradox where 65% of learners feel anxious writing without digital aids. The study implies that such dependency threatens the future professional competence of prospective teachers, as it erodes the linguistic logic necessary for manual instruction. Ultimately, the research suggests that educators must guide students to use AI as a supportive tool rather than a substitute for the thinking process to preserve academic and professional integrity.

Keywords: *Artificial Intelligence (AI), AI Dependency, A2 Proficiency Level, Writing Skills*

A. Introduction

The integration of artificial intelligence (AI) technology in education has significantly transformed how students learn foreign languages (Nabila et al., 2025). AI-based tools, such as ChatGPT and DeepL, have become common auxiliary instruments in academic environments, providing instant feedback on grammar and writing style and assisting in the

drafting of more coherent text structures (Imawan & Sya, 2025).

Conceptually, AI dependency in an educational context is defined as a condition in which users feel unable to complete tasks without technological assistance. This dependency often leads to a decline in independent cognitive engagement. This dependency arises when technology is viewed not as a supplement but as a substitute for human thought processes. This

technology offers time efficiency and easy access to information, which can theoretically enhance student learning productivity (Eragamreddy, 2024). However, this convenience becomes a psychological trap that causes students to lose independence in linguistic problem solving. In the broader landscape of AI-assisted foreign language learning, these technologies offer significant benefits by providing personalized scaffolding and lowering the affective filter of learners (Zou et al., 2022).

In the context of German language proficiency, writing skills are a crucial productive competence because they involve the complex cognitive process of connecting thought with linguistic expression (Kumari, 2024). Writing is not merely assembling words; it also strengthens overall language competence by fostering an understanding of structure and precise vocabulary use (Deep & Chen, 2025). For students in the German language education program at the A2 level, the primary foundation that must be mastered is independence in constructing simple sentences and mastering basic grammar, such as verb conjugation,

sentence structure, and the use of cases (Kumari, 2024).

However, the convenience of AI carries a high risk of dependency, particularly among students without a strong linguistic foundation (Abdullayeva, 2023). Students tend to use AI to obtain instant results in their writing tasks without understanding the underlying grammatical processes (Qin & Lu, 2024). The author argues that this phenomenon has shifted students' mentality from "learner" to "editor." Students no longer struggle to develop linguistic logic, but rather simply filter what the machine presents. Furthermore, factors such as learner autonomy and digital literacy play a decisive role in whether AI acts as a support or a crutch; without strong autonomy, learners may opt for superficial task completion over deep cognitive processing (Zou et al., 2022).

This excessive dependency is feared to hinder critical thinking and creativity development, as well as erode motivation for in-depth learning (Deep & Chen, 2025). Psychologically, students often experience a noticeable decline in self-confidence. They paradoxically feel "safe" when technology is present

yet highly anxious and helpless when required to write manually. The tangible impact of this phenomenon is evident in the disparity between writing produced with AI assistance and students' authentic abilities in offline tests without digital aids (Mirzaeian & Oskoui, 2025).

Previous studies have shown mixed results regarding the effectiveness of AI. On the one hand, AI has been shown to improve writing scores (Qin & Lu, 2024). On the other hand, however, such progress has been found to be temporary because students' accuracy and syntactic complexity tend to decrease drastically when working without tools (Mirzaeian & Oskoui, 2025). This study differs from prior research in that it focuses specifically on A2-level German language education students. In this context, specific German mechanical aspects, such as *Satzbau* and *Kasus*, become the main parameters for measuring dependency levels (Kumari, 2024).

The core issue identified in this research is the high level of digital dependency among students, with all participants (100%) admitting to utilizing AI for their assignments. This reliance has resulted in a decline in

fundamental skills, particularly in German sentence structure (*Satzbau*) and the application of cases (*Kasus*) at the A2 level. Such a condition triggers a psychological paradox; while students feel supported by technology, they simultaneously experience significant anxiety and a lack of self-confidence when required to write manually without digital assistance. Furthermore, this dependency raises concerns regarding their future quality as prospective teachers, as they may struggle to provide corrections or explain grammar rules to their students due to a habitual reliance on machines rather than their own linguistic competence.

This research aims to analyze the extent to which A2-level German language education students depend on AI for writing tasks (Kumari, 2024). Additionally, the study aims to evaluate the psychological impact of AI use on learning independence among these students.

B. Research Methodology

This research employs a descriptive qualitative approach, which, according to Samsu (2021), aims to systematically describe and

interpret present-time phenomena. This study primarily focuses on exploring the impact of artificial intelligence (AI) technology dependency on the writing skills of Class B, Cohort 2025 students of German Language Education at the A2 proficiency level at UNIMED.

Research data were collected entirely through an online Google Form questionnaire, which included multiple-choice questions to determine the frequency of tool usage and open-ended questions to examine the impact of this technology on students' creativity, self-confidence, and ability to produce texts independently. Narrative data analysis was conducted by summarizing respondents' answers to identify the extent to which using this technology impacts learning motivation and students' ability to produce written work without machine assistance.

C.Result and Discussion

Analysis of Research Results and Discussion Through this study, several crucial points regarding the patterns of use and students' dependence on AI technology in the process of learning German were identified, as outlined below:

1. Usage and Dominance of AI Platforms

Questionnaire data from 27 respondents indicates widespread adoption of the technology. Specifically, 100% of students use AI to assist with writing tasks. Specifically, ChatGPT is the primary choice, used by 63% of respondents, followed by Gemini (22.2%). The remainder use DeepL, DeepSeek, or a combination of platforms. ChatGPT's dominance suggests that students prefer tools that can produce fluent and natural language. These findings support the theory of Deep and Chen (2025) that AI has become a primary tool for students to overcome language barriers in the early stages of learning.

2. Intensity of Use: From Tool to Dependency

Regarding frequency of use, a high dependency pattern was found: 60% of respondents admitted to using AI for almost every writing task. Meanwhile, 30% use it only for grammar checks, and 10% use it solely to search for specific vocabulary. The significant 60% figure supports the theory of Mirzaeian and Oskoui (2025) that the convenience of AI often shifts technology's role from a

supplementary reference to a primary production tool. However, this poses a risk of reducing students' critical thinking processes in creative writing.

3. Reducing the Learning Burden at the A2 Level

Students tend to use AI to instantly generate complex sentence structures. For A2-level learners, German grammar rules, such as word order and verb conjugation, represent a significant cognitive load. According to the research of Imawan and Sya (2025), AI usage allows students to avoid technical errors and achieve desired grade standards, even if their proficiency is not yet fully stable.

4. Accuracy vs. Linguistic Understanding

An interesting finding is that the majority of students are satisfied with the grammatical accuracy of AI-generated content but do not deeply understand the concepts. While AI provides correct results, the DeepSeek-V3 (2025) study cautions against the "surface-level accuracy" phenomenon. In this case, students obtain technically correct answers without understanding the underlying linguistic logic and risk developing a shallow grasp of German grammar.

5. Weakened Retention Due to Instant Processes

The impact on long-term memory is concerning: Forty-five percent of respondents feel that vocabulary and sentence structures generated by AI are "fleeting" due to the frequent use of the copy-paste feature. According to Abdullayeva (2023), overly instant processes eliminate the challenges of learning, such as looking up words in a dictionary, which are vital for retention. Without an independent learning process, it becomes difficult for students to permanently memorize German.

6. Loss of Personal Style and Identity

As many as 70% of students realize that their writing has become rigid and machine-like. This phenomenon aligns with Kumari's (2024) findings regarding the loss of the "human touch" in AI-generated texts. Although the text may be grammatically perfect, it feels emotionally bland. Students can produce work that looks impressive but lacks their unique character as learners.

7. Writing Anxiety Without AI Assistance

This study found that 65% of students experience significant anxiety and lack confidence when asked to write spontaneously in class without access to AI. Contrary to Eragamreddy's (2024) theory that AI can reduce stress, Unimed's findings suggest that AI triggers technological dependency. This dependence makes students feel helpless when technology is unavailable, indicating a weakness in their ability to communicate directly.

8. Impact on Competence as Future Teachers

There is a notable concern among students regarding their future roles as teachers. They fear losing the ability to detect student errors or explain grammar rules manually without digital assistance. This is the novel aspect of this research compared to the study by Nabila et al. (2025). The data proves that AI dependency at the foundational level threatens the professionalism and teaching competence of future German language educators, not just posing a current grading issue.

D. Conclusion

In conclusion, this study showed that the use of artificial intelligence tools had both positive and negative impacts on the writing skills of A2-level German Language Education students. AI helped students improve grammatical accuracy, vocabulary choice, and text organization. However, excessive dependence on AI reduced students' cognitive independence, creativity, and confidence in producing written texts without technological assistance. The findings indicated that many students relied on AI to complete writing tasks rather than developing their own linguistic abilities, especially in fundamental aspects of German such as sentence structure and grammar. Therefore, it was important for educators to guide students in using AI as a supportive learning tool rather than a substitute for their thinking process. Balanced and responsible use of AI could help students maintain their writing competence while still benefiting from technological advancements.

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