



AI Use in Writing Assignments: A Case Study of EFL Learners at Takhar University

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Abstract

Artificial intelligence (AI) has permeated nearly every aspect of our lives, playing a crucial role in academic writing. Although the use of AI by university students has become a common practice, few studies have specifically examined the extent and conditions of AI use in writing tasks among EFL students in a single university context. Therefore, this study focuses on the extent and conditions of AI use in writing tasks by EFL students at Takhar University. A quantitative research method was employed using a survey questionnaire containing 20 close-ended statements with 110 EFL students from freshmen to seniors. The study aimed to determine the extent of AI use in writing tasks and identify the conditions under which students use AI. The findings reveal that over 90% of students utilized AI across various writing tasks, including generating ideas, creating outlines, avoiding time-consuming work, and correcting grammar and spelling. Students reported using AI especially when faced with language barriers, overwhelming workloads, or when they felt uncomfortable seeking help from teachers. Based on these results, AI can be considered an unavoidable phenomenon in academic contexts, particularly in the field of writing. The findings could be beneficial and informative for teachers, university officials, policymakers, faculty members, and other pedagogical in-charges. Therefore, they should establish specific and comprehensive guidelines for appropriate AI use and develop short- and long-term educational programs to enhance AI literacy among students. This study is limited to one university, and future research could use qualitative methods to investigate teachers' perspectives across the country.

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INTRODUCTION

Writing is the process in which we organize and communicate our ideas and feelings into written forms through symbols that represent a language. Depending on the context and applicability, writing has different purposes. One purpose is academic writing, which is used mostly at universities and educational settings. In academic writing, the topic, purpose, and audience are of great importance. Therefore, one should take these elements into account when writing academic pieces (Sumarno, Kusumaningrum, & Nurhayati, 2022).

In the current 21st century, writing skills in the English language are among the most pivotal and crucial phenomena, not only in academic affairs but also in professional and intercultural communication. Writing is one of the complex parts of the language learning journey compared to other skills, like speaking, reading, and listening (Khayrullayeva, 2022). One fundamental requirement of learning is writing and it therefore demands a strong mastery of structure, vocabulary, accurate grammar, and coherent organization and demonstrates the ability to think because it allows individuals to transfer abstract ideas and feelings into concrete ones while observing coherence and neatness in word choice, style, and tone (Sumarno, Kusumaningrum, & Nurhayati, 2022; Etemadzadeh et al., 2013; Naber & Wyatt, 2014; Nejmaoui, 2019; Stephenson & Sadler-McKnight, 2016).

Most students that attain this level of language use are considered as high achievers and it is evident that they are able to manage many other subjects in their study. It is therefore important to note that writing contributes to student learning (AlRawahi & Al-Balushi, 2015; Gillespie et al., 2014; Pelger & Nilsson, 2016; Ray et al., 2016). Most students cannot carry out the writing processes, such as prewriting, planning, drafting, and revising, due to the complexity of the process (Oshima & Hogue, 1994; Sumarno, Kusumaningrum, & Nurhayati, 2022). To improve the writing and to correct the draft, individuals need feedback which is widely acknowledged as an essential component of learning at all levels. In higher education, feedback is essential to students' learning, yet it does not operate in isolation; instead, it is facilitated through teachers and technological tools like Artificial Intelligence (Buckingham Shum et al, 2023).

Although students generally appreciate the efficiency and clarity of AI feedback, they continue to perceive human feedback as more effective in providing individualized and context-sensitive support to their writing (Liu, 2024). Students generally avoid relying on AI tools unless constrained by time, resources, or language proficiency. For example, they try to use AI when they are asked to finish any task in due time or they are loaded with tasks which take more time to finish such as monograph submission, thesis submission, project submission and so on. Because of heavy workload on teachers and advisers in giving feedback on student's writings, researcher have tried to create an immediate feedback tool to facilitate the process.

With the advent of artificial intelligence, the Automated Writing Evaluation has been introduced in correcting the written pieces (Liu, W. 2024; Stevenson & Phakiti, 2014; Weigle, 2013). Researches have shown that students mostly use the AI tools (Automated Writing Evaluation) in correcting their spelling, mechanics and grammar (Liu, W. 2024; Strobl et al, 2019). Another AI tool called AWF (Automated Writing Feedback) employs natural language processing algorithms to automatically assess and provide feedback on written texts (Hi & Aryadoust, 2024). The use of AI in education is definitely changing the learning patterns of learners and it is on an upward trend. It has also attracted considerable attention in recent years (Zawacki-Richter et al, 2019). Automated Writing Evaluation (AWE) and Automated Writing Feedback (AWF) systems have greatly been used in language learning and writing instruction. These tools provide instant feedback to help students identify and correct errors in their writing. They can also assist with different parts of academic writing, such as generating ideas, writing the literature review, analyzing data, and even creating research proposals (Xu, 2025; Abd-Elsalam & Abdel-Momen, 2023).

Despite the collective gain realized in the use of AI in writing, there is still limited understanding on how frequently and under what conditions students use these tools to revise their written assignments. Takhar University, is one of the institutions of higher learning where English is taught as a foreign language (EFL). It is evident that most EFL students face difficulties in writing due to limited vocabulary, grammatical issues, and structural or organizational challenges. Although AI tools can support learners in improving their writing, it remains unclear on how often and under what circumstances EFL students at Takhar University use AI tools when writing their assignments.

This study aims to investigate how often and under what conditions EFL learners at Takhar University use AI tools to revise their writing assignments. Although AI tools such as AWE and

AWF have been widely studied for their effectiveness in providing feedback, little is known about how frequently and under what conditions EFL learners use these tools in real writing tasks. This comes against a backdrop that most existing researches focused on the quality or accuracy of AI feedback rather than students' actual usage patterns, particularly in specific contexts like Takhar University. This gap necessitates the need for a quantitative investigation on students' use of AI and the conditions of AI tool use in writing assignments.

This research is significant because it sheds light on how EFL learners at Takhar University interact with AI tools while completing their writing assignments. By examining the frequency and conditions of AI usage, the study contributes to a better understanding of students' adoption of AI in writing and circumstances facilitating the decision to use technology to support learning. The findings will be important to educators, researchers, and developers since they will inform the influence of the practical use of AI tools in writing instruction, highlighting areas where students rely on technology and potential gaps in support.

The main objective of this research is to examine how often and under what conditions EFL learners at Takhar University use AI tools to support their writing assignments seeking answer for the following two research questions; which are mainly related to the frequency of usage and the condition / circumstances they turn when writing their assignments.

1. How often do EFL learners at Takhar University use AI tools when completing their writing assignments?
2. In what conditions do EFL learners at Takhar University use AI tools in their writing assignments?

Literature review

Overview

In this chapter, literature that is relevant to the topic on the role of AI in correcting written assignments among EFL learners is reviewed. It first presents Historical Background of Artificial Intelligence, AWE (Automated Writing Evaluation) integration in English writing, AWCFT (Automatic Writing Corrective Feedback) use in English Writing, Ethical and Pedagogical Implications in English Writing, and Use of AI in EFL Students' Writing Practices.

Historical Background of Artificial Intelligence

The development of artificial intelligence is traced back to the mid-20th century when researchers tried to create systems to mimic human intelligence based on rule-based programming, where machines were programmed to do some predetermined tasks. This feature was called symbolic AI or "good old-fashioned AI". Later it was developed with more cognitive abilities that is able to analyze and organize the ideas logically (Sarica & Gençoğlu, 2025; Russell & Norvig, 2016). After a while, artificial intelligence took different shapes to perform various tasks. The first type used in writing was, Chat GPT, which was launched at the end of November 2022. At that time, it was the most widely used tool for writing, but later other types were introduced and are divided into three categories based on applicability and other characteristics. The first group includes Google Bard, Perplexity, BLOOM, Chat Sonic, Cloude, Whisper, Jasper Chat, Chat GPT, AJET Digital, Dream Writer, Jenni, Kuai Bi Xiao Xi, Inspire, Xiao Ming, A Tong, and A Le. The second group includes AWCFT (automated writing corrective feedback tool), Grammarly, World-vice, AI Proofreader, Perfect-It, and Pro-Writing-Aid. The third group consists of automated scoring tools such as U Do Writer, Jasper, Shortly AI, and Idealthon (Jen & Salam, 2024). These varied and available tools indicate that AI has brought significant changes in educational sector globally in the manner of not just knowledge dissemination but learning itself. The entire process of teaching, learning and evaluation is therefore aligned to this technological advancement and use of Artificial Intelligence (AI). Artificial Intelligence is here to stay and there is no option but to embrace it for better pedagogical and learning outcomes. Particularly, AI can be a game changer in helping EFL (English as a Foreign language) learners improve their writing skills.

AWE (Automated Writing Evaluation) Integration in English Writing

This section explores the meaning and role of AWE in English writing, and its level of accuracy. It also compares preferences between AWE and teacher-directed feedback from the viewpoints of researchers and users. In addition, it highlights the positive and negative outcomes of AI-based

English writing tools such as AWE, and AWCF. Students in higher learning are tapping on the advantages of technology to enhance their learning outcomes. There are numerous AI tools in use for various purposes but this research will particularly look at Automated Writing Evaluation (AWE) tool and how students have integrated it in English writing. AWE refers to the use of computer algorithms to evaluate and score written texts, often for assessment purposes, it focuses on evaluating overall quality of writing and provides a summative assessment score (Abdulaziz & Mohammed, 2024). AWE systems include ETS's e-rater, Pearson's intelligent Essay Assessor, and Turnitin's Revision Assistant. These systems assist learners and teachers in the assessment of the written work which could be essays, comprehension passages, or even composition. For instance, Turnitin's Revision Assistant is able to correct errors in any written work. This in turn helps the student not just to correct the errors but to learn proper writing practices. It is also believed that utilizing AWE would provide faster, cheaper and more precise scoring. To authenticate this belief, many researchers have studied AWE as an assistant English writing tool to establish its efficacy in helping students in English writing. In a study by Liu (2024), the validity and effects of automated writing feedback on students' writing outcomes and engagement in revision were examined. The results showed that automated writing feedback plays an important role in improving learners' writing, particularly in developing their linguistic abilities. However, compared to human feedback, it does not fully meet students' needs regarding content-related suggestions. The study also found that the AWE system was not equally accurate across all types of errors, and students' responses to its feedback depended on how actively they engaged in learning through their behavior, thinking, and emotions. On the contrary, Juan, Austin, & Alex (2023) postulate that AWE programs have been used extensively to assist instructors and learners to get correct feedback.

Another study conducted by Zu (2025) reveals that although AI helps the writer to correct grammar and readability, it does not work in content generation that lacks the academic integration. Zu (2025), further states that the academic journals should have a policy regarding AI usage and they should at least update their policy of the AI usage in writing and authorships. These results still agree with the findings of an earlier study done by (Liu, 2024). Aside from these findings regarding AI tools, other findings show that AWE programs have been used extensively to assist instructors and learners to get correct feedback. They have also helped in optimizing the writing output and despite their limitations in detecting writing content errors, they have helped in providing immediate feedback of mechanical errors for students' writing, something a human cannot always do (Lavolette, Polio & Kahng, 2015). From the discussions here it is evident that Automated Writing Evaluation (AWE) is one of the technological advantages that many scholars should tap on for improved English writing outcomes.

Depending on how available and affordable the AI programs are, majority of students and teachers would like or would be mandated to use them in writing and evaluation. The advent of AI applications in English language teaching settings, has therefore created a good learning opportunity for both students and teachers, especially the use of AI-directed writing tools. AI-supported writing tools create a facilitation for human in writing and revising their works, while the role of human is still alive. AWCF (Automatic Writing Corrective Feedback) is another resourceful tool in English writing. AWCF refers to the use of computer algorithms to provide feedback on specific aspects of writing such as grammar, syntax, or organization (Huawei & Aryadoust, 2024). It focuses on providing targeted feedback to improve writing skills, rather than evaluating overall writing quality. AWCF has systems like Grammarly, ProWritingAid, and QuillBot, which are usually used for formative assessment, such as providing feedback to students during the writing process. These systems offer automated evaluations of grammar, coherence and writing style (Bai & Wang, 2023, Brown, 2023).

Research has shown that AWCF can have positive impact on writing performance, particularly in areas such as grammatical accuracy, coherence and cohesion. A systematic study of 83 studies on AWCF found that most studies reported positive results, with AWCF helping to increase writing scores and performance (Shi & Aryadoust, 2024). Similarly, studies have also explored the use of AWCF in combination with human feedback, finding that AWCF can be useful supplement to human feedback (Escalante, Pack & Barret, 2023). Despite these positive research findings, it is important to note that although AI tools help the writer to correct grammar, generate ideas, and find mistakes in their writing with constant and automated feedback, its use must be checked. Language learning is a multidimensional undertaking with well-established principles. These principles of language learning must be observed while effecting language acquisition

especially when the language is foreign or second language to the learner. The outcome of language learning process is key. Pannel, Partsch, and Fuller (2017), postulate that learners acquire language through producing language, receiving feedback, and modifying their output.

Ethical and Pedagogical Implications of AI in English Writing

It is evident that AI can generate contextually relevant text and this has led to its use in academic settings (Hsu, 2023). However, the integration of AI in English writing raises several ethical and pedagogical concerns. Some of the ethical issues of AI use is the authorship and ownership of work where AI systems raise questions about who owns the work and who is responsible for its accuracy. Instructors and students who get their work through AI may be unable to give citations since the work lacks ownership. In this way, AI tools can facilitate plagiarism where students may take other people's work and pass it on as theirs.

According to Russel and Norvig (2016), all researchers should be concerned with the ethical implications of their work. AI systems can also perpetuate biases presented in their training data thus compromising fairness. AI tools often require access to sensitive student data, raising concerns of privacy and data protection. This can lead to social ills like defamation or theft of personal property. Li (2007) deals with privacy concerns in his article about intelligent agent supported online learning where he advocates for care of personal data that is submitted during the use of AI tools. Although ethical concerns such as plagiarism (Stewart, 2023), threats to human intelligence and academic integrity (Weissman, 2023), and the risk of generating incorrect feedback (Koltovskaia, 2023) have been raised, the use of AI in education continues. A stunningly low number of authors, only two out of 146 articles (1.4%), critically reflect upon ethical implications, challenges and risks of applying AI in education.

There are also pedagogical implications resulting from the use of AI in English writing key among them being overreliance on AI tools which can hinder students' writing skills and critical thinking. Sarica and Gençoğlu, 2025 deem that there are concerns about overuse and over-reliance on these tools especially in English writing. This negates the basic objective of language acquisition. Writing in English Language is about creativity originality, and critical thinking. These important outcomes in language learning should not be sacrificed at the altar of AI. A lot of emphasis should be placed on these outcomes so that even as learners use AI their abilities of critical thinking, problem solving, imagination, and creativity are not compromised.

Important to note is the fact that AI-generated feedback can undermine students' autonomy and confidence in their writing. This is because while generating this feedback AI may not put into consideration the specific abilities of the learners. Instructors using AI may also shift teaching focus and adapt their teaching methods and focus on higher-order skills. This may finally compromise the validity of assessments and evaluations. It is therefore mundane that all the stakeholders take into account these ethical and pedagogical implications of AI. By acknowledging these implications and adopting best practices, educators can harness the benefits of AI in English writing while minimizing potential risks. Best practices include; transparency and disclosure where users clearly disclose the use of AI tools in writing feedback. Learners should be taught to critically evaluate AI-generated content and feedback.

There should be AI literacy to control over-reliance and make users aware of its misuse, which can cause plagiarism (Gençoğlu, 2025; Russell & Norvig, 2016). They should be educated about AI capabilities, limitations, and biases. Digital literacy plays a key role in the use of AI tools in learning. Digitally Literate encompasses individuals that possess a broad range of digital skills and knowledge, and have an understanding of the potential uses of technological devices and programs. Digital literacy is one of the main core competencies for learning and it challenges existing thinking while leading to a more innovative, creative and transformational learning. The role of the teacher in AI use should be emphasized. Human teachers and evaluators must review and provide feedback on all AI-generated content. Gavilánez and Sánchez (2019) employed a pre-test/post-test experimental research design to investigate the development of 28 university students' writing during a semester of study. The participants used Grammarly and another AI writing assistant, for AWCF. The findings showed an improvement to the student's motivation to learn independently and asserted the role of the teacher in compensating for the limitations of the tools, which they found to be in content development. Several researchers also investigated students' perceptions of Grammarly. Findings related to these are comparable with slight variations. O'Neill and Russell (2019), found that students who employed Grammarly as a writing assistant were more satisfied with the grammar

advice, they received than those mentored by human teachers. Previous studies revealed several potentials of Grammarly though they are not comparable to human-based corrective feedback.

It was also found that EFL students generally have favorable views toward Grammarly; however, the psychological factors that contribute to formulating the students' intention to use Grammarly are not apparent. Instructors may find it hard to give instant feedback for students' problematic areas of their pieces of writing, but AWE can partially do that for certain aspects of the language (Lavolette, Polio & Kahng, 2015). Whatever accuracy these programs offer, human intervention is essential to control the limits of the program and to advance the high quality of corrective feedback. The next obstacle of leveraging AI is mentioned by Welham (2008) which is related to the fee and the opportunity in running and introducing AI based methods which is very hard and unaffordable in most governmental institutions. These constraints should be mitigated in order to enhance the use of AI in English learning. AI-generated feedback is a potential solution to enhance the quality and value of feedback received by EFL students (Guo & Wang, 2024). AI has the ability to analyze language patterns (Rudolph et al., 2023), and it holds promising potential for supporting writing tasks.

AI use in EFL Students' Writing Practices

In language learning and teaching tasks, AI is used to emulate the behavior of a teacher or a learner. The evolution of language learning and teaching has been rapid and transformative. In 1950s -1960s AI research focused on machine translation, with limited success. In 1980s AI started being applied to language learning with rule-based systems and early Chabot. In 1990s to 2000 Computer-Assisted language learning (CALL) and Intelligent Computer-Assisted Language Learning (ICALL) emerged, focusing on grammar and vocabulary instruction. Other AI-powered language learning platforms like Rosetta Stone, gained popularity during the early 2000s. In the modern era, AI-powered language apps like Duolingo, Babel, and Memrise, have revolutionized language learning with gamification, personalization, and adaptive testing. Duolingo and Grammarly enable learners to practice language skills, offering instant corrections and suggestions to enhance learning (Xu, Wang, X., & Li, 2022). However, important point to note is that these tools may provide overly simplistic suggestions or literal translations that fail to capture the intended academic meaning thus reducing critical thinking, creativity, and independent problem -solving skills (Kessler, 2020).

In the recent years, AI-driven language learning platforms like Chat GPT and Google's BERT, have improved language understanding, conversation, and feedback capabilities.

In personalization, AI-powered adaptive learning systems tailor instruction to individual learner's needs, pace, and learning style while in conversational AI, Chatbots and virtual assistants, like Chat GPT, practice conversational skills, provide feedback, and stimulate real- life conversations. It assists in drafting manuscripts, thereby improving the writing efficiency of researchers and authors (Thomas, Bhosale, Shukla, & Kapadia, 2023). There is also Natural Language processing (NLP) where AI-powered tools analyze and generate human language, visual recognition, and voice process enabling more effective language instruction and feedback (Nilsson, 2010). AI-powered platforms also integrate text, audio, video, and speech recognition to create immersive language learning experiences (Multimodal learning). AI use has a significant place in the future where it will gain increased adoption of AI-powered language learning tools in classrooms and self-study settings. There will also be more sophisticated AI models that will handle complex language tasks, like nuanced conversation and idiomatic expressions. Integration of AI with other technologies, like Virtual Reality (VR) and Augmented reality (AR), to create immersive language learning environments will mark a tremendous milestone in the progress of enhancing learning outcomes through AI for a better society.

The changes experienced in artificial intelligence (AI)-based language models have created new possibilities for educational purposes, especially in English as a foreign Language (EFL) setting. One of the benefits is the enhancement of writing accuracy and increased confidence among EFL students. This makes AI one of the most valuable educational resource. This put aside, the effectiveness of AI tools can vary based on students' proficiency levels and familiarity with technology (Zhang, 2021).

Learners express themselves through writing which is a critical skill in language acquisition, and the challenges faced by EFL learners may hinder their ability to express themselves effectively. This implies that there is need for tailored approaches to enhance writing. All educational stakeholders should consider integrating AI tools into writing curricular in order to complement

traditional teaching methods and ensure that students develop both their writing skills and their ability to think critically and solve problems. In this case, weaker students will benefit a lot from AI. A published, controlled experimental study involving professionals from various fields show that Chat GPT is especially beneficial for individuals with weaker writing skills (Noy & Zhang, 2023).

AI is in use globally and EFL students use it in writing. They find these tools helpful in enhancing writing skills, like grammar, vocabulary, organization, and generation of ideas. AI is therefore used among EFL students in several countries, particularly in higher education settings.

In Saudi Arabia, students frequently use Chat GTP, Grammarly, and Google translate for academic writing (Al-Sofi, 2024). A study at a public University in Egypt found that AI- assisted feedback (via grammar) improved EFL students' writing proficiency, especially in language use and organization. In China research explored AI's impact on speaking skills and self-regulation in EFL contexts. AI-enhanced collaborative storytelling was tested in a university in Japan while in Turkey, studies examined students' perceptions of AI paraphrasing tools in academic writing. These countries represent a growing trend of AI adoption in EFL education, though usage varies by institution and access to technology. However, there are still research gaps concerning the use of AI among EFL learners specifically in Afghanistan because there are few studies specific to Afghanistan relating to the use of AI among EFL students in English writing practices. It is also noted that EFL learners in the country face challenges like limited resources, infrastructure, and internet access. Adoption of AI tools in Afghanistan may also be hindered by technological limitations, language barriers (Dari/Pashto versus English), and educational infrastructure. There is need to assess AI tools use in Afghanistan among EFL students in writing their English assignments. This research therefore seeks to bridge this gap by establishing how often EFL learners at Takhar University use AI tools in their writing practices. It is also crucial to know in what conditions do EFL learners at Takhar University use AI tools in their English writing.

METHODS

Research Design

Research design is a crucial step in the research process (Creswell, 2014). To address the research questions, the researchers reviewed empirical evidence around the use of AI among EFL students in writing English assignments. The study adopted quantitative analytical approach. In a quantitative approach, the researcher identifies the research problem based on the trends and attitudes of the participants to explain why something happens. In quantitative research, we explain the tendencies and how a variable causes effect on another one (Cresswell & Guetterman, 2019). A quantitative approach is chosen for three reasons for this study; first with regard to the research problem it was needed to evaluate trends and explanations to be made.

Secondly, because of the familiarity of the research problem to the audiences mainly the national authorities of the education, the policy makers, and the profit and nonprofit stakeholders. Thirdly, the quantitative approach was used due to the nature of data collected which is numerical in nature. There is a specific way of running the tools to do numerical data analysis and measurements (Cresswell & Guetterman, 2019). Quantitative data were collected using closed multiple-choice questions and Likert-scale questions through an online survey.

Participants and Selection Procedure

According to Creswell (2014), convenient sampling is used to select participants based on ease of access. Convenient Sampling method was used to select a sample of 110 participants out of 120 EFL learners across academic levels and proficiency tiers (beginner to advanced) to complete the study tool. The participants consisted of 110 EFL learners from Takhar University, drawn from four classes: freshmen 27 (making 24.5 percent), sophomores 23 (making 20.9 percent), juniors 32 (making 29.1 percent), and seniors 28 (making 25.5 percent). The total number of students in the English department were 120 (English Department, Takhar University Student Statistics Report, 2025). The survey was delivered via the online platforms. Specifically, it was distributed through WhatsApp groups and by email to a network of EFL students on said networks.

Instruments

A research instrument is a tool used to collect data in a research study (Dowler & Kofinas, 2012). This study used a questionnaire which consisted 20 item tools. The questionnaire, containing 20 close-ended statements, was initially created on the Google Forms platform and then distributed via

WhatsApp groups. Participants were asked to respond based on their experiences, indicating frequency from "always" to "never." This frequency scale aimed to ascertain participants use of Artificial Intelligence in writing their assignments. It was also used to assess the conditions under which participants use Artificial intelligence in writing assignments.

Data Collection and Analysis

Dowler and Kofinas (2012) emphasize the importance of careful data collection in research. In this research, data quality was ensured through robust, reliable and valid methods. As mentioned earlier, the questionnaire in google form format was sent to EFL learners at the university. After that, they answered the questionnaire using the link shared to them. The questionnaire was closed receiving responses in order to cope with research threat not to receive answers from nonprofessional individuals Nunan et al, 2009). The data were downloaded and SPSS version 25 was used to analyze the data.

Research timeline

The research started on July 2025 with the initial administrative procedures and getting permission from the research affairs voice chancellor office. It took one and half month. The data collection procedure took four weeks letting the participants to answer the question through google form when they had internet connection. The data analysis took one and half month, first arranging the answers and later entering the data into SPSS. The result, conclusion discussion and also reporting of the research took one month. the paper was proofread about two weeks before it is submitted to the journal. The general timeline took 6 months and two weeks.

Ethical approval

The Research Committee of the Office of the Vice-Chancellor for Research at Takhar University, which was established at the beginning of 2025 as a separate office for the university's research affairs, approved this study (Approval No. OVCRTU-R.NO.012-2025). The participants were informed through a consent letter attached at the beginning of the questionnaire and they agreed with all stages and purposes of the research. In addition, as they were all my own students (first author), they were informed about their right to withdraw and the details of the research procedure through WhatsApp group too.

FINDINGS AND DISCUSSION

Demographic Profile of Participants

This study aimed to examine the use of Artificial Intelligence in writing assignments among EFL learners at Takhar University. It also sought to assess the conditions under which EFL learners use AI in their writing assignments. The participants included four classes, ranging from freshmen to seniors, with varying age groups. As shown in the table 1 below, 9 out of 110 participants were aged 17 to 19, representing 8.2% of the total sample. A significant majority, 77 participants (70%), were aged 20 to 22. University students in Afghanistan fall within the age range of 18 to 25 (Ministry of Education Kankoor Exam, 2025). Additionally, 24 participants (24%) were aged 23 to 25. The academic backgrounds of the participants were distributed as follows: 27 were freshmen, accounting for 24.5% of the total; 25 were sophomores, representing 22.7%; 32 were juniors, making up 29.1%; and 26 were seniors, comprising 23.6%. This diverse representation across different academic levels and ages provides insight into the frequency of usage of AI in writing assignments among learners at university level.

Table 1. Participants' Demographic Information

1. Age		
Age	Frequency	Percentage
17-19	9	8.2
20-22	77	70.0

23-25	24	21.8
Total	110	100.0
2. Class		
Class	Frequency	Percentage
freshmen	27	24.5
sophomore	25	22.7
junior	32	29.1
senior	26	23.6
Total	110	100.0

Table 2. The Frequency of AI use by EFL Students

Items		Frequency and Percentage (%)							
No	Frequency and conditions of AI use by students	Always	Usually	Often	Sometimes	Rarely	Never	Mean	S.D
1	I use AI when preparing outline for my writing	21 19.1%	33 30.0%	18 16.4%	28 25.5%	7 6.4%	3 2.7%	2.7818	1.33672
2	I use AI when know the guide to control time consuming.	23 20.9%	19 17.3%	27 24.5%	25 22.7%	13 11.8%	3 2.7%	2.9545	1.40371
3	I use Ai when lack English proficiency of the issue.	29 26.4%	26 23.6%	27 24.5%	18 16.4%	6 5.5%	4 3.6%	2.6182	1.36793
4	I use Ai when there are many tasks to do.	26 23.6%	33 30.0%	21 19.1%	22 20.0%	4 3.6%	4 3.6%	2.6091	1.33475
5	I use AI when I am shy to ask the teacher repeatedly questions about the writing correction.	22 20.0%	27 24.5%	22 20.0%	25 22.7%	8 7.3%	6 5.5%	2.8909	1.43575
6	I use AI to prepare the research proposal.	26 23.6%	27 24.5%	20 18.2%	18 16.4%	13 11.8%	6 5.5%	2.8455	1.52163
7	I use AI when preparing monograph because of lack of research qualification.	27 24.5%	23 20.9%	20 18.2%	23 20.9%	14 12.7%	3 2.7%	2.8455	1.46636
8	I use AI when there is limited time to do the class assignments	28 25.5%	30 27.3%	17 15.5%	24 21.8%	7 6.4%	4 3.6%	2.6727	1.41492
9	I use AI before submitting my final written assignments	19 17.3%	22 20.0%	24 21.8%	28 25.5%	12 10.9%	5 4.5%	3.0636	1.41601
10	I use AI when my teacher or classmates are not available to help.	42 38.2%	31 28.2%	17 15.5%	13 11.8%	5 4.5%	2 1.8%	2.2182	1.29489
Overall Mean								2.75	

Table 2 presents the frequency and conditions under which EFL students reported using Artificial Intelligence (AI) tools in their writing. A total number of 21 participants, representing 19.1%, reported that they always use AI in making outlines for their writing an indication that majority of students rely on AI for this task. Additionally, 33 participants (30%) selected usually, 18 participants (16.4%) selected often, and 28 participants (25.5%) selected sometimes. The low differences in frequency from always to sometimes suggest a widespread use of AI in preparing outlines for writing assignments. Only a small number of participants, 7 (6.4%) selected rarely, and 3 (2.7%) selected never, indicating that very few students avoid using AI in this context. Regarding time management, participants also reported using AI in their writing assignments. 23 participants (20.9%) answered always, indicating a substantial portion of students' reliance on AI to save time. Additionally, 19 participants (17.3%) selected usually, 27 participants (24.5%) selected often, and 25 participants (22.7%) selected sometimes, reflecting a gradually increasing use of AI for efficient writing when they are able to write themselves too. Only 13 participants (11.8%) selected rarely, and 3 participants (2.7%) selected never, indicating that very few students avoid using AI in these conditions. Overall, the responses suggest that AI is widely used by students to manage time effectively in their writing tasks. Regarding lack of English proficiency, participants also reported using AI in their writing assignments. 29 participants (26.4%) answered always, indicating a considerable reliance on AI when they face language difficulties.

The findings also show that, 26 participants (23.6%) selected usually, 27 participants (24.5%) often, and 18 participants (16.4%) sometimes, showing that many students frequently turn to AI to support their writing when they struggle with English proficiency. A total number of 6 participants (5.5%) selected rarely, and 4 participants (3.6%) selected never, indicating that very small number of students avoid using AI due to lack of English proficiency. AI therefore contributes to better writing skills among EFL students. In general, these findings indicate that AI serves as an important tool for students to overcome language challenges in writing assignments and that a considerable portion of participants rely on AI when they face a high workload. From the findings, 26 respondents (23.6%) reported that they always use AI in such situations, while 33 participants (30.0%) stated that they usually use it. Among the students, 21(19.1%) often turn to AI, and 22 respondents (20.0%) sometimes rely on it when they have many tasks to complete. Only a small minority reported limited use: 4 participants (3.6%) indicated rarely, and another 4 participants (3.6%) reported never using AI for managing heavy workloads. Looking at the close answers from always to sometimes, we can say, more than 70% of the participants consistently integrate AI into their work when dealing with multiple tasks, highlighting the tool's importance for managing academic demands. For the statement "I use AI when I am shy to ask the teacher repeatedly about writing correction," the findings indicate that students who feel hesitant to approach their teacher multiple times tend to rely on AI as an alternative source of support. According to the data, 22 participants (20.0%) reported that they always use AI in such situations, while 27 students (24.5%) stated that they usually do so. Additionally, 22 respondents (20.0%) indicated that they often rely on AI, and 25 participants (22.7%) mentioned that they sometimes use it because of their shyness in asking repeated questions. A smaller portion of the sample reported lower reliance on AI: 8 respondents (7.3%) indicated rarely and 6 students (5.5%) stated they never use AI for this purpose. Overall, these findings suggest that a considerable majority of students (nearly 65%) frequently use AI because they feel uncomfortable asking repeated questions from their teacher, indicating that AI serves as an alternative source of support when students experience social hesitation in academic communication. For the statement "I use AI to prepare the research proposal," the findings show that a considerable number of students depend on AI during this stage of academic writing. As the results show, 26 participants (23.6%) reported that they always use AI, and 27 students (24.5%) stated that they usually do so. Furthermore, 20 respondents (18.2%) often use AI, while 18 participants (16.4%) sometimes rely on it for preparing their proposals. Only a smaller number indicated low usage, with 13 students (11.8%) reporting rarely, and 6 participants (5.5%) never using AI for this purpose. In common, this statement demonstrates that a majority of students use AI to some extent when preparing research proposals, reflecting the tool's increasing relevance in students' academic work. For the statement "I use AI when preparing my monograph because of lack of research qualification," the results show that many students rely on AI due to limited research skills. According to the findings, 27 participants (24.5%) stated that they always use AI, while 23 respondents (20.9%) usually do so. Additionally, 20 participants (18.2%) often, and another 23 students (20.9%) sometimes turn to AI during monograph preparation. Only a small group reported lower use, with 14 respondents (12.7%)

rarely, and 3 participants (2.7%) never using AI for this purpose. This statement highlights that the majority of students turn to AI to address gaps in their research skills while preparing their monographs. For the statement “I use AI when there is limited time to do the class assignments,” the findings show that students often rely on AI to manage time constraints. Specifically, 28 participants (25.5%) reported always using AI, and 30 respondents (27.3%) usually do so. Additionally, 17 students (15.5%) often and 24 participants (21.8%) sometimes use AI in such situations, while a smaller proportion reported low usage: 7 respondents (6.4%) rarely, and 4 participants (3.6%) never using AI. Overall, this statement indicates that a majority of students turn to AI as a practical solution when facing limited time for completing assignments. For the statement “I use AI before submitting my final written assignments,” the results indicate that students frequently use AI at the final stage of their writing. Specifically, 19 participants (17.3%) reported always using AI, 22 respondents (20.0%) usually do so, 24 students (21.8%) often, and 28 participants (25.5%) sometimes rely on AI before submission. Only a small group reported limited use, with 12 respondents (10.9%) rarely, and 5 participants (4.5%) never using AI at this stage. The findings of the statement show that students check their writing pieces for accuracy before submitting to the teacher. For the statement “I use AI when my teacher or classmates are not available to help,” the findings show that students frequently rely on AI in the absence of immediate support. Specifically, 42 participants (38.2%) reported always using AI, 31 respondents (28.2%) usually do so, 17 students (15.5%) often, and 13 participants (11.8%) sometimes turn to AI. A smaller proportion reported low usage, with 5 respondents (4.5%) rarely, and 2 participants (1.8%) never using AI in such situations. This statement demonstrates that most students use AI as a substitute for guidance when teachers or classmates are unavailable. The findings indicate that EFL students widely and consistently use AI across various stages of writing, including outlining, time management, idea generation, research proposal and monograph preparation, and final revisions. Students rely on AI to compensate for language difficulties, limited research skills, high workload, and lack of immediate guidance from teachers or peers. Overall, AI serves as a valuable support tool, enhancing writing efficiency, quality, and academic confidence.

Table 3. The Conditions of AI use by EFL Student

No	Items	Frequency and Percentage (%)						
		Always	Usually	Often	Sometimes	Rarely	Never	S.D
1	I use AI instead of traditional resources such as dictionaries or books.	21 19.1%	37 33.6%	11 10.0%	24 21.8%	13 11.8%	4 3.6%	2.8455 1.45379
2	I use AI when I need examples or models of good writing.	27 24.5%	33 30.0%	13 11.8%	23 20.9%	10 9.1%	4 3.6%	2.7091 1.45480
3	I use AI to improve the overall quality of my writing.	26 23.6%	27 24.5%	21 19.1%	27 24.5%	5 4.5%	4 3.6%	2.7273 1.37413
4	I use AI when I face challenges expressing ideas in English.	29 26.4%	35 31.8%	15 13.6%	24 21.8%	3 2.7%	4 3.6%	2.5364 1.35238
5	I use AI to complete writing tasks more quickly.	24 21.8%	36 32.7%	20 18.2%	20 18.2%	7 6.4%	3 2.7%	2.6273 1.32623
6	I use AI to rewrite or paraphrase sentences that I find difficult.	27 24.5%	34 30.9%	23 20.9%	14 12.7%	9 8.2%	3 2.7%	2.5727 1.35090
7	I use AI to check the coherence and organization of my writing.	27 24.5%	24 21.8%	18 16.4%	27 24.5%	12 10.9%	2 1.8%	2.8091 1.42388
8	I use AI to help me generate ideas for writing.	18 16.4%	48 43.6%	17 15.5%	23 20.9%	2 1.8%	2 1.8%	2.5364 1.15478
9	I use AI to correct grammar, spelling, or sentence structure.	32 29.1%	34 30.9%	14 12.7%	21 19.1%	7 6.4%	2 1.8%	2.4818 1.35275

10	I use AI tools when working on my English writing assignments.	32	37	19	19	2	1	2.3182	1.17256
		29.1%	33.6%	17.3%	17.3%	1.8%	0.9%		
Overall Mean									2.6164

Table 3 presents findings on the frequency and conditions under which EFL students use AI. It shows how often students rely on AI across different situations. The responses range from always to never. The patterns in AI use in academic writing among students are highlighted. The findings on the statement “I use AI instead of traditional resources such as dictionaries or books,” show that students’ reliance on AI as a substitute for conventional tools in writing varies. Specifically, 21 participants (19.1%) reported that they always use AI, while 37 respondents (33.6%) indicated that they usually do so.

The findings also indicate that 11 students (10.0%) often, 24 participants (21.8%) sometimes, 13 students (11.8%) rarely, and 4 participants (3.6%) never use AI instead of traditional resources. The results therefore show that a high number of students use AI instead of dictionaries or primary resources when writing while a small number do not use AI. For the statement “I use AI when I need examples or models of good writing,” the findings indicate that many students rely on AI as a source of guidance. Specifically, 27 participants (24.5%) reported always using AI, and 33 respondents (30.0%) usually do so. Additionally, 13 students (11.8%) often, 23 participants (20.9%) sometimes, 10 students (9.1%) rarely, and 4 participants (3.6%) never turn to AI for writing examples or models. This statement suggests that a majority of students use AI to support their writing by providing illustrative examples and models of quality work. For the statement “I use AI to improve the overall quality of my writing,” the findings show varied levels of reliance among students. Specifically, 26 participants (23.6%) always and 27 (24.5%) usually used AI, while 21 (19.1%) often, 27 (24.5%) sometimes, 5 (4.5%) rarely, and 4 (3.6%) never relied on it. This statement indicates that a majority of students use AI regularly to enhance the quality of their writing, highlighting its role as an important support tool in the writing process. For the statement “I use AI when I face challenges expressing ideas in English,” the findings indicate that students frequently rely on AI to overcome language difficulties. Specifically, 29 participants (26.4%) always and 35 (31.8%) usually used AI, while 15 (13.6%) often, 24 (21.8%) sometimes, 3 (2.7%) rarely, and 4 (3.6%) never did. The result shows that they use AI when they face idea creation problem in their writing. For the statement “I use AI to complete writing tasks more quickly,” the findings show that students often rely on AI to enhance efficiency. Specifically, 24 participants (21.8%) always and 36 (32.7%) usually used AI, while 20 (18.2%) often, 20 (18.2%) sometimes, 7 (6.4%) rarely, and 3 (2.7%) never did. Over all, this statement indicates that AI is frequently used by students as a tool to accelerate the completion of writing tasks. Regarding the statement “I use AI to rewrite or paraphrase sentences that I find difficult,” the data indicate that students frequently turn to AI for assistance with challenging sentences. Twenty-seven participants (24.5%) always and thirty-four (30.9%) usually used AI in this way. Additionally, 23 students (20.9%) often, 14 (12.7%) sometimes, 9 (8.2%) rarely, and 3 (2.7%) never relied on AI for paraphrasing. These results suggest that AI is an important tool for helping students reformulate complex or difficult sentences, supporting their overall writing process. For the statement “I use AI to check the coherence and organization of my writing,” the findings reveal that students often utilize AI to improve the structure of their work. Twenty-seven participants (24.5%) always and 24 (21.8%) usually relied on AI for this purpose. In addition, 18 students (16.4%) often, 27 (24.5%) sometimes, 12 (10.9%) rarely, and 2 (1.8%) never used AI to check coherence and organization. For the statement “I use AI to help me generate ideas for writing,” the results indicate that students commonly rely on AI for idea generation. Eighteen participants (16.4%) always and 48 (43.6%) usually used AI to generate ideas, while 17 (15.5%) often and 23 (20.9%) sometimes did so. Only a small number of students reported low usage, with 2 participants (1.8%) rarely and 2 (1.8%) never relying on AI for this purpose. It shows that students mostly use AI in their writing to generate ideas. For the statements “I use AI to correct grammar, spelling, or sentence structure” and “I use AI tools when working on my English writing assignments,” the findings show that students frequently rely on AI to enhance their writing accuracy and overall performance. In correcting grammar, spelling, or sentence structure, 32 participants (29.1%) always and 34 (30.9%) usually used AI, while 14 (12.7%) often, 21 (19.1%) sometimes, 7 (6.4%) rarely, and 2 (1.8%) never did. It was reported that when working on English writing assignments in general, 32 participants (29.1%) always and 37 (33.6%) usually relied on AI,

with 19 (17.3%) often, 19 (17.3%) sometimes, 2 (1.8%) rarely, and 1 (0.9%) never using AI. In conclusion, these statements indicate that a majority of students consistently use AI both for language accuracy and as a general support tool in completing writing assignments, highlighting its integral role in the EFL writing process.

Discussion

The purpose of this study was to investigate how often, and under what conditions EFL learners at Takhar University use AI in their writing. The findings of this study indicate that EFL students widely and consistently use AI to support various aspects of their writing, including generating ideas, improving quality, enhancing language accuracy, organizing content, and increasing efficiency though the extent of use varies from one learner to the next. Students reported using AI for outlining their writing tasks and for controlling time-consuming activities, even when they were capable of doing the tasks themselves; similar to using a calculator when the work can be done manually. They also turned to AI when they faced a lack of English proficiency or when assignments became overwhelming. Social factors, such as feeling ashamed to ask the teacher repeated questions, also influenced their reliance on AI. Abdulaziz, & Mohammed (2024) found similar results in their study where they opined that there were certain deficiencies in the suggestions provided by Grammarly, where students were uncertain regarding their ability to exploit the entire program's potential. For example, in that study, most of the students' responses to the third item in the construct which read: "I can apply Grammarly suggestions to improve my writing quality," were negative. Despite these findings, the overall findings indicate that the participants' responses clearly demonstrate that almost all students leverage AI when outlining their writing assignments. In addition, students used AI to write parts of their research proposals due to limited research qualifications, and when dealing with time constraints. They frequently used AI for checking accuracy, modeling, improving overall quality, paraphrasing difficult sentences, organizing sentences, generating ideas, and handling grammar. Overall, the findings indicate that AI is used by students for nearly in all aspects of their writing assignments. Some of the findings of this study are closely aligned with the past studies reviewed. Out of 110 participants, 26 students (23%) selected always, 27 students (24.4%) selected usually, 21 students (19.1%) selected often, and another 27 students (24.5%) selected sometimes when asked about using AI to improve the overall quality of their writing. Only 5 students selected rarely and 4 never. The large proportion of students who selected always to sometimes (91.1%) indicates a strong reliance on AI for enhancing the quality of their writing, which is consistent with previous findings (Abdulaziz & Mohammed, 2024; Zhang, 2021). Additionally, the results show that more than 90% of the students rely on AI to correct grammar, spelling, organization, and punctuation. This pattern is also supported by earlier studies (Juan, Austin, & Alex, 2025; Zu, 2025; Gavilánez & Sánchez, 2019; Lavolette, Polio, & Kahng, 2015; Guo & Wang, 2024; Noy & Zhang, 2023; Al-Sofia, 2024). The participants' responses to the statements designed to examine the frequency and conditions of EFL students' AI use indicate a strong positive attitude toward AI. For each statement, the combined responses from always to sometimes exceeded 90%, suggesting that a large majority of students use AI across various conditions and with different levels of frequency. This is in agreement with the argument that AI helps students generate ideas, write literature reviews, analyze data, and even develop research proposals (Xu, 2025; Abd-El salam & Abdel-Momen, 2023). AI therefore serves as a key tool that complements traditional resources, helping students overcome language challenges and complete writing tasks more effectively and its use in education has grown and gained popularity from educators and students alike (Zawacki-Richter et al., 2019).

CONCLUSION

This study sought to establish the extent and conditions of AI use among EFL learners at Takhar University. The findings indicate that a large number of EFL learners (over 90%) were using AI in writing their assignments to improve their written English communication skills. However, there is a relatively low number of learners that do not use AI. From the research findings it is evident that students rely on AI to generate ideas, create outlines, manage time-consuming activities, paraphrase difficult sentences, and improve grammar and overall writing quality. The research revealed that conditions like limited access to teachers, shyness in asking questions from teachers, and heavy workloads contribute to students' dependence on AI. These results suggest that AI is helping learners overcome linguistic and academic challenges, but they also highlight the need for guidance

to prevent overreliance and ensure responsible use. Several limitations necessitate acknowledgment. The reliance on self-reported questionnaire data in this study may introduce response bias, and the focus on university-level EFL learners restricts the generalizability to other educational contexts. Future studies ought to utilize longitudinal designs to assess the lasting effects of oral reading and AI-enhanced training on language development. Future research could also include teachers' perspectives towards AI use and its consequences across the country and employ qualitative method to understand the deeper impact of AI use in EFLs' writing. The study confirms that AI plays an important role in supporting EFL learners' writing, emphasizing the need for thoughtful integration of AI into educational settings.

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