

## THE PROMISE AND PERILS OF AI-POWERED WRITING TOOLS *EVALUATING THE PROS AND CONS IN SCHOOL-LEVEL LANGUAGE LEARNING*

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### **ABSTRACT**

The increasing use of Artificial Intelligence (AI) in education has created new opportunities and challenges for language learning, particularly at school. This study examines the pros and cons of AI-powered writing tools such as ChatGPT and Grammarly. Especially their influence on students' writing skills, creativity, and engagement. A quantitative case study was conducted on a sample of 100 students (50 boys and 50 girls) of government and private schools of Okara with pre-test and post-test questionnaires to determine changes in awareness, knowledge, and use of AI tools. An outstanding improvement in the knowledge of students about AI was seen as awareness level improved from 73% to 93% following intervention. Awareness of some of the writing supportive software also went up quite a long way, with utilization growing from 20% to 59%. Functional gains such as improved grammar correction, vocabulary enhancement, and assisting in novel ideas in writing was described by students. All these show that AI support can aid in decreasing technical errors, brainstorming, and confidence building in writing. Stringent limitations were also found by the study. Copying AI-written responses without verification was reported by students, and that is concerning in terms of plagiarism, dependency, and reduced critical thinking. AI-written material could not be fully read by a considerable proportion, which may restrict later learning success. In general, the findings indicate that AI-powered writing assistance has the potential to promote teaching and learning and should be used after assistance provided by mentors, that they should be implemented with close teacher monitoring, computer literacy training, and ethics awareness. Such synchronization will ensure that AI technologies are utilized as facilitators' tools for student learning and not alternatives for individual effort and creativity.

### **KEYWORDS**

*Language learning, AI Powered Writings, Evaluation, Use of ChatGPT, Pros and Cons of AI Tools.*

### **INTRODUCTION**

The emergence of AI tools in the education system is specifically important, as AI-powered writings are widely used among students of the present age. AI tools enable students to complete their assignments and other academic tasks. Khan (2023) is of the opinion that AI has emerged as a strong tool in a number of disciplines, with education being one of the most notable ones. These tools have proven to be very beneficial for students, as they help them improve their tasks without errors and also develop creativity. At the same time, they can also cause an erosion of students' critical thinking skills, hinder their creativity, and make them dependent and less engaged in their academic tasks. It is important to talk about the extent to which these tools are benefiting students' learning. This study aims to explore the pros and cons of AI-powered writings at the school level to highlight the benefits and drawbacks of using AI tools in the education system. This study would help learners and teachers understand what types of benefits and harms the use of AI tools may cause in their writings. It may help them make informed decisions in the future while using these tools and be aware that these tools are meant for assistance and enhancement of their ideas and skills, not for creating entire assignments, which could lead to plagiarism and dependency.

## LITERATURE REVIEW

This study will explore the positive and negative impact of AI powered writings at school level on language learning. As artificial intelligence is playing an important role in our daily life now a days (Chen et.al., 2020 as cited in Pratiwi & Apiani, 2024).AI powered writing has made students get their academic content error free and advance. As AI tools suggest sentence structures, enhance academic writing and facilitate in content creation, students have attracted towards it for academic assistance. (Pratiwi & Apriani, 2024).The impact of writings has shown a richness perceptions to develop and be creative in exploring ideas (Mazzone & Elgammal, 2019 as cited in Pratiwi & Apiani, 2024).Articial Intelligence(AI) is essentials In modern education as it facilitates in improving educational deficiency, effectiveness and productivity(Baidoo-Anu et al.,2024 as cited in Pratiwi & Apriani,2024).No doubt, AI has become usual while writing (Morrison 2023 as cited in Pratiwi & Apriani,2024).Rapid technological advancement like AI tools is deeply transforming the education landscape.(Pimental et al.,2024).

With the growing reliance on digital tools such as Grammarly, QuillBot, and ChatGPT in educational settings, many language teachers are beginning to question how these technologies are shaping students' writing abilities now and how they may influence them in the future (Ahmad, Khan, Nadeem, & Kashif, 2025). Using chatbots makes students less stressed while studying in classroom, it also saves time and keep them engaged (Ait Baha et al ., 2024 as cited in Pimental et al.,2024). Students are now digital natives who have been accustomed to access to information and modern technology (Pimental et al ., 2024).A wide usage of AI powered writings is helping students enhance their abilities of using advance language and making the writing better for achieving good scores in class.AI technologies can make the education more inclusive (Kooli,2023 as cited in Pimental et al.,2024).As the AI tools like ChatGPT ,grammerly,MetaAI etc help students enhance their language skills, they also hinder their critical thinking skills and innovation. The lack of critical thinking skills is also considerable issue among students (Thong et.al,2023; Liang & Wu,2024; Sardi et.al;2025 Launonen et.al2024 as cited in Balraj 2025).

When students start relying on AI tools, they often look for easy way outs. Increased AI engagement can make students overly dependant and can diminish their logical reasoning ( Long, Xiangfei & Jiacan, 2023 ; Neendoor, 2024; Vovk, Kryvoshyyia, 2024a, p. 391\_395; Vovk , Kryvoshyyia, 2024b, p. 323\_328; Vovk, Kryvoshyyia, 2024c, p. 2\_14 as cited in Olena & Kryvshyyia, 2024) . Too much dependence on AI to meet their task, where no personal efforts is being done can stunt students' intellectual abilities (Rane et.al,2023 as cited in Balraj 2025). They stop using their innate abilities and always prioritize convenience. AI tools where assist students they also make them lazy. As suggested by Khan (2024), over-reliance on AI can result in a declination in originality, analytical depth, and problem-solving skills, as students begin to prefer AI-generated content over actual intellectual engagement.

As far as ChatGPT is concerned, it is considered to answer the questions and solve the problem from given data,(Mahajan, 2023 as cited in Olena & Kryvshyyia , 2024). It is a valuable assistant for enhancing learning(Balraj,2025).Rising popularity of ChatGPT among students has prompted critical discussions within the academic community (Rasul et.al.,2023;Guo& Lee,2023;Yu,2023;Sun & Hoelscher,2023 as cited in Balraj,2025). By providing 24/7 access, it ensures personalized space ,interactive learning and reduce stress and pressure among students ( Long, Xiangfei & Jiacan, 2023 as cited in Olena & Kryvshyyia, 2024). AI helps students to brainstorm ideas but too much dependence on it without knowing the source is threatening (Jankovic & Kulic,2025 as cited in Balraj,2025).By creating human like texts ChatGPT has proven a practical tool for academic writings(Imad,2024; Anshori & Fauziab,2024;Laregi & Mebarek,2024 as cited in Balraj 2025).

While chatbots are specifically advanced ones; can personalize learning experiences by adapting individual users' unique traits, such as background, age, and knowledge, which creates a more effective and interconnected learning process (Gregorac, Brünner, & Ebner, 2025). Chatbots allow educators to focus on

teaching by automating routine activities and supporting students' individual needs (Gregorac, Brünner, & Ebner, 2025). Rule based chatbots function by matching user inputs to respond to user's questions following a basic if-then framework (Güldal and Dincer, 2024, as cited in Gregorac, Brünner, & Ebner, 2025). They are effective with complex questions and seek clarification, but nuanced or open-ended questions can be difficult (Labadze et al., 2023, as cited in Gregorac, Brünner, & Ebner, 2025). Voice chatbots, such as Alexa and Siri, can help kids with their homework, making it engaging and interactive (Hsu et al., 2023, & Kudina & Coeckelbergh, 2021, as cited in Gregorac, Brünner, & Ebner, 2025). They can provide additional practice, summaries, and explanations to reinforce learning and improve retention (Tapalova and Zhiyenbayeva, 2023, as cited in Gregorac, Brünner, & Ebner, 2025). Chatbots can facilitate interactive learning activities like goal-setting, reflection and teamwork, which are crucial for project-based learning. (Kumar, 2021 as cited in Gregorac, Brünner, & Ebner 2025).

AI tools also foster learning by helping to develop more creativity. They can provide learners innovative ideas to explore the world more creatively or critically. AI helps learners focus more on problem solving and critical thinking. It can also encourage users to think differently. As AI can be a beneficial source to improve writing skills (Kuhail et.al., 2023 ; Bibi & Atta, 2024 ; Marzuki et.al.,2024 as cited in Elstad & Eriksen 2024). On the other hand it can make students less-engaged in academic work (Pinker, 2025 as cited in Elstad & Eriksen 2024). Learning environments should be designed to prevent students from completely relying on shortcuts that can hinder proper learning while writing assignments (Hodges & Kirschna,2024 as cited in Elstad & Eriksen 2024).

Thus AI should be used for the purpose of taking help while writing assignment to teacher. This may cause no learning while no effort has been put by students in this case they just want to enjoy the marks of a ready-made work. Resultantly these type of writings cause no good marks but could be the reason of plagiarism. Because if a student copies text from scrapbook without citing the source and submits them as their own is considered as plagiarism (Huston,2024 as cited in Elstad & Eriksen 2024).

## **METHODOLOGY:**

This section of study is going to explain how the research was conducted. It demonstrate which type of research has been conducted, who are the participants, where and how the data is collected, what tools has been used.

## **RESEARCH DESIGN:**

This study used quantitative approach. The purpose was to evaluate the extent to which AI tools are benefiting or human student's academic writings at school level. This was a case study (studied specific area).

## **POPULATION and SAMPLING:**

The population of this study was all government and private schools of Okara. From this population a sample of 100 students 50 males and 50 females was selected using cluster sampling. The sample was taken from students of 8<sup>th</sup> to 10<sup>th</sup> class from government and private schools of Okara which includes Iqra Science Model High School, Falcon Public School, Dar-e-Arqam High school, The Knowledge School Al-Sharif Campus , Government MC Junior Model Girls High School, Government MC High School for Boys, Government Girls Model High School , Government Islamia High School New Campus.

## **RESEARCH SETTING:**

The research was conducted in the govt. and private sector schools of district Okara. The data was collected in August 2025.

## **DATA COLLECTION TOOLS:**

The main tool for the data collection was pre-test and post-test questionnaire. These questionnaires were consisted on evaluation of pros and cons of AI tools while doing school work.

### **VALIDITY and RELIABILITY:**

The tools were checked by two languages expert to ensure validity. A pilot test was also conducted for reliability changes were made on the basis of feedback.

### **DATA COLLECTION PROCEDURE:**

To collect data researcher went to two academies where a number of students from different government and private schools were present. After taking permission from head masters researcher went to each class and asked for 10 minutes to collect data from students sitting there.

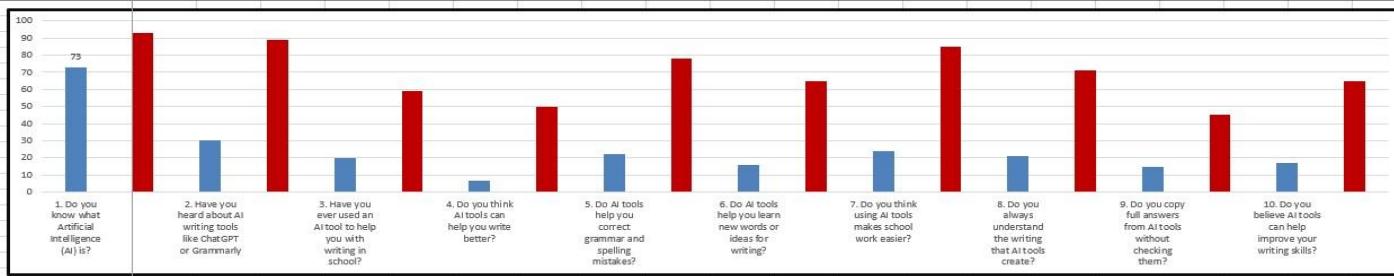
### **LIMITATIONS:**

The sample taken was small and was covering only one district. Students were filling questionnaires first time and were fearing to be judged may not have answered honestly.

### **SUMMARY LINE:**

The method helped researcher to know about how students are using AI tools for school writings and to what extent they are benefiting or harming them.

100 Students Survey Data Results	1. Do you know what Artificial Intelligence (AI) is?	2. Have you heard about AI writing tools like ChatGPT or Grammarly	3. Have you ever used an AI tool to help you with writing in school?	4. Do you think AI tools can help you write better?	5. Do AI tools help you correct grammar and spelling mistakes?	6. Do AI tools help you learn new words or ideas for writing?	7. Do you think using AI tools makes school work easier?	8. Do you always understand the writing that AI tools create?	9. Do you copy full answers from AI tools without checking them?	10. Do you believe AI tools can help improve your writing skills?		
	Pre Test	Post Test	Pre Test	Post Test	Pre Test	Post Test	Pre Test	Post Test	Pre Test	Post Test	Pre Test	Post Test
average results after 100 student data	73	93	30	89	20	59	7	50	22	78	16	65
standard deviation (for Showing Improvement)		14.1		41.7		27.6		30.4		39.6		34.6
Minimum awareness score is	7	Point number. 4										
Maximum awareness score is	93	Point number. 1										



### **DISCUSSION PERTINENT TO FINDINGS**

This research aimed to analyze student's awareness, perceptions, and experiences about the use of AI-powered writing tools at the school level. 100 students were administered a pre-test and post-test survey to measure changes in student's knowledge and attitudes following an instructional intervention. The findings give important understanding about both pros and cons of AI-powered tools for use in education.

### **1. ENHANCED AWARENESS OF AI**

The results clearly reflect a vast increase in students' awareness of Artificial Intelligence. A mere 73% students in the pre-test knew that they possessed some knowledge regarding AI. This increased to 93% during the post-test with an enormous 20% rise in basic knowledge. The low standard deviation of 14.1 compared to the mean indicates that most of the students enhanced their awareness incrementally, validating the fact that the teaching interventions were effective. This is in line with previous studies where it was stated that systematic exposure improved technological literacy among the students.

## **2. KNOWLEDGE OF AI TOOLS**

One of the strongest benefits was students' familiarity with AI powered software like ChatGPT or Grammarly. Fewer than 30% of students had ever even heard of these tools before the intervention, but their use rose to 89% post-intervention. The high standard deviation (41.7), however, also is showing that students varied incredibly in terms of awareness level; some learned to be extremely skilled at spotting AI tools, and others were not. This is a sign that overall visibility was heightened, individuals' level of understanding was not same.

## **3. ACTUAL USE OF AI TOOLS IN SCHOOL WORK**

In normal use, an AI writing tool in pre-test had ever been used by only 20%. Post-tests showed higher usage, with 59% using it. Higher use of AI is shown in this for homework. Still, large variation in frequency and confidence of use are displayed by the standard deviation (27.6). The tools were used by some easily, whereas others were hesitant, perhaps because of lack of access, confidence, or trust in technology.

## **4. PERCEIVED BENEFITS TO WRITINGS**

Students noticed the use of AI as a tool for writing assignment on exposure. Post-test results are as follows: 50% of them thought that AI can spell and grammar-check (up from 22%).

78% felt that AI facilitates learning new words and coming up with ideas on what to write (up from 16%).

65% agreed that AI tools make school easier (from 24%).

These findings affirm that the functional value of AI is appreciated by students, more specifically in reducing mechanical errors and facilitating creativity. The relatively high standard deviations (30.4 to 39.6) suggest diverse experiences depending on differences in digital literacy, study approaches, and formal background experience.

## **5. CHALLENGES AND LIMITATIONS**

While the benefits, the research identifies some challenges of working with AI-based writing among students: 71% confirmed that they do not always comprehend the content developed by AI tools (versus 21%). This suggests that sometimes AI outputs are too sophisticated, poorly expressed, or hostile to students' level of comprehension.

45% of them confessed to plagiarizing with AI software without verification, compared to 15% before the test. This is alarming on the basis of overdependence, dishonesty, and lack of critical thinking ability.

Though 65% of them all agreed that AI devices are capable of enhancing writing skill, 35% disagreed or doubted. This reflects suspicion concerning the matter of AI facilitating long term skills improvement or short term convenience.

## **6. OVERALL TRENDS**

The outcome demonstrates both pros and cons of using AI-based writing at the school level:

Pros: Improved awareness, enhanced usage, improved grammar correction, vocabulary assistance, and facility of writing ideas.

Cons: Uneven familiarity among the students, understanding problems with AI content, and plagiarism and addiction problems.

The evidence indicates that even though there might be the potential for AI tools, they are unable to substitute teacher guidance, critical thinking, and moral sensitization for students' teaching practice.

## **CONCLUSION**

The study aimed to determine both beneficial and harming effects of AI writing assistance on language learning at school level, and findings confirm that such technology possesses both overbearing advantages and actual risks. On the positive side, students' awareness for technological development was increased by AI Softwares, it has improved their ability to write with few mistakes, exposed them to more sophisticated words, and helped in presenting new ideas. The value of AI is highlighted by these benefits as an additional tool for studies that can facilitate learning and writing assignments less stressful for students with different abilities. Notably, the

findings also suggest that managed exposure to AI tools can contribute a significant role to technological literacy, which is one of the learning skills in the 21st century.

Together with that, the research identifies some delicate problems. There was more use of AI content as the majority of students would previously plagiarize responses in a careless or uncontrolled manner. The likelihood of plagiarism is not only increased by the activity but the creation of innovative thought, strong logic, and critical reasoning is also discouraged. Furthermore, the gap between students' ability to use AI tools accurately and awareness regarding AI outputs is a threat of superficial learning. Students' capability would underrate to arrive at answers on their own and think out of the box—abilities if this over-reliance fails to address the issue that are inherent to long-term academic and professional advancement.

Accordingly, this study concludes that AI writing tools should not be treated as substitutes for students' hard work but as supporting tools used to enhance learning in the proper manner. Teachers and schools have a critical role to fulfill in realizing such a balance. Educators can maximize the use of such tools by including digital literacy as part of the curriculum, setting clear ethical standards, and teaching students to think critically when interacting with AI output, while not diminishing their weaknesses. Doing so will enable AI to serve as a scholarly partner to help in language learning, spur creativity, and advance academic success without compromising the critical goals of autonomous learning and critical thinking.

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