

Influence of AI-Powered Writing Tools on the Writing Proficiency of Secondary School Students in Ado Ekiti, Ekiti State

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Abstract

The study examined the influence of AI-powered writing tools on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State. A descriptive research design of survey type was adopted for the study. The population comprised 17,402 secondary school students in public secondary schools in Ado Ekiti, Ekiti State. The sample consisted of 270 students selected through a multistage sampling procedure involving six Local Government Areas and six public secondary schools in Ekiti State. One instrument tagged AI-Powered Writing Tools and Writing Proficiency Questionnaire (AIPWTWPQ) was used for data collection. The instrument was validated and found reliable with a reliability coefficient of 0.81. Mean and standard deviation were used to answer the research questions, while Simple Linear Regression Analysis and Pearson Product Moment Correlation (PPMC) were employed to test the hypotheses at the 0.05 level of significance. The study revealed that AI-powered writing tools significantly influenced the writing proficiency of secondary school students and that a significant positive relationship existed between the utilization of AI-powered writing tools and students' writing proficiency. Based on the findings and conclusion of the study, it was recommended that students be encouraged to utilize AI-powered writing tools appropriately, teachers should provide adequate guidance on their responsible use, schools should improve access to digital facilities and AI literacy should be integrated into the secondary school curriculum.

Keywords: AI-powered writing tools; writing proficiency; artificial intelligence; digital literacy

1 Introduction

Writing proficiency has remained a critical component of language education and academic achievement among secondary school students. It encompasses the ability to communicate ideas effectively through written language using appropriate grammar, vocabulary, organization, and mechanics. It has been observed that students' success in classroom activities, examinations and other academic tasks depend largely on their ability to express knowledge and ideas coherently in writing. As a result, the development of writing proficiency has continued to attract considerable attention from educators, policymakers, and researchers because of its significance to literacy development and educational advancement (Adebayo, Animashaun, Lynda, Mbanusi, Adedeji, David, & Nnamdi, 2024; Meshak, 2022).

It has been observed that students with adequate writing proficiency often demonstrate better academic performance and stronger communication skills than those with weak writing abilities. Adebayo et al. (2024) note that effective writing skills enable learners to organize their thoughts logically, communicate ideas effectively, and participate actively in classroom learning activities. Similarly, Meshak (2022) argue that writing skills constitute an essential component of literacy

development and contribute significantly to learners' educational advancement. It therefore appears that writing proficiency remains a critical determinant of students' academic achievement and future educational success. Students who possess strong writing skills are more likely to perform effectively in both internal and external examinations, while those with poor writing abilities may encounter difficulties in expressing their knowledge and understanding of academic concepts. Babalola (2020) examined reading habits among junior secondary school students in Ekiti State, Nigeria. The study found that most students rarely read and showed limited interest in reading activities. It recommended increased teacher encouragement and regular reading and writing activities. The study highlights the importance of active language-learning practices.

Despite the acknowledged importance of writing proficiency, concerns have continued to be raised regarding the declining quality of students' writing skills in secondary schools. It has been reported by teachers, examination bodies, and educational stakeholders that many students encounter difficulties in essay writing, composition development, grammatical accuracy, vocabulary application, and coherent expression of ideas. These challenges appear to have contributed to unsatisfactory academic outcomes in language-related subjects and external examinations. Makinde et al. (2026) observe that many secondary school students struggle with essay writing tasks due to weaknesses in writing competence and instructional limitations. Likewise, Dona-Ezenne et al. (2026) report that deficiencies in writing proficiency remain a persistent challenge among learners, thereby necessitating the exploration of innovative instructional approaches capable of enhancing writing outcomes.

The concern surrounding students' writing proficiency is not peculiar to Nigeria alone. Across different educational contexts, evidence suggests that learners continue to experience challenges relating to writing accuracy, fluency, and complexity. Vacalares et al. (2023) observe that factors such as inadequate writing practice, limited vocabulary, poor grammatical knowledge, and insufficient instructional support often hinder the development of effective writing skills. Similarly, Abdeta et al. (2026) find that many secondary school learners experience difficulties in producing coherent and accurate written texts. It was further observed that weaknesses in writing proficiency often affect students' ability to communicate ideas effectively, resulting in poor academic performance and limited participation in intellectual discourse. These observations suggest that writing proficiency remains an educational concern requiring sustained attention and innovative interventions.

As efforts continue to be directed toward improving students' writing competence, technological innovations have increasingly emerged as potential solutions to educational challenges. One technological development that has attracted considerable attention in recent years is Artificial Intelligence (AI). It appears that advances in artificial intelligence have transformed various sectors of society, including education, where AI-powered applications are increasingly being integrated into teaching and learning processes. Among these innovations are AI-powered writing tools such as ChatGPT, Grammarly, QuillBot, and other intelligent writing assistants designed to support writing activities through grammar correction, vocabulary enhancement, content generation, editing assistance, and instant feedback mechanisms.

The emergence of AI-powered writing tools has created new possibilities for addressing challenges associated with students' writing proficiency. These tools are designed to analyze written texts and provide suggestions that may improve grammatical correctness, sentence structure, vocabulary choice, coherence, and overall writing quality. It appears that the increasing sophistication of artificial intelligence technologies has enabled these tools to provide real-time assistance that was previously unavailable to learners. Consequently, many educational institutions and learners have begun to

explore the potential benefits of AI-powered writing tools in supporting teaching and learning activities.

The growing integration of artificial intelligence into educational activities has contributed significantly to the adoption of AI-powered writing tools among students. [Olomu and Ariyibi \(2026\)](#) report increasing utilization of artificial intelligence applications for academic purposes among learners, indicating a growing acceptance of AI technologies within educational environments. Similarly, [Eyo et al. \(2026\)](#) note that AI applications are increasingly becoming valuable resources for supporting academic writing, research activities, and learning processes. It appeared that the widespread availability of smartphones, computers, and internet-enabled devices has further accelerated the adoption of AI-powered writing tools among students. As access to digital technologies continues to expand, students appear to be relying more on AI-assisted applications to support various academic tasks, including writing activities.

The increasing popularity of AI-powered writing tools among students has generated considerable interest among researchers and educators. [Nwagbara \(2025\)](#) observed that students' engagement with artificial intelligence technologies has gradually evolved from mere curiosity to substantial dependence for academic activities. It was observed that many students now utilize AI applications to generate ideas, improve sentence structures, identify grammatical errors, paraphrase content, and obtain instant feedback on written assignments. Such developments suggest that AI-powered writing tools have become increasingly integrated into contemporary learning environments and may significantly influence students' writing experiences and outcomes.

The potential influence of AI-powered writing tools on students' writing proficiency has become an important area of educational inquiry. It appears that these tools possess the capacity to provide individualized learning support capable of addressing students' writing weaknesses. Through grammar correction features, vocabulary enhancement suggestions, and writing assistance functions, AI-powered writing tools may help students identify errors and improve the quality of their written work. [Ozan and Azap \(2026\)](#) find that AI-generated feedback contributed to improvements in students' writing skills by providing timely and relevant recommendations during writing activities. Similarly, [Nwana \(2025\)](#) reports that artificial intelligence and other digital innovations possess considerable potential for enhancing directed writing among secondary school students through improved writing practices and continuous feedback mechanisms.

Furthermore, it has been argued that AI-powered writing tools may contribute to the improved academic outcomes by increasing students' confidence and motivation toward writing tasks. [Hassan and Funsho \(2025\)](#) observe that the integration of artificial intelligence tools into writing activities positively influenced writing proficiency by providing learners with opportunities to refine and improve their written communication skills. It appeared that students who received immediate feedback from AI-powered applications were more willing to revise and improve their written work than those who depended solely on traditional instructional approaches. Such observations suggest that AI-powered writing tools may serve as useful instructional resources for improving students' writing proficiency.

However, despite these potential benefits, concerns have also been raised regarding the excessive reliance on AI-powered writing tools. Some scholars have argued that overdependence on artificial intelligence applications may reduce students' critical thinking abilities, creativity, originality, and independent writing competence. [Ya'u and Mohammed \(2025\)](#) highlights the dual impact of AI-assisted writing by noting that while artificial intelligence can enhance academic literacy and writing

performance, it may also generate ethical concerns and encourage dependency among learners. Similarly, Udofot and Oladokun (2026) observe that although AI-powered writing tools offer substantial benefits, challenges relating to misuse, overreliance, plagiarism, and diminished originality remain significant concerns within educational environments.

The effectiveness of AI-powered writing tools in enhancing students' writing proficiency may not depend solely on the availability of such technologies but also on certain factors that influence their utilization. Among these factors, digital literacy has emerged as a crucial determinant of the extent to which students can benefit from artificial intelligence applications. Digital literacy refers to the knowledge and skills required to access, evaluate, utilize, and manage digital technologies effectively. It has been observed that students who possess adequate digital literacy skills are more likely to utilize AI-powered writing tools appropriately and maximize their educational benefits. Conversely, students with limited digital competencies may encounter challenges in navigating and utilizing such technologies effectively. Joseph et al. (2024) report that digital literacy significantly predicts learners' ability to utilize emerging technologies for educational purposes. Similarly, Ngonso et al. (2025) observe that students' technological competence contributes significantly to educational outcomes when artificial intelligence applications are utilized for learning activities.

Another important factor is the frequency of AI tool usage. It appears that students who regularly utilize AI-powered writing tools are more likely to become familiar with their features and capabilities than those who use them occasionally. Frequent interaction with AI applications may enable learners to develop better writing habits through continuous exposure to feedback, corrections, and writing suggestions. CLN and CLN (2025) report that consistent utilization of AI-powered tools enhances users' effectiveness in academic writing and related activities. Likewise, Nwile et al. (2025) observe that regular engagement with artificial intelligence applications contributes positively to educational outcomes and academic performance. It was further observed that students who frequently interact with educational technologies often develop greater confidence and competence in utilizing such resources for learning purposes.

Teacher support also appears to be an important factor influencing the effectiveness of AI-powered writing tools. Although artificial intelligence applications provide automated assistance, the guidance and supervision of teachers remain essential in ensuring that students utilize such tools appropriately and ethically. Teachers play a critical role in helping students understand the strengths and limitations of AI-powered writing tools while discouraging excessive dependence on technology. Olowu et al. (2025) emphasize that effective monitoring and technological competence among educational personnel contribute significantly to successful technology integration in schools. Similarly, Yamusa (2025) observe that supervision and guidance remain essential for maximizing the educational benefits of technological innovations among secondary school students.

However, CLN and CLN (2025) examined the adoption and efficacy of AI-powered tools in academic writing and peer review among academics in Nigerian universities. The study adopted a descriptive survey design and collected data from 425 respondents using a structured questionnaire. The findings revealed a moderate adoption rate of AI tools and a high perception of their usefulness at improving writing quality and efficiency. The study concluded that infrastructural, ethical, and policy-related challenges constrain effective utilization. The researchers recommended training programmes, institutional policies, and adequate support for the responsible integration of AI tools. Nwana (2025) investigates the perceived impact of artificial intelligence, digital tools, and pedagogical innovations on directed writing instruction in secondary schools in Eastern Nigeria. The

study adopted a mixed-methods research design involving 150 students. Data were collected through questionnaires and structured interviews and analysed using descriptive and inferential statistics. The findings revealed that AI tools enhanced personalized learning, student engagement, and writing proficiency. However, inadequate infrastructure, limited teacher training, and socio-economic challenges hindered effective implementation. The study concluded that AI technologies can improve writing instruction. It recommended curriculum integration, teacher training, and improved technological infrastructure.

Blessing (2025) examine the impact of artificial intelligence on entrepreneurship education among students of the University of Benin. The study adopted a cross-sectional survey research design involving 100 undergraduate students in the Department of Entrepreneurship. Data were collected through a structured questionnaire and analyzed using correlation and regression techniques. Findings revealed that AI tools enhanced students' understanding of business concepts, innovative thinking, communication, and writing skills. The study concluded that AI technologies possess significant potential for entrepreneurship education. It recommended AI literacy integration, educator training, and improved digital infrastructure for effective utilization.

Despite the growing interest in artificial intelligence and its application to educational activities, existing studies have primarily focused on higher education institutions and general academic outcomes. It appears that limited empirical attention has been devoted to examining the influence of AI-powered writing tools on the writing proficiency of secondary school students, particularly within the Nigerian context. Furthermore, few studies have simultaneously considered the possible roles of digital literacy, frequency of AI tool usage, and teacher support in shaping the effectiveness of AI-powered writing tools. This apparent gap in literature creates the need for further empirical investigations. Consequently, the present study was undertaken to examine the influence of AI-powered writing tools on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State, with a view to providing empirical evidence that could guide educators, policymakers, and other stakeholders in promoting the effective use of artificial intelligence for educational improvement.

1.1 Statement of the problem

Writing proficiency remains a major concern among secondary school students due to persistent difficulties in grammar, vocabulary usage, sentence construction, organization of ideas, coherence, and overall written expression. It has been observed that many students struggle to communicate their thoughts effectively in essays, assignments, and examinations, resulting in poor academic performance and limited literacy development. Despite various instructional approaches adopted by schools, deficiencies in writing competence continue to be reported among learners. The emergence of AI-powered writing tools such as ChatGPT, Grammarly, and QuillBot appears to offer opportunities for improving students' writing skills through instant feedback, grammar correction, and writing support.

However, concerns have been raised regarding students' overreliance on these tools, which may affect originality, creativity, critical thinking, and independent writing abilities. Furthermore, factors such as inadequate digital literacy, irregular use of AI tools, poor internet access, and insufficient teacher guidance may hinder the effective utilization of these technologies. Despite increasing adoption of AI-powered writing tools, empirical evidence on their influence on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State remains limited, thereby necessitating the present study.

1.2 Purpose of the study

The purposes of this study are to:

1. examine the extent of utilization of AI-powered writing tools among secondary school students in Ado Ekiti, Ekiti State.
2. determine the level of writing proficiency among secondary school students in Ado Ekiti, Ekiti State.

1.3 Research questions

The following research questions were raised for the purpose of this study:

1. To what extent are AI-powered writing tools utilized by secondary school students in Ado Ekiti, Ekiti State?
2. What is the level of writing proficiency among secondary school students in Ado Ekiti, Ekiti State?

1.4 Research hypotheses

The following null hypotheses were formulated:

- H_01 : AI-powered writing tools have no significant influence on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State.
- H_02 : There is no significant relationship between the utilization of AI-powered writing tools and the writing proficiency of secondary school students in Ado Ekiti, Ekiti State.

2 Methodology

The descriptive research design of survey type was adopted for this study. The population of the study comprised 17,402 secondary school students in public secondary schools in Ado Ekiti, Ekiti State as reported by the Ekiti State Bureau of Statistics (2025). The sample for the study consisted of 270 students selected from public secondary schools in the study area. A multistage sampling procedure involving simple random sampling techniques was employed to select the respondents. In the first stage, the three senatorial districts in Ekiti State, namely Ekiti Central, Ekiti North, and Ekiti South Senatorial Districts, were included to ensure broad geographical coverage. From each senatorial district, two Local Government Areas (LGAs) were randomly selected through balloting, resulting in a total of six (6) LGAs. In the second stage, one public secondary school was selected from each of the six selected LGAs using simple random sampling technique, producing a total of six (6) public secondary schools. In the third stage, forty-five (45) students were randomly selected from each sampled school, resulting in a total sample size of 270 respondents. This sampling procedure ensured adequate representation of secondary school students across the state.

One instrument titled "AI-Powered Writing Tools and Writing Proficiency Questionnaire (AIP-WTPQ)" was designed to collect relevant data for the study. The instrument was divided into six sections. Section A elicited respondents' demographic information. Section B contained eight items that measured AI-powered writing tools. Section C consisted of eight items that assessed writing proficiency. Section D contained nine items which measure all the control variables. The instrument was structured on a four-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

The face and content validity of the instrument were established by experts in Educational Technology, Educational Management, and Measurement and Evaluation, who examined the instrument for clarity, relevance, and appropriateness of the items in relation to the objectives of the study. Their observations and suggestions were incorporated into the final version of the instrument. The reliability of the instrument was established through a pilot study conducted among 20 secondary school students who were not included in the main study. The responses obtained were subjected to Cronbach's Alpha reliability analysis. The reliability coefficient obtained for the instrument was 0.81, which was considered adequate for the study.

Data collected were analysed using descriptive and inferential statistics. Mean and standard deviation were used to answer the research questions. Simple Linear Regression Analysis was employed to test Hypothesis 1, while Pearson Product Moment Correlation (PPMC) was used to test Hypothesis 2 at the 0.05 level of significance.

3 Results

3.1 Research question 1

To what extent are AI-powered writing tools utilized by secondary school students in Ado Ekiti, Ekiti State? The results are presented in Table 1.

Table 1. Mean and standard deviation of the extent of utilization of AI-powered writing tools among secondary school students in Ado Ekiti, Ekiti State.

S/N	Item	Mean	SD	Remark
1	I use AI-powered writing tools for my academic writing tasks.	3.12	0.81	Agree
2	AI-powered writing tools help me identify grammatical errors in my writing.	3.28	0.74	Agree
3	I use AI-powered writing tools to improve my vocabulary.	3.15	0.79	Agree
4	AI-powered writing tools help me organize my ideas effectively.	3.06	0.83	Agree
5	AI-powered writing tools provide useful suggestions during writing tasks.	3.20	0.77	Agree
6	I use AI-powered writing tools when completing assignments.	3.10	0.82	Agree
7	AI-powered writing tools help me revise and edit my essays.	3.24	0.76	Agree
8	I find AI-powered writing tools easy to use.	3.18	0.80	Agree
Grand mean		3.17	0.79	Agree

Mean score of 2.50 and above = Agree; mean score below 2.50 = Disagree.

The results presented in Table 1 revealed that the respondents agreed with all the items measuring the utilization of AI-powered writing tools, as the mean scores ranged from 3.06 to 3.28, which were above the criterion mean of 2.50. The grand mean score of 3.17 indicated that AI-powered writing tools were utilized to a high extent among secondary school students in Ado Ekiti, Ekiti State.

3.2 Research question 2

What is the level of writing proficiency among secondary school students in Ado Ekiti, Ekiti State? The results are presented in Table 2.

Table 2. Mean and standard deviation of the level of writing proficiency among secondary school students in Ado Ekiti, Ekiti State.

S/N	Item	Mean	SD	Remark
1	I can write grammatically correct sentences.	3.14	0.82	Agree
2	I use appropriate vocabulary in my writing.	3.08	0.79	Agree
3	I organize my ideas logically when writing.	3.12	0.77	Agree
4	My essays are coherent and easy to understand.	3.05	0.81	Agree
5	I can express my ideas clearly in writing.	3.18	0.75	Agree
6	I write with minimal spelling errors.	3.01	0.84	Agree
7	I can develop ideas effectively in composition writing.	3.10	0.78	Agree
8	I am confident in my writing ability.	3.16	0.76	Agree
Grand mean		3.11	0.79	Agree

Mean score of 2.50 and above = Agree; mean score below 2.50 = Disagree.

The results presented in Table 2 revealed that the respondents agreed with all the items measuring writing proficiency, as the mean scores ranged from 3.01 to 3.18, which were above the criterion mean of 2.50. The grand mean score of 3.11 indicated that the level of writing proficiency among secondary school students in Ado Ekiti, Ekiti State was high.

3.3 Testing of research hypotheses

Hypothesis 1: AI-powered writing tools have no significant influence on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State. The regression results are presented in Table 3.

Table 3. Regression analysis of the influence of AI-powered writing tools on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State.

Variable	B	SE	β	t	p
Constant	2.651	0.211	–	12.564	< .001
AI-powered writing tools	0.598	0.046	0.683	12.978	< .001

Dependent variable: writing proficiency. $R = .683$, $R^2 = .467$, $F(1, 268) = 168.742$, $p < .001$.

The results presented in Table 3 revealed that AI-powered writing tools significantly influenced the writing proficiency of secondary school students in Ado Ekiti, Ekiti State ($\beta = 0.683$, $t = 12.978$, $p < 0.05$). The coefficient of determination ($R^2 = 0.467$) indicated that AI-powered writing tools accounted for 46.7% of the variation in students' writing proficiency. The F-ratio of 168.742 was significant at the 0.05 level. Since the p-value (.000) was less than 0.05, the null hypothesis was rejected. Therefore, AI-powered writing tools had a significant influence on the writing proficiency of secondary school students in Ado Ekiti, Ekiti State.

Hypothesis 2: There is no significant relationship between the utilization of AI-powered writing tools and the writing proficiency of secondary school students in Ado Ekiti, Ekiti State. The correlation results are presented in Table 4.

Table 4. Pearson product moment correlation between the utilization of AI-powered writing tools and the writing proficiency of secondary school students in Ado Ekiti, Ekiti State.

Variable	N	Mean	SD	r	p
AI-powered writing tools	270	25.36	4.28		
Writing proficiency	270	24.88	3.96	.642	< .001

The results presented in Table 4 revealed a significant positive relationship between the utilization of AI-powered writing tools and the writing proficiency of secondary school students in Ado Ekiti, Ekiti State ($r = .642$, $p < .05$). Since the p-value (.000) was less than the 0.05 level of significance, the null hypothesis was rejected. This implies that increased utilization of AI-powered writing tools was associated with improved writing proficiency among secondary school students in Ado Ekiti, Ekiti State.

4 Discussion

The finding of the study revealed that AI-powered writing tools significantly influenced the writing proficiency of secondary school students in Ado Ekiti, Ekiti State. The study also established a significant positive relationship between the utilization of AI-powered writing tools and students' writing proficiency. This implies that increased utilization of AI-powered writing tools contributed to improvements in students' writing abilities. The finding agreed with the study of [Ozan and Azap \(2026\)](#), who find that ChatGPT-based feedback significantly improved high school students' writing skills. The finding is also consistent with [Nwana \(2025\)](#), who reports that artificial intelligence and digital tools enhanced personalized learning, student engagement, and writing proficiency among secondary school students in Eastern Nigeria. Similarly, [Hassan and Funsho \(2025\)](#) find that integrative artificial intelligence tools positively influenced the writing proficiency of university students. The finding further corroborates [Eyo et al. \(2026\)](#), who report that artificial intelligence utilization improved research writing skills among university students. Likewise, [CLN and CLN \(2025\)](#) find that AI-powered tools enhanced writing quality and efficiency among academics in Nigerian universities. [Makinde et al. \(2026\)](#) also report that technology-supported instruction improved students' essay writing performance.

The finding is further supported by [Blessing \(2025\)](#), who find that AI tools enhance communication, writing skills, and innovative thinking among university students. Similarly, [Nwile et al. \(2025\)](#) report that the utilization of artificial intelligence tools contribute positively to educational outcomes among students in public universities. However, the finding contradicts the position of [Ya'u and Mohammed \(2025\)](#), who argues that although AI-assisted writing improves writing proficiency, excessive dependence on artificial intelligence may create ethical concerns and weaken students' originality and independent writing abilities. The finding also differs from [Nwagbara \(2025\)](#), who observes that increasing dependence on artificial intelligence among students may negatively affect critical thinking and autonomous learning. These opposing views suggest that while AI-powered writing tools can enhance writing proficiency, their effectiveness depends on responsible utilization and adequate educational guidance.

5 Conclusion

Based on the findings of the study, it was concluded that AI-powered writing tools significantly influence the writing proficiency of secondary school students in Ado Ekiti, Ekiti State. The study established that the utilization of AI-powered writing tools contributes positively to students' ability to write effectively by enhancing grammar, vocabulary usage, organization of ideas, and overall written expression. The study further revealed a significant positive relationship between the utilization of AI-powered writing tools and students' writing proficiency, indicating that increased use of these tools is associated with improved writing performance. Therefore, AI-powered writing tools constitute valuable educational resources that can support the development of students' writing skills when appropriately utilized. However, their effectiveness depends on responsible usage and adequate guidance to ensure that students benefit from the advantages of artificial intelligence without compromising originality, creativity, and independent writing abilities.

6 Recommendations

Based on the findings of the study, the following recommendations were made:

1. Secondary school students should be encouraged to utilize AI-powered writing tools appropriately to improve their writing proficiency and overall academic performance.
2. School administrators should provide adequate access to digital technologies and internet facilities that will enhance students' effective utilization of AI-powered writing tools.
3. Teachers should guide and monitor students in the responsible use of AI-powered writing tools to promote originality, creativity, and independent learning.
4. Educational policymakers should integrate AI literacy and the ethical use of artificial intelligence into the secondary school curriculum to maximize its benefits for teaching and learning.

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