

Knowledge and Influence of Using Artificial Intelligence Writing Tools on Grammar

Rowena Adolfo
Antonete Brusas
Cindy Canillo, et al.

University of the Visayas- Toledo City campus
College of Education

ABSTRACT

This study investigates the knowledge and influence of AI writing tools on the grammar skills of second-year Bachelor of Secondary Education English majors at the University of the Visayas Toledo City campus. A survey of 50 students assessed demographics, familiarity with AI writing tools, and their impact on grammar, using descriptive statistics and regression analysis. Findings show 52% of students were from low-income homes, with 68.06% using mobile phones and 51.35% accessing the internet via mobile data. The students' mean knowledge score of 3.4 indicated neutral familiarity with AI tools, and mean ratings from 3.34 to 3.76 suggested general agreement on the positive impact of AI tools on grammar. However, students expressed concerns about overreliance on these tools. Regression analysis revealed a weak but statistically significant positive relationship between AI tool knowledge and grammar improvement (Multiple $R = 0.2788$, $R^2 = 0.0777$, $p\text{-value} = 0.0499$). This study finding will benefit curriculum planners in designing AI-focused programs, teachers in identifying support areas, and students in enhancing grammar skills through AI tools. It will also serve as a reference for future researchers studying AI in education. Further research is needed to explore AI tools' long-term effects and develop best practices for their educational integration.

Keywords: AI integration, influence, grammar, knowledge, writing skills, writing tools

INTRODUCTION

Every educational institution is focused on enabling student achievement because education has a transforming effect on how people and society are shaped. State universities and colleges serve as effective catalysts, fostering the knowledge and skills required to produce a workforce that is competent and productive. Even amid the significant investments made in higher education, however, the complex network of student performance needs thorough examination and comprehensive evaluation. State colleges and universities have a big impact on students' academic and career goals. Policymakers, educators, and administrators need to have a deep grasp of the factors that influence student accomplishment in order to develop interventions and methods that work. The study aims to investigate and reveal the underlying ideas by utilizing multivariate regression analysis to identify the factors influencing student achievement in state universities and colleges.

Recent studies have yielded important new information about the variables affecting college student achievement. For instance, grit, resilience, and mentality are examples of non- cognitive variables that are important in predicting academic achievement and perseverance (Robbins et al., 2018). These results emphasize the importance of taking psychological characteristics of pupils into account in addition to standard academic variables. Moreover, socioeconomic characteristics have been found to be important indicators of student achievement. Students from lower-income families encounter additional difficulties because of financial limitations, restricted access to resources, and small support systems, according to a study by Hurwitz and Lee (2020). Ensuring equitable possibilities for success in higher education requires addressing these challenges. The function of institutional support services has drawn more notice lately.

Breland et al.'s study from 2021 shown the beneficial effects of academic support services on student retention and graduation rates, including mentorship, tutoring, and extra teaching. Effective advising techniques have also been demonstrated to improve degree completion and student performance (Sawyer et al., 2022). In order to improve student engagement, retention, and graduation rates, high-impact practices—such as undergraduate research, internships, and service-learning opportunities—are essential, according to a study by Kuh et al. (2020). This emphasizes how important it is to give students a variety of chances for hands-on learning and skill development.

Furthermore, emphasis has been placed on the significance of inclusive and interesting teaching methods. Student achievement and engagement are positively impacted by student- centered teaching methods, active learning techniques, and supportive classroom environments, according to a recent meta- analysis by Feldman et al. (2021). Also, it is impossible to disregard how technological improvements affect students' progress. Chen and Lambert's (2021) study emphasized how online learning environments and educational technologies support student engagement, personalized learning, and resource access. Studying the effects of hybrid or entirely online instructional methods on student achievement in the digital era is vital, since more and more institutions embrace these models.

Achieving student success in state universities and colleges is the most important objective, but it's also critical to understand the complex relationships between the different components that contribute to that achievement. Previous research has identified a variety of factors that affect student accomplishment; however, there has not been a comprehensive analysis of the combined effects and relationships between all these variables. Additionally, considering the evolving nature

CONCEPTUAL FRAMEWORK

INPUT	PROCESS	OUTPUT
Students profile in terms of: Socio-economic background Types of digital Technology Access to technology Length of years using technology	Quantitative research design Data gathering survey questionnaire Descriptive statistics and Regression Analysis.	The level of knowledge of students in the use of artificial intelligence writing tools on grammar. The significant relationship between the students' level of knowledge and the influence of the use of artificial intelligence writing tools on grammar. Proposed Recommendation

STATEMENT OF THE PROBLEM

The primary objective of this research is to determine the level of knowledge and influence of artificial intelligence (AI) writing tools on grammar among Second-year Bachelor of Secondary Education English Majors Students at the University of Visayas Toledo City Campus.

Specifically, this study sought to answer the following questions:

1. What is the demographic profile of students in terms of
 - 1.1. Socio-economic status;
 - 1.2. Types of digital technology;
 - 1.3. Access to technology;
 - 1.4. Length of years in using gadgets?
2. What is the level of knowledge of students in the use of artificial intelligence writing tools?
3. What is the influence of artificial intelligence writing tools on grammar?
4. Is there a significant relationship between students' level of knowledge in the use of artificial intelligence writing tools and the influence of the use of artificial intelligence writing tools on grammar?
- 5.What recommendations can be proposed based on the findings of this study?

STATEMENT OF THE NULL HYPOTHESIS

Null Hypothesis (H0): There is no significant relationship between the level of knowledge about AI writing tools and their influence on grammar. In other words, the coefficient for 'Level of Knowledge' in predicting 'Influence' is zero.

Alternative Hypothesis (H1): There is a significant relationship between the level of knowledge about AI writing tools and their influence on grammar. This means that the coefficient for 'Level of Knowledge' in predicting 'Influence' is not zero.

RESEARCH METHODOLOGY

Research Design

In this study, a Quantitative descriptive research design was employed. This design is particularly suitable as it allows for a detailed and accurate description of the level of knowledge and influence of artificial intelligence writing tools on grammar, based on numerical data and statistical analysis.

Research Environment

The collecting of data was conducted at University of the Visayas- Toledo Campus located in Sergio Osmeña Sr. Street, Poblacion, Toledo City, Cebu Philippines. It is located about 500 meters from the Toledo City Port and about 50 kilometers (30 mi) away from Cebu City. The university is one of the satellite campuses of a non-sectarian, private institution, the University of the Visayas Cebu. It was formally open in 1947 for the solicitous purpose of helping young men and women who could not afford to go to Cebu City to acquire education. Through all the years since its incipience, the University of the Visayas Toledo City Campus continued to fulfill its mission. The College of Education offers undergraduate programs such as Bachelor of Elementary Education and Bachelor of Secondary Education major in English, Filipino, and Social Studies. The university has become home to many professionals and has a history of high rating Board passers.

Respondents

There was a total of 50 respondents. The respondents of this research were strictly confined to second-year students, currently pursuing a Bachelor of Secondary Education major in English at the University of the Visayas-Toledo City Campus, who are enrolled for the academic year 2023-2024.

Sampling Technique

In this study, purposive sampling was used to select the sample. The researcher has chosen the Second-year Bachelor of Secondary

Education major in English. The choice of this class as the sample was also influenced by the purposive sampling criteria, which indicated that these students had an average capacity compared to other classes.

Instrument

To gather the data, the researchers utilized a survey questionnaire- checklist. The questionnaire consisted of twenty- eight (28) items. The first section focuses on demographic profiling, gathering information about the respondents. The second section contains eight

(8) questions that focus on determining the familiarity or students' level of knowledge in using AI writing tools. The remaining twenty

(20) questions explore the influences of AI writing tools on grammar. This approach ensures a thorough evaluation of the respondents' understanding and application of artificial intelligence writing tools. Additionally, before full-scale data collection, a reliability test (pilot testing) will be conducted. This test involves administering the questionnaire to 10 third-year students taking up Bachelor of Secondary Education major in English and 10 BSED major in Filipino. Their feedback will help ensure the questionnaire's consistency and reliability.

Data Gathering Procedure

The researchers adhered to a specific procedure to achieve the objectives of the study. Initially, the researcher sent a permission letter to the Dean of the College of Education, seeking approval to conduct the study with the target participants. Upon receiving approval, the study administered according to its timeline. To ensure adherence to safety rules, the researchers obtained the informed consent of the respondents through face- to-face interaction. This step provided the respondents with the opportunity to decide whether they wish to participate in the study. At this stage, the survey instrument also was distributed to the respondents. This instrument served as the primary source of

data for the study and will facilitate the collection of information. The respondents are expected to answer the questions in the survey, which aimed to evaluate students' level of knowledge on AI writing tools and their influence on grammar. After the data collection, the gathered information will be statistically analyzed to ensure the reliability and validity of the results.

Data Analysis

In this study, descriptive statistics were utilized to analyze the data that will be gathered from the respondents. The researchers calculated basic descriptive statistics such as mean, and mode to determine students' level of knowledge of AI writing tools and its influence on grammar. A regression analysis was used to measure the significant difference of respondents' level of knowledge and influence of using artificial intelligence writing tools.

Ethical Consideration

It is important to adhere to ethical principles to protect the dignity, rights, and welfare of research participants. As such research involving students' behavior should be reviewed by an ethics committee to ensure that the appropriate standards are being upheld. Beneficence. Researchers have a duty to minimize harm and maximize benefits in their studies. Human research should aim to benefit participants directly or, more commonly, to benefit others. Respect for Human. Dignity This principle, from the Belmont Report, emphasizes the right to self-determination and full disclosure.

Informed Consent:

Study Goals: Clearly state the research goals in understandable terms and explain how the data will be used. Type of Data: Inform participants about the nature of the data being collected (quantitative or qualitative). o Participant Selection: Explain how participants were selected and the total number of participants.

Confidentiality Pledge: Assure participants that their privacy will be protected. If anonymity is possible, it should be stated.

Confidentiality Procedures: Protect participants' data through various measures:

- Only collect identifying information when essential.
- Use ID numbers instead of personal identifiers.
- Keep identifying information in a secure, booked file.
- Restrict access to identifying information to a need-to-know basis.
- Avoid entering identifying information into computer files.

Voluntary Consent: Participation should be strictly voluntary without any penalties or loss of benefits for non- participation.

- Debriefing, Communications, and Referrals:
- Show respect and minimize emotional risks through gracious and polite interactions, being tactful and culturally sensitive.
- Offer debriefing sessions after data collection to address participants' questions or concerns, especially if the study involved stress or deception. Communicate with participants post-study to express appreciation for their involvement. Results and Discussion This part showed the results and findings of data gathered from the target respondents.

RESULTS AND DISCUSSIONS

This part showed the results and findings of data gathered from the target respondents.

Part I. Demographic Profile of the Students

1.1. Socio-economic status

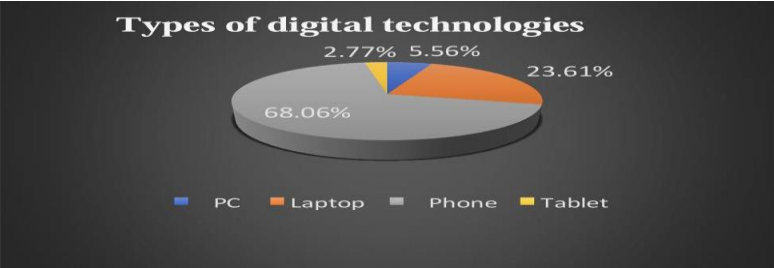


Figure 1: Socio-economic Status of Respondents

The pie chart represents the socio-economic status of respondents based on family income. The majority, 84%, earn monthly income below ₱10,957- 21,914, indicating a low income. The next largest group, 16%, earn between ₱21,914- 76,669, suggesting a middle- income status. None of the respondents earn between ₱76,669-219,140 and 219,141-above, representing high income and rich families respectively. These income distributions suggest that most of the population may face financial constraints, impacting their access to resources and opportunities, and indicating a need for targeted economic and social support initiatives.

According to the Philippine Institute for Development Studies (PIDS), there are 3 main types or stratification of social hierarchy in the Philippines based on income: Low-income class, Middle income class, High-income class. Somewhere in these three main classes are some more types, which is a cross between the upper and lower brackets. So, we can generally say that the social classes in the Philippines are: Rich (219,140 and above), High income (131,484 -219,140), Upper middle income (76,669 -131 484), Middle class (43,828- 76,669), Lower middle class (21,194- 43,828), Low income (between 9520 - 21,194), Poor (below 10,957 monthly income).

1.2 Types of Digital Technologies that Students Utilized

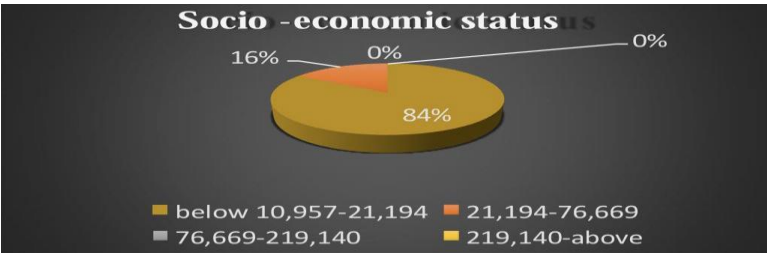


Figure 2: Types of Digital Technologies Utilized by Respondents

The figure shows that 68.06% of students primarily use their phones for studying, followed by 23.61% using laptops. 5.56% use PCs, and a mere 2.77% use tablets for their studies. The data implies that the majority of students (68.06%) rely on phones for studying, indicating a preference or necessity for mobile learning. This suggests the need for mobile friendly educational resources and platforms. The significant use of laptops (23.61%) highlights their continued importance in student learning. The relatively low usage of PCs (5.56%) and tablets (2.77%) suggests that these devices are less favored or accessible. These trends can guide educators and policymakers in designing and implementing digital learning strategies and resources that are compatible with the devices most commonly used by students.

1.3. Access to the Internet of the Respondents

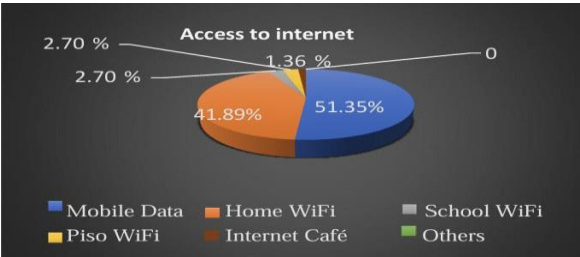


Figure 3: Access to Internet by Respondents

This chart shows that 51.35% of students use mobile data and 41.89% use home WiFi for internet access for their studies. A small percentage use school WiFi and piso (peso) WiFi (2.70% each), and 1.36% use internet cafes. No students reported using other means of accessing the internet. This suggests that mobile data and home WiFi are the primary methods of internet access for students in their studies. According to data from the Philippine Statistics Authority (PSA), 42.1% of households utilize a mobile broadband network to access the internet. This is a USB modem, integrated Subscriber Identity Module (SIM) card, or phone access to the internet.

1.4. Number of Years that the respondents Using Technologies

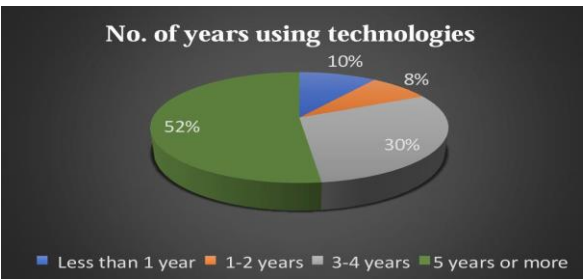


Figure 4: Number of Years Using Technologies

The data shows that 10% of students have been using their devices for less than 1 year, 8% for 1-2 years, 30% for 3-4 years, and the majority, 52%, for 5 years or more. The significant proportion (52%) of individuals using technologies for 5 years or more suggests a growing familiarity and reliance on technological tools, possibly influenced by initiatives like the University of the Philippines Open University's integration of online teaching and learning program to support distance education in the country in the late 1990s to 2000s.

Part II. Level of Knowledge and Influence of Using AI Writing Tools on Grammar

AI writing tools have gained popularity in academic and professional settings, offering real-time grammar suggestions and stylistic improvements. While these tools help users enhance their writing, their impact on grammatical knowledge remains debated. This section shows the knowledge of respondents towards AI tools in grammar and how these tools influence accuracy and competency.

Table 1: Level of Knowledge of Respondents on the Use of AI writing Tools on Grammar

Items	Mean	Mode	Interpretation
Q1.	3.4	3	Moderately Knowledgeable
Q2.	3.37	4	Neutral
Q3.	3.08	3	Neutral
Q4.	3.24	4	Neutral
Q5.	3.12	3	Neutral
Q6.	3.39	3	Neutral
Q7.	3.35	3	Neutral
Q8.	3.29	3	Neutral

Number of Respondents	Mean	SD	Description
50	3.27	0.81	Neutral

Legend:
1.0 - 1.7 Not Knowledgeable
1.8 - 2.5 Slightly Knowledgeable
2.6 - 3.3 Neutral
3.4 - 4.1 Moderately Knowledgeable
4.2 - 4.9 Extremely knowledgeable

Table 1 displays the students' level of knowledge on AI writing tools. The responses were measured on a Likert scale: 1 represents 'Not knowledgeable', 2 represents 'Slightly knowledgeable', 3 represents 'Neutral', 4 represents 'Moderately knowledgeable', and 5 represents 'Extremely knowledgeable' (PsycINFO Database Record (c) 2016). The mean scores for the questions were as follows: Question 1 (Mean: 3.4), Question 3 (Mean: 3.08), Question 5 (Mean: 3.12), Question 6 (Mean: 3.39), Question 7 (Mean: 3.35), and Question 8 (Mean: 3.29). These scores suggest that students generally perceive themselves as neutral in their level of knowledge about AI writing tools. For Questions 2 (Mean: 3.37) and 4 (Mean: 3.24), while the average scores suggest a neutral level of knowledge, the most common responses were 'Moderately knowledgeable'. This indicates that a significant number of students feel moderately knowledgeable about AI writing tools, despite the overall average being neutral.

The survey data suggests that students generally perceive themselves to have a neutral level of knowledge in using AI writing tools. However, there is some variation in responses, indicating a range of knowledge levels among the students. Although AI writing tools are more widely available, not everyone is aware of how to use them to their full potential. Consider a situation in which people are aware that artificial intelligence exists but are not proficient in its application. Though they have trouble putting AI into practice, they acknowledge it as a concept or technology.

This viewpoint emphasizes the necessity of education and skill enhancement in order to fully realize the promise of AI. The issues brought up by Kornfeld and Roy’s study highlight how difficult it is to strike a balance between using AI techniques and preserving uniqueness in academic writing. Some concerns have been raised about the potential for these tools to contribute to plagiarism, as students may rely too heavily on automated suggestions and fail to develop their own writing skills (Kornfeld & Roy, 2021).

Table 2: Influence of AI Writing Tools on Grammar

Items	Mean	Mode	Interpretation
Q1.	3.5	4	Substantial Influence
Q2.	3.56	4	Substantial Influence
Q3.	3.36	3	Moderate Influence
Q4.	3.76	4	Substantial Influence
Q5.	3.34	3	Moderate Influence
Q6.	3.34	3	Moderate Influence
Q7.	3.32	3	Moderate Influence
Q8.	3.16	3	Moderate Influence
Q9.	3.52	3	Substantial Influence
Q10.	3.46	4	Substantial Influence
Q11.	2.6	3	Moderate Influence
Q12.	2.48	2	Limited Influence
Q13.	2.36	2	Limited Influence
Q14.	2.36	2	Limited Influence
Q15.	2.48	2	Limited Influence
Q16.	3.24	3	Moderate Influence
Q17.	2.88	3	Moderate Influence
Q18.	3.1	3	Moderate Influence
Q19.	2.96	3	Moderate Influence
Q20.	2.86	3	Moderate Influence

Number of Respondents	Mean	SD	Description
50	3.08	0.42	Moderate Influence

Legend:

- 1.0 - 1.7 Negligible Influence
- 1.8 - 2.5 Limited Influence
- 2.6 - 3.3 Moderate Influence
- 3.4 - 4.1 Substantial Influence
- 4.2 - 4.9 Significant Influence

Table 2 presents the influence of AI writing tools on students’ grammar. The responses were measured on a Likert scale where 1 represents ‘Negligible Influence’, 2 represents ‘Limited Influence’, 3 represents ‘Moderate Influence’, 4 represents ‘Substantial Influence’, and 5 represents ‘Significant Influence’.

The findings from the survey on students’ perceptions of AI writing tools reveal a predominantly positive attitude towards their influence on grammar and writing skills. Across questions focusing on positive aspects (Q1-10), students commonly expressed agreement, particularly highlighting benefits

such as improved grammar (Q4), enhanced writing clarity (Q2), and overall positive influence (Q10). However, responses also showed a tendency towards moderate influence on certain aspects (Q3, Q5-Q9), indicating some uncertainty despite a leaning towards agreement. Conversely, concerns about potential drawbacks (Q11-20) received predominantly moderate influence responses, with students generally disagreeing with suggested drawbacks such as reduced creativity (Q12, Q13) or over-reliance (Q14, Q15). This suggests that while students recognize the benefits of AI tools, they are cautious about potential negative implications. These findings may lead to the nuanced perspectives students hold regarding the integration of AI in educational settings, emphasizing the need for balanced considerations in leveraging these technologies to enhance learning outcomes effectively.

Given the positive reception, educational institutions should consider integrating AI writing tools into the curriculum. This can help students develop stronger writing skills, enhance clarity, and improve grammar, thereby better preparing them for future academic and professional endeavors (Liu, Wu, & Xu, 2019). However, educators should emphasize the balanced use of AI tools, ensuring that students use them to complement their learning rather than as a crutch that might hinder the development of independent writing skills (Zhang & Zou, 2018). To address uncertainties and maximize the benefits of AI writing tools, schools should provide training sessions for both students and teachers, including workshops on how to effectively use these tools and integrate them into writing practices (Aoun, 2017).

Continuous monitoring and feedback mechanisms should be established to assess the impact of AI tools on students’ writing abilities. This can help in identifying areas where students might become overly reliant on these tools and in providing corrective measures. Further research is needed to explore long-term effects and best practices for integrating AI writing tools into educational settings, contributing to the development of guidelines and policies that ensure these tools are used effectively and ethically (Tambunan, 2022). Overall, while AI writing tools present an innovative way of learning, their influence on student’s grammar and writing skills necessitates a balanced approach that leverages their strengths while addressing potential limitations.

Table 3: Analysis of data on significant relationship between students’ level of knowledge on AI writing tools and its influence on grammar.

Regression Statistics		
Multiple R		0.279
R Square		0.078
Adjusted R Square		0.059
Standard Error		0.786
Observations		50

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	2.497	2.497	4.045	0.050
Residual	48	29.628	0.617		
Total	49	32.125			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.625	0.824	1.971	0.054	-0.033	3.282	-0.033	3.282
Level of knowledge in the use of artificial intelligence writing tools	0.533	0.265	2.011	0.050	0.000	1.066	0.000	1.066

A regression analysis was conducted to examine the relationship between students' level of knowledge in the use of artificial intelligence writing tools and the influence of the use of artificial intelligence writing tools on grammar. The coefficients table provides estimates for the intercept and the predictor variable. The intercept of 1.625 represents the expected level of knowledge when the predictor variable is zero. The coefficient for the predictor variable is 0.533, suggesting that, on average, a unit increase in the predictor variable leads to a 0.533 increase in the level of knowledge. The t-statistic of 2.011 and the associated p-value of 0.050 indicate that the coefficient for the predictor variable is statistically significant.

ANOVA results indicate that there is evidence of a significant relationship between the predictor variable and the level of knowledge. The F-statistic of 4.045 suggests overall significance, and the associated p-value of 0.050 indicates a marginally significant relationship. This suggests that as individuals use AI writing tools more frequently, their grammar knowledge tends to improve. These findings imply that students' level of knowledge in the use of artificial intelligence writing tools contributes to students' grammar proficiency. The implications of these results are significant for educational practice and policy. Integrating AI writing tools into the curriculum can substantially enhance students' grammatical skills and overall writing proficiency. This finding aligns with previous studies that highlight the effectiveness of AI tools in educational settings. For instance, Liu, Wu, and Xu (2019) found that AI-based educational tools significantly improve learning outcomes and student engagement. Similarly, Zhang and Zou (2018) emphasized that AI tools provide personalized learning experiences that cater to individual student needs, thereby improving academic performance.

The positive correlation demonstrated by the regression analysis suggests that as students become more adept at using AI writing tools, their grammatical skills are likely to improve. This supports the notion that technological proficiency is increasingly essential for academic success in the digital age (Aoun, 2017). However, it also highlights the need

for comprehensive training programs to ensure students can effectively leverage these tools. Educational institutions should invest in professional development for educators to facilitate the integration of AI tools in teaching practices, ensuring that both students and teachers can maximize the benefits of these technologies (Tambunan, 2022).

The significant relationship between AI writing tools and students' grammatical knowledge emphasizes the importance of integrating technology into education. As AI continues to evolve, its role in shaping educational outcomes will likely become even more critical. Therefore, ongoing research and adaptive teaching strategies will be necessary to harness the full potential of AI in education, ensuring students are well-prepared for the demands of the modern workforce. Integrating AI writing tools into classroom activities can serve as an effective method for enhancing students' grammar skills. The positive correlation observed suggests that as students engage more with AI tools, their understanding and application of grammar rules improve. This finding is supported by recent studies. For instance, Holmes et al. (2019) found that AI tools provide immediate feedback, allowing students to correct errors in real-time, which reinforces learning and retention of grammatical rules. Similarly, Cheung and Slavin (2016) demonstrated that technology-assisted instruction, including AI applications, can significantly improve language skills and academic performance. The marginally significant relationship highlighted by the ANOVA results underscores the potential of AI tools to enhance learning outcomes, even if current usage levels show room for improvement. Educational institutions should consider these findings when designing curricula and training programs. By fostering an environment that encourages the use of AI tools, schools can help students develop critical language skills essential for academic success and future career opportunities (Schmid, 2020). This evidence supports the need for professional development for educators to effectively integrate AI writing tools into their teaching practices. Teachers equipped with the knowledge and skills to utilize these tools can better support students

in leveraging AI for learning enhancement (Ouyang & Jiao, 2021).

In conclusion, the significant relationship between AI writing tool usage and grammar proficiency highlights the transformative potential of technology in education. By embracing AI applications, educators can provide students with the tools necessary to improve their language skills, ultimately preparing them for the demands of a technology-driven world.

SUMMARY OF FINDINGS

Most students from low-income families use phones for studying and have relied on them for over five years, mainly accessing the internet via mobile data and WiFi. They perceive their knowledge of AI writing tools as neutral, with varied responses. While they see AI tools as beneficial for grammar, concerns about drawbacks and over-reliance persist.

CONCLUSION

The study concludes that while students generally perceive themselves as having a neutral level of knowledge about AI writing tools, there is a statistically significant, albeit weak, positive relationship between the level of knowledge about AI writing tools and their influence on grammar. This suggests that increasing students' knowledge about AI writing tools could potentially enhance their grammar skills. However, it's important to note that the level of knowledge about AI writing tools only explains a small portion of the variation in their influence on grammar, indicating that other factors may also play a significant role. As students become more proficient with AI tools, their understanding and application of grammar rules improve, supporting their academic success. This gives emphasis on the need for comprehensive training programs for both students and educators to fully leverage AI's potential in education, preparing students for the demands of a technology driven world.

RECOMMENDATIONS

Based on the findings of this study, it is recommended that educational institutions incorporate training and awareness programs about AI writing tools into the curriculum to

enhance students' proficiency with these tools. Teachers should provide guidance and support to students, including demonstrations on how to use the tools, offering feedback, and addressing any concerns or questions. Students are encouraged to explore various AI writing tools and understand the reasoning behind corrections to promote a deeper understanding of grammar rules. Further research should be conducted to explore other factors influencing the effectiveness of AI writing tools, such as the quality of the tools, frequency of use, and the type of feedback provided.

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