Eswatini Educational Research Journal (ESWERJ)
Vol. 2 No. 1, 114-130 (March 2026)
ISSN: 3104-6223 (online)
Website: https://eswera.org/

Experiences of University Students with Artificial Intelligence Writing Tools

Sifundza, Bheka Simphiwe
Faculty of Education,
University of Eswatini
Email: bhekasifundza88@gmail.com
https://orcid.org/0000-0002-8743-0139

Osodo, Joseph
Department of Curriculum and Teaching,
University of Eswatini
Email: osodojoey@yahoo.com
https://orcid.org/0000-0002-8743-0139

Article History
Received: 22nd October 2025
Accepted: 2nd January 2026
Published: 30th March 2026

Keywords
AI writing tools, academic writing, experiences, mixed methods research.

***Corresponding Author**:
bhekasifundza88@gmail.com

Abstract
The study investigated experiences of undergraduate English Language students at the University of Eswatini regarding the use of Artificial Intelligence (AI) writing tools. The study objectives were two-fold: to determine the prevalent AI writing tools used by undergraduate English Language students; and to find out how students used AI writing tools in academic writing. The study employed concurrent mixed-methods research design A mixed-methods approach was employed, combining quantitative data from structured questionnaires with qualitative insights from semi-structured interviews involving 32 participants. Simple random sampling technique was employed. Data analysis included descriptive statistics for quantitative data and thematic analysis for the qualitative data, ensuring a comprehensive understanding of students' experiences. Findings revealed a high frequency (67%) of AI writing tools usage for purposes such as proofreading, grammar check; paraphrasing and enhancing readability; and for idea generation. The findings also revealed that most of the students (75%) never disclosed their use of AI writing tools in their academic assignments because of fear that AI use may be viewed as academic dishonesty. Recommendations for future research included exploring the long-term impacts of AI writing tools on academic performance and expanding the scope to include other disciplines.

Introduction

Labelled a megatrend, Artificial Intelligence (AI) writing tools have become increasingly prevalent, and are expected to proliferate even further as the 21st century progressed (Haluza & Jungwirth, 2023) According to Popenici and Kerr (2017) as cited in Wang'ang'a (2024), the earliest significant definition of AI was made by John McCarthy in 1956 that stated that to prove there is presence of artificial intelligence, a machine should be capable of learning or should have aspects of cognition that it can imitate. In his definition, McCarthy emphasised that artificial intelligence revolves around machines imitating human cognition.

AI is typically defined as the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions (Investopedia, 2024). Since its inception during McCarthy's work in 1956, AI evolved to a much more powerful and multifaceted tool that is inevitably being part and parcel of human life. According Wang'ang'a (2024), AI had been

upgrading rapidly in recent times due to the accessibility of huge quantities of data, strong computing resources and Algorithms advancements. It could change several areas of society like education which is both a vital driver of socioeconomic improvement and a human right. AI writing tools, a subfield of AI, referred to software applications that utilise AI technologies to assist writers in various aspects of their writing process. These tools use the ML algorithms and natural language processing to analyse text, provide suggestions, correct grammatical errors, enhance readability and generate content. (AIContentfy, 2023).

The integration of these AI writing tools in educational settings had become increasingly prevalent, particularly among undergraduate students studying English Language and Literature (Imsa-ard et al., 2024). These tools, which range from grammar checkers to sophisticated text generation software, were designed to enhance writing skills and improve academic performance (Marzuki et.al., 2023). As AI rapidly invaded educational spaces, there appeared a need for research that would provide knowledge and understanding of their efficacy and implications. Such knowledge and understanding are particularly crucial for institutions of higher learning in Eswatini and the world at large since these AI tools seem to unavoidably occupy the education sector.

There was a global growing amount of research on AI writing tools and their impact on students' writing performance, both positive and negative impacts. One qualitative study conducted by Marzuki et.al. (2023) in Indonesia revealed the positive influence of AI writing tools on English as a Foreign Language (EFL) student writing. An Interview with teachers revealed a diverse range of AI writing tools, including Quillbot, WordTune, Jenni, Chat-GPT, Paperpal, Copy.ai, and Essay Writer. The teachers unanimously agreed that these tools enriched Indonesian students' writing quality, particularly in terms of content and organization. The study's implications suggested that integrating AI writing tools could elevate the quality of student writing, enhancing language learning outcomes. However, their study was limited by their reliance on a case study approach which threatened generalizability of their findings in other parts of the world, including Eswatini. Worth noting was that their study also focused only on teachers' perspectives, which signified a need for further research to gather students' perspectives of these AI writing tools.

Complementary to Marzuki et.al. (2023), Vieru & Petrea (2025) in a separate study conducted at the National University of Science and Technology POLITEHNICA Bucharest in Romania, examined the impact of artificial intelligence on students' academic development. The study discovered that the integration of AI in education came with an array of advantages including personalised learning, improved learning outcomes, and enhanced student engagement. The study also identified challenges such as overreliance on AI, diminished critical thinking skills and academic dishonesty. This study utilised a mixed methods design, capitalizing on the use of a questionnaire.

Other scholars, such as Ho (2024), provided insights on how students used AI writing tools which could be also observed within UNESWA. In a study conducted in Vietnam, Ho (2024) highlighted that students predominantly exploited ChatGPT to find instant solutions to English learning difficulties. Henceforth, the study emphasised students' need for teacher's instruction and physical classroom even when ChatGPT's advantages on vocabulary acquisition, translation, grammar checking, and paraphrasing were evident. The research underscored the importance of guiding learners to appropriately utilize ChatGPT. Worth noting was that this study primarily focused on ChatGPT, neglecting many other AI writing tools that students might have used in their English learning routines. It remained urgent, therefore, to do further

research on the use of various AI writing tools that students could possibly incorporate in the writing.

In Africa, research in AI writing tools usage was still emerging, particularly the Southern African context (Bosch et al., 2023). One review study conducted by Wang'ang'a (2024) in East Africa, Kenya, explored ways in which AI was used in higher education; looking at its benefits and consequences on teaching and learning. Identified consequences of AI tools included, among others, the negative impact on private tutoring businesses, and professors' apprehension about the potential for students to exploit these tools, viewing them as new avenues for academic dishonesty and cheating. Although this study looked at AI, it looked at AI tools in general, not specifically AI writing tools. Noting, also, the review approach used in the study, it seemed necessary to do a research using both qualitative and quantitative approaches, narrowing the scope of AI tools to AI writing tools.

Mhlanga (2023), in South Africa, looked at Open AI in Education, exploring responsibility and ethics in the use of ChatGPT towards lifelong learning. Drawing from a critical document analysis, he emphasized that while ChatGPT could significantly enhance productivity, improve language support for non-native English speakers, and provide immediate feedback, it also posed risks related to plagiarism, accuracy, and over-reliance on AI. He emphasized that these ethical concerns were paramount, with the need for transparent disclosure of AI use, proper attribution, and policies to prevent misuse. This meant that his study surfaced the urgent need for further research of empirical research on the use of AI, particularly AI writing tools. Finding students experiences of these tools in Eswatini could complement his study and many other studies on AI in education around the world.

Narrowing the focus to Eswatini, very few studies had been published on AI, particularly AI writing tools (Yu & Dlamini, 2024). There had not been much on students' experiences on AI writing tools. Among the reviewed studies, one conducted by Hlatjwako & Tsabedze (2024) in Eswatini, explored librarians' perspectives and readiness for artificial intelligence. Their findings revealed wavering levels of awareness among librarians regarding AI integration in libraries. Librarians generally held a positive perception of AI's potential benefits, including improved information retrieval and enhanced user services.

The global literature on AI writing tools was plausible (Ho, 2024; Vieru & Petrea, 2025; Mhlanga, 2023; Hlatjwako & Tsabedze, 2024 Wei, 2023; Bosch et.al, 2023). However, identified gaps in methodology, such as the prevalence of either quantitative or qualitative approaches, called for further research that would employ a mixed method approach to comprehensively attain an exposure of AI writing tools usage (Creswell, 2009). Additionally, much of the literature mainly identified and focused on the experiences and perspectives of certain populations such as teachers and librarians, leaving out students' perspectives. Furthermore, much of the literature examined AI in a broader scope while some specifically focused on a very narrow scope such as focusing on ChatGPT only.

Notably, research on AI and especially AI writing tools in UNESWA and Eswatini at large was still in its nascent stages; very few studies had been published on AI (Yu & Dlamini, 2024). In a time when AI was immensely proliferating, such scarcity of studies on AI writing tools signified that UNESWA remained behind in terms of research and knowledge. This hindered innovation, adaptation, adoption, and integration of AI within and outside the classroom which could ultimately lead to poor academic performance in a course of time. In response to these

gaps in knowledge and methodology, this study proposed a mixed method approach to explore UNESWA English Language students' experiences of AI writing tools.

Statement of the Problem.

According to UNESWA strategic plan (2024), the university's mission was to be responsive to national and international needs through teaching and learning, research, innovation, entrepreneurship and community engagement for inclusive and sustainable development. The mission encompassed the mandate to equip students and faculties with necessary skills to excel in their chosen fields and adapt to the evolving needs of the world. Having identified AI as both an international and national need, the university was determined to work towards equipping faculties and students with skills to help them navigate AI in their education.

However, despite the stance to equip students with skills by the university, the availability and usage of AI writing tools among students at UNESWA increased, yet there was a lack of comprehensive understanding regarding their experiences with these tools. Up to at least the beginning of 2024, no research had been published on the usage of AI writing tools within UNESWA; no policy document or framework for the use of AI tools had been adopted either (Yu & Dlamini, 2024). This unveiled a gap in understanding the usage of AI writing tools, posing a problem to UNESWA stakeholders. The ultimate problem was that the lack of knowledge on AI writing tools hindered their appropriate adoption within the university (Yu & Dlamini, 2024). It was a problem for students, who are direct users of AI writing tools without any form of assistance or regulation from the university. In a time when technology could not be separated from academia, the lack of assistance and regulation on technology, especially AI tools, led to students' difficulty accessing these tools or if they did access them, using them inappropriately (Yu & Dlamini, 2024).

It was also a challenge to educators within the institution as they remained ignorant of students' experiences on AI writing tools, which could affect their teaching and assessment methodologies (Yu & Dlamini, 2024). If the gap in understanding the usage of AI writing tools persisted, the problem would continue to sabotage any attempts to adapt and integrate AI by the university, which could lead to suboptimal standards in students' academic performance, making it difficult for them to effectively use AI writing tools.

In response to this problem, this study gathered information on students' experiences with AI writing tools. The study also aimed to recommend possible solutions that could work towards enhancing academic performance while successfully adopting and integrating AI writing tools within the classroom.

Theoretical Framework

This study hinged on the Technology Acceptance Model (TAM) as attributed to Davis (1986). TAM is a widely used model that explained how users come to accept and use technologies. The main argument of this model is that two primary factors influence an individual's decision to accept and use technology: perceived usefulness (PU) and perceived ease of use (PEOU) (Ma, 2017). PU and PEOU formed an end-user's beliefs on a technology and therefore predicts their attitude toward the technology, which in turn predicts its acceptance. The fundamental principle of TAM, therefore, is that the better users perceive that a specific application would enhance their performance, and the less effort the application requires to use, the higher the adoption rate would be. This principle, in context, meant that if students perceived that AI

writing tools enhanced their performance, and it helped them write their assignments effortlessly, they would certainly adopt them extensively in their academic writing.

Using this model as a framework for the study on UNESWA undergraduate students' experiences on AI writing tools brought stronger lenses to explore how and why students utilised AI writing tools as well as their usage patterns.

Purpose of the Study

The purpose of this study was to explore UNESWA English Language students' experiences with AI writing tools.

Research Objectives

The objectives of the study were to:

1. Determine prevalent AI writing tools used by undergraduate English Language students.

2. Find out how students utilise AI writing tools in their academic writing.

Research Questions

To address the research problem, the following research questions guided the study.

1. What are prevalent AI writing tools used by undergraduate English Language students?

2. How do students utilise AI writing tools in their academic writing?

Methodology

Research Paradigm

This study adopted the pragmatism paradigm which focused on applications, what worked, and solutions to problems. Thus, for the researchers, pragmatism opened the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis (Creswell, 2009). This paradigm, with its liberal and pluralistic approach to research, fit so well in this study as it allowed the researchers to employ all possible approaches to understand UNESWA English language students' experiences of AI writing tools. Most importantly, this paradigm works in most mixed-methods approach which this study sought to employ, making it possible for the researchers to collect, analyse and interpret data using both qualitative and quantitative approaches, thus resulting to comprehensive findings on students' experiences on AI writing tools (Creswell, 2009).

Research Approach

A research approach is a plan and procedure that consist of the steps of broad assumptions to detailed methods of data collection, analysis and interpretation (Chetty, 2016). In line with the pragmatic paradigm, this research employed a mixed-methods research approach. This study adopted a mixed-methods approach which combined both the qualitative and quantitative approaches. Mixed methods involved merging quantitative and qualitative data in order to

provide a comprehensive analysis of the research problem. In this approach, the researchers collected both forms of data and then integrated the information in the interpretation of the overall results. The researchers embed one smaller form of data, qualitative data, within another larger data, quantitative data, in order to analyse different types of questions. This approach was proposed in this study so that the quantitative approach could provide statistical evidence on the frequency of use of AI writing tools, while the qualitative approach delved into the lived experiences of students with AI writing tools (Creswell, 2009).

Design of the Study

Research design encompassed an overall plan for selecting subjects, research sites and data collection procedures to answer the research questions. The worldviews, approaches, and the methods all contributed to a research design that tended to be mixed (Creswell, 2009). Aiming to both generalise the findings to a population as well as develop a detailed view of the meaning of AI writing tools and its implications for individuals, this study employed a concurrent mixed-methods research design which was suitable to this study because it allowed the researchers to collect diverse type of data, using a survey and interviews, simultaneously, and then integrate the information in the interpretation of the overall results. Through this design, it was possible to collect quantitative data on the frequency of AI writing usage while gathering qualitative data on participants' in-depth sentiments on AI writing tools usage patterns. This helped to better understand the research problem by converging or triangulating broad numeric trends from quantitative research and the detail of qualitative research.

Population

Population referred to all the units on which the findings of research could be applied. It referred to a set of all the units which possess variable characteristic under study and for which findings of research can be generalised (Shukla, 2020). The target population for this study comprised full time English Language and Literature students across all levels in two undergraduate programmes in the University of Eswatini. These targeted programmes included Bachelor of Education Secondary (Humanities), and Bachelor of Arts in Humanities, with a total number of 312 students.

Sample

A sample referred to a subset of a population, which represents all the types of elements of the population (Shukla, 2020). For quantitative data collection, the study aimed for at least 10% of the population from both the Faculties of Education and Humanities in UNESWA. The 10% guideline was informed by Cochran (1977) who suggested the 10% rule of thumb sampling. Cochran stated that in line with other factors such as the research type, the research goals, and number of researchers, a researcher could take at least 10% of the population as a sample. The 10%, equating to 32 participants, was chosen for this study because it was convenient for the researchers in terms of time resources. (Cohen et.al., 2018). Simple random sampling was used to select the 32 participants including 6 participants who were selected for interviews. This probability sampling technique was relevant to this study as it facilitated fair chances of English Language and Literature students from their various levels being selected for survey. This ensured representation and reflection of the diversity and characteristics of the entire population, allowing for more generalizable results. A smaller sample size for the interviews was selected in line with time and economic constraints; especially because small sample sizes are typical of qualitative studies (Cohen et.al., 2007).

Instruments

This study adopted both qualitative and quantitative criteria for collecting data. On one hand, qualitative research involved collecting and analysing non-numerical data expressed in terms of language rather than numerical values. On the other hand, the quantitative research involved collecting and analysing quantified data (Creswell, 2009; Investopedia, 2024). For qualitative data collection, the study employed a semi-structured interview guide while employing an electronically administered structured survey for the quantitative data collection.

Data Collection

Interviewing involved the researchers' asking questions of another person. The study used a semi-structured interview guide with open ended questions in which the interviewer used a pre-determined list of topics and questions to gather in-depth information on AI experiences from interviewees. A semi-structured interview with open ended questions was suitable for this study because it ensured richness and depth of the qualitative research findings by allowing for flexibility, exploration of possible unexpected themes, and focus on interviewees perspectives (Cohen et al., 2018; Creswell, 2009).

For the quantitative data, a survey including close-ended questions that assessed various dimensions of students' experiences with AI writing tools was administered using online Google Forms sent to participants via email and WhatsApp. Close-ended questions required respondents to only select the option (s) that they felt were appropriate and expressive of their opinion. The structured survey was selected for this study mainly because of its advantage of making work much easier in data analysis (Cohen et.al., 2007). The electronic administration of the questionnaire was also relevant to this study as it was cost effective, reached people quickly, and boosted scalability, thus making the process easy for the researchers and convenient to respondents (Cleave, 2023).

Data Analysis

Data analysis included organizing, accounting for and explaining the data; in short, making sense of data in terms of participants' definitions of the situation, noting patterns, themes, categories and regularities to have meaningful information (Cohen et.al, 2018).

For quantitative data analysis, the collected data were subjected to descriptive statistics, using Microsoft Excel to summarise demographic information and overall responses. The descriptive statistics described and presented data, in terms of summary frequencies. This included mode, median, frequencies, cumulative frequencies and percentages (Cohen et.al, 2007). Such statistics made no inferences or predictions, but simply reported what had been found, in a variety of ways.

For the qualitative data, a thematic approach to data analysis was employed. It is a method that included identifying, analysing, organising, describing and reporting themes found within a data set (Creswell, 2009; Braun & Clarke, 2006). In this study, transcribed interviews underwent thematic analysis following Braun and Clarke's six phase framework. The thematic analysis involved, respectively, reading trough the transcripts for familiarity; coding in line with research questions; creating themes; reviewing the themes; defining the themes, and finally, integrating the findings into a coherent narrative alongside quantitative results (Braun & Clarke, 2006)

Findings

This section contains the findings of the research study exploring UNESWA undergraduate English language students' experiences of Artificial Intelligence (AI) writing tools. Data were collected from 32 participants, comprising undergraduate students enrolled in English language and Literature courses, through a combination of an online administered structured questionnaire and semi structured interviews. The participants comprised of students from the faculties of Humanities and Education, from year 1 to 4. The students' demographic information is shown in tables 1 and 2 below. The collected data were analysed using Microsoft Excel to develop meaningful insights. Responses to the open-ended questions were scanned to determine common words and phrases that were used by the respondents. Descriptive statistics were employed to summarize and present the results. Tables, pie charts, percentages, and graphs were used to visually represent the data and enable a clear understanding of the findings. The qualitative data from the interviews were subjected to thematic analysis, allowing for the identification of key themes and patterns in students' experiences. The chapter comprised of two sections: data presentation and discussion of findings sections.

The findings were organised according to the following research objectives:

1. To determine prevalent AI writing tools used by undergraduate English Language students.

2. To find out how students use AI writing tools in their academic writing

3. To explore students' perceptions on the use of AI writing tools in academic writing.

Table 1

Student's age

		Frequency	Percent	Valid Percent	Cumulative percent
Valid	16-20	2	6.0	6.0	6
	21-24	18	56.0	56.0	63
	25-34	12	37.0	38.0	100
	Total	32	100	100	

Table 2

Student's Year of study

		Frequency	**Percent**	**Valid Percent**	**Cumulative percent**
Valid	Year 1	4	12.5	12.5	6
	Year 2	6	18.8	18.8	31
	Year 3	6	18.8	18.8	50
	Year 4	16	50.0	50.0	100
	Total	32	100	100	

Prevalence of AI Writing Tools Used by Undergraduate English Language and Literature students.

The study sought to determine the prevalent AI writing tools among UELL students. A checkbox question was administered, and as shown in Table 3 and figure 1, the responses among respondents revealed their preferences regarding various AI writing tools used to support their English writing. Twenty (63%) selected ChatGPT as one of the tools they used in English writing, Fifteen (47%) selected Gemini, and seven (22%) selected Grammarly. Other tools such as Quillbot, also received sinificant usage, while several options were not utilized at all.

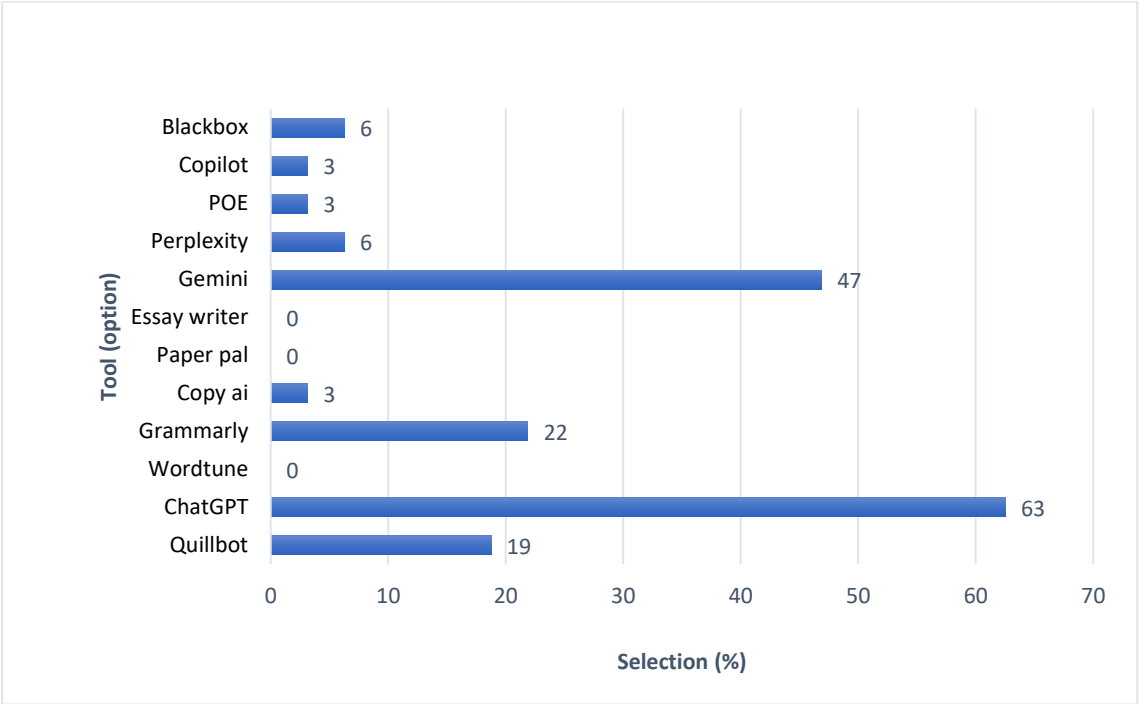
Table 3

Frequency table on prevalence of AI writing tools

Response	Frequency	Percentage
Quillbot	6	19
ChatGPT	20	63
Wordtune	0	0
Grammarly	7	22
Copy ai	1	3
Paper pal	0	0
Essay writer	0	0
Gemini	15	47
Perplexity	2	6
POE	1	3
Copilot	1	3
Blackbox	2	6

Figure 1

Prevalence of AI writing tools among participants



The findings indicated that ChatGPT stood out as the most prevalent AI writing tool, with 63% of respondents utilizing it. Following ChatGPT, Quillbot, Grammarly and Gemini also showed considerable usage, with 19%, 22% and 47% of respondents, respectively. These tools were known for their strengths in enhancing grammar and providing writing suggestions, which could explain their popularity among UELL students.

In contrast, tools such as Wordtune, Paper Pal, and Essay Writer received no selections, suggesting either a lack of awareness or preference among the respondents.

Recognition of Popular Tools

Qualitative findings indicated that all interviewees (100%) identified ChatGPT as the most utilised AI writing tool. One interviewee expressed dominance of ChatGPT in their routine, stating, “I use ChatGPT for almost all my assignments; it helps me generate ideas quickly” (Interviewee 1). This consensus reflected the significant preference for ChatGPT noted in the quantitative findings.

Variety of Tools Utilised

All (100%) participants mentioned several other writing tools such as Grammarly, POE, and Quillbot. One of the interviewees mentioned that they often switched between tools, stating: “I use Grammarly to check my grammar, but often switch to Quillbot for paraphrasing” (Interviewee 2). Another highlighted the excitement to use new AI editions, stating, “I have been comfortable using ChatGPT for some time, but I have since fallen in love with new

editions of AI such a POE and Blackbox AI" (interviewee 6). This indicated that students employed multiple tools to address different writing needs.

Students' Usage of AI Writing Tools

AI Writing Tools Usage Frequency among Students

The study also sought to find the usage patterns of AI writing tools among UELL students. Respondents were asked how often they used AI writing tools to assist with their English writing. The results as shown in Table 4 indicated varying levels of usage among the participants. Out of all 32 respondents, 2 (6%) reported that they always used AI writing tools, while 8 (25%) indicated they used them almost always. This suggested that a small portion of respondents relied heavily on these tools.

The majority, however, fell into the 'often' category, with 10 (31%) of respondents reporting this frequency, indicating a more regular use of AI writing tools among a significant segment. This was enforced by the median and mode for this data which were both 3, indicating that the typical response lean towards "often," highlighting that many participants saw value in using AI writing tools regularly, but not necessarily as a primary resource.

Additionally, 9 (28%) respondents stated they sometimes used these tools, showing that while they may have not relied on them consistently, they found them useful on occasion. On the lower end of the scale, 3 (9%) of respondents indicated that they used AI writing tools almost never. This highlighted a smaller group that may have preferred traditional writing methods or may not have found AI tools beneficial for their needs.

Interviewees reported varying frequencies of AI writing tools usage. Most participants 4 (67%) admitted having been using AI writing tools more often. One of them explicitly admitted having used AI writing tools whenever they had an assignment, stating, "I use ChatGPT almost every time I write an assignment" (interviewee 1). This indicated a high reliance on AI writing tools assistance. In contrast, some 2 (33%) of the interviewees reported to have used AI writing tools only when they are stuck or need help with a specific part of their assignment. This suggested that while some students used AI writing tools regularly, others used them more selectively.

Table 4

AI writing tools usage frequency among students

Scale Response	Frequency	Percentage
5. Always	2	6
4. Almost Always	8	25
3. Often	10	31
2. Sometimes	9	28
1. Almost Never	3	9
Median	3	
Mode	3	

Disclosure of Using AI writing tools

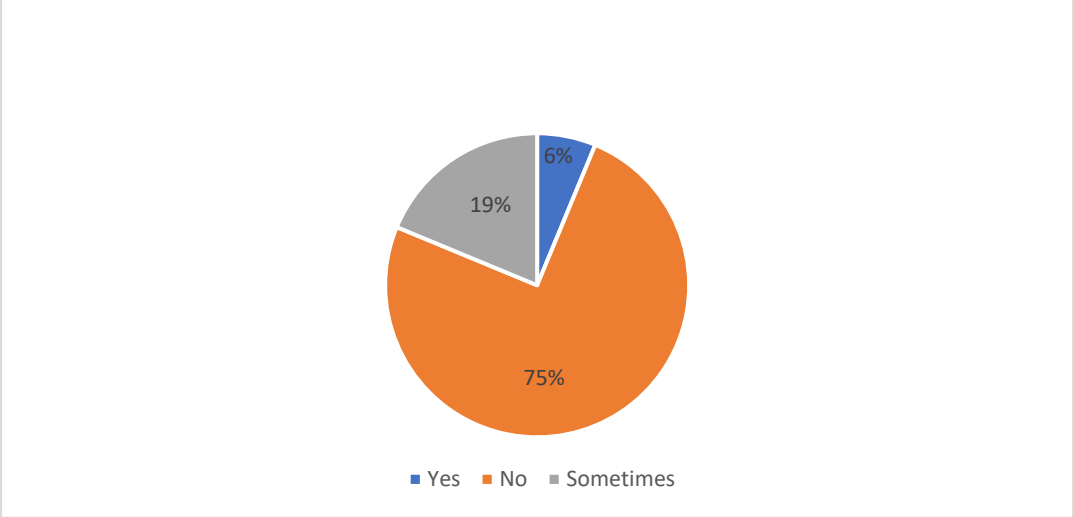
The respondents were also asked whether they typically disclosed their use of AI writing tools in their English assignments. The findings revealed a clear trend regarding disclosure practices among participants. As illustrated in Figure 2, a majority of respondents, 24 (75%), indicated that they did not disclose their use of these tools. This significant percentage suggested a common reluctance or hesitation to acknowledge reliance on AI writing assistance in academic work. In contrast, only 2 (6.3%) of respondents reported that they always disclosed their use of AI writing tools.

Additionally, 6 (18.8%) of respondents stated that they sometimes disclosed their usage. This indicated that while some participants recognised the value of transparency, they may have done so only under certain circumstances, possibly depending on the context of their assignments or the expectations of their instructors.

When discussing whether Interviewees disclosed their use of AI writing tools in their assignments, most 5 (83%) interviewees indicated reluctance. One of them expressed fear that disclosing use of AI writing tools may be viewed as cheating by instructors, and as such, attract serious penalties. They stated, "I rarely tell my instructors that I used AI; I feel like they might think I am cheating" (Interviewee 5). The majority expressed that they could not disclose their use of AI writing tools in their assignments because their instructors seemed to be completely against AI writing tools. They added that it was hard for them to disclose their use of AI tools because they did not know of any way to reference AI yet. Only one (17%) of the interviewees indicated that they often disclosed their use of AI writing tools where necessary and applicable.

Figure 2

Participants' disclosure of Using AI writing tools



Purposes for Using AI Writing Tools

The respondents were asked to identify their purposes of using AI writing tools. The collected data revealed that respondents had various purposes for using AI writing tools. As portrayed in

Figure 3, thirteen (41%) of the respondents indicated that the main reason for using AI writing tools was to correct their written work. Additionally, twelve (38%) of respondents stated that they used these tools for searching information on writing topics, reflecting a desire for better resources and knowledge while composing their texts.

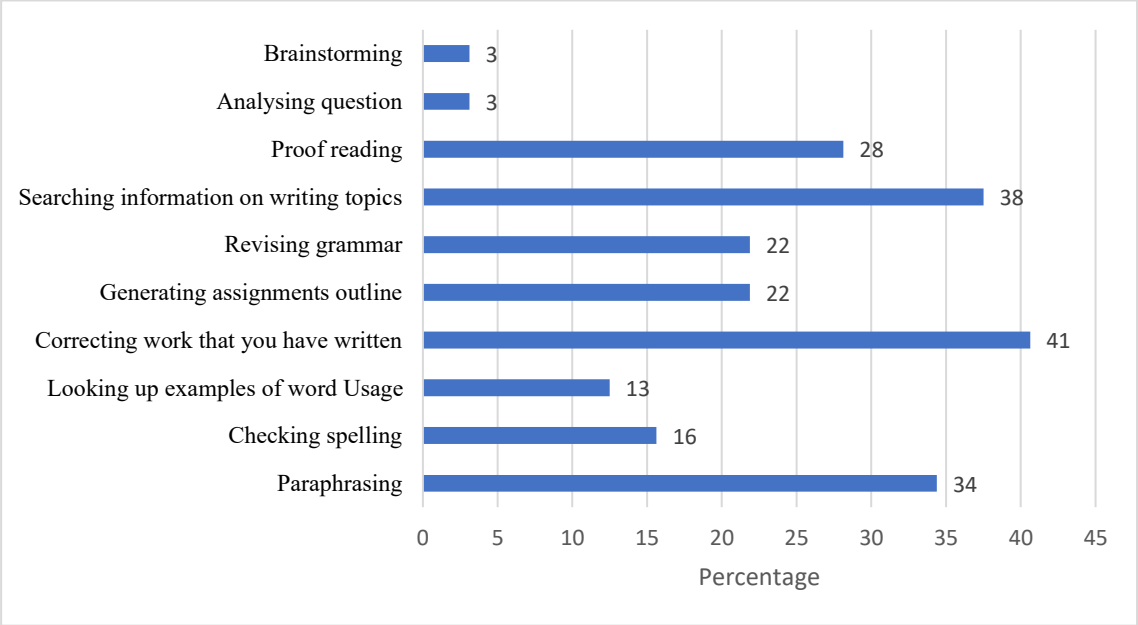
The data also indicated that eleven (34%) of respondents utilised AI tools for paraphrasing. Other notable purposes included proofreading, with nine (28%) of respondents, and generating assignment outlines, which 22% of respondents reported using these tools for. Revising grammar was similarly highlighted by seven (22%) of the participants, further emphasising the importance of linguistic accuracy.

Conversely, fewer respondents indicated lesser-used functions, such as checking spelling (16%) and looking up examples of word usage (13%). The least common purposes were analysing questions and brainstorming, each reported by only one (3%) of respondents.

The interviewees were also asked to state their purposes of using AI writing tools. All (100%) identified several specific purposes for using AI writing tools. A majority (67%) reported that they used them for proofreading and to check grammar, paraphrasing and enhancing readability, reflecting a common use case among students as noted in the quantitative data. Others 2 (33%) reported that they used AI writing tools for idea generation; they helped them to brainstorm topics before they started writing.

Figure 3

Participants' purposes for Using AI Writing Tools



Discussion of Findings

Prevalence of AI Writing Tools

The study found that ChatGPT was the most widely used AI writing tool among UNESWA undergraduate English Language students, with 63% of respondents indicating its use. This

aligned with findings from Marzuki et al. (2023), who noted the increasing popularity of various AI tools among students for enhancing writing quality. The prominence of ChatGPT could be attributed to its resourcefulness in generating content and providing instant feedback, as highlighted by Ho (2024), who described students' reliance on such tools for immediate solutions to language difficulties.

However, the limited usage of other tools like Wordtune and PaperPal suggested a potential lack of awareness or accessibility issues, echoing concerns raised scholars about the uneven adoption of AI technologies in educational contexts. This inconsistency indicated a need for educational institutions, particularly in Eswatini, to promote a wider range of AI resources to enhance student learning.

Usage Patterns of AI Writing Tools

On the usage patterns of AI writing tools, the findings revealed that while some students used AI writing tools frequently, a significant portion (75%) did not disclose their usage in assignments. This hesitance to acknowledge the use of AI reflected a broader concern regarding academic integrity, which had been discussed in literature by Mhlanga (2023). He emphasised the ethical implications of using AI tools, suggesting that students often dreaded consequences, leading to a culture of secrecy. This indicated a number of challenges to institutions of higher learning, including, and particularly, academic dishonesty as identified by Vieru & Petrea (2025).

Moreover, the mixed frequency of use, where the majority reported using AI tools "often" rather than "always", indicated a noticeable relationship with technology. This finding sustained Vieru & Petrea's (2025) affirmation that students do utilise AI writing tools in their academic writing, and that calls for a balanced approach to ensure effective and responsible use of AI in educational environments.

Conclusion

Prevalent AI Writing Tools Used by Undergraduate English Language Students

Based on the findings, it was concluded that AI writing tools, particularly ChatGPT, played a significant role in the academic writing processes of UNESWA undergraduate students. The strong preference for ChatGPT suggested effectiveness in enhancing writing quality. It suggested that ChatGPT was accessible, easy to use, and effectively helped students to do better in the English assignments. Other writing tools including Grammarly and Gemini are secondary to ChatGPT.

How Students Use AI writing Tools in Their Academic Writing

The research revealed that students used AI writing tools for various purposes, including proofreading, idea generation, and enhancing readability. While some reported using these tools regularly, others employed them selectively when they faced specific challenges in their writing assignments. The variability in usage patterns suggested that while AI writing were beneficial, students were still concerned with their own writing skills. The dependence on AI writing tools and lack of disclosure, however, raised concerns about over-reliance, which could hinder their ability to develop independent writing skills. This highlights a critical need for educational institutions to provide clear guidelines on the appropriate use of these tools.

Ultimately, while AI writing tools seemed to offer substantial benefits, they also pose challenges that must be addressed to ensure they enhance rather than hinder academic development**.**

Recommendations for Action

Based on the findings and their implications, the study recommends the following actions:

Develop institutional guidelines: the University of Eswatini should formulate clear guidelines on the ethical use of AI writing tools, emphasising responsible integration into academic practices. This could include criteria for when and how to use AI writing tools, as well as recommendations for proper acknowledgement and transparency in academic submissions.

Educating students could also play a huge role. Workshops and seminars should be organised to educate students on the effective use of AI writing tools, addressing both their benefits and potential drawbacks one crucial goal that the university should consider. Areas of focus for these educational initiatives could include topics such as understanding the functionalities of various AI tools; identifying the appropriate contexts for using AI writing tools; as well as finding strategies to balance AI assistance with personal writing skill development, among others.

Future research exploring the long-term impacts of AI writing tools on students' writing and overall academic outlook seems to be a crucial goal that the university should adopt. This goal could include conducting longitudinal studies to assess changes in writing proficiency over time with the use of AI writing tools. This would bring about comprehensive knowledge on the use and integration of AI in education.

Recommendations for Further Research

Further research should focus on expanding the scope to include other concepts and contexts, as well as investigating the effectiveness of specific tools in enhancing writing quality across different contexts. Additionally, exploring students' experiences in other institutions within Eswatini could provide a broader understanding of AI writing tools usage in the region.

Acknowledgement
We hereby acknowledge and express our heartfelt gratitude to all the study participants who generously shared their time and insights by completing the survey and engaging in interviews.

Conflict of Interest
We declare that there is no conflict of interests regarding the publication of the paper or otherwise.

Authors' contributions

SIFUNDZA, B.S: Conception/design, development of data collection instrument, analysis, interpretation of data, revised manuscript (40%)
OSODO, J: Conception/design, development of data collection instrument, interpretation of data, revised manuscript (20%)
SIFUNDZA, B.S: Data collection, analysis and interpretation of data and first draft (30%)
OSODO, J: Interpretation of data, first draft and editing (10%)

References

AIContentfy, (2023, November, 07). AI writing tools: the future of the writing Industry. https://aicontentfy.com/en/blog/future-of-writing-ai-assisted-content-creation

Braun, V., & Clarke, V. (n.d.). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bosch, T., Jordaan, M., Mwaura, J., Nkoala, S., Schoon, A., Smit, A., Uzuegbunam, C. E., & Mare, A. (2023). South African University students' use of AI-Powered Tools for Engaged Learning. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4595655

Cleave, P. (2023, January 26). Advantages of questionnare in online research. *Smart Survey*. Retrieved November 27, 2024, from https://www.smartsurvey.co.uk/blog/advantages-of-questionnaires-in-online-research

Cochran, G.W. (1977). *Sampling Techniques*. New York, NY: Wiley

Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education (6th ed.) Routeledge Falmer

Cohen, L., Manion, L., & Morrison, K. (2017). Research methods in education. In *Routledge eBooks*. https://doi.org/10.4324/9781315456539

Cresswell, J. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE publications Ltd

Conchran, W.G. (1977). Sampling Techniques. John Willy & Sons

Iskender, A. (2023). Holy or unholy? Interview with open AI's ChatGPT. *European Journal of Tourism Research*, 34, 3414. https://doi.org/10.54055/ejtr.v34i.3169.

Imsa-ard, Thangthong, P., & Phiromsombut, J. (2024). Navigating AI Writing assistance Tools: Unveiling the Insights of Thai EFL Learners. *Thaitesol Journal 37(1).*

Investopedia Team. (2024, November 28). What is artificial intelligence (AI)? Investopedia. https://www.investopedia.com/terms/a/artifical-intelligence-ai.asp

Haluza, D., & Jungwith, D. (2023). Artificial Intelligence and ten Societal megatrends: A GPT-3 case study. Preprints. https://doi.org/10.20944/preprints202301.0474.v1

Hlatshwako, Z., & Tsabedze, V. (2024). Unlocking the future: Exploring librarian's perspectives and Readiness for Artificial Intelligence Integration in eswatini libraries. *Journal of Web Librarianship*, 1–20. https://doi.org/10.1080/19322909.2024.2364324

Ho, P. X. P. (2024). Using ChatGPT in English language learning: A study on I.T. students' attitudes, habits, and perceptions. International Journal of TESOL & Education, 4(1), 55-68. DOI: https://doi.org/10.54855/ijte.24414.

Mhlanga, D. (2023). Open AI in Education, the responsible and ethical use of CHATGPT towards lifelong learning. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4354422

Ma, X. (2017). The technology Acceptance Model: A Meta Analysis of Empirical Findings. *Idea Group Publishing.*https://www.researchgate.net/publication/314410967.

Marzuki, Widiati, U., Rusdin, D., Darwin, I., & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. Cogent Education, 10(2), 1–17. https://doi.org/10.1080/2331186x.2023.2236469.

University of Eswatini. (n.d.). *UNESWA Strategic Plan 2024* [Press release]. Retrieved September 21, 2024, from https://www.uneswa.ac.sz/administration/upc/strategicplan/

Shukla, S. (n.d.). Concept of population and sample. In *Researchgate*. https://www.researchgate.net/publication/346426707

Tsabedze, V. (2023). Managing records in the age of artificial intelligence: How prepared are archives and Records Management Professionals in eswatini? *Internet Reference Services Quarterly*, *28*(1), 77–95. https://doi.org/10.1080/10875301.2023.2284898.

Wang'ang'a, A. W. (2024). Consequences of Artificial Intelligence on Teaching and Learning in Higher Education in Kenya: Review East. https://doi.org/10.37284/eajes.7.1.1718.

Wei, L. (2023) Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning. *Front. Psychol*. 14:1261955. https://doi.org/10.3389/fpsyg.2023.1261955.

Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In Y. S. Lincoln & E. G. Guba (Eds.), Handbook of qualitative research (pp. 163-188). Thousand Oaks, CA: Sage.

Yu, K., & Dlamini, R. (2024). Higher Education ICT integration in Africa. In *Routledge eBooks*. https://doi.org/10.4324/9781003394877

Vieriu, A. M., & Petrea, G. (2025). The Impact of Artificial Intelligence (AI) on Students'Academic Development. Education Sciences, 15(3), 343. https://doi.org/10.3390/educsci15030343