DIGITAL TOOLS IN ESSAY WRITING: PERSPECTIVES FROM ENGLISH EDUCATION STUDENTS

*Tri Puja Lestari[1], Amrullah[2]
Trilestari50@gmail.com
[1,2]English Language Education, Faculty of Teacher Training and Education,
Sriwijaya University, Indonesia

Abstract: This study explores the use of technological writing tools in the essay-writing process, focusing on how these tools help address common challenges such as grammatical errors, plagiarism, translation, and paraphrasing. It investigates the perceptions of sixth-semester students in an English Education Study Program regarding the use of grammar checkers, plagiarism detectors, translation tools, and paraphrasing tools within the context of an essay writing course. A cross-sectional survey design was employed, and data were collected through structured questionnaires. The responses were statistically analysed using descriptive analysis methods in SPSS to identify usage patterns and student attitudes. The results show that students generally have positive views toward the use of technological tools, with most reporting that these tools assist them in overcoming various writing-related difficulties. The findings also indicate that students make use of a variety of tools, depending on their specific needs. The study recommends further research into the pedagogical integration of such tools in academic writing instruction.

Keywords: *essay writing; grammar checker; plagiarism checker; translation tool; paraphrasing tool*

INTRODUCTION

Essay writing is widely recognized as a complex academic task, particularly for English as a Foreign Language (EFL) learners, who often experience multifaceted challenges in the writing process. Bulqiyah et al. (2021) categorize these challenges into several key areas. First, students experience cognitive difficulties in transferring abstract ideas into written language. Second, linguistic challenges, especially those involving lexical and grammatical competence pose significant obstacles. Third, vocabulary mastery, including accurate word choice, is identified as a critical factor in effective essay composition. Finally, organizing content from constructing coherent sentences to structuring unified paragraphs is cited as one of the most difficult components of academic writing.

High-quality writing requires attention to various elements, including organization, clarity, diction, and mechanics (Starkey, 2004). In addition to these, plagiarism remains a major concern. Kustini (2021) points out that students frequently plagiarize by quoting without integrating personal interpretation or analysis, making the practice of paraphrasing essential in academic integrity. According to Rusdianto (2022), paraphrasing involves rewording key ideas without altering their original meaning, thereby enabling students to present ideas authentically and avoid plagiarism.

Technological writing tools have emerged as potential solutions to common writing difficulties. Tools such as grammar checkers help address syntactic issues (Cavaleri & Dianati, 2016), and their functionalities often extend to punctuation and plagiarism detection (Mubarok & Syafi'i, 2020). Other tools, such as paraphrasing and translation applications, assist students in linguistic transfer and idea reformulation (Sulistyaningrum, 2021; Carrió-Pastor, 2016), thus offering additional support for developing effective academic writing.

At the English Education Study Program of Sriwijaya University, Essay Writing is a required course offered in the third semester, where students are trained to write structured academic essays. To facilitate their learning, students are encouraged to utilize technological writing tools such as grammar checkers, plagiarism detectors, machine translators, and paraphrasing platforms. However, while numerous studies have examined the functions and advantages of these tools, limited research has focused specifically on how EFL university students perceive and engage with these tools in the context of an Essay Writing course

METHODOLOGY

This study employed a cross-sectional survey research design. As noted by Creswell (2012), the cross-sectional survey is one of the most widely adopted approaches in academic research. It involves collecting data at a single point in time, allowing researchers to assess prevailing attitudes or behaviors within a specific population. This design is particularly valued for its efficiency and ability to yield timely and informative results regarding current phenomena.

Subjects

This present study was conducted at the Faculty of Teacher and Training Education of Sriwijaya University during the Even Semester of the academic year of 2022/2023. The participants of this study comprised all sixth-semester students who had taken the Paragraph Writing and Essay Writing courses and had prior experiences using technological writing tools. Given that all students met the inclusion criteria, the entire cohort of sixth-semester students was designated as both the population and the sample for this study.

Table1. The population and sample of the study

No	Study Program	Semester	Academic Year	Location	Total
1	English Education Study Program	6	2022/2023	Indralaya	36
				Palembang	38
		TOTAL			74

Table 2. Gender of the participants

No	Gender	
1	Male	10
2	Female	64
	Total	74

Data Collection and Data Analysis

This study employed a closed-ended questionnaire to collect data. A total of five questionnaires were utilized: four employed a five-point Likert scale format, while one was structured as a multiple-choice questionnaire to indicate their preferred technological writing tool. All questionnaire content was reviewed by the researcher's academic supervisor to ensure alignment with the objectives of the present study. Additionally, the four Likert-scale questionnaires underwent a validation process through distribution to non-sample participants. The five questionnaires included in this study are as follows: 1) Grammar Checker Questionnaire, adapted from the studies of Dewi (2022) and Lailika (2019); 2) Plagiarism Checker Questionnaire, developed based on research by Zheng (2021) and Matheson and Starr (2013); 3) Translation Tool Questionnaire, based on the work of Yanti and Meka (2019) as well as Axelina and Setiawan (2017); 4) Paraphrasing Tool Questionnaire, derived from the studies of Kurniati (2022) and Inayah and Sulistyaningrum (2021); and 5) Selected Technological Writing Tools Questionnaire, designed in a multiple-choice format and developed by Fajriah (2022).

Table 3. Result of the validity and reliability tests

No	Questionnaire	Validity Test			Reliability Test	
		Non-valid Item	Valid Items	Total Item (N)	Cronbach Alpha	Total Item (N)
1	Grammar checker	1	11	12	.851	12
2	Plagiarism	0	10	10	.920	10
3	Translation	1	11	12	.801	12
4	Paraphrasing	0	12	12	.934	12

Furthermore, the data were analyzed statistically by using SPSS to know the descriptive statistics which included mean, mode, and standard deviation. The students' responses were presented in the form of percentage. For the last questionnaire (multiple choice), the results were presented in the form of a bar chart or pie chart, to address the second set of research questions.

FINDINGS AND DISCUSSION
Findings
The participants were instructed to complete four questionnaires related to technological writing tools they had utilized during their essay writing course: grammar checkers, plagiarism checkers, translation tools, and paraphrasing tools. The responses were subjected to statistical analysis to calculate mean scores, which were used to determine the level of agreement among respondents. Following the classification proposed by Nouh et al. (2015), a mean score between 1.00 and 2.33 indicates a low level of agreement, a score between 2.34 and 3.66 reflects a moderate level of agreement, and a score between 3.67 and 5.00 denotes a high level of agreement. In addition to the four primary questionnaires, participants were also asked to complete a supplementary questionnaire to indicate their preferred technological writing tool.

Grammar Checker

Table 4. Participants' responses about the perception of grammar checker

Perception of Grammar Checker	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
	N	%	N	%	N	%	N	%	N	%
1 Grammar checkers are easy to use.	44	59.5	24	32.4	4	5.4	2	2.4	0	0.0
2 Grammar checkers are accurate, precise, and detail.	9	12.2	42	56.8	19	27.5	4	5.4	0	0.0
3 I use grammar checkers to identify grammar errors in essay writing.	39	52.7	30	40.5	2	2.7	1	1.4	2	2.7
4 I use grammar checkers to identify spelling errors in my essay writing.	36	48.6	32	43.2	3	4.1	2	2.7	1	1.4
5 I use grammar checkers to identify punctuation errors in my essay writing.	31	41.9	36	48.6	5	6.8	1	1.4	1	1.4
6 I use grammar checkers to help me in word choices.	29	39.2	31	41.9	9	12.2	3.	4.1	2	2.7
7 I use grammar checkers because they have some good features that make me feel more confident in my writing.	31	41.9	33	44.6	8	10.8	0	0	2	2.7
8 Grammar checkers help me to correct the grammar in my essay writing.	34	45.9	33	44.6	5	6.8	0	0	2	2.7
9 Grammar checkers help me to correct the spelling in my essay writing.	35	47.3	32	43.2	5	6.8	1	1.4	1	1.4
10 Grammar checkers help	33	44.6	32	43.2	6	8.1	2	2.7	1	1.4

	Perception of Grammar Checker	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
		N	%	N	%	N	%	N	%	N	%
	me correct the punctuation in my essay writing.										
11	Grammar checkers are useful to correct some errors in my writing.	32	43.2	36	48.6	4	5.4	0	0	2	2.7

Table 5. Result of descriptive statistics from perception of grammar checker

	N	Minimum	Maximum	Mean	Std. Deviation
Grammar checker 1	74	2	5	4.49	.726
Grammar checker 2	74	2	5	3.76	.737
Grammar checker 3	74	1	5	4.39	.841
Grammar checker 4	74	1	5	4.35	.801
Grammar checker 5	74	1	5	4.28	.768
Grammar checker 6	74	1	5	4.11	.959
Grammar checker 7	74	1	5	4.23	.853
Grammar checker 8	74	1	5	4.31	.826
Grammar checker 9	74	1	5	4.34	.781
Grammar checker 10	74	1	5	4.27	.833
Grammar checker 11	74	1	5	4.30	.806
Valid N (listwise)	74				

The results presented in Table 4 indicate that the statement *" Grammar checkers are easy to use"* (Grammar Checker 1) received strong agreement from 59.5% of participants and moderate agreement from 32.4%, yielding a mean score of 4.49 in Table 5. This reflects an overall high level of agreement. Similarly, the statement "*Grammar checkers are accurate, precise, and detail"* (Grammar Checker 2) achieved a mean score of 3.76. Although 27.5% of participants were undecided and 5.4% expressed disagreement, a majority of 56.8% agreed, and 12.2% strongly agreed, as shown in Table 4.

Regarding students' perceptions of their reasons for using grammar checkers (items 4 to 7), Table 4.1 reveals that 52.7% of participants strongly agreed with the statement *"I use grammar checkers to identify grammar errors"* (Grammar Checker 3), which recorded a mean score of 4.39. Likewise, high levels of agreement were observed for statements related to identifying spelling errors (Grammar Checker 4), punctuation errors (Grammar Checker 5), and receiving assistance with word choice (Grammar Checker 6), with mean scores ranging from 4.11 to 4.35.

Furthermore, the statement *"Grammar checkers are useful to correct some errors in my writing"* (Grammar Checker 11) was strongly agreed upon by 43.2% of participants, resulting in a mean score of 4.30, as displayed in Table 5.

Plagiarism Checker

Table 6. Participants' responses about the perception of plagiarism checker

Perception of Plagiarism Checker	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
	N	%	N	%	N	%	N	%	N	%
1 In general, plagiarism checkers are reliable systems.	14	19.7	38	53.5	16	22.5	3	4.2	0	0.0
2 The similarity report of plagiarism checkers are trustworthy.	11	15.5	29	40.8	25	35.2	6	8.5	0	0.0
3 Overall, I am satisfied with my experience in using plagiarism checkers.	15	21.1	42	59.2	10	14.1	4	5.6	0	0
4 I use plagiarism checkers to view my own essay writing originality percentage report	19	26.8	40	56.3	7	9.9	3	2	2.8	0.0
5 I use plagiarism checkers to view plagiarized texts in my essay writing.	20	28.2	39	54.9	9	12.7	1	1.4	2	2.8
6 When using plagiarism checkers, I would pay special attention to paraphrasing skills in my essay writing.	20	28.2	37	52.1	11	15.5	3	4.2	0	0.0
7 Plagiarism checkers increase my anti-plagiarism awareness in my essay writing.	23	32.4	38	53.5	8	11.3	2	2.8	0	0
8 Plagiarism checkers detect plagiarism in my essay writing.	23	32.4	40	56.3	4	5.6	3	4.2	1	1.4
9 Plagiarism checkers prevent me from plagiarizing in my essay writing.	23	32.4	35	49.3	9	12.7	4	5.6	0	0
10 Using plagiarism checkers has effects on my essay writing process.	21	29.6	38	53.5	10	14.1	2	2.8	0	0

Table 7. Result of descriptive statistics from perception of Plagiarism Checker

	N	Minimum	Maximum	Mean	Std. Deviation
Plagiarism checker 1	71	2	5	3.89	.766
Plagiarism checker 2	71	2	5	3.63	.849
Plagiarism checker 3	71	2	5	3.96	.764
Plagiarism checker 4	71	1	5	4.00	.894
Plagiarism checker 5	71	1	5	4.04	.853
Plagiarism checker 6	71	2	5	4.04	.783
Plagiarism checker 7	71	2	5	4.15	.730
Plagiarism checker 8	71	1	5	4.14	.816
Plagiarism checker 9	71	2	5	4.08	.824
Plagiarism checker 10	71	2	5	4.10	.740
Valid N (listwise)	71				

According to the data presented in Table 6, out of 74 participants, 71 reported using plagiarism checkers. The statement *"Plagiarism checkers are reliable systems"* (Plagiarism Checker 1) yielded a mean score of 3.89, with 19.7% of respondents strongly agreeing and 53.5% agreeing. Similarly, the statement *"The similarity report generated by plagiarism checkers is trustworthy"* (Plagiarism Checker 2) obtained a mean score of 3.63, with 15.5% of participants strongly agreeing and 40.8% agreeing, as shown in Table 3. The statement *"Overall, I am satisfied with my experience using the plagiarism checkers"* (Plagiarism Checker 3) recorded a mean score of 3.96, with 21.1% of respondents strongly agreeing and 59.2% agreeing.

Furthermore, in Table 7, the statement *"I use plagiarism checkers to view the originality of my essay writing"* (Plagiarism Checker 4) received a mean score of 4.00, with 26.8% of participants strongly agreeing and 56.3% agreeing. Likewise, the statement *"I use plagiarism checkers to view plagiarized texts in my essay writing"* (Plagiarism Checker 5) reached a mean score of 4.04. Additional statements (Plagiarism Checker 6 to 10), which explored various aspects of the tools' effectiveness and their feedbacks, yielded mean scores ranging from 4.04 to 4.15. Strong and moderate agreement levels for these items ranged from 28.2% to 56.3%, reflecting a generally high perceived value of the plagiarism checkers among participants.

Translation Tool

Table 8. Participants' responses about the perception of translation tool

	Perception of Translation Tool	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
		N	%	N	%	N	%	N	%	N	%
1	I can translate text more easily if I use translation tools instead of doing it by hand.	26	35.1	34	45.9	12	16.2	0	0	2	2.7
2	Translation tools save my time.	33	44.6	31	41.9	6	8.1	2	2.7	2	2.7
3	I use translation tool when I have trouble understanding the meaning of a word in my essay.	35	47.3	34	45.9	3	4.1	0	0	2	2.7
4	I use translation tools to help me checki the synonyms.	26	35.1	36	48.6	6	8.1	6	8.1	0	0.0
5	I use translation tools for translating word by word.	23	31.1	31	41.9	10	13.5	8	10.8	2	2.7
6	I use translation tools for translating sentence by sentence.	24	32.4	34	45.9	10	13.5	5	6.8	1	1.4
7	I use translation tools for translating paragraph by paragraph.	21	28.4	35	47.3	8	10.8	5	6.8	5	6.8

	Perception of Translation Tool	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
		N	%	N	%	N	%	N	%	N	%
8	I feel more confident using translation tools in producing essays in my essay writing class.	21	28.4	28	37.8	18	24.3	6	8.1	1	1.4
9	Translation tools enrich my vocabulary.	26	35.1	34	45.9	11	14.9	2	2.7	1	1.4
10	Translation tools could provide me synonyms to avoid repetition in my essay writing.	28	37.8	34	45.9	8	10.8	3	4.1	1	1.4
11	Translation tools could translate word by word, phrase by phrase, andeven paragraph by paragraph well in my essay writing	25	33.8	36	48.6	8	10.8	1	1.4	4	5.4

Table 9. Result of descriptive statistics from perception of translation tool

	N	Minimum	Maximum	Mean	Std. Deviation
Translation tool 1	74	1	5	4.11	.869
Translation tool 2	74	1	5	4.23	.915
Translation tool 3	74	1	5	4.35	.801
Translation tool 4	74	2	5	4.11	.869
Translation tool 5	74	1	5	3.88	1.059
Translation tool 6	74	1	5	4.01	.929
Translation tool 7	74	1	5	3.84	1.123
Translation tool 8	74	1	5	3.84	.980
Translation tool 9	74	1	5	4.11	.853
Translation tool 10	74	1	5	4.15	.871
Translation tool 11	74	1	5	4.04	.999
Valid N (listwise)	74				

The findings regarding the use of translation tools indicate varying levels of agreement among participants. As shown in Table 8, the statement *"I can translate texts more easily if I usetranslation tools instead of doing it manually"* (Translation Tool 1) received agreement from 45.9% of participants, with a mean score of 4.11, indicating a high level of perceived usefulness. Similarly, the statement *"Translation tools save my time"* (Translation Tool 2) achieved a high mean score of 4.23, with 44.6% of respondents strongly agreeing.

Other statements also reflected strong positive perceptions. For instance, using translation tools to understand unfamiliar words (Translation Tool 3) and to check synonyms (Translation Tool 4) received high levels of agreement, with mean scores of 4.35 and 4.11, respectively.

Additional data further underscore the generally favorable views of translation tools in essay writing contexts. Specifically, 41.9% of participants agreed with the use of translation tools for word-by-word translation (Translation Tool 5), and 45.9% agreed

with their use for sentence-by-sentence translation (Translation Tool 6), both recording mean scores of approximately 4.01. Participants also expressed confidence in using translation tools (Translation Tool 8), reflected by a mean score of 3.84, and acknowledged their role in vocabulary enrichment (Translation Tool 9), with a mean score of 4.11. Finally, the statements regarding the effectiveness of translation tools in providing synonyms (Translation Tool 10) and facilitating the translation of texts of various lengths (Translation Tool 11) received mean scores of 4.15 and 4.04, respectively, indicating an overall positive perception of their utility in supporting essay writing tasks

Paraphrasing Tool

Table 10. Participants' responses about the perception of paraphrasing tool

	Perception of Paraphrasing Tool	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
		N	%	N	%	N	%	N	%	N	%
1	Paraphrasing tools are easily accessible digital tools.	24	33.8	38	53.5	6	8.5	1	1.4	2	2.8
2	Paraphrasing tool features greatly assist me in writing.	22	31.0	37	52.1	8	11.3	3	4.2	1	1.4
3	Paraphrasing tools are effective because they include several features that can help me improve the quality of my writing.	24	33.8	35	49.3	7	9.9	4	5.6	1	1.4
4	I use paraphrasing tools to help me to correct the grammatical errors in my essay writing.	18	25.4	39	54.9	6	8.5	8	11.3	0	0
5	I use paraphrasing tools to help me to change the part of the speech in my essay writing.	26	36.6	33	46.5	9	12.7	3	4.2	0	0
6	I use paraphrasing tools to help me to use proper tenses in my essay writing.	24	33.8	33	46.5	8	11.3	6	8.5	0	0
7	I use paraphrasing tools to help me to use proper connectors/discourse markers in my essay writing.	25	35.2	35	49.3	7	9.9	4	5.6	0	0
8	I use paraphrasing tools to help me to change words from source texts.	24	33.8	37	52.1	7	9.9	1	1.4	2	2.8
9	I use paraphrasing tools to help me change active sentences into passive voice and vice versa.	21	29.6	33	46.5	12	16.9	3	4.2	2	2.8
10	Through their vary features, paraphrasing tool applications encourage me to	26	36.6	29	40.8	11	15.5	5	7.0	0	0

Perception of Paraphrasing Tool	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
	N	%	N	%	N	%	N	%	N	%
write essays.										
11 Using paraphrasing tool applications boost my confidence towards my essay writing to have a unique work/ not be accused of plagiarism	26	36.6	33	46.5	8	11.3	4	5.6	0	0
12 I feel like I could write efficiently and my essay will get better results when I use paraphrasing tool apps.	23	32.4	36	50.7	10	14.1	1	1.4	1	1.4

Table 11. Result of descriptive statistics from perception of paraphrasing tool

	N	Minimum	Maximum	Mean	Std. Deviation
Paraphrasing tool 1	71	1	5	4.14	.850
Paraphrasing tool 2	71	1	5	4.07	.851
Paraphrasing tool 3	71	1	5	4.08	.890
Paraphrasing tool 4	71	2	5	3.94	.893
Paraphrasing tool 5	71	2	5	4.15	.804
Paraphrasing tool 6	71	2	5	4.06	.893
Paraphrasing tool 7	71	2	5	4.14	.816
Paraphrasing tool 8	71	1	5	4.13	.861
Paraphrasing tool 9	71	1	5	3.96	.948
Paraphrasing tool 10	71	2	5	4.07	.900
Paraphrasing tool 11	71	2	5	4.14	.833
Paraphrasing tool 12	71	1	5	4.11	.803
Valid N (listwise)	71				

The findings presented in Table 8 indicate that out of 74 participants, 71 were included in the data analysis, as those who did not use paraphrasing tools were excluded. The analysis of participants' responses to statements regarding paraphrasing tools reveals varying degrees of agreement. For the statement *"Paraphrasing tools are easily accessible digital tools"* (Paraphrasing Tool 1), 53.5% of respondents agreed, while 33.8% strongly agreed, resulting in a mean score of 4.14. Additionally, the statement *"Paraphrasing tool features greatly assist me in writing"* (Paraphrasing Tool 2) yielded a mean score of 4.07, with 52.1% agreeing and 31.0% strongly agreeing. The final statement in this section, *"The features of paraphrasing tools can enhance the quality of my writing"* (Paraphrasing Tool 3), received moderate agreement from 49.3% of respondents, with a mean score of 4.05.

Further analysis presented in Table 11 demonstrates strong agreement among participants regarding the usefulness of the paraphrasing tool in various components of essay writing. The statement *"Pparaphrasing tools help ensure grammatical correctness"* (Paraphrasing Tool 4) achieved a mean score of 3.94, with 54.9% of respondents agreeing. The tools' capability to assist in changing parts of speech (Paraphrasing Tool 5) was also well-received, reflected by a high mean score of 4.15.

Additional statements related to the tool's role in ensuring proper tense usage (Paraphrasing Tool 6), effective use of discourse markers (Paraphrasing Tool 7), and avoiding plagiarism (Paraphrasing Tool 11) all garnered high levels of agreement, with mean scores ranging from 4.06 to 4.14. The final item, *"Paraphrasing tools increase my confidence and improve my essay outcomes"* (Paraphrasing Tool 12), received a mean score of 4.11, with 50.7% of participants moderately agreeing. These results collectively indicate a generally positive perception of the paraphrasing tools' contribution to their essay writing.

Technological Writing Tools Preference
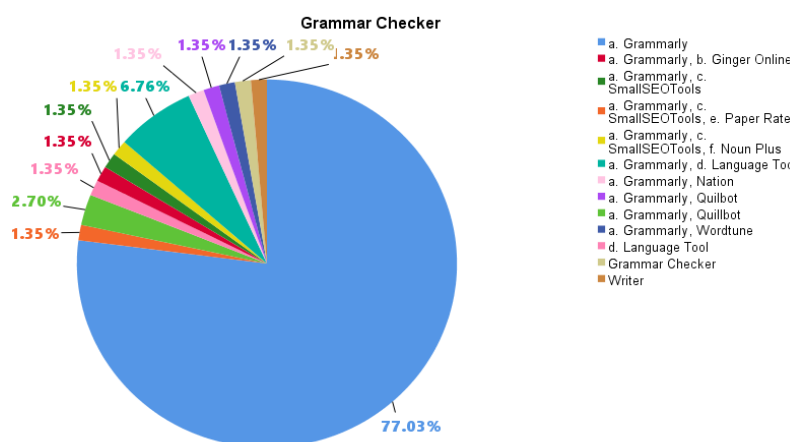
Figure 1. The various Grammar Checker applications/websites used by the participants

According to the data in Chart 1, students utilized a variety of grammar checker applications and websites during their essay writing course. The majority, 57 students, used Grammarly. Participants were allowed to select multiple tools, revealing combinations such as: 1 student using Grammarly and Ginger Online; 1 student using Grammarly, SmallSEOTools, and Paper Rater; 1 student using Grammarly, SmallSEOTools, and Noun Plus; 5 students using Grammarly and Language Tool; 1 student using Grammarly and Nation; 3 students using Grammarly and Quillbot; 1 student using Grammarly and Wordtune; 1 student using Language Tool only; 1 student using Grammar Checker; and 1 student using Writer.
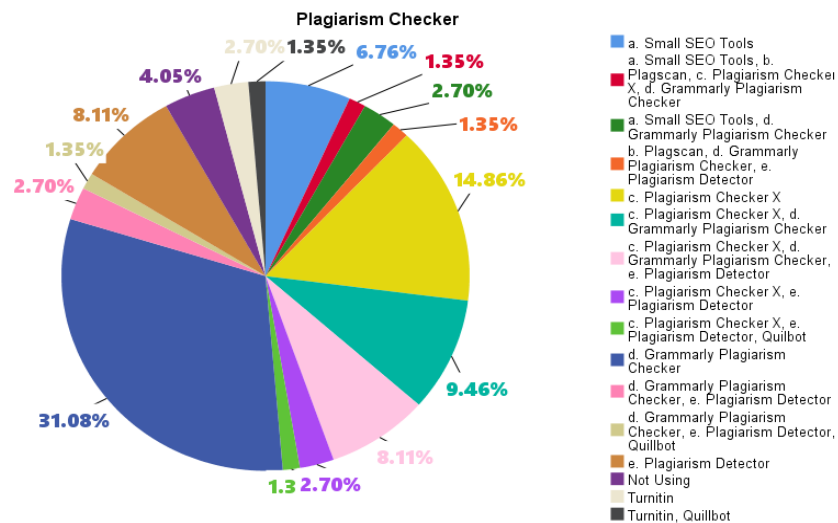
Plagiarism Checker

Legend:
- a. Small SEO Tools
- a. Small SEO Tools, b. Plagscan, c. Plagiarism Checker X, d. Grammarly Plagiarism Checker
- a. Small SEO Tools, d. Grammarly Plagiarism Checker
- b. Plagscan, d. Grammarly Plagiarism Checker, e. Plagiarism Detector
- c. Plagiarism Checker X
- c. Plagiarism Checker X, d. Grammarly Plagiarism Checker
- c. Plagiarism Checker X, d. Grammarly Plagiarism Checker, e. Plagiarism Detector
- c. Plagiarism Checker X, e. Plagiarism Detector
- c. Plagiarism Checker X, e. Plagiarism Detector, Quillbot
- d. Grammarly Plagiarism Checker
- d. Grammarly Plagiarism Checker, e. Plagiarism Detector
- d. Grammarly Plagiarism Checker, e. Plagiarism Detector, Quillbot
- e. Plagiarism Detector
- Not Using
- Turnitin
- Turnitin, Quillbot

Figure 2. The various Plagiarism checker applications/websites used by the participants

Based on the data presented in Chart 2, out of 74 students, 71 used a plagiarism checker, while the remaining participants did not. During the essay writing course, students employed various plagiarism checker applications and websites. Specifically, 5 students used SmallSEOTools, 11 used Plagiarism Checker X, 23 used Grammarly Plagiarism Checker, 6 used Plagiarism Detector, and 2 used Turnitin. Participants were allowed to select multiple tools, with combinations including: 1 student using SmallSEOTools, Plagscan, Plagiarism Checker X, and Grammarly Plagiarism Checker; 2 students using SmallSEOTools and Grammarly Plagiarism Checker; 1 student using Plagscan, Grammarly Plagiarism Checker, and Plagiarism Detector; 7 students using Plagiarism Checker X and Grammarly Plagiarism Checker; 6 students using Plagiarism Checker X, Grammarly Plagiarism Checker, and Plagiarism Detector; 2 students using Plagiarism Checker X and Plagiarism Detector; 1 student using Grammarly Plagiarism Checker, Plagiarism Detector, and Quillbot; and 1 student using Turnitin and Quillbot.

Translation Tool

Legend:
- a. Google Translate
- a. Google Translate, b. U Dictionary
- a. Google Translate, b. U Dictionary, c. Cambridge Dictionary
- a. Google Translate, b. U Dictionary, c. Cambridge Dictionary, d. Bing Translator, e. Trex Dictionary
- a. Google Translate, b. U Dictionary, c. Cambridge Dictionary, e. Trex Dictionary
- a. Google Translate, b. U Dictionary, DeepL translate
- a. Google Translate, c. Cambridge Dictionary
- a. Google Translate, c. Cambridge Dictionary, d. Bing Translator
- a. Google Translate, c. Cambridge Dictionary, DeepL
- a. Google Translate, c. Cambridge Dictionary, e. Trex Dictionary
- a. Google Translate, c. Cambridge Dictionary, oxford
- a. Google Translate, DeepL
- a. Google Translate, Kamusku
- a. Google Translate, Oxford Dictionary
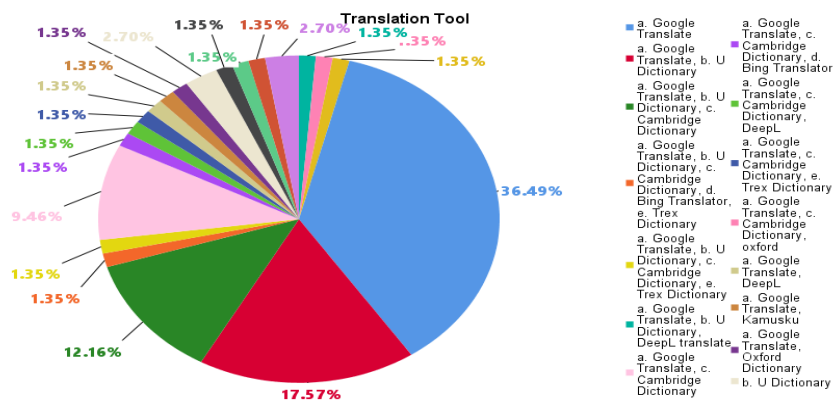- b. U Dictionary
- ...

Figure 3. The various Translation Tool applications/websites used by the participants

Based on the information provided in Chart 4.6, it can be observed that the students made use of a range of translation tools, both in the form of applications and websites, while working on their essays in the essay writing course atmosphere. There were 27 of the participants used Google Translate. The data indicated that the participants were given the option to select multiple translation tools. The data indicated that a variety of translation tools were used by the students. It revealed that 13 students used Google Translate and U Dictionary, 9 students used Google Translate, U Dictionary and Cambridge Dictionary, 1 student used Google Translate, U dictionary, Cambridge Dicitonary, Bing Translator and Trex Dictionary, 1 student used Google Translate, U Dictionary, Cambridge Dicitonary, Trex Dictionary, 7 students used Google Translate and Cambridge Dictionary, 1 student used Google Translate, Cambridge Dicitonary, and Bing Translator, 1 student used Google Translate, Cambridge Dictionary, and DeepL, 1 student used Google Translate, Cambridge Dictionary, and Trex Dictionary, 1 student used Google Translate, Cambridge Dictionary, and Oxford, 1 students used U dictionary and B ing Translator, 1 student used Cambridge Dictionary, 1 student used Cambridge Dictionary and Trex Dictionary, and lastly 3 students used DeepL.
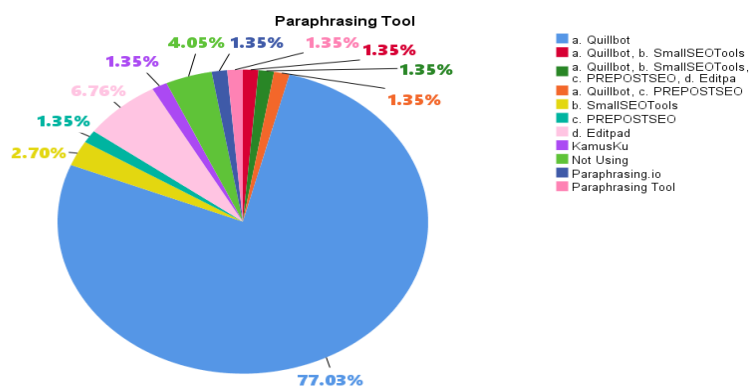
Figure 4. The various Paraphrasing Tool applications/websites used by the participants

Similar to plagiarism checkers, as shown in Chart 4.7, out of a total of 74 students, 71 students utilised paraphrasing tools while the remaining participants did not. During the essay writing course, the students employed different paraphrasing tool applications/websites. The chart revealed that among the surveyed participants, the majority of participants, 57 students utilised Quillbot as their paraphrasing tool, 2 students utilised SmallSEOTools, 1 student used PREPOSTSEO, 5 students used Editpad, 1 student used Kamusku, 1 student used Paraphrasing Tool, 1 student used Paraphrasing.io. In addition, the data also reported that participants were permitted to choose multiple plagiarism checkers. It revealed that 1 student used Quillbot, SmalSEOTools, PREPOSTSEO, Editpad and last 1 student used Quillbot and PREPOSTSEO.

DISCUSSION

The study investigated sixth-semester English Education students' perceptions and usage of technological writing tools grammar checkers, plagiarism checkers, translation tools, and paraphrasing tools during their essay writing course. Using a 44-item questionnaire, the study found that most students actively used these tools to improve their writing. Grammar checkers, especially Grammarly (preferred by 77.03% of students), were viewed as easy to use, accurate, and helpful in correcting errors, aligning with Pratama's (2020) findings on Grammarly's positive impact on students' writing confidence. Similarly, plagiarism checkers were highly regarded for detecting unoriginal content, raising awareness about plagiarism, and encouraging better paraphrasing skills, consistent with Chandere et al.'s (2021) emphasis on the importance of plagiarism prevention. Grammarly Plagiarism Checker was the most popular tool, followed by Plagiarism Checker X and others.

Students also showed a positive perception of translation tools, with Google Translate being the most used (36.49%), supporting Niño's (2020) findings that machine translation aids vocabulary and comprehension by providing quick and contextualized translations. Paraphrasing tools, notably Quillbot (used by 77.03%), were praised for enhancing writing quality by helping with grammar, tense, connectors, and originality, preventing plagiarism as noted by Lestari (2023). These findings suggest that students recognize the value of integrating technological tools to address common writing challenges, enhance accuracy, and build confidence in their academic work. The widespread adoption of these tools reflects their practical benefits and the students' growing reliance on technology to support effective and ethical writing practices.

These results indicate a clear trend toward embracing technological writing tools as essential aids in academic writing, highlighting their role not just as corrective instruments but also as learning facilitators. The positive perceptions and high usage rates suggest that students find these tools intuitive and beneficial for improving writing mechanics, originality, and language skills. This integration of technology in the writing process may also reflect a broader shift in educational practices, where digital literacy becomes integral to student success. Consequently, educators are encouraged to incorporate these tools into their curriculum to support students' development, while future research could explore how these technologies impact long-term writing proficiency and critical thinking skills.

CONCLUSION AND SUGGESTION
Conclusion

This study examines students' perceptions of technological writing tools grammar checkers, plagiarism checkers, translation tools, and paraphrasing tools used in essay writing courses. Overall, students expressed positive views, finding these tools helpful in improving various aspects of their writing. Grammar checkers like Grammarly were praised for their ease of use and effectiveness in correcting grammar, spelling, and punctuation. Plagiarism tools such as Grammarly's plagiarism checker and Plagiarism Checker X were valued for promoting originality. Translation tools like Google Translate aided in vocabulary development and accurate translation, while paraphrasing tools such as Quillbot supported content originality and improved writing confidence. In

sum, students found these tools to be valuable writing aids, with many using a combination to address specific writing challenges. The findings highlight the supportive role of technological tools in enhancing academic writing.

Suggestions

Based on the research findings, it is recommended that students in English language education continue to utilize technological writing tools such as grammar checkers, plagiarism checkers, translation tools, and paraphrasing tools to effectively overcome challenges in academic writing, including essay composition. A wide variety of these tools is readily available online, allowing users to select those best suited to their individual needs. Additionally, lecturers are encouraged to integrate these tools into essay writing courses, given their positive reception by students. Lastly, the study highlights diverse types of technological writing tools, suggesting that future research could further explore their integration into writing instruction methods.

REFERENCES

Agussani, A., & Ansari, K. (2020). The Approach to Indonesian Language and Literature Curriculum in the Industrial Revolution Era 4.0 and Society 5.01. *Colloquium International Postgraduateof University Muhammadiyah Sumatera Utara*, *January 2020*, 1–11. http://publikasiilmiah.umsu.ac.id/index.php/publikasi-ilmiah/article/view/245

Ariyanti, A. (2016). Shaping Students' Writing Skills: The Study of Fundamental Aspects in Mastering Academic Writing. *Indonesian Journal of EFL and Linguistics*, *1*(1), 63–77. https://doi.org/10.21462/ijefll.v1i1.5

Ariyanti, A., & Fitriana, R. (2017). E FL Students' Difficulties and Needs in Essay Writing A. Ariyanti 1 , Rinda Fitriana 1 1. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, *158*(Ictte), 111–121.

Axelina, M., & Setiawan, A. (2017). Students' Perception on the Use of Google Translate. *JUORNAL BEGINNER EDUCATIION (BEjo)*, 1–14.

Broughton, G., Christophe, B., Roger, F., Petter, H., & Anita, P. (1980). Teaching English as a Foreign Language. In *London: Routledge and Kegan Paul* (Vol. 4, Issue 1).

Bulqiyah, S., Mahbub, M. A., & Nugraheni, D. A. (2021). Investigating writing difficulties in essay writing: Tertiary students' perspectives. *English Language Teaching Educational Journal*, *4*(1), 61. https://doi.org/10.12928/eltej.v4i1.2371

Carrió-Pastor, M. L. (2016). Technology Implementation in Second Language Teaching and Translation Studies: New Tools, New Approaches. In *International Journal of Applied Linguistics* (Vol. 28, Issue 2).

Cavaleri, M., & Dianati, S. (2016). You want me to check your grammar again? The usefulness of an online grammar checker as perceived by students. *Journal of Academic Language & Learning*, *10*(1), 223.

Chandere, V., Satish, S., & Lakshminarayanan, R. (2021). Online Plagiarism Detection Tools in the Digital Age: A Review. *Annals of the Romanian Society for Cell Biology*, *25*(1), 7110–7119. http://annalsofrscb.ro

Cresswell, J. W. (2012). *Planning, Conducting, and Evaluating Quantitative and Qualitative Research Fourth Edition*. https://www.ptonline.com/articles/how-to-get-better-mfi-results

Dewi, U. (2022). *Grammarly as Automated Writing Evaluation: Its Effectiveness from EFL Students' Perception*. *78*(May), 1–15. https://doi.org/10.21512/lc.v16i2.8315

Eryansyah, E., Erlina, E., Fiftinova, & Nurweni, A. (2019). EFL Students' Needs of Digital Literacy to Meet the Demands of 21stCentury Skills. *Online-Journal.Unja.Ac.Id*, *3*(2), 2580–5711. https://online-journal.unja.ac.id/irje/article/view/8297

Fajriah, Z. D. (2022). *Efl students use of internet-based applications in thesis writing: a tam perspective*. UNIVERSITAS ISLAM NEGERI AR-RANIRY BANDA ACEH.

Fitriana, K., & Nurazni, L. (2022). Exploring Students' Perception of Using Grammarly to Check Grammar in Their Writing. *JET (Journal of English Teaching)*, *8*(1), 15–25. https://doi.org/10.33541/jet.v8i1.3044

Gain, A., Rao, M., & Bhat, K. S. (2019). Usage of grammarly - online grammar and spelling checker tool at the health sciences library, Manipal Academy of Higher Education, Manipal: A Study. *Library Philosophy and Practice*, *2019*.

Gilakjani, A. P. (2017). A Review of the Literature on the Integration of Technology into the Learning and Teaching of English Language Skills. *International Journal of English Linguistics*, *7*(5), 95. https://doi.org/10.5539/ijel.v7n5p95

Graham-Matheson, L., & Starr, S. (2013). Is it cheating or learning the craft of writing? Using Turnitin to help students avoid plagiarism. *Research in Learning Technology*, *21*(1063519), 1–13. https://doi.org/10.3402/rlt.v21i0.17218

Hanafizadeh, P., Ghandchi, S., & Asgarimehr, M. (2017). Impact of Information Technology on Lifestyle. *International Journal of Virtual Communities and Social Networking*, *9*(2), 1–23. https://doi.org/10.4018/ijvcsn.2017040101

Ilma, R. (2021). Student' Perception of Machine Translation Application in Enchaning English Literacy of Tridinanti University. *ELT in Asia in the Digital Era: Global Citizenship and Identity STUDENTS'*, *Unedited*, 573–582.

Inayah, N., & Sulistyaningrum, S. D. (2021). Employing Online Paraphrasing Tools to Overcome Students' Difficulties in Paraphrasing. *English Language Education Journal*, *2*(1), 52–59.

Irvin, L. L. (2010). Research and Study Skills: Academic Writing. *Writing Spaces: Readings on Writing*, *1*, 3–16. http://dx.doi.org/10.1016/j.tws.2012.02.007

Isnawati, U. M., Badriyah, N., & Lamongan, U. I. (2021). *PELATIHAN PARAFRASE PADA MAHASISWA : UPAYA MENGHINDARI PLAGIARISME*. *1*(3), 341–349.

Karimi, E. M., & Amin, M. Y. M. (2019). Students` Attitude toward Effectiveness of Anti-Plagiarism Software, Turnitin. *Applied Linguistics Research Journal*, *November 2019*. https://doi.org/10.14744/alrj.2019.66376

Kastberg, P., & Andersson, T. B. (2012). Machine Translation Tools - Tools of the Translator's Trade. *Communication & Language at Work*, *1*(1), 34. https://doi.org/10.7146/claw.v1i1.7238

Katleyana, S. (2020). *the Perception of English Education Study Program of Sriwijaya University Students Towards the Use of Digital Writing Tools in …*

https://repository.unsri.ac.id/32225/

Kurniati, E. Y. (2022). *Post- Graduate Students ' Perceptions of Quillbot Utilization in English Academic Writing Class*. *7*(3), 437–451.

Kurniati, E. Y., & Fithriani, R. (2022). Post-Graduate Students' Perceptions of Quillbot Utilization in English Academic Writing Class. *Journal of English Language Teaching and Linguistics*, *7*(3), 437. https://doi.org/10.21462/jeltl.v7i3.852

Kustini, T. (2021). Kekeliruan Mahasiswa dalam Menulis Artikel Ilmiah: Studi Kasus dalam Mata Kuliah Academic Reading and Writing. *Prosiding Seminar Nasional Pendidikan*, *3*, 111–117.

Lailika, H. I. (2019). *Students' Perceptions of the Use of Grammarly As an Online Grammar Checker in Thesis Writing*. http://digilib.uinsby.ac.id/34607/

Lestari, A. T. (2023). Student views on the use of paraphrasing tools to avoid plagiarism in writing thesi*s. Institute of Islamic Education Curup*.

Mubarok, N. M. F. A., & Syafi'i, A. (2020). Grammarly: An Online EFL Writing Companion. *ELTICS : Journal of English Language Teaching and English Linguistics*, *5*(2). https://doi.org/10.31316/eltics.v5i2.912

Niño, A. (2020). Exploring the use of online machine translation for independent language learning. Research in Learning Technology, 28(1063519), 1–32. https://doi.org/10.25304/rlt.v28.2402

Nova, M., & Utami, W. H. (2018). Efl Students' Perception of Turnitin for Detecting Plagiarism on Academic Writing. *International Journal of Education*, *10*(2), 141–148.

Oshima, H., & Hogue, A. (2006). *Writing Academic English Fourth Edition*. https://www.ptonline.com/articles/how-to-get-better-mfi-results

Pratama, Y. D. (2020). The investigation of using grammarly as online grammar checker in the process of writing. English Ideas: Journal of English Language Education, 1(1), 46–54.

Rusdianto, G. (2022). *Journal of English Language Teaching An Analysis o f Students ' Ability in Paraphrasing a Paragraph at the English Department Universitas Negeri Padang*. *11*(3), 314–323. https://doi.org/10.24036/jelt.v10i2.112479

Stanciu, C., Coman, C., Gabriel, T., & Bularca, M. C. (2020). *Online Teaching and Learning in Higher Education during the Coronavirus Pandemic : Students ' Perspective*.

Starkey, L. (2004). *How to Write Great Essays* (1st ed.). Learning Express. www.learnatest.com

Sujarwo. (2020). *Students' Perceptions of Using Machine Translation Tools In the EFL Classroom*. *5*, 230–241.

Sulistyaningrum, S. D. (2021). Utilizing Online Paraphrasing Tools to Overcome Students' Paraphrasing Difficulties in Literature Reviews. *Journal of English Language Studies*, *6*(2), 229. https://doi.org/10.30870/jels.v6i2.11582

Tarmiji, Basyah, M. N., & Yunus, M. (2016). Persepsi Siswa Terhadap Kesiapan Guru dalam Proses Pembelajaran (Studi Pada SMP Negeri 18 Banda Aceh). *Jurnal Ilmiah Mahasiswa Pendidikan Kewarganegaraan Unsyiah*, *1*(1), 41–48.

Tarsan, V., Kandang, A., & Helmon, A. (2021). Students Perception Towards the

Application of Grammarly: the Automatic Grammar Checker in Writing Narrative Text in the Third Semester At Stkip Ypup Makassar. *JIPD (Jurnal Inovasi Pendidikan Dasar)*, *5*(2), 123–133. https://doi.org/10.36928/jipd.v5i2.858

Whyte, S. (2017). Digital tools ITILT mini-guide Interactive Teaching in Languages with Technology. *Digital Tools*, 23. http://bit.ly/2h6ENUi

Yanti, M., & Meka, L. M. C. (2019). The students' perception in using Google Translate as a media in translation class. *Inacelt*, *4432*(November), 128–143. http://e-proceedings.iain-palangkaraya.ac.id/index.php/INACELT/article/view/89

Zheng, Q. (2021). Chinese University Students' Perceptions of the Use and Effectiveness of Turnitin in EAP Writing. *International Journal of TESOL Studies*, *3*(20), 40–54. https://doi.org/10.46451/ijts.2021.06.04

About the Authors:

Tri Puja Lestari is an experienced English teacher and graduate student pursuing a Magister program in Language Education at the Faculty of Teacher Training and Education, Sriwijaya University. She is particularly interested in teaching English as a Foreign Language (EFL), especially to international students. Her research focuses on innovative EFL teaching strategies and cross-cultural language learning.

Amrullah is a lecturer in both undergraduate and graduate programs in English Education, Faculty of Teacher Training and Education, Sriwijaya University. His areas of expertise include Educational Leadership and Management, as well as Language Teaching.