AI-Supported Writing Process, Writing Self-Efficacy, And English Academic Performance among Junior High School Students

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ABSTRACT

With the rise of AI tools, they have been increasingly used to assist in planning, writing, editing and revising texts in English. However, there are mixed results regarding the benefits of using AI in writing tasks, with most of the research coming from university students. This study explored how often students use AI to aid their writing, their writing self-efficacy, and English academic achievement. A non-experimental quantitative descriptive correlational design was used as well as predictive analysis. 142 students from Grades 7 to 10 at Miglamin National High School during the 2026-2027 School Year participated in this study. Data were collected using a 6-item questionnaire on how often they use AI for writing, a 19-item writing self-efficacy questionnaire, and English grades from Term 1. Descriptive statistics, Pearson Product-Moment Correlation, and two-tailed multiple linear regression were conducted using an Alpha level of .05. Students reported using AI tools for writing sometimes (M = 3.38, SD = 1.027). They had a high level of writing self-efficacy M = 3.47, SD = 0.590). Their English grades were, on average, 85.67 (SD = 4.038). There was no significant relationship between using AI tools for writing and writing self-efficacy (r = -.115, p=.172). There was also no significant relationship between using AI tools for writing and English academic achievement (r= -.052, p=.538). Writing self-efficacy had no significant relationship with English academic achievement (r=-.126, p=.135). The regression model was not statistically significant (F(2,139)=1.444, p=.240), explaining only 2.0% of the variance. Therefore the null hypotheses were not rejected. Overall, results suggest that AI should be used with care and support. Further research into writing and longitudinal studies is needed.

Keywords: AI-assisted writing process, writing self-efficacy, English academic performance, junior high school students, writing, artificial intelligence

INTRODUCTION

Artificial Intelligence is impacting the writing process of learners. In a review of 39 empirical studies, it was observed that writing was often supported by automated essay scoring systems, large language models and writing tools. Over reliance, lack of higher order skill development and inconsistent outcomes in different teaching contexts were observed (Luo et al., 2025). There is a clear need for research into AI assisted writing in current contexts where learners are still building their foundational knowledge, regulation strategies and judgement of digital tools.

Positive outcomes have been seen from studies which have looked at AI assisted writing. ChatGPT was found to have a positive effect on the academic writing skills of undergraduate English as a second language learners (Mahapatra, 2024). University students using ChatGPT for 11 weeks scored higher post writing scores compared to those using an automated essay scoring system or no similar support (Shi et al., 2025). These studies were highly structured and specific to writing, therefore showing how writing can be supported with structured use of tools.

The majority of studies have focused on writing self-efficacy and English achievement. AI assisted writing strategies have not often been looked at alongside writing self-efficacy and real grades within school. It was

found that English writing self-efficacy and self-concept predicted language achievement amongst 1092 secondary students in Hong Kong (Chao et al., 2018). In an Indonesian primary school setting, 516 sixth grade students had a relationship between self-efficacy and English language ability (Anam & Stracke, 2019). This shows that writing self-efficacy can be linked to achievement depending on the population, outcome and how the study was designed.

Writing self-efficacy can be complex. A 5 factor structure for academic writing self-efficacy was validated with 743 university students. Linguistic knowledge, self-regulation, information organisation, writing performance and rehearsal and memory efficacy predicted English academic writing performance (Teng & Wang, 2022). In a school setting, self-efficacy for conventions of writing was related to writing and English language arts grades for elementary and high school students. However, the other factors were not (Zumbrunn et al., 2019). This indicates that the overall self-efficacy score can hide differences in how confident students feel with different areas such as linguistics, regulation, performance in class and performance across genres.

AI use might depend on the writing process. Students with high AI literacy engaged in more collaborative and metacognitive strategies when using a generative AI whereas students with low AI literacy engaged in fewer interactions and were more independent (Kim et al., 2019). This is important as using AI to help with planning, questioning and evaluating could be a completely different process compared to copying. A 6 item frequency questionnaire can give an insight into how they are using AI but cannot indicate the quality of interaction nor how they are actually developing their writing.

The literature shows conflicting evidence. Positive effects on writing performance have been found in intervention studies (Mahapatra, 2024; Shi et al., 2025), however, reviews have highlighted that some issues still remain such as excessive reliance, lack of metacognition and dependence on teaching (Luo et al., 2025; Shabir, 2025). This may be due to factors such as the age of the participants, length of time using AI, guidance from teachers, AI literacy and outcome measures. Specific writing scores may be more impacted by AI supported writing compared to overall grades for English including reading, language knowledge and activities in class.

This study focuses on junior high school students at Miglamin National High School. It will examine how AI supported writing strategies and writing self-efficacy can predict English academic performance using Term 1 grades. This study will also examine if there is a relationship between AI supported writing strategies and writing self-efficacy. There is no intervention in this study and therefore no claims are being made about causality.

Statement of the Problem

This study investigated the language self-efficacy of junior high school students as exposed to online communicative language teaching approach. Specifically, it sought to answer the following questions:

The study sought to answer the following questions:

1. What is the extent of AI-assisted writing practices among junior high school learners?

2. What is the level of writing self-efficacy in terms of linguistic, self-regulatory, classroom performance, and genre-based performance self-efficacy?

3. What is the level of English academic performance based on Term 1 English grades?

4. Is there a statistically significant relationship between AI-assisted writing practices and writing self- efficacy, AI-assisted writing practices and English academic performance, and writing self-efficacy and English academic performance?

5. To what extent do AI-assisted writing practices and writing self-efficacy individually and collectively predict English academic performance?

METHODOLOGY

This study uses a quantitative non-experimental descriptive correlational study with predictive elements. The descriptive part of the study investigated how much AI-assisted writing practices there was, the level of writing self-efficacy and the English academic achievement. The correlational part showed the relationship between the variables. Finally, multi-linear regression was used to investigate the individual and collective influence of AI-assisted writing practices and writing self-efficacy on English academic achievement.

This study was non-experimental as the variables were not altered or manipulated. Data was gathered via survey and English academic achievement was obtained from existing Term 1 records within the school. Therefore, the results were only interpreted as correlations, not causal.

The population for this study were the 220 learners in Grades 7-10 at Miglamin National High School during the 2026-2027 School Year. This population consisted of 54 learners in Grade 7, 58 learners in Grade 8, 56 learners in Grade 9 and 52 learners in Grade 10.

A sample was calculated using Slovin's formula, with a 5% margin of error. This calculation gave 141.94 learners, rounded up to 142 learners. This sample was proportionally allocated across the four different grades giving 35 learners from Grade 7, 37 learners from Grade 8, 36 learners from Grade 9 and 34 learners from Grade 10.The learners were grouped according to grade level, and the number of respondents was determined through proportional allocation. Random selection was employed within each grade level to give learners equal chance of being selected through the lottery method., which involved randomly drawing names from each of the rade level until the required number of participants was reached. This procedure ensured that all four grade levels were proportionally represented in the study.

Permission from the school Principal was obtained to conduct this study. The researcher then handed out the questionnaires to the chosen learners. Parental consent was obtained and the learners provided assent by completing assent forms. The learners completed the AI-assisted writing process questionnaire and writing self-efficacy questionnaire.

The learners' Term 1 English grades were obtained from the academic records at the school. These were matched by using the respondents codes. This helped keep the data confidential and ensured accurate matching. The questionnaires were checked for clarity, validity, and consistency.

An AI-assisted writing process questionnaire containing six questions was used. This was adapted from Khojasteh, Karimian, Nasiri et al. (2025). The questions asked how often the learner used AI tools to generate ideas/arguments, plan and organize, generate ideas/develop, rephrase/organize, edit and proofread and clarify/cohere.

A writing self-efficacy questionnaire with 19 questions was used. This came from Zhang, Zhang & Zhu (2023) and is known as the genre-based L2 writing self-efficacy scale. The four domains of the scale were linguistic, self-regulation, class performance and genre-based performance. This was used to ensure all areas of the learners' beliefs regarding their writing were covered. This was also supported by research that has found writing self-efficacy contains distinct domains (Teng & Wang, 2022; Zumbrunn et al., 2019).

Both questionnaires contained Likert scales with 5 points. The scores were interpreted according to the following ranges: 1.00-1.80 = Never, 1.81-2.60 = Rarely, 2.61-3.40 = Sometimes, 3.41-4.20 = Often and 4.21-5.00 = Always. The writing self-efficacy scores were interpreted according to the mean scores observed and the categories used in this study (moderate/high). English academic achievement was measured using the learners' Term 1 English grades.

Descriptive statistics were used to calculate the means and standard deviation of the AI-assisted writing process, writing self-efficacy, 4 domains of writing self-efficacy and English academic achievement. Pearson product moment correlation was used to determine the relationship between the AI-assisted writing process, writing self-efficacy and English academic achievement.

Multi-linear regression was used to determine the individual and collective influence of the AI-assisted writing process and writing self-efficacy on English academic achievement. There were two predictor variables in this regression. All statistical tests were two tailed with an alpha level of .05. Any p-values less than .05 were considered statistically significant.

Expert validation was carried out to ensure the questions on the questionnaire were clear and relevant. Minor changes were made to the wording to ensure they were appropriate for learners aged Grades 7-10. The questionnaires went through pilot testing with 40 Junior High School learners who were not included in the 142 respondents of the main study. The pilot testing was conducted separately to determine internal consistency before the actual data collection.

Cronbach's alpha was used to determine internal consistency. The AI-assisted writing process scale had an alpha coefficient of .794 with 40 valid responses while writing self-efficacy scale had an alpha coefficient of .953. This shows good internal consistency.

Parental consent, assent from learners and permission from the school Principal was obtained. Respondents codes were used to match the questionnaire with English grades. No names were used.

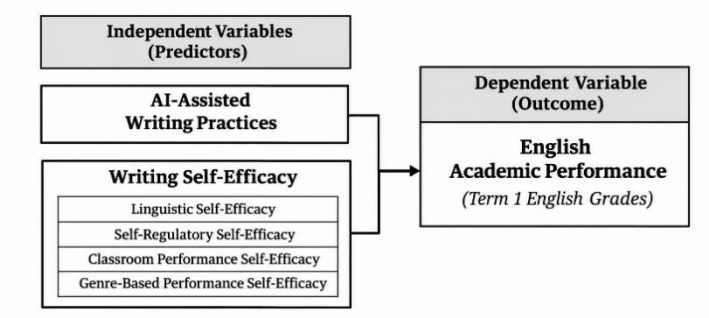


Figure No. 1. Framework of the study

The study treated AI-assisted writing practices and writing self-efficacy as predictor variables and English academic performance as the outcome variable. AI-assisted writing practices referred to learners' reported use of AI tools for planning, generating ideas, drafting, rephrasing, editing, and improving clarity and coherence. Writing self-efficacy referred to learners' perceived capability in linguistic, self-regulatory, classroom performance, and genre-based performance tasks. English academic performance referred to the learners' Term 1 English grades.

This model was informed by research which shows that self-efficacy is a complex construct and has multiple dimensions that are related to writing behaviours and outcomes (Teng & Wang, 2022; Zumbrunn et al., 2019). The importance of learner interaction and teacher design in AI writing was also considered (Kim et al., 2019; Luo et al., 2025). As this study was a non-experimental design, the arrows indicate statistically tested relationships and therefore do not assume causality.

Table No. 1. Extent of AI-assisted writing process

Indicator	M	SD	Interpretation
1. I use AI tools to generate ideas or structure arguments before starting academic writing.	3.30	1.238	Sometimes
2. I use AI tools to plan and outline my writing before beginning the drafting process.	3.48	1.325	Often
3. I use AI tools like ChatGPT, to generate ideas or expand content while writing my drafts.	3.41	1.210	Often

4. I use AI tools to rephrase or structure sentences as I draft my writing.	3.30	1.294	Sometimes
5. I use heavily on AI tools to edit and proofread my writing assignments.	3.34	1.248	Sometimes
6. I use AI tools to enhance the clarity and coherence of my writing after drafting.	3.47	1.242	Often
Overall	3.38	1.027	Sometimes

RESULTS AND DISCUSSION

Table 1 presents the extent of AI-assisted writing process. The overall mean was 3.38 (SD = 1.027), which was interpreted as Sometimes. The highest mean was recorded for using AI tools to plan and outline writing before drafting (M = 3.48, SD = 1.325), The lowest means were recorded for generating ideas or structuring arguments before academic writing (M = 3.30, SD = 1.238) and relying on AI tools to rephrase or structure sentences during drafting (M = 3.30, SD = 1.294). Both were interpreted as Sometimes. The standard deviations ranged from 1.210 to 1.325.

Overall, learners stated that they occasionally used AI tools to assist with their writing (M = 3.38, SD = 1.027). They used AI to help plan and outline their writing (M = 3.48, SD = 1.325). This demonstrates that learners used AI throughout several parts of their writing process, however they did not use it frequently. The relatively high frequency of planning and improving after writing shows that learners used AI as a support tool for organization and improving their text.

This simply means that learners used AI tools occasionally. However, they may have used them for very different purposes. For example, some may have used it for planning, asking for explanations, copying text or improving. This does not mean that using AI tools occasionally resulted in an improvement in their writing.

Luo et al. (2025) found that AI tools were often used during planning, providing feedback and revising in L2 writing tasks. However, productive use relied on teacher-designed tools. Furthermore, Kim et al. (2019) found that students with high AI literacy had more collaborative and metacognitive interactions with generative AI. Therefore, this is in line with research showing that the stage and quality of interaction with AI tools is important.

Table 2 presents the level of writing self-efficacy. The overall mean was 3.47 (SD = 0.590), interpreted as High. Self-regulatory self-efficacy had the highest mean (M = 3.60, SD = 0.634) and Linguistic self-efficacy had the lowest mean (M = 3.37, SD = 0.765), interpreted as Moderate.

Table No. 2. Level of Writing Self-efficacy among Junior High School

Dimension	**M**	**SD**	**Interpretation**
Linguistic self-efficacy	3.37	0.765	Moderate
Self-regulatory self-efficacy	3.60	0.634	High
Classroom Performance self-efficacy	3.51	0.702	High
Genre-based Performance self-efficacy	3.44	0.828	High

Overall writing self-efficacy was high (M = 3.47, SD = 0.590). Self-regulatory self-efficacy had the highest mean (M = 3.60, SD = 0.634), followed by classroom performance self-efficacy (M = 3.51, SD = 0.702) and genre-based performance self-efficacy (M = 3.44, SD = 0.828). Linguistic self-efficacy had the lowest mean and was interpreted as moderate (M = 3.37, SD = 0.765). The results show that learners felt more capable of regulating their writing and performing classroom tasks than of managing linguistic aspects of writing. The difference between self-regulatory and linguistic self-efficacy shows that there is variability within the overall

result. This can show that learners may have different levels of confidence. Having higher levels of confidence in one aspect such as planning and monitoring does not mean that they will have higher confidence in grammar, vocabulary and other language resources. This should not be seen as a direct measure of their writing ability due to the measurement being about their perception of capability. A study by Teng & Wang (2022) confirmed that there is a multidimensional structure to academic writing self-efficacy with each dimension predicting academic writing performance in university learners. However, at school level, this was not the case. Zumbrunn et al (2019) found that writing conventions self-efficacy was associated with grades but ideation and self-regulation were not. The present differences among dimensions support interpreting the learners' confidence profile rather than relying only on the overall mean.

The mean Term 1 English grade was 85.67 (SD = 4.038). The grades ranged from 75 to 97. The grade distribution therefore showed variation in learners' English academic performance within the study sample.

Table No. 3. English academic performance based on Term 1 grades

Variable	**N**	**M**	**SD**	**Interpretation**
English academic performance	142	85.67	4.038	

The average grade in Term 1 English was 85.67(SD = 4.038). However, the scores range from 75 to 97. This shows there is variability in how well learners performed in their English academics. Despite being an overall measure, this shows that learners within the sample had differing levels of English achievement. The score may have incorporated many aspects such as reading, knowledge of language, in-class activities, tests, projects and writing (see methodology). Therefore, it cannot be assumed that the average score represents how well learners performed academically when writing. This may mean that any relationships found between AI-assisted writing or writing self-efficacy and the outcome will be less than if they were assessed specifically on their writing. This gives an indication of how well learners achieved in school, however does not tell us what specific English skills that they performed better in. Specific writing studies have found relationships that would not necessarily be seen in overall measures. A meta-analysis looking at 76 studies found a medium relationship between writing self-efficacy and English writing achievement (Sun et al., 2021). However, this relationship was stronger amongst second language learners. Chao et al. (2018) looked at language achievement amongst secondary learners and found that it varied depending on the language area and outcome. This supports that the overall measure can be seen as general achievement.

Table 4. Relationships among AI-assisted writing practices, writing self-efficacy, and English academic performance

Variable	**Variables**	***r***	***p-value***	**Interpretation**
AI-assisted writing practices and writing self-efficacy	−.115	.172	Very weak negative; not statistically significant	Null hypothesis not rejected
AI-assisted writing practices and English academic performance	−.052	.538	Very weak negative; not statistically significant	Null hypothesis not rejected
Writing self-efficacy and English academic performance	−.126	.135	Very weak negative; not statistically significant	Null hypothesis not rejected

AI-assisted writing practices had a very weak negative relationship with writing self-efficacy, r = −.115, p =.172, and with English academic performance, r = −.052, p =.538. Writing self-efficacy had a very weak negative relationship with English academic performance, r = −.126, p =.135. None of the relationships was statistically significant at α =.05; therefore, the null hypotheses were not rejected. The coefficients indicate that the observed associations were small and negative, while the p-values indicate insufficient evidence of relationships in this

sample. The results show that there is no impact on self-efficacy or English grades by AI assisted writing. They also show that there is no correlation between high writing self-efficacy and writing ability. This shows that there is no statistical association between the variables within this sample. This could be due to the low range of responses given to how often AI was used, how capable they felt at writing and their overall English achievement. As well as this, the lack of variation in the data, one school sample and cross-sectional nature of the research may have impacted the results. The findings should be seen as showing that there was no association between the variables within the parameters of this study. This does not mean there cannot be an association elsewhere or with specific writing outcomes. The findings are contrary to previous research by Chao et al. (2018) who found that English self-efficacy and self-concept predicted language achievement in 1092 secondary students. Anam & Stracke (2019) also found a relationship between self-efficacy and English language ability in a sample of 516 Indonesian sixth grade learners. In addition, a meta regression found there was a medium relationship between writing self-efficacy and English writing achievement (Sun et al., 2021).These differences may be explained by the present study's use of a broad Term 1 grade, a junior-high sample from one school, and an overall self-efficacy score rather than writing-specific performance and dimension-level analyses. The finding is closer to Zumbrunn et al. (2019), who found that only some self-efficacy dimensions were related to school grades.

As seen in the regression output, there appears to be no issues with independence errors, as the Dublin-Watson Statistic was 2.069. There was no multicollinearity between the independent variables, as the tolerance value was .987 (VIF=1.103). From the histogram and P-plot, it appears that the residuals are roughly normally distributed. The scatterplot does not suggest any heteroscedasticity or non-linearity. Therefore, it seems reasonable that various assumptions using multiple linear regression have been met.

Table 5. Individual and collective prediction of English academic performance

Predictor	**B**	**β**	**t**	**p-value**	**Interpretation**
Writing self-efficacy	−0.915	−.134	−1.582	.116	Not statistically significant
AI-assisted writing practices	−0.265	−.068	−0.799	.426	Not statistically significant

AI-assisted writing practices and writing self-efficacy jointly explained 2.0% of the variance in English academic performance (R^2 =.020; adjusted R^2 =.006). The regression model was not statistically significant, $F(2, 139) = 1.444$, $p = .240$. Writing self-efficacy had a negative, nonsignificant coefficient ($B = -0.915$, $\beta = -.134$, $p = .116$), and AI-assisted writing practices also had a negative, nonsignificant coefficient ($B = -0.265$, $\beta = -.068$, $p = .426$). The null hypotheses concerning collective and individual prediction were not rejected. The model explained very little of the variation in Term 1 English grades, and once both predictors were entered together, neither of them made a statistically significant unique contribution. The negative coefficients should not be interpreted as evidence that either construct harmed achievement because neither coefficient was statistically significant and the design did not establish temporal or causal direction. Under the conditions of this study, reported AI-assisted writing frequency and overall writing self-efficacy did not provide useful statistical prediction of broad English academic performance. The weak model may reflect the mismatch between writing-related predictors and a term grade covering several English competencies. It may also reflect unmeasured influences such as prior achievement, language proficiency, teacher practices, task difficulty, motivation, and actual writing behaviour. The result contrasts with Teng & Wang (2022), who found that several dimensions of academic writing self-efficacy predicted English academic writing performance among 743 university learners, and with Zorlu & Ünver (2022), who found that English self-efficacy and self-regulatory strategies significantly predicted English achievement among 542 ninth-grade students. It is also not the same as intervention research, where organized use of ChatGPT led to better results specific to writing (Mahapatra, 2024; Shi et al., 2025). Those studies relied on writing assessments, particular interventions, or predictors at the dimension level, but this study relied on AI practices that occur naturally, a single overall self-efficacy score, and general school grades. This gap shows why predictors and outcomes should be matched more closely.

CONCLUSION

This study investigated AI writing support, writing self-efficacy and English academic achievement amongst 142 junior high school students. Students reported using AI tools occasionally. Planning, outlining and improving were all used more frequently than generating and rephrasing. Overall students had high levels of writing self-efficacy. Self-regulation had the highest mean score for each dimension. Students had moderate linguistic efficacy. Their average English grade for Term 1 was 85.67. None of the tested relationships was statistically significant. AI-assisted writing practices were not significantly related to writing self-efficacy or English academic performance. Writing self-efficacy was also not significantly related to English academic performance. The regression model explained 2.0% of the variance in English grades and was not statistically significant. The null hypotheses were not rejected. Theoretically, the findings support a careful distinction between AI-use frequency, writing beliefs, writing performance, and broad English achievement. These constructs should not be treated as interchangeable. The findings also support the use of multidimensional measures of writing self-efficacy because learners may feel more capable of self-regulation than of linguistic performance. In practice, teachers could offer a guided writing activity using AI as a support tool. This would need to include specific writing objectives and an opportunity for learners to assess the suggestions. Some schools may also offer guidance on using the AI responsibly, checking the accuracy of suggestions and ensuring academic integrity. Future research should be mixed-methods, including self-report data, writing samples, process data, teacher assessment data and AI use data. Longitudinal or experimental research should be conducted to look at changes over time. Structured writing activities using AI should be used in future research. Writing specific measures should be used.

RECOMMENDATIONS

Based on the findings, English teachers are encouraged to guide students in using AI tools responsibly during writing activities. Students should also be given opportunities to practice writing independently to develop their writing skills and confidence without relying too much on AI assistance. Schools may provide activities and training that help students understand proper use of AI in planning, drafting, and revising their written work. Future researchers may examine other factors that could be related to students' writing self-efficacy and English academic performance. Further, studies may also focus on students' actual writing performance and examine how their use of AI tools and writing confidence change over time.

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REFERENCES

1. Anam, S., & Stracke, E. (2019). The role of self-efficacy beliefs in learning English as a foreign language among young Indonesians. TESOL Journal, 11 (1), Article e00440. https://doi.org/10.1002/tesj.440
2. Chao, C. N. G., McInerney, D. M., & Bai, B. (2018). Self-efficacy and self-concept as predictors of language learning achievements in an Asian bilingual context. The Asia-Pacific Education Researcher, 28 (2), 139–147. https://doi.org/10.1007/s40299-018-0420-3
3. Khojasteh, L., Karimian, Z., Nasiri, E., Kafipour, R., & Farahmandi, A. Y. (2025). Artificial intelligence and academic writing questionnaire (AI-AWQ): Development and validation among medical students' experiences using exploratory factor analysis. BMC Medical Education, 25, Article 1697. https://doi.org/10.1186/s12909-025-08288-z
4. Kim, J., Lee, S.-S., Detrick, R., Wang, J., & Li, N. (2019). Students-generative AI interaction patterns and its impact on academic writing. Journal of Computing in Higher Education, 38(1), 504–525. https://doi.org/10.1007/s12528-025-09444-6

5. Luo, Y., Xia, Y., & Lu, X. (2025). A systematic review of the role of artificial intelligence in second language writing education. Digital Studies in Language and Literature, 2(2), 302–325. https://doi.org/10.1515/dsll-2025-0001
6. Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: A mixed methods intervention study. Smart Learning Environments, 11, Article 9. https://doi.org/10.1186/s40561-024-00295-9
7. Shabir, A. (2025). Generative AI writing tools and academic writing in higher education: A systematic review of empirical and review studies. Information Technology Education Journal, 4 (3), 543–557. https://doi.org/10.59562/intec.v4i3.10494
8. Shi, H., Chai, C. S., Zhou, S., & Aubrey, S. (2025). Comparing the effects of ChatGPT and automated writing evaluation on students' writing and ideal L2 writing self. Computer Assisted Language Learning, 39 (4), 1148–1175. https://doi.org/10.1080/09588221.2025.2454541
9. Sun, T., Wang, C., Lambert, R. G., & Liu, L. (2021). Relationship between second language English writing self-efficacy and achievement: A meta-regression analysis. Journal of Second Language Writing, 53, Article 100817. https://doi.org/10.1016/j.jslw.2021.100817
10. Teng, M. F., & Wang, C. (2022). Assessing academic writing self-efficacy belief and writing performance in a foreign language context. Foreign Language Annals, 56 (1), 144–169. https://doi.org/10.1111/flan.12638
11. Zhang, J., Zhang, L. J., & Zhu, Y. (2023). Development and validation of a genre-based second language (L2) writing self-efficacy scale. Frontiers in Psychology, 14, Article 1181196. https://doi.org/10.3389/fpsyg.2023.1181196
12. Zorlu, S., & Ünver, G. (2022). Predictive roles of self-regulatory learning strategies and self-efficacy beliefs on English language learning achievement. *Turkish Journal of Education, 11(2), 74–92. https://doi.org/10.19128/turje.841709
13. Zumbrunn, S., Broda, M., Varier, D., & Conklin, S. (2019). Examining the multidimensional role of self-efficacy for writing on student writing self-regulation and grades in elementary and high school. British Journal of Educational Psychology, 90(3), 580–603. https://doi.org/10.1111/bjep.12315