

Using GRE³AIT Module to Improve Communicative Writing Competence among Malaysian Primary ESL Learners

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Abstract

This classroom-based action research investigated the effectiveness of the GRE³AIT (GAMLET Communicative WrAlting) Module in enhancing the communicative writing competence of low-achieving Malaysian primary Level 2 ESL learners. The study addressed the challenge faced by these learners in constructing extended communicative messages for the End of Academic Session Test (UASA), a requirement set by the Ministry of Education Malaysia. The GRE³AIT Module, underpinned by the principles of “Enjoy, Expand, and Evaluate,” was designed to foster an engaging and effective writing process. It integrates a Gamified Flipped Home-Based Learning Model (GAMLET) with AI-powered feedback through QuillbotAI, aligning with flipped learning, mastery learning, constructivism, and gamified learning theories. The module features memorable formulas and a controlled writing approach to guide learners. Four low-achieving students, selected via purposive sampling, participated in a two-week intervention using the module. Pre- and post-intervention assessments revealed significant improvements in communicative writing, with individual gains ranging from 200% to 333%. Participants demonstrated mastery of key writing skills, including identifying message types, recognising recipients, stating content, and accurately punctuating messages. Furthermore, the intervention positively influenced learners’ perceptions, with participants reporting increased confidence and enjoyment in writing. The findings suggest that the GRE³AIT Module is a highly effective pedagogical tool for developing communicative writing skills in ESL learners. By providing a structured, engaging, and AI-supported learning environment, it empowers students to confidently meet the communicative demands of the UASA. This innovation aligns with The Roadmap of Reform of English Language Education in Malaysia, contributing to the development of proficient ESL communicators who meet CEFR standards. The implications of this research extend to broader ESL education practices, highlighting the potential of integrating gamified flipped learning and AI to address specific writing challenges and improve learner outcomes nationwide.

Keywords: ESL Education, Communicative Message, Writing, Ai Integration, UASA, CEFR, GAMLET

Introduction

The ability to write emails, letters, and other forms of messages is an essential part of communicative writing. These skills are crucial for English as a Second Language (ESL) learners, especially at the primary school level, as they form the basis for future academic and social success. Specifically, within the Malaysian educational context, the Ministry of Education has implemented the End of Academic Session Test (UASA) to evaluate ESL learners' communicative competence, particularly in constructing extended messages based on real-world stimuli. This emphasis underscores the practical importance of mastering communicative writing for students to effectively engage with and respond to information presented in various formats, mirroring authentic communication scenarios as aspired in the Roadmap of Reform of English Language Education (KPM, 2015). This shows how important it is to teach and learn communicative writing.

As Moore and Murray (2006) articulate, writing is not merely transcription, but a dynamic process of idea discovery, organisation, and revision. This inherent complexity can pose significant challenges for ESL learners, who must navigate not only the cognitive demands of writing but also the linguistic intricacies of expressing themselves in a non-native language. Consequently, ESL learners often struggle to follow essential writing steps and coherently communicate their ideas, impacting their ability to meet academic requirements in communicative writing tasks as pointed out by Ubaid (2023).

As illustrated in Figure 1, which showcases sample pupil work they had done in the UASA, common challenges include difficulties in describing event details such as date, time, and venue, failures in meeting communication objectives, severe grammatical errors that impede meaning, and difficulty elaborating on event activities mentioned in the stimulus. These issues highlight the significant obstacles learners face in constructing coherent and effective communicative messages.

Write your email to Alan in about 60-80 words.

To:	alan@gmail.com
Subject:	Teluk Ramunia Family Day Program

Hi! How are you? I hope you are in good place. I Teluk
 Ramunia Family Club Yearly Family Day. you Date 13 January 2024
 you Time 8:00 am to 5:00 pm. place on are Teluk Ramunia
 Field
 I you to do you?
 your friend
 Been I can

Write your email to Alan in about 60-80 words.

To:	alan@gmail.com
Subject:	Teluk Ramunia Family Day Program

Hi! How are you. I hope you are the point. Teluk
 Ramunia Family Club Yearly Family Day. I saw an
 advertisement you. Eat good food prepared by our
 home cooks. Exciting games for all. Singing competition.
 Your friend
 Min Nui

Figure 1. Sample communicative messages written by Malaysian primary ESL learners

On top of that, a preliminary study involving a survey was conducted to identify the challenges pupils faced in writing communicative messages. The findings as tabulated in Table 1 revealed several key areas of difficulty. While pupils demonstrated a moderate understanding of identifying message types and writing content, scoring 2.25 out of 5, they

reported low levels of enjoyment and confidence in their writing abilities, with a mean score of 1.5 out of 5. Pupils also struggled to write communicative messages independently, requiring significant teacher guidance, as evidenced by a mean score of 1.25 out of 5. Additionally, they found it challenging to elaborate on event activities described in the stimulus and evaluate their own writing, both scoring 1.0 out of 5. These results highlight the need for targeted interventions to improve pupils' skills and confidence in communicative writing.

Table 1

Findings of preliminary study

No	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Indicator
1	Identify message type	1	1	2	0	2.25	Moderate
2	Recognise recipient's name	0	2	1	1	2.75	High
3	State content in message	1	3	0	0	1.75	Moderate
4	Determine date, time, place	0	1	2	1	3.00	High
5	List activities of the event	4	0	0	0	1.00	Low
6	Punctuate message accurately	0	0	4	0	3.00	High
7	Write message with guidance	3	1	0	0	1.25	Low
8	Self-assess and improve	4	0	0	0	1.00	Low
9	Enjoy writing message	3	1	0	0	1.25	Low
10	Write message confidently	2	2	0	0	1.50	Low

Therefore, a research gap exists in developing effective pedagogical tools that address these specific challenges within the context of the UASA. This research aims to develop and evaluate the GRE³AIT Module, an innovative educational tool designed to improve primary school ESL learners' communicative writing skills. This study attempted to achieve the following objectives:

1. To develop Malaysian primary ESL learners' communicative writing proficiency through the implementation of the GRE³AIT Module.
2. To instil enjoyment and confidence in communicative writing among Malaysian primary ESL learners.

Literature Review

Communicative Writing

Communicative writing is a fundamental skill that enables ESL learners to use English in meaningful and practical ways. It focuses on the function of writing and its ability to convey messages, rather than just grammatical accuracy. Hirvela and Belcher (2025) emphasise that communicative writing involves authentic tasks, real-world audiences, and meaningful purposes. This approach aligns with the idea that language learning should be contextualised and relevant to learners' lives. In Malaysia, the Roadmap of Reform of English Language

Education highlights the importance of communicative skills in the English language curriculum as highlighted in The Common European Framework of Reference for Languages (CEFR) (KPM, 2015). This emphasis reflects the understanding that English proficiency is essential for students' academic and professional success in an increasingly globalised world. The roadmap aims to equip students with the necessary skills to communicate effectively in English, both orally and in writing.

The End of Academic Session Test or Ujian Akhir Sesi Akademik (UASA)

The Final Academic Session Test, also referred to as *Ujian Akhir Sesi Akademik* or UASA, was introduced by the Ministry of Education Malaysia in 2022, with the intention to replace the previously abolished Primary School Evaluation Test or *Ujian Penilaian Sekolah Rendah* (UPSR). According to the Malaysian Examinations Council (2022), UASA serves as a school-level examination conducted as part of the summative assessment at the end of the academic calendar. It is administered to Level 2 primary school pupils, namely Year 4, Year 5, and Year 6, during the current academic session. The primary objectives of UASA include assessing pupils' cognitive levels, gathering information about their academic achievements, and evaluating the content learned throughout the academic session. Also, UASA provides a comprehensive overview of pupils' progress, abilities, and achievements, aiding teachers in planning interventions to develop pupils' potential in alignment with the National Education Philosophy (FPK).

According to KPM (2024), The English language UASA paper comprises seven sections, in which the last section of UASA requires candidates to compose a 60-to-80-word extended communicative message based on a provided stimulus, such as an advertisement or poster, as illustrated in the example in Figure 1.

You saw an advertisement for a family day program. Write an email to your friend, Alan, to say why you want to join the program and invite him to go with you.

**Teluk Ramunia Family Club
Yearly Family Day**

Date: 13 January 2024 (Saturday)

Time: 8:00 a.m. to 5:00 p.m.

Place: Teluk Ramunia Field

Activities:

Eat good food prepared by our home cooks.

Exciting games for all.

Singing competition.

Come and enjoy the day with your family and friends.

Write your email to Alan in **60-80 words**.

Figure 2. Sample Question from Part 7 of the UASA English Paper

This section aims to assess ESL learners based on the two writing learning standards stated in the Standards-Based English Language Curriculum (SBELC), as tabulated in Table 1.

Table 2

Writing Skills Content and Learning Standards in SBELC (BPK, 2018)

Content Standard: 4.3 Communicate with appropriate language form and style for a range of purposes in print and digital media			
Focus	Learning Standards		
	Year 4 (A1 High)	Year 5 (A2 Low)	Year 6 (A2 Mid)
Punctuate text correctly	4.3.1 Use capital letters, full stops, question marks and commas in lists appropriately in guided writing at discourse level	4.3.1 Use capital letters, full stops, commas in lists and question marks appropriately in independent writing at discourse level	4.3.1 Use capital letters, full stops, commas in lists, question marks, and marks appropriately at discourse level
Plan, draft and edit work appropriately on familiar topics	4.3.3 Produce a plan or draft of one paragraph for a familiar topic and modify this appropriately in response to feedback	4.3.3 Produce a plan or draft of one or two paragraphs for a familiar topic and modify this appropriately in response to feedback	4.3.3 Produce a plan or draft of two paragraphs or more for a familiar topic and modify this appropriately in response to feedback

Based on Table 1, the last part of the UASA paper assesses the learning standards in the SBELC by focusing on Content Standard 4.3, which emphasises effective communication with appropriate language form and style for various purposes in print and digital media. The assessment aligns with the specific learning standards for Year 4, Year 5, and Year 6, reflecting a progression in complexity. All three levels share the learning standard of planning, drafting, and editing work on familiar topics. The progression is evident as learners move from producing a plan or draft of one paragraph in Year 4 to generating a plan or draft of two paragraphs or more in Year 6. This involves modifying their work appropriately in response to feedback, showcasing an increasing level of sophistication in writing skills.

The Gamified Flipped Home-Based Learning (GAMLET) Model

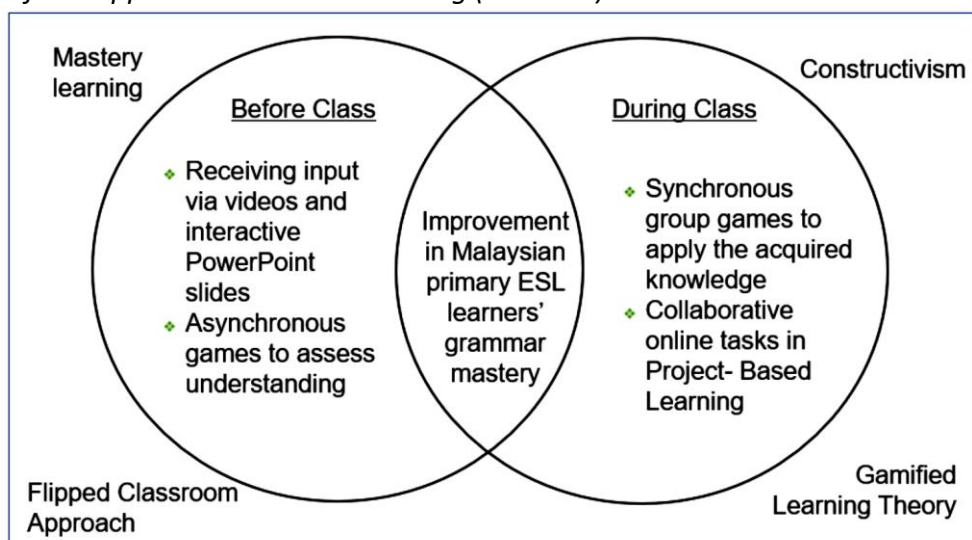


Figure 3. The Gamified Flipped Home-Based Learning (GAMLET) Model

The Gamified Home-Based Learning Model (GAMLET) is a pedagogical approach that integrates the principles of gamification, flipped classroom, and home-based learning to create an engaging and effective learning environment (Teo & Ramesh, 2024). Gamification involves incorporating game design elements, such as points, badges, and leaderboards, to enhance motivation and participation. The flipped classroom model shifts direct instruction from the group learning space to the individual learning space, allowing for in-class time to be dedicated to active learning and collaborative activities (Chun & Sathappan, 2023). Home-based learning extends learning beyond the traditional classroom setting, enabling students to learn at their own pace and convenience. In this research study, the GAMLET model is utilised within the GRE³AIT Module to enhance the communicative writing skills of Malaysian primary ESL learners. By incorporating gamified elements, such as synchronous group games and collaborative online tasks, the module aims to make the learning process more enjoyable and engaging for students (Cattoni et al., 2024). The flipped classroom approach allows students to receive input through videos and interactive PowerPoint slides before class, while in-class time is used for applying the acquired knowledge through collaborative activities. This approach also facilitates mastery learning, as students can work at their own pace and receive immediate feedback on their progress.

GAMLET Communicative Writing (GRE³AIT) Module

The GRE³AIT Module, formally known as the GAMLET Communicative Writing Module, is an innovative educational tool designed to address the specific challenges faced by Malaysian primary ESL learners in developing effective communicative writing skills. This module integrates several key pedagogical approaches, including the Gamified Flipped Home-Based Learning (GAMLET) model, mastery learning, constructivist principles, and gamification elements. By combining these methodologies, the GRE³AIT Module aims to create an engaging and effective learning environment that fosters active participation and deepens understanding of communicative writing. The module's modular structure ensures learners thoroughly grasp each writing concept before progressing, promoting a controlled-to-free writing process. This approach is designed to enhance learners' engagement and writing mastery by making the learning process enjoyable and rewarding.

A distinctive feature of the GRE³AIT Module is its integration of artificial intelligence through QuillbotAI. This AI-driven personalised guidance transcends traditional teaching methods by providing instant feedback on grammar, syntax, and language usage, empowering learners to self-assess and refine their communicative writing skills. (Amanda et al., 2023). The module also incorporates practical tools such as the 'TiFNaPe' acronym and the '12345' method to facilitate information retrieval and message construction. These methods, along with the use of LiveWorksheets and controlled writing templates, provide learners with structured support to confidently produce simple communicative messages. The GRE³AIT Module, officially registered under MyIPO intellectual property (LY2024W00487), represents a comprehensive approach to enhancing ESL learners' communicative writing competence through a blend of innovative pedagogical strategies and technological integration. Figure 4 illustrates the integration of the GAMLET model within the GRE³AIT Module, highlighting the key components and their alignment with various pedagogical principles.

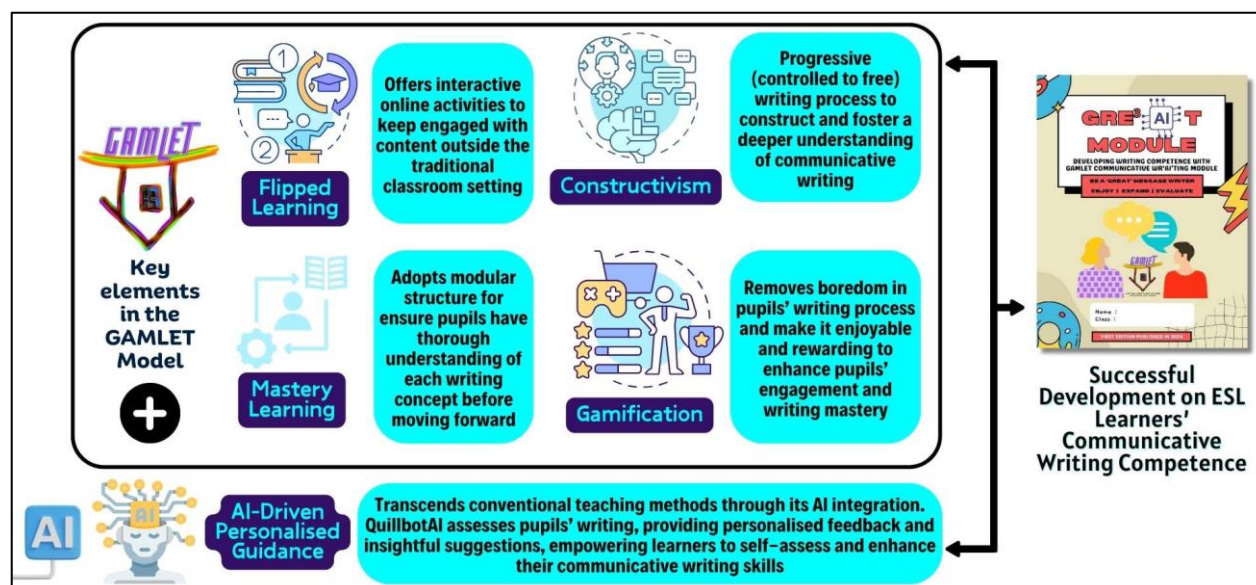


Figure 4. Integration of the GAMLET Model within the GRE³AIT Module

Methods

Research Design

This study employed a classroom-based action research design. Action research is a cyclical and iterative process that involves planning, acting, observing, and reflecting on a specific issue or problem (Kemmis & McTaggart, 1988). This design was deemed appropriate for this study as it allowed the researcher to investigate the effectiveness of the GRE³AIT Module in a real-world classroom setting, while also allowing for flexibility and adjustments to the intervention based on ongoing observations and reflections.

Research Participants

A purposive sampling method was used to select the participants for this study. Purposive sampling is a non-probability sampling technique in which researchers deliberately select participants based on specific criteria (Creswell & Plano Clark, 2018). In this study, the selection criteria were: (i) Year 4-6 ESL learners, and (ii) scored lower than 5 out of 15 marks in communicative message writing. These criteria were chosen to ensure that the participants were representative of the target population and that they had a genuine need for improvement in their communicative writing skills. A total of four ESL learners, aged 10 to 12, were selected to participate in the study.

Implementation of the Intervention

The GRE³AIT Module was used as the intervention in this study. The module consists of five main steps: (i) Identifying types of communicative messages, (ii) Finding key information from the question and stimulus, (iii) Controlled writing, and (iv) Using Quillbot as AI-powered self-assessment. The implementation of the module followed the Kemmis and McTaggart (1988) action research spiral, which involves four main steps: (i) planning, (ii) acting, (iii) observing, and (iv) reflecting. In this study, the planning stage involved the development of the GRE³AIT Module and the research instruments. The acting stage involved the implementation of the module in the classroom. The observing stage involved the collection of data through pre- and post-tests and survey questionnaires. The reflecting stage involved the analysis of the data and the evaluation of the effectiveness of the module.

Data Analysis

Research Instruments and Data Collection Methods

The data for this study were collected using pre- and post-tests and survey questionnaires. The pre-test, consisting of a communicative writing task, was administered before the implementation of the GRE³AIT Module to assess the participants' baseline writing skills. This pre-test served as a baseline measure against which to compare their progress after the intervention. The post-test, which was identical to the pre-test, was administered after the intervention with the GRE³AIT Module. Using the same test allowed for a direct comparison of individual and group performance, ensuring that any observed changes could be attributed to the intervention (Chua, 2024). Both tests were designed to assess the learners' ability to construct a communicative message based on a given stimulus, aligning with the requirements of the UASA. In addition to the writing assessments, a survey questionnaire was administered after the post-test to gather the pupils' perceptions of the module and their experiences with communicative writing. The questionnaire included both closed-ended questions, using a Likert scale, to quantify learners' levels of enjoyment and confidence. The combination of data from different instruments provided a more comprehensive understanding of the impact of the GRE³AIT Module on learners' writing skills and their affective responses to the intervention.

Data Analysis Methods

The data collected from the pre- and post-tests were analysed using descriptive statistics, such as means and standard deviations. This approach was deemed appropriate for quantifying the changes in pupils' communicative writing scores before and after the intervention. Means provided a measure of central tendency, allowing for a clear comparison of overall performance, while standard deviations offered insights into the variability or spread of scores within the group. The use of descriptive statistics enabled the researchers to summarise the quantitative data in a clear and concise manner, facilitating the identification of trends and patterns of improvement (Creswell & Creswell, 2023). The margin of improvement was calculated by comparing the pre- and post-test scores for each participant, providing a straightforward measure of individual progress. For the survey questionnaires, data were analysed using descriptive statistics and qualitative methods, such as thematic analysis. Descriptive statistics were used to calculate the mean scores of the questionnaire to identify the pupils' perceptions before and after the intervention. Thematic analysis was employed to examine the qualitative data gathered from the open-ended survey questions. This involved a systematic process of coding and categorizing the responses to identify recurring themes and patterns in pupils' perceptions and experiences (Braun & Clarke, 2006). The combination of descriptive statistics and thematic analysis allowed for a more comprehensive understanding of the impact of the intervention, capturing both the quantitative changes in performance and the qualitative shifts in attitudes and perceptions.

Results

The implementation of the GRE³AIT Module demonstrated a significant positive impact on the communicative writing abilities of the participating ESL learners. As illustrated in Table 3, the margin of improvement in communicative writing scores ranged from 200% to 333% across the four participants. Specifically, Pupil A improved from 3/15 to 10/15 (+233%), Pupil B from 4/15 to 12/15 (+200%), Pupil C from 3/15 to 11/15 (+267%), and Pupil D from 3/15 to 13/15 (+333%). This substantial increase in scores suggests that the structured approach of

the GRE³AIT Module, incorporating elements like the “TiFNaPe” acronym, the “12345” method, and controlled writing templates, effectively equipped learners with the necessary tools to construct coherent and accurate communicative messages.

Table 3

Pre- and Post-Intervention Scores and Improvement Margins for Pupils

Pupil	Before Innovation	After Innovation	Margin of Improvement
Pupil A	3 / 15	10 / 15	+233%
Pupil B	4 / 15	12 / 15	+200%
Pupil C	3 / 15	11 / 15	+267%
Pupil D	3 / 15	13 / 15	+333%

To further illustrate the impact of the GRE³AIT Module, Figure 5 presents a sample of one pupil's work before and after the intervention. As can be observed, the post-intervention work demonstrates a noticeable reduction in errors and a marked improvement in communicative achievement. The pupil's ability to address the task requirements became more relevant, with a clearer focus on the intended message and a more effective conveyance of information compared to the pre-intervention sample. This visual comparison underscores the GRE³AIT module's effectiveness in guiding learners toward producing more accurate and communicatively effective written messages.

Before Intervention

Write your email to Alan in about 60-80 words.

To:	alan@gmail.com
Subject:	Teluk Ramunia Family Day Program

Dear Alan, ✓

Hi, How are you? I hope you are in the pink! ✓ Teluk Ramunia family club yearly family day. Date in 13 January 2024 (Saturday). Time at 8:00am to 5:00pm. place in Teluk Ramunia Field. Come and

After Intervention

Dear Sophie,

Hi! How are you? I hope you are in the pink! Let me tell you about the Earth Day celebration. It will be held on 30 March 2024 (Saturday), from 8:00 a.m. to 11:00 a.m. at the School Garden. The activities include planting your favourite fruit trees, decorating garden, making flower bouquet and join creative photo challenge. That's all for now. Goodbye.

Your cousin,
Shue Ong

Figure 5. A pupil's work before and after the intervention.

The second objective of this study aimed to instil enjoyment and confidence in communicative writing among ESL learners. As shown in Table 4, a notable shift in pupils' perceptions occurred following the intervention. For instance, learners' perception of enjoying writing messages significantly improved, with the mean score increasing from 1.25 before the intervention to 3.25 after, indicating a shift from “Low” to “High.” This suggests that the interactive elements and gamified aspects of the GRE³AIT Module, such as LiveWorksheets, “TiFNaPe” and “12345” methods, made the writing process more engaging and enjoyable for the learners. While there was an improvement in writing message confidently with the mean score increasing from 1.50 to 2.50, this change was less

pronounced, suggesting that building confidence may require more sustained interventions. Notably, one participant still disagreed with feeling confident, highlighting the need for further strategies to address individual needs and concerns.

Table 4

Changes in Pupils' Perceptions of Communicative Writing Following the Intervention

No.	Statement	Before Intervention		After Intervention		Difference
		Mean	Indicator	Mean	Indicator	
1	Identify message type	2.25	Moderate	4	High	+1.75
2	Recognise recipient's name	2.75	High	4	High	+1.25
3	State content in message	1.75	Moderate	4	High	+2.25
4	Determine date, time, place	3.00	High	4	High	+1.00
5	List activities of the event	1.00	Low	4	High	+3.00
6	Punctuate message accurately	3.00	High	4	High	+1.00
7	Write message with guidance	1.25	Low	3.75	High	+2.50
8	Self-assess and improve	1.00	Low	3.50	High	+2.50
9	Enjoy writing message	1.25	Low	3.25	High	+2.00
10	Write message confidently	1.50	Low	2.50	Moderate	+1.00

Discussions

The findings from the pre- and post-test assessments clearly demonstrate a substantial improvement in the participants' communicative writing skills following the intervention with the GRE³AIT Module. The significant increase in scores, with improvement margins ranging from 200% to 333%, indicates that the module effectively addressed the challenges these ESL learners faced. This improvement can be attributed to the structured and systematic approach of the GRE³AIT Module, which includes explicit instruction on identifying message types, extracting key information from stimuli, and utilising controlled writing templates. The module's design facilitated a progressive development of writing skills, moving from controlled practice to more independent production of communicative messages. These results align with the principles of mastery learning, where learners are given opportunities to practice and receive feedback until they achieve a desired level of competence (Anderson & Burns, 1987). The positive impact of the intervention is further supported by the reduced errors and increased relevance observed in the pupils' post-intervention work samples.

The data gathered from the questionnaire provides additional insights into the learners' perceptions of their writing experience. Overall, the learners reported an increased level of enjoyment in writing communicative messages after the intervention. This suggests that the gamified elements and interactive activities incorporated in the GRE³AIT Module, such as LiveWorksheets and collaborative tasks, contributed to a more positive and engaging learning environment. Gamification has been shown to enhance motivation and engagement in learning (Deterding et al., 2011), and the findings suggest that these elements were effective in making the writing process more enjoyable for the participants. While the learners demonstrated improvement in their confidence in writing, the increase was less pronounced compared to their enjoyment. This indicates that while the module provided tools and strategies to improve writing skills, building confidence is a more complex process that may require sustained support and opportunities for successful application of these skills.

To sum up, the findings of this study provide evidence for the effectiveness of the GRE³AIT Module in achieving its research objectives. The module successfully developed ESL learners' communicative writing proficiency, as demonstrated by the significant improvement in their writing scores. Furthermore, the intervention contributed to a more positive attitude towards writing, as evidenced by the increased enjoyment reported by the learners. While further research may explore strategies to enhance writing confidence more comprehensively, the GRE³AIT Module presents a valuable pedagogical tool for improving communicative writing skills and fostering a more positive learning experience for ESL learners.

Conclusion

This classroom-based action research investigated the effectiveness of the GRE³AIT Module in enhancing communicative writing skills among primary ESL learners in Malaysia. The study addressed the challenges faced by these learners in meeting the communicative demands of the UASA, particularly in constructing extended written messages. The GRE³AIT Module, integrating a Gamified Flipped Home-Based Learning Model (GAMLET) with AI-powered feedback, was implemented as an intervention. The key findings of this research indicate that the GRE³AIT Module had a significant positive impact on the communicative writing abilities of the participating ESL learners. Analysis of pre- and post-test scores revealed substantial improvement in learners' writing performance, with individual gains ranging from 200% to 333%. This demonstrates the module's success in developing learners' proficiency in crafting communicative messages. Furthermore, the study found that the intervention fostered a more positive attitude towards writing among the learners. Questionnaire data indicated an increase in learners' enjoyment of writing following the intervention. While there was also an improvement in learners' confidence in their writing abilities, the increase was less pronounced compared to the improvement in enjoyment. Overall, the GRE³AIT Module proved to be an effective pedagogical tool for enhancing communicative writing skills and promoting a more engaging learning experience for ESL learners.

This research makes significant contributions both theoretically and contextually to the field of ESL education. Theoretically, it fills a notable research gap by developing and evaluating an effective pedagogical tool—the GRE³AIT Module—specifically designed to address challenges in communicative writing within the Malaysian primary ESL context. The module offers empirical validation of a blended learning approach, demonstrating the successful integration of a Gamified Flipped Home-Based Learning (GAMLET) model with AI-powered feedback through QuillbotAI. This aligns with and reinforces established educational theories, including flipped learning, mastery learning, constructivism, and gamified learning, by showcasing how their combined application can lead to significant improvements in learning outcomes and learner engagement. Furthermore, the study contributes to the understanding of how AI integration can transcend traditional teaching methods, providing instant, personalised feedback that empowers learners in self-assessment and the refinement of their communicative writing skills. It also offers a practical model for guiding learners through the complex, dynamic process of writing—from idea discovery to revision—by incorporating structured tools like the “TiFNaPe” acronym and the “12345” method, thereby providing tangible strategies for writing development.

Contextually, this study directly addresses the specific communicative writing challenges faced by Malaysian primary ESL learners in meeting the requirements of the End of Academic Session Test (UASA). The GRE³AIT Module presents itself as a highly effective and practical pedagogical tool tailored to this local context, significantly improving ESL learners' ability to construct coherent and accurate communicative messages. By enhancing communicative writing proficiency and fostering a more positive attitude towards writing, the intervention aligns directly with The Roadmap of Reform of English Language Education in Malaysia and contributes to the national goal of developing proficient ESL communicators who meet CEFR standards. The demonstrated success of the module in increasing both writing enjoyment and confidence among learners provides a scalable and innovative solution for broader ESL education practices nationwide, highlighting the potential of integrating gamified flipped learning and AI to address specific writing challenges within the Malaysian schooling system.

Limitations and Future Studies

While this study provides valuable insights into the effectiveness of the GRE³AIT Module, it is important to acknowledge certain limitations. The study involved a small sample size of four primary ESL learners, which may limit the generalisability of the findings to a larger population. Future research could replicate this study with a larger and more diverse group of participants to enhance the external validity of the results. Additionally, the study was conducted over a relatively short period. A longer-term study could investigate the sustained impact of the GRE³AIT Module on learners' communicative writing skills and their long-term development of writing confidence and enjoyment. Furthermore, while the study demonstrated improvements in writing enjoyment, the gains in writing confidence were less pronounced. Future research could explore additional strategies to more effectively foster writing confidence, such as incorporating peer feedback, collaborative writing activities, or personalised goal-setting within the module. Finally, this study focused primarily on the quantitative outcomes of the intervention. Future research could incorporate qualitative data collection methods, such as interviews or classroom observations, to gain a deeper understanding of Malaysian primary ESL learners' experiences with the GRE³AIT Module and the factors that contribute to their communicative writing development.

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