INTEGRATING MULTIPLE INTELLIGENCES TO ENHANCE THE ESL WRITING SKILLS AMONG MALAYSIAN PRE-UNIVERSITY STUDENTS

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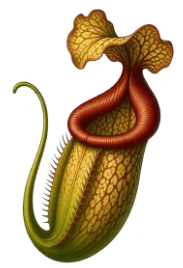*Corresponding author: Iziana.hani@ums.edu.my

Abstract *The reliance on high-stakes testing, such as the Malaysian University English Test (MUET), has perpetuated the myth that formulaic writing is the optimal way to teach students. Hence, the five-paragraph essays or the "hamburger" approach continue to be reinforced. However, this approach hinders their ability to write argumentative essays effectively. To address this issue, a module on Multiple Intelligences (MI) was developed to improve students' writing performances. This study was set out to determine whether giving pre-university students MI instructions improves their English writing abilities and to examine whether the instructions taught using MI Instruction can be retained by them. A quasi-experimental research design was employed, involving 60 pre-university students purposively selected from Universiti Malaysia Sabah (UMS). Two groups were created out of them: the experimental group and the control group. Each group received different treatment conditions during the intervention period - one with the implementation of MI Instructions, while the other received a traditional lecture-based instruction without being physically intervened (or manipulated with interventions). Using the Mann-Whitney software, the significant differences between the mean scores were identified by comparing the scores of the pre- and post-test of both groups, thus proving that the MI Instructions were effective in improving the students' writing performances in English. The findings underscore the need for curriculum reform in ESL writing instruction, advocating the integration of Multiple Intelligences theory to foster more flexible, learner-responsive pedagogies that address diverse cognitive profiles and enhance students' written performance.*

Keywords: *Multiple Intelligences, ESL Writing, Pre-University Students, Quasi-Experimental Study, Curriculum Reform*

INTRODUCTION

The Malaysian Education Blueprint 2013-2025 aspires for every child to be, at minimum, operationally proficient in English as the international language. It is undeniable that the heterogeneous society of Malaysia provides an ideal setting for the development of multilingual students. However, in the 2022 *Sijil Pelajaran Malaysia* (SPM) examination, approximately 52,674 candidates, representing 14.3 per cent of the total 373,974 candidates, did not pass the English paper (Norhisham, 2023). The irony of it being the most spoken language used in universities and colleges, an average Malaysian student still struggles to write compositions in English, demonstrating an inadequate mastery of the language despite 11 years of learning it (Kiram, Sulaiman, Swanto, & Din, 2014; Hiew, 2012). This has caused potentially smart youths to face problems in trying to get into universities or degree programs due to poor performance in the Malaysian University English Test (MUET). A government report from 2025 reaffirms that low English proficiency among Malaysian university students remains a persistent issue, adversely affecting their academic performance, communication skills, and employability in both local and international job markets (Ramasamy, 2025).

There is a widespread belief that one of the things causing the steady drop in the nation's English proficiency is the unchanged medium of instruction in the classrooms (Ismail, AlSaqqaf, & Din, 2020). Even though the students have been learning English for 11 years, Hiew (2012) claims that most Malaysian students' ability in English does not significantly improve when they learn the language using traditional teaching pedagogies. This learning environment could have a dramatic impact on the students' motivation, and the declining trend of the students' performance in English confirms Pandian's claim (2002) that the most popular method used in the classroom is drilling using past-year examination questions, worksheets, and exercise books (Che Musa, Koo, & Azman, 2012). This low English performance among students persists from one school level to the next and reaches a breaking point at the postsecondary level, making it difficult for teachers in Malaysian schools to cope with. Results show that 62% of MUET Exam applicants only received Bands 1 and 2, which puts them in the category of "limited user" and "very limited user" of English (Sani, 2015).

To write a flawless, error-free piece, students need to be well acquainted with the grammar rules and use an appropriate choice of words and phrases, mechanics of writing, organizational skills and styles of writing (Yunus & Chien, 2016), thus making writing the hardest skill to be taught compared to the other language skills. However, it is consistently challenging to locate essays written by Malaysian students with few grammatical problems; these errors are mostly in the word order and usage of tenses (Maros, Hua & Salehuddin, 2007). Although the Multiple Intelligences theory has been acknowledged as a valuable pedagogical framework for scaffolding writing skills, its application in this area remains limited. Additionally, there is a notable lack of research examining how Multiple Intelligences can effectively support the development of writing skills. Therefore, it is crucial to deepen our understanding of how this theory facilitates the process of argumentative writing, particularly for pre-university students within our local context.

Researchers have done well in providing empirical studies that depict how Multiple Intelligence leads to better performance in language learning, yet it appears less popular strategy

to be implemented in the classroom. Since its introduction, it has improved ESL teaching and learning as it supplies teachers with a range of teaching methods and approaches (Richards & Rodgers, 2001). This theory can be a valuable aid for the educators in teaching writing because it leads to better writing performance (Eng & Mustapha, 2010; Gündüz & Ünal, 2016) by making greatest contribution towards predicting writing scores (Marefat, 2007), increasing vocabulary knowledge (Zarei & Afshar, 2014), and enhancing motivation in learning the language (Madkour & Mohamed, 2016). To address this theoretical void, a quasi-experimental study was called for. The purposes of this study are:

1. To determine whether providing Multiple Intelligences Instructions improves ESL writing performance among UMS pre-university students.
2. To examine the ability of ESL pre-university students at UMS to retain the writing strategies and skills taught through Multiple Intelligences-based instruction.

This study serves as a timely call for policymakers to refine the curriculum by fostering greater flexibility and diversity within the second language teaching and learning landscape. Rather than relying solely on conventional verbal-linguistic and logical-mathematical approaches, offering students opportunities to engage through multiple intelligences can enhance their interest, deepen their engagement, and support the holistic development of their intellectual capacities.

MATERIALS AND METHODS

This research follows an experimental design, with an in-depth justification of adopting a quasi-experimental framework. Focusing on students' learning experiences with Multiple Intelligences and their relation to good writing performances, this study examined how one variable affected another. Hence, it steered this study towards adopting a quantitative approach to achieve the research objectives.

Sample
A quasi-experimental design with no random assignment was employed in this study; thus, convenience sampling was used (Creswell, 2018). Sixty pre-university students enrolled in the Science Foundation Program at the Preparatory Centre of Science and Technology were selected. The participants, aged 18 to 19 at the time of the study, were divided into two intact classes as designated by the centre: 30 students in the experimental group (EG) and 30 in the control group (CG). No reshuffling of participants was conducted to maintain the integrity of institutional groupings.

Instrument
This study is carried out to determine the effectiveness of Multiple Intelligence Instruction to enhance the writing performance of pre-university students. Through this, language educators may be able to achieve optimal learning results from the students by using the right stimulus. The following instruments were used to collect the data for this study:

1. Multiple Intelligences Profiling Questionnaire III (A self-assessed intelligence inventory)

2. Malaysian University English Test (MUET) Paper 4/800 Writing for July 2016 for the pre-post and retention tests
3. The Five Intelligence-Focused and the 5-in-1 Writing Modules

Procedures

Sixty pre-university students were evenly divided into two language classes and equally assigned to experimental and control treatments. One class was designated as the control group, while the other served as the experimental group. The control class was taught using a conventional teaching technique, following the syllabus outlined for teaching writing. In contrast, the experimental group was introduced to Multiple Intelligences Instruction, with lessons redesigned from the same syllabus used in the current semester. Figure 1 provides a brief overview of the research procedures:
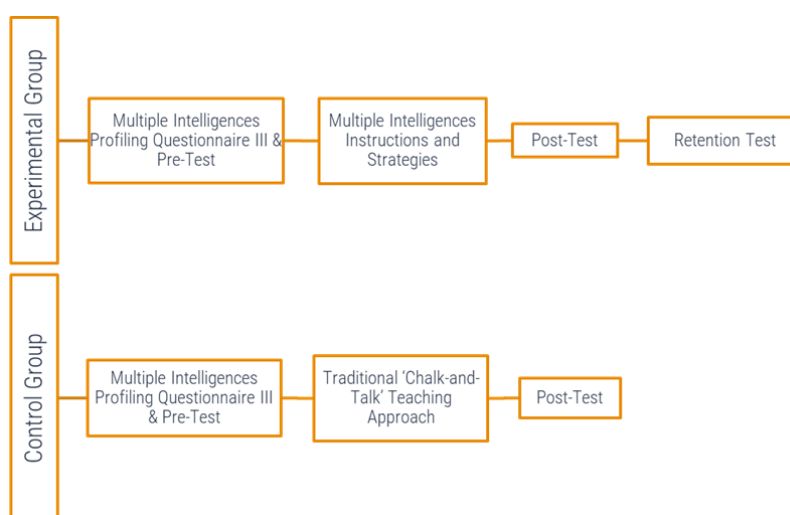
Figure 1
Research Procedures

All students underwent two weeks of identical, lecture-based instruction focusing on fundamental writing skills, particularly argumentative essays. These sessions were one-way, with minimal interaction and no physical interventions, establishing a uniform baseline for both the experimental and control groups. Before the pre-test, students completed the Multiple Intelligences Profiling Questionnaire III. They were then given 50 minutes to write a full argumentative essay responding to a prompt on whether the traditional male role has remained unchanged with modernisation. Essays were evaluated using the latest MUET Writing Task 2 rubric (60 marks for Task Fulfilment, 60 for Language and Organisation), assessing idea relevance and development, structural coherence, lexical range, and grammatical accuracy in line with national academic writing standards.

During the intervention, the control group received lectures, a traditional form of instruction and strategy in the class. The Multiple Intelligences Instruction, however, was applied in the experimental classes. In other words, the researcher physically intervened in the learning process so that everyone experienced something different in the experimental setting than in the control condition. The experimental group experienced two parts of the teaching strategies: The

Five Intelligence-Focused Lessons and the 5-in-1 Lessons for ten weeks. According to McKenzie (2005a), it is neither necessary nor advisable to try accommodating all nine intelligences in a single lesson. Attempting to include all intelligences often leads to an unnatural learning environment, where students struggle to benefit from the excessive input and experiences. Instead, teachers should aim to integrate no more than three to five intelligences into one lesson (McKenzie, 2005b). In this study, five intelligences were selected based on their natural alignment with the lesson objectives, content, and activities. Targeting a limited set of intelligences allowed for more deliberate instructional planning, deeper learner engagement, and more effective assessment of outcomes. This focused approach also ensured that each intelligence could be meaningfully integrated, rather than superficially included, thereby enhancing both pedagogical coherence and instructional impact.

The intervention phase spanned ten weeks and was divided into two parts. The first part, termed the Five Intelligence-Focused Phase, involved five consecutive weeks of instruction in which each week focused on one specific intelligence: Verbal-Linguistic, Logical-Mathematical, Visual-Spatial, Interpersonal, and Intrapersonal. These intelligences were selected for their natural alignment with the structured syllabus and their relevance to language learning. The primary aim of this phase was to build a foundational understanding of each intelligence, familiarising students with the learning strategies, tasks, and thinking patterns associated with each one. This scaffolding enabled students to recognise and apply these modes of thinking in isolation before progressing to the second phase, where all five intelligences were strategically integrated into each of the remaining five lessons.

The second part of the intervention focused on teaching writing through the integrated application of the five previously introduced intelligences. Each lesson combined Verbal-Linguistic, Logical-Mathematical, Visual-Spatial, Interpersonal, and Intrapersonal intelligences and incorporated five key writing components: Topic-Word Association, Brainstorming, Mind-Mapping, Rank-Ordering, and Metacognition. These components were strategically selected for their alignment with both the Multiple Intelligences framework and the structural demands of argumentative writing. Topic-Word Association and Brainstorming activated Verbal-Linguistic and Interpersonal intelligences by facilitating language-rich, collaborative idea generation essential for crafting a clear thesis statement and supporting claims. Mind-Mapping engages Visual-Spatial intelligence to help students visually organise main ideas, premises, and counterarguments, aiding in paragraph planning and coherence. Rank-Ordering appealed to Logical-Mathematical intelligence by encouraging students to logically sequence arguments from strongest to weakest or in a cause-and-effect hierarchy, supporting the logical flow of body paragraphs. Finally, Metacognition fostered Intrapersonal intelligence by promoting reflective thinking, helping students evaluate the clarity, persuasiveness, and coherence of their arguments throughout the drafting and revision stages.

As students were already familiar with each intelligence from the first phase, these five were now synthesised into a cohesive lesson structure implemented over five weeks. The 5-in-1 lessons followed a three-stage instructional model: Pre-, While-, and Post-Teaching. The While-Teaching stage focused specifically on guiding students through the writing process using the five core components, each serving as an instructional entry point to activate and apply a specific

intelligence. This multi-modal approach aimed to enhance cognitive engagement, reinforce writing skills, and accommodate diverse learner profiles in the ESL writing classroom.

The post-test was administered at the end of the tenth week to assess the students' writing performance after completing the intervention phase. The task was comparable to the pre-test, asking students to explore whether the traditional male role has evolved with modernisation. By comparing performance between the pre-test and post-test, a clearer picture of the impact of Multiple Intelligences can be obtained, rather than relying solely on post-test results. The differences in treatment effects between the groups were assessed by analysing their post-test writing performance.

A retention test was administered only to students in the experimental group to determine whether the writing skills taught through Multiple Intelligences instruction were retained over time. This assessment was conducted one month after the post-test, without any further instruction or practice in between. The task mirrored the format and expectations of the pre- and post-tests, requiring students to take a stance on a given issue and justify their position using logical reasoning, explanations, and relevant examples. The goal was not to assess improvement per se, but to evaluate the extent to which students could sustain and independently apply the writing strategies they had acquired during the intervention.

Two experienced examiners, both with extensive backgrounds in teaching and assessing MUET Writing papers, evaluated the pre-, post-, and retention assessments. Each essay was annotated to ensure inter-rater reliability. This retention test was essential to determining whether the students had retained the abilities given with the Multiple Intelligences Instructions over time. The results obtained through the pre-, post-, and retention tests were statistically analysed using the Mann-Whitney U Test.
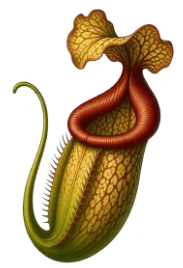
RESULTS & DISCUSSION

Multiple Intelligences Instructions Improves ESL Writing Performance Among UMS Pre-University Students

The Mann-Whitney U test was employed to examine differences between two independent groups on a continuous measure (Pallant, 2011). This test converted the scores on the continuous variable into ranks across both groups to determine if there were significant differences. It was conducted twice to assess whether there were significant differences in the writing scores between the two groups in both the pre-test and the post-test. Tables 1 and 2 outline the mean ranks of the pre-test between the two groups

Table 1
The Mean Ranks of The Pre-Tests Between the Control and Experimental Groups

Ranks

	Type of Group	N	Mean Rank	Sum of Ranks
Test	Control	30	29.85	895.50
	Experiment	30	31.15	934.50
	Total	60		

Table 2
The P (Two-Tailed) Values of the Pre-Tests

Test Statistics

	Test
Mann-Whitney U	430.500
Z	-.290
Asymp. Sig. (2-tailed)	.772

Referring to Table 2, it is evident that the p-values (2-tailed) for the pre-test are larger than the alpha level (p = 0.772 > 0.05). This indicates that there was no significant difference in the mean scores of the pre-test between the control and experimental groups, as shown in Table 1, where the mean scores were 29.85 and 31.15, respectively. The small difference of 1.30 between the groups suggests that their writing performance was quite similar at the start of the study, indicating comparable baseline proficiency levels. This lack of significant difference implies that the students began the intervention with equivalent writing skills and without external factors likely influencing the results.

The Mann-Whitney U test was then used to analyse the post-test writing scores and assess differences in mean ranks between the control and experimental groups. This non-parametric analysis was conducted twice: once for the pre-test and once for the post-test, to compare the rank distributions of both tests across the two groups. The results of the post-test analysis are detailed in Tables 3 and 4 below:

Table 3
The Mean Ranks of the Post-Tests Between the Control and Experimental Groups

Ranks

	Type of Group	N	Mean Rank	Sum of Ranks
Test	Control	30	22.37	671.00
	Experiment	30	38.63	1159.00
	Total	60		

Table 4
The P (Two-Tailed) Values of the Post-Tests

Test Statistics

	Test
Mann-Whitney U	206.000
Z	-3.618
Asymp. Sig. (2-tailed)	.000

a. *Grouping Variable: Type of group*

The data reveal a statistically significant improvement in the experimental group, with mean ranks increasing from 31.15 (Table 1) to 38.63 (Table 3). In contrast, the mean ranks for the control group decreased from 29.85 (Table 1) to 22.37 (Table 3), indicating a negative change. This difference is further supported by the p-value (2-tailed) of 0.00 (p = 0.00 < α = 0.05) in Table 4, which shows a statistically significant difference between the two groups in the post-

test. The experimental group experienced an increase in mean rank by 7.48 between the pre- and post-tests, whereas the control group saw a decline in mean scores. The p-value for the post-test, being less than the alpha level ($p = 0.00 < α = 0.05$), strongly suggests that the experimental group outperformed the control group in the writing tests. This conclusion is further supported by the pre-test data in Table 2, which indicated no significant differences between the groups before the intervention. Therefore, the improvement in writing performance observed in the experimental group suggests that the Multiple Intelligences Instruction effectively enhanced students' writing abilities.

The Ability of ESL Pre-University Students at UMS To Retain the Writing Strategies and Skills Taught Through Multiple Intelligences-Based Instruction
To assess whether the Multiple Intelligences theory has a long-term impact when integrated into the existing curriculum, the means of the post-test and retention test were compared to determine if the Multiple Intelligences Instructions were retained by the students. The analysis involved comparing the scores from the post-test and the retention test for students in the experimental group. Following the same statistical methods as before, the Mann-Whitney U test was used to generate the mean ranks for these two tests, with the results presented in Tables 5 and 6.

Table 5
The Mean Ranks of the Post and Retention Tests Between the Control and Experimental Groups

Ranks				
	Type of Test	**N**	**Mean Rank**	**Sum of Ranks**
Test	Post-Test	30	28.32	849.50
	Retention Test	30	32.68	980.50
	Total	60		

Table 6
The P (Two-Tailed) Values of the Post- and Retention Tests

Test Statistics	
	Test
Mann-Whitney U	384.500
Z	-.973
Asymp. Sig. (2-tailed)	.331

a. *Grouping Variable: Type of Test*

Table 6 shows a p-value of 0.331, which is greater than the alpha value ($p = 0.331 > 0.05$). This indicates that there was no statistically significant difference between the mean scores of the post-test and the retention test. The students neither showed improvement nor a decline in their performance on the retention test compared to the post-test. As expected, this result suggests that the knowledge gained from the Multiple Intelligences Instruction was retained by the students. Thus, the Multiple Intelligences theory not only enhances writing skills but also ensures that the knowledge acquired remains with the students even after a month.

CONCLUSION

Multiple Intelligences is a learning theory that recognises and values the diverse ways students process and engage with information, acknowledging that individuals possess different strengths across various domains of intelligence. Overall, knowing the students' characters and abilities

would help educators to shape them into better learners. It is important to identify the students' intelligence, as it would help the educators understand what learning styles suit them best. Although a single lesson/learning experience only included three to five intelligences, the duration of the ten-week intervention seems like a fair deal, as the students got to experience different learning experiences through the Multiple Intelligences theory. The purpose of having a variety of lesson plans is to strengthen the domain that appears significant to them, while trying to develop the other domains to mould the students into holistic beings.

Multiple Intelligences provides a foundation for exploring and understanding human capabilities in learning, as everyone is born and develops differently from others. The key concept of introducing this theory into the education system is to give the educators an idea to start seeing every student individually and discovering his or her potential in learning. It is high time for educators to start changing their views based on the score sheets of the students. Students with low marks do not always mean they are slow-paced learners, but they need different methods of learning; thus, the educators need to start changing their strategies of teaching by having more variety in them. Gardner's theory of Multiple Intelligences provides a valuable framework for identifying individual learners' strengths, which ideally should be recognised even before formal instruction begins (Gardner, 1983). Even if this theory has not been introduced, language teachers need to make a concerted effort to explore diverse teaching methods and strategies to create a new and exciting class environment for them to learn.

Through this research and the outcomes, it displayed, it is hoped that it will become a stepping stone for educators to start restructuring their strategies in teaching by considering the students' differences in learning. Understanding and adopting Multiple Intelligences-based teaching and learning would help strengthen the students' significant domains, as well as develop others in which they are weak. However, meaningful change within the educational system requires support from policymakers and institutional leadership. Decision-makers must revisit the application of Multiple Intelligences theory within the existing curriculum to ensure broader inclusivity. Doing so could not only help nurture areas where students demonstrate less proficiency but also further develop the intelligence in which they already excel. If this effort is supported by key stakeholders, such as policymakers, curriculum developers, and educational leaders, it could bring a transformative perspective to the education landscape by fostering the development of holistic individuals equipped with diverse competencies across multiple domains.

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