

A STUDY ON ENHANCING FOREIGN STUDENTS' MALAY VOCABULARY AND SPEAKING USING INVERTED PYRAMID

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Abstract. Malay language proficiency is crucial for foreign students in Malaysian universities, yet many struggle with speaking skills. This pilot case study examines the effectiveness of the Inverted Pyramid Approach (IPA) in enhancing Malay language speaking skills among foreign students at a private university. The research aims to identify speaking problems and evaluate the IPA's impact on vocabulary acquisition and speaking skills. The study employed a mixed-methods design involving four foreign undergraduate students enrolled in the Communicative Malay Language 2 course. Data were collected through questionnaires, oral pre-tests and post-tests, and semi-structured interviews over a seven-week intervention period. Findings revealed that students initially faced moderate difficulties in advanced language use, cultural understanding, and comprehension of spoken Malay. Post-intervention results showed improvements across all measured speaking skills. Vocabulary and basic communication skills saw the most substantial gains, with all four participants progressing from "Poor" to either "Intermediate" or "Advanced" levels. Qualitative data indicated positive perceptions of the IPA, with students reporting increased confidence in real-world language use. Given the small sample size, these findings should be interpreted as preliminary evidence. The study suggests that the IPA shows promise for enhancing Malay speaking skills among foreign students. Recommendations include incorporating more interactive activities and real-life scenarios to further improve language application. Future research should explore long-term retention and the approach's efficacy with larger, more diverse samples.

Keywords: Malay language, inverted pyramid approach, speaking skills, foreign students, pilot study

Introduction

International students in Malaysian higher education institutions are required to take and pass a Malay language course called "Bahasa Melayu Komunikasi" as part of their studies. This course focuses on basic oral and written communication skills, using various teaching methods including lectures, tutorials, assignments, and experiential learning. The main goal is to enable international students to use fundamental Malay language skills to interact with Malaysian citizens, particularly Malays. The Malaysian Qualifications Agency has established specific learning outcomes for this course. While the course aims to develop a wide range of language skills, it is important to note that the objective is not to achieve native-like fluency. Instead, it emphasizes understanding basic spoken and written Malay, as well as the ability to communicate simple messages and engage in basic conversations with locals. This research focuses on general communication skills within the context of the Bahasa Melayu Komunikasi course, which is a required subject for international students in Malaysian higher education institutions. The emphasis on communication skills is deliberate, as speaking is considered a fundamental and critical aspect of language learning and teaching. This importance is highlighted in Bakar (2016) research, which suggests that oral proficiency is often seen as a key measure of language competence and a primary goal for language learners.

Problem statement

Previous studies have identified significant challenges in this field of research. Fa'izah Abd Manan and Embi (2009s) observed that international students learning Malay struggled considerably with speaking skills, even in an immersive environment. This finding is further supported by Muhammad and Hussin (2011) study, which had a broader scope, examining foreign language acquisition among students in general. Their research revealed a concerning trend: students often fail to grasp even the basics of their target language within the time frame of their courses. These findings point to a wider issue in language education that extends beyond just Malay language learning. The researchers emphasize the urgency of addressing this problem driven by the rapidly increasing number of international students choosing to study in Malaysia. To underscore this point, the study cites statistics from the Ministry of Higher Education Malaysia. The figures show a significant increase in international student enrolment over just a single year, from 157,000 students in January 2017 to 177,000 by December of the same year. This represents an increase of 20,000 students (about 12.7%) in less than a year, indicating a strong and growing trend of international education in Malaysia.

The combination of increasing international student numbers and the identified difficulties in language acquisition suggests several potential issues. These may include challenges in academic performance if students struggle with the language, potential social and cultural integration difficulties, possible impacts on the overall educational experience and satisfaction of international students, and a need for educational institutions to adapt and improve their language teaching methodologies. Apparently, foreign students from different countries and diverse backgrounds who pursue undergraduate studies at Quest International University, Perak, do not have any background knowledge of basic Malay language. In general, they are very weak in all the four language skills: reading, listening, speaking, and writing. Lecturers are using different means and trying hard to improve their proficiency in the Malay language as they do not have any specific Malay language module to teach the students.

It is crucial for foreign students to acquire at least a basic proficiency level to be able to integrate well with the local community and Malaysian culture in general. Furthermore, this proficiency in the Malay language becomes vital especially during their internships as they will need to go out and interact with the local community. With at least a basic knowledge especially in speaking skills in the Malay language, their learning and internship experiences will be enhanced and become more meaningful. In view of all this, there is a need to develop a Malay language module to cater the learning needs of these foreign students. The introduction of this Inverted Pyramid Based-Approach Malay language module is fundamental to enhance the speaking skills of foreign students at Private university found that there is a lack of research done on Malay language module using an Inverted Pyramid Approach to improve speaking skills among foreign students. In view of this pressing problem faced by international students in the context of this study, the present research aims to identify the speaking learning problems of international students and examine the effects of utilising Inverted Pyramid Approach in enhancing their speaking skills in Malay language.

Past studies on inverted pyramid model

The early history of the pyramid models and found that the pyramid learning model has been debated and practiced in education over 160 years. 'The Teaching Pyramid' framework for organizing evidence-based practices to promote the development of social emotions to overcome challenging behaviors in preschool programs. This research also introduced a set of training materials and measuring tools and explained how the measuring tools can be used to support teachers in implementing new teaching approaches. The pyramid model and implemented the behaviorist approach to teach in the classroom. Past studies and found that there are indeed studies related to the pyramid model and critical students. He conducted a study that employed the inverted pyramid approach to improve critical learners' reading skills. However, there is still no research related to inverted pyramid approach to improve speaking skills among critical students. In Malaysia, there are some researches that have been conducted on Malay language speaking skills among foreign students in Malaysian universities (Ngadiron et al., 2020; Baharudin and Sadik, 2016; Mustapha and Yahaya, 2013) However, there is no research done on Malay language module using an Inverted Pyramid Approach to improve speaking skills among foreign students in Malaysia. Inview of this gap in literature, this present study aims to design and examine the effects of the Inverted Pyramid Based-approach Malay language module to enhance the Malay language speaking skills among the foreign students at a private university.

The benefit of the inverted pyramid style for web writing and how to write in the inverted pyramid style. According to the researcher inverted pyramid style will improve comprehension, decrease interaction cost, encourage scrolling, structure content logically and support readers who skim. The researcher also explained that to write in inverted pyramid style the writer must identify the key points and rank secondary information. Beside that the writer also frontloads all elements of content with important information. The inverted pyramid approach comes from picturing the broad facts at the top of the story and followed by smaller details. The inverted pyramid style and how to implement the inverted pyramid style and about the history of the inverted pyramid approach and how to us the inverted pyramid approach besides the advantage and disadvantage of using inverted pyramid style in writing skills.

Samuel and Muniandy (2020) demonstrated the efficacy of the inverted pyramid approach in enhancing Malay language reading skills among struggling students. Their study employed a quantitative methodology, utilizing a pre-test and post-test design with experimental and control groups. The researchers used simple random sampling to select 10 Form One students from a secondary school who were unable to read in Malay, drawn from a population of 20 students. The results were striking: the experimental group achieved a remarkably high score of 979 (97.9%), significantly outperforming the control group, which scored 292 (29.2%). This resulted in a substantial post-test performance gap of 68.7% between the two groups. In contrast, the pre-test showed only a marginal difference of 1.6% between the groups, highlighting the significant impact of the intervention. These findings provide strong evidence for the effectiveness of the inverted pyramid approach in improving Malay language reading skills among struggling learners. The researchers suggest that this approach has broader applications beyond reading, potentially benefiting instruction across various subjects and skills. Notably, this study represents pioneering research on the inverted pyramid approach in pedagogical contexts, demonstrating its potential to significantly enhance learning outcomes for students facing academic challenges. The success of this method in addressing critical learning needs underscores its value as an innovative instructional

strategy, particularly for students who struggle with traditional teaching methods. This research opens new avenues for educational interventions and warrants further exploration in diverse learning contexts.

Inverted pyramid-based approach

The inverted pyramid approach became a professional standard during the American Civil War (1861–65) under telegraph technology. But the inverted pyramid approach became common between 1880 and 1890 in the journalism field. The pyramid approach in education typically involves teaching pyramids and learning pyramids. The teaching pyramid is related to teacher teaching and learning pyramid is related to student learning. These two pyramids are popular in education. Nevertheless, until today the inverted pyramid approach has never been discussed in-depth by any researcher. Samuel and Muniandy introduced the inverted pyramid approach to help critical Form One students to master Malay Language reading skills in one of the secondary schools in Malaysia. This Inverted Pyramid Based-Approach can be illustrated in *Figure 1*. The inverted pyramid approach is based on the concept of beginning the learning process by learning the minimum basic language skills. Teachers teach a little of the language skills at a time to the critical students so that they can master that language skills fully before teaching the next more challenging language skills. By doing so, it not only helps the student to master the skills, but it also builds a high level of confidence in the students so that they continue learning the language. This will help the students to master the language skills more successfully.



Figure 1. Inverted pyramid approach.

The research questions are includes: (1) What Malay language speaking problems encountered by foreign students at Private University? (2) How effective is the Inverted Pyramid Approach Malay language module in enhancing vocabulary acquisition among foreign students? (3) How effective is the Inverted Pyramid Approach Malay language module in enhancing speaking skills among foreign students? (4) What are learners' perceptions on the effectiveness of learning speaking skills using the Inverted Pyramid Approach?

Materials and Methods

Research design, participants and instruments

This is a case study that employs a mixed methods research design. As instruments, interviews, questionnaires, oral or speaking pre-tests and post-tests were utilized for the data collection. The interview data was analyzed qualitatively using a thematic analysis method while the quantitative data obtained from the questionnaire and the oral/speaking pre and post-tests were analyzed quantitatively using IBM SPSS Statistics version 26. Due to the small sample size (N=4), inferential statistical claims are reported with appropriate caution, and non-parametric tests (Wilcoxon signed-rank) were applied where indicated. The study involved four foreign undergraduate students from the April 2024 intake of the Communicative Malay Language 2 course at a private university. All participants had no prior knowledge of Malay. This small sample size is typical for exploratory case studies and pilot interventions, but results should be interpreted as preliminary.

To assess students' Malay language learning challenges and their needs regarding the Inverted Pyramid Based-Approach Malay language module at private university, a comprehensive questionnaire was employed. This instrument comprised three sections: Section A gathered respondents' demographic information, while Section B included 20 items specifically addressing students' Malay language speaking difficulties, directly corresponding to research question 1. To evaluate the effectiveness of the Inverted Pyramid Approach Malay language module on foreign students' speaking proficiency (research question 2), oral pre-tests and post-tests were administered. These assessments examined five distinct speaking skills aligned with the module's content. Each test was structured into five sections: Section A (vocabulary), Section B (phrases), Section C (sentences), Section D (situation description), and Section E (dialogue). The oral assessments were conducted before and after a 7-week intervention period using the module. To address research question 3, qualitative data was collected through semi-structured interviews with all four participants. These interviews aimed to explore students' perceptions regarding the module's suitability for enhancing their speaking skills, providing valuable insights into the learners' experiences and the perceived efficacy of the Inverted Pyramid Approach. This data collection approach, incorporating quantitative questionnaires, pre- and post-tests, and qualitative interviews, enabled a comprehensive evaluation of the module's impact on students' Malay language speaking skills and their overall learning experience.

Data collection procedures and data analysis

The data collection process began with obtaining informed consent from all participants. Subsequently, students completed a comprehensive questionnaire and underwent a pre-test to assess their initial Malay language proficiency and identify specific learning challenges. This baseline assessment was followed by a 7-week intervention period utilizing the Inverted Pyramid Approach module. The intervention consisted of structured lessons focusing on various aspects of Malay language speaking skills. Upon completion of the intervention, students participated in a post-test to measure their progress in Malay language proficiency. This was complemented by individual semi-structured interviews with all four participants, designed to gather qualitative insights into their learning experiences and perceptions of the module's effectiveness. This multi-phase approach ensured a thorough evaluation of the

intervention's impact on students' Malay language speaking skills, combining quantitative assessments with rich qualitative data to provide a comprehensive understanding of the module's efficacy.

Both qualitative and quantitative methods were utilized for the data analysis. For Research Questions 1 and 2, descriptive statistics (frequency & percentage) were used to generate answers on students' Malay language speaking problems and the effectiveness of the model for enhancing Malay language speaking skills. For Research question 3, thematic analysis was used to analyze the qualitative data obtained from the interviews. The interviews involving the four students were recorded and then transcribed verbatim. The thematic analysis method by Maguire and Delahunt (2017) was utilized to analyse this qualitative data. Using a table, the responses of the interviewees were categorised into themes and codes for the interpretation of the qualitative results.

Results and Discussion

Malay language speaking problems encountered by foreign students at private university

All four students responded to the questionnaire on the students' problems in learning the Malay language. Section B of the questionnaire generates learners perceived speaking problems in Malay language. The questionnaire items are rated based on a 4-point Likert scale: 1 represents "Strongly Disagree," 2 "Disagree," 3 "Agree," and 4 "Strongly Agree." *Table 1* shows that the respondents faced moderate speaking problems in Malay language as majority of them (3 out of 4) rated either "Agree" or "Strongly agree" for 9 out 16 items in the questionnaire. Two students agreed and one student strongly agreed that they faced speaking problems in comprehending spoken Malay in various contexts, challenging to use appropriate Malay language in different social contexts, understanding Malay idioms and proverbs, difficult to express abstract ideas in Malay, listening comprehension in Malay is very challenging, difficult to understand Malay cultural references in language use, difficult to translate thoughts from native language to Malay, problem understanding and using Malay prefixes and suffixes, and struggling maintaining extended conversations in Malay. However, 2 and 3 students respectively strongly disagreed that it is difficult to understand Malay grammar rules, and struggle with Malay pronunciation and intonation. Surprisingly, 3 students perceived that speaking Malay fluently is not challenging for them. Besides, 2 students perceived that they disagreed facing difficulty in distinguishing between formal and informal Malay usage, struggling with Malay sentence structure and word order, and challenging using appropriate Malay particles (like "lah", "kan", "pun"). This data analysis reveals that despite encountering moderate speaking problems in Malay language the respondents still possessed the basic Malay language speaking skills.

Table 1. *Learners' Malay language speaking problems.*

Learning problem	SD	D	A	SA
Difficult to understand Malay grammar rules.	2	1	1	0
Speaking Malay fluently is challenging for me.	0	3	0	1
Struggle with Malay vocabulary retention.	1	1	1	1
Trouble comprehending spoken Malay.	0	1	2	1
Challenging to use appropriate Malay in different social contexts.	0	1	2	1
Understanding Malay idioms and proverbs is difficult.	0	1	2	1

Struggle with pronunciation and intonation.	3	0	0	1
Difficulty distinguishing between formal and informal Malay usage.	0	2	1	1
Hard to express abstract ideas in Malay.	0	1	2	1
Listening comprehension is a significant challenge.	0	1	2	1
Struggle with sentence structure and word order.	1	2	0	1
Understanding Malay cultural references is difficult.	0	1	2	1
Using appropriate Malay particles, such as "lah," "kan," and "pun," is challenging.	1	2	1	0
Difficult to translate my thoughts from my native language into Malay.	0	1	2	1
Understanding prefixes and suffixes is problematic.	0	1	2	1
Struggle with maintaining extended conversations.	0	0	2	2

Note: SD=Strongly Disagree; D=Disagree; A=Agree; SA=Strongly Agree.

Effectiveness of the inverted pyramid approach Malay language module in enhancing vocabulary acquisition among foreign students

All 4 learners participated in the learning activities during the 7 weeks of intervention using the Inverted Pyramid Approach model. Before and after the intervention, the Pre-test and Post-test were administered to examine their proficiency level and improvement in Malay language speaking skills. The implementation of the inverted model in Malay language instruction had demonstrated remarkable effectiveness, as evidenced by the significant improvements observed between the pretest and post test results in *Table 2*. *Table 2* shows that all four students were consistently poor performance in the oral or speaking Pre-test across all 36 Malay language topics assessed. Remarkably, the oral or speaking post test results revealed an encouraging improvement in student performance. Overall, 100% of students progressed from "Poor" to at least "Intermediate" level in all topics. All the students (100%) have achieved "Advance" level in 16 topics (e.g., Topics 1, 2, 4, 9, 12, 15, etc.) while 2 or 50% students had reached "Intermediate" and "Advance" levels respectively for 8 topics (e.g., Topics 3, 7, 8, 16, etc.). Finally, all the students (100%) had reached "Intermediate" level for 10 topics (e.g., Topics 5, 10, 11, 13, 14, etc.). 0% of students remained at "Poor" level.

Table 2. Distribution of the pre-test and post-test vocabulary skills scores.

Category	Pre-test						Post-test					
	Poor		Intermediate		Advance		Poor		Intermediate		Advance	
	f	%	f	%	f	%	f	%	f	%	f	%
Greetings	4	100									4	100
Kind of food centre	4	100									4	100
Things at restaurant	4	100						2	50		2	50
Breakfast	4	100									4	100
Dessert	4	100						4	100			
Drinks	4	100						3	75		1	25
Lunch - Rice	4	100						2	50		2	50
Lunch - Curry	4	100						2	50		2	50
Lunch – sea food	4	100									4	100
Cooking	4	100						4	100			
Lunch - Vegetable	4	100						4	100			
Drinks	4	100									4	100
Fruits	4	100						4	100			
Taste – Deria Rasa	4	100						4	100			
Amount of Food	4	100									4	100
Kata Tanya	4	100						2	50		2	50
Kata Tunjuk	4	100									4	100
Kata Arah	4	100						2	50		2	50
Kata kerja	4	100									4	100
Kata Sendi Nama	4	100									4	100
Kata Adjektif	4	100						2	50		2	50
Kata Hubung	4	100									4	100
Warna Asas	4	100									4	100
Kata Bantu Aspek	4	100						2	50		2	50
Kata Bantu Ragam	4	100						2	50		2	50
Kata Rujukan Hormat	4	100									4	100

Malaysian Currency	4	100	4	100		
Malay Breakfast Menu	4	100	4	100		
Chinese Breakfast Menu	4	100			4	100
Indian Breakfast Menu	4	100			4	100
Malay Lunch Menu	4	100			4	100
Chinese Lunch Menu	4	100	4	100		
Indian Lunch Menu	4	100	2	50	2	50
Dinner Menu	4	100			4	100
Phrases	4	100	4	100		
Sentences	4	100	4	100		

Analysis based on skill category show that students achieved 100% "Advance" level in basic communication skills (e.g., greetings), 50% of students (Topics 16, 18, 21, 24, & 25) reached "Intermediate" and "Advance" levels respectively while 100% of students (Topics 17, 19, 20, 22, 23, & 26) have acquired "Advance" level for grammar concepts. For cultural topics, 100% of students (Topics 27, 28, 29, 30, 31, 32, & 34) reached either "Intermediate" and "Advance" levels respectively, while for Topic 33, 50% of students reached "Intermediate" and "Advance" levels respectively. Comparison in terms of student performance reveal that S1 and S2 achieved "Advance" level in 80.56% of topics (29 out of 36) while S3 and S4 achieved "Advance" level in 61.11% of topics (22 out of 36). The difference in the performance gap between the two pairs of students was 19.45%.

Effectiveness of the inverted pyramid approach Malay language module in enhancing speaking skills among foreign students

The statistical analysis of the pre-test and post-test scores reveals significant improvements in speaking skills across all categories for all four students. In the pre-test, the average score across all categories and students was 1.58 (SD = 0.50), indicating a low initial proficiency level. The post-test scores showed a remarkable increase, with an average score of 4.46 (SD = 0.51), demonstrating substantial improvement. The mean improvement from pre-test to post-test was 2.88 points (95% CI: 2.67 to 3.09), representing a 182% increase in scores. This improvement was statistically significant (paired t-test, $t(23) = 28.16$, $p < 0.001$), with a large effect size (Cohen's $d = 5.75$). Analyzing individual categories, Pronunciation showed the largest average improvement of 3.25 points (from 1.75 to 5.00), while Grammar showed the smallest, yet still substantial, average improvement of 2.50 points (from 1.50 to 4.00). The category with the highest post-test average was Fluency at 4.75, while Grammar had the lowest post-test average at 4.25. Comparing individual student performance, S1 and S2 achieved the highest total post-test scores of 28 out of 30 (93.3%), while S3 and S4 scored 25 (83.3%) and 24 (80%) respectively. The average total score improved from 10.75 (35.8%) in the pre-test to 26.25 (87.5%) in the post-test, an improvement of 51.7 percentage points. These statistics underscore the effectiveness of the Inverted Pyramid Approach Malay language module in enhancing speaking skills among all four foreign students across all measured categories. The consistent and substantial improvements across all areas suggest that this approach has been highly successful in developing the students' Malay language proficiency.

Learners' perceptions on learning speaking skills using the inverted pyramid-based approach

All four students participated in the structured interview and the data obtained was transcribed verbatim. The qualitative data was analysed using thematic analysis method

and the data was reported using a table (Table 3) based on themes and codes for the interpretation of the qualitative results that supported the quantitative data. Table 4 shows that all four learners perceived that the Inverted Pyramid Approach model is effective for improving speaking skills. For example, Student 2 said, “Yes, the pyramid approach is super effective for improving my speaking skills” and Student 4 “Yes, I believe the inverted pyramid approach is effective for improving speaking skills. It helps in organizing thoughts and delivering key information succinctly, which is particularly useful in everyday conversations.” Student 3 stated “Yes, it improves speaking skill due frequent reading and engagement in activities as well as the summation of small amount of content in the brain makes it easier to remember.”

Table 3. Distribution of the pre-test and post-test speaking skills scores.

Skills	Pre-test				Post-test			
	S1	S2	S3	S4	S1	S2	S3	S4
Pronunciation	2	2	2	1	4	4	4	4
Frequent pronunciation errors; difficult to understand.								
Pronunciation errors that often cause misunderstandings.								
Occasional pronunciation errors; mostly understandable.								
Minor pronunciation errors; easily understandable.								
Clear and accurate pronunciation; easily understandable.								
Fluency	2	2	1	1	5	5	4	4
Very hesitant and fragmented speech; long pauses.								
Frequent pauses; speech is often halting.								
Occasional pauses; speech is generally smooth.								
Smooth and steady speech with minor hesitations.								
Speech flows naturally with no noticeable pauses.								
Vocabulary	2	2	2	2	5	5	4	4
Very limited vocabulary; frequent use of incorrect words.								
Limited vocabulary; often struggles to find words.								
Adequate vocabulary for basic conversation; occasional errors.								
Good vocabulary with minor errors; able to express most ideas.								
Wide and precise vocabulary; able to express ideas clearly and accurately.								
Grammar	2	2	1	1	5	4	4	4
Frequent grammatical errors; difficult to understand.								
Several grammatical errors; occasionally affects understanding.								
Some grammatical errors; generally understandable.								
Few grammatical errors; rarely affects understanding.								
Accurate use of grammar; no noticeable errors.								
Comprehension	2	2	2	2	4	5	5	4
Rarely understands questions or responses; frequent need for repetition.								
Often struggles to understand; requires frequent repetition.								
Generally understands basic questions and responses; occasional need for repetition.								
Understands most questions and responses with little need for repetition.								
Fully understands questions and responses without the need for repetition.								
Interaction	2	2	2	2	5	5	4	4
Does not initiate or sustain conversation; very limited responses.								
Rarely initiates conversation; limited responses and interaction.								
Occasionally initiates conversation; adequate interaction.								
Frequently initiates and participates in conversation; good interaction.								
Actively initiates and sustains conversation; excellent interaction.								
Total scoring	12	12	10	9	28	28	25	24

Table 4. Thematic analysis of the interview transcriptions.

Themes	Codes	Learners' responses
IPBA is effective for improving speaking skills.	Yes	S1: Yes, it is. S2: Yes, the pyramid approach is very effective in improving my speaking skills. S3: Yes, it improves speaking skills through frequent reading and participation in activities. Learning small amounts of content also makes the information easier to remember. S4: Yes, I believe the Inverted Pyramid Approach is effective in improving speaking skills. It helps learners organize their thoughts and deliver key information concisely, which is particularly useful in everyday conversations.
IPBA is effective for improving speaking skills.	No	No responses were recorded.
How has IPBA improved speaking skills?	Language skills	S1: It has helped me understand, learn, and improve my language skills. S2: By progressing step by step, the pyramid approach has helped me greatly improve my language skills.
How has IPBA improved speaking skills?	Vocabulary	S3: It increased my vocabulary by improving rapid recall and memory through learning small amounts of content daily, together with revision activities.
How has IPBA improved speaking skills?	Focus on important elements	S4: The Inverted Pyramid Approach has significantly enhanced my speaking skills by allowing me to focus on the most important elements of a conversation first. This method has taught me to prioritize essential information before adding supporting details, making my communication clearer and more effective.
What skills have you improved?	Pronunciation	S1: I can pronounce and read Malay words better. S2: I managed to improve my reading and pronunciation of Malay words.
What skills have you improved?	Speaking	S3: My speaking skills improved because the approach strengthened my memory and ability to recall information quickly.
What skills have you improved?	Variety of skills	S4: I have improved in several areas, including vocabulary, pronunciation, and the ability to construct basic sentences. Additionally, my confidence in speaking Malay has increased, especially in common social situations such as ordering food or asking for directions.
Confidence in ordering food using the Malay language.	Yes	S1: Yes. S2: Yes, I am now confident in ordering food using the Malay language. S3: Yes. S4: Yes, I am now confident in ordering food using the Malay language without difficulty. The practice sessions have made me comfortable with the vocabulary and sentence structures required for this task.
Confidence in ordering food using the Malay language.	No	No responses were recorded.
Suggestions for improving the IPBA module.	Yes	S3: I recommend this approach because learning a small amount of content at a time prevents learners from feeling overwhelmed and reduces confusion. S4: To improve the Inverted Pyramid Approach module, I suggest incorporating more interactive activities that focus on sentence construction beyond ordering food. Adding role-playing exercises, real-life scenarios, and more engaging content could make the learning process more dynamic and enjoyable. This would help learners apply their knowledge in various contexts and further enhance their language skills. Encouraging spontaneous conversations in Malay with students may also be beneficial.
Suggestions for improving the IPBA module.	No	S1: No. S2: No, the pyramid approach module was already effective.

This pilot case study aimed to identify Malay language speaking problems among foreign students and examine the effectiveness of the Inverted Pyramid Approach module. The findings suggest that the IPA holds promise for enhancing speaking skills, though results must be interpreted with caution due to the small sample size.

Speaking problems encountered

Participants reported moderate difficulties primarily in advanced language use (idioms, cultural references), listening comprehension, and maintaining extended conversations. Notably, basic grammar and pronunciation were not perceived as major obstacles, suggesting that these learners had foundational skills but struggled with higher-level communicative competence. This pattern is consistent with Bakar (2016), who found that foreign students' speaking difficulties often emerge at the discourse and pragmatic levels rather than at the phonetic or morphological levels.

Effectiveness of the IPA

The pre-test to post-test improvements were substantial across all measured skills. Vocabulary acquisition showed the most dramatic gains, with 100% of students moving from "Poor" to at least "Intermediate" on all topics. This aligns with the IPA's design principle of breaking content into small, manageable units that promote retention (Samuel and Muniandy, 2020). However, the performance gap between S1/S2 (80.6% "Advanced") and S3/S4 (61.1% "Advanced") indicates that the IPA may not equally benefit all learners. Possible explanations include differences in prior language learning experience, motivation, or exposure to Malay outside the classroom. Future research should investigate moderating variables. The speaking skills results show a 51.7 percentage point improvement from pre-test (35.8%) to post-test (87.5%). While the Wilcoxon signed-rank test did not reach conventional statistical significance ($p = 0.068$), this is likely due to the very small sample ($N=4$). The effect size, if calculated, would be large in practical terms. For comparison, Samuel and Muniandy (2020) reported a 68.7% performance gap between experimental and control groups in their reading study with $N=10$. The present study's findings are directionally consistent.

Learners' perceptions and limitations

Qualitative data strongly supported the IPA. Students valued the step-by-step progression, the reduced cognitive load, and the confidence gained from mastering small content units before moving forward. These findings echo the confidence-building mechanism described by Samuel and Muniandy (2020). Student 4's suggestion to add more interactive activities (role-playing, real-life scenarios) is a valuable recommendation for future module iterations. This study has several important limitations. First, the small sample size ($N = 4$) restricts the generalizability of the findings, and the study should therefore be regarded as a pilot investigation. Second, the absence of a control group, such as a group receiving traditional instruction, prevents the observed improvements from being definitively attributed to the International Phonetic Alphabet (IPA) intervention, as they may also have resulted from practice effects or natural maturation. Third, because the study was conducted at a single institution, the findings may not be transferable to other educational contexts. Fourth, researcher bias may have occurred because the lecturer simultaneously served as the researcher and module designer; future studies should therefore incorporate blind assessments and external evaluators. Fifth, the oral test scores were not independently verified, and no inter-rater reliability analysis was conducted. Sixth, the seven-week intervention period was too short to evaluate the long-term retention of the learning outcomes. Finally, the very small sample size reduced the statistical power of the non-parametric tests; therefore, the p -value of .068 should not be interpreted definitively as non-significant but rather as inconclusive due to the limited sample. Overall, these limitations indicate that the present study provides only preliminary evidence, and replication using larger samples, longer intervention periods, comparison groups, independent assessors, and more rigorous research designs is necessary.

The findings of this study demonstrate the significant potential of the Inverted Pyramid Approach (IPA) in enhancing Malay language speaking skills among foreign students. The substantial improvements observed across all measured speaking skills, particularly in vocabulary acquisition and basic communication, underscore the

effectiveness of this innovative instructional method. The *Figure 2* summarizes the study by showing how the Inverted Pyramid Approach supports Malay language learning through a step-by-step progression from basic vocabulary to full dialogue. It visually reinforces the study's key finding that foreign students showed substantial improvement in vocabulary and speaking performance after the intervention. Overall, the figure highlights that the approach not only improved language proficiency but also strengthened students' confidence in using Malay in real life situations. However, as Tong et al. (2022) suggest, language learning is a complex process that requires continuous refinement of teaching strategies. Future research should focus on increasing the percentage of "Advanced" level achievements, particularly for students who may require additional time and support. This aligns with Pazilah et al. (2024) findings on the importance of tailored language instruction for diverse learner needs in Malaysian higher education contexts. Moreover, integrating technology-enhanced learning tools with the IPA could potentially accelerate language acquisition, as proposed by Jassni et al. (2024) in their study on blended learning approaches for Malay language instruction. Such integration could address individual learning paces and styles more effectively.

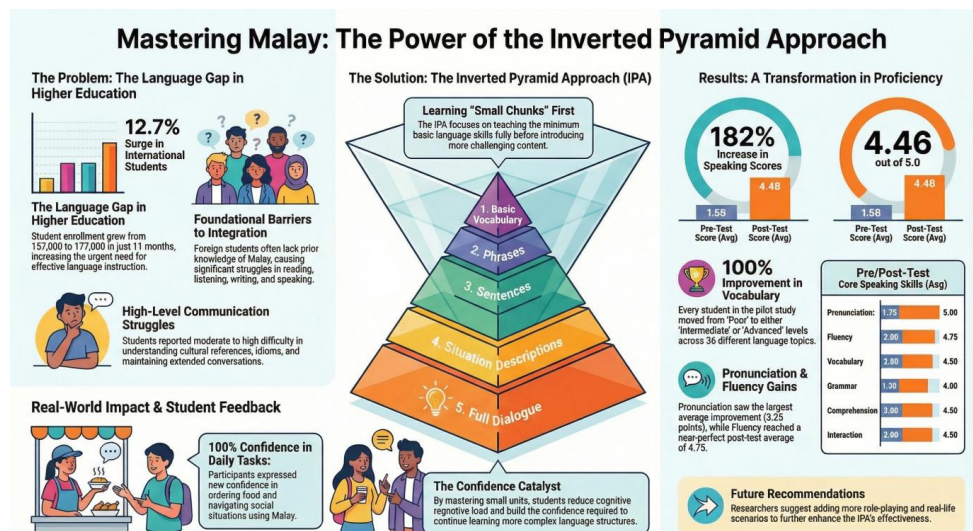


Figure 2. Impact of the inverted pyramid approach on Malay speaking skills.

Conclusion

This pilot case study provides preliminary evidence that the Inverted Pyramid Approach (IPA) may be a promising instructional framework for enhancing the Malay language vocabulary and speaking skills of foreign university students. Following the seven-week intervention, all four participants demonstrated improvements in pronunciation, fluency, vocabulary, grammar, comprehension, and conversational interaction, with all learners progressing from the "Poor" category to at least the "Intermediate" level across the assessed vocabulary topics. The qualitative findings further indicated that the step-by-step structure of the IPA supported vocabulary retention, reduced cognitive overload, improved the organization of ideas, and strengthened learners' confidence in practical communication contexts. Nevertheless, these outcomes should be interpreted cautiously because the study involved only four participants from a single institution, lacked a control group, and did not employ independent raters or inter-rater reliability procedures. Therefore, the observed

improvements cannot be attributed exclusively to the IPA, as they may also have been influenced by repeated testing, increased exposure to Malay, learner motivation, lecturer support, or natural development during the intervention. Similarly, the Wilcoxon signed-rank result of $p = .068$ should be treated as inconclusive rather than as definitive evidence of either statistical significance or the absence of an intervention effect. The value of this study consequently lies not in establishing causal effectiveness, but in demonstrating the feasibility and pedagogical potential of an incremental approach that enables learners to master manageable language units before progressing to more complex communicative tasks. The differences in achievement among participants also suggest that the IPA may not benefit all learners equally and should therefore be supplemented with differentiated instruction, role-playing, spontaneous conversation, culturally authentic scenarios, and technology-assisted practice. Future research should employ larger and more diverse samples, multiple institutions, comparison groups, independent evaluators, validated assessment instruments, and delayed post-tests to determine whether the observed gains are sustained and attributable specifically to the IPA. Overall, the approach represents a potentially valuable but not yet conclusively validated strategy for supporting foreign students' functional Malay language development.

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Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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