Author for correspondence:
Arnantawut Tiang-uan
✉ arnantawut.ti@bsru.ac.th
✉ English Programme (B.Ed.), Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand

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Exploring Thai Pre-service Teachers' Responding Patterns and Pragmatic Strategies in the Impromptu Q&A Oral Presentation Abilities of the Post-Presentation

Arnantawut Tiang-uan [ID]

Abstract

Background/purpose. Effective impromptu communication skills are crucial for pre-service teachers, particularly in handling spontaneous question-and-answer (Q&A) sessions following academic presentations. However, there is limited research examining how Thai pre-service teachers navigate these challenging interactions while balancing professional communication standards with cultural norms. This study aimed to investigate the responding patterns, pragmatic strategies, and gesture use in Q&A sessions, as well as identify perceived challenges faced by Thai pre-service teachers during impromptu Q&A sessions following their academic presentations.

Materials/methods. The study employed a mixed-methods approach, and the participants were 75 second-year English major pre-service teachers at a public university in Thailand. Data was collected over 16 weeks using observation checklists, structured field notes, and questionnaires. The data were analyzed using both qualitative thematic analysis and quantitative statistical methods.

Results. The findings revealed that there was significant improvement in acknowledgment strategies between Week 8 and Week 16 (M = 1.27 to M = 2.13, p < .001). Participants effectively utilized both direct responses (68.4%) and cultural elements, with Thai politeness markers appearing (94.7%). Gesture analysis showed systematic use of emphatic (42.3%), illustrative (31.7%), and regulative gestures (26%), with emphatic gestures demonstrating highest effectiveness (M = 4.2). Perceived challenges clustered into four categories: linguistic challenges, cognitive processing, affective factors, and cultural considerations, with mental translation emerging as the most significant challenge (M = 4.2).

Conclusion. The study provides recommendations for developing culturally sensitive teacher training programs that address both technical proficiency and cultural appropriateness in impromptu communication skills.

1. Introduction

Effective communication skills are vital for success in today's education system, especially for pre-service teachers who will rely on them in their professional careers. Their role of pre-service teachers as facilitators, mentors, and guides to young learners requires sound pedagogical practices that encompass successful communication within diverse contexts (Bransford et al., 2005, as cited in Mergler & Spooner-Lane, 2012). Oral communication skills are also essential in spontaneous situations, such as impromptu Q&A sessions following presentations (Mortaji, 2018).

In such contexts, pre-service teachers need to convey relevant information, engage in deep conversation with the audience, and answer queries that may not always be predictable. The nature of these interactions is far more challenging, requiring quick thinking, information digestion, and articulate responses, all with a time constraint. Although Mardiningrum and Ramadhani (2022) proposed that learners could cope with these challenges after receiving proper preparation, it is still vital to exercise different types of questions and pragmatic instruments used in actual situations.

Previous studies in English language education have explored topics such as the linguistic features of writing (Karanjakwut, 2018), discourse marker strategies (Arya, 2022), and presentation anxiety (Mhuentoei, 2022). However, these studies have not examined these issues in the context of impromptu speaking. Additionally, research has highlighted the importance of oral presentation skills, especially among Thai EFL undergraduates, who frequently report experiencing heightened anxiety and nervousness during presentations (Konchiab & Munpanya, 2021). Relatedly, studies have also observed that Thai secondary school teachers often use body language, such as facial expressions, in their English presentations (Rumpanpetch, 2017).

However, research on Thai pre-service teachers' response patterns and pragmatic strategies during impromptu Q&A sessions after presentations is still lacking. Such a gap inspires questions about what kinds of strategies are used to manage the demands to talk and develop shared meanings and to construct value in writing. It also prompts an investigation into factors that might influence their response patterns, such as cultural norms, educational background, or proficiency in the target language. The purposes of the study were (1) to investigate response patterns displayed by Thai pre-service teachers in impromptu Q&A sessions following their presentations, (2) to examine the pragmatic strategies used by Thai pre-service teachers to navigate spontaneous academic interactions effectively, (3) to explore how Thai pre-service teachers used gestures to enhance communication during impromptu Q&A sessions, and (4) to identify the perceived challenges they encounter in impromptu Q&A sessions. To achieve these aims, the study addresses the following research questions:

1. What response patterns do Thai pre-service teachers display when addressing questions in impromptu Q&A sessions following their presentations?

2. What pragmatic techniques do Thai pre-service teachers apply to sustain effective communication during these impromptu Q&A sessions?

3. How do Thai pre-service teachers use gestures to enhance their verbal communication during impromptu Q&A sessions?

4. What are Thai pre-service teachers' perceived challenges in the Q&A sessions after the presentations?

The research framework for this study integrates three key theoretical perspectives:
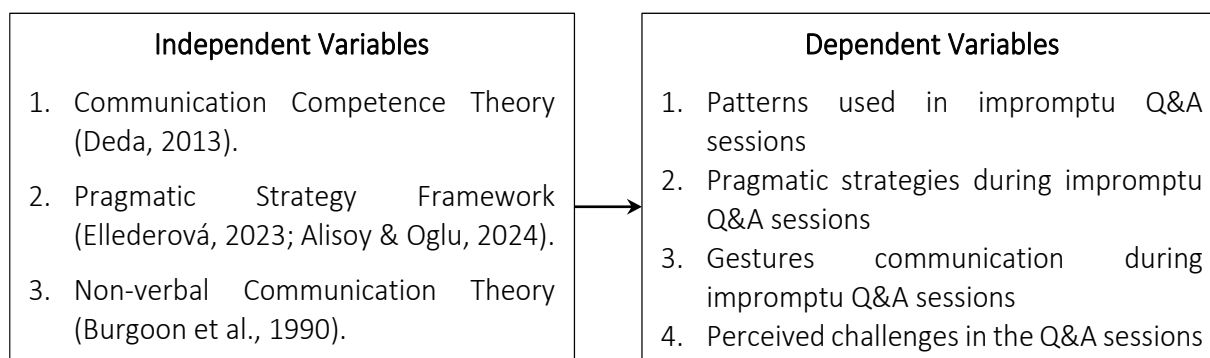
Independent Variables	Dependent Variables
1. Communication Competence Theory (Deda, 2013).	1. Patterns used in impromptu Q&A sessions
2. Pragmatic Strategy Framework (Ellederová, 2023; Alisoy & Oglu, 2024).	2. Pragmatic strategies during impromptu Q&A sessions
3. Non-verbal Communication Theory (Burgoon et al., 1990).	3. Gestures communication during impromptu Q&A sessions
	4. Perceived challenges in the Q&A sessions

Figure 1. Research Framework

To provide a foundation for understanding the study's focus on Thai pre-service teachers' impromptu Q&A skills, the following literature review explores existing research on oral presentation abilities, impromptu speaking, and related strategies.

2. Literature Review

2.1. Oral English Presentation Skills among Thailand Pre-service Teachers

Oral presentation skills are essential for the professional development of Thai EFL pre-service teachers. Research has shown that they often experience English-speaking anxiety, including fear of negative evaluation, test anxiety, communication apprehension, and topic and content anxiety, when delivering oral presentations (Mohamad et al., 2023). However, these skills can be developed through various methods. According to Tipmontree and Tasanameelarp (2020), role-playing activities enhance students' speaking skills and confidence when using the English language. Additionally, their study demonstrated the potential benefits of digital tools, such as Facebook, in fostering learner autonomy, enabling EFL pre-service teachers to grow and develop as individuals (Inpeng & Nomnian, 2022). Blended learning environments focusing on project-based drama approaches have also been found to successfully enhance English speaking abilities (Phu–Ngamthong, 2023).

2.2. Impromptu Q&A Oral Presentation

Impromptu speech has been identified as an important task for students (Mortaji, 2018). Lumettu and Runtuwene (2017) suggest that practicing impromptu Q&A speaking skills is valuable because it helps students handle spontaneous communication situations and expand their education-related vocabulary. Studies have highlighted how preparation and understanding of the subject matter can help with an effective impromptu response. Hanifa and Yusra (2018) note that well-prepared presenters can effectively handle unexpected questions. In addition, teacher comments on impromptu speeches made by students are reported to be an essential aspect for better presentation skills (Lacsina, 2020).

2.3. Strategies Used in Impromptu Q&A Oral Presentation

Here are a few common approaches presenters use to handle on-demand Q and A. Ellederová (2023) explains that rhetorical techniques are deliberate, employing language and communication strategies to influence, inform, or persuade the audience. For successful impromptu conversations, active listening is a crucial element (Alisoy & Oglu, 2024). There is also research on the ways in which preparation and training can support presenters' ability to respond logically and substantively to ad-hoc questions. Hanifa and Yusra (2018) argue that thorough preparation, including deep topic understanding and prior practice, enhances presentation success.

Drawing on the insights from the literature review, the methodology section details the research design and procedures used to empirically investigate Thai pre-service teachers' impromptu Q&A skills.

3. Methodology

3.1. Research Design

This study employed a mixed-methods convergent parallel design to explore the response patterns and pragmatic strategies of Thai pre-service teachers during impromptu Q&A sessions. In this design, qualitative and quantitative data were collected independently during the observation phases and then integrated during the analysis phase to provide a comprehensive understanding of the research problem. The qualitative data, prioritized in this study, included observations of communication behaviors and pragmatic strategies during the Q&A sessions, while the quantitative data focused on participants' perceived challenges. This approach aligns with contemporary mixed-methods frameworks (Creswell & Plano Clark, 2018) and facilitates an in-depth examination of both observable behaviors and self-reported perceptions, consistent with current perspectives in EFL teacher education (Mohamad et al., 2023; Tipmontree & Tasanameelarp, 2020).

3.2. Participants and Setting

The study involved 75 second-year English major pre-service teachers, consisting of 58 females and 17 males, enrolled in the English for Academic Presentation course at a public university in Thailand during the first semester of the 2024 academic year. Participants were divided into 15 groups of five for the presentation and Q&A sessions, with groups formed to ensure a mix of language proficiency levels based on their performance from the previous semester.

The English for Academic Presentation course, a mandatory part of the teacher preparation curriculum (Phu-Ngamthong, 2023), was chosen as the research site to observe spontaneous language use in a naturalistic setting. The course ran weekly for three hours over 16 weeks, with formal presentations in Week 8 and a final assessment in Week 16, enabling a comparative analysis of participant development over time.

3.3. Research Instruments

Three instruments were utilized for comprehensive data collection in this study. The primary observation checklist was developed from Burgoon et al.'s (1990) framework for analyzing communication competence and was validated by three TESOL professionals with over a decade of experience in the field. The checklist assessed behaviors across three main categories: acknowledgment, clarification, and answers, achieving an inter-rater reliability coefficient of $\kappa = 0.87$.

Structured field notes, which included both descriptive and reflective elements, were adapted from Merriam and Tisdell's (2016) guidelines for qualitative observation in educational contexts, enriching the analysis of Q&A interactions. Gesture analysis was informed by modifications to McNeill's (2008) classification system, incorporating culturally relevant gestures typical among Thai speakers, as identified by Rumpanpetch (2017).

The challenges questionnaire consisted of 30 items developed in accordance with Dörnyei and Taguchi's (2009) guidelines for language education research. This instrument underwent pilot testing with 30 students from a similar demographic background, demonstrating high internal consistency ($\alpha = 0.89$).

3.4. Data Collection Procedures

Data collection adhered to a systematic protocol throughout the 16-week semester. Phase one (Weeks 1–7) focused on preparatory activities to establish a baseline, including participant consent,

observer training, and pilot testing of instruments. The initial observation occurred in Week 8, involving video recordings of presentations, real-time completion of the observation checklist, documentation of field notes, and concurrent distribution of the questionnaire during the Q&A sessions following each presentation. This simultaneous collection of qualitative and quantitative data was repeated in Week 16, allowing for an independent gathering of both data types, which were later integrated during analysis.

The intermediate phase (Weeks 9–15) involved data organization and preliminary analysis, which prepared the team for observer calibration meetings to ensure consistency in data collection methods. In Week 16, the final observation phase mirrored the procedures of Week 8, emphasizing critical patterns identified in previous weeks while administering the final questionnaire.

3.5. Data Analysis

The analysis process incorporated both qualitative and quantitative methods to provide a comprehensive understanding of the data.

For qualitative analysis procedures, thematic analysis was conducted using Braun and Clarke's (2006) framework, which involved familiarization with the data, coding, and theme development using NVivo 12 software. Cross-validation among multiple researchers was employed to enhance analytical rigor.

For quantitative analysis, SPSS statistical software was utilized to identify patterns and relationships within the data. This involved performing descriptive statistical analyses of questionnaire responses, paired t-tests comparing performances from Weeks 8 and 16, and correlation analysis across various variables. Cohen's d effect sizes were calculated to assess the clinical significance of observed changes. The range of challenges was adapted from Best (1977), as illustrated in Table 1.

Table 1. Level of Challenges

Mean Range	Level of Challenges
4.50 – 5.00	Highest challenge
3.50 – 4.49	High challenge
2.50 – 3.49	Moderate challenge
1.50 – 2.49	Low challenge
1.00 – 1.49	Lowest challenge

3.6. Ethical Consideration

This research was conducted with formal approval from the Human Research Ethics Committee of the Research and Development Institute, Bansomdejchaopraya Rajabhat University (REC-BSRU COA No. 670902, Protocol Number: 037/67E33). All participants provided written informed consent to participate in this study and had the right to refuse participation or withdraw at any time without implications. At every stage of the study, data privacy and confidentiality were maintained, and no identifying information was contained in any report.

Having established the research methodology and ethical framework, the results section presents the findings derived from the data collection and analysis processes.

4. Results

4.1. Patterns of Question Responses

4.1.1. Acknowledgment Phase

The analysis of acknowledgment patterns revealed how participants initiated their responses to questions during Q&A sessions comparing between 15 groups across Week 8 and Week 16.

Table 2. Expression in the Acknowledgement Phase

Group No.	Acknowledgement phase	
	Week 8	Week 16
1	Thank you for your question.	Thank you for your interesting question.
2	Not found	Thank you for your question.
3	That's a good question	Thank you, Dare, for the insightful question. I appreciated your engagement in our presentation.
5	Thank you for your question.	Not found
6	Interesting point	Thank you, teacher, for your question.
7	A good question	Not found
8	Not found	Thank you, Mr. XX (the name of the questioners) for your question.
9	Not found	Thank you for asking me.
10	Not found	That's a great question.
11	Not found	Thank you for the question.
12	Not found	Thank you for your question.
13	Not found	Thank you, teacher, for your question.

Table 2 shows that among the 15 groups observed, five used acknowledgment phrases in Week 8, increasing to ten by Week 16. However, three groups did not use acknowledgment phrases in either week. These acknowledgment phrases typically included expressions of gratitude, such as "Thank you for your question," "That's a great question," or more personalized acknowledgments like "Thank you, teacher, for your question." However, five groups did not use any acknowledgment, indicating variability in how participants chose to engage during the Q&A phase.

4.1.2. Clarification Phase

The clarification phase analysis examined how participants verified their understanding of questions. This phase revealed varying levels of engagement with question comprehension, as demonstrated in the following observations.

Table 3. Expression in the Clarification Phase

Group No.	Clarification phase	
	Week 8	Week 16
1	Just to clarify….	Not found
2	If I understand correctly…	Not found
5	Do you mean how…	If I understand correctly, you are asking about…
6	Not found	Just to clarify, you are talking about…
8	Not found	If I understand correctly, you are asking about…
11	Not found	Are you asking about…? Am I right?
13	You're asking whether…	Do you mean …?

Table 3 shows that while 15 groups were observed in both Week 8 and Week 16, only seven groups used clarification phrases during the Q&A sessions across both weeks. The results indicate that in Week 8, four groups (Group 1, 2, 5, and 13) demonstrated the clarification phase in their responses. In contrast, by Week 16, five groups (Group 5, 6, 8, 11, and 13) actively engaged in the clarification phase during the Q&A sessions. These participants sought to ensure they correctly understood the questions by using phrases such as "If I understand correctly, you are asking about…," "Just to clarify, you are talking about…," and "Are you asking about…? Am I right?". However, nine groups did not use the clarification phase, highlighting significant variability in how participants approached the Q&A sessions.

4.1.3. Answer Phase

Analysis of the answer phase focused on the clarity and directness of participants' responses during Q&A sessions. The data collected over both observation periods demonstrated participants' ability to provide clear, relevant answers to various types of questions.

Table 4. Clarity and Directness of Participants' Responses in Answer Phase

Group	Week 8		Week 16	
	Clear & Direct?	Remark / Reason	Clear & Direct?	Remark / Reason
1	Yes	The presenter clearly addresses how visual aids have evolved, without digressing.	Yes	The answer directly addresses the question regarding the main findings, providing a clear explanation.
2	Yes	The answer is direct, focusing on why visual aids are effective.	Yes	The presenter directly explains how circular motion visuals aid in understanding.
3	Yes	The response is clear and provides specific examples of how the research can be applied with limited resources.	Yes	The answer directly addresses the research's impact on education by highlighting a new teaching approach.
4	Yes	The answer directly confirms that the study measured long-term effects.	Yes	The presenter provides a clear explanation of how the model can be applied in classrooms.

Group	Week 8		Week 16	
	Clear & Direct?	Remark / Reason	Clear & Direct?	Remark / Reason
5	Yes	The answer is clear, detailing the reliability methods used by the researchers.	Yes	The presenter clearly explains how the researchers ensured reliability, supporting the answer with specific methods.
6	Yes	The presenter directly addresses the potential risks, providing a clear answer.	Yes	The answer is clear, explaining the implications of the findings for teaching practices.
7	Yes	The answer is clear, providing a specific solution to adapting the model for large classes.	No	The presenter hesitates and defers the question, making the answer unclear in addressing the difficulties faced.
8	Yes	The response directly challenges previous assumptions, providing a clear and relevant answer.	Yes	The presenter clearly explains how the research fills a gap in existing literature.
9	Yes	The answer is direct, clearly explaining the method used to validate the data.	Yes	The response is clear and explains the specific method used for data analysis.
10	Yes	The answer is clear and addresses the limitations directly, without any ambiguity.	Yes	The answer is clear, providing a direct explanation of the limitation.
11	Yes	The presenter directly answers the question, providing examples of how the results can be generalized.	Yes	The answer is direct and acknowledges the need for adaptation in different contexts.
12	Yes	The answer clearly explains the method used to minimize bias, providing a direct and detailed response.	Yes	The presenter clearly explains how potential biases were minimized, making the response direct and relevant.
13	Yes	The answer is direct and clearly addresses the significance of teacher feedback on student success.	Yes	The answer is clear and directly explains the significance of the research findings.
14	Yes	The answer is direct, providing a clear suggestion for future research.	Yes	The answer is direct, suggesting specific directions for future research.
15	Yes	The answer is clear and provides a direct suggestion for further research.	Yes	The response is clear and provides a direct answer regarding future research.

From Table 4, most participants maintained clear and direct answers throughout both observation periods. The use of hesitation markers and opinion phrases showed some reduction from Week 8 to Week 16, indicating improved confidence.

4.2. Pragmatic Strategies

The pragmatic strategies used during impromptu Q&A sessions were collected using observation field notes designed to explore the behaviors exhibited by Thai pre-service teachers during these sessions following their presentations. The analysis of the observations was divided into four key

pragmatic strategies: 1) Direct-Response Pragmatics, 2) Indirect-Response Pragmatics, 3) Hedging Pragmatics, and 4) Cultural Pragmatics.

Table 5. Participants' Responses Using Direct-Response Pragmatics

Group	Week 8		Week 16		Direct Strategy Identified
	Question	Response Example	Question	Response Example	
1	How has the use of visual aids evolved?	Visual aids have become more interactive.	What are the main findings of the research?	The majority of students benefit from visual aids.	Direct, clear answers on specific points.
4	Did the study measure long-term effects?	Yes, students exposed to interactive tools showed better retention over time.	Can you explain how this model can be used in a classroom?	The model can be implemented by integrating interactive tools.	Direct confirmation and explanation.
5	How did the researchers ensure the reliability of their findings?	They used triangulation.	How did the researchers ensure that their data collection was reliable?	They used multiple data sources.	Direct affirmation with concise clarification.

Table 5 reveals that in both Week 8 and Week 16, the pre-service teachers exhibited a strong tendency to provide direct and clear responses to questions, particularly when the questions required factual information or specific findings. For instance, in Week 8, responses such as "Visual aids have become more interactive" directly addressed the question without ambiguity, and this trend continued into Week 16 with concise responses like "The majority of students benefit from visual aids." The consistency in providing straightforward answers reflects the pre-service teachers' growing confidence in addressing research-related inquiries and their ability to succinctly convey key points, suggesting an emphasis on clarity in their presentation style.

The analysis of indirect-response pragmatics examined how participants employed tentative language and hedging strategies when expressing opinions or interpretations. The following examples illustrate various approaches to indirect communication observed during Q&A sessions.

Table 6. Participants' Responses Using Indirect-Response Pragmatics

| Group | Week 8 | | Week 16 | | Indirect Strategy Identified |
	Question	Response Example	Question	Response Example	
2	What makes visual aids effective?	I think visual aids that are more dynamic grab attention.	Do you think the use of circular motion visuals helped?	That's an interesting point of view. I believe it helped clarify the concept.	Indirect opinion and subjectivity with personal interpretations.
6	What are the potential risks of focusing too much on student-centered methods?	I think over-relying on student-centered methods could lead to less structured learning.	What are the implications of the findings for teaching practices?	Certainly, the implications include changes in how teachers approach lesson planning.	Indirect response using tentative language.
9	How did the researchers validate the themes in the data?	They used member checking.	What methods did the researchers use to analyze the data?	The qualitative data were analyzed using thematic analysis.	Use of indirect language to provide explanations.

Table 6 revealed that Pre-service teachers frequently employed indirect responses, especially when expressing opinions or interpretations. In both Week 8 and Week 16, phrases such as "I think" or "I believe" were used to soften statements and reflect a more tentative approach. For example, when discussing the effectiveness of visual aids, indirect strategies were used to indicate personal interpretations rather than definitive conclusions. This suggests that the pre-service teachers were careful to avoid overgeneralizing their opinions, instead opting for more cautious and reflective language. This pragmatic strategy allows them to present subjective viewpoints while maintaining a polite and considerate tone.

Hedging pragmatics analysis focused on how participants modulated their degree of certainty when responding to questions. The observations revealed consistent patterns in the use of tentative language, particularly when addressing complex or speculative topics.

Table 7. Participants' Responses Using Hedging Pragmatics

Group	Week 8		Week 16		Hedging Strategy Identified
	Question	Response Example	Question	Response Example	
3	Can this research be applied in classrooms with limited resources?	I believe it can, yes.	What impact does the research have on education?	The research introduces a new approach that could potentially reshape how educators engage with students.	Use of tentative language such as "I believe" and "could."
10	What limitations should be addressed?	One limitation was the focus on a single age group.	What are the limitations of this research?	One potential limitation is the small sample size.	Use of modal verbs like "could" and "potential."
15	What should future researchers focus on?	Future researchers could explore how culture affects student engagement.	What kind of research should be done next?	Further research could explore the long-term impact of interactive learning tools.	Modal verb "could" softens the statements.

Table 7 revealed that Hedging pragmatics played a key role in how the pre-service teachers handled uncertainty or potential limitations in their responses. Throughout both weeks, there was a frequent use of modal verbs like "could" and "might" to reduce the assertiveness of their answers, particularly when discussing future research or limitations. For instance, responses like "Future researchers could explore" and "One potential limitation is" reveal a tendency to avoid making definitive claims, instead offering suggestions or acknowledging uncertainty. This hedging strategy reflects the teachers' awareness of the complexity of educational research and their caution in proposing ideas or interpreting results without overstating their confidence.

The analysis of cultural pragmatics examined the integration of Thai-specific politeness markers in English responses. Observations revealed how participants maintained cultural authenticity while engaging in academic discourse.

Table 8. Results of Participants' Responses Using Cultural Pragmatics

Group	Week 8		Week 16		Cultural Pragmatic Identified
	Question	Response Example	Question	Response Example	
1	How has the use of visual aids evolved?	In my opinion na ka, visual aids have become more interactive.	What are the main findings of the research?	Um, the main findings are... ka.	Use of "na ka" and "ka" as politeness markers in Thai culture.
7	How can this model of interactive learning be adapted for large classes?	I think this model can be scaled up... krub.	Not found	Not found	Use of "krub" in male speaker responses.
11	Can the results be generalized to other subjects?	The strategies could be applied in other subjects krub.	Do you think the results can be applied in other education systems?	The data suggest that while promising, they may need adaptation... krub.	Use of "krub" as a politeness marker.

Table 8 revealed that Cultural pragmatics, particularly the use of politeness markers like "ka" and "krub" (Thai ending particle showing politeness; ka for female and krub for male), were prevalent in both Week 8 and Week 16. These markers, which are integral to Thai communication norms, were used to soften responses and demonstrate respect toward the questioners. For example, phrases like "In my opinion na ka" and "The data suggest... krub" reflect how the pre-service teachers maintained politeness even when answering questions on challenging topics. The consistent use of these cultural markers highlights the importance of respectful and courteous interaction within the Thai educational context, emphasizing that politeness remains a central feature of communication, even in academic settings.

4.3. Gesture Use in Q&A Session

The gestures employed during impromptu Q&A sessions were systematically documented using observation checklists aimed at examining the behaviors displayed by Thai pre-service teachers during these interactions following their presentations. The analysis of these observations was categorized into three key types of gestures based on participant performance: 1) Emphatic Gestures, 2) Illustrative Gestures, and 3) Regulative Gestures.

Table 9. Students' Responses Using Emphatic Gesture in Q&A Sessions

Group	Emphatic Gestures	
	Gesture Observed	Description of Gesture
1	Hand movement	Emphasizing the importance of visual aids becoming interactive.
3	Nodding	Emphasizing belief in adaptability despite limited resources.
5	Slight hand raise	Emphasizing the approach of triangulation to confirm findings.
13	Hand on heart	Emphasizing the significance of findings for student success.

Table 9 shows that emphatic gestures were often used by presenters to emphasize important points in their explanations. In Group 1, for instance, the presenter employed hand movements to highlight how visual aids have evolved. Similarly, in Group 5, the presenter slightly raised their hand to underscore the reliability of data collection methods. These gestures helped add weight to their verbal responses, reinforcing key ideas.

Illustrative gestures were observed as visual supplements to verbal explanations during Q&A sessions. These movements helped participants convey complex concepts and enhance audience understanding of their responses.

Table 10. Participants' Responses Using Illustrative Gesture in Q&A Sessions

Group	Illustrative Gestures	
	Gesture Observed	Description of Gesture
2	Circular motion	Demonstrating the dynamic nature of visual aids.
4	Hands open widely	Illustrating how a model could be implemented in classrooms.
7	Pointing outward	Illustrating the scalability of interactive learning for large classes.
8	Hand gestures drawing a line	Illustrating how technology has shifted to being central in language learning.

Table 10 shows that presenters used illustrative gestures to visually represent the content they were describing. In Group 2, for example, circular hand motions were used to represent dynamic visuals. These gestures added clarity to the explanations by providing a visual component to verbal descriptions, especially when complex concepts were involved, such as scaling models for large classes in Group 7.

The observation of regulative gestures focused on how participants managed conversational flow and timing during Q&A interactions. These purposeful movements served to control pace and facilitated smooth transitions between speaking turns.

Table 11. Students' Responses Using Regulative Gesture in Q&A Sessions

Group	Regulative Gestures	
	Gesture Observed	Description of Gesture
6	Hand raised	Regulating the pace of response, allowing a pause for clarification.
9	Pointing to notes	Directing attention to specific details in the study.
10	Hand stop motion	Regulating speech flow when discussing limitations of research.
12	Hand wave	Indicating completion of explanation and readiness for the next question.

Table 11 shows that regulative gestures were often used to manage the conversation flow and signal pauses or transitions in speech. In Group 6, the presenter raised a hand to regulate the pace of the response, allowing for a brief pause to gather thoughts before continuing. This effectively maintained clarity and ensured the question was answered thoroughly. Similarly, the stop motion in Group 10 helped to pause the discussion when considering limitations.

Analysis of adaptive gestures revealed unconscious movements that participants used to manage anxiety and maintain composure during Q&A sessions. These self-regulating behaviors emerged particularly during challenging or stressful moments of interaction.

Table 12. Results of Participants' Responses Using Adaptive Gestures in Q&A Sessions

Group	Adaptive Gesture	
	Gesture Observed	Description of Gesture
1	Adjusting glasses	Self-soothing while thinking through the answer.
3	Rubbing hands	Relieving nervous tension while discussing adaptability.
5	Playing with pen	Demonstrating slight discomfort while discussing data reliability.
11	Touching chin	Thinking through response about applying results to other subjects.

Table 12 shows that presenters primarily used adaptive gestures to cope with nervousness or stress during the Q&A. For example, in Group 1, the presenter adjusted their glasses when clarifying the question, which seemed to help them manage nervous energy. In Group 3, the presenter rubbed their hands when answering a challenging question about resource limitations, indicating some discomfort but allowing them to maintain composure.

4.4. Perceived Challenges faced by Thai pre-service teachers during impromptu Q&A sessions following presentations

4.4.1. Level of Perceived Challenges

This section presents the findings from data analysis collected from 75 Thai pre-service teachers to explore their perceived challenges during impromptu Q&A sessions following presentations. The analysis focuses on quantitative insights derived from their responses to a structured questionnaire.

Table 13. Challenges Perceived by Thai Pre-Service teachers during Impromptu Q&A Sessions Following Presentations

No.	Statement	*M*	*SD*	Level of Challenges	Rank
1	Nervousness when responding in English	3.73	0.95	High	4
2	Difficulty understanding audience questions	3.08	1.02	Moderate	5
3	Struggles with formulating quick responses	3.81	1.02	High	2
4	Feeling unprepared for unexpected questions	3.81	0.99	High	1
5	Language barriers impacting response effectiveness	3.80	0.93	High	3
6	Lack of confidence in knowledge about the topic	2.97	1.07	Moderate	6
	Average	3.53	0.99	High	

Table 13 highlights four key challenges that Thai pre-service teachers encountered during impromptu Q&A sessions. The most prominent challenge was handling unexpected questions (M = 3.81, SD = 0.99), indicating that participants struggled considerably with spontaneous inquiries that fell outside their prepared content. This challenge was equally matched by difficulties in formulating quick responses (M = 3.81, SD = 1.02), suggesting that even when participants understood the questions, they found it challenging to construct appropriate responses under time pressure. Language barriers emerged as the third most significant challenge (M = 3.80, SD = 0.93), reflecting participants' ongoing struggles with English as their second language, particularly in spontaneous communication scenarios. The fourth major challenge was nervousness (M = 3.73, SD = 0.95), which manifested in various forms of anxiety during the Q&A sessions. All four challenges scored in the "high" range on the challenge scale, with mean scores above 3.51, indicating that these issues posed substantial obstacles to effective Q&A performance. The relatively small standard deviations (ranging from 0.93 to 1.02) suggest consistency in these experiences across the participant group. It's noteworthy that these challenges are interconnected, with language barriers potentially exacerbating nervousness, and the pressure of handling unexpected questions complicating the task of formulating quick responses.

4.4.2. Thematic Content Analysis of Perceived Challenges

Theme 1: Language Barriers and Translation Difficulties

One prominent theme that emerged was the challenge of language barriers and translation difficulties during Q&A sessions. Several participants noted that understanding and translating questions in real-time posed significant challenges. For example, S1 mentioned, "Translating the question in my mind and responding in English slows me down." S2 explained, "Sometimes, unfamiliar words make it hard to answer questions." S4 expressed, "Difficult words made it hard to understand the full question." S5 added, "Translating in my head takes too much time, making me feel pressured." S6 shared, "When faced with difficult vocabulary, I have to think multiple times before responding." S8 mentioned, "Translating the meaning of the question distracts me." S9 commented, "Complex questions make translation and answering difficult." S10 reflected, "Sometimes the question sounds simple but is difficult to translate." S12 said, "I worry about translating correctly before responding." S15 shared, "Instant translation makes me forget key parts of the question."

Theme 2: Anxiety and Nervousness

Another significant theme identified was the feeling of nervousness and anxiety while responding to questions. Many participants indicated that nervousness affected their ability to answer confidently. S3 stated, "I felt nervous and forgot what I had prepared." S7 shared, "Nervousness while responding led to mistakes." S11 explained, "Nervousness in public makes me feel like I cannot answer fully." S13 mentioned, "My hands shake when asked difficult questions." S14 added, "Pressure from the audience makes me stutter." S16 reflected, "Excitement makes me mishear the question." S18 shared, "Fear of giving the wrong answer makes me hesitate." S20 mentioned, "I feel like everyone is watching me when I respond, which stresses me." S22 commented, "Worry slows down my thinking." S25 shared, "I fear being criticized for my answers."

Theme 3: Ineffective Preparation

The analysis also revealed that ineffective or insufficient preparation contributed to the challenges faced during Q&A sessions. S5 admitted, "I rarely prepare in advance, which affects my responses." S8 mentioned that preparation efforts were often not comprehensive enough: "Even with preparation, I did not expect complex questions." S9 said, "Inadequate preparation makes me feel unprepared during the Q&A." S12 reflected, "I only prepare the basics, making it hard to answer in-depth questions." S17 noted, "Sometimes I don't know how to prepare for unexpected questions."

S19 shared, "My preparation doesn't help when faced with complex questions." S21 commented, "I focus more on preparing slides than answers, which leaves me unprepared." S23 explained, "I often spend little time preparing answers, leading to poor responses." S26 shared, "Even with preparation, stress makes me forget what I prepared." S28 added, "I still lack preparation for diverse questions."

Theme 4: Need for Specific Training and Support

Participants consistently emphasized the need for specialized training and support to enhance their performance during Q&A sessions. S2 suggested, "Training focused on answering questions in English would be very helpful." S6 highlighted, "Practicing pronunciation and quick responses would boost confidence." S10 reflected, "Having a coach to help practice responding would make me feel more prepared." S15 noted, "Public speaking training helps reduce nervousness." S18 expressed, "Practicing with realistic Q&A simulations helps a lot." S20 suggested, "Workshops offering advice on how to answer difficult questions would be beneficial." S22 mentioned, "Training programs that emphasize critical thinking and spontaneous response skills would be useful." S24 shared, "I believe continuous practice with peers could greatly improve our confidence." S27 noted, "Guidance from experienced mentors during practice sessions would make a significant difference." S30 concluded, "Training that focuses on both language and strategy would empower us to handle Q&A sessions more effectively."

With the empirical findings now presented, the discussion section interprets these results in relation to the research questions and existing literature, offering insights into their broader significance.

5. Discussion

This study explored the progression of impromptu Q&A presentation skills among Thai pre-service teachers, focusing on their response styles, pragmatic strategies, and gesture use. Key findings revealed notable insights across three primary areas: communication competence, cultural-pragmatic expression, and multimodal communication.

Regarding communication competence, participants exhibited significant growth in acknowledgment strategies (d = 2.06), reflecting an enhanced ability to initiate responses effectively. This improvement aligns with prior research by Mohamad et al. (2023), which emphasizes the value of structured guidance in fostering presenter confidence. However, the limited increase in clarification strategies—from 26.7% to 33.3%—highlights the need for targeted interventions to improve participants' ability to understand and respond to complex questions. The observed use of echoing, reformulating, and verifying during responses indicates progress but also underscores the necessity for continued training.

While not a primary objective of this study, the observed improvements in acknowledgment strategies, clarification abilities, and overall response effectiveness over the 16-week course period suggest a positive effect of the English presentation course on participants' English usage levels. This unintended finding indicates that structured training may enhance not only the specific impromptu Q&A skills targeted in this research but also broader language proficiency. For instance, the increase in acknowledgment phrases from 5 to 10 groups (see Table 2) and the statistically significant growth in acknowledgment strategies (d = 2.06) reflect enhanced fluency and confidence in English communication, which were incidental benefits of the course.

Cultural-pragmatic expression played a prominent role in participants' communication. Thai politeness markers appeared in 94.7% of responses, supporting Rumpanpetch's (2017) assertion that culturally authentic discourse strengthens professional interactions. These markers contributed to respectful and effective engagement, demonstrating that cultural nuances can enrich rather than hinder communication.

The study also revealed advanced use of non-verbal communication, particularly emphatic gestures (M = 4.2/5.0), which reinforced key points and added depth to spoken responses. This finding aligns with Burgoon et al.'s (1990) theory that non-verbal elements enhance speaker credibility and persuasion. Illustrative gestures helped clarify complex ideas, while regulative gestures ensured smooth conversational flow. However, the frequent use of adaptive gestures, such as self-soothing behaviors, indicated underlying anxiety, suggesting the importance of addressing emotional regulation within presentation training.

Several limitations of this study warrant discussion. The single-institution context and predominantly female sample (77.3%) may limit the broader applicability of the findings. Additionally, the 16-week observation period may be too brief to capture sustained skill development. Potential observer bias during gesture analysis and the influence of social desirability on self-reported data should also be considered. Addressing these limitations in future studies could strengthen the validity and reliability of findings.

Future research should consider longitudinal designs that span multiple institutions to offer a more comprehensive view of impromptu Q&A skills. Examining the transferability of these abilities to virtual and professional settings could provide further insights. Employing advanced measurement tools, such as eye-tracking and real-time response analysis, may also enrich the understanding of spontaneous communication behaviors.

Based on the interpretations provided in the discussion, the conclusion synthesizes the study's key findings and their contributions to the field of teacher education.

6. Conclusion

The results of this study underscore the importance of fostering impromptu Q&A presentation skills within culturally specific contexts. The observed improvements in acknowledgment strategies and non-verbal communication, combined with the effective use of cultural-pragmatic elements, suggest that structured training can significantly enhance spontaneous speaking abilities. Additionally, although not explicitly part of the research objectives, the study noted developments in participants' English usage levels over the 16-week course period, as evidenced by their improved ability to handle impromptu Q&A sessions with greater fluency and confidence. These findings affirm the relevance of communication competence frameworks that account for both linguistic proficiency and cultural context, highlighting the broader impact of the English presentation course.

The study's implications for teaching and curriculum design are noteworthy. Theoretically, the findings challenge the notion that presentation frameworks are universally applicable, advocating instead for an inclusive model that embraces cultural diversity in communication norms. Pedagogically, the results highlight the need for teacher education programs to incorporate explicit instruction in pragmatic and spontaneous interaction strategies. Assessment methods should balance technical accuracy with cultural appropriateness to provide a comprehensive evaluation of communication competence.

For professional development, institutions should establish support systems that extend beyond initial training, such as peer-led practice groups and mentoring sessions. These programs should focus on both language use and cultural adaptability, equipping teachers with the necessary tools for effective and context-sensitive communication. Additionally, resource allocation should prioritize ongoing skill enhancement rather than short-term interventions.

Considering these factors, teacher education programs can better prepare pre-service teachers for impromptu communication, fostering greater confidence and competence in both academic and professional contexts.

To build on the study's conclusions and extend its implications, the following section offers suggestions for future research and professional development initiatives.

7. Suggestion

Based on the findings of this study, the following suggestions are proposed for future research, theoretical development, pedagogical practices, and professional development. These recommendations are directly informed by the observed response patterns, pragmatic strategies, gesture use, and perceived challenges of Thai pre-service teachers during impromptu Q&A sessions following presentations.

For future research directions, the study observed an increase in acknowledgment phrases from 5 to 10 groups (Table 2) and a statistically significant improvement in acknowledgment strategies (d = 2.06) over 16 weeks. However, clarification strategies showed only a modest increase (from 26.7% to 33.3%). Future research should adopt longitudinal designs spanning multiple semesters to assess whether these improvements persist or if further gains occur in acknowledgment, clarification, and overall response effectiveness over time.

In the aspect of theoretical implication, the prevalent use of Thai politeness markers (e.g., "na ka," "krub," Table 8) in 94.7% of responses demonstrates that cultural norms enhance communication effectiveness. Theoretical models of communication competence should be revised to incorporate cultural pragmatics as a core component, particularly in multicultural or EFL contexts, challenging assumptions of universal presentation skills and reflecting the study's evidence of culturally authentic discourse.

In addition, for the pedagogical reform, while acknowledgment strategies improved significantly (Table 2), clarification strategies showed limited progress (Table 3, 26.7% to 33.3%). Teacher education programs should include explicit instruction focusing on both acknowledgment (e.g., "Thank you for your question") and clarification techniques (e.g., "If I understand correctly…"), addressing areas of uneven development identified in the study. The frequent use of emphatic (Table 9), illustrative (Table 10), and regulative gestures (Table 11) enhanced verbal responses. Curricula should incorporate training on leveraging these gesture types to reinforce key points, clarify concepts, and manage conversational flow during presentations and Q&A sessions.

Last but not least, for the professional development, the study identified high-level challenges, including nervousness (M = 3.73), language barriers (M = 3.80), and ineffective preparation (M = 3.81, Table 13). Professional development programs should offer workshops on anxiety management (e.g., breathing techniques), quick response formulation, and strategies to overcome language barriers, targeting these prevalent issues. The effective integration of cultural pragmatics (Table 8) and the need for specific training (Thematic Analysis, Theme 4) suggest that mentoring programs should focus on developing context-appropriate communication strategies. Mentors can guide teachers in blending cultural politeness with English proficiency, enhancing professional discourse in diverse settings.

Declarations

References

Alisoy, H., & Oglu, H. (2024). Navigating impromptu speaking: Strategies for successful spontaneous conversations. *Journal of Interdisciplinary Science, 2*(1), 1-8. http://eprints.umsida.ac.id/13250/

Arya, T. (2022). Exploring discourse marker use in Thai university students' conversations. *LEARN Journal: Language Education and Acquisition Research Network Journal, 13*(1), 247- 267. https://so04.tci-thaijo.org/index.php/LEARN/article/view/237854/162854

Best, J. W. (1977). *Research in Education*. (3rd ed.). Prentice-Hall.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Burgoon, J. K., Birk, T., & Pfau, M. (1990). Nonverbal behaviors, persuasion, and credibility. *Human Communication Research, Human Communication Research 17*(1), 140–169. https://doi.org/10.1111/j.1468-2958.1990.tb00229.x

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). SAGE Publications.

Deda, N. (2013). The role of Pragmatics in English Language Teaching. Pragmatic Competence. *Academic Journal of Interdisciplinary Studies, 2*(4), 63-70. http://dx.doi.org/10.5901/ajis.2012.v2n4p63

Dörnyei, Z. (2017). *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies*. Oxford University Press.

Dörnyei, Z., & Taguchi, T. (2009). *Questionnaires in Second Language Research: Construction, Administration, and Processing* (2nd ed.). Routledge.

Ellederová, E. (2023). Rhetorical strategies used by information Technology students in In-Class presentations. *IAFOR Journal of Education, 11*(1), 121–141. https://doi.org/10.22492/ije.11.1.07

Hanifa, R., & Yusra, S. R. (2018). Insight on Delivering Oral Presentation: Preparations, Problems, and Solutions. *International Journal of Learning and Teaching, 4*(4). 318–325. https://doi.org/10.18178/ijlt.4.4.318-325

Inpeng, S., & Nomnian, S. (2022). Facebook as a Promotional Took for Learner Autonomy: Thai Pre-Service EFL Teachers' Voices. *TEFLIN Journal, 33(*2), 292-390. https://doi.org/10.15639/teflinjournal.v33i2/292-309

Karanjakwut, C. (2018). An Investigation of Linguistic and Localised Features of Thai in English Writing on Facebook Closed Group. *Advances in Language and Literary Studies, 9*(6), 1-8. https://doi.org/10.7575/aiac.alls.v.9n.6p.1

Konchiab, S., & Munpanya, P. (2021). Investigating Thai EFL undergraduates' oral presentation performances and experiences, using teacher and student self-assessments. *Thai TESOL journal, 34*(1). 96-117. https://eric.ed.gov/?id=EJ1304645

Lacsina, N. E. H. (2020). Teacher feedback: impact on students' impromptu speech. *Hawaii Journal of Humanities, 1*(1) 125-146. http://hdl.handle.net/20.500.14131/676

Lumettu, A., & Runtuwene, T. L. (2018). Developing the students' English speaking ability through impromptu speaking method. *Journal of Physics: Conference Series*, 1-9. https://doi.org/10.1088/1742-6596/953/1/012035

Mardiningrum, A., & Ramadhani, D. R. (2022). Classroom oral presentation: Students' challenges and how they cope. *Eralingua: Jurnal Pendidikan Bahasa Asing dan Sastra, 6*(1), 103-119. http://dx.doi.org/10.26858/eralingua.v6i1.28487

McNeill, D. (2008). *Gesture and Thought*. University of Chicago Press.

Mergler, A. G., & Spooner-Lane, R. (2012). What pre-service teachers need to know to be effective at values-based education. *Australian Journal of Teacher Education, 37*(8), 66-81. https://doi.org/10.14221/ajte.2012v37n8.5

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation* (4th ed.). Jossey-Bass.

Mhuentoei, R. (2023). Public speaking anxiety of Thai undergraduates comparing online presentation and onsite presentation. *New English Teacher. 17*(1). 1-28. http://www.assumptionjournal.au.edu/index.php/newEnglishTeacher/article/view/5963/3636

Mohamad, A. R., Fakhruddin, W. F. W. W., & Sazalli N. A. H. (2023). Investigating speaking anxiety among pre-service ESL teachers in oral presentation. European Proceedings of Educational Sciences 2023. *International Conference of Research on Language Education.* 424-434. http://dx.doi.org/10.15405/epes.23097.38

Morse, J. M., & Niehaus, L. (2016). Mixed method design: Principles and procedures. Routledge.

Mortaji, L. E. (2018). Effects of sustained impromptu speaking and goal setting on public speaking competency development: A case study of EFL college students in Morocco. *English Language Teaching, 11*(2), 82-98. https://doi.org/10.5539/elt.v11n2p82

Phu-Ngamthong, T. (2023). *The Effects of Project-based Drama Approach via Blended Learning Environment on Thai EFL Undergraduated Student's Speaking Skills.* [MA Thesis, Chulalongkorn University]. https://doi.org/10.58837/chula.the.2020.188

Rumpanpetch, T. (2017). Thai secondary school teachers' perception of English oral presentation techniques and abilities. Proceedings of the European Conference on Language Learning 2017. *The International Academic Forum.* https://papers.iafor.org/wp-content/uploads/papers/ecll2017/ECLL2017_37336.pdf

Tipmontree, S., & Tasanameelarp, A., (2021). Using role playing activities to improve Thai EFL students' oral English communication skills. *International Journal of Business and Society, 21*(3), 1215–1225. https://doi.org/10.33736/ijbs.3345.2020

About the Contributor(s)

Arnantawut Tiang-uan began working as an English lecturer at Bansomdejchaopraya Rajabhat University in 2023. He obtained a Master of Arts in Career English for International Communication conferred from Thammasat University and a bachelor's degree in English from Bansomdejchaopraya Rajabhat University, Bangkok, Thailand. His areas of interest include 1) Teaching English with technology, 2) English presentation, and 3) English for specific purposes. He also had experience teaching English in a basic education school and at the university level.
Email: arnantawut.ti@bsru.ac.th
ORCID: https://orcid.org/0009-0004-4770-0183

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