

Strategic Questioning in Multilingual Classrooms: Cognitive Demands, Language Use, and Student Responses in English Language Instruction

LISETTE PILAPIL & JOAN GENEROSO

Department of English and Literature
Silliman University

ABSTRACT

Strategic questioning is essential for promoting interactive and effective English language teaching and learning. This qualitative study examined the questioning techniques employed by English language teachers and the corresponding responses of multilingual students during classroom interactions. Grounded in Bloom's Taxonomy, Sociocultural Theory, and the Interactionist Theory of Second Language Acquisition, the study analyzed question types, student responses, and language choices across cognitive levels. Data were collected from classroom observations involving four English language teachers and 200 students at Western Mindanao State University. Results revealed a strong emphasis on higher-order thinking, with analysis-level questions most frequently used (95.4%), followed by comprehension (73.8%) and evaluation (70.2%). Application (18%), inference (1.8%), and synthesis (0%) questions were underutilized, indicating limited engagement with these domains. Lower-order questions typically elicited brief, factual responses, while higher-order questions generated more elaborate and reflective answers. Student silence and minimal participation were common in response to inference and synthesis tasks. Language-use patterns showed that teachers primarily used English when posing cognitively demanding questions, whereas students often responded in Taglish, particularly during analysis and evaluation. This suggests that students employ Taglish as a cognitive strategy to navigate linguistic and conceptual challenges. The findings highlight the need for more balanced questioning strategies, especially in application, inference, and synthesis. The study recommends targeted professional development, curriculum revisions to include project-based tasks, and further research into multilingual language use in classroom discourse.

Keywords: *strategic questioning, multilingual classrooms, cognitive demands, language use, student responses*

INTRODUCTION

In today's dynamic English language classrooms, the selection of effective instructional strategies is crucial for supporting linguistically diverse learners. Magdato and Satparam (2023) underscore that successful language learning hinges on

meaningful, collaborative, and interactive methods. Students flourish in environments that spark their interests and maintain engagement through interactive experiences. Rivers (1987) argued that interaction empowers learners to apply their knowledge in real-life contexts and utilize language in versatile ways. Similarly, Brown (2020) has emphasized that interaction fosters interpretation, negotiation of meaning, and collaboration, establishing it as a foundational element of classroom communication.

One of the most effective strategies for cultivating interactive learning environments is the use of strategic teacher questioning. This technique directs discourse and shapes interactions to align with pedagogical goals. Brown (2007) highlighted that effective language teachers initiate engaging dialogues through purposeful questions. Xia (2020) described questioning as a fundamental scaffolding strategy that extends throughout the instructional process. By varying question types such as open-ended, closed, and follow-up, teachers promote critical thinking and nurture student-centered interactions. The impact of questioning goes beyond participation; it enriches understanding. Ho (2005) reported that classroom questioning encourages constructive dialogue, while Smith and Lewis (2018) found it to be central to teachers' conversational practices. When students are encouraged to justify, elaborate, and clarify their responses, questioning shifts into a collaborative process for constructing knowledge (Creemers & Kyriakides, 2006; Yang, 2010).

Furthermore, thoughtfully crafted questions can guide learners' focus toward both language form and lesson content (Tan, 2007; Arifin, 2012). Process-oriented questions, which require students to articulate their reasoning or apply their knowledge, foster deeper cognitive engagement (Creemers & Kyriakides, 2006). In second-language classrooms, effective questioning serves to lower the affective filter (Christenbery & Kelly, 1991), fosters dialogue (Kinsella, 1991), facilitates real-time instructional adjustments, and promotes reflection (Christenbery & Kelly, 1991; Kinsella, 1991). Consequently, it is essential to examine not only the frequency of questions posed but also their types and the nature of the resulting student responses.

Empirical evidence emphasizes the significant role of questioning in educational settings. For instance, Abudi and Gallardo (2024) discovered that incorporating a variety of question types notably enhances critical thinking and student engagement in

junior high classrooms. In contrast, research by Magdato and Satparam (2003) revealed that pre-service teachers often face difficulties in formulating higher-order questions, highlighting the necessity for professional development in this area. Postman (1999) succinctly articulated this concept: “Wisdom means knowing what questions to ask about knowledge.”

This research specifically involves multilingual students enrolled in Purposive Communication courses at Western Mindanao State University (WMSU), one of the largest and oldest universities in the region, located in Zamboanga City, Philippines. These students are generally characterized by their diverse cultural and linguistic backgrounds, speaking local dialects, Tagalog, Cebuano, or Chavacano, alongside English and Taglish. In Zamboanga, the linguistic profile is highly multilingual, with a mixture of Filipino languages, indigenous dialects, and a widespread use of Tagalog and English due to historical and educational influences. WMSU, situated in this context, reflects a community where language practices are fluid, and code-switching, especially Taglish, is common among students and educators alike.

The participants are primarily college-aged students enrolled in Bachelor of Arts and Bachelor of Science programs taking Purposive Communication, whose English proficiency ranges from limited to advanced. Their multilingual repertoire influences how they interpret and respond during Purposive Communication classroom interactions, often employing Taglish as a strategic tool to navigate linguistic and conceptual challenges.

The Purposive Communication course, it is designed to develop students' communication skills for varied real-world contexts, emphasizing critical thinking, ethical considerations, and effective information dissemination. The course includes activities such as presentations, discussions, reflection papers, and debates that require students to articulate ideas coherently and critically.

Teachers' questioning strategies are deliberately aligned with these activities, aiming to stimulate deeper cognitive processing, facilitate interactive discussions, and promote critical engagement. For example, during group discussions or presentations, questions might aim to clarify reasoning (comprehension), push students to analyze or evaluate their ideas, or apply concepts to real-life situations. These questions are integral

to nurturing the course's overarching goal: to produce competent communicators who can think critically and articulate their perspectives effectively.

The activities, such as analysis of cases, reflection on societal issues, or planning communication campaigns, are designed to foster higher-order thinking skills in line with Bloom's Taxonomy. Teachers' questions serve to guide these activities, prompting students to elaborate on their responses, justify their opinions, and synthesize information from various sources, all within the multilingual and culturally rich classroom environment. This contextualizes the questioning approach as not merely an assessment technique but as an instructional scaffold to deepen engagement and align classroom discourse with the course objectives.

Within multilingual contexts, such as the Western Mindanao State University (WMSU) in Zamboanga City, these challenges are even more pronounced. Educators must navigate diverse proficiency levels and cultural expectations. However, research focused on how questioning strategies are adapted for multilingual groups remains limited. This study aimed to fill this gap by examining the questioning techniques employed by English language teachers, as well as the responses and language choices of multilingual students during essential classroom interactions. The goal was to investigate the questioning methods utilized by English language instructors and to evaluate how multilingual students responded, including an analysis of the language choices made by both teachers and students across various cognitive levels of questioning.

Research Questions

1. What types of questioning techniques do English language teachers commonly use when interacting with multilingual students in the classroom?
2. How do multilingual students respond to different types of teacher questions in English language classroom interactions?
3. How does the language choice of teachers and students vary across different cognitive levels of classroom questioning?

LITERATURE REVIEW

Krashen's Monitor Model suggests that spontaneous language production arises from implicit acquisition, which is enhanced by exposure to comprehensible input (Krashen, 1982). While this model emphasizes the significance of input, later theories have broadened its perspective. In particular, the Interaction Hypothesis (Long, 1996; Gass & Mackey, 2007) emphasizes the crucial role of meaningful interaction, particularly through the negotiation of meaning. When learners face communication breakdowns, their efforts to resolve misunderstandings facilitate the internalization of complex linguistic structures.

The concept of interaction in second language acquisition (SLA) is typically framed through three fundamental components: input, negotiation of meaning, and output. Initially, learners receive linguistic input through teacher talk or peer discussions, which encompasses both positive evidence (grammatically correct language use) and negative evidence (feedback or reformulations). This input makes a significant contribution to language development. Comprehensible input, often described as "i+1" (Krashen, 1982), refers to language that is slightly more advanced than the learner's current proficiency but is made accessible through context or support.

Krashen's theories, particularly the Monitor Model and the concept of comprehensible input, are highly relevant to the Purposive Communication course, which aims to develop students' ability to express themselves effectively in various communicative contexts. In this context, Krashen's emphasis on *comprehensible input* suggests that students learn and improve their language proficiency when they are exposed to language that is slightly above their current level but made understandable through context, visual aids, or instructional support. In the Purposive Communication course, teachers facilitate this by providing stimuli—such as guided questions, examples, or scaffolding activities—that help students process and internalize new language structures and concepts necessary for proficient communication.

Krashen's notion of the *natural order of language acquisition* underscores the importance of a low-anxiety environment where students can experiment with language

freely, minimizing the fear of making mistakes. This aligns with the course's objective of encouraging students to express opinions, ideas, and arguments without fear of immediate correction, fostering a more open and student-centered environment.

Furthermore, the *Monitor Hypothesis*—which states that conscious learning (like grammar rules) serves as a potential ‘monitor’ or editor for language production—indicates that students benefit from opportunities to practice language in meaningful ways. In Purposive Communication, teacher questioning plays a pivotal role by providing such meaningful opportunities. Teachers guide students to reflect, elaborate, and clarify their ideas, helping them develop both fluency and accuracy over time.

Finally, Krashen's emphasis on *meaningful interaction*—where learners negotiate meaning and seek understanding—directly supports the pedagogical approach of the course. Teachers' questions are designed not just to assess knowledge but to provoke rich, contextualized communication that allows students to actively use language, negotiate meaning, and build confidence in their expressive abilities. Krashen's theories highlight the importance of supportive, contextualized, and interactive learning environments—core principles of Purposive Communication—that enable students to articulate their thoughts effectively with teacher-mediated support, ultimately fostering genuine language acquisition and confident expression.

The second component, negotiation of meaning, acts as a crucial mechanism in converting input into intake. This process involves strategies such as clarification requests, comprehension checks, and confirmation checks (Long, 1996). Such interactions encourage learners to modify their language use and focus on form, thereby refining their interlanguage. Ultimately, output plays a vital role. Swain (1985) argues that language production prompts learners to shift their focus from solely attending to meaning to also considering linguistic form. This productive engagement fosters deeper cognitive processing and promotes syntactic development.

In classroom contexts, the questioning strategies employed by teachers are pivotal in fostering interaction. According to Brown (1996), teacher-initiated questions not only sustain classroom discourse but also enhance communicative engagement. Effective questioning promotes comprehension, stimulates cognitive processes, and encourages student participation. Several researchers have pinpointed essential components of

effective questioning. Magdato and Satparam (2023), Ravi et al. (2014), and Zulueta (2006) emphasized that questions should align with lesson objectives, be pertinent to the learners' context, and display grammatical accuracy and clarity. Furthermore, Christenbury and Kelly (1983) and Kinsella (1991) identified four key pedagogical functions of teacher questioning: (1) to elicit student speech without requiring initiation, (2) to encourage peer interaction, (3) to guide teacher feedback, and (4) to assist students in constructing their understanding.

The cognitive aspect of teacher questioning is often rooted in Bloom's Taxonomy (Bloom, 1956; Anderson & Krathwohl, 2001), which categorizes questions into six cognitive levels: remembering, understanding, applying, analyzing, evaluating, and creating. These levels offer a structured approach to developing students' intellectual capabilities and language proficiency. Recent research by Niza (2024) has classified teachers' strategies into question-planning (e.g., closed, open-ended, display, yes/no questions) and question-controlling strategies (e.g., modifying or repeating questions, selecting specific students). These practices have been shown to sustain learner interest, promote spontaneous responses, and verify comprehension.

Further supporting this perspective, Abudi and Gallardo (2024) observed a positive correlation between higher-order questioning, grounded in Bloom's Taxonomy, and the development of critical thinking skills among students. Such cognitively demanding questions encouraged learners to analyze, evaluate, and justify their ideas, leading to a deeper engagement with the material. Similarly, Pandey (2022) noted that Nepalese EFL teachers frequently preferred divergent questioning to foster multiple perspectives and enhance student agency during instruction. These questions were instrumental in stimulating discussion, monitoring learning, and encouraging reflective thinking. Additionally, Muico, Guino, and Mamulang (2022) confirmed that questioning, when aligned with learning objectives, enhances both content delivery and critical thinking. Drawing on various studies, they concluded that effective questioning clarifies instruction, promotes cognitive engagement, and supports a deeper understanding of the content.

Collectively, these studies demonstrate that thoughtfully designed questioning strategies, when applied interactively, can significantly enhance classroom interaction,

foster critical thinking, and facilitate meaningful language learning among multilingual students.

Theoretical Framework

This study was grounded in three complementary theoretical perspectives: Bloom's Taxonomy of Educational Objectives, Vygotsky's Sociocultural Theory, and the Interactionist Theory of Second Language Acquisition (SLA). Together, these frameworks offer a multidimensional lens for analyzing teacher questioning strategies and student responses in multilingual English language classrooms.

Bloom's Taxonomy, originally developed by Bloom et al. (1956) and later revised by Anderson and Krathwohl (2001), provides a hierarchical model of cognitive processes that guide educational objectives. The taxonomy delineates six cognitive levels: remembering, understanding, applying, analyzing, evaluating, and creating. In classroom practice, teacher questions are key tools for engaging students across these levels. As Brown (2000) notes, questions that align with higher-order thinking skills can foster critical thinking and deeper comprehension. Within multilingual settings, where learners vary in linguistic proficiency, the taxonomy offers a structured framework for designing cognitively appropriate and linguistically accessible questions.

Vygotsky's Sociocultural Theory (1978) emphasized the centrality of social interaction and cultural context in the development of cognition and language. A core concept of this theory is the *Zone of Proximal Development* (ZPD), which refers to the range between what learners can do independently and what they can achieve with guided support. In the classroom, teacher questioning acts as scaffolding that supports learners' movement through their ZPD. Through dialogic interaction, teachers co-construct meaning with learners, enabling them to engage with content beyond their current independent capabilities. This perspective is especially relevant for multilingual classrooms, where scaffolding through questioning can mediate both language development and conceptual understanding.

Complementing the sociocultural lens, the Interactionist Theory of Second

Language Acquisition (Long, 1996; Gass, 1997) underscores the role of meaningful interaction in facilitating language learning. According to this theory, language acquisition is promoted through negotiated interaction, where learners are prompted to clarify, confirm, or reformulate utterances in response to communication breakdowns. Teacher questions that encourage elaboration, clarification, and reasoning can stimulate such negotiation processes. In multilingual classrooms, where students often bring diverse linguistic repertoires and varied exposure to English, these interactional opportunities are particularly critical for supporting linguistic and cognitive development.

Together, these three theoretical perspectives form an integrated framework for examining teacher questioning in multilingual English language classrooms. Bloom's Taxonomy guides the analysis of cognitive demand in questions; Vygotsky's theory provides insight into the social and developmental dimensions of learning through scaffolding; and the Interactionist Theory highlights the linguistic benefits of negotiated meaning. This theoretical triangulation supports a holistic understanding of how questioning strategies can be employed to enhance interaction, critical thinking, and language acquisition among diverse learners.

Collectively, these theories serve as a conceptual foundation for addressing the research questions and analyzing the role of teacher questioning in multilingual language education.

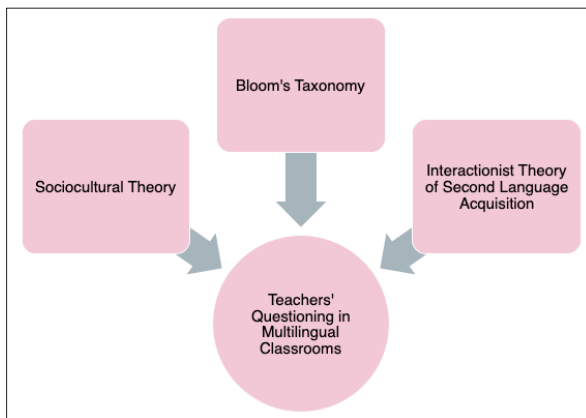


Figure 1. *Theoretical Framework*

METHODOLOGY

This is a qualitative case study using classroom observation and thematic analysis. It employed convenience sampling with four English teachers and approximately 200 students from Purposive Communication classes at Western Mindanao State University (WMSU).

Two observation tools were used: (1) a Questioning Strategy Checklist (adapted from Bloom, 1956; Kinsella, 1991) and (2) a FLINT-based Response Checklist (Moskowitz, 1971; Brown, 2020). Each class was observed for a full session, and data collection included video recordings and field notes, which were later transcribed and translated. Non-English student responses (e.g., Taglish, Tagalog, Cebuano, Chavacano, or other Philippine local languages used by students) were translated into English for analytic consistency.

Questions were coded and categorized using Bloom’s Revised Taxonomy, while student responses were analyzed through the FLINT system. Language use was examined across cognitive levels via thematic coding. Ethical protocols were followed throughout the study: permissions were secured, informed consent was obtained, and anonymity was ensured.

RESULTS AND DISCUSSION

Table 1 categorizes teacher questions using Bloom’s Taxonomy levels. Each type was described, exemplified, and quantified by frequency (f), percentage (%), and rank.

Table 1.
Common Types of Questioning Techniques of English Language Teachers

Types of Questions	Description	Code	Samples of Teachers’ Questions during Classroom Interactions	f	%	Rank
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Knowledge	Eliciting factual answers, testing recall and recognition of information	K	-Are you familiar with impromptu speaking? -What is the dictionary meaning of the word imeldific?	36	64.9	4
Comprehension	Interpreting, extrapolating	C	-What does it mean to know your subject backward and forward? -There is a structure to public speaking, di ba? Ano ba ang sinasabi ng model?	41	73.8	2
Application	Applying information heard or read to new situations	AQ	-How do we introduce our topic? -What is the second process of public speaking?	10	18.0	5
Inference	Forming conclusions that are not directly stated in instructional	I	-Bakit hindi niya alam and kanyang sasabihin?	1	1.8	6
Analysis	Breaking down into parts, relating parts to the whole	AN	-What are the indications showing or instilling that the speaker is not ready for her presentation? -What is the impact of technology on communication?	53	95.4	1
Synthesis	Combining elements into a new pattern	S		0	0.0	7
Evaluation	Making a judgement of good and bad, right or wrong, according to some set of criteria, and stating why.	E	-What do you suggest if the speaker does not know his subject matter? - What should have been done to better the presentation?	39	70.2	3

The result indicated that the most frequently used question type was analysis (AN), which ranked first with a frequency of 53 (95.4%). This dominant use of analytical questions suggested that teachers emphasized critical thinking and problem-solving, encouraging students to explore cause-and-effect relationships or underlying meanings in the content. This question type in Bloom's Taxonomy (Brown, 2020) is defined as the fourth highest level of the thinking process, which involves breaking down information into its components. It involved more complex cognitive processes. This, too, is called a divergent type of question (Pandey, 2022), a higher-quality question (Ravi et al., 2024), or a higher-order thinking skill question (Krathwohl & Anderson, 2001). All these pertain to questions that are open-ended and require creative thinking, as well as varied and multiple responses (Loewen, 2014). This is reflected in the teachers' questions, such as "What are the indications showing or indicating that the speaker is not ready for her presentation?" This required the students to compare the actual presentation with a standard or expected structure of public speaking. It entails identifying facts, detecting omissions, or spotting relationships. Another, "What is the impact of technology on communication?" This type of question prompted students to think critically, not just recall facts, but also to explain or analyze the effects or consequences of technology on communication.

Another analysis question that a participant used in the English language classroom was, "What are the factors that contribute to misunderstanding in communication?" This is an example of a causal question or a problem identification question, which seeks to explore the reasons or causes behind a communication breakdown. It was also considered an open-ended question that encouraged students to provide detailed and reflective answers. These characteristics of the analysis-type of question were applied to the 53 questions that the participants in this study used in teaching English to multilingual students. Krathwohl and Anderson (2001) further emphasized that analysis questions encouraged students to think outside the box. The question enabled students to analyze options and possibilities, ultimately arriving at a sound argument or answer to the given question. This finding is also in line with the study by Pandey (2022), which revealed that although teachers utilize both divergent and convergent questions, they tend to prioritize divergent ones. The participants

believed that this type of question is important in ELT classrooms, as it permits the exploration of multiple ideas. This is also congruent with the study by Ravi et al. (2024), wherein higher-quality questions are given importance, as these reignite learners' curiosity and stimulate the development of critical thinking skills.

Comprehension was ranked 2, with a frequency of 41, 73.8 percent. In Bloom's Taxonomy (Brown, 2020), it is the second lowest thinking level; however, it is seen as a foundation for higher-level thinking skills. It is emphasized that higher levels of thinking skills frequently require the application of skills required at lower levels, like comprehension (Brown, 2020). Moreover, this type of question (comprehension) tests understanding by asking students to explain or interpret the material. For example, *"What does it mean to know your subject backward and forward?"* This type of question asks students to interpret or explain the meaning of the phrase in their own words. The question does not ask for factual recall but for understanding. It encourages students to paraphrase or provide a more profound meaning to the expression. This is also true of other examples of questions of this type, such as *"There is a structure to public speaking, di ba? Ano ba ang sinasabi ng model?"* *"What is impromptu speaking?"* *"What are they advancing or teaching in this particular technology?"* *"What can you say about technology?"* A high frequency of comprehension questions indicated an effort to ensure that students grasp meaning, not just memorize it. Bloom's Taxonomy (Anderson & Krathwohl, 2001) categorizes comprehension as a cognitive level above simple recall. Teachers ask comprehension-level questions aimed at helping students interpret, summarize, or explain, which supports a more profound understanding. Walsh and Sattes (2011) likewise advocate for quality questioning as a tool to drive deeper thinking and real understanding. They stressed that comprehension questions promote student reflection and dialogue.

Evaluation ranks 3rd with a frequency of 39, or 70.2 percent. This means that the teacher participants likewise considered this type of question in their teaching. In the revised version of Bloom's Taxonomy (Anderson & Krathwohl, 2001), evaluation is the second-highest cognitive process category, just below "Create." It is defined as making judgments based on criteria and standards through checking and critiquing. This involves assessing the value of ideas, materials, or methods by

referencing specific standards or criteria and may include activities such as critiquing, judging, justifying, validating, and prioritizing. For example, *“What do you suggest if the speaker does not know his subject matter?”* By asking this question, the teacher encourages higher-order thinking by allowing students to express their opinions and make informed judgments. Also, in this example, *“What should have been done to better the presentation?”* This question involved making a judgment based on criteria or standards. It asked students to assess the quality or effectiveness of a presentation and suggest improvements. Another question of this type was: *“What are the benefits and risks offered by this technology?”* *“What are the things that you consider cool? Paano daw ang expression pag ito ang nangyari?”* *“How will you react to this situation?”* These are open-ended questions that require students to think critically by weighing the pros and cons, justifying and validating their ideas, and expressing their thoughts about the Question.

Knowledge was moderately used, which was ranked 4, with a frequency of 36 (64.9%). This meant that the participants of this study did not focus much on this type of questionnaire. However, as the results suggested, this was not entirely ignored since 64.9 percent of the questions had been utilized during class interactions. Examples of this type of question used by English language teachers in teaching include the following: *“Are you familiar with impromptu speaking?”* *“What is the dictionary meaning of the word imeldific?”* *“Wala siyang Twitter? Ano yung Twitter?”* *“She/ He does not have Twitter? What is Twitter?”* *“What did he say?”* This question type, according to Brown (2020), focuses on eliciting factual answers and testing recall and recognition of information. Nonetheless, it forms a substantial part of the teaching process, indicating a foundation-building and critical inquiry.

The least used types of questions were application (AQ), ranked 5 with a frequency of only 10 (18.0%). This type involved applying learned content to real-life or hypothetical contexts. An example of this is, *“How do we introduce our topic?”* *“What is the second process of public speaking?”* The low percentage suggests that students may have fewer opportunities to apply their knowledge in real-world settings. According to studies (Walsh & Sattes, 2011; Chin, 2007; Gall, 1970, 1984), teachers are less inclined to this type of questions because of time constraints in covering the topic

for the class period, fear of losing control of the classroom discussion, or reference for questions with quick, factual answers.

Inference and synthesis were not considered as questioning techniques during classroom interactions, as evident in the results. Inference (I) was ranked 6 (1.8%) with a frequency of only 1. This type of question involves drawing conclusions from implicit information. There was only one question of this type extracted from the classroom observation, which is, "*Bakit hindi niya alam ang kanyang sasabihin? [Why does he not know what to say?]*" The rare use might indicate limited emphasis on reading between the lines or inferential thinking, which are also critical skills. In the same way, synthesis (S) was ranked 7, with zero frequency (0.0%). This meant that this was not utilized throughout the lesson proper. This type involves creating new ideas or products by combining various elements. The absence of synthesis questions reveals a gap in creative or integrative thinking tasks, which are important for full cognitive engagement. Studies have shown that, as indicated by Gall and Artero-Boname (1994), teachers tend to avoid synthesis questions because they are time-consuming and challenging to manage in large classes. Like in WMSU, a class contains 40 – 50 students, which mostly explains the non-usage of inference and synthesis types of questions.

Additionally, this type of questionnaire requires creative, open-ended responses that are more challenging to assess objectively. Cazden (2001) reveals that English classrooms often follow an IRE (Initiation-Response-Evaluation) pattern, where students are expected to produce short, correct answers. This rigid structure leaves little room for students to combine ideas, generate new content, or create solutions, all key elements of synthesis.

Table 2 illustrates the students' responses to teachers' questions during classroom interaction. The table had been categorized according to teachers' questions, types of students' responses to teachers' questioning, code, students' sample responses, frequency, and rank

Table 2.
Students’ Responses to Teachers’ Questioning During Classroom Interaction

Types of Teachers’ Questions	Types of Students’ Responses	Code	Sample Responses	f	%	Rank
Knowledge	Specific	Sp	-Example is personal information -Agree -Yes -Technical glitch	27	77.14	1
	Silence	Si	silence	7	20.0	2
	Open-ended/ student initiated	OE/SI	Yes, sir. Sobrang Latin means really beautiful.	1	2.86	3
Comprehension	Open-ended/ student initiated	OE/SI	- There is positive impact because it makes things faster and efficient. -Yung delivery of the message is very restricted. In terms of nonverbal expression and body language, hindi siya open to new ideas [The delivery of the message is very restricted. In terms ofnonverbal expression and body language, hindi siya open to new ideas.]	19	43.18	1
	Specific	Sp	-On the spot speaking. - Memorize, understand.	16	36.36	2
	Silence	Si	Silence	9	20.45	3

Application	Open-ended/ student initiated	OE/SI	-I use shortcut like tnx for thanks, otw for on the way, btw for by the way, rep for reply, tom for tomorrow, lol for laugh out loud, etc. - Addicted to technology. Hooked ka na sa cellphone, for example, that you tend to ignore your loved one.	5	62.5	1
	Specific	Sp	-Mayrn yung pa- question type [There is that questioning type] -Mayrn din yung parang pa-quote [There is also a quote type]	3	37.5	2
Inference	Specific	Sp	-Kasi nahulog ang cue card [because the cue card fell]	1	2.22	1
Analysis	Specific	Sp	-The speaker is nervous. -Too much movement, sir	23	41.07	1
	Open-ended/ student initiated	OE/SI	-No. Nag walkout siya because hindi niya alam kung ano and sasabihin niya. [She walks out because she doesn't know what to say.] -Sa communication, I think it is not present there because I believe that the robot has not emotions to express kung ano ang gusto niya i-express[what it wants to express]	21	37.5	2
	Silence	Si	Silence	9	16.0	3
	Confusion	C	Po? [Yes?] What went wrong, po?	3	5.4	4
Synthesis				0	0.0	

Evaluation	Open-ended/ Student initiated	OE/SI	-Technology has the potential to revolutionize medical application such as...They can provide convenience and security. - ...not contented kasi always may bago. We crave for more.	13	28.8	1
	Specific	Sp	-Yung negative -Yes -No	11	24.4	2
	Silence	Si		11	24.4	1

There is a notable variation in the nature and complexity of student responses based on the level of cognitive demand. At the knowledge level, 77.14% of the responses were classified as specific (Sp), featuring examples such as “Example is personal information,” “Agree,” or “Technical glitch.” These responses were predominantly brief, factual, and direct, often consisting of a single word or phrase. This finding aligns with Moskowitz’s (1971) classification of specific responses, which are often pre-rehearsed and limited in cognitive scope. The prevalence of specific responses is also consistent with Anderson and Krathwohl’s (2001) interpretation of the remembering level in Bloom’s Taxonomy, where students are tasked with recalling facts or basic concepts. The low rate of open-ended or student-initiated responses (2.86%) and the relatively high percentage of silence (20%) further highlight the limited engagement that is typically prompted by low-cognitive-demand questions.

In addressing comprehension-level questions, open-ended responses were the most prevalent, accounting for 43.18%, followed by more specific answers. Student replied at this level frequently included explanations and elaborations, such as: “There is a positive impact because it makes things faster and more efficient,” and “The delivery of the message is very restricted... it does not allow for new ideas.” These extended responses illustrate students’ ability to interpret and articulate ideas in their own words, reflecting the understanding level of Bloom’s Taxonomy (Anderson & Krathwohl, 2001). This aligns with Nunan (1991), who remarked that referential questions foster extended, meaningful discourse. Likewise, Richards and Lockhart (1994) emphasized

that comprehension-level questions encourage interpretative thinking. However, it is noteworthy that a significant proportion of silence and expressions of confusion (20.40%) indicate that some students may find it challenging to provide more elaborate answers, aligning with Chaudron's (1988) findings on students' hesitation in responding to questions that demand higher levels of cognitive processing.

Application-level questions predominantly elicited open-ended or student-initiated responses, accounting for 62.5% of total replies, while 37.5% were more specific in nature. Students frequently grounded their answers in real-life contexts, as evidenced by comments such as, "I use shortcuts like 'tnx' for 'thanks' and 'otw' for 'on the way'..." or "When you're hooked on your cellphone, you tend to ignore your loved ones." These findings indicate that application questions encourage students to connect academic content with their personal experiences, thereby fostering deeper engagement. Anderson and Krathwohl (2001) highlighted that application involves the transfer of knowledge to new situations, a cognitive process supported by these open-ended responses. Similarly, Nunan (1991), Richards and Lockhart (1994), and Chaudron (1988) have argued that real-world tasks enhance learner motivation and contribute to authenticity in classroom discourse.

Remarkably, all responses to inference-level questions were categorized as specific (100%), reflecting a lack of elaboration or inferential reasoning. This finding implies that students may have struggled to achieve even surface-level comprehension, likely due to their limited exposure to inferential questioning or insufficient scaffolding. As Anderson and Krathwohl (2001) indicate, making inferences necessitates interpretation and the integration of ideas—capabilities that learners may not readily access without support. Moreover, Cotton (1988) and Vygotsky (1978) highlight that higher-order reasoning skills typically exist within learners' Zone of Proximal Development, thereby requiring instructional mediation to be fully realized in classroom discussions.

Analysis-level questions yielded a mix of specific responses (41.07%) and open-ended answers (37.5%), with 16% of participants remaining silent. The specific answers, such as "The speaker is nervous" and "It saves time," indicate a tendency among students to rely on literal or surface-level observations. In contrast, open-ended responses like "Nag-walkout siya because hindi niya alam kung ano ang sasabihin niya [He walked

out because he did not know what to say.” reflect attempts at deeper reasoning and interpretation. This distribution highlights the transitional cognitive demands of analysis tasks, which, according to Anderson and Krathwohl (2001), require students to examine relationships and components within information. The relatively high level of silence suggests that students may need additional modeling or support to engage with analytical thinking more confidently, consistent with the emphasis from Chaudron (1988), Cotton (1988), and Vygotsky (1978) on the importance of guided instruction in developing abstract reasoning skills.

No responses were recorded for synthesis-level questions (0%). This lack of engagement may suggest either that synthesis questions are rarely employed in classroom discussions or that students are unprepared to participate in creative and integrative thinking. As noted by Anderson and Krathwohl (2001), synthesis, or creating, involves generating new ideas or reorganizing information in innovative ways—skills that demand significant cognitive effort. Cotton (1988) and Nunan (1991) pointed out that such questions are often overlooked in classroom practice due to time constraints and their inherent complexity. Taba (1966) advocated for the intentional teaching of generative thinking to enhance students’ abilities in synthesis. The complete absence of responses at this level underscores a potential gap in classroom questioning strategies and indicates a pressing need for more deliberate instruction aimed at fostering creative thinking.

Evaluation-level questions elicited the highest rate of open-ended, student-initiated responses (28.8%), closely followed by specific responses and instances of silence, each at 24.4%. The open-ended responses, such as “They can provide convenience and security” and “We crave for more,” illustrate students’ developing ability to form judgments and justify their opinions. These findings align with Anderson and Krathwohl’s (2001) concept that evaluation entails the critical assessment of ideas based on established criteria or evidence. However, the equal frequencies of specific responses and silence highlight variability in students’ engagement with evaluative tasks. Scholars such as Cotton (1988), Chaudron (1988), and Richards and Lockhart (1994) emphasize that effective evaluation necessitates metacognitive awareness and consistent practice—skills that may still be in development among learners. Additionally, Paul and Elder

(2006) assert that fostering evaluative thinking requires explicit instruction in critical reasoning, which may account for the inconsistent depth of responses observed at this level.

Table 3 presents the language choice of teachers and Students across different cognitive questions.

Table 3.

Language choice of Teachers and Students Across Different Cognitive Question Types

Type of questions	Language Use	f	%	Samples	Students' Language Use	f	%	Samples
knowledge	English	17	53.1	-Are you familiar with Impromptu speaking? -Do they understand when you use shortcut or acronyms?	English	15	68.2	-Example is personal information. - sophisticated, glamorous
	Taglish	15	46.9	- Bakit hinde pwede magmix and different brands? Ano 'yung demographic natin?	Taglish	5	22.7	-Walang information - hindi ko nabasa ang waiver, sir.
	Tagalog	0	0		Tagalog	2	9.1	-Madami po. - Wala po.
comprehension	English	18	45.0	-When do you use the word brunch? - So, what can you say about technology?	Taglish	20	57.1	- I hear it lang in the video. -Hindi sila liable whatever happens to you.
	Taglish	21	52.5	-Kahit nahulog ang cue card, it doesn't matter, di ba? - Pag negative na ang feedback na naobserve mo, what do you need to do?	English	14	40.0	-Make sure your presentation is lively. -Slang, these are so vivid and colorful...
	Tagalog	1	2.5	Galit na galit na siya.	Tagalog	1	2.0	-Mayron tinitingnan

Application	English	5	22.5	-How do we introduce our topic? -What is second in the process of public speaking?	English	0	0.0	
	Taglish	4	10.0	-Paano daw and expression pag hindi ka makahiram ng laptop? -Ang dali ng technology...	Taglish	7	1.0	-Yung mga evidence, for example... -Paminsan, naga guess lang ako.
	Tagalog	0	0		Tagalog	0	0.0	
Inference	English	0	0		English	0	0.0	
	Taglish	0	0		Taglish	1		Kasi nahulog man and cue card.
	Tagalog	1	1.0	-Bakit hindi siya alam and sasabihin niya.	Tagalog	0	0.0	
Analysis	English	28	68.3	-Did she redeem herself? Why? -What is wrong with his tone?	English	16	35.6	-It fell. -it would make work a lot lesser.
	Taglish	11	26.8	-Bakit siya naiintindihan ng mga audiebce niya? - Then, after nahulog ang cue card, anong ginawa niya to redeem herself?	Taglish	23	51.1	-yung pagiging unprepared niya po. -Yung answer niya po ay not related.
	Tagalog	2	4.9	-Paano ba yung ginawa niya? - Ano, sir...	Tagalog	6	13.3	-Palakad-lakad po siya, sabay sigaw. - Po?
Synthesis	English	0	0.0		English	0		
	Taglish	0	0.0		Taglish	0		
	Tagalog	0	0.0		Tagalog	0		

Evaluation	English	28	71.8	-Can you give me one recommendation? -How do you present your main idea?	English	10		
	Taglish	11	28.21	-Ano yung dapat i-suggest natin to improve the quality of her voice? -Saan kaya mas matimbang, yung positive or negative effects?	Taglish	13		-Yung suggestion po is dapat po nag-prepare po siya before nag-present. -Yung eye contact niya, hindi Talaga naglalasts.
	Tagalog	0	0.0		Tagalog	0		-

The data presented in Table 3 reveal that English is the primary language utilized by teachers when posing higher-order cognitive questions. Specifically, 68.3% of analysis-level questions and 71.8% of evaluation-level questions were expressed in English. Typical examples of such teacher discourse at these levels include questions like “Did she redeem herself? Why?” and “Can you provide one recommendation?” This indicates a deliberate commitment to academic English when engaging with complex tasks that require critical thinking, analysis, or synthesis. This pattern aligns with Anderson and Krathwohl’s (2001) taxonomy, which suggests that higher-order cognitive processes—such as analysis, evaluation, and creation—are most effectively supported by precise and cognitively demanding language. In the Philippines, English serves as the default language for formal education and assessment, particularly for tasks that require clarity, rigor, and abstraction.

Interestingly, students predominantly responded to knowledge-level questions in English (68.2%), but they transitioned to Taglish for analysis (51.1%) and evaluation (50%) questions. Responses such as “*Yung pagiging unprepared niya po* (His/Her being unprepared),” “*Yung answer niya po ay not related* (His/Her answer is not related),” and “*Yung suggestion po is dapat po nag-prepare po siya before nag-present* (The suggestion is that he/she should have prepared before presenting). exemplify this shift. The observed code-switching reflects the students’ need to utilize a broader linguistic repertoire when addressing cognitively demanding questions. Taglish, as

described by Bautista (2004), serves as a linguistic bridge that enables learners to convey nuanced meanings while striking a balance between informal comfort and academic expectations. Martin (2014) and Reyes (2004) highlight that Taglish helps students manage emotions, reduce cognitive load, and negotiate meaning, functions that are particularly significant in multilingual and cognitively challenging classroom environments.

Similarly, the results indicate that teachers also utilized Taglish most frequently at the comprehension (52.5%) and knowledge (46.9%) levels. This pattern suggests a deliberate pedagogical strategy to clarify meanings and support understanding. For instance, teacher prompts such as “*Kahit nahulog ang cue card, it does not matter, di ba?* (Even if the cue card fell, it does not matter, right?)” and “*Pag negative na ang feedback na naoobserve mo, what do you need to do?* (When you observe negative feedback, what do you need to do?)” show how educators incorporate local linguistic elements to make abstract or unfamiliar concepts more accessible. Bautista (2004) and Reyes (2004) assert that such code-switching serves an instructional purpose, as it simplifies complex information, facilitates comprehension checks, and encourages student responses. Gonzales (1998) observes that teachers frequently employ Taglish to connect concepts to students’ lived experiences, especially when confronting unfamiliar terminology or culturally distant content.

In line with teacher patterns, students frequently used Taglish at the comprehension (57.1%) and analysis (51.1%) levels. Responses such as “*I hear it lang in the video[I simply listened to it in the video]*” and “*Hindi sila liable whatever happens to you* (‘They are not liable for whatever happens to you.’)” exemplify a hybrid linguistic strategy. These replies indicate that students utilize Taglish to scaffold their reasoning, transitioning from basic comprehension to deeper interpretation. Martin (2014) and Garcia and Wei (2014) contend that multilingual learners draw upon their entire linguistic repertoires to engage cognitive functions. From a Vygotskian (1978) perspective, language acts as a mediating tool within the Zone of Proximal Development (ZPD). In this context, Taglish serves as a strategic linguistic resource, enabling students to navigate their ZPD and articulate responses that extend beyond the limitations of either language used in isolation.

The data reveal a minimal reliance on pure Tagalog across all cognitive levels, with usage rarely surpassing 10% for any question or response. In contrast, the categories of synthesis and inference were almost absent from the dataset. Only one inference question was noted (in Tagalog), and no synthesis questions were asked or answered in any language. This indicates a significant instructional gap, as these levels—which necessitate the generation of original ideas and the interpretation of implicit meaning—are crucial for fostering advanced critical thinking skills (Anderson & Krathwohl, 2001). The lack of these question types may reflect practical constraints in the classroom or a preference for more concrete, answerable tasks. Research by Cotton (1988), Chaudron (1988), and Nunan (1991) highlights the infrequency of synthesis and inference questioning in language education, often attributed to time constraints, teacher confidence, or a curriculum that focuses predominantly on recall and comprehension.

Application-level questions were similarly scarce, with only five posed in English and four in Taglish. Student responses to these queries were minimal—none in English and just seven in Taglish. This suggests a difficulty in linking classroom content to real-life or contextualized tasks. Such a trend may stem from curriculum constraints, particular questioning practices by teachers, or student reluctance to move beyond textbook knowledge.

CONCLUSIONS

English language teachers predominantly employed analysis, comprehension, and evaluation questions, indicating a strong emphasis on higher-order thinking skills. However, application, inference, and synthesis questions were underutilized or absent. This limited variety suggests an imbalance in the development of students' full cognitive potential, particularly in real-world problem-solving and creative expression. Meanwhile, student responses generally mirrored the cognitive complexity of the questions. Lower-order questions (e.g., knowledge) elicited specific, brief responses, whereas higher-order questions, such as application and evaluation, resulted in more open-ended and elaborated answers. However, a significant proportion of silence

and lack of response—especially for inference and synthesis—indicates a need for scaffolding and cognitive support. Teachers mainly used English for higher-order questions, affirming its role in academic discourse. Students, meanwhile, shifted toward Taglish for cognitively demanding questions, using it as a strategic tool to negotiate meaning and reduce cognitive load. Taglish functioned as a transitional language, aiding comprehension and expression. The minimal use of Tagalog and the absence of synthesis- and inference-level exchanges highlight missed opportunities for creative, integrative engagement and culturally responsive instruction.

RECOMMENDATIONS

Based on the study's findings, several pedagogical and institutional recommendations are proposed to enhance classroom interaction and cognitive engagement in multilingual English language classrooms.

First, teachers are encouraged to diversify their questioning strategies by incorporating more inference, application, and synthesis-level questions. These higher-order question types promote creative thinking, problem-solving, and deep learning, and should be emphasized in teacher training and professional development. Second, scaffolding should be deliberately integrated into classroom practice through strategies such as think-aloud, modeling, visual aids, and peer interaction to support students' reasoning and help them navigate cognitively demanding tasks. Third, Taglish should be formally recognized as a pedagogical resource rather than a linguistic deficiency. Its strategic use can serve as a bridge to support comprehension and articulate complex thoughts, particularly in higher-order tasks. Fourth, teachers should aim to develop more dialogic classroom discourse, moving beyond traditional Initiation-Response-Evaluation (IRE) patterns toward interactional formats that allow students to question, reason, and justify their ideas using both English and Taglish. Fifth, curriculum planners are urged to revise lesson frameworks and assessments to ensure balanced cognitive engagement. The inclusion of performance-based tasks, project-based learning, and real-world applications can foster students' ability to synthesize and apply knowledge. Finally, further research is needed to examine how

language use—particularly the interplay of English, Taglish, and Tagalog—affects student cognition across different learning environments and proficiency levels. Future studies might also explore instructional interventions that enhance the use of synthesis and inference in multilingual classrooms.

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