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Article

Languaging, Learning, and Livestreaming: A Social Media Ethnography Towards a Framework on Pedagogical Ecology for Educational Livestreams

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Abstract

This study investigates the language practices and audience engagement strategies used in Facebook educational livestreams to understand how these contribute to informal digital learning. Using a social media ethnographic approach, it draws on Hymes' SPEAKING model and Multimodal Discourse Analysis (Kress & van Leeuwen) to analyze 13 livestreams by a popular Filipino educational content creator. Findings show six recurring interactional patterns—calls to respond, praise utterances, encouragement, expository talk, pedagogical humor, and multimodal engagement—used to enhance engagement and learning. These are situated within a larger pedagogical ecology characterized by the deliberate construction of a safe, inclusive space; streamer-led interaction patterns using adaptive and multimodal feedback; and the normalization of bi-/multilingual discourse to foster rapport and comprehension. The study proposes the Pedagogical Ecology for Educational Livestreams (PEEL) Framework, which illustrates how strategic language use and engagement can transform passive viewership into interactive learning. This framework offers timely implications amid the current education crisis in the Philippines, showing how students' social media use can support learning beyond formal classrooms. It also underscores the value of combining ethnographic and multimodal analysis in exploring emerging informal learning spaces.

Keywords

Social media ethnography, informal education, educational linguistics

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Introduction

Pragmatics is the study of meaning conveyed by a speaker or writer and eventually interpreted by a listener or reader (Najeh, 2015). Hence, any linguistic items, whether written or spoken, might have diverse meanings based on their contextual application. In the early days of pragmatics, in the mid-19th century, pragmaticists were considered either "language philosophers," who depended on intuited data, or "conversation analysts," who relied on tape-recorded "real" language. According to Fitzmaurice (2010), it is reasonable that linguists (i.e., Austin, Searle, Grice) might consider literary discourse as a minor reliable source of material in investigating standard communicative practices. Therefore, in empirical research of linguistics, it is a truism that spontaneous everyday communication, rather than the literary pieces, offers the perfect source of linguistic data for communication analysis.

Critically intensified by the dual challenges of recurrent natural disasters and the increasing prevalence of extreme weather phenomena, the Philippine education system has been navigating a period of profound and escalating education crisis in the post-pandemic era. Official reports from the Department of Education (DepEd), as highlighted by the Congressional Commission on Education (EDCOM II, 2024), indicate that a staggering 377,729 Filipino learners face a high probability of significant and potentially irreversible learning losses. These losses are a direct consequence of persistent disruptions to formal schooling caused by typhoons, floods, and other natural calamities. This precarious situation is further aggravated by the recent necessity for widespread class cancellations due to dangerously high heat indices, a measure implemented to protect student well-being but one that inevitably curtails instructional time and deepens the existing educational deficit (EDCOM II & PIDS, 2024). The cumulative impact of these disruptions underscores an urgent and compelling need for the development and implementation of resilient, adaptable, and readily accessible learning modalities that can ensure educational continuity irrespective of external adversities.

In response to this pressing need, a promising avenue for mitigating learning losses and fostering continuous educational engagement lies in strategically harnessing the pervasive influence and widespread adoption of social media platforms for academic support. The Philippines notably ranks consistently among the top nations globally for average daily screen time devoted to social media, currently holding the third position worldwide (Kemp, 2024). Of this population of social media users, Filipino students comprise a significant portion and have increasingly turned to these platforms for educational purposes (Fortuna, 2023). According to Barrot (2020), this trend grew significantly between 2007 and 2019, with Facebook being the most explored platform due to its accessibility, popularity among students and teachers, and practical value in teaching and learning. Supporting this, Fortuna (2023) found that Filipino learners typically spend three to six hours per week on platforms like Facebook. Meanwhile, Calicdan-Del Campo (2024) reported that Filipino digital immigrants—those who did not grow up with digital technology but have adapted to it—use social media for educational purposes for three to five hours daily, surpassing the global average of two hours. While concern about excessive screen time persists (Ermita et al., 2025), the integration of social media in education was found to be beneficial in aspects such as promoting digital literacy, collaborative learning, and information dissemination and offers opportunities for student engagement and improved comprehension skills (Samala et al., 2024; Ermita et al., 2025).

These underscore the role of social media as a key tool in digital learning, strengthening its vast potential for educational outreach and knowledge dissemination beyond the confines of traditional classroom setting.

Digital learning can be seen as a form of informal learning that can champion learner-centric approaches, emphasizing autonomy, self-direction, and the direct applicability of knowledge to real-world contexts (Beetham & Sharpe, 2019). This philosophy resonates strongly with Cross's (2007) evocative analogy of informal learning as akin to "riding a bike; the rider [learner] chooses the destination, the speed, and the route" (p. 49), thereby underscoring the learner's active role in shaping their educational journey. Cross (2007) also brought to light a crucial "spending/outcome paradox" prevalent in many organizational training and development strategies. This paradox reveals that while formal training initiatives often consume as much as 80% of an organization's allocated training budget, they may, in fact, contribute to only about 20% of the tangible learning outcomes and performance improvements. Conversely, informal learning activities, which typically account for a mere 20% of resource allocation, have been observed to generate up to 80% of the actual learning that occurs within an organization, as measured by enhanced performance, skill acquisition, and overall potential. This striking disparity is not a localized issue but rather a global challenge. As De Grip (2015) astutely observed, policies often focus on formal education and training, while most companies lack strategies to fully leverage the benefits of informal workplace learning. The conscious integration of a blended learning framework, one that synergistically combines the structured elements of formal instruction with the flexible, learner-driven opportunities of informal learning, could provide a robust and effective strategy to harness these inherent benefits.

Furthermore, the burgeoning use of live video streaming across a multitude of social media platforms has demonstrated considerable promise in augmenting student engagement, fostering a more immediate and personal sense of connection between students and educators and creating dynamic learning communities (Chen, et al., 2021). Research indicates a generally positive disposition among students towards online streaming media, with many perceiving these platforms as innovative, accessible, and effective tools for both teaching and learning (Bridge, et al., 2009; Safar, and Alkhezzi, 2016; Huang, et al., 2023;). This positive reception suggests that platforms such as Facebook Live, YouTube Live, and others give features inherent in these platforms, such as real-time chat, reactions, and Q&A sessions, can transform passive content consumption into active participatory learning experiences.

Although online learning platforms are widely studied, most of them focus on technological features or their specific use in subjects like language learning or history. Less attention has been given to sociolinguistic norms that shape communication in digital spaces. Specifically, the role of linguistic practices in maintaining audience engagement during educational livestreams is still underexplored. Looking at these dimensions may extend our understanding of online engagement and may help develop effective digital teaching strategies.
This study, therefore, aims to meticulously address this identified gap by undertaking an in-depth exploration of the complex linguistic and interactional dynamics that unfold within the context of educational livestreams. Specifically, the research endeavors to provide a comprehensive answer to the critical question: How do language practices and audience engagement in Facebook educational livestreams co-construct a dynamic pedagogical ecology that positions livestreaming as a meaningful space for informal learning and interaction?

Ultimately, this study hopes to contribute both to teaching practice and the existing body of knowledge on using digital platforms in education. By identifying linguistic strategies that improve engagement and create a positive atmosphere in live-streamed classes, the study can guide the development of more effective and culturally responsive online teaching methods. This is especially significant in the Philippine context, where frequent class disruptions make flexible and reliable remote learning essential.

METHODOLOGY

Research Design

This study utilized social media ethnography which allows for the exploration of how individuals engage, learn, and interact within digital communities while remaining rooted in traditional ethnographic methods (Postill& Pink, 2012). Social media ethnography is an approach within the broader scheme of digital ethnography (Hine, 2000; Pink et al., 2015) which facilitates the close observation, detailed description, and nuanced interpretation of naturally occurring interactions and cultural practices. Moreover, the study used a single case design to allow for a holistic and intensive exploration of the unique linguistic strategies, emergent sociolinguistic norms, and interactional patterns within this bounded context, providing depth and contextual understanding. Overt non-participant observation was likewise observed to avoid potential for Hawthorned effect and maintain the natural setting.

Corpus and Case Selection

A total of thirteen (13) livestream sessions were purposely collected from a popular, widely followed Filipino online educational content creator who features lectures and talks on language testing and academic skills. All the videos, originally broadcast in 2025, were retrieved directly from Facebook, ensuring that they were uploaded in the public domain and adhered to the community standards set by the platform. The selection was informed by Wang's (2023) proposed axes for case selection in livestreaming research, alongside several contextual factors identified by the researchers. The livestreams were broadcast primarily on Facebook, providing access to a large, publicly available dataset within a major social media platform. They are characterized by an informal social setting conducive to informal learning and regularly attract a large audience—making an ideal case for analyzing engagement at public scale. Additionally, they follow a consistent streaming schedule and cross modal delivery (voice, video, text, graphics, and live chat) with an educational focus that aligns directly with the study's goal of examining pedagogical communication in livestream environments.

The data collection process involved downloading the 13 recordings of the selected livestream sessions and producing comprehensive verbatim transcripts. These transcripts included the streamer's spoken discourse, anonymized audience chat messages, significant visual elements, and multimodal cues such as gestures and interactive platform features. To ensure depth and accuracy, the researchers conducted multiple viewings–first independently, then collaboratively–to take detailed observational notes. These notes documented features including platform affordances, the session's mood and energy, technical challenges, and the overall structure and flow of each livestream event.

Data Analysis

The data analysis in this study was informed by two key analytical frameworks: the SPEAKING model of Hymes (1974) and the Multimodal Discourse Analysis proposed by Kress and van Leeuwen (2001; 2006). The intersection of these frameworks is illustrated in Figure 1.

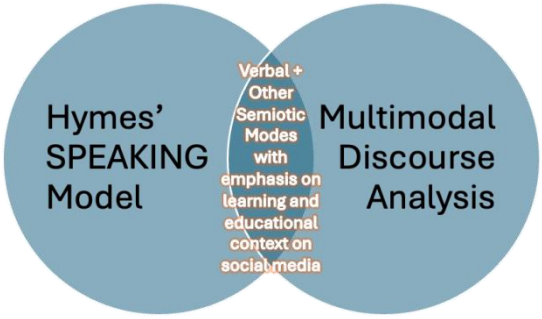

Figure 1. Analytical Framework

On one hand, the researchers used Hymes' SPEAKING model to guide the systematic identification of ethnographic components of the communicative events in the livestreams namely, Settings, Participants, Ends, Act Sequence, Key, Instrumentalities, Norms, and Genre. It provided the situational context for interpreting the communicative practices observed during the stream, particularly focused on verbal data.

On the other hand, the analysis was further deepened using Kress and van Leeuwen's (2006) Multimodal Discourse Analysis framework which informed the examination of other semiotic systems untouched by Hymes' model. The combination of modes, rather than purely verbal, essentially enhances meaning and fulfils pedagogical purposes. The interplay of these communicative modes was analyzed in relation to the streamer's instructional strategies and influence on audience engagement. Combined, this dual perspective supports the study's goal of understanding how informal learning emerges through socially and semiotically rich online interactions.

The pedagogical connection of these frameworks lies in how they complement each other in understanding communication and learning. Hymes' SPEAKING model highlights social and cultural context of communicative events, explaining how live streamers recognize purpose, tone, and norms appropriate for interaction. Meanwhile, Multimodal Discourse Analysis emphasizes that meaning is created through language and other modes such as visuals, sounds, and gestures, which align with the principles of multiliteracies pedagogy (Yelland, 2018). When they intersect, both frameworks provide a more comprehensive view of how meaning is shaped both by context and by multiple modes, showing how digital spaces like livestreams can serve as authentic and engaging resources for developing learners' communicative competence and multimodal literacy.

Lastly, a thematic analysis was conducted on livestream transcripts and observational field notes, following Braun and Clarke's (2006) six-phase process. This stage helped identify overarching themes related to interaction, engagement, and learning. Triangulation across the three analytical lenses—ethnographic (SPEAKING), multimodal (MDA), and thematic—was employed to enhance the depth, trustworthiness, and interpretive richness of the findings.

Ethical Considerations

The study adhered to ethical guidelines for conducting research in online and digital environments (e.g., British Sociological Association, 2017; Association of Internet Researchers, 2019). The study only involved publicly accessible livestream recordings and live chat and comment data, ensuring that no private or restricted content was used. All individuals, including the livestreamer and audience members, were anonymized in transcripts and reported to protect privacy. The research focused solely on communicative practices, aiming to minimize harm and provide a fair and balanced interpretation of the observed phenomena without evaluating individuals. Moreover, data was securely stored on password-protected devices and cloud storage accessible only to the researcher and these will be destroyed by deletion within 3 years from the completion of the study.

RESULTS AND DISCUSSION

This social media ethnography investigated the language practices and interaction strategies employed by the selected educational livestreamer, a prominent educational content creator in the Philippines, during her livestreams.

To provide context for the analysis of these interactional patterns, the following table outlines the communicative event based on the components of Hymes' (1974) SPEAKING framework: Setting, Participants, Ends, Act Sequence, Key, Instrumentalities, Norms, and Genre.

Table 1. SPEAKING Components of Facebook Livestreams.

Element	Description
Setting	A livestream session on Facebook usually held at night, with an affordance of live chat and comments
Participants	Livestreamer (host), audience (both active or those who engage with the livestreamer and passive or those who are part of the audience count but do not directly engage in the livestream)
Ends	To teach vocabulary and commonly confused English words for test prep
Act Sequence	Introduction, motivation, instructional lecture, quiz pretest, interaction, discussion, call to action
Key	Warm, humorous, encouraging, casual but authoritative. mix of Filipino and English.
Instrumentalities	Spoken language, viewer comments, slides/questions on-screen, gestures. Mixed code (Filipino-English).
Norms	Interactive but respectful environment; viewers participate silently or through chat; emphasis on learning, promoting safe space for learning.
Genre	Educational livestream lecture and quiz; motivational talk embedded within an informal learning session.

Within educational livestreams, the setting is consistently established as a Facebook session, typically broadcast in the evening. This creates a focused educational atmosphere. The key participants are the live streamer, who assumes the role of the host and educator, and the audience or live viewers, who engage as learners and audience members. It has an open affordance for live interaction, either through chat or comment, and allows the audience to actively and passively participate. The explicitly stated ends, or overarching

goals of these digital gatherings, are to instruct viewers on vocabulary and commonly confused English words, specifically aimed at test preparation. Additionally, the Act Sequence (shown in Figure 2) unfolds through several distinct stages. This sequence provides evident structured flow of the events in a livestream, which simulates a typical classroom flow or that of other learning environments.

Figure 2. Act Sequence of Facebook Livestreams

The livestream typically commences with an Introduction, where the live streamer welcomes the audience, introduces the session's topic, and sets a positive tone. This is often followed by a motivation segment, designed to engage viewers from the outset, perhaps by highlighting the relevance of the topic or sharing encouraging words to build learner confidence. This flow mirrors how livestreams can foster learning-focused communities, where both the streamer and the audience support one another during and after the sessions (Faas, Dombrowski, Young, & Miller, 2018). In the context of educational livestreaming, such structured engagement not only promotes community-building but also enhances accountability and self-education, which in turn contributes to the development of viewers' skills over time (Kokinda & Rodeghero, 2023)

The core of the session is the instructional lecture, where the live streamer delivers the main educational content, explaining concepts and providing examples. To gauge understanding and encourage active learning, a quiz pretest is often incorporated, allowing viewers to assess their knowledge. A significant portion of the livestream is dedicated to Interaction, where viewers can actively participate, likely through submitting answers, asking questions via the chat, or reacting to the content, fostering a sense of community. This interactive phase often transitions into a broader Discussion, where the live streamer might address common questions, elaborate on complex points, or facilitate a deeper exploration of the material based on viewer feedback. Gandolfi, Ferdig, and Clements (2022) asserted that educational live streamers use educational strategies such as constructivism and scaffolding, allowing viewers to learn by observing, asking questions, and participating in discussion practices that are evident in the sessions. Finally, the session typically concludes with a Call to Action, which could involve encouraging viewers to review the material, practice the concepts learned, subscribe for future sessions, or share the content. According to Yolac and Hetrick (2024), streamers' unintentional approaches to education can also be seen as valid pedagogical practices.

The overall key of these livestreams is notably warm, humorous, and encouraging, maintaining a casual yet authoritative demeanor that makes learning approachable; this is further characterized by the natural integration and mix of Filipino and English. The instrumentalities employed are multimodal, encompassing spoken language by the host, written viewer comments in the chat, visually presented slides or questions on-screen, and the host's expressive gestures, all frequently delivered in a mixed code of Filipino-English. The established norms cultivate an interactive yet respectful learning environment, where viewers are encouraged to participate, often silently or through the chat interface, with a strong emphasis on collaborative learning and the active promotion of a "safe space" for asking questions and making mistakes. Conclusively, the Genre of these events is best identified as an educational livestream lecture combined with quiz elements, often seamlessly

embedding a motivational talk within the broader framework of an informal learning session.

Strategic Languaging in Educational Livestreams

This section focuses specifically on the linguistic choices and strategies employed in the livestreams. Table 2 shows the different interaction patterns observed from the dataset.

Table 2. Interaction patterns of Educational Livestreams

Interaction Pattern	Definition	Interaction Flow	Sample
Call to Respond	A statement made to encourage responses	Streamer to Audience	"So, by typing that.. hopefully you can gather more people to watch… "I-type niyo na rin ang sagot ninyo mamaya…" [You can also type your answers later]
Praise Utterances	A quick praise remark or commendation directed toward the audience	Streamer to Audience	"Salamat sa pagta-type, masunurin sila…" [Thank you for typing. You are obedient.]
Encouragement	A statement intended to motivate the audience	Streamer to Audience	"Again this is a safe space to learn so huwag kayong matatakot…[don't be scared to engage]" "Kung feeling mo may mali, [if you feel something wrong] ask yourself: 'What would I replace this with?'"
Expository Talk	Information-rich statements that provide instruction, context, definition, or explanation to a concept	Streamer to Audience	"This is going to be sentence correction based on English lessons that we have right now…" "Now, again, the goal is not just to know what you know, but also to identify what you don't know so you can practice." "Medyo mahirap 'to kasi hindi siya masyadong na-cover dun sa first slides natin." [It's a little hard since it was not covered in our first slide].
Pedagogical Humor	The use of humor (e.g. jokes, banters) while discussing	Streamer to Audience	"Parang sa relationship 'yan—kapag may mali, palitan mo, 'wag mong tiisin." [It's like a relationship– if there's something wrong, change it. Don't endure.]
Multimodal Engagement	The use of multiple semiotic modes, other than verbal,	Streamer to Audience/Audience to Streamer	"Marami ang nagkakamali dito kasi sanay tayo marinig sa conversations 'yung mali." [Many get confused with these mistakes since we

	to communicate a message	usually hear them in conversations.] (Use of an external board shown on screen)

An analysis of the educational livestream revealed that the live streamer used a mix of interactive and supportive language techniques to foster engagement and learning. This includes calls for participation, praise, reassurance, clear explanations, and humor. Considering that livestreams are often monologic and the audience is invisible, the streamer maximizes creativity in using the platform's limited interactive tools. Engagement, in this sense, was not only limited by the use of verbal spiels but rather enriched by multimodal responses like emojis, reaction buttons, and visual elements. This observably helped clarify messages, and thus potentially reduce anxiety and enhance learning. These findings align with Lu et al. (2021), highlighting the importance of multimodal strategies in sustaining engagement and creating a positive learning environment.

Positioning Educational Livestreams as Locus for Learning

This section delves into the specific sociolinguistic norms from the interactional patterns that emerged from the analysis of the educational livestreams, examining how these established conventions shape and facilitate audience engagement in the digital learning environment. Hence, the following themes are discussed and elaborated into specific sub-themes.

a. Deliberate construction of a "Safe Space"

The interaction patterns in the livestreams significantly position the platform as a safe space for learning. The following sub-themes present how she makes it a norm during her live stream session.

Table 3. Deliberate construction of a "Safe Space"

Sub-Theme	Interaction Flow	Sample
Affirming and Encouraging Language	Streamer to Audience	"Kung kayo ay nagkamali, nasaktan dahil nagkamali ng sagot okay lang yan ang mahalaga may natutunan at manalangin tayo na sana may sapat na chances tayo para lahat ng pagkakamali ko ay maitama" [If you commit any mistake, or felt hurt because you made a wrong answer, that's okay. What's important is that you have learned something and let's pray that we have enough chance to correct our mistakes]
Use of Humor and Cultural References	Streamer to Audience	"Imaginin niyo yung may mga naka-underwear lang na pumapasok sa trabaho — di ba awkward? Parang sentence din 'yan kapag kulang sa parts — awkward!" [Just imagine those who go to wear only with underwear– isn't that awkward? It's like a sentence, awkward if you're missing some parts.] "Hindi lahat ng mukang mabait, mabait. Tandaan nyo yan! Mag eeleksyon pa naman. If you believe on that, type

	"yes" if not, go away! (the streamer laughs) [Not all streamers

It was observed that the streamer's interaction pattern consistently used positive reinforcement to promote motivation, engagement, and healthy online dynamics. Remarkably, humor played a key role, easing tension, building community, and encouraging flexible thinking (Oshima, 2018; McCartney, 2020; Burgos et al., 2025). Affirming language, such as normalizing mistakes, fostered a growth mindset, while culturally resonant jokes made the lesson more relatable. These strategies created a supportive environment that sustained attention and strengthened connections with both content and community (Soarez & Reis da Luz, 2015).

b. Streamer-Led Interactions and Responsive Multimodal Feedback

The livestreams cater to thousands of viewers on a platform where the audience does not have the same affordances. The act sequence of the livestream is highly dependent and dominated by the live streamer whereas the audience can respond only through the chat. Nonetheless, the live streamer actively recognized and engaged with the limited responses from the audiences, fostering a sense of interaction and inclusion despite the asymmetry in communication. To further expound on these themes, the following sub-themes emerged.

Table 4. Sub-themes for Streamer-Led Interactions and Responsive Multimodal Feedback

Sub-Theme	Interaction Flow	Sample
Asymmetrical Turn-Taking	Streamer to Audience and vice verse	"Okay, so earlier, we discussed types of conjunctions. Now, let's look at how they work in compound sentences. Makinig lang kayo, then mag-comment mamaya. [Just listen for now, then you can comment later]" (The speaker sets the structure of the lesson, guiding timing and flow without direct back-and-forth.)
Audience Participation via Text and Emojis	Audience to Streamer	"May sumagot na ng 'letter C'..." [Somebody already answered letter C] (Reference to an actual chat response from a viewer Feedback Prompt) [Streamer smiles and says:] "Nakakatawa yung sagot ng isa—puso emoji pa!" [The other one's answer is funny– with a heart emoji!]
Responsive Multimodal Feedback and Validation	Streamer to audience and vice versa	Uy may gumamit sa sentence. [Oh, somebody used the sentence] I like it! Si Raymart. I-very good muna natin si Raymart. (Flashes the sentence constructed by Raymart as well as his name and picture at the bottom right of the screen)

As shown in Table 4, the live streamer's interactional patterns reflect norms that manage communication, foster participation, and provide feedback. Through asymmetrical turn-taking, the streamer controls pacing while leaving room for audience input via text and emojis. This aligns with research showing that multimodal feedback—combining text, voice, and visuals—reduces cognitive overload and supports diverse learning styles (Lin et al., 2024; Sutrisno et al., 2024; Lamb, 2018). Examples include verbal validation and displaying viewer responses onscreen, which reinforce motivation and create inclusion despite limited real-time exchange (Chiaro et al., 2023; Ma et al., 2023). Such practices sustain attention, stimulate creativity and critical thinking, and build a learner-centered space that balances individual and collective engagement.

c. Normalization of Mixed-Code Discourse (Bi-/Multilingual Ease)

The choice of language code in the livestream is very critical in the communication process, considering the diverse linguistic background of the audience that remains unknown unless the live streamer deliberately asks. The streamer employed both Filipino and English languages throughout the livestreams, utilizing them as key instrumentalities for communication. While Filipino and English are official and widely known languages in the Philippines, how these languages were utilized as resources are influential in the positioning of the livestream as a locus of learning.

In general, the normalization of mixed-code discourse was evident in the persistent and consistent display of bi-/multilingual ease in the speech of the live streamer. In this case, by normalizing the at-ease usage of both languages, the live streamer promotes clarity, accessibility and relatability by creating a comfortable environment for viewers with varied linguistic repertoire (Celik, 2003; Shao, 2023; and Ristiamadani & Tauchid, 2025). To further elaborate this theme, the following sub-themes are presented.

Table 5. Sub-themes for Normalization of Mixed-Code Discourse (Bi/Multilingual Ease)

Sub-Theme	Interaction Type	Sample
Communicative Resource	Promoting platform	"Imaginin niyo yung may mga naka-underwear lang na pumapasok sa trabaho — di ba awkward? Parang sentence din 'yan kapag kulang sa parts — awkward!" [Just imagine those who go to wear only with underwear– isn't that awkward? It's like a sentence, awkward if you're missing some parts.]
Enhancing Clarity and Rapport	Feedback prompt	"May natutuhan na ba? Sige nga taas ang kamay or type yes yes or kahit ano lang may natutuhan ba kayo sa discussion" [Are you learning anything? Come one! Raise your hand or type "yes" or anything you learned from the discussion]

Fostering Learner Confidence	Encouragement "Wag kayo mag sorry kung nagkakamali ok lang yan kung may nambubully sa inyo ibablock natin (smiles) bawal yun dito. Masaya ako pag may natutuhan kayong bago. Sumagot pa rin kayo kahit mali." [Don't apologize if you commit mistakes, that's okay. Block those who bully you (smiles) they're not welcome here. Just answer, regardless.]

The streamer's use of mixed-code discourse shows how bilingual lease can effectively foster engagement, provide clarity, and increase confidence among viewers. This bilingual, conversational approach aligns with Bucjan and Bucjan's (2014) findings, where students reported that alternating between English and Filipino helped them express ideas more clearly, thus increasing their participation. Similarly, Manuel (2024) and Spice (2018) emphasize that engaging in code-mixing enhances cognitive processing, enabling bilingual learners to bridge communication gaps and adopt flexible communication strategies. In this context, the streamer's use of bilingual codes not only strengthens emotional and cognitive connections with the audience but also promotes a dynamic and inclusive learning environment.

The Nexus of Livestream Languaging in Language Learning

Generally, the data revealed a deliberate use of language that fosters both engagement and inclusivity. A defining feature of the live streamer's communication is the creation of a supportive and respectful "safe space", a consistent discourse norm that encourages participation even from passive or hesitant viewers. This safe space is linguistically constructed through adaptive, encouraging language and the use of humor and culturally relevant references, which reflect convergence strategies. By aligning speech with audience expectations and social contexts, the live streamer minimizes social distance, making the educational environment feel more personalized and approachable.

Moreover, the live streamer's engagement style is predominantly streamer-led, initiating the majority of the interactions. This aligns with the asymmetrical nature of livestream discourse, where control over the flow of conversation remains with the streamer. However, audience participation is still effectively elicited through multimodal strategies, particularly text-based chat and emojis, which serve as the primary channels for viewer interaction. Furthermore, language is also used to validate audience contributions. Through real-time acknowledgment of chat inputs, verbal reinforcement, and on-screen corrections (Multimodal), the live streamer creates a visual feedback loop. This affirms the value of individual participation, fostering a sense of involvement despite the limited and asynchronous nature of chat communication. The live streamer's linguistic responses often mirror or build on user comments, thereby creating a dynamic, responsive atmosphere.

Overall, the discourse of educational livestreams, as exemplified in the case of the selected livestreams, reveals distinct linguistic norms and interactional patterns that shape and facilitate audience participation in a digital, asynchronous environment. A supportive and respectful norm is central to the livestream environment. This norm constructs a psychologically safe and emotionally inclusive communicative space, significantly lowering the affective filter for participants. It is established and reinforced through the streamer's adaptive, encouraging language, as well as culturally relevant humor and references, consistent with the convergence strategy of Communication Accommodation Theory (Giles et al., 1973). These linguistic choices reflect an intentional effort to accommodate the linguistic and sociocultural expectations of the audience, thereby fostering a sense of familiarity and trust. This convergence not only humanizes the educational experience but also makes participation less intimidating for viewers who

may otherwise remain passive in public digital settings. These findings are supported by studies such as those of Al-Bakarat et al. (2025), Shernoff et al. (2017), Dalimunthe et al. (2024), and Reeve (2006), which suggest that supportive and safe learning environments enhance learner engagement by fostering positive relationships, offering motivational and emotional support, and enabling students to participate actively and confidently in their learning.

In terms of interactional structure, the livestream follows a distinct streamer-led pattern, where turn-taking is largely one-directional—the streamer initiates discourse, and the audience responds through text-based comments and emojis. This mode of engagement reflects the multimodal affordances of the platform, which favor asynchronous, limited-channel interaction. Importantly, peer-to-peer discourse is virtually absent, and yet, participation is not diminished. Instead, it is reconfigured: rather than direct verbal exchanges, participation manifests through textual cues, visual reactions, and symbolic interactions (e.g., hearts, thumbs up, emojis).

What compensates for this asymmetry is the use of visual feedback loops such as the streamer reading aloud and responding to comments in real time, displaying corrections on screen, or explicitly acknowledging individual contributions. These multimodal strategies help validate participant input, reinforcing a sense of presence and visibility despite the mediated nature of the interaction. They also function as interactional scaffolds, enabling less confident participants to engage through lower-risk modalities.

Thus, while the platform affords limited reciprocity and peer interaction, the emergent sociolinguistic norms and interactional strategies collectively sustain audience engagement. Participation is not simply a function of access or content, but of relational discourse practices. The careful balance of authority and approachability, structure and spontaneity, instruction and affirmation are all significant to engage the viewers until the end of the stream.

The PEEL Framework

Drawing from the insights generated through data analysis and complementing previous claims that leveraging social media can enhance educational outcomes, this study proposes the Pedagogical Ecology for Educational Livestreams (PEEL) Framework (see Figure 3). This dynamic framework illustrates how specific language practices and audience engagement strategies in educational livestreams can potentially transform passive viewing into interactive learning. It underscores the pedagogical potential of social media platforms by demonstrating how strategic communicative practices can cultivate meaningful, participatory learning environments. This is particularly significant in the context of the ongoing education crisis in the Philippines, offering practical implications for leveraging students' screen time on social media as a complementary space for learning beyond formal classroom settings.

The PEEL Framework offers a robust justification for the strategic construction of language in educational livestreams to foster transformative pedagogies and meaningful learning experiences. Grounded in the methodological soundness of a combined approach between the SPEAKING model and Multimodal Discourse Analysis, the framework interrogates the emerging potential for informal learning within educational livestreams.

The pedagogical ecology starts with an initiation of a livestream on a publicly accessible social media platform such as Facebook. This livestream, whether viewed synchronously or asynchronously, follows an act sequence (refer to Figure 1) that simulates the structure of the teaching-learning process. The live streamer assumes the role of a knowledge provider, with their language practices and communicative strategies acting as catalysts for engagement.

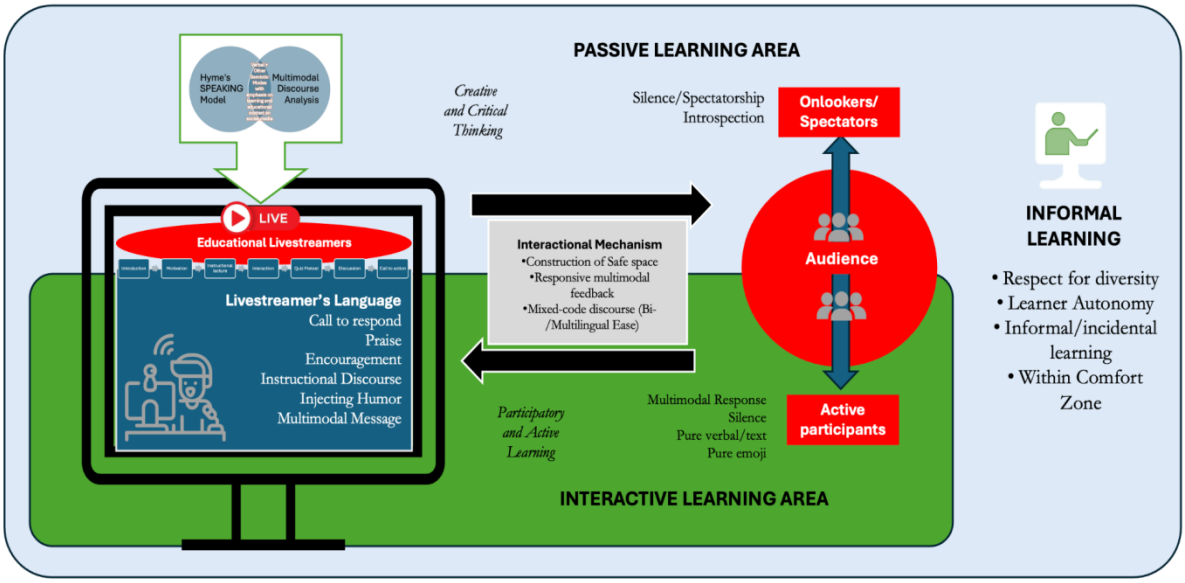

Figure 3. The PEEL Framework

The livestream then triggers interaction. Such interaction comes in different patterns (e.g. call to respond, praise, encouragement, etc.). It may be streamer-centric, convergent, and monologic in nature. Nonetheless, they can still initiate interaction through deliberate interactional mechanisms such as the construction of safe space, responsive multimodal feedback and mixed-code discourse (Bi-/Multilingual Ease). Initially, the audience may occupy the role of passive viewers or onlookers. Although they are not compelled to participate, they still engage cognitively through spectatorship and introspection. This space is referred to as the Passive Learning Area, where learners are present but silent, invisible yet reflective. To move these passive viewers into the Interactive Learning Area, live streamers must employ sustained, strategic language use to invite, acknowledge, and reinforce participation. The directional flow from the streamer to the audience in the framework visually depicts this shift—from passive reception to active involvement, highlighting how language serves as a tool to build connection and shared focus.

Audience engagement manifests in diverse forms, including silence, text responses, emoji use, or multimodal combinations. These responses act as indicators of cognitive engagement or affective states—such as understanding, confusion, or disengagement. For instance, repeated emojis may denote agreement or confusion, while silence might indicate contemplation, disinterest, or technical issues. These cues feed back into the live streamer's communicative strategy, prompting adjustments that enhance connection and learning.

Furthermore, the interaction between live streamers and audiences gradually co-constructs a communicative culture which propels adaptation. This eventually shapes the pedagogical ecology of informal learning within social media livestreams. Unlike formal classrooms, the livestream fosters respect for diversity, learner autonomy, and incidental learning—as learners choose whether and how to engage, often within the comfort of their own space and pace, supported by the platform's cross modal affordances.

Additionally, the PEEL Framework postulates that the iterative interactional cycle in educational livestreams—streamer initiates, audience responds, streamer adapts—creates evolving norms of participation. These may include how feedback is acknowledged, how differing views are accommodated, and how learners negotiate meaning. Characteristics of a safe and learner-centered space—such as mutual respect and autonomy—are both outcomes and enablers of these interactional patterns. As such, the framework serves as a lens for examining not only live streamers' language strategies but also the participatory dynamics that shape an evolving, socially situated ecology for informal education.

Broadly, as online learning continues to evolve as an alternative modality not only for language learning but also for other subjects in all levels of education, it is important to understand how educators can keep thriving within an unpredictable landscape. Therefore, the PEEL Framework is not only a mere visualization of a pedagogical ecology in an online community like social media. It provides a frame for all other platforms with similar ends, keys and instrumentalities and is imperatively framed as a recognizable instructional cycle with significantly wider applications in lesson planning, formative assessment, and learning continuity.

Since the PEEL Framework provides vital viewpoints that guide teachers in the ecology of informal digital learning, they can use it as a blueprint to plan interactive segments, incorporate formative assessments through available and accessible multimodal cues, and scaffold learning even in the absence of face-to-face contact. Moreover, it supports equity and access by reaching learners who may lack stable classroom access but have social media connectivity, emphasizes learner autonomy by allowing viewers to choose when or how to engage, and even catalyzes teacher professional development as educators can analyze their own livestreams using the PEEL lens to refine their practice. With such a nuanced understanding of digital revolution and technology integration in the educational realm, it will be easier for teachers to migrate seamlessly with contingency from traditional to flexible learning set-up and contribute more to a well-designed learning continuity plan within an institution or any broader structure. Hence, in contexts such as the Philippine education crisis, PEEL thus offers a flexible pedagogical ecology for sustaining learning continuity and nurturing learner autonomy in unpredictable educational landscapes.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this study provides a complementary justification on why social media should be used as a platform for learning– be it in formal educational settings or beyond. The constructed Pedagogical Ecology for Educational Livestreams (PEEL) Framework hinges on an integrated approach that thoughtfully combines various adaptive communication strategies, where achieving clarity and ensuring comprehension critically depends on the strategic synergy between accessible, audience-tailored language and supportive visual elements. With a nuanced understanding of such a dynamic structure of interaction between a streamer and an audience, educational livestreams can be effectively positioned as locus of learning, potentially providing strategic support for improved learning outcomes amid a worsening education crisis.

The findings of this study lead to several key recommendations. Firstly, with the PEEL Framework as a guide, educational livestreams are recommended to be leveraged for microlearning, particularly to maintain learning continuity during class disruptions. In this context, live streamers are therefore encouraged to position themselves as microlearning providers. Hence, they

must construct an identity of authority and build credibility through substantial content creation that may yield opportunities for educational support. Secondly, educators are recommended to apply the PEEL Framework in creating livestream contents for learning and extending its scope to other digital environments with potential for teaching-learning simulation. In this sense, they should devise appropriate interactional mechanisms to build rapport and reduce learner anxiety. Finally, future researchers should investigate how these sociolinguistic norms evolve across different subject areas, age groups, or cultural contexts to strengthen the applicability and acceptability of the pedagogical ecology. While traditionally used separately as analytical frameworks, this study also recommends the hybrid approach between Hymes' SPEAKING model and the Multimodal Discourse Analysis in conducting social media ethnography, especially in the context of education and its related settings.

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