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EXPLORING DYNAMIC MOTIVATION IN VIRTUAL EFL CLASSROOMS: A QUALITATIVE CASE STUDY IN INDONESIA

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ABSTRACT

The proliferation of virtual learning environments in English as a Foreign Language (EFL) education has necessitated a deeper understanding of how digital contexts shape student motivation, particularly in developing country settings. This qualitative case study investigates student motivation in synchronous online English learning among ninth grade students at a junior high school in Indonesia. Through semi-structured interviews with ten students, thematic analysis within Miles and Huberman's interactive framework was employed to explore factors influencing learner motivation in virtual classrooms. The findings reveal that student motivation in synchronous online learning is a dynamic phenomenon shaped by interconnected factors operating across individual, social, instructional, and environmental levels. Interactive activities enhanced engagement, while passive instructional approaches led to disengagement. The teacher emerged as the most influential motivational factor, and platform features played crucial mediating roles in reducing participation anxiety. Although technical challenges and environmental distractions posed significant barriers, students demonstrated resilience through adaptive coping strategies. The study contributes theoretical insights into the contextual nature of L2 motivation in digital environments and offers practical implications for educators, curriculum designers, and policymakers seeking to optimize student engagement in virtual EFL classrooms.

Keywords: EFL Student Motivation, Qualitative Case Study, Secondary Education, Synchronous Online Learning, Virtual Classrooms.

INTRODUCTION

The integration of digital technologies into language education has fundamentally transformed the landscape of English as a Foreign Language (EFL) instruction, creating new possibilities for teaching and learning while simultaneously presenting unprecedented challenges for educators and learners alike (Apriliyana, 2025; Chen & Qiao, 2025). Virtual classrooms, defined as synchronous online learning environments where teachers and students interact in real time through digital platforms, have become increasingly prevalent in EFL contexts worldwide, necessitating a reexamination of foundational pedagogical concepts, including learner motivation (Fan & Chen, 2023). The rapid expansion of online

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education, accelerated dramatically by the COVID-19 pandemic, has forced educational systems globally to adopt technology mediated instruction at an unprecedented scale, often without adequate preparation, infrastructure, or empirical guidance (Tseng et al., 2022). As language learning migrates from physical to digital spaces, understanding how these new environments shape students' motivational experiences has emerged as a critical research priority with significant implications for instructional design, teacher preparation, and educational policy.

Student motivation has long been recognized as a fundamental determinant of success in second language acquisition, influencing learners' engagement, persistence, and ultimate achievement (Syaheera et al., 2024). Classical frameworks, including Gardner's socio educational model distinguishing integrative and instrumental orientations, established motivation as a relatively stable individual difference variable. Subsequent work by Dörnyei reconceptualized motivation through the L2 Motivational Self System, emphasizing the role of learners' ideal L2 self, ought to L2 self, and L2 learning experience in shaping motivational trajectories. More recently, scholars have shifted toward understanding motivation as a dynamic, context sensitive phenomenon that emerges from the ongoing interaction between learners and their environments. This dynamic turn, informed by complexity and dynamic systems theory, conceptualizes motivation not as a fixed trait but as a fluid state that fluctuates in response to moment-to-moment classroom events, interpersonal interactions, and environmental conditions. This theoretical evolution has particular relevance for virtual learning contexts, where the absence of physical co presence, reduced nonverbal cues, and technology mediated interaction create fundamentally different conditions for motivational processes to unfold (Song, 2022; Wang et al., 2026).

Research on motivation in online learning environments has grown substantially over the past decade, yet findings remain inconsistent and context dependent. Several studies have documented motivational benefits of online language learning, including increased learner autonomy, flexible pacing, and access to authentic digital resources. Synchronous online platforms, in particular, have been shown to preserve some social dimensions of face-to-face learning through real time interaction, which is critical for sustaining motivation. However, a parallel body of research highlights significant motivational challenges in virtual environments, including learner isolation, reduced accountability, diminished teacher immediacy, and technology related frustrations. Martin et al. found that undergraduate online learners reported significantly lower engagement and persistence compared to their face-to-face counterparts, attributing this gap primarily to reduced social presence and insufficient instructor feedback. Similarly, Lin documented widespread motivational decline among EFL university students in Taiwan following the transition to online instruction, particularly among learners with lower self-regulation capacities (Anwas et al., 2024; Dewi, 2023; Sailer & Homner, 2020)

Critically, however, these studies share important limitations that restrict the generalizability of their findings. First, the majority focus on higher education learners in Western or East Asian contexts, where digital infrastructure, institutional support, and learner autonomy differ substantially from secondary education settings in Southeast Asia (Müller et al., 2023). Second, most existing research employs quantitative survey

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instruments, including motivation scales, engagement indices, and self-efficacy questionnaires, that, while capable of identifying broad patterns, cannot capture the nuanced, dynamic, and contextually embedded nature of motivational experiences as they unfold in real time virtual classrooms (Sakdapat, 2024). Third, relatively few studies have centered students' own voices, allowing learners to articulate in their own words what motivates or demotivates them in specific virtual contexts (Adeoye et al., 2024). The consequence is a literature that tends toward decontextualized generalizations about online motivation, with insufficient attention to how local pedagogical, cultural, infrastructural, and developmental factors shape learners' experiences.

The Indonesian EFL context provides a particularly compelling and underexplored setting for investigating student motivation in virtual classrooms. As the world's fourth most populous nation and a vast archipelagic country, Indonesia has experienced rapid but uneven digital transformation in education, shaped by both policy driven technological adoption and the practical necessity of maintaining educational continuity through various disruptions, most acutely the COVID-19 pandemic (Yoel et al., 2023). The national curriculum mandates English instruction from junior high school onward, yet significant disparities exist in teacher quality, digital infrastructure, and student access to devices and stable internet connectivity, particularly in regions outside major urban centers (Hamidah et al., 2025). These structural conditions make Indonesia a critical site for examining how global educational technology trends intersect with local resource constraints and inequities.

Indonesian junior high school students, typically aged 13 to 15 years, occupy a crucial developmental stage where motivation for language learning is particularly malleable and susceptible to environmental influences (Tseng et al., 2022). Adolescent learners bring distinctive characteristics to virtual learning environments, including developing self-regulation capacities, heightened sensitivity to peer influence and social comparison, and strong orientation toward immediate social feedback (Li et al., 2026). These developmental characteristics interact in complex ways with the affordances and constraints of synchronous online platforms, creating motivational dynamics that differ meaningfully from those documented among adult university learners. Despite this, adolescent EFL learners in Indonesia have received comparatively little attention in the online motivation literature, representing a significant empirical gap.

Synthesizing the preceding discussion, three interconnected gaps in the existing literature are identified. First, there is a pronounced geographic and institutional gap: studies of online EFL motivation have disproportionately focused on tertiary education in Western and East Asian contexts, while secondary education in Southeast Asia, and Indonesia specifically, remains substantially underrepresented. This matters because contextual factors including cultural norms, institutional structures, learner developmental characteristics, and infrastructure conditions are not merely background variables but constitutive elements of motivational dynamics (Sidaway et al., 2025). Second, there is a methodological gap: the dominance of quantitative approaches in online motivation research has produced aggregated patterns at the expense of contextually rich, experience centered accounts.

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Qualitative inquiry that allows learners to articulate their motivational experiences in their own terms is necessary to complement and deepen existing quantitative findings (Tang et al., 2025). Third, there is a theoretical gap: despite the dynamic turn in L2 motivation research, few studies have empirically examined how dynamic motivational fluctuations operate in synchronous virtual classrooms, particularly in resource constrained settings where infrastructural factors may disrupt theoretically predicted motivational patterns (Alamer et al., 2025; I Wayan, 2026).

The present study addresses these three gaps by conducting a qualitative case study of ninth grade students' motivational experiences in synchronous Zoom based English learning at a junior high school in North Toraja Regency, South Sulawesi, Indonesia, a regional, non-urban context that is markedly underrepresented in existing research. By centering students' voices through in depth semi structured interviews and employing thematic analysis within (Saldaña, 2021)interactive framework, the study provides an empirically grounded, experience centered account of what actually motivates and demotivates adolescent EFL learners in virtual classrooms. In doing so, it moves beyond confirming or disconfirming existing frameworks to examine how the specific intersection of pedagogical, social, technological, and infrastructural factors in a developing country context generates motivational dynamics that established theories do not fully anticipate.

This study is guided by the following research question: How do Indonesian junior high school students experience and perceive motivation in synchronous online English learning environments? More specifically, the study seeks to identify the key factors that enhance or diminish student motivation in virtual EFL classrooms and to understand how these factors interact to shape learners' motivational dynamics over time.

The significance of this study is threefold. Theoretically, it extends dynamic systems approaches to L2 motivation into synchronous virtual learning environments in a developing country context, contributing nuanced empirical evidence to a field that has been predominantly shaped by data from high resource settings. Practically, the findings offer evidence-based guidance for EFL teachers, curriculum designers, and school administrators navigating the complexities of virtual instruction in resource constrained contexts. Methodologically, the study demonstrates the value of qualitative, experience centered inquiry in capturing motivational complexity that quantitative instruments cannot access, providing a model for similarly contextualized research in underrepresented educational settings.

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METHODS

Research Design

This study employed a qualitative case study design to investigate the dynamics of student motivation in synchronous online English learning. The case study approach was selected for its capacity to provide rich, contextualized understanding of complex phenomena within real-world settings (Campbell et al., 2020). A qualitative design was particularly appropriate given the study's focus on students' subjective experiences and perceptions, which cannot be adequately captured through quantitative instruments alone (Nicolas, 2022).The case was defined as ninth-grade students at a single junior high school in Indonesia who participated in synchronous online English instruction, bounded by time (one academic semester) and place (the virtual classroom environment).

Participants and Research Context

The study was conducted at SMPN 1 Tallunglipu, a public junior high school located in North Toraja Regency, South Sulawesi, Indonesia. The school serves students from diverse socioeconomic backgrounds and had implemented synchronous online learning through the Zoom platform as part of its instructional continuity strategy. Participants were ten ninth-grade students (aged 14–15 years) who had completed at least one semester of English instruction via Zoom.

Participants were selected through purposive sampling based on the following inclusion criteria: (a) regular attendance in Zoom-based English classes, (b) willingness to share their experiences openly, and (c) representation of varied English proficiency levels to capture diverse perspectives. The sample included six female and four male students, reflecting the typical gender distribution in Indonesian language classrooms. A sample of ten participants was deemed sufficient for this qualitative case study, as the primary goal was depth of understanding rather than statistical generalizability. This sample size aligns with recommendations for qualitative inquiry in bounded case study contexts, where smaller, purposively selected samples enable intensive exploration of individual experiences. Data collection continued until thematic saturation was reached, confirming the adequacy of the sample (Noble & Smith, 2025).

Data Collection

Data were collected through semi-structured individual interviews conducted in Indonesian to enable participants to express themselves fully and naturally (Campbell et al., 2020). An interview protocol was developed based on the research questions and a comprehensive review of the L2 motivation literature. The protocol explored multiple dimensions of students' motivational experiences, including their overall feelings about Zoom-based learning, factors influencing attendance and participation, activities that enhanced or diminished motivation, the teacher's role, the influence of platform features, speaking anxiety, peer influence, technical challenges, and the impact of the home environment on learning sustainability. Each interview lasted between 45 and 60 minutes and was conducted in a quiet setting within the school after class hours. Interviews were

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audio-recorded with participants' informed consent, and field notes were taken to capture contextual details and non-verbal cues (Ahmad & Wilkins, 2024).

Data Analysis

Data analysis followed the interactive model developed by Saldaña (2021), comprising three concurrent and iterative activities: data condensation, data display, and conclusion drawing and verification. All interviews were transcribed verbatim in Indonesian, and transcripts were read repeatedly to achieve familiarization with the data. Data condensation involved a systematic coding process conducted in two phases. In the first phase, open coding was applied inductively to identify initial codes directly emerging from participants' responses. Simultaneously, deductive codes derived from existing L2 motivation theories were applied to capture theoretically relevant patterns (Saldaña, 2021). In the second phase, related initial codes were grouped through axial coding into broader categories based on their conceptual similarities and relationships. These categories were subsequently refined through constant comparative analysis across all transcripts, resulting in overarching themes that represented the key motivational dynamics in synchronous online learning.

Data display involved organizing condensed data into structured summary matrices, allowing systematic identification of patterns, relationships, and variations across participants. Conclusion drawing and verification involved interpreting broader patterns, checking preliminary conclusions against original transcript data, and actively seeking disconfirming evidence to avoid confirmatory bias (Saldaña, 2021).

Ethical Considerations

Prior to data collection, ethical approval was obtained from the relevant institutional authority. Participants and their parents or guardians were informed about the purpose, procedures, and voluntary nature of the study (Murchison, 2026). Written informed consent was obtained from all participants and their guardians before interviews commenced. Participants were assured of confidentiality and anonymity; pseudonyms are used throughout the study to protect their identities. They were also informed of their right to withdraw from the study at any time without consequence. All data were stored securely and accessed only by the research team.

Trustworthiness

To ensure the rigor and trustworthiness of the findings, this study addressed four criteria; credibility, transferability, dependability, and confirmability. Credibility was established through prolonged engagement with participants, member checking, and peer debriefing. Member checking was conducted by sharing summary interpretations with several participants to verify that findings accurately reflected their experiences. Peer debriefing involved discussing emerging interpretations with colleagues familiar with qualitative research to challenge assumptions and enhance analytical rigor. Transferability was supported by providing thick, detailed descriptions of the research context, participants, and findings, enabling readers to assess the applicability of findings to similar context (Noble & Smith, 2025). Dependability was addressed through the maintenance of an audit trail documenting all methodological decisions, coding procedures, and analytical steps throughout the research process. Confirmability was ensured by grounding all

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interpretations in direct evidence from the data and actively searching for disconfirming cases to minimize researcher bias.

RESULTS

Analysis of interview data from ten ninth-grade students identified twelve interconnected themes shaping motivation in synchronous online English learning. Rather than operating independently, these themes form an integrated motivational ecosystem spanning individual, social, instructional, and environmental levels. Three clusters of themes proved particularly analytically significant: the instructional-activity nexus (Themes 3–5), the technological-social interface (Themes 6–8), and the ecological-infrastructural context (Themes 11–13). Table 1 provides a thematic overview, followed by interpretive analysis of the key patterns and their interrelationships.

Table 1. Summary of motivational themes in synchronous online English learning

Theme	Key Findings
Emotional Responses	Motivation fluctuated across and within sessions, driven by activity type, material difficulty, and technical conditions. Positive emotions arose from social connection and interactive tasks; negative emotions linked to passive instruction and physical discomfort.
Attendance & Punctuality	Attendance was motivated by content value, anticipated activities (quizzes), grading policies, and peer presence. Barriers included technical issues, personal routines, and competing home demands.
Motivating Activities	Gamified quizzes, breakout room discussions, presentations, videos, and polling were highly engaging due to their interactive, collaborative, and low-stakes nature.
Demotivating Activities	Extended lectures, excessive text reading, lack of interaction, heavy assignments, and unclear audio consistently reduced engagement.
Teacher Influence	Clarity, friendliness, appropriate pacing, humor, and praise enhanced motivation. Passive slide reading, fast delivery, and restricted participation diminished it.
Platform Features	Chat reduced anxiety by enabling text-based participation. Breakout rooms facilitated small-group interaction. Polling enabled quick, inclusive engagement. Feature use was contingent on overall classroom climate.
Speaking Anxiety	Anxiety stemmed from fear of mistakes and peer judgment. Confidence developed gradually through regular practice, teacher praise, and the anonymity of text-based participation.
Peer Influence	Active peers modeled engagement and stimulated participation; collective peer silence triggered downward motivational spirals.
Recognition & Rewards	Teacher praise enhanced confidence and a sense of relational validation. Even low grades functioned as motivational prompts for improvement.

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Motivational Fluctuations	Motivation varied based on material difficulty, physical state, technical conditions, and teacher delivery style. Some students maintained consistent intrinsic motivation.
Technical Challenges	Slow internet, data limitations, and device problems posed barriers. Students adapted through signal-seeking, WiFi switching, peer help, and calm reengagement.
Home Environment	Quiet spaces and family support enhanced concentration; noise and sibling disruption were significant impediments. Headphones and designated spaces were common coping strategies.
Session Duration	Attention declined after 30–60 minutes. Engaging content and structured breaks extended attention; passive extended periods were the primary driver of disengagement.

The Dynamic Nature of Student Motivation

A foundational pattern across all twelve themes is the dynamic, context-sensitive nature of student motivation. Far from reflecting a stable dispositional trait, students' engagement consistently emerged as an emergent response to the interplay between learning conditions and personal states. Student 2's observation *'Kadang saya semangat, tapi kadang juga malas kalau materinya susah'* (Sometimes I'm enthusiastic, but sometimes I'm lazy if the material is difficult), captures what is best understood not as inconsistency but as motivational sensitivity to context. Critically, this sensitivity operated bidirectionally: the same student who reported enthusiasm during gamified activities described disengagement during extended passive lectures, and the same virtual environment that reduced speaking anxiety through chat features simultaneously introduced new forms of self-consciousness. This bidirectionality across themes suggests that effective virtual instruction must be understood as ongoing motivational management rather than a fixed pedagogical formula.

The Instructional-Activity Nexus: Interactivity as the Central Driver

The most consistent pattern across all participants was the strong relationship between interactivity and motivation. Gamified quizzes, breakout room discussions, and polling were not merely preferred over passive activities — they functioned as qualitatively different motivational experiences. Student 1's characterization of quizzes as 'seru dan menantang' (fun and challenging) and Student 4's explicit statement that *'Saya bosan kalau tidak ada interaksi'* (I'm bored if there's no interaction) point to a motivational threshold: passive reception did not merely produce lower engagement but appeared to actively disengage students, suggesting a non-linear relationship between activity design and motivation. What unites the motivating activities quizzes, collaborative breakout tasks, presentations, and polling is their capacity to position students as active agents rather than passive recipients, creating a sense of competence, purposeful participation, and social connection simultaneously. This pattern reveals that interactivity and motivation in virtual EFL classrooms are not merely correlated but structurally interdependent.

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The teacher's role is analytically inseparable from the activity nexus. Students' motivational responses to activities were consistently mediated by how those activities were delivered. Teacher clarity, pacing, warmth, and strategic use of praise transformed the same task from motivating to demotivating or vice versa. This means the teacher functioned not merely as a content deliverer but as a motivational architect — the variable that determined whether platform affordances were activated or remained latent. Student 5's demotivation when the teacher passively read slides and Student 3's disengagement under excessively fast pacing illustrate that even theoretically engaging content is insufficient without relational and pedagogical attentiveness.

The Technological-Social Interface: Platform Features, Anxiety, and Peer Dynamics

A second analytically significant cluster involves the interaction between platform features, speaking anxiety, and peer dynamics. These three themes are interconnected in ways that resist separate treatment. The chat function's value for anxious students — as articulated by Student 1 ('Saya suka fitur chat karena bisa jawab tanpa takut') and Student 5 ('Chat membuat saya lebih berani') illustrates how technological features mediate the social risk of participation. However, Student 7's admission that she rarely used features despite their availability because of persistent shyness reveals a critical qualification: platform affordances do not automatically reduce anxiety but require a supportive classroom climate to become accessible. In other words, technology provides possibility; pedagogy and social environment determine actualization.

Peer dynamics further complicate this picture. Peer influence was consistently bidirectional: active peers generated social energy that drew quieter students into participation Student 1: *'Saya jadi ikut semangat kalau teman aktif'* , while collective silence created downward motivational spirals Student 7: *'Kalau teman diam semua, saya juga jadi malas'*. This bidirectionality means that peer dynamics can amplify either engagement or disengagement, and the direction of this amplification is itself influenced by teacher behavior and activity design. The three sub-systems — platform features, speaking anxiety, and peer dynamics thus function as a mutually reinforcing motivational circuit rather than independent variables.

The Ecological-Infrastructural Context: Recognition, Technical Barriers, and Home Environment

The third analytically significant cluster concerns the ecological conditions within which instructional motivation operates. Teacher recognition, technical challenges, home environment, and session duration together constitute the motivational ecology of virtual learning the background conditions that either enable or constrain the motivational effects of instruction. Teacher praise, for instance, functioned as more than external reinforcement: Student 8's reflection that *'Saya merasa dihargai kalau guru memuji'* (I feel valued when the teacher praises) indicates that recognition served as a marker of relational connection, addressing a psychological need for belonging that the physical distance of virtual learning may otherwise leave unmet.

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Technical and environmental factors, meanwhile, reveal the structural limits of pedagogical agency. Students' internet connectivity problems and home distractions were not peripheral inconveniences but fundamental barriers capable of negating the motivational benefits of well-designed instruction. Student 3's identification of poor connection as a direct motivational disruptor '*Jaringan buruk membuat saya tidak semangat*' (Bad connection makes me unenthusiastic) illustrates that motivation in virtual environments is ultimately conditional on infrastructural adequacy. Students demonstrated considerable adaptive resilience in response to these barriers repositioning themselves for better signal, sharing hotspots, and taking peer notes yet the persistence of these coping strategies across participants signals a systemic problem that individual adaptation alone cannot resolve.

Attention sustainability, tied closely to session duration and activity variety, further underscores that motivational ecology is temporally sensitive: even intrinsically motivated students experienced declining attention beyond 60 minutes without structured breaks or activity transitions. These findings reveal that student motivation in synchronous online EFL learning is neither a stable trait nor a simple product of instructional design. It is a dynamic, multi-level phenomenon produced by the ongoing interaction among instructional choices, technological affordances, social processes, and ecological conditions. The twelve themes do not function as a checklist of motivational factors but as an integrated system in which changes in one domain such as a shift from interactive to passive activities, or the onset of technical disruption propagate motivational effects across multiple others. This systemic character has significant implications for how educators, researchers, and policymakers conceptualize and respond to the motivational challenges of virtual EFL instruction.

DISCUSSION

Dynamic and Situated Nature of Online L2 Motivation

The finding that students' motivation fluctuated across sessions and even within single lessons provides compelling empirical support for the dynamic turn in L2 motivation theory (Sidaway et al., 2025). Students' descriptions of being sometimes enthusiastic and sometimes disengaged depending on material difficulty, activity type, technical conditions, and personal states align with the conceptualization of motivation as an emergent property of learner-context interaction rather than a stable individual trait. These findings extend dynamic systems approaches to motivation into the virtual learning environment, demonstrating that temporal variability and contextual sensitivity are not exclusive to face-to-face settings but operate with equal, if not greater, intensity in online contexts (Zhou, 2025).

Importantly, however, this study reveals that motivation fluctuation in virtual environments is driven by a qualitatively distinct set of ecological pressures compared to those documented in physical classrooms. While prior dynamic systems research has foregrounded internal learner variables such as self-efficacy and goal orientations (Zhang, 2025). The present findings demonstrate that external infrastructural conditions particularly internet connectivity and home environment distractions exerted equally

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powerful and sometimes overriding influences on motivational states (Mcclelland & Larson-Hall, 2025). This challenges theoretical frameworks that treat contextual factors as peripheral moderators rather than central determinants of motivational dynamics. The profound influence of home environment and technical infrastructure confirms that motivation in virtual learning cannot be understood solely through instructional variables but must account for the broader ecological context (Al-Hoorie et al., 2025). This aligns with (Khan et al., 2024); ecological systems perspective, yet extends it by demonstrating that in low-resource digital environments, microsystem and ecosystems factors may collapse into a single disruptive force that instruction alone cannot counteract. Future theoretical models of online L2 motivation should therefore integrate infrastructural equity as a foundational, rather than supplementary, variable.

Interactive and Gamified Activities

Students' strong preference for interactive and gamified activities aligns with extensive research on the motivational power of active learning and game-based elements in educational contexts. Student 1's characterization of quizzes as *seru dan menantang* (fun and challenging) reflects the optimal balance of challenge and skill that Lamb identifies as essential for flow experiences (Lamb, 2025). The immediate feedback provided by gamified platforms serves multiple motivational functions identified in self-determination theory: satisfying learners' need for competence through clear progress indicators, supporting autonomy through self-monitoring, and creating opportunities for relatedness through shared competitive experiences (Nyamongo et al., 2023).

Nonetheless, this finding warrants critical qualification. Another research cautions that gamification effects are not uniformly positive and may be contingent on students' prior game literacy, competitive disposition, and cultural orientation toward evaluation (Ahad et al., 2025; Oliveira et al., 2023). In collectivist educational cultures such as Indonesia, competitive game formats may generate social discomfort or anxiety for certain learners, potentially undermining the very engagement they seek to promote. The present study did not document such negative responses, which may reflect either the teacher's skillful implementation of low-stakes gamification or a limitation in the interview protocol's capacity to surface reluctant participants' discomfort. Future research should therefore examine the differential motivational effects of gamification across learner personality profiles and cultural contexts rather than treating gamification as uniformly beneficial.

The motivational power of breakout room discussions highlights the importance of social interaction in virtual environments, consistent with sociocultural theory's emphasis that learning occurs through collaborative engagement (Tao et al., 2025). In virtual contexts, breakout rooms create reduced-anxiety participation spaces by lowering the affective filter (Zebua, 2025). However, this finding partially diverges from (Kohnke et al., 2024) observation that breakout rooms can generate confusion and disengagement when tasks are insufficiently structured. The present students' positive experiences suggest that task clarity and teacher scaffolding prior to breakout sessions may be the critical mediating variable an implication that warrants explicit attention in pedagogical design. The demotivating effect of passive activities aligns with cognitive load theory, as online environments may impose

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extraneous cognitive load through screen-based information processing, rendering sustained passive reception particularly taxing (Bhat et al., 2026). This finding extends cognitive load theory beyond its original face-to-face instructional context and suggests that the threshold for cognitive overload may be significantly lower in virtual settings.

The Teacher as Motivational Anchor

Perhaps the most significant finding is that the teacher remains the central motivational influence even in technology-mediated learning environments. Students' detailed descriptions of how teacher clarity, pacing, demeanor, humor, and praise affected their motivation powerfully reaffirm the centrality of human relationships in education, regardless of delivery medium. This finding is consistent with research on teacher immediacy and extends it into virtual contexts, demonstrating that relational dimensions of teaching transcend physical presence (Bouten et al., 2025).

This finding stands in partial contrast to techno-centric perspectives in educational technology research, which have argued that well-designed digital platforms and automated feedback systems can compensate for reduced teacher presence in online learning (Newton, 2024). The present data challenge this position: students consistently attributed their motivational peaks and valleys to teacher behavior rather than to platform capabilities, suggesting that technological tools function as motivational amplifiers only when activated by effective human pedagogy. This implies a critical reconceptualization of the teacher's role in virtual EFL settings not as a facilitator who yields agency to technology, but as an irreplaceable motivational architect whose relational competencies determine whether digital affordances are productively appropriated.

Teacher praise, in particular, extended beyond mere external reinforcement to serve as a signal of relational recognition and identity validation (Shao et al., 2024), a function that automated platforms are structurally incapable of replicating. This finding makes a meaningful contribution to debates about teacher substitution in digital education, providing qualitative evidence from a developing-country context that human relational presence remains non-negotiable for sustaining adolescent learner motivation.

Platform Features and Speaking Anxiety

The finding that specific Zoom features mediated students' motivational experiences in distinct ways contributes to understanding the relationship between technological design and learner engagement. The chat feature's function in reducing speaking anxiety by enabling text-based participation aligns with research on computer-mediated communication in language learning (Luo & Xiong, 2025), where reduced real-time pressure facilitates participation from anxious learners.

However, this finding requires critical contextualization. While text-based participation may serve as a valuable transitional scaffold, it also carries the risk of entrenching avoidance behaviors if learners rely on written channels as permanent substitutes for oral production rather than as stepping stones toward it. The present study found that regular oral practice gradually built students' confidence, consistent with desensitization through exposure(Schmid, 2023), yet the long-term developmental

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trajectory from text-reliant participation to autonomous oral engagement remains unclear. This represents a substantive gap that longitudinal research should address.

Furthermore, the amplified self-consciousness arising from self-image visibility on screen constitutes a novel anxiety dimension not captured in foundational models of foreign language anxiety (Hussain et al., 2025; MacIntyre & Gregersen, 2022), suggesting that these classical frameworks require updating to account for the specific phenomenology of video-mediated language learning. This study's documentation of this phenomenon in an Indonesian junior high school context contributes empirical grounding for such theoretical revision.

Peer Dynamics and Technical Equity

The bidirectional influence of peers reveals the profound importance of social presence in virtual learning environments. Students' increased enthusiasm when peers were active and demotivation when peers were silent illustrate the social contagion of motivation and extend Bandura's social cognitive theory into virtual contexts, where observing peers' engagement enhances self-efficacy beliefs. The negative spiral of collective silence reveals a particular vulnerability of virtual environments, where teachers lack the physical and spatial tools available in face-to-face settings to interrupt passivity and reenergize the group. This finding diverges from studies in Western higher education contexts that report relatively stable peer motivation dynamics in online settings, suggesting that the social contagion effect may be more pronounced in adolescent learners within collectivist cultural contexts, where conformity norms and interpersonal sensitivity are more salient. This cross cultural divergence underscores the need for L2 motivation research that is sensitive to developmental and cultural specificities rather than generalizing from adult Western samples (Goldin et al., 2025).

The significant technical challenges students reported illuminate the lived reality of digital learning in developing country contexts and constitute perhaps the most theoretically consequential finding of this study. Student 4's conditional endorsement of digital platforms "if the signal is good" and Student 8's observation that "not all friends have good phones" powerfully illustrate the digital divide that transforms pedagogical inequity into motivational inequity (Heinz et al., 2025). Critically, while students demonstrated remarkable resilience through adaptive coping strategies, this study argues that framing individual resilience as a solution risks depoliticizing a structural problem.

Individual adaptation cannot substitute for systematic infrastructure investment, and educational research that celebrates student coping without simultaneously advocating for policy-level intervention may inadvertently normalize inequitable conditions. Student 6's request for an application "that can be used without internet" is not merely a practical suggestion but a powerful articulation of the misalignment between globally promoted digital education models and the material realities of learners in resource-constrained settings. This finding contributes to a growing body of critical scholarship calling for context-sensitive digital education policies that begin from the learner's actual circumstances rather than from idealized technological visions (Martin et al., 2025).

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CONCLUSION

This study demonstrates that student motivation in synchronous online EFL learning is best understood as a dynamic, context-dependent system rather than a stable individual attribute. Drawing on qualitative evidence from Indonesian junior high school learners, the findings reveal that motivation emerges through the continuous interaction of instructional design, teacher practices, technological affordances, peer dynamics, and ecological conditions. Rather than functioning as isolated variables, these factors operate as an integrated motivational ecosystem, where shifts in one domain reverberate across others.

Three key insights extend current understandings of L2 motivation in virtual environments. First, interactivity functions as a threshold condition for engagement: interactive and gamified activities do not merely enhance motivation but prevent disengagement, while passive instructional modes actively undermine it. Second, the study reaffirms that the teacher remains the central motivational agent, even in technology-mediated contexts. Teacher clarity, relational presence, and pedagogical responsiveness determine whether digital tools become meaningful resources or remain underutilized features. Third, technological affordances and infrastructural realities jointly shape motivational access. Features such as chat and breakout rooms can reduce participation anxiety and broaden engagement; however, their effectiveness is contingent on supportive classroom climates and, critically, on equitable access to stable internet and learning environments.

Theoretically, this study contributes to the dynamic and ecological reconceptualization of L2 motivation by foregrounding infrastructural and environmental factors as constitutive elements rather than peripheral influences. It highlights the need to extend existing motivational frameworks to account for the material conditions of learning, particularly in under-resourced contexts.

Practically, the findings suggest that effective virtual EFL instruction requires intentional orchestration of interaction, pedagogy, and technology, alongside sustained attention to students' emotional and social experiences. For policymakers, the study underscores that motivational equity cannot be separated from digital equity, calling for systemic investment in infrastructure and context-sensitive teacher development.

Finally, this study is limited by its bounded case and cross-sectional design. Future research should adopt longitudinal and multi-site approaches to examine how motivational trajectories evolve over time and across diverse contexts. Further investigation is also needed into how sustained engagement in virtual environments translates into measurable language development outcomes, particularly among learners with varying levels of access and support.

REFERENCES

Adeoye, M. A., Prastikawati, E. F., & Abimbowo, Y. O. (2024). Empowering Learning: Pedagogical Strategies for Advancing 21st Century Skills and Quality Education. *Journal of Nonformal Education*, *10*(1), 10–21. https://doi.org/10.15294/JONE.V10I1.1451

Ahad, A., Langove, S. A., Kakar, A., Quratulain, & Rubab, U. E. (2025). The Impact of

FOSTER JELT
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***p*-ISSN: 2776-8880**

Educational Psychology on Enhancing Student Motivation and Academic Achievement in Secondary Schools. *Journal of Social Horizons*, *2*(2), 342–350. https://doi.org/10.5281/ZENODO.16640103

Ahmad, M., & Wilkins, S. (2024). Purposive sampling in qualitative research: a framework for the entire journey. *Quality & Quantity 2024 59:2*, *59*(2), 1461–1479. https://doi.org/10.1007/S11135-024-02022-5

Al-Hoorie, A. H., Hiver, P., & In'Nami, Y. (2025). Looking beyond the L2 Motivational Self System: Lessons from two "lost" decades. *Studies in Second Language Acquisition*, *47*(4), 1193–1204. https://doi.org/10.1017/S0272263125101319

Alamer, A., Robat, E. S., Shirvan, M. E., & Ryan, R. (2025). Self-Determination Theory and Language Learning: A Multilevel Meta-Analysis. *Educational Psychology Review*, *37*(2), 59-. https://doi.org/10.1007/S10648-025-10038-Y/METRICS

Anwas, E. O. M., Permatasari, A. D., Iftitah, K. N., Supriyatno, Salman, I., & Firdaus, W. (2024). Teacher's Guidebook: Promising Solutions to the Challenges of Vocational and Language Learning in Vocational High Schools. *International Journal of Language Education*, *8*(4), 713–733. https://doi.org/10.26858/ijole.v8i4.70000

Apriliyana, N. P. (2025). Transforming Education Through Deep Learning Design: Integrating Four Key Elements in School Practice. *Molang: Journal Islamic Education*, *3*(1), 19–27. https://doi.org/10.32806/JM.V3I1.843

Bhat, A., Wani, Z. A., Mir, I., & Quadir, A. (2026). The influence of supervisors' motivating and demotivating behaviour on doctoral students' information seeking. *Mentoring & Tutoring: Partnership in Learning*. https://doi.org/10.1080/13611267.2026.2640070

Bouten, A., Reeve, J., Haerens, L., Jang, H. R., & De Cocker, K. (2025). Goals for others: teachers' aspirations for students predict motivating and demotivating teaching. *Motivation and Emotion 2025*, 1–17. https://doi.org/10.1007/S11031-025-10186-2

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *J. Res. Nurs.*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206

Chen, W., & Qiao, L. (2025). Learning at Zhejiang University: Applying the Learning Engineering Approach to ICT-Enabled Educational Innovation. *Beijing International Review of Education*, *7*(4), 321–336. https://doi.org/10.1177/25902547251395885

Dewi, Y. P. (2023). Use of Tiktok Application to Enchance Students' Speaking Skill. *Journal Corner of Education, Linguistics, and Literature*, *3*(2). https://doi.org/10.54012/jcell.v3i2.196

Fan, T. Y., & Chen, H. L. (2023). Developing cooperative learning in a content and language integrated learning context to enhance elementary school students' digital storytelling performance, English speaking proficiency, and financial knowledge. *Journal of Computer Assisted Learning*, *39*(4). https://doi.org/10.1111/jcal.12804

FOSTER JELT
Journal of English Language Teaching

Copyright © The Author(s)
Vol.7, No. 2, April 2026
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***p*-ISSN**: **2776-8880**

Goldin, S., Robinson, D. D., Shaughnessy, M., Garcia, N. M., Blunk, M., Pynes, D., & Mortimer, J. P. (2025). Beyond Technical Fixes: Reconsidering Equity Sticks and Expanding Notions of Equitable Teaching. *Urban Education*. https://doi.org/10.1177/00420859251359261;WGROUP:STRING:PUBLICATION

Hamidah, J., Jumadi, Rafiek, M., Mu'in, F., Noortyani, R., Amelia, R., & Etika Rahmawati, L. (2025). Innovations to Strengthen National Identity in Indonesia: Promoting Literacy Acquisition through Culture-Based Education. *ISVS E-Journal*, *12*(4). https://doi.org/10.61275/isvsej-2025-12-04-08

Heinz, M., Mc, ·, Rory, D., Keane, E., & Ie, M. H. (2025). The essential role of teacher diversity in creating equitable and inclusive learning environments: an interdisciplinary conceptual framework. *Learning Environments Research 2025 28:2*, *28*(2), 387–407. https://doi.org/10.1007/S10984-025-09540-5

Hussain, S. Q., Panhwar, P. D. F., & Ansari, P. D. S. (2025). The Multifactorial Nature of Foreign Language Speaking Anxiety: A Comprehensive Review of Contributing Factors in EFL. *Journal of Applied Linguistics and TESOL (JALT)*, *8*(3), 2058=2072-2058=2072. https://doi.org/10.63878/JALT1216

I Wayan. (2026). Longitudinal analysis of student learning motivation from past experiences to future career projections. *Priviet Social Sciences Journal*, *6*(1), 654–668. https://doi.org/10.55942/PSSJ.V6I1.1173

Khan, F., Khan, M. A., & Rahman, H. U. (2024). Perusing sustainable development through education: evidence from Malaysia, Indonesia and Pakistan. *Environment, Development and Sustainability 2024*, 1–20. https://doi.org/10.1007/S10668-024-05441-4

Kohnke, L., Foung, D., Zou, D., & Jiang, M. (2024). Creating the conditions for professional digital competence through microlearning. *Educational Technology and Society*, *27*(1). https://doi.org/10.30191/ETS.202401_27(1).SP05

Lamb, J. (2025). Conceiving the Future Classroom Through Learning Futures, Postdigital and Learning Spaces Research. *Postdigital Science and Education 2025 7:3*, *7*(3), 690–698. https://doi.org/10.1007/S42438-025-00552-1

Li, D., Zhang, M., Zhou, S., & Yu, X. (2026). Structural equation modeling and validation of virtual learning community constructs based on the Chinese evidence. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2025.2503235

Luo, Z., & Xiong, Y. (2025). Is anxiety always harmful? An exploration of the impact of language anxiety on EFL learning motivation, EFL competence and EFL academic performance. *BMC Psychology 2025 13:1*, *13*(1), 674-. https://doi.org/10.1186/S40359-025-03017-Z

MacIntyre, P. D., & Gregersen, T. (2022). The idiodynamic method: Willingness to communicate and anxiety processes interacting in real time. *IRAL - International Review of Applied Linguistics in Language Teaching*, *60*(1), 67–84.

FOSTER JELT
Journal of English Language Teaching

Copyright © The Author(s)
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***p*-ISSN**: **2776-8880**

https://doi.org/10.1515/IRAL-2021-0024/XML

Martin, F., Long, S., Haywood, K., & Xie, K. (2025). Digital distractions in education: a systematic review of research on causes, consequences and prevention strategies. *Educational Technology Research and Development*, *73*(6), 3423–3451. https://doi.org/10.1007/S11423-025-10550-6/TABLES/9

Mcclelland, N., & Larson-Hall, J. (2025). Why you should stop using the ideal L2 self and the L2 motivational self-system to measure motivation (Reaction to Al-Hoorie, Hiver & In'nami, 2024). *Studies in Second Language Acquisition*, *47*(4), 1121–1132. https://doi.org/10.1017/S0272263124000779

Müller, C., Mildenberger, T., & Steingruber, D. (2023). Learning effectiveness of a flexible learning study programme in a blended learning design: why are some courses more effective than others? *International Journal of Educational Technology in Higher Education*, *20*(1). https://doi.org/10.1186/s41239-022-00379-x

Murchison, J. M. . (2026). *Ethnography essentials : designing, conducting, and presenting your research*. 256. https://books.google.com/books/about/Ethnography_Essentials.html?hl=id&id=LMqqEQAAQBAJ

Newton, J. M. (2024). Stepping Up the Quality of English Language Teaching: How Can Nation's Four-Strands Principle Help? *VNU Journal of Foreign Studies*, *40*(3), 161–171. https://doi.org/10.63023/2525-2445/JFS.ULIS.5201

Nicolas, D. G. (2022). Integrated Quality Management for the Existence of Pastoral Ministries at the Bethel Church of Indonesia Parakletos. *Quantitative Economics and Management Studies*, *3*(6). https://doi.org/10.35877/454ri.qems1068

Noble, H., & Smith, J. (2025). Ensuring validity and reliability in qualitative research. *Evidence-Based Nursing*, *28*(4), 206–208. https://doi.org/10.1136/EBNURS-2024-104232

Nyamongo, P. G., Ichuloi, A., & Kandagor, D. (2023). Assessment of financial management systems for sustainability of the SDA Church in South-East Kenya field, Kenya. *Journal of Pastoral and Practical Theology (JPPT)*, *2*(1). https://doi.org/10.51317/jppt.v2i1.378

Oliveira, W., Hamari, J., Shi, L., Toda, A. M., Rodrigues, L., Palomino, P. T., & Isotani, S. (2023). Tailored gamification in education: A literature review and future agenda. *Education and Information Technologies*, *28*(1). https://doi.org/10.1007/s10639-022-11122-4

Sailer, M., & Homner, L. (2020). The Gamification of Learning: a Meta-analysis. *Educational Psychology Review*, *32*(1). https://doi.org/10.1007/s10648-019-09498-w

Sakdapat, N. (2024). Approaches for sustainable professional skill development for vocational education students in Thailand. *F1000Research 2024 13:401*, *13*, 401. https://doi.org/10.12688/f1000research.146802.1

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FOSTER JELT
Journal of English Language Teaching

Copyright © The Author(s)
Vol.7, No. 2, April 2026
***e*-ISSN**: **2723-4126**
***p*-ISSN**: **2776-8880**

Saldaña, J. (2021). Coding techniques for quantitative and mixed data. *The Routledge Reviewer's Guide to Mixed Methods Analysis*, 151–160. https://doi.org/10.4324/9780203729434-14

Schmid, S. F. (2023). The communicative CLIL classroom: Insights into heterogenous learners' spoken communication in English about art in Swiss primary schools. *Journal of Immersion and Content-Based Language Education*, *12*(1), 49–74. https://doi.org/10.1075/JICB.21015.FRA

Shao, Y., Liu, X., Song, Y., Zhang, Z., Wang, P., Xing, X., Peng, W., Xing, S., Bian, J., & Cao, X. (2024). Experimental study on slow tensile, fatigue, and impact on X42 steel and #20 carburizing steel. *International Journal of Pressure Vessels and Piping*, *208*. https://doi.org/10.1016/j.ijpvp.2024.105139

Sidaway, K., Li, J., & Ushioda, E. (2025). Using motigraphs to investigate the temporalities of motivation: Illustrating contrasting approaches. *Research Methods in Applied Linguistics*, *4*(2), 100220. https://doi.org/10.1016/J.RMAL.2025.100220

Song, Y. (2022). The Constructive Role of Teacher Enthusiasm and Clarity in Reducing Chinese EFL Students' Boredom. In *Frontiers in Psychology* (Vol. 13). https://doi.org/10.3389/fpsyg.2022.874348

Syaheera, W., Sulaiman, M., Rahila, N., Ibrahim, W., & Razak, R. A. (2024). *Attitudes and Motivation of TVET Students in Learning English*. https://doi.org/10.6007/IJARBSS/v14-i10/23112

Tang, S., Hoye, A., Slade, A., Tang, B., Holmes, G., Fujimoto, H., Zheng, W. Y., Ravindra, S., Christensen, H., & Calear, A. L. (2025). Motivations for Self-Harm in Young People and Their Correlates: A Systematic Review. *Clinical Child and Family Psychology Review 2025 28:1*, *28*(1), 171–208. https://doi.org/10.1007/S10567-024-00511-5

Tao, H., Tang, J., Liu, J., & Wang, J. (2025). How to build tourism economic resilience in historical and cultural blocks?—A fsQCA study based on 21 blocks in Beijing. *Humanities and Social Sciences Communications 2025 12:1*, *12*(1), 1426-. https://doi.org/10.1057/s41599-025-05741-8

Tseng, T. H., Lin, S., Wang, Y. S., & Liu, H. X. (2022). Investigating teachers' adoption of MOOCs: the perspective of UTAUT2. *Interactive Learning Environments*, *30*(4). https://doi.org/10.1080/10494820.2019.1674888

Wang, S., Bao, Q., & Yu, J. (2026). Large Language Model Self-Efficacy and Metacognition as Bridges in Cross-Linguistic Self-Efficacy Transfer. *The Asia-Pacific Education Researcher 2026*, 1–18. https://doi.org/10.1007/S40299-026-01092-3

Yoel, S. R., Akiri, E., & Dori, Y. J. (2023). Fostering Graduate Students' Interpersonal Communication Skills via Online Group Interactions. *Journal of Science Education and Technology*, *32*(6). https://doi.org/10.1007/s10956-022-09998-5

Zebua, N. (2025). Education Transformation : Implementation of Deep Learning in 21st-

FOSTER JELT
Journal of English Language Teaching

Copyright © The Author(s)
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***e*-ISSN**: **2723-4126**
***p*-ISSN**: **2776-8880**

Century Learning. *Harmoni Pendidikan : Jurnal Ilmu Pendidikan*, *2*(2), 146–152. https://doi.org/10.62383/HARDIK.V2I2.1405

Zhang, Q. (2025). The role of EFL teacher immediacy and teacher-student rapport in boosting motivation to learn and academic mindsets in online education. *Learning and Motivation*, *89*, 102092. https://doi.org/10.1016/J.LMOT.2024.102092

Zhou, H. (2025). Exploring the dynamic teaching-learning relationship in interactive learning environments. *Interactive Learning Environments*, *33*(7), 4363–4393. https://doi.org/10.1080/10494820.2025.2462149