



Emergency remote teaching in english language teaching: A mixed-method investigation of pedagogical effectiveness, student engagement, and instructor adaptation

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Abstract

This mixed-method study examined the effectiveness of emergency remote teaching (ERT) in English language teaching contexts, focusing on pedagogical outcomes, student engagement, and instructor adaptation strategies. The research was conducted across 24 higher education institutions in Southeast Asia, involving 487 English language instructors and 3,256 undergraduate students over a two-semester period (September 2021–May 2022). Participants completed validated questionnaires (Student Engagement in Language Learning Scale, Instructor Pedagogical Adaptation Index), while 42 instructors participated in semi-structured interviews, and classroom recordings ($n = 64$) were analyzed qualitatively using thematic analysis. Results indicated that 68.4% of students reported moderate to high engagement in remote ELT environments, with synchronous instruction showing significantly higher engagement scores ($M = 3.87$, $SD = 0.64$) compared to asynchronous delivery ($M = 3.12$, $SD = 0.71$; $t(3,254) = 18.92$, $p < 0.001$). Instructors demonstrated substantial adaptation ($M = 3.58$, $SD = 0.82$ on a 5-point scale), particularly in integrating multimodal resources and implementing break-out room activities. However, speaking skills development remained problematic, with only 42.1% of instructors reporting confidence in assessing oral proficiency remotely. Thematic analysis revealed five major themes: (1) technological constraints, (2) student motivation fluctuations, (3) pedagogical innovation, (4) assessment challenges, and (5) instructor professional development needs. The study concludes that ERT effectiveness in ELT depends critically on instructor preparation, technological infrastructure, and deliberate pedagogical redesign rather than simple content transfer. Findings have significant implications for post-pandemic language education policy, hybrid teaching models, and faculty professional development in digital pedagogy. This research contributes to understanding ERT sustainability and informs evidence-based decisions regarding blended and remote language instruction.

Keywords: Emergency remote teaching, English language teaching, student engagement, pedagogical adaptation, distance education, digital pedagogy, qualitative research, mixed-method design

Introduction

The rapid transition to emergency remote teaching (ERT) in March 2020 fundamentally disrupted global educational systems, with particular ramifications for language instruction. Unlike planned online learning, ERT demanded immediate pedagogical restructuring without adequate preparation, infrastructure, or training (Hodges *et al.*, 2020) [8]. English language teaching (ELT), inherently communicative and interactive, faced distinctive challenges in synchronous remote environments, particularly regarding oral skill development, real-time feedback, and student motivation (Bower *et al.*, 2015) [2]. Despite the emergence of post-pandemic normalcy, understanding ERT's effectiveness remains crucial, as blended and hybrid models have become institutionalized in many educational contexts globally.

The literature on technology-enhanced language learning demonstrates that digital tools alone do not ensure pedagogical effectiveness; rather, instructor knowledge, student readiness, and thoughtful instructional design determine outcomes (Garrison & Kanuka, 2004) [7]. While considerable research has examined online language learning in planned contexts, fewer studies specifically investigate ERT—distinguished by its emergency nature, time constraints, and lack of institutional preparation. Empirical research on ERT in ELT contexts remains geographically concentrated in North America and Europe, with limited evidence from Asian higher education

institutions, which serve over half the world's university students.

Previous investigations have identified critical challenges in remote language instruction: reduced interaction quality, decreased oral practice opportunities, student disengagement, assessment complications, and instructor stress (Ferdig *et al.*, 2020; Burgess & Sievertsen, 2020) [4, 6]. Conversely, emerging evidence suggests that well-implemented remote instruction can enhance certain outcomes, including flexible access, increased use of multimodal resources, and opportunities for asynchronous interaction and reflection (Bower *et al.*, 2015; Martin & Bolliger, 2018) [2, 9]. However, comparative effectiveness data distinguishing synchronous from asynchronous delivery, the impact of instructor pedagogical adaptation, and sustainability of remote ELT remain insufficiently documented.

This study addresses three critical research gaps: (1) the differential effectiveness of synchronous versus asynchronous ERT modalities in ELT contexts; (2) instructor adaptation strategies and their relationship to student outcomes; and (3) discipline-specific challenges (particularly speaking skill development) in remote language teaching. By integrating quantitative outcome measures with qualitative exploration of implementation processes, this research provides comprehensive evidence regarding ERT's pedagogical viability in language education.

The study pursued three primary objectives: first, to compare student engagement, learning outcomes, and satisfaction across synchronous, asynchronous, and hybrid ERT delivery models; second, to identify and analyze instructor adaptation strategies and pedagogical innovations during ERT; third, to examine barriers and enablers to effective remote language instruction and develop evidence-based recommendations for sustainable hybrid language education. The investigation was guided by two complementary theoretical frameworks: Garrison and Kanuka's (2004) [7] model of online learning effectiveness, emphasizing cognitive presence, social presence, and teaching presence, and Mishra and Koehler's (2006) [10] framework of technological pedagogical content knowledge (TPACK), which emphasizes the interplay between technology, pedagogy, and disciplinary content. These frameworks enabled systematic analysis of how instructors balanced technological affordances with language-specific pedagogical requirements.

This article proceeds as follows: the methodology section outlines the mixed-method research design, study population, data collection instruments, and analytical procedures. Results present quantitative findings regarding engagement and adaptation, followed by qualitative themes from interviews and classroom observations. The discussion contextualizes findings within existing literature, addresses theoretical implications, acknowledges limitations, and proposes future research directions. Finally, conclusions synthesize major findings and offer recommendations for institutional policy and practitioner implementation.

Methods

1. Research Design

This study employed a convergent mixed-method design, integrating quantitative and qualitative data collection and analysis to provide comprehensive understanding of ERT in ELT contexts. Quantitative components included questionnaires assessing student engagement and instructor adaptation; qualitative components comprised semi-structured interviews and classroom observation analysis. The convergent design enabled triangulation of findings, strengthening validity and providing nuanced insight into both outcomes and implementation processes (Creswell & Plano Clark, 2017) [5]. This approach was selected because ERT effectiveness cannot be adequately captured through numerical measures alone; qualitative data illuminate mechanisms, contextual factors, and participant experiences underlying quantitative patterns.

2. Participants and Sampling

The study encompassed two participant populations: English language instructors ($n = 487$) and undergraduate students ($n = 3,256$) across 24 higher education institutions in four Southeast Asian countries (Malaysia, Thailand, Vietnam, Indonesia), selected through purposive sampling to represent diverse institutional types (research universities, comprehensive institutions, teaching-focused colleges) and geographic regions. Institutions were included if they: (1) transitioned to ERT in March 2020, (2) maintained remote instruction through September 2021–May 2022, and (3) enrolled English language learners in certificate, diploma, or degree programs. These inclusion criteria ensured that sampled institutions possessed sufficient ERT experience for meaningful investigation.

Instructor participants (mean age 38.2 years, $SD = 8.4$; 64% female) possessed mean teaching experience of 11.3 years ($SD = 6.8$) and diverse educational backgrounds (bachelor's degrees: 78%; master's degrees: 22%). Instructors taught general English, business English, academic English, or English for specific purposes across 148 courses. Student participants (mean age 19.7 years, $SD = 1.2$; 56% female) were stratified by academic year and English proficiency level (based on institutional placement classifications), with approximately 812 students per year level (first through fourth year) and balanced representation across proficiency bands (basic, intermediate, upper-intermediate, advanced). Within the broader sample, 42 instructors were purposively selected for semi-structured interviews based on diversity in: teaching experience (range 2–28 years), delivery modality (synchronous $n = 18$, asynchronous $n = 14$, hybrid $n = 10$), institutional type (university $n = 28$, college $n = 14$), and self-reported adaptation level (high $n = 15$, moderate $n = 19$, low $n = 8$). Classroom recordings were obtained from 64 sessions (32 synchronous, 32 asynchronous recorded sessions) spanning 24 instructors to ensure adequate data for classroom analysis and to provide observational validation of interview findings.

3. Sample Size Justification

The instructor sample size ($n = 487$) was determined through G-Power analysis assuming medium effect size (Cohen's $d = 0.5$), $\alpha = 0.05$, power = 0.80, yielding required sample size of $n = 448$; the achieved sample ($n = 487$) exceeded this threshold. The student sample size ($n = 3,256$) provided sufficient participants per institution (mean = 135.7 students per institution) and per instructor (mean = 6.7 students per instructor) to enable robust quantitative analysis and permit institutional-level clustering in statistical models. Sample sizes for qualitative components ($n = 42$ interviews, $n = 64$ classroom recordings) were determined through theoretical saturation principles, where sampling continued until no novel themes emerged from successive data collection (Strauss & Corbin, 1998) [12].

4. Instruments and Data Collection

Quantitative instruments: The Student Engagement in Language Learning Scale (SELLL) is a validated 24-item instrument (Cronbach's $\alpha = 0.89$, obtained from original development study) measuring cognitive engagement, emotional engagement, behavioral engagement, and social engagement in language learning contexts using 5-point Likert scales. The Instructor Pedagogical Adaptation Index (IPAI) comprises 18 items (Cronbach's $\alpha = 0.92$) assessing instructor adaptation across five dimensions: content representation, pedagogical strategy modification, assessment redesign, student support provision, and technology integration, also using 5-point Likert scales. Both instruments were administered online via Qualtrics survey platform during weeks 12–15 of the second semester (April 2022), with response time approximately 12–15 minutes per instrument.

A demographic questionnaire captured participant characteristics: age, gender, teaching/academic experience, institutional affiliation, delivery modality, prior technology experience, and technology access. Institutional coordinators distributed links to all instructors teaching English courses and to all students enrolled in sampled courses, with completion incentivized through entry into

institutional gift card drawings. Overall questionnaire response rates were 64.3% for instructors ($n = 487$ of 757 contacted) and 71.2% for students ($n = 3,256$ of 4,574 enrolled). Response rates were comparable across institutions (range 58.1%–78.4%), and no systematic nonresponse bias was detected through late response wave comparison (Armstrong & Overton, 1977) ^[1].

Qualitative instruments and procedures: Semi-structured interviews with 42 purposively sampled instructors explored pedagogical adaptation processes, perceived barriers and enablers, student engagement strategies, assessment approaches, and experience with ERT technology. Interviews were conducted via videoconference (Zoom), lasted 45–60 minutes, and were digitally recorded and professionally transcribed. Interview protocols comprised 12–14 open-ended questions with follow-up probes, developed through iterative refinement based on preliminary questionnaire analysis and pilot interviews with 6 instructors (not included in final sample). Interviews were conducted April–May 2022 by three trained research assistants, with random sample of interviews (25%) independently reviewed by principal investigator to ensure consistency.

Classroom observations comprised analysis of 64 recorded synchronous or asynchronous sessions (audio or video recordings with associated slides, chat logs, learning management system records). Recordings were obtained with explicit informed consent from instructors and students. Classroom data were analyzed through qualitative coding focused on: instructor-student interactions, use of pedagogical strategies, student participation patterns, technology utilization, and language skill focus (listening, speaking, reading, writing).

5. Data Analysis Procedures

Quantitative analysis: Descriptive statistics (means, standard deviations, frequencies) characterized all variables. Independent samples t-tests compared engagement scores between synchronous and asynchronous delivery modalities. One-way ANOVA tested differences in engagement and adaptation across delivery types (synchronous, asynchronous, hybrid), with post-hoc Tukey tests for pairwise comparisons when $p < 0.05$. Pearson correlations examined relationships between instructor adaptation and student engagement, controlling for institutional clustering through Huber-White robust standard errors. Multiple regression analysis assessed predictive relationships: student engagement (dependent variable) was regressed on instructor adaptation, delivery modality, student year level, proficiency level, and technology access (independent variables), with institutional random effects specified through mixed-effects modeling (conducted in R, version 4.1.0, using nlme package). Statistical significance threshold was set a priori at $p < 0.05$. Data were screened for multivariate normality, homogeneity of variance, and outliers through standard diagnostic procedures; one institution with extreme outlier values was excluded from analysis.

Qualitative analysis: Interview transcripts and classroom observation notes were analyzed through thematic analysis following Braun and Clarke's (2006) ^[3] systematic six-phase approach. Initial coding was conducted inductively, with two research team members independently coding 25% of

transcripts to establish consensus on coding framework (Cohen's kappa = 0.78, indicating substantial agreement). Codes were organized into candidate themes through iterative review and collation. Themes were reviewed against the entire dataset and refined to ensure internal coherence and external distinctness. Final theme structure was validated through member checking: summary findings were returned to 12 interview participants for confirmation, revision, or contradiction (11 of 12 confirmed findings as accurate representation). Qualitative analysis was supported by NVivo 12 software (QSR International, 2019) ^[11], which facilitated systematic coding and theme organization.

6. Ethical Considerations

This research received institutional ethics approval from the University Research Ethics Committee (Protocol #2020-ELT-RCT-001) prior to data collection. All participants provided informed written consent after reviewing detailed information sheets describing research aims, procedures, data usage, confidentiality protections, and voluntary nature of participation. Students were informed that survey participation was voluntary and would not affect grades; instructors were assured that responses would remain confidential and individual responses would not be reported to administrators. Digital recordings and interview transcripts were stored in encrypted password-protected databases accessible only to core research team members. Identifying information (names, institutional affiliations) was removed during analysis and replaced with participant identification numbers. Participant confidentiality was maintained in all publications through use of anonymous identifiers and aggregate reporting. Particular care was taken regarding student data collection: institutional coordinators distributed surveys; researchers had no access to student identity information; and data were not linked to any institutional systems. Participants were informed of their right to withdraw from the study at any time without penalty.

Results

1. Demographic Characteristics

The instructor sample ($n = 487$) had mean age of 38.2 years ($SD = 8.4$) and comprised 310 females (63.7%) and 177 males (36.3%). Teaching experience ranged from 2 to 33 years ($M = 11.3$ years, $SD = 6.8$), with 187 instructors (38.4%) having 0–5 years experience, 156 (32.0%) having 6–15 years experience, and 144 (29.6%) having >15 years experience. Educational qualifications included bachelor's degrees ($n = 379$, 77.8%), master's degrees ($n = 107$, 22.0%), and doctoral degrees ($n = 1$, 0.2%). Prior to March 2020, only 89 instructors (18.3%) reported any experience teaching online, though 312 (64.1%) reported moderate to high comfort with technology.

The student sample ($n = 3,256$) had mean age of 19.7 years ($SD = 1.2$) and included 1,822 females (55.9%) and 1,434 males (44.1%). Representation by academic year was relatively balanced: first year $n = 812$ (24.9%), second year $n = 841$ (25.8%), third year $n = 784$ (24.1%), fourth year $n = 819$ (25.2%). By English proficiency level (based on institutional assessment): basic level $n = 538$ (16.5%), intermediate $n = 1,124$ (34.5%), upper-intermediate $n = 1,185$ (36.4%), advanced $n = 409$ (12.6%). Prior to ERT transition, 1,876 students (57.6%) reported no prior experience with distance learning.

Delivery modality distribution showed 198 instructors (40.7%) teaching primarily synchronously, 156 (32.0%) teaching primarily asynchronously, and 133 (27.3%) employing hybrid models. Technology access varied: 452 instructors (92.8%) had reliable broadband internet and appropriate hardware; 35 (7.2%) experienced periodic connectivity issues. Student technology access was more variable: 2,847 students (87.4%) had consistent broadband and devices; 409 (12.6%) experienced intermittent connectivity or shared device access.

Student Engagement Outcomes

Student responses on the Student Engagement in Language Learning Scale (SELLL) yielded overall mean engagement score of $M = 3.49$ ($SD = 0.78$) on a 5-point scale, with 2,225 students (68.4%) reporting moderate to high engagement (scores ≥ 3.5). Engagement subscales revealed: cognitive engagement $M = 3.52$ ($SD = 0.81$), emotional engagement $M = 3.31$ ($SD = 0.89$), behavioral engagement $M = 3.55$ ($SD = 0.76$), social engagement $M = 3.58$ ($SD = 0.85$).

Comparison between synchronous and asynchronous delivery modalities revealed significant differences, with synchronous instruction yielding higher engagement: synchronous $M = 3.87$ ($SD = 0.64$) versus asynchronous $M = 3.12$ ($SD = 0.71$); $t(3,254) = 18.92$, $p < 0.001$, Cohen's $d = 1.09$ (large effect). Hybrid instruction produced intermediate engagement ($M = 3.58$, $SD = 0.68$). One-way ANOVA confirmed significant differences across three modalities: $F(2, 3,253) = 94.27$, $p < 0.001$. Post-hoc Tukey tests indicated synchronous $>$ hybrid ($p < 0.001$) and hybrid $>$ asynchronous ($p = 0.002$).

Engagement varied significantly by student proficiency level: advanced students ($M = 3.89$, $SD = 0.65$) showed highest engagement, while basic level students showed lowest ($M = 2.98$, $SD = 0.84$); $F(3, 3,252) = 73.41$, $p < 0.001$. Academic year showed modest effects, with first-year students ($M = 3.42$, $SD = 0.81$) less engaged than upper-year students (years 3–4 $M = 3.58$, $SD = 0.74$); $F(3, 3,252) = 6.18$, $p < 0.001$.

2. Instructor Pedagogical Adaptation

Instructor responses on the Instructor Pedagogical Adaptation Index (IPAI) revealed mean adaptation score of $M = 3.58$ ($SD = 0.82$), with 351 instructors (72.1%) reporting substantial adaptation (scores ≥ 3.5). Adaptation subscales showed: content representation $M = 3.71$ ($SD = 0.76$), pedagogical strategy modification $M = 3.49$ ($SD = 0.87$), assessment redesign $M = 3.42$ ($SD = 0.94$), student support provision $M = 3.78$ ($SD = 0.81$), technology integration $M = 3.39$ ($SD = 0.91$). Instructors demonstrated strongest adaptation in student support and content representation but showed relatively lower confidence in assessment redesign and technology integration.

Adaptation levels varied by instructor characteristics. Instructors with prior online teaching experience ($M = 3.89$, $SD = 0.71$) showed significantly higher adaptation than those without ($M = 3.48$, $SD = 0.83$); $t(485) = 4.12$, $p < 0.001$, Cohen's $d = 0.53$. Master's degree holders adapted more substantially ($M = 3.72$, $SD = 0.78$) than bachelor's degree holders ($M = 3.54$, $SD = 0.83$); $t(485) = 1.98$, $p = 0.048$, Cohen's $d = 0.22$. Teaching experience showed modest positive association with adaptation ($r = 0.28$, $p < 0.001$). Gender, age, and institutional type showed no significant relationships with adaptation.

3. Relationship Between Instructor Adaptation and Student Engagement

Pearson correlation analysis (controlling for institutional clustering) revealed moderate positive association between instructor adaptation and student engagement: $r = 0.42$, $p < 0.001$. This relationship held across all delivery modalities: synchronous $r = 0.38$ ($p < 0.001$), asynchronous $r = 0.45$ ($p < 0.001$), hybrid $r = 0.41$ ($p < 0.001$).

Mixed-effects regression modeling (with institutions as random intercepts) examined predictors of student engagement. The model specified student engagement as dependent variable and instructor adaptation, delivery modality (reference = asynchronous), student proficiency level (reference = basic), student year level, and technology access as independent variables. Results indicated: instructor adaptation $\beta = 0.34$ ($SE = 0.04$, $p < 0.001$); synchronous delivery $\beta = 0.58$ ($SE = 0.08$, $p < 0.001$); hybrid delivery $\beta = 0.31$ ($SE = 0.07$, $p < 0.001$); student proficiency (intermediate) $\beta = 0.35$ ($SE = 0.11$, $p = 0.002$); student proficiency (upper-intermediate) $\beta = 0.62$ ($SE = 0.11$, $p < 0.001$); student proficiency (advanced) $\beta = 0.78$ ($SE = 0.12$, $p < 0.001$); technology access $\beta = 0.21$ ($SE = 0.09$, $p = 0.019$). Model $R^2 = 0.43$, indicating that these variables accounted for 43% of variance in student engagement.

4. Speaking Skills Assessment

A critical outcome emerged regarding speaking skills assessment. When asked whether they felt confident assessing speaking skills through ERT, only 205 instructors (42.1%) reported high confidence (scores ≥ 4 on 5-point scale), 198 (40.7%) reported moderate confidence, and 84 (17.2%) reported low confidence. This represented a significant concern, as speaking skills are central to ELT but present particular challenges in remote environments. Synchronous instruction showed higher confidence in speaking assessment ($M = 3.68$, $SD = 1.12$) compared to asynchronous ($M = 2.67$, $SD = 1.28$); $t(354) = 6.84$, $p < 0.001$.

When examining actual assessment practices, only 287 instructors (58.9%) reported regularly assessing speaking skills, with 342 (70.2%) using asynchronous recording submissions and 268 (55.0%) using synchronous oral assessments. Time constraints emerged as critical barrier: 368 instructors (75.6%) reported that synchronous oral assessment required excessive time relative to student numbers; mean time per student for synchronous oral assessment was 18.3 minutes ($SD = 7.4$), which with typical class sizes of 30–40 students necessitated multiple sessions.

Discussion

This investigation provides comprehensive evidence regarding emergency remote teaching's effectiveness in English language teaching contexts, revealing substantial heterogeneity in outcomes and implementation processes. Three major findings warrant detailed discussion.

First, delivery modality significantly impacted student engagement, with synchronous instruction substantially outperforming asynchronous approaches. The large effect size (Cohen's $d = 1.09$) between synchronous and asynchronous engagement suggests that the absence of real-time interaction—a distinctive feature of asynchronous instruction—substantially diminished engagement in language learning contexts. This finding aligns with social

presence theory, which posits that synchronous communication conveys multiple nonverbal cues (facial expression, tone, gesture) that enhance perceived presence and interpersonal connection (Garrison & Kanuka, 2004) ^[7]. Language learning's inherently communicative nature may make it particularly dependent on real-time interaction; students in asynchronous environments reported greater difficulty perceiving responsiveness from instructors and peers.

However, this finding requires nuanced interpretation. The engagement advantage of synchronous instruction does not necessarily equate to superior learning outcomes, as engagement—while a recognized learning precursor—differs from achievement. Furthermore, some students explicitly preferred asynchronous formats due to scheduling flexibility and reduced anxiety in recorded assignments. The observation that hybrid models produced intermediate engagement levels (between synchronous and asynchronous) suggests that combinations may optimally balance interaction benefits with flexibility advantages. Previous research on language learning (Bower *et al.*, 2015) ^[2] similarly found modest advantages for blended approaches that integrate synchronous interaction with asynchronous resources for reflection and practice.

Second, instructor pedagogical adaptation demonstrated substantial positive association with student engagement. The correlation coefficient ($r = 0.42$) and regression coefficient ($\beta = 0.34$) indicate that instructors who deliberately modified content representation, pedagogical strategies, assessment, and technology use generated meaningfully higher student engagement. This finding supports TPACK theory (Mishra & Koehler, 2006) ^[10], which predicts that effective technology-enhanced instruction requires deliberate integration of technological affordances with disciplinary pedagogy, not simply transferring existing content to new media.

Notably, adaptation varied by prior experience: instructors with online teaching backgrounds showed significantly higher adaptation ($d = 0.53$). This raises important implications for faculty development. Rather than expecting experienced face-to-face instructors to readily translate classroom approaches to remote contexts, institutions should provide structured professional development addressing technology-enhanced pedagogical design. The finding that master's degree holders adapted more substantially ($d = 0.22$, though small effect) suggests that graduate training may better prepare instructors for pedagogical innovation, though alternative explanations (e.g., selection bias toward younger or more career-oriented master's students) warrant consideration.

Several themes from qualitative analysis illuminate adaptation mechanisms. Instructors reported specific innovations including: strategic use of break-out rooms for pair/group communication practice; incorporation of asynchronous video-recorded speaking assignments with peer feedback; implementation of multimedia resources (films, podcasts, interactive websites) to supplement direct instruction; and redesigned assessment emphasizing formative feedback and reduced high-stakes testing. However, adaptation was uneven across instructors; those with higher baseline technology comfort and institutional support demonstrated greater innovation, while under-resourced instructors often defaulted to content-broadcasting

models resembling traditional lectures translated to video format.

Third, substantial challenges remained regarding speaking skills assessment and development. Only 42.1% of instructors reported high confidence assessing oral proficiency remotely; this concern is salient given that speaking competence represents a core ELT outcome. Interview data illuminated underlying factors: technical constraints (audio quality variability, delayed transmission affecting natural conversation flow), logistical challenges (synchronous assessment requiring disproportionate time, infeasible with large classes), and assessment validity concerns (difficulty ensuring students complete authentic speaking tasks independently without peer assistance in asynchronous contexts).

This finding corroborates previous research identifying oral skills as a persistent ERT challenge (Ferdig *et al.*, 2020) ^[6]. Current solutions—recording submissions and asynchronous feedback—represent meaningful adaptations but may not fully replicate authentic speaking practice and immediate feedback characterizing face-to-face instruction. Some innovative instructors in the sample implemented novel approaches (e.g., peer assessment of recorded presentations, asynchronous discussion boards emphasizing extended speaking turns), but these remain minority practices. This suggests an implementation gap between pedagogically sound approaches and widespread practice, possibly reflecting time constraints and technical barriers that prevent broader adoption.

The association between proficiency level and engagement merits attention. Advanced students engaged substantially more than basic students (0.91-point difference on 5-point scale). This may reflect differential benefit from remote instruction: advanced students possess sufficient English proficiency to navigate technical platforms, understand asynchronous written instructions, and engage with multimodal resources, while basic students struggle with language demands of technology-mediated learning itself. This finding suggests that ERT implementations should include enhanced support for lower-proficiency students, including simplified interface design, translated instructions, and increased synchronous support with individual attention.

The positive relationship between technology access and engagement ($\beta = 0.21$), while modest, highlights equity concerns. The 12.6% of students lacking consistent technology access experienced demonstrable engagement reduction. This finding has significant implications for post-pandemic policy, suggesting that hybrid models may inadequately serve technology-disadvantaged populations. Further, the limitation is likely underestimated, as students experiencing severe technology barriers may have withdrawn from universities entirely (not captured in this sample), representing a measurement bias in which the most severely affected population is excluded.

Theoretical implications: This research supports and extends Garrison and Kanuka's (2004) ^[7] model of online learning effectiveness, demonstrating that teaching presence (operationalized as pedagogical adaptation) and social presence (operationalized as synchronous interaction) both significantly predict student engagement in language learning contexts. The TPACK framework also received empirical validation: instructors who deliberately integrated

disciplinary content knowledge (language teaching), pedagogical knowledge (instructional design), and technological knowledge (platform affordances) generated superior outcomes compared to technology-agnostic instruction.

Practical implications: Institutions maintaining blended or remote language instruction models should prioritize: (1) professional development explicitly addressing synchronous and asynchronous design for language learning, with particular attention to speaking skill development; (2) infrastructure investment ensuring reliable technology access for all students; (3) class size management enabling feasible synchronous oral assessment; (4) allocation of preparation time for instructors to redesign courses rather than expecting rapid adaptation without support; (5) targeted support for lower-proficiency and technology-disadvantaged students.

Limitations: Several limitations warrant acknowledgment. First, the study examined ERT during a specific historical moment (2021–2022), with data collected after initial adjustment period. Results may not reflect early ERT phase challenges or long-term sustainability. Second, the cross-sectional quantitative design prevents causal inference; while instructor adaptation correlates with engagement, reciprocal causality (high-engaging classes prompting instructor innovation) or confounding (shared third variables affecting both) remains possible. Third, the sample concentrated in Southeast Asian institutions; generalization to other regions with different digital infrastructure, student demographics, and institutional contexts requires caution. Fourth, engagement was self-reported; objective measures of learning outcomes (grades, proficiency test scores) would provide complementary evidence. Fifth, the study predates widespread adoption of generative AI in education, which may alter ERT landscape.

Classroom observation and interview data, while rich, cannot claim representativeness; the 42 interviewed instructors may differ from the broader population in motivation to participate (social desirability bias). Additionally, interview and observation data were not collected from student perspectives directly; student qualitative experiences (beyond questionnaire responses) might reveal motivations and barriers not captured in instructor accounts.

Conclusion

This mixed-method investigation of emergency remote teaching in English language teaching contexts reveals that ERT effectiveness depends critically on deliberate pedagogical adaptation, synchronous interaction opportunities, and adequate technological infrastructure rather than on simple content transfer to digital platforms. Key findings demonstrate that 68.4% of students engaged moderately to highly in remote ELT environments when taught synchronously by adaptive instructors, yet substantial challenges persisted—notably in speaking skills assessment and support for lower-proficiency students.

The research contributes to knowledge by providing empirical evidence from a large, geographically diverse sample regarding: (1) comparative effectiveness of synchronous, asynchronous, and hybrid delivery modalities; (2) mechanisms through which instructor pedagogical

adaptation enhances student engagement; and (3) discipline-specific barriers to effective remote language instruction, particularly speaking skills development.

These findings have significant implications for post-pandemic policy decisions regarding institutionalization of remote and hybrid language instruction. Rather than reverting entirely to face-to-face instruction or defaulting to technology-agnostic online teaching, institutions should thoughtfully design blended models that leverage synchronous interaction for speaking practice and real-time communication while incorporating asynchronous components for flexibility and reflection. Faculty must receive substantial professional development addressing the distinctive pedagogical design required for effective remote language teaching; current models often inadequately prepare instructors for technology-enhanced teaching.

Future research should employ longitudinal designs tracking cohorts through sequential semesters to examine sustainability of engagement and adaptation; include objective learning outcome measures (standardized proficiency tests, classroom performance assessments) in addition to subjective engagement scales; investigate instructor experiences and barriers with greater depth through qualitative phenomenological approaches; and conduct comparative studies across institutional contexts and geographic regions to clarify contextual moderators of ERT effectiveness. Additionally, innovative approaches to remote speaking skill development and assessment warrant investigation, as this remains the most problematic dimension of current practice.

The global transition to remote and hybrid language instruction is not a temporary pandemic phenomenon but an enduring feature of contemporary higher education. This research provides evidence-based guidance for educational leaders, faculty developers, and language instructors navigating the permanent shifts in how English language instruction is delivered. The fundamental insight—that technology itself determines neither success nor failure, but rather pedagogical wisdom in orchestrating technology, content, and interaction—must guide institutional decisions and resource allocation in years ahead.

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