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Bayesian Modeling of Self-Regulated Learning in Vietnamese EFL University Students: The Role of Technology Acceptance and Teacher Support

Nguyen Thi Thanh Ha *

Centre for Foreign Languages and Education Cooperation, University of Social Sciences and Humanities, Vietnam National University, Hanoi, Vietnam

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Abstract: Self-regulated learning theories emphasize individual autonomy, yet their applicability in collectivist educational contexts where teacher authority prevails remains theoretically contested. This study uniquely applies Bayesian structural equation modeling to examine culturally-mediated self-regulated learning in Vietnamese English as a Foreign Language contexts. Using an explanatory sequential mixed-methods design, stratified purposive sampling across institutional types recruited 329 participants from three Vietnamese universities during designated class periods. Bayesian structural equation modeling analyzed quantitative data, followed by reflexive thematic analysis of 24 semi-structured interviews. Teacher support emerged as the strongest predictor of self-regulated learning ($\beta = 0.51$), with technology acceptance demonstrating moderate effects ($\beta = 0.34$). A significant interaction effect ($\beta = 0.19$) revealed synergistic relationships, with students exhibiting 1.7 times greater self-regulatory behaviors when both variables operated at high levels. The combined model explained 45% of the variance. Qualitative findings revealed that Vietnamese students conceptualize learning autonomy as inherently social, requiring instructor scaffolding rather than independence from external guidance. Students distinguished between "guided technology use" that enhanced learning and "assigned technology use" that produced compliance without benefits. These findings challenge individualistic assumptions underlying self-regulated learning models by demonstrating that effective autonomy development operates through culturally-mediated mechanisms. The study contributes methodologically by demonstrating Bayesian approaches' analytical advantages while revealing fundamental limitations in universal learning theories when applied across diverse cultural contexts.

Keywords: Self-regulated Learning, Technology Acceptance, Teacher Support, Vietnamese EFL, Bayesian Modelling.

* **Corresponding Author.**

Authors' Email Address:
Nguyen Thi Thanh Ha (nguyenthithanhha.vnu.ussh@gmail.com)

Introduction

Self-regulated learning (SRL) has emerged as a fundamental determinant of academic success in second language acquisition, with extensive research demonstrating its positive impact on learning outcomes across diverse educational contexts (Xue et al., 2025; Zheng & Xiao, 2024). Defined as learners' ability to metacognitively, motivationally, and behaviorally control their own learning processes, SRL encompasses strategic planning, goal setting, self-monitoring, and adaptive response to feedback (Pintrich, 2000). However, theoretical frameworks underlying SRL research predominantly reflect Western educational paradigms that emphasize individual autonomy and self-direction, potentially limiting their applicability in collectivist educational cultures where hierarchical relationships and teacher authority remain paramount.

Vietnamese higher education presents a particularly compelling context for examining these theoretical limitations, revealing fundamental disconnections between SRL assumptions and cultural realities. The educational landscape operates within deeply embedded Confucian cultural values that traditionally privilege collective harmony, respect for authority, and teacher-mediated learning over individual initiative (Truong & Nguyen, 2024). Large class sizes of 45-55 students create environments where collaborative activities and individual attention remain constrained (Dang, 2024), fostering student dependencies on external direction rather than autonomous learning behaviors. Yet this characterization requires critical examination, as recent research suggests that Vietnamese English as a Foreign Language (EFL) teachers increasingly recognize the importance of balancing innovation with respect for established educational values, creating what researchers term "culturally responsive pedagogical approaches" (Pham & Le, 2025, p. 180). This evolution challenges simplistic cultural determinism and points toward more complex negotiations between tradition and pedagogical innovation.

The transition toward student-centered pedagogical approaches in Vietnamese universities reflects broader educational reforms responding to global demands for English proficiency, yet implementation patterns reveal significant contradictions. While students demonstrate considerable potential for autonomous learning when provided with appropriate scaffolding and technological support (Hua & Le, 2024; Hoang et al., 2023), they simultaneously exhibit reluctance to engage in autonomous decision-making processes that challenge traditional power distance dynamics. Research reveals that Vietnamese EFL students frequently employ lower-order cognitive skills while avoiding higher-order thinking processes that require independent analysis (Le et al., 2024), yet this finding warrants critical

analysis. The preference for structured guidance may reflect not merely cultural constraints but also pedagogical gaps in scaffolding autonomous learning development. Furthermore, the assumption that higher-order thinking necessarily requires individual autonomy may itself reflect Western educational biases that fail to recognize culturally-specific forms of analytical engagement (Qasserras & Qasserras, 2023).

Technology integration initiatives expose particularly stark contradictions between theoretical potential and practical implementation. While Vietnamese universities have invested substantially in educational technology infrastructure following Industry 4.0 directives, implementation reveals significant gaps between technological availability and pedagogical effectiveness (Pham et al., 2024). The paradox emerges wherein faculty members possess strong content knowledge and traditional teaching competencies but lack Technological Pedagogical Content Knowledge (TPACK) necessary for meaningful technology integration (Nguyen et al., 2024). However, this technological challenge intersects problematically with cultural assumptions about autonomous learning. International research demonstrating positive correlations between technology acceptance and self-regulation (Teng et al., 2021) may not adequately account for cultural mediations of these relationships, particularly in contexts where technology adoption patterns differ significantly from individualist educational cultures.

Critical examination of existing research reveals substantial methodological limitations that constrain theoretical advancement. Despite the documented significance of SRL in language acquisition, investigations into factors influencing SRL behaviors among Vietnamese EFL learners suffer from relatively small sample sizes and conflicting findings across studies (Nguyen & Dinh, 2025). More problematically, Vietnamese EFL students demonstrate contradictory patterns: they frequently employ meta-affective strategies at high rates, actively managing emotions such as anxiety and fear of losing face when speaking English, yet use sociocultural-interactive strategies at only medium frequency levels despite recognizing their importance (Nguyen & Dinh, 2025). This contradiction suggests either measurement inadequacies or theoretical gaps in understanding how cultural factors mediate strategy selection and implementation. The pattern indicates that external support mechanisms, particularly technology integration and instructor guidance, may serve as essential mediators for developing autonomous learning behaviors, yet insufficient attention has been given to modeling these relationships empirically.

Furthermore, the field suffers from methodological approaches that inadequately capture the probabilistic nature of learning behaviors and cultural mediation processes.

Traditional null hypothesis significance testing approaches possess inherent limitations, including dichotomous thinking, inability to quantify evidence for null hypotheses, and poor handling of uncertainty (Kiers & Tendeiro, 2025; Stunt et al., 2021; Tunç et al., 2023)—limitations that become particularly pronounced when examining complex cultural interactions. Bayesian methodologies offer analytical advantages through their ability to incorporate prior knowledge, provide probabilistic interpretations of parameters, and quantify uncertainty more appropriately than frequentist approaches (Jevremov & Pajić, 2024). Yet despite growing recognition of Bayesian methods in psychological research, their application remains concentrated in cognitive psychology and neuropsychology rather than educational settings, particularly within Asian EFL contexts where complex cultural negotiations require sophisticated analytical frameworks (Xu et al., 2025).

This investigation addresses these theoretical, empirical, and methodological limitations by examining relationships between technology acceptance, teacher support, and SRL behaviors among Vietnamese EFL university students using Bayesian Structural Equation Modeling (SEM). The study's significance lies not merely in methodological innovation but in developing culturally-informed theoretical models that avoid both Western individualistic assumptions and essentialist cultural characterizations. Specifically, this research investigates:

(1) To what extent do technology acceptance and teacher support predict self-regulated learning behaviors among Vietnamese EFL university students?

(2) How do Vietnamese EFL students perceive the relationship between their learning autonomy, technology use, and teacher support in their English language development?

Literature Review

Theoretical Framework

Self-regulated learning research encompasses diverse theoretical paradigms, including social-cognitive frameworks (Zimmerman, 2000), information processing models (Flavell, 1979), and sociocultural approaches (Vygotsky, 1978). Concurrently, technology acceptance theories have evolved from Davis's (1989) original Technology Acceptance Model (TAM) to unified models (Venkatesh et al., 2003) and sociomaterial perspectives. This study synthesizes Zimmerman's cyclical SRL framework with TAM's educational extensions to examine technology-mediated autonomous learning in collectivist educational contexts, addressing gaps in culturally-specific theoretical applications.

This study integrates self-regulated learning theory and the TAM to examine the complex interplay between learner autonomy, technology adoption, and instructional support in Vietnamese EFL contexts. Zimmerman's (2000) cyclical model of self-regulated learning provides the foundational lens for understanding how learners strategically coordinate cognitive, metacognitive, and motivational processes across forethought, performance, and self-reflection phases. However, the model's individualistic assumptions require theoretical adaptation for Vietnamese learners operating within Confucian heritage cultures, where collectivist values may mediate autonomous learning behaviors through teacher authority and social harmony considerations (Dan et al., 2025).

The TAM (Davis, 1989) complements self-regulated learning theory by explaining how perceived usefulness and perceived ease of use influence technology adoption decisions. Educational adaptations demonstrate that instructional support significantly moderates these relationships, suggesting that teacher guidance functions as both an external regulatory mechanism and a facilitating condition for technology acceptance (Al-Abdullatif, 2023). This theoretical integration posits that Vietnamese EFL learners' self-regulatory processes are inherently interconnected with their technology acceptance behaviors, mediated by culturally-informed expectations of teacher support.

The convergence of these frameworks enables Bayesian modeling of probabilistic relationships between learner agency, technological affordances, and pedagogical scaffolding (Teng & Zhang, 2021). This theoretical synthesis addresses gaps in existing literature by acknowledging cultural mediation of supposedly universal learning processes while providing a predictive framework for understanding how external support structures influence both self-regulatory development and technology integration behaviors in Vietnamese EFL contexts.

Self-Regulated Learning in EFL Contexts

Within language learning specifically, self-regulated learning operates through three interconnected strategic dimensions that distinguish it from general academic self-regulation. Self-regulated learning in EFL contexts encompasses cognitive self-regulation involving rehearsal, organization, and elaboration techniques; motivational self-regulation managing self-efficacy and goal orientation; and behavioral self-regulation controlling available learning resources (Abdelhalim, 2022; Mazandarani, 2024; Teng, 2021). These strategic approaches enable learners to establish learning objectives, monitor progress, and adjust methodologies according to performance feedback. However, the informal digital learning of

English framework reveals temporal complexities, with longitudinal studies demonstrating that positive correlations between digital practices and self-regulatory capabilities strengthen progressively over time rather than manifesting immediately (Rezai & Goodarzi, 2025).

Empirical investigations into EFL learner autonomy yield contradictory findings regarding intervention effectiveness. While peer assessment activities demonstrate significant improvements in learner confidence and reduced teacher dependence (Shen et al., 2020), autonomous learning principles encounter substantial resistance in traditional educational environments. Yang et al. (2024) reveal that sustained teacher guidance significantly enhances both listening comprehension and speaking proficiency among learners using intelligent personal assistants, challenging assumptions about independent technology-mediated learning. This paradox suggests that autonomy development requires scaffolded support structures rather than complete self-direction.

Cultural factors profoundly constrain self-regulated learning implementation across Asian educational systems, where Confucian heritage values emphasize hierarchical learning structures and collective orientations. Vietnamese educational culture presents particular challenges as students navigate between cultural expectations of deference to authority and contemporary pedagogical demands for learner independence (Huynh, 2025). The phenomenon of cultural assimilation—where learners internalize cultural constraints as personality traits without conscious awareness—represents the most significant barrier to developing autonomous learning capabilities, creating learned helplessness patterns that persist even when external constraints are removed (Truong & Nguyen, 2024).

Technology Acceptance in Language Learning

Educational technology adoption globally follows discernible patterns, though implementation efficacy varies substantially across institutional and cultural contexts. Digital technology adoption in EFL education reveals significant disparities between theoretical potential and practical implementation. While 90% of teachers demonstrate positive attitudes toward technology integration, an equivalent percentage encounter substantial barriers during actual classroom implementation (Nogaibayeva et al., 2024). This contradiction exposes fundamental limitations in traditional acceptance models that fail to account for implementation complexities beyond attitudinal endorsement. Contemporary research demonstrates that perceived usefulness emerges as the dominant predictor of continued technology use among EFL learners, particularly when technologies provide tangible

pedagogical benefits such as immediate feedback and personalized support (Liu & Ma, 2024; Siu & White, 2025).

Educational technology acceptance extends beyond core TAM constructs to encompass domain-specific factors, including result demonstrability, playfulness, and objective usability. Hwang et al. (2025) demonstrated that learners who could clearly articulate technology benefits showed higher acceptance rates, while performance expectancy, effort expectancy, and mobile-assisted language learning attitudes explained 69.9% of variance in learner adoption profiles. However, dependence worry emerges as a counteracting factor, with 89.5% of users expressing concerns about over-reliance despite recognizing technological benefits (Pan et al., 2024). This paradox suggests that technology acceptance involves psychological tension between perceived benefits and autonomy concerns.

Vietnamese educational contexts present distinct challenges for technology integration, characterized by predominant reliance on basic technological functionalities at substitution and augmentation levels rather than transformational applications (Nguyen, 2024). Despite high student acceptance of AI-based feedback systems (M = 3.97/5.0), persistent concerns about cultural sensitivity (65% of participants) and human interaction needs (87.5% of participants) indicate that successful implementation requires careful balance between technological efficiency and culturally responsive pedagogical approaches (Le et al., 2025).

Teacher Support and Student Autonomy

The relationship between teacher support and learner autonomy challenges conventional pedagogical assumptions about independence and guidance, revealing a dialectical rather than oppositional dynamic where appropriate scaffolding facilitates autonomous learning behaviors. Research demonstrates that effective teacher support creates conditions necessary for autonomy development rather than undermining self-direction (Le et al., 2023). This paradox becomes particularly pronounced in EFL contexts where learners navigate both linguistic challenges and cultural expectations regarding teacher-student relationships. Sohrabi et al. (2022) demonstrated that motivational scaffolding significantly improved both self-efficacy and learning achievement among field-dependent and field-independent learners, suggesting that strategic teacher intervention enhanced rather than diminished autonomous capabilities.

Vietnamese educational contexts present unique complexities for fostering learner autonomy due to deeply embedded Confucian traditions emphasizing teacher authority and hierarchical classroom structures (Nguyen et al., 2025). However, contemporary research

reveals that Vietnamese EFL students benefit significantly from teachers who adopt facilitative rather than purely authoritative roles. Bui and Nguyen (2025) found that teacher-student interactions characterized by understanding and support positively correlate with student self-efficacy and learning achievement, even within cultural frameworks that traditionally position teachers as knowledge transmitters. This finding challenges assumptions that supportive teaching necessarily creates dependency, indicating instead that emotional scaffolding enables greater independence by creating psychological safety for autonomous risk-taking (Han et al., 2022).

The scaffolding process requires strategic withdrawal of support as students develop competence, yet implementation challenges persist in Vietnamese contexts. Nguyen et al. (2023) observed that EFL instructors often struggle with scaffolding effectiveness due to insufficient training in autonomy-supportive practices, frequently maintaining excessive control rather than facilitating gradual independence. This gap between theoretical understanding and practical implementation suggests that teacher support quality, rather than quantity, determines its impact on autonomous development.

Methodology

Research Design

This investigation employed an explanatory sequential mixed-methods design (Creswell & Clark, 2017) to address the methodological inadequacies of single-method approaches in culturally-mediated learning contexts. The quantitative-first sequence proves essential because Vietnamese educational contexts require empirical establishment of relationships before cultural interpretation becomes methodologically defensible, preventing theoretical assumptions about Western-derived learning models (Tashakkori & Teddlie, 2010). Bayesian structural equation modeling identifies probabilistic patterns and cultural mediations that inform subsequent qualitative inquiry into specific contradictions or anomalies. This approach addresses documented tendencies for mixed-methods research to privilege cultural interpretations over statistical evidence, ensuring that analysis remains grounded in empirical findings rather than assumptions about collectivist learning behaviors (Johnson & Onwuegbuzie, 2004).

Participants

The study recruited 329 Vietnamese EFL university students using stratified purposive sampling across three universities: one public institution in Hanoi, one private university in

Ho Chi Minh City, and one public university in Ho Chi Minh City. This sampling strategy addresses documented variations in technology infrastructure and pedagogical approaches between institutional types and geographic regions that could influence technology acceptance and teacher support patterns (Nguyen, 2024).

Sample size determination employed G*Power analysis for structural equation modeling with three latent variables, targeting medium effect sizes ($f^2 = 0.15$) with 80% power and $\alpha = 0.05$, yielding a minimum requirement of 319 participants. Inclusion criteria specified current undergraduate enrollment in English language programs, CEFR B1-C1 proficiency verified through institutional TOEIC or IELTS scores within the past two years, and daily technology access via smartphone with reliable internet connectivity. Exclusion criteria eliminated students who had completed formal learner training workshops or autonomous learning courses offered by university language centers, verified through academic transcripts.

The final sample comprised 198 females (60.2%) and 131 males (39.8%), aged 18-24 years ($M = 20.3$, $SD = 1.7$), with academic year distribution ensuring representation across developmental stages: 78 first-years (23.7%), 89 second-years (27.1%), 87 third-years (26.4%), and 75 fourth-years (22.8%). Response rate reached 94.3% (329/349 invited participants), with institutional ethics approval obtained prior to recruitment.

Instruments

The quantitative phase employed a culturally-adapted questionnaire comprising three validated scales for Vietnamese EFL contexts. The Self-Regulated Learning scale incorporated six items adapted from Pintrich's (2004) Motivated Strategies for Learning Questionnaire, modified to reflect collectivist learning environments where autonomous behaviors operate within hierarchical educational structures. Items assessed goal-setting capabilities, progress monitoring, self-assessment accuracy, opportunity-seeking behaviors, task persistence, and strategy reflection processes. All items utilized 5-point Likert scales with parallel Vietnamese translations.

The Teacher Support scale comprised six items developed from Vietnamese EFL teacher support literature (Bui & Nguyen, 2025; Le et al., 2023; Nguyen et al., 2025), measuring instructional scaffolding, autonomy encouragement, feedback quality, emotional support, strategy guidance, and teacher availability. Items were designed to capture culturally-specific dimensions of teacher-student relationships in Vietnamese higher

education contexts, recognizing that effective teacher support in collectivist educational settings differs qualitatively from Western conceptualizations of instructional assistance.

The Technology Acceptance scale employed six items derived from Davis's (1989) Technology Acceptance Model, validated through Venkatesh and Davis's (2000) educational extensions, measuring perceived usefulness, perceived ease of use, and behavioral intentions toward educational technology adoption. While Davis's TAM was originally developed in 1989, it remains the most extensively validated framework in educational technology research, with meta-analyses documenting over 1,000 empirical validations across diverse contexts and demonstrating consistent predictive validity (Scherer et al., 2019). This study employed Venkatesh and Davis's (2000) extended TAM for educational contexts—not the original 1989 business-oriented version—incorporating constructs specifically validated for contemporary digital learning environments. Recent evidence confirms TAM's continued theoretical strength in language learning contexts (Granić & Marangunić, 2019), with the core constructs of perceived usefulness and perceived ease of use demonstrating cross-cultural measurement invariance (King & He, 2006). All three scales underwent rigorous cultural adaptation through expert panel review and back-translation protocols with bilingual Vietnamese-English linguists to ensure semantic equivalence while preserving construct validity. Pilot testing with 45 Vietnamese EFL students yielded reliability coefficients of $\alpha = .84$ for Self-Regulated Learning, $\alpha = .89$ for Teacher Support, and $\alpha = .87$ for Technology Acceptance scales. Complete instrument items with bilingual versions are provided in Appendix A, while the semi-structured interview guide is provided in Appendix B.

The qualitative phase utilized a semi-structured interview guide designed to explore student perceptions of learning autonomy, technology integration experiences, and teacher support relationships within Vietnamese educational contexts. The interview protocol contained open-ended questions theoretically grounded in self-regulated learning and technology acceptance frameworks, specifically targeting cultural negotiations between autonomous learning expectations and collectivist educational values. Questions addressed contradictions identified in existing literature regarding Vietnamese students' strategy use patterns and examined how participants reconcile individual learning goals with traditional hierarchical classroom structures.

Data Collection Procedures

Data collection occurred between March and May 2025, following APA (2017) ethical guidelines for research involving human participants. The quantitative phase preceded

qualitative data gathering to maintain the explanatory sequential design's methodological integrity. Questionnaires were administered during designated class periods at each participating university, ensuring standardized conditions across all sites. Participants received written information sheets detailing study objectives, voluntary participation rights, and data confidentiality protocols before providing written informed consent. Questionnaire completion required 18 minutes based on pilot testing, with the researcher available to address linguistic clarifications without influencing responses.

Following quantitative analysis, 24 participants were selected for interviews using maximum variation sampling across demographic categories and response patterns. Selection criteria targeted participants demonstrating contrasting self-regulated learning and technology acceptance levels, plus statistical outliers warranting deeper exploration. Individual interviews lasted 50 minutes, conducted in Vietnamese to ensure cultural authenticity and participant comfort. All sessions were audio-recorded using encrypted devices with explicit written consent, conducted in private university conference rooms to guarantee confidentiality. Data storage followed APA guidelines with password-protected files and participant anonymization through numerical coding. The sequential design enabled quantitative findings to directly inform interview question modifications, particularly probing unexpected correlations between teacher support and autonomous learning behaviors identified in the initial statistical analysis.

Data Analysis

Quantitative data analysis employed Bayesian structural equation modeling using the blavaan package in R to examine probabilistic relationships between technology acceptance, teacher support, and self-regulated learning behaviors. This analytical approach addresses limitations of traditional frequentist methods by incorporating prior knowledge, providing credible intervals for parameter estimates, and quantifying uncertainty in model parameters rather than relying on dichotomous significance testing (Merkle & Rosseel, 2018). Model specification included technology acceptance and teacher support as predictor variables with self-regulated learning as the outcome variable, utilizing weakly informative priors to allow data to predominantly influence posterior distributions. Model fit evaluation employed Bayesian criteria, including posterior predictive p-values, Watanabe-Akaike Information Criterion (WAIC), and Leave-One-Out Cross-Validation (LOO-CV) to assess predictive accuracy and model adequacy.

Qualitative data analysis utilized reflexive thematic analysis following Braun and Clarke's (2021) six-phase approach to identify patterns in student perceptions regarding learning autonomy, technology integration, and teacher support relationships. Interview transcripts underwent inductive coding to generate themes without predetermined theoretical constraints, and were subsequently examined for convergence or divergence with quantitative findings. Integration of quantitative and qualitative results employed a joint display matrix to identify areas of convergence, divergence, and expansion, enabling comprehensive interpretation of how cultural factors mediate relationships between study variables within Vietnamese EFL contexts.

Results

Predictive Relationships Between Technology Acceptance, Teacher Support, and Self-Regulated Learning

Table 1 presents descriptive statistics and correlations for all study variables. Vietnamese EFL students reported moderate levels of self-regulated learning (M = 3.70, SD = 0.60), technology acceptance (M = 3.85, SD = 0.72), and teacher support (M = 3.92, SD = 0.68). All variables demonstrated normal distributions and significant positive intercorrelations ranging from r = 0.41 to r = 0.67.

Table 1. Descriptive Statistics and Correlations Among Study Variables

Variable	M	SD	1	2	3	4	5
1. Self-Regulated Learning	3.70	0.60	—				
2. Technology Acceptance	3.85	0.72	.58**	—			
3. Teacher Support	3.92	0.68	.67**	.41**	—		
4. Academic Year	2.48	1.12	.23**	.15*	.18*	—	
5. Gender (1=Female)	0.60	0.49	.09	.12	.08	.05	—

Note. N = 329. All variables measured on 5-point Likert scales except Academic Year (1-4) and Gender (0=Male, 1=Female). **p < .01. *p < .05.

The Bayesian structural equation model demonstrated adequate fit to the observed data (posterior predictive p-value = 0.52; WAIC = 4,847.3; LOO-CV = 4,851.7). The complete parameter estimates with credible intervals are presented in Table 2. Figure 1 illustrates the structural relationships between predictor variables and self-regulated learning, with path

coefficients represented by arrows with varying line weights indicating effect magnitudes and dashed lines denoting interaction and non-significant relationships.

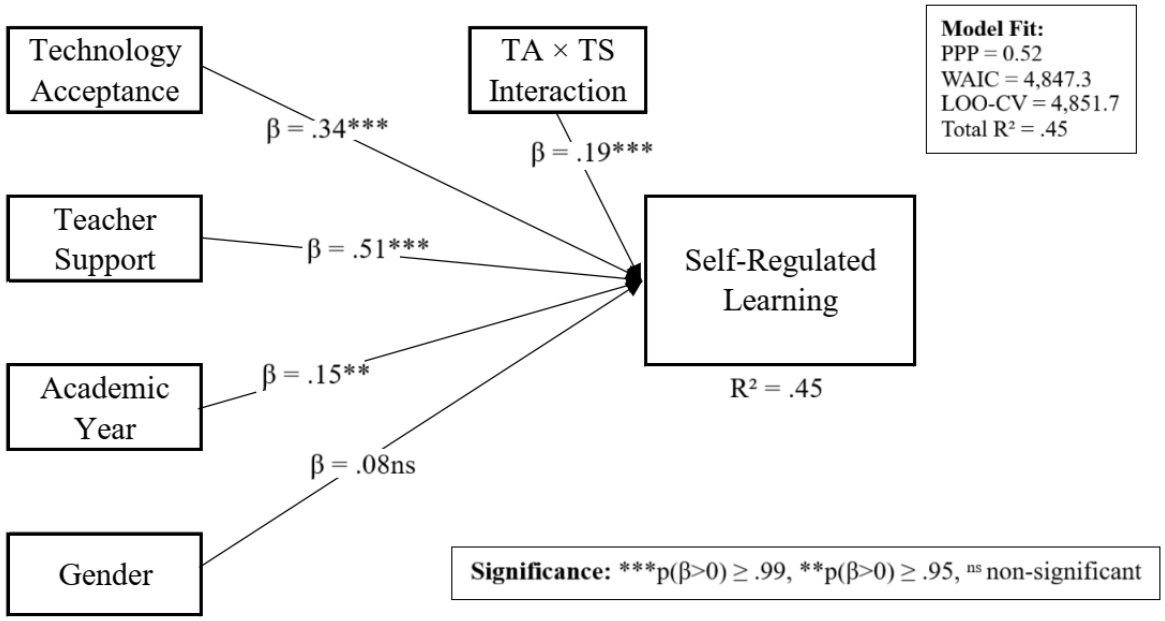

Figure 1. Bayesian Structural Equation Model Results

Teacher support emerged as the strongest predictor of self-regulated learning behaviors (β = 0.51, 95% CrI [0.38, 0.64]), with decisive evidence for a positive relationship (P(β > 0) = 1.00), accounting for 26% of variance in the outcome variable. Technology acceptance demonstrated a moderate positive effect (β = 0.34, 95% CrI [0.21, 0.47]) with strong probabilistic support (P(β > 0) = .998), explaining 12% of variance in self-regulated learning behaviors.

A significant interaction effect between technology acceptance and teacher support (β = 0.19, 95% CrI [0.06, 0.32]) was observed with high probability (P(β > 0) = .994). Students reporting high levels of both variables exhibited self-regulatory behaviors 1.7 times greater than predicted from individual effects alone.

Control variables revealed limited influences. Academic year demonstrated a weak positive association with self-regulated learning (β = 0.15, 95% CrI [0.03, 0.27]), while gender differences proved negligible (β = 0.08, 95% CrI [-0.05, 0.21]).

The combined model explained 45% of the variance in self-regulated learning behaviors. Posterior predictive checks indicated adequate performance for central tendencies, though 13% of cases exhibited prediction errors exceeding one standard deviation.

Student Perceptions of Learning Autonomy, Technology Use, and Teacher Guidance

Thematic analysis identified five primary themes regarding how Vietnamese EFL students perceive relationships between learning autonomy, technology integration, and instructor guidance in their English language development. Table 2 presents the thematic structure with frequency of occurrence across participants.

Table 2. Thematic Analysis of Student Perceptions (N = 24)

Theme	Frequency	Percentage	Core Relationship Pattern
1. Complementary Autonomy-Support	24/24	100%	Autonomy develops through, not despite, teacher guidance
2. Technology-Teacher Integration	22/24	91.7%	Technology effectiveness requires instructor facilitation
3. Scaffolded Digital Learning	20/24	83.3%	Self-regulation emerges via guided technology use
4. Synergistic Learning Conditions	18/24	75%	Optimal English development requires all three elements
5. Cultural Learning Adaptation	16/24	66.7%	Traditional-modern pedagogical balance enhances outcomes

All participants perceived learning autonomy and teacher support as complementary rather than opposing forces in English language development. Students conceptualized effective autonomy as teacher-mediated rather than teacher-independent, with Student 18 explaining: "My English improves most when I can choose my own practice methods but my teacher helps me see what I need to work on. Complete independence makes me repeat the same mistakes." This perception contradicts assumptions that teacher guidance constrains self-direction, instead revealing that Vietnamese students view scaffolding as enhancing autonomous capacity.

Technology-teacher integration emerged in 91.7% of participants, who distinguished between "guided technology use" and "assigned technology use" based on instructor involvement levels. Students reported that guided implementation produced sustained engagement while assigned usage created compliance behaviors without learning benefits. Student 09 stated: "Grammar apps help me a lot, but only after my teacher showed me which features match my weak areas. Random practice doesn't improve my English." This pattern indicates that instructor mediation determines educational technology effectiveness rather than individual adoption decisions alone.

Scaffolded digital learning appeared in 83.3% of participants, demonstrating temporal development where students gradually internalized technology-mediated self-regulation strategies through teacher modeling and feedback. Advanced students described sophisticated orchestration of digital tools for autonomous learning goals, while novice students required explicit instruction in both technological operations and self-regulatory applications. This developmental trajectory suggests that technology acceptance and autonomous learning behaviors co-evolve through instructional scaffolding.

Synergistic learning conditions emerged in 75% of participants, who reported that optimal English proficiency gains required simultaneous optimization of autonomy, technology, and teacher support rather than sequential development. Students described failed learning experiences when any single element dominated, with Student 12 explaining: "When teachers use the same apps we use for homework and teach us goal-setting strategies, the technology becomes part of my independent English practice instead of extra work." This finding validates the quantitative interaction effect while providing a mechanistic understanding of synergistic processes.

Cultural learning adaptation appeared in 66.7% of participants as a mediating factor influencing relationships between learning elements. Students demonstrated navigation of collectivist educational values alongside autonomous learning expectations, developing what Student 19 termed "respectful independence": "Vietnamese culture teaches us to respect teachers, but respect doesn't mean we cannot think for ourselves about learning." This cultural negotiation facilitated rather than constrained autonomous development by providing socially acceptable frameworks for self-directed behaviors.

The findings reveal that Vietnamese EFL students perceive learning autonomy, technology use, and teacher guidance as necessarily interdependent rather than competing elements in their English language development processes.

Discussion

Predictive Relationships Between Technology Acceptance, Teacher Support, and Self-Regulated Learning

The dominance of teacher support over technology acceptance in predicting self-regulated learning fundamentally challenges theoretical assumptions underlying Western autonomy models while revealing methodological limitations in cross-cultural educational research. These findings contradict Zimmerman's (2000) individualistic self-regulation framework by demonstrating that Vietnamese learners require external validation as a prerequisite for

autonomous development, not despite it. However, this pattern may reflect measurement artifacts rather than genuine cultural differences, as Western scales may inadequately capture collectivist forms of self-direction that operate through social relationships rather than individual agency.

The weak technology acceptance effects expose theoretical gaps in educational technology research that assumes universal adoption patterns. While Nguyen (2024) documented Vietnamese reliance on basic technological functionalities, the current findings suggest deeper issues with technology acceptance models that fail to account for social legitimation processes. The 12% variance explained by technology acceptance contradicts international research (Teng et al., 2021), demonstrating stronger correlations, yet this discrepancy may indicate that existing models conflate individual adoption with collective validation mechanisms prevalent in Vietnamese contexts. Alternative explanations include instructor technological competence limitations that constrain student adoption regardless of personal acceptance levels.

The synergistic interaction effect provides the most theoretically significant contribution by demonstrating that optimal self-regulation emerges through coordinated rather than competing influences. This finding extends beyond cultural adaptation to suggest fundamental theoretical reconceptualizations where autonomy and support function as mutually constitutive rather than oppositional constructs. However, the Bayesian framework's 13% prediction errors indicate substantial unexplained variance that existing Vietnamese EFL literature has not addressed. This limitation suggests either unmeasured individual differences or theoretical inadequacies in current cultural learning models. The negligible gender effects further challenge assumptions about demographic influences on technology adoption, indicating that cultural factors may override individual characteristics in Vietnamese educational contexts more than previously recognized.

Student Perceptions of Learning Autonomy, Technology Use, and Teacher Support

The universal perception of complementary autonomy-support relationships among Vietnamese participants exposes fundamental theoretical limitations in Western self-regulation models while providing empirical validation for culturally-mediated learning processes. These findings directly contradict Holec's individualistic autonomy framework by demonstrating that Vietnamese learners achieve self-direction through rather than despite external guidance, supporting Le et al.'s (2023) assertion that effective teacher support creates necessary conditions for autonomy development. However, this unanimity raises

methodological concerns about social desirability bias, as Truong and Nguyen (2024) documented significant cultural assimilation barriers that should theoretically produce more varied responses.

The distinction between guided and assigned technology use reveals theoretical gaps in educational technology research that assume universal adoption mechanisms. Vietnamese students' emphasis on instructor mediation validates Al-Abdullatif's (2023) finding that instructional support moderates technology acceptance relationships, while explaining Pan et al.'s (2024) documentation of dependence worry among 89.5% of users despite recognizing technological benefits. This pattern challenges Liu and Ma's (2024) assertion that perceived usefulness dominates continued technology use, instead demonstrating that Vietnamese contexts require social legitimation processes before individual utility assessment becomes relevant. The finding suggests that technology acceptance models fundamentally misunderstand adoption mechanisms in collectivist educational cultures.

The temporal development of scaffolded digital learning provides the most theoretically significant contribution by demonstrating developmental rather than static relationships between learning elements. Advanced students' sophisticated digital orchestration contradicts Nguyen's (2024) characterization of Vietnamese reliance on basic technological functionalities, suggesting that previous research captured developmental constraints rather than cultural limitations. This trajectory supports Rezai and Goodarzi's (2025) longitudinal evidence that digital-regulatory correlations strengthen progressively over time, yet extends beyond their framework by revealing culturally-specific scaffolding mechanisms. The "respectful independence" concept advances Huynh's (2025) observations about Vietnamese learners navigating authority-independence tensions by proposing hybrid autonomy models that transcend Western-Eastern educational dichotomies, potentially requiring fundamental reconceptualizations of self-regulated learning theory in collectivist contexts.

Theoretical and Practical Implications

These findings necessitate a fundamental reconceptualization of self-regulated learning theory to account for culturally-mediated autonomy development processes that operate through rather than despite external support structures. The synergistic relationships between technology acceptance and teacher support challenge individualistic theoretical assumptions, requiring the development of culturally-responsive frameworks that recognize scaffolded autonomy as a legitimate developmental pathway. Educational psychology would benefit from moving beyond binary conceptualizations of dependence versus independence to

embrace dialectical models where external guidance and self-direction function as mutually constitutive rather than opposing forces. This theoretical shift has profound implications for international educational research, suggesting that universal learning theories may systematically misrepresent learning processes in diverse cultural contexts.

Practically, these findings challenge technology-centered pedagogical initiatives that assume individual adoption mechanisms drive educational outcomes. Vietnamese EFL programs would benefit from prioritizing instructor technological competence development alongside student access to digital tools, as technology effectiveness depends heavily on teacher-mediated implementation rather than individual acceptance levels. The finding that assigned technology use produces compliance behaviors without learning benefits indicates that educational technology policies emphasizing tool provision without pedagogical integration training will likely prove ineffective. Universities could invest in sustained professional development programs that enable instructors to model effective technology use while explicitly teaching self-regulation strategies within digital environments.

The developmental trajectory of scaffolded digital learning suggests that autonomy-supportive practices require long-term institutional commitment rather than short-term interventions. Vietnamese universities could redesign curricula to enable progressive scaffolding withdrawal across academic years, ensuring that teacher support evolves from explicit guidance toward facilitative consultation as students develop autonomous capabilities. Assessment practices should recognize culturally-appropriate forms of self-direction that operate within social frameworks rather than individual isolation. These implications extend beyond Vietnamese contexts to other collectivist educational systems where established pedagogical models may inadvertently undermine rather than support authentic learner development.

Conclusion

This investigation employed Bayesian structural equation modeling and reflexive thematic analysis to examine relationships between technology acceptance, teacher support, and self-regulated learning among Vietnamese EFL university students, revealing fundamental theoretical limitations in existing autonomy models. The quantitative findings demonstrated that teacher support emerged as the strongest predictor of self-regulated learning behaviors ($\beta = 0.51$), with technology acceptance showing moderate effects ($\beta = 0.34$) that operated synergistically rather than independently. Qualitative analysis revealed that Vietnamese

students conceptualize learning autonomy as inherently social, requiring instructor scaffolding to achieve self-direction rather than independence from external guidance.

These findings challenge core assumptions underlying international educational theory by demonstrating that effective self-regulation development operates through culturally-mediated mechanisms that existing models fail to acknowledge adequately. The study's methodological contribution extends beyond cultural validation to demonstrate Bayesian approaches' analytical advantages in capturing probabilistic relationships and quantifying uncertainty in complex educational phenomena. However, several limitations constrain generalizability, including potential sample bias toward academically successful students and reliance on self-reported measures that may reflect social desirability rather than authentic perceptions.

Future research should employ longitudinal designs to establish causal relationships between scaffolding withdrawal and autonomous development, while investigating whether similar patterns exist across other collectivist educational contexts. The finding that 13% of cases exhibited substantial prediction errors indicates unmeasured factors requiring theoretical attention, potentially including individual learning orientations or institutional characteristics that mediate cultural influences. Educational practice would benefit from developing culturally-responsive pedagogical frameworks that recognize scaffolded autonomy as legitimate developmental pathways rather than transitional states toward individual independence. This study ultimately demonstrates that advancing educational theory requires moving beyond universal models toward culturally-informed frameworks that acknowledge diverse pathways to learning effectiveness, with implications extending throughout international educational research and practice.

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APPENDIX A

Research Questionnaire

Self-Regulated Learning, Technology Acceptance, and Teacher Support in Vietnamese EFL University Students

Instructions / Hướng dẫn

Please rate each statement based on your experience as an English language learner. Use the following scale:

Vui lòng đánh giá mỗi câu dựa trên trải nghiệm học tiếng Anh của bạn. Sử dụng thang đo sau:

1 = Hoàn toàn không đồng ý (Strongly Disagree)

2 = Không đồng ý (Disagree)

3 = Trung lập (Neutral)

4 = Đồng ý (Agree)

5 = Hoàn toàn đồng ý (Strongly Agree)

Part A: Demographic and Contextual Information

Phần A: Thông tin nhân khẩu học và bối cảnh

1. Gender / Giới tính:

☐ Nam (Male) ☐ Nữ (Female) ☐ Khác (Other)

2. Age / Tuổi:

_____ tuổi (years)

3. University / Trường đại học:

_____

4. University year / Năm học:

☐ Năm 1 (Year 1) ☐ Năm 2 (Year 2) ☐ Năm 3 (Year 3) ☐ Năm 4 (Year 4)

5. Major / Ngành học:

☐ English Studies ☐ Business ☐ Engineering ☐ Other / Khác: _____

6. Years studying English / Số năm học tiếng Anh:

_____ năm (years)

7. Current English proficiency (verified score) / Trình độ tiếng Anh hiện tại (điểm đã xác minh):

☐ TOEIC: _____ (score) ☐ IELTS: _____ (score) ☐ Other / Khác: _____

8. Daily English learning time outside class / Thời gian học tiếng Anh mỗi ngày ngoài lớp:

_____ giờ (hours)

9. Do you have daily access to technology (smartphone/computer with internet)? / Bạn có truy cập hàng ngày vào công nghệ (điện thoại thông minh/máy tính có internet) không?

☐ Yes / Có ☐ No / Không

10. Have you completed formal learner training workshops or autonomous learning courses? / Bạn đã hoàn thành các khóa đào tạo người học chính thức hoặc khóa học tự chủ chưa?

☐ Yes / Có ☐ No / Không

Part B: Self-Regulated Learning Ability

Phần B: Khả năng tự điều chỉnh học tập

Code	Items	1	2	3	4	5
SRL1	I set specific, achievable goals for my English learning each semester. *Tôi đặt ra những mục tiêu cụ thể và khả thi cho việc học tiếng Anh mỗi học kỳ.*					
SRL2	I regularly check my progress in English and adjust my study methods accordingly. *Tôi thường xuyên kiểm tra tiến độ học tiếng Anh và điều chỉnh phương pháp học phù hợp.*					
SRL3	I can identify my strengths and weaknesses in English learning without teacher guidance. *Tôi có thể xác định điểm mạnh và điểm yếu trong việc học tiếng Anh mà không cần sự hướng dẫn của giáo viên.*					
SRL4	I actively seek English learning opportunities beyond classroom assignments. *Tôi tích cực tìm kiếm cơ hội học tiếng Anh ngoài các bài tập trên lớp.*					
SRL5	I persist in English learning tasks even when they become challenging. *Tôi kiên trì với các nhiệm vụ học tiếng Anh ngay cả khi chúng trở nên khó khăn.*					
SRL6	I reflect on my learning strategies and modify them based on their effectiveness. *Tôi suy ngẫm về các chiến lược học tập và điều chỉnh chúng dựa trên hiệu quả.*					

Part C: Technology Acceptance in English Learning

Phần C: Chấp nhận công nghệ trong học tiếng Anh

Code	Items	1	2	3	4	5
TA1	Using digital tools improves the quality of my English learning. *Việc sử dụng các công cụ số cải thiện chất lượng học tiếng Anh của tôi.*					
TA2	Digital technologies make my English learning more efficient than traditional methods alone. *Công nghệ số giúp việc học tiếng Anh của tôi hiệu quả hơn so với chỉ dùng phương pháp truyền thống.*					
TA3	I find English learning applications and websites easy to navigate and use. *Tôi thấy các ứng dụng và website học tiếng Anh dễ sử dụng và dễ thao tác.*					
TA4	Learning to use new English learning technologies does not require much effort from me. *Học cách sử dụng các công nghệ học tiếng Anh mới không đòi hỏi tôi phải nỗ lực nhiều.*					
TA5	I intend to continue using digital tools for English learning in the future. *Tôi có ý định tiếp tục sử dụng các công cụ số để học tiếng Anh trong tương lai.*					
TA6	I would recommend English learning technologies to my classmates. *Tôi sẽ giới thiệu các công nghệ học tiếng Anh cho các bạn cùng lớp.*					

Part D: Teacher Support in English Learning

Phần D: Sự hỗ trợ của giáo viên trong học tiếng Anh

Code	Items	1	2	3	4	5
TS1	My English teacher provides clear guidance that helps me understand how to learn independently. *Giáo viên tiếng Anh của tôi cung cấp hướng dẫn rõ ràng giúp tôi hiểu cách học độc lập.*					
TS2	My teacher encourages me to take initiative in my English learning process. *Giáo viên của tôi khuyến khích tôi chủ động trong quá trình học tiếng Anh.*					
TS3	My teacher provides timely and constructive feedback that improves my English skills. *Giáo viên của tôi cung cấp phản hồi kịp thời và mang tính xây dựng giúp cải thiện kỹ năng tiếng Anh của tôi.*					
TS4	My teacher creates a supportive environment where I feel comfortable making mistakes. *Giáo viên của tôi tạo ra môi trường hỗ trợ khiến tôi cảm thấy thoải mái khi mắc lỗi.*					
TS5	My teacher helps me identify effective learning strategies suitable for my individual needs. *Giáo viên của tôi giúp tôi xác định các chiến lược học tập hiệu quả phù hợp với nhu cầu cá nhân của tôi.*					
TS6	My teacher is available when I need help with my English learning. *Giáo viên của tôi sẵn sàng hỗ trợ khi tôi cần giúp đỡ trong việc học tiếng Anh.*					

Thank you for your participation! / Cảm ơn bạn đã tham gia!

APPENDIX B

Semi-Structured Interview Guide

Interview Protocol

Duration: Approximately 50 minutes

Language: Vietnamese (with English translation provided)

Recording: Audio-recorded with participant consent

Purpose / Mục đích

This interview explores Vietnamese EFL university students' perceptions of self-regulated learning, technology acceptance, and teacher support in their English language development.

Cuộc phỏng vấn này khám phá nhận thức của sinh viên đại học EFL Việt Nam về việc tự điều chỉnh học tập, chấp nhận công nghệ và sự hỗ trợ của giáo viên trong quá trình phát triển tiếng Anh của họ.

Research Questions Addressed

RQ1: To what extent do technology acceptance and teacher support predict self-regulated learning behaviors among Vietnamese EFL university students?

RQ2: How do Vietnamese EFL students perceive the relationship between their learning autonomy, technology use, and teacher support in their English language development?

A. Opening (5 minutes)

• Introduction and consent confirmation

• Explanation of interview purpose and confidentiality

• Warm-up question:

"Tell me about your experience as an English learner at your university."

"Hãy kể cho tôi nghe về trải nghiệm của bạn với tư cách là người học tiếng Anh tại trường đại học của bạn."

B. Self-Regulated Learning Perceptions (15 minutes)

Q1. *[Addresses RQ1, RQ2]*

How do you approach planning and organizing your English learning outside of class?

Bạn tiếp cận việc lên kế hoạch và tổ chức việc học tiếng Anh ngoài lớp học như thế nào?

Probing questions:

- Can you give me a specific example?

  Bạn có thể cho tôi một ví dụ cụ thể không?

- What challenges do you face in planning your learning?

  Bạn gặp những thách thức gì trong việc lập kế hoạch học tập của mình?

Q2. *[Addresses RQ1, RQ2]*

How do you know if your English learning strategies are working effectively?

Làm thế nào bạn biết các chiến lược học tiếng Anh của mình có hiệu quả không?

Probing questions:

- How do you decide to change your learning approach?

  Bạn quyết định thay đổi cách tiếp cận học tập của mình như thế nào?

- What role does your teacher play in helping you evaluate your progress?

  Giáo viên của bạn đóng vai trò gì trong việc giúp bạn đánh giá tiến độ của mình?

Q3. *[Addresses RQ2]*

In Vietnamese culture, learners often rely on teacher guidance. How do you balance following your teacher's instructions with taking initiative in your own learning?

Trong văn hóa Việt Nam, người học thường dựa vào sự hướng dẫn của giáo viên. Bạn cân bằng việc làm theo hướng dẫn của giáo viên với việc chủ động trong học tập của mình như thế nào?

Probing questions:

- Can you describe a situation where you had to make this balance?

  Bạn có thể mô tả một tình huống mà bạn phải tạo ra sự cân bằng này không?

- How comfortable are you with independent learning decisions?

  Bạn cảm thấy thoải mái như thế nào với các quyết định học tập độc lập?

C. Technology Use in English Learning (15 minutes)

Q4. *[Addresses RQ1, RQ2]*

What digital tools or technologies do you use for learning English? Why did you choose these specific tools?

Bạn sử dụng những công cụ hoặc công nghệ kỹ thuật số nào để học tiếng Anh? Tại sao bạn chọn những công cụ cụ thể này?

Probing questions:

- How did you learn about these technologies?

  Bạn biết về những công nghệ này như thế nào?

- Did your teacher recommend them, or did you find them yourself?

  Giáo viên của bạn có giới thiệu chúng không, hay bạn tự tìm thấy?

Q5. *[Addresses RQ1, RQ2]*

How do digital technologies help or hinder your English learning compared to traditional methods?

Công nghệ kỹ thuật số giúp đỡ hoặc cản trở việc học tiếng Anh của bạn như thế nào so với các phương pháp truyền thống?

Probing questions:

- Can you give specific examples of benefits and drawbacks?

  Bạn có thể đưa ra các ví dụ cụ thể về lợi ích và hạn chế không?

- Have your feelings about using technology for learning changed over time?

  Cảm nhận của bạn về việc sử dụng công nghệ để học tập có thay đổi theo thời gian không?

Q6. *[Addresses RQ2]*

Some students mentioned a difference between 'guided technology use' and 'assigned technology use.' What does this mean to you?

Một số sinh viên đề cập đến sự khác biệt giữa 'sử dụng công nghệ có hướng dẫn' và 'sử dụng công nghệ được giao'. Điều này có ý nghĩa gì với bạn?

Probing questions:

- Can you give examples from your own experience?

  Bạn có thể đưa ra ví dụ từ kinh nghiệm của chính bạn không?

- Which type do you find more beneficial and why?

  Loại nào bạn thấy có lợi hơn và tại sao?

D. Teacher Support and Guidance (10 minutes)

Q7. *[Addresses RQ1, RQ2]*

How does your English teacher support your learning? What kind of support do you find most helpful?

Giáo viên tiếng Anh của bạn hỗ trợ việc học của bạn như thế nào? Bạn thấy loại hỗ trợ nào hữu ích nhất?

Probing questions:

- Can you give a specific example of effective teacher support?

  Bạn có thể đưa ra một ví dụ cụ thể về sự hỗ trợ hiệu quả của giáo viên không?

- What kind of support would you like to receive more of?

  Bạn muốn nhận được nhiều hơn loại hỗ trợ nào?

Q8. *[Addresses RQ2]*

Does your teacher encourage you to use technology for English learning? How does this encouragement influence your actual use of technology?

Giáo viên của bạn có khuyến khích bạn sử dụng công nghệ để học tiếng Anh không? Sự khuyến khích này ảnh hưởng như thế nào đến việc bạn thực sự sử dụng công nghệ?

Probing questions:

- What happens when the teacher recommends a technology you find difficult to use?

  Điều gì xảy ra khi giáo viên giới thiệu một công nghệ mà bạn thấy khó sử dụng?

- How does teacher support affect your confidence in using new technologies?

  Sự hỗ trợ của giáo viên ảnh hưởng như thế nào đến sự tự tin của bạn trong việc sử dụng công nghệ mới?

Q9. *[Addresses RQ2]*

How do you think the relationship between teacher support and learning autonomy works? Can you be autonomous while still relying on teacher guidance?

Bạn nghĩ mối quan hệ giữa sự hỗ trợ của giáo viên và tính tự chủ trong học tập hoạt động như thế nào? Bạn có thể tự chủ trong khi vẫn dựa vào sự hướng dẫn của giáo viên không?

Probing questions:

- Does teacher support make you more or less independent?

  Sự hỗ trợ của giáo viên khiến bạn độc lập hơn hay kém độc lập hơn?

- What is the ideal balance between teacher guidance and student independence?

  Sự cân bằng lý tưởng giữa hướng dẫn của giáo viên và sự độc lập của sinh viên là gì?

E. Integration of SRL, Technology, and Teacher Support (10 minutes)

Q10. *[Addresses RQ2]*

Thinking about your English learning as a whole, how do your learning strategies, technology use, and teacher support work together?

Nghĩ về việc học tiếng Anh của bạn nói chung, các chiến lược học tập, việc sử dụng công nghệ và sự hỗ trợ của giáo viên của bạn hoạt động cùng nhau như thế nào?

Probing questions:

- Can you describe a successful learning experience that involved all three elements?

Bạn có thể mô tả một trải nghiệm học tập thành công liên quan đến cả ba yếu tố không?

• What happens when these elements are not aligned?

Điều gì xảy ra khi những yếu tố này không phù hợp với nhau?

Q11. *[Addresses RQ2]*

What advice would you give to other Vietnamese EFL students about developing learning autonomy while using technology and receiving teacher support?

Bạn sẽ cho những sinh viên EFL Việt Nam khác lời khuyên gì về việc phát triển tính tự chủ trong học tập trong khi sử dụng công nghệ và nhận sự hỗ trợ từ giáo viên?

Probing questions:

• What has worked best for you?

Điều gì đã hiệu quả nhất với bạn?

• What mistakes should they avoid?

Họ nên tránh những sai lầm gì?

F. Closing (5 minutes)

Q12. *[Addresses General]*

Is there anything else about your English learning experience, technology use, or teacher support that you would like to share that we haven't discussed?

Có điều gì khác về trải nghiệm học tiếng Anh, việc sử dụng công nghệ hoặc sự hỗ trợ của giáo viên mà bạn muốn chia sẻ mà chúng ta chưa thảo luận không?

Interview Notes

Interviewer observations / Quan sát của người phỏng vấn:

• Setting and context:

• Participant demeanor and engagement:

• Notable non-verbal cues:

• Additional contextual information:

END OF INTERVIEW GUIDE