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Modelling Thai EFL Students' Acceptance of an LMS for Prosody Instruction: A UTAUT2-Based Mixed-Methods Study

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Abstract

English prosody remains underemphasised in Thai EFL curricula despite its role in communicative competence. This study examines Thai university EFL students' behavioural intention towards a prosody-focused blended learning module incorporating a learning management system (LMS). Using the UTAUT2 framework, quantitative survey data from 157 participants were analysed with PLS-SEM, and semi-structured interviews with 20 purposefully selected students were examined through thematic analysis. Performance Expectancy ($\beta = .28$, $p < .001$) and Hedonic Motivation ($\beta = .25$, $p < .001$) emerged as the strongest predictors of Behavioural Intention, accounting for 58% of variance. Effort Expectancy and Social Influence showed smaller but significant effects. Behavioural Intention ($\beta = .45$, $p < .001$) and Facilitating Conditions ($\beta = .31$, $p < .001$) predicted actual use behaviour. Interview data contextualised these findings: participants reported heightened prosodic awareness and reduced speaking anxiety through private, asynchronous practice, with technical frustrations non-disruptive to overall acceptance. These findings contribute to our understanding of LMS acceptance in Thai EFL by demonstrating that when platforms are designed around specific language learning objectives such as prosody practice, students' perceived *usefulness and enjoyment of the LMS* drive behavioural intention and subsequent use.

Keywords: blended learning, LMS, prosody instruction, Thai EFL, UTAUT2

Introduction

Learning Management Systems are now commonly used by universities to deliver and administer curricula, with extensive research into LMS acceptance for institution-wide

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platforms such as Blackboard, Moodle, and Canvas (Granić & Marangunić, 2023). However, this focus obscures a growing trend: teachers using free, cloud-based LMS platforms independently, outside institutional mandates, to create learning experiences aligned with specific curriculum goals (Brown et al., 2021). In these cases, individual instructors are increasingly using platforms like Canvas Free for Teachers and Google Classroom to design learning environments that fit with specific pedagogical objectives without requiring extensive institutional infrastructure (Brown et al., 2021).

Existing cloud-based LMS platforms support multimedia integration, learner interaction, analytics, and competency-based pathways, thus enabling instructors to design rich learning environments without extensive institutional support. However, as shown by research within blended learning contexts (Granić & Marangunić, 2023), learner acceptance depends less on which LMS is used and more on how instructional goals and learning activities are implemented by the teacher to achieve instructional outcomes.

The problem is that despite the proliferation of instructor-initiated LMS use, little is known about how Thai EFL students accept such platforms for skill-based learning, and whether UTAUT2 constructs predict their behavioural intention and use behaviour in this context. Accordingly, the present study does not evaluate learning outcomes but rather examines students' acceptance of an instructor-designed LMS within a prosody-focused instructional context.

Literature Review

1. The Problem of Student Acceptance in Instructor-Initiated Contexts

While teacher initiatives may provide pragmatic solutions, their success depends on whether students accept and voluntarily use the digital tools their teachers choose to use – what Al-Nuaimi and Al-Emran (2021) and Granić and Marangunić (2023) describe as student acceptance of the digital environments that instructors create outside institutional mandates.
Learner expectations, perceived instructional value, and enjoyment have been found important to student acceptance of educational technologies (Keane et al., 2023; Granić & Marangunić, 2023); however, empirical research investigating student acceptance of LMS implemented by teachers independently of institutional requirements remains relatively unexamined, especially in the South-east Asian EFL contexts of the present research (Park, 2009; Al-Emran et al., 2020).

2. The Thai EFL Context and Prosody Instruction

In this study, 'prosody' refers to suprasegmental features of speech including stress, rhythm, intonation, and phrasing (Celce-Murcia et al., 2010). For Thai students, these prosodic components present a fundamental barrier to communicative competence due to differences between Thai tonal patterns and English discourse-level intonation. Thai is tonally based, with pitch functioning lexically, whereas English prosody operates at phrase and discourse levels through stress, rhythm, and intonation, often resulting in L1 transfer (Peerachachayanee, 2022). Learners may produce grammatically accurate sentences yet remain difficult to follow in real-

time interaction, as prosody plays a critical role in signalling prominence, grouping information, and guiding listener interpretation during speech processing. As a result, the absence of prosodic competence can limit communicative effectiveness even when segmental accuracy and grammatical control are achieved (Derwing & Munro, 2005; Levis, 2018; Celce-Murcia et al., 2010).

Recent research indicates a lack of prosodic instruction in Thai EFL curricula, where segmental phonology and grammatical accuracy are prioritised (Lekwilai, 2021). Teacher time constraints, grammar-focused lessons, and limited teacher training have been linked to this deficit (Lekwilai, 2021). Technology-mediated instruction, such as LMS-based coursework in blended learning environments, may address this gap (Lewin et al., 2019).

3. UTAUT2 and Its Application in the Thai EFL Context

Venkatesh et al. (2003) developed the Unified Theory of Acceptance and Use of Technology (UTAUT) with four primary constructs: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC). Venkatesh, Thong, and Xu (2012) extended this to UTAUT2 by adding Hedonic Motivation (HM), Price Value, and Habit. In this study, the core constructs are defined as follows:

- Performance Expectancy (PE): the degree to which a student believes using the LMS will improve learning of English prosody.
- Effort Expectancy (EE): the perceived ease of using the LMS.
- Social Influence (SI): the perceived pressure from peers or teachers to use the LMS.
- Facilitating Conditions (FC): the perceived availability of technical and resource support.
- Hedonic Motivation (HM): the enjoyment or pleasure derived from using the LMS.
- Behavioural Intention (BI): the student's stated intention to use the LMS for prosody learning.
- Use Behaviour (UB): actual, observable use of the LMS.

Note: In the present study, the UTAUT2 model was adapted to the instructional context by excluding Price Value and Habit, as these constructs were not considered applicable to a course-based learning environment in which system use was not financially driven and did not reflect established habitual behaviour.

UTAUT2 has demonstrated strong explanatory power in educational settings, where learner acceptance is influenced by both perceived instructional value and experiential quality (Baptista & Oliveira, 2015; El-Masri & Tarhini, 2017). Researchers such as El-Masri and Tarhini (2017) and Raza et al. (2021) have suggested that contextual and cultural adaptations are relevant when applying UTAUT2 in educational settings. In non-Western, collectivist cultures such as Thai EFL classrooms, Social Influence and Facilitating Conditions may play more noticeable roles than in individualistic societies (Baptista & Oliveira, 2015).

4. The Present Study

To address the research gap, this study uses the UTAUT2 framework as an analytical lens to investigate Thai university students' acceptance of an instructor-initiated LMS course designed to support learning of English prosody (rhythm, stress, prominence, intonation), which is fundamental to spoken intelligibility (Derwing & Munro, 2005).

Hypotheses of the Study

What factors, as specified by UTAUT2, influence Thai EFL students' behavioural intention to use an instructor-designed LMS course for learning prosody within a blended learning context?

Based on an adapted UTAUT2 framework contextualised for this instructional setting, the following hypotheses were formulated:

- H1: Performance Expectancy (PE) positively influences Behavioural Intention (BI).
- H2: Effort Expectancy (EE) positively influences Behavioural Intention (BI).
- H3: Social Influence (SI) positively influences Behavioural Intention (BI).
- H4: Hedonic Motivation (HM) positively influences Behavioural Intention (BI).
- H5: Behavioural Intention (BI) positively influences Use Behaviour (UB).
- H6: Facilitating Conditions (FC) positively influences Use Behaviour (UB).

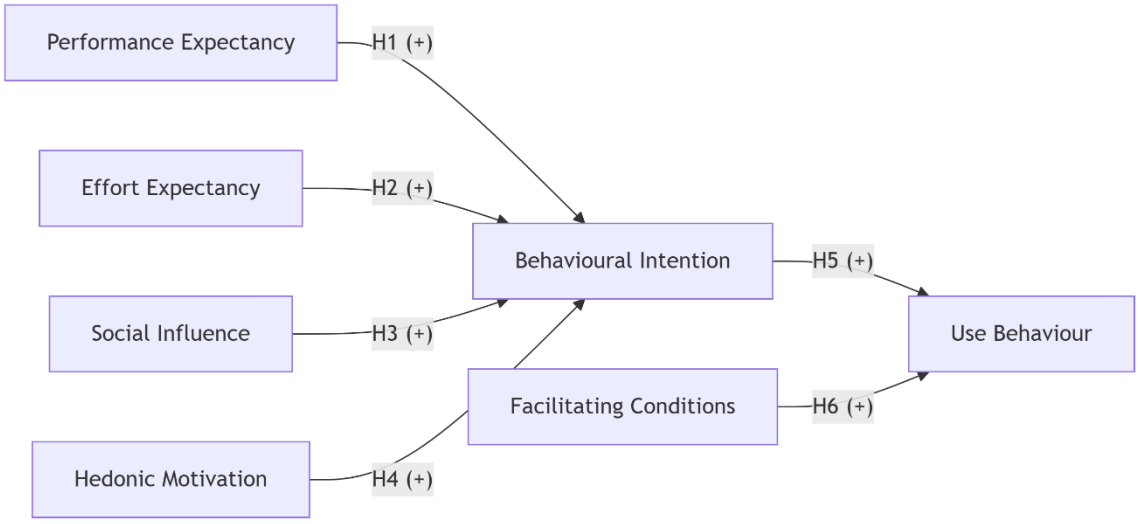
Delimitations

Although LMS-based formative assessments included course grading, the institution did not require the LMS, and students only needed to use it for assessments; they could choose their participation level after meeting minimum requirements. This study does not evaluate prosodic accuracy, intelligibility, or speech performance outcomes. All references to learner benefit reflect perceptions and self-reported acceptance rather than measured linguistic change. Accordingly, the study adopts a technology acceptance perspective using validated UTAUT2-based scales, with behavioural intention and self-reported use as the dependent variables. The term "engagement" is used only descriptively where necessary; the primary constructs are behavioural intention and use behaviour.

Based on the UTAUT2 framework (Venkatesh et al., 2012) and the hypothesised relationships outlined above, the conceptual model guiding this study is presented in Figure 1. The model proposes that Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Hedonic Motivation (HM) positively influence Behavioural Intention (BI), which in turn predicts Use Behaviour (UB). Facilitating Conditions (FC) are hypothesised to directly influence Use Behaviour (UB).

Figure 1

Hypothesised UTAUT2-based Model of Thai EFL Students' LMS Acceptance for Prosody Instruction



Methodology

1. Research Design

This study employed a convergent, parallel, mixed-methods design (Creswell & Plano Clark, 2018), in which quantitative and qualitative data were collected concurrently, analysed independently, and merged during interpretation.

2. Research Context

The study was conducted within a compulsory 14-week English Pronunciation and Prosody course for English Education majors at a public university in Northeastern Thailand. The prosody-related components were taught over 14 weeks, integrated into each weekly unit. The course was delivered in a blended learning format, with approximately 50% face-to-face instruction and 50% asynchronous via instructor-designed modules hosted on Canvas Free for Teachers. Access to the LMS was required as part of the course structure, but individual activities (frequency, depth, sequencing) were neither mandated nor graded beyond minimum requirements, allowing meaningful variation in acceptance and use behaviour.

The Canvas course was organised into weekly units, each containing: (1) a short instructional video on a prosodic concept; (2) listening discrimination activities; (3) shadowing and imitation tasks; (4) a self-recording assignment; and (5) a brief reflective journal prompt.

3. Participants

The study sample comprised 157 English Education majors enrolled in four parallel sections of the same course, each taught by the same instructor using identical materials. The course was required for English Education majors across all year levels (Years 1–4). Table 1 summarises demographic characteristics.

Table 1

Participant Demographic Characteristics

Variable	Category	N	%
Gender	Male	38	24.2
	Female	119	75.8
Year of study	Year 1	3	1.9
	Year 2	89	56.7
	Year 3	45	28.7
	Year 4	20	12.7
Age	18–20 years	108	68.8
	21–23 years	43	27.4
	24+ years	6	3.8
English learning duration	≤10 years	36	22.9
	11–15 years	94	59.9
	≥16 years	27	17.2
Primary access device	Smartphone	96	61.1
	Laptop/Desktop	61	38.9

Note. Percentages calculated from valid sample (N = 157).

All participants completed a quantitative survey. Twenty students were selected for semi-structured interviews using stratified purposeful sampling (Palinkas et al., 2015) based on Canvas analytics (logins, time-on-task, assignment completion): high engagers (n=7), medium (n=7), low (n=6).

4. Instruments and Data Collection

4.1 Quantitative Instrument and Construct Definitions

During the final week, quantitative data were collected via an online survey (QuestionPro) in Thai and English. All UTAUT2 constructs (PE, EE, SI, FC, HM, BI) were measured using 5-point Likert scales (1 = strongly disagree, 5 = strongly agree). Use Behaviour (UB) was measured using frequency ratings (e.g., "How often did you review Canvas materials before class?") with response options: Never, Rarely, Sometimes, Often, Always.

UTAUT2 scales (Venkatesh et al., 2012) were contextualised to the Canvas prosody modules. The following constructs were measured with their definitions:

- Performance Expectancy (PE): degree to which a student believes using the LMS will improve learning of English prosody (3 items, $\alpha = .91$).
- Effort Expectancy (EE): perceived ease of using the LMS (1 item).
- Social Influence (SI): perceived pressure from peers or teachers to use the LMS (1 item).
- Facilitating Conditions (FC): perceived availability of technical and resource support (2 items, $\alpha = .87$).
- Hedonic Motivation (HM): enjoyment or pleasure derived from using the LMS (2 items, $\alpha = .89$).
- Behavioural Intention (BI): student's stated intention to use the LMS for prosody learning (1 item).

Single-item measures were preserved for EE, SI, and BI to mitigate respondent fatigue and because previous UTAUT2 studies have shown adequate validity for streamlined models in practical educational contexts (Hair et al., 2019).

4.2 Justification for Omitted Constructs

Price Value was deemed irrelevant because the LMS platform was provided at no cost to students. Habit was excluded because the single-semester intervention (14 weeks) was insufficient for habitual usage patterns to develop meaningfully; the study's focus is on acceptance drivers rather than automaticity.

Use Behaviour (UB) was measured using a three-item self-report scale (reviewing materials before class, reviewing after class, perceived usefulness of continued access). These data were triangulated with objective Canvas analytics (logins, session duration, completion rates). A strong positive correlation was observed ($r = .78$, $p < .001$), supporting validity.

The survey was translated and back-translated (Beaton et al., 2000) and piloted with 30 students from a comparable cohort, resulting in minor wording revisions. All items are available as supplementary material.

4.3 Qualitative Instrument

Semi-structured interviews (20–45 minutes) explored students' experiences corresponding to the four emergent themes: enhanced prosodic awareness, affective benefits and reduced

anxiety, usability and technical hurdles, and perceived communicative readiness. Interviews were conducted in Thai during weeks 13–14, audio-recorded, transcribed, and translated into English, with a subset back-translated for accuracy.

5. Data Analysis

5.1 Quantitative Analysis

Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS 4.0 was used. The measurement model was assessed for internal consistency reliability (composite reliability > .85), convergent validity (AVE > .65), and discriminant validity (HTMT < .85). Common method bias was assessed using full collinearity (VIFs < 3.3). The structural model was evaluated using bootstrapping with 5,000 resamples. Predictive accuracy was assessed using R^2 and effect sizes (f^2).

5.2 Qualitative Analysis

Inductive thematic analysis following Braun and Clarke's (2006) six-phase framework was used. Two researchers independently generated initial codes, then collaboratively reviewed and refined codes through discussion (Nowell et al., 2017). This process produced an open set of codes reflecting students' experiences.

5.3 Integration and Triangulation

Integration followed a three-step process. First, quantitative results identified which UTAUT2 constructs significantly predicted BI and UB. Second, qualitative themes were independently developed without reference to UTAUT2. Third, in the interpretive phase, themes were systematically mapped onto UTAUT2 constructs through theoretical triangulation (Flick, 2022). For example, "enhanced prosodic awareness" was mapped to Performance Expectancy; "affective benefits and reduced anxiety" to Hedonic Motivation; "usability and technical hurdles" to Effort Expectancy and Facilitating Conditions; "perceived communicative readiness" to Performance Expectancy. This mapping allowed qualitative findings to contextualise and explain the quantitative relationships, producing the integrated interpretation presented in the Results section.

Results

Findings are presented in three parts: quantitative results, qualitative findings, and integrated interpretation.

1. Quantitative Results

1.1 Descriptive Statistics and Measurement Model

Table 2 presents descriptive statistics and internal consistency. Mean scores were positive across constructs, with Performance Expectancy (M = 4.28, SD = 0.79) and Behavioural Intention (M = 4.28, SD = 0.85) among the highest.

Table 2

Descriptive Statistics and Internal Consistency (Number of Questionnaire Items Per Construct)

Construct	Items	Mean	SD	Cronbach's α
Performance Expectancy (PE)	3	4.28	0.79	0.91
Effort Expectancy (EE)	1	4.16	0.90	—
Hedonic Motivation (HM)	2	4.31	0.80	0.89
Social Influence (SI)	1	4.20	0.85	—
Facilitating Conditions (FC)	2	4.22	0.85	0.87
Behavioural Intention (BI)	1	4.28	0.85	—

Note. 5-point Likert scale. Cronbach's α is not reported for single-item constructs.

Composite reliability for multi-item constructs exceeded 0.85, AVE exceeded 0.65, and HTMT ratios were below 0.85, indicating satisfactory reliability and discriminant validity.

Structural Model and Hypothesis Testing

Table 3 presents bivariate correlations. All constructs correlated positively and significantly.

Table 3

Correlation Matrix of Key Constructs

Construct	1	2	3	4	5	6	7
1. PE	—						
2. EE	.59**	—					
3. HM	.68**	.50**	—				
4. SI	.44**	.38**	.42**	—			
5. FC	.60**	.51**	.55**	.47**	—		
6. BI	.65**	.45**	.75**	.43**	.53**	—	
7. UB	.35**	.30**	.38**	.25**	.33**	.40**	—

**p < .01.

Table 4 presents structural model results. All six hypotheses were supported. The model explained 58% of variance in BI ($R^2 = .58$) and 41% in UB ($R^2 = .41$).

Table 4

Structural Model Results and Hypothesis Testing

Hypothesis	Path	β	t-value	P	f^2	Support
H1	PE → BI	.28	4.12	<.001	.09	Supported
H2	EE → BI	.22	3.45	<.001	.06	Supported
H3	SI → BI	.15	2.20	.028	.03	Supported
H4	HM → BI	.25	3.89	<.001	.07	Supported
H5	BI → UB	.45	6.23	<.001	.24	Supported
H6	FC → UB	.31	4.78	<.001	.11	Supported

Note. Bootstrapping with 5,000 resamples. Effect sizes (f^2) interpreted using Cohen's (1988) guidelines.

2. Qualitative Findings

Four themes emerged from thematic analysis.

Theme 1: Enhanced Prosodic Awareness: Students described noticing prosodic concepts previously unaware of, aligning with Performance Expectancy.

"Before this course, I never thought about the 'music' of English. I just spoke words. Now, when I watch YouTube, I can hear where the stress is." (P12)

Theme 2: Affective Benefits and Reduced Anxiety: Students reported enjoyment, autonomy, and reduced anxiety, aligning with Hedonic Motivation.

"I was always shy to practise in class. But in Canvas, in my own room, I could repeat as many times as I wanted." (P8)

Theme 3: Usability and Technical Hurdles: Some students reported frustrations, but these did not override perceived value, aligning with Effort Expectancy and Facilitating Conditions.

"Sometimes the instructions confused me. The button was at the bottom; I wasted time looking for it." (P2)

Theme 4: Perceived Communicative Readiness and Confidence: Students described increased confidence in classroom speaking contexts, aligning with Performance Expectancy.

"After practising the 'thought group' module, I tried to use pauses in my presentation. My teacher said it was much easier to follow." (P10)

3. Integrated Interpretation

Mapping qualitative themes onto UTAUT2 constructs contextualised the quantitative results. Theme 1 (enhanced prosodic awareness) and Theme 4 (communicative readiness) both mapped to Performance Expectancy, consistent with its strong effect (β = .28). Theme 2 (affective benefits) mapped to Hedonic Motivation, supporting its significant contribution (β = .25). Theme 3 (usability and technical hurdles) mapped to Effort Expectancy and Facilitating Conditions, which showed smaller but significant effects (β = .22 and β = .31, respectively). Performance Expectancy emerged as a primary predictor, consistent with students' reports of perceived gains in prosodic awareness. Hedonic Motivation was also influential, as private, self-paced practice reduced speech-related anxiety. Effort Expectancy and Social Influence showed relatively weaker influence: minor usability frustrations did not override perceived value, and acceptance remained self-directed rather than socially driven. Facilitating Conditions enabled use but did not independently motivate it, consistent with interview reports that technical access affected but did not determine acceptance. While themes were mapped onto UTAUT2 constructs to support theoretical triangulation, alternative interpretations are possible, and the mapping reflects a theoretically informed analytical decision rather than a definitive categorisation.

Discussion

This study investigated Thai EFL students' acceptance of an instructor-designed blended LMS course for learning prosody through the lens of UTAUT2. In this Thai EFL instructional context, triangulation of quantitative and qualitative findings offers an understanding of how students formed behavioural intentions and how these translated into use behaviour.

1. Performance Expectancy as a Core Motivational Driver (H1)

Performance Expectancy was the strongest predictor of Behavioural Intention (β = .28, $p < .001$, $f^2 = .09$). Within this course-specific setting, students' acceptance was associated with their perception of the course's instructional value for prosody skills. Interviews confirmed that students attributed increased prosodic awareness to the structured LMS activities. This aligns with prior research (Venkatesh et al., 2012; Zheng et al., 2025) showing that for cognitively demanding language tasks, Performance Expectancy can outweigh other UTAUT2 constructs.

2. Hedonic Motivation and Sustained Acceptance (H4)

Hedonic Motivation also contributed significantly to Behavioural Intention (β = .25, $p < .001$, $f^2 = .07$). Students reported that multimedia, self-paced features reduced anxiety and enhanced

enjoyment compared to traditional classroom pronunciation exercises. In Thai EFL contexts, where face-loss concerns are salient (Horwitz, 2001; Teimouri et al., 2019), the private practice space may have reduced social pressure, making the tool both useful and enjoyable.

3. Relatively Weaker Influence of Effort Expectancy and Social Influence (H2, H3)

Although Effort Expectancy ($\beta = .22$, $p < .001$, $f^2 = .06$) and Social Influence ($\beta = .15$, $p = .028$, $f^2 = .03$) were significant, their effect sizes were smaller. This does not imply a fixed hierarchy but rather a context-specific pattern within this instructional setting. Students mentioned usability frustrations, but these did not substantially affect their behavioural intention. Despite the collectivist nature of Thai students (Pibooltaew & Chantarakamol, 2025), participants described LMS interaction as self-directed rather than socially driven. As Elyakim (2025) found with Price Value, Social Influence may function differently in mandated versus voluntary instructional settings.

4. From Intention to Use: Role of Facilitating Conditions (H5, H6)

Behavioural Intention showed the strongest direct association with Use Behaviour ($\beta = .45$, $p < .001$, $f^2 = .24$), reinforcing its role as the primary predictor. Facilitating Conditions also showed a direct influence ($\beta = .31$, $p < .001$, $f^2 = .11$). Qualitative insights uncovered technical limitations (e.g., internet reliability) that affected students' ability to practise, demonstrating the distinction between constructs that influence intention formation (e.g., Performance Expectancy) and those that facilitate intention enactment (Facilitating Conditions).

5. Theoretical Implications

The findings suggest that in an instructor-led, pedagogy-first LMS environment, Performance Expectancy and Hedonic Motivation may be stronger predictors than Effort Expectancy and Social Influence. This pattern indicates that alignment between learning objectives, activities, and assessment, together with the affective experience of learning, may shape technology acceptance in instructional contexts. In learning environments where LMS platforms have reached a level of stability, widespread adoption, and technical reliability, traditional technology-centred predictors focused primarily on system usability may exert relatively diminished influence. The LMS platform functioned as an integrated part of the instructional design rather than merely a repository for materials.

These findings suggest a context-specific extension of UTAUT2's application, where acceptance may be shaped not only by system-related perceptions but also by the alignment between instructional design and learning objectives. In this setting, learners' intentions were associated primarily with perceived instructional value and affective experience.

Conclusion

What distinguishes this study from generic technology acceptance research is its focus on prosody: a feature of English that Thai EFL curricula routinely neglect despite its proven role in intelligibility. Unlike most UTAUT2 applications that examine institution-mandated platforms for general content delivery, this study investigated an instructor-designed LMS purpose-built to address this specific phonological gap. The findings reveal that when a learning system is tightly aligned with a challenging, under-taught skill, students' acceptance of LMS based tuition is driven less by generic usability or social pressure and more by perceived instructional value and the affective safety of private practice, a pattern that may be particularly relevant in collectivist, face-sensitive classrooms like those in Thailand.

The study examined determinants of student acceptance of an instructor-designed LMS course for learning English prosody in a Thai EFL context. Using UTAUT2 with a blended learning course structured around explicit prosodic learning objectives, scaffolded practice, and performance-based activities, the findings from this Thai EFL course indicate that behavioural intention appeared to be primarily shaped by how students' perceived the usefulness of the LMS content (Performance Expectancy) and their enjoyment of practice activities (Hedonic Motivation). Performance Expectancy and Hedonic Motivation emerged as the apparent principal predictors of Behavioural Intention, which in turn strongly predicted actual Use Behaviour.

In this skill-based oral context, where sustained practice and performance confidence were central, learners' perceptions of instructional value were more influential than purely technical considerations. The LMS platform did not inherently generate acceptance; rather, acceptance was associated with learners' perceptions of instructional purpose, clear relevance to improving speaking intelligibility, and an environment that reduced performance anxiety and allowed repeated low-stakes practice. These findings indicate that acceptance was more closely associated with pedagogical design variables than with technical system attributes. As blended learning continues to shape higher education, understanding how students accept teacher-designed digital environments remains essential to effective pedagogy.

Recommendations

1. Pedagogical Implications

Performance Expectancy results suggest that students are more likely to accept LMS-based instruction if they perceive a learning benefit; in this case, design that directly supports prosodic features. The role of Hedonic Motivation indicates that access to multimedia and private practice opportunities may reduce anxiety and support acceptance, particularly for speaking-based tasks. In this Thai EFL context, the availability of a private "safe space" for practice may have reduced social pressure associated with oral performance. The limited influence of Social Influence suggests that voluntary, learner-centred LMS integration may be more effective than compliance-driven approaches.

2. Limitations and Future Research

Although the LMS was not institutionally mandated, completion of formative assessments contributed to course grading, placing the study in a conditionally required context. This may have influenced certain UTAUT2 constructs. The sample was predominantly female from a single Thai university, limiting generalisability. Future research should include more diverse samples and cross-cultural comparisons. Replication across other language skill domains (e.g., grammar, writing) and in contexts with different levels of design integration or voluntariness would help determine whether similar patterns emerge.

An additional limitation exists where qualitative findings relied solely on semi-structured interviews. Future studies could incorporate classroom observations, stimulated recall, or analysis of student-produced artefacts to achieve fuller methodological triangulation.

Following from this, future studies could examine relationships between LMS acceptance and objective measures of learning outcomes (e.g., acoustic analyses of prosodic features). Longitudinal studies could investigate whether habitual usage develops over time. Further research exploring how specific instructional design features (e.g., feedback structures, task sequencing) interact with UTAUT2 constructs in skill-focused classes would provide a more comprehensive model of learner acceptance in EFL blended learning contexts. Additionally, future studies could employ multi-item measures for all constructs to enhance reliability and construct validity.

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