Application of Microlearning to Develop University Students' Speaking Skills: A Case Study of Udon Thani Rajabhat University

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Abstract

This paper discusses how microlearning can serve as an innovative pedagogical intervention to enhance the speaking proficiency of university students in the Thai EFL context, with specific reference to Udon Thani Rajabhat University. Despite years of English learning, most students in Thailand have not yet achieved speaking proficiency due to insufficient authentic communication practice and a lack of confidence. Microlearning provides a practical and effective solution by offering frequent speaking practice in low-stress environments and promoting learner autonomy through short, focused, and flexible learning segments. It enhances students' speaking ability by reducing speaking anxiety and increasing motivation through flexible, learner-centered activities. Drawing on a literature review and contextual analysis, the study describes how microlearning supports the development of key speaking skills—fluency, pronunciation, and communicative competence—through repeated, meaningful, and self-regulated tasks. Although reducing speaking anxiety is a secondary benefit, the primary focus lies in how learners are enabled to become more proficient speakers through cognitively manageable and affectively supportive experiences. The discussion encompasses theoretical underpinnings, pedagogical features, and classroom applications, including emerging teacher and learner roles and implications for curriculum design. The paper concludes that microlearning holds strong potential as a sustainable and learner-centered approach to improving students' speaking proficiency, motivation, and communicative confidence in higher education.

Keywords: English speaking ability, microlearning, university students

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Introduction

English plays an essential role in Thailand as a means of international communication, academic advancement, and professional success. In universities, English proficiency has become indispensable, particularly under ASEAN integration, where graduates are expected to communicate effectively in multicultural contexts. However, despite many years of formal instruction, students' language competence remains inadequate. The persistence of grammar-translation methods, examination-driven learning, and large class sizes continues to limit opportunities for authentic interaction and suppress learners' confidence (Khamprated, 2012; Noom-Ura, 2013). Furthermore, low motivation, fear of making mistakes, and lack of exposure to real-world English use aggravate the difficulty of developing communicative fluency (Khamkhien, 2010). Although communicative and learner-centered approaches have long been encouraged (Darasawang, 2007), their implementation remains inconsistent across Thai higher education. These conditions highlight the need for innovative pedagogies that promote active, confident, and realistic use of English—particularly in speaking.

Speaking, as the core component of communicative competence, is a crucial skill for academic and professional success. It enables students to exchange ideas, participate in group discussions, and deliver presentations effectively (Richards, 2008). According to Nunan (2003), oral communication is a key factor in employability, especially in fields such as tourism, business, health care, and education. Trilling and Fadel (2009) likewise identified communication as one of the most essential twenty-first-century skills valued by employers. In the ASEAN context, English serves as a lingua franca for regional collaboration and mobility (Kirkpatrick, 2010). Thus, developing speaking proficiency is no longer optional but a vital requirement for students' academic achievement and career progression.

At Udon Thani Rajabhat University (UDRU), recent studies by Thomol, Tutwisoot, and Klanrit (2024) found that students generally possess moderate motivation and experience moderate levels of speaking anxiety, including communication apprehension and fear of negative evaluation. Despite years of study, many still lack fluency and confidence due to limited authentic practice. Moreover, the inverse relationship between motivation and anxiety suggests that enhancing motivation alone may not sufficiently reduce anxiety or improve performance. Compounding factors such as limited feedback, large class sizes, and minimal real-life communication further restrict speaking development. These persistent challenges underline the need for new teaching strategies that provide flexibility, frequent feedback, and low-stress practice environments.

Microlearning offers a potential solution to these challenges. It delivers content in short, focused, and flexible learning segments, enabling students to practice speaking autonomously in manageable, low-anxiety contexts. Through digital platforms, microlearning supports repetition, immediate feedback, and learner-centered engagement (Giurgiu, 2017; Hug, 2022). Research has demonstrated its effectiveness in enhancing skill acquisition, learner satisfaction, and performance

(Cheng, Liu & Wang, 2017; Sichani, Mobarakeh & Omid, 2018). In the Thai context, Songkram (2021) found that mobile microlearning promoted confidence and fluency among university students. For institutions such as UDRU—where many learners face both limited opportunities and high anxiety—microlearning offers a promising means to foster regular, self-directed speaking practice that supports both cognitive and affective aspects of language learning.

While speaking proficiency and speaking anxiety are interrelated, they represent distinct yet complementary constructs. Speaking proficiency reflects learners' linguistic and communicative competence, whereas speaking anxiety is an affective factor that influences performance. This study approaches microlearning as a pedagogical means to enhance speaking proficiency by reducing anxiety and increasing opportunities for authentic, low-stress practice.

The objective of this study is to explore how microlearning can be applied to improve university students' English-speaking proficiency and to address affective barriers to communication in the Thai EFL context. The study seeks to answer the following research question: How can microlearning enhance the speaking proficiency of EFL university students in a way that promotes confidence, motivation, and communicative competence?

Theoretical Framework

This study is based on two major theoretical perspectives that together explain speaking development from both the cognitive and affective dimensions. The integration of these frameworks provides a strong conceptual basis for considering how microlearning can enhance English-speaking proficiency while simultaneously lowering the affective barriers among university students.

First, SDT by Deci and Ryan (2000) focuses on intrinsic motivation, which heightens when the learners' psychological needs for autonomy, competence, and relatedness are met. In a language classroom, SDT has been widely applied to explain how learners' motivation and engagement blossom in environments that foster independence and meaningful feedback. By design, microlearning supports such needs through short, self-paced, and autonomous speaking practices that let learners take responsibility for their learning. It helps promote competence with immediate, specific feedback after each micro-task, thereby building learners' confidence through the small steps of progress. Further, when learners engage in peer-sharing and interactive mobile activities, the sense of relatedness and community further reinforces their motivational disposition to communicate in English. Microlearning thus cultivates not only autonomy and self-regulation but also a positive motivational climate necessary for sustained speaking improvement.

Second, according to Krashen's Affective Filter Hypothesis (1982), emotional factors such as anxiety, self-confidence, and motivation affect the amount of language input that is processed and internalized. A high affective filter, due to fear of making mistakes, negative evaluation, or

pressure associated with classrooms, may block comprehension and decrease output, while a low affective filter allows the learner greater linguistic intake and fluency. Microlearning allows effective lowering of the affective filter because it offers opportunities in short, low-stakes, and repeatable activities for speaking that allow learners to become less apprehensive about the speaking act. The informal, digital-based environment of microlearning allows students to practice without fear of judgment, thereby offering them more willingness to communicate. Repeated exposure in relaxed settings over time leads to increased confidence and automaticity in speech production, with the result of transforming anxiety into positive engagement.

Combined, SDT and the Affective Filter Hypothesis represent a corresponding theoretical basis through which to understand the double impact that microlearning has on learners. Cognitively, microlearning acts as a scaffold that guides learners in developing linguistic competence in pronunciation, fluency, and grammatical accuracy through structured repetition and manageable learning chunks. Affectively, it works as an emotional support system that decreases anxiety, increases intrinsic motivation, and fosters confidence. Together, these theories explain how microlearning creates an optimal learning environment where motivation and emotional readiness together facilitate improvement in communicative performance. This dual theoretical perspective emphasizes that effective language learning involves not just the mental mastering of linguistic forms but also developing an emotional readiness to use the language in valid communication. Thus, this framework sets the stage for an analysis and discussion of how microlearning might strengthen university students' speaking proficiency via an integrated approach that addresses their minds and emotions.

Literature Review

1. EFL Speaking Skill at Higher Level of Education

Speaking is important in tertiary education as it allows students to be fluent in academic and professional environments. As English is being more widely used as a medium of instruction, students are required to communicate thoughts, ideas and opinions by means of discussions or presentations in class (Richards, 2008). However, many nonnative English learners, particularly in Thai context, find it difficult to read and comprehend due to the limited time available for English course section in their study programs, teacher-centered approach of teaching, and fear of making mistakes (Noom-Ura 2013; Khamkhien 2010). Consequently, much of the speaking is underperformed and it is often rated as the most neglected skill (Goh & Burns, 2012). Effective teaching must go beyond rote memorization to interactive, learner-centered practices and be facilitated by the use of digitalized tools including mobile learning, task-based exercises, and microlearning.

1.1 Characteristics of Speaking Skill

Speaking is one of the most complex language skills in second or foreign language learning. It involves the learner in real-time production of language under social and cognitive constraints. It plays transactional (information conveying) and interactional (relationship building) roles (Brown & Yule, 1983), and relies upon fluency, accuracy, pronunciation, comprehension and discourse management (Bygate 1987; Richard, 2008). Speaking is usually fragmented, context-dependent and requiring rapid retrieval, monitoring and adjustment (Goh & Burns, 2012). Teaching ought to go far beyond drilling, affording opportunities for meaningful interaction crops up and scaffolding, feedback, reflection emerge to develop linguistic competence as well as strategic competence.

1.2 Challenges Instructors Face as they Teach Speaking Competence in a Second or Foreign Language

According to Horwitz et al. (1986), and Liu and Jackson (2008), speaking is normally regarded as the most agonizing skill in second or foreign language acquisition because of low confidence, fear of making errors or be judged negatively. In the Thai EFL setting that is exacerbated by low exposure to natural expression, attention to accuracy, confined set of words, and difficulties in pronunciation (Khamkhien, 2010; Noom-Ura, 2013; Gilakjani, 2012). Otherwise, the absence of authentic conversation opportunities, large class sizes and limited feedback impede fluency development (Tuan & Mai 2015). Communicative, learner-centered approaches that minimize anxiety and facilitate regular, meaningful practice are necessary to address these dilemmas.

1.3 Factors Affecting Speaking Performance of the Learners (Motivation, Anxiety, Less Exposure)

Speaking is one of the important dimensions of language ability; however, it is a problematic area for many EFL learners as a result of low motivation, anxiety and little access to meaningful input. Motivation enhances willingness to communicate and persistence (Dörnyei, 2001; Deci & Ryan, 2000) but anxiety most frequently ploughs fluency as a result of fear of errors and negative evaluation (Horwitz et al., 1986; Thomol et al., 2024). Limited exposure to English and grammar-based instruction may also inhibit growth (Nunan, 2003; Khamkhien, 2010). These factors complement each other thus creating a vicious cycle of under-performance.For this reason, pedagogies capable of delivering lower levels of anxiety, higher levels of confidence and proper communicative opportunities are called for.

2. Microlearning in Language Education
2.1 Definition and Principles of Microlearning

Microlearning is an instructional approach that delivers content in short, focused segments to improve retention, motivation, and provide just-in-time learning (Díaz Redondo et al., 2021; Lee, 2023). It is more than shortened lessons, but a research-based strategy rooted in cognitive science, designed to engage learners through autonomy, reflection, and repetition (Dolasinski & Reynolds, 2020; Leong, 2021). Its key features include brevity, mobile compatibility, and clearly

defined learning goals, allowing for flexible, learner-centered practice supported by digital media (Sözmen et al., 2023).

2.2 Previous Work on Microlearning in Language Learning

In the past decade, microlearning has been widely studied for its potential in language education, particularly in vocabulary, listening, pronunciation, and speaking. Research highlights increased retention, motivation, and speaking fluency through mobile apps, bite-sized videos, and dialogue tasks (Leong, 2021; Burston, 2015; Plummer, 2020). In Thailand, Songkram (2021) found that microlearning with self-regulated strategies enhanced confidence, autonomy, and oral performance. Studies also show that repetition, immediate feedback, and mobile access reduce anxiety and cognitive load, making microlearning especially effective for learners with limited time, high speaking anxiety, or restricted access to native input (Ibrahim & Callaway, 2014). However, further longitudinal research is needed in underexplored EFL contexts, particularly rural universities.

2.3 Advantages over Traditional Methods

Traditional methods often rely on long sessions, grammar-heavy instruction, and delayed feedback, which can cause overload and low motivation (Richards & Rodgers, 2014). By contrast, microlearning provides short, digestible tasks, immediate feedback, and anytime-anywhere access (Buchem & Hamelmann, 2010; Thalheimer, 2017). Its flexibility supports learner autonomy and repeated practice (Giurgiu, 2017), while low-stakes environments reduce speaking anxiety and foster confidence (Horwitz et al., 1986; Songkram, 2021). Incorporating multimedia and interactive features, microlearning offers a more engaging, learner-centered alternative to traditional pedagogy, particularly for improving speaking ability.

3. Contextual Background: Udon Thani Rajabhat University

Udon Thani Rajabhat University (UDRU), a public institution in northeastern Thailand, primarily serves students from rural Isan. Established as a teacher-training college in 1923 and incorporated into the Rajabhat University system in 2004, it now enrolls over 20,000 students (Udon Thani Rajabhat University, 2023). Many learners enter with limited English proficiency, leading to low confidence, speaking anxiety, and little exposure to authentic use. English courses are often taught in large lecture-style classes, limiting individual practice (Office of Academic Affairs, School of General Education, Udon Thani Rajabhat University, 2024). While UDRU has introduced English-major programs, communicative teaching, and facilities such as language labs and a self-access center (Udon Thani Rajabhat University Language Center, 2024), challenges persist due to class size, time constraints, and few native instructors. These conditions highlight the need for innovative solutions like microlearning to support flexible, learner-centered speaking practice.

4. Microlearning as a Tool to Enhance Speaking Ability
4.1 Pedagogical Design of Microlearning for Speaking

Microlearning is recognized as an effective approach for developing speaking skills in EFL contexts, as it delivers short, focused, and interactive lessons that address learners' limited exposure, high anxiety, and restricted class time. By concentrating on one communicative function—such as self-introduction, daily routines, or expressing opinions—microlearning uses short videos, audio clips, or mini-dialogues to promote immediate engagement and fluency (Thalheimer, 2017; Leong, 2021). The principle of "chunking" breaks complex processes into manageable segments, reducing cognitive load and facilitating incremental skill acquisition (Hug, 2005). Technology integration further enables independent practice with instant feedback (Giurgiu, 2017), while scaffolding strategies like vocabulary lists and sentence starters lower anxiety for low-proficiency learners (Songkram, 2021). Scholars agree that effective microlearning for speaking should be brief, interactive, meaningful, and learner-directed, extending practice beyond the classroom and offering a versatile solution for resource-limited settings such as Thai universities.

4.2 Practical Examples and Activities

To apply microlearning in English speaking instruction, teachers can design short, skill-focused tasks on real-life communication via digital platforms. Video prompts, micro-dialogues, and low-stakes practice on apps like Flip or Padlet engage learners in authentic speaking with feedback (Giurgiu, 2017; Leong, 2021). Pronunciation drills supported by speech recognition tools such as ELSA Speak or Duolingo provide immediate correction (Burston, 2015), while 30-second vocabulary speeches enhance fluency and retrieval (Plummer, 2020). Interactive micro-role-plays on platforms like Google Classroom or LINE further promote repeated practice and reduce anxiety (Songkram, 2021). Together, these micro-tasks create engaging, student-centered opportunities that extend speaking practice beyond the classroom and address common EFL challenges.

4.3 The Roles of Teachers and Learners

In microlearning-based speaking instruction, classroom dynamics change. Learners take center stage, while teachers serve as facilitators, designers, and feedback providers (Buchem & Hamelmann, 2010; Leong, 2021). Teachers prepare short, authentic speaking tasks. They support learners' progress and use technology to give timely feedback, which needs digital skills (Songkram, 2021). Learners gain independence by choosing content, practicing at their own pace, and reflecting through self-recordings and peer collaboration. These processes boost confidence and lower anxiety (Giurgiu, 2017; Díaz & Troyano, 2022). The shifts in classroom roles align with Self-Determination Theory. This theory highlights autonomy and competence as key motivators. They also connect to Krashen's Affective Filter Hypothesis, which says that low-anxiety settings help with language learning. Together, these ideas build more flexible, engaging, and empowering

speaking classrooms. This is especially important in Thai universities, where students often feel unsure and lack skills.

In the self-introduction microlearning module, for example, the instructor shares a short model video and a feedback rubric. Learners then record and share one-minute clips for peer review. The teacher encourages reflection and gives formative feedback using Google Classroom or another digital platform like Flip. This approach helps improve confidence and communication skills continuously.

5. Benefits and Considerations

Microlearning supports English-speaking skills by offering flexible, short, and focused tasks accessible anytime and anywhere, which is especially beneficial for students in rural universities like Udon Thani Rajabhat (Giurgiu, 2017; Leong, 2021). It promotes learner autonomy, reduces anxiety, and enables practice in sub-skills such as pronunciation, fluency, and vocabulary (Songkram, 2021; Díaz & Troyano, 2022). However, challenges remain: fragmented micro-units may limit cumulative proficiency if not well-sequenced (Hug, 2005), digital access and literacy can be barriers (Buchem & Hamelmann, 2010), and teachers need training in design and feedback. Long-term communicative competence requires integration of microlearning with extended interactive tasks. Thus, while microlearning has strong potential, careful design and implementation are crucial for effectiveness.

6. Challenges and Limitations

Microlearning is a potential way to support the improvement of speaking English among university students with time constraints, lack of confident and motivation. Its brief, flexible, and accessible practice sessions permits learners — particularly in non-Central areas such as Udon Thani Rajabhat University — to study anytime with autonomy and less anxiety (Asaoka, 2017; Leong 2021; Songkram 2021; Díaz & Troyano, 2022). Challenges, though, are coherent sequencing to not scatter learning (Hug, 2005), barriers to access and digital literacy skills (Buchem & Hamelmann, 2010) as well as the need for teacher training. While repetition is necessary for short-term retention, longer-term communicative competence comes from linking microlearning with extended speaking work. In other words, when properly designed and situated content can potentially facilitate speaking and help to meet the needs of a diverse population.

7. Recommendations and Implications

In order to get the most out of microlearning in developing speaking skill in English at university, a number of recommendations can be made. First, educators should incorporate microlearning meaningfully into language courses by linking brief, purposeful speaking activities to overall course learning outcomes. That could be exercising once-a-week speaking micro-tasks (e.g., 1-minute voice recordings, role-play dialogues or pronunciation drills) on mobile apps or LMSs;

insuring coherence and a crescendo in the exercise difficulty> reaction required to accomplish the task (Giurgiu, 2017; Leong, 2021). Secondly, training teachers is crucial. Digital literacy and pedagogical skills necessary to create effective microlearning resources may be missing among many educators. Focused workshops and peer learning may help lecturers to design and deliver well-structured, learner-centred micro-content that optimises fluency, accuracy and interaction (Buchem & Hamelmann, 2010; Songkram, 2021).

Third, microlearning should not be applied as a stand-alone instructional model but combined with communicative pedagogies, such as task-based language teaching (TBLT), PBL and core tasks-projects based learning, to help learners transfer or use micro-skills in extended real-world contexts (Richards & Rodgers, 2014). For instance, units on functional language (agreeing, clarifying, requesting) can be used to prompt full-class discussion or collaborative group presentation after independently studying in order to connect practicing individualized items with interacting authentically. And at a curriculum level, there are some natural extensions here as well such as incorporating microlearning principles into syllabus design (eg, modular content components; automatic mobile assessments; personalized learning pathways). This integration enhances student self-reliance, accommodates variety of learner 'needs' and contributes to continued learning beyond class hours (Díaz & Troyano, 2022). Now, these pedagogical consequences are of paramount significance in places like Udon Thani Rajabhat University where microlearning can supplement traditional instruction and make language learning opportunities more accessible, especially in rural or limited environments.

Methodology

This study adopts a literature review and contextual analysis design to explore how microlearning can be applied as an innovative pedagogical approach to enhance the English-speaking proficiency of university students in the Thai EFL context. The approach integrates theoretical, empirical, and contextual perspectives to provide a comprehensive understanding of how microlearning can foster both cognitive and affective development in speaking. Such an approach is suitable for conceptual and educational research aiming to synthesize knowledge rather than test specific hypotheses (Torraco, 2016; Snyder, 2019).

1. Literature Review Procedure

The literature review followed a structured process inspired by systematic review principles (Petticrew & Roberts, 2006; Kitchenham & Charters, 2007). Studies published between 2010 and 2024 were retrieved from databases including Scopus, ERIC, Google Scholar, and ThaiJO using combinations of keywords such as "microlearning," "speaking," "EFL," "motivation," and "university students." The inclusion criteria focused on studies that (1) examined microlearning or related modular approaches in EFL or ESL contexts, (2) targeted speaking or communicative

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skills, and (3) provided empirical or theoretical insights into learner motivation, anxiety reduction, or autonomy.

Each study was screened for relevance and quality, and thematic analysis was conducted to identify recurring ideas, benefits, and challenges associated with microlearning in language education. This interpretive process aligns with the integrative review methodology, which allows for the combination of diverse sources to build conceptual understanding (Torraco, 2016; Snyder, 2019).

2. Contextual Analysis

The contextual analysis complements the literature review by focusing on the specific case of Udon Thani Rajabhat University (UDRU). Contextual analysis involves systematic examination of documents, institutional reports, and qualitative descriptions to interpret the educational setting and learner needs (Bowen, 2009; Onwuegbuzie & Frels, 2016). Data sources included institutional policy documents, English course syllabi, and prior studies of UDRU students' English-speaking challenges (e.g., Thomol, Tutwisoot, & Klanrit, 2024).

This process allowed for the triangulation of contextual insights with theoretical perspectives from Self-Determination Theory (Deci & Ryan, 2000) and the Affective Filter Hypothesis (Krashen, 1982), ensuring that the analysis accounted for both cognitive and emotional dimensions of learning.

3. Analytical Framework

The findings from both the literature and contextual analyses were organized thematically under three conceptual dimensions—cognitive development, affective engagement, and pedagogical transformation—consistent with the guiding theoretical framework. This interpretive synthesis follows the principles of qualitative content analysis, focusing on meaning patterns and theoretical saturation (Elo & Kyngäs, 2008; Bowen, 2009).

4. Ethical and Scholarly Considerations

As this study relies exclusively on publicly available documents, no human participants were involved. All sources were cited properly, ensuring transparency and adherence to research ethics in literature-based inquiry (Snyder, 2019).

Conclusion

Microlearning has emerged as a promising instructional approach for enhancing English-speaking skills in higher education, particularly in contexts where learners face time constraints, limited exposure to authentic language, and high levels of speaking anxiety. By delivering short, focused, and accessible learning tasks, microlearning allows students to engage in regular oral practice, build confidence, and develop key communicative sub-skills such as fluency, pronunciation, and

vocabulary use. For students at Udon Thani Rajabhat University—many of whom come from rural or under-resourced backgrounds—microlearning offers a flexible and learner-centered solution to traditional challenges in language instruction. Its integration into the university's English curriculum can provide more equitable access to speaking opportunities and promote greater learner autonomy. However, to fully realize its potential, microlearning must be thoughtfully designed, systematically implemented, and supported by institutional policies, teacher training, and technological infrastructure. Future efforts should focus on evaluating the long-term impact of microlearning on students' communicative competence and identifying best practices for its integration with other communicative teaching approaches. As Thailand continues to prioritize English proficiency in education and professional development, microlearning stands out as a scalable and impactful tool for equipping students with the speaking skills necessary for academic and career success.

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