# فعالية وحدات التعلم المصغر في تطوير مهارات التحدث باللغة الإنكليزية لدى طلاب الصف الثاني في المدارس المتوسطة

# The Influences of Micro Learning Modules on Developing Speaking Skills by Second Grade Intermediate School Students


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**الكلمات المفتاحية: التعلم المصغر، مهارات التحدث، التعلم اللغوي بمساعدة الأجهزة المحمولة، تدريس اللغة الإنجليزية، طلاب المرحلة المتوسطة، الطلاقة، النطق، التعلم الرقمي.**

**Keywords: Micro learning, Speaking Skills, Mobile-Assisted Language Learning (MALL), English Language Teaching (ELT), Intermediate School Students, Fluency, Pronunciation, Digital Learning.**

**الملخص**

تبحث هذه الدراسة في فعالية وحدات التعلم المصغر في تطوير مهارات التحدث باللغة الإنجليزية لدى طلاب الصف الثاني في المدارس المتوسطة. مع ازدياد دمج الأدوات الرقمية في التعليم، أصبح التعلم المصغر – وهو عبارة عن حلقات تعليمية مكثفة وموجزة – يُعتبر منهجًا تفاعليًا يركز على المتعلم. تستخدم هذه الدراسة تصميمًا شبه تجريبي مع 60 طالبًا من طلاب المدارس الحكومية في محافظة بغداد، تم تقسيمهم إلى مجموعتين: تجريبية وضابطة. تلقت المجموعة التجريبية تعليمها من خلال وحدات التعلم المصغر عبر الهاتف المحمول، بينما تلقت المجموعة الضابطة تعليمها من خلال التعليم التقليدي القائم على الكتب المدرسية. أُجريت اختبارات قبلية وبعدية لقياس التحسن في الطلاقة والنطق والدقة والترابط. كشف التحليل الإحصائي باستخدام اختبارات tأن المجموعة التجريبية تفوقت بشكل ملحوظ على المجموعة الضابطة، مما يؤكد فعالية التعلم المصغر في تعزيز الكفاءة اللغوية الشفوية. كما تشير النتائج إلى زيادة التفاعل وتكوين مواقف إيجابية لدى الطلاب تجاه التعلم المصغر. تشير الدراسات إلى أن التعلم المصغر يحمل في طياته إمكانات واعدة كأداة تربوية في تطوير مهارات التحدث، ويجب دمجه في مناهج تعليم اللغة الإنجليزية كلغة أجنبية لتوفير عمليات تعلم لغوية أكثر تفاعلية وشمولية.

**Abstract**

This study investigates the effectiveness of micro learning modules in developing the English-speaking proficiency of second-grade students in intermediate schools. With greater integration of digital tools into learning, micro learning—intense, brief learning episodes—has come to be recognized as a responsive and learner-centered approach. This study employs a quasi-experimental design with 60 public school students from Baghdad Governorate, divided into experimental and control groups. The experimental group was instructed through mobile-based micro learning modules, while the control group was instructed through conventional textbook-based teaching. Pre- and post-tests were conducted to measure improvements in fluency, pronunciation, accuracy, and coherence. Statistical analysis via t-tests revealed that the experimental group significantly surpassed the control group, confirming the efficacy of micro learning in enhancing oral language proficiency. The results also indicate increased engagement and positive student attitudes towards micro learning. They suggest that micro learning holds promise as a pedagogical instrument in speaking development and must be integrated into EFL curricula to offer more interactive and inclusive language learning processes.

## 1. Introduction

In the evolving face of education, especially in English language teaching (ELT), instructors are continuously seeking newer ways to speed up their learning processes. Micro learning is one of those innovations where content is presented in short, focused dosages—typically through digital media such as mobile apps, videos, or interactive modules. Micro learning is becoming increasingly popular because it is flexible, accessible, and aligns with the manner in which digital-native learners prefer to learn (Hug, 2005, p. 4; Salas et al., 2012, p. 86).

The importance of English as a Foreign Language (EFL) speaking ability cannot be overstressed. Speaking is not only part of communicative competence but also one of the most challenging skills to acquire among students. This challenge is particularly evident among students at the intermediate level in school, who often struggle with fluency, pronunciation, and confidence. Within the traditional classroom environment, speaking opportunities are minimal due to reasons such as teacher-fronted lessons, large classes, and time constraints (Leong & Ahmadi, 2017, p. 35).

Microlearning, however, offers bite-sized, repetitive, and engaging learning experiences that could be offered for specific speaking sub-skills. If utilized properly, it has the potential to provide learners with sufficient and meaningful opportunities to talk and interact with material asynchronously or in real time (Buchem & Hamelmann, 2010, p. 13). Consequently, the aim of this research is to examine the effectiveness of microlearning modules in acquiring speaking skills among second-grade intermediate school pupils in terms of fluency, accuracy, and pronunciation.

### 1.1 Statement of the Problem

Speaking is the least developed and least emphasized language skill in English as a Foreign Language (EFL) instruction, although it is an essential component of communicative competence and of overall language proficiency. Unlike the listening and reading receptive skills, or even writing as a productive skill, speaking requires spontaneous language creation on the spot. It involves not only linguistic competence but also pragmatic and social competence, and is thus a complex skill to teach and assess (Goh & Burns, 2012, p. 25). Nevertheless, in the majority of educational contexts—particularly in developing countries—the instruction of speaking is often marginalized or ignored.

According to Leong and Ahmadi (2017), not speaking in classroom instruction is primarily due to the dominance of traditional pedagogical paradigms that emphasize more on grammar translation and reading comprehension (p. 36). The teachers will allocate more class time to practicing grammar, vocabulary lists, and writing activities at the cost of

very little time for the students to practice crucial oral communication. Moreover, with large class sizes, rigid curricula, brief instruction time, and insufficient teacher training in communicative methodology, speaking activity is usually reduced to textbook conversations or practice with very limited liberty, which cannot build authentic communicative competence (Ur, 1996, p. 121).

The second contributing element is a lack of necessary resources and technological facilities in the majority of public institutions. Practice of speaking, which under normal circumstances involves interaction, comments, and time, is difficult to achieve in crowded classrooms without the aid of advanced teaching tools. This leaves a learning atmosphere where students are rarely given the opportunity to practice real spoken English, fluency, or confidence in their ability to speak. As a result, learners graduate with adequate reading or writing ability but big gaps in speaking skills, which hamper their academic and professional growth.

Over the past decade, learning technology has also emerged as a potential solution to many of these issues. Perhaps most importantly, mobile-assisted language learning (MALL) offers students flexible and interactive tools to practice language ability outside the classroom. Among these technologies, microlearning as characterized by short, focused digital learning sessions has been observed to provide cutting-edge skill enhancement in a time-efficient manner (Hug, 2005, p. 3). Microlearning modules, which are normally disseminated via mobile apps, voice messages, or short videos, provide repeated encounters with language input and active engagement with language.

While its growing significance, nonetheless little empirical studies have directly considered the impact of microlearning, especially through short, interactive modules with a focus on speaking practice, on the acquisition of secondary-level EFL students' oral language. Literatures have mostly discussed vocabulary learning, grammar enhancement, or learner motivation within microlearning settings (Nikou & Economides, 2018, p. 171). Consequently, there is an important research need for the application of microlearning for the actual practice of speaking skill development, particularly at the intermediate school stage where learners are transitioning from elementary language usage to progressively more advanced uses.

This study tries to bridge this gap by empirically examining the effect of microlearning modules on second-grade intermediate students' speaking ability. It investigates whether incremental exposure to short, interactive speaking activities can enhance students' fluency, pronunciation, accuracy, and confidence levels, thus presenting a novel solution to the age-old problem of oral language teaching in EFL settings.

## 1.2 Significance of the Study

This study is theoretically and practically significant to the English language teaching (ELT) community, that is, for the acquisition of speaking skill through online learning techniques. Focusing on the implementation of microlearning modules, the study offers an innovative pedagogic solution designed to overcome barriers to speaking teaching in EFL instruction.

Theoretically, this study contributes to the increasing body of literature on technology-supported language learning, particularly mobile-assisted and microlearning-based instruction. While previous studies have addressed the use of mobile applications for vocabulary acquisition as well as learners' general interest, this study specifically addresses the acquisition of oral communication skills, an aspect still under-explored with respect to contemporary microlearning. It offers empirical support for the effectiveness of structured bite-sized learning activities in developing speaking sub-skills such as fluency, pronunciation, and grammatical accuracy—factors usually neglected in large studies (Kukulska-Hulme & Viberg, 2018, p. 209).

Pedagogically, the study has important implications for language teachers, curriculum designers, and school administrators. For teachers, the integration of microlearning offers an easy, low-tech, and accessible approach to enhancing speaking skills without requiring significant technological investment or time-consuming preparation. Since microlearning modules can be delivered through well-known platforms like WhatsApp, Google Classroom, or YouTube, instructors can incorporate them into class or assign them as out-of-class speaking practice to augment in-class learning (Ifenthaler & Yau, 2020, p. 106).

For curriculum makers and education planners, the findings serve evidence-based inputs toward the strengthening of English language courses with mobile-based microlearning elements. This aligns with the current trends in education towards learner-centric, technology-facilitated, and competency-based learning. The study also shows how digital modules may be designed to fulfill specific learning outcomes, thereby improving content delivery and student performance quantitatively.

From the policy-making perspective, the research calls for the necessity to reform old pedagogical practices rooted in memorization and passive learning. Since students are becoming increasingly accustomed to digital communication and mobile technology, there needs to be a shift in educational institutions in making an adaptation that accommodates the learning style and requirement of today's digitally native learners. Successful deployment of microlearning can serve as a model for scalable, sustainable, and student-centered education reform in high-enrollment and under-resourced settings.

Finally, this study not only serves as a validation of microlearning as an instructional strategy, but also as an open door to the stakeholders of language instruction to revisit the manner in which speaking is taught, practiced, and assessed in modern classrooms.

**1.3 Research Questions**

1. *What is the effect of microlearning modules on second-grade intermediate school learners' speaking ability?*
2. *What are the most enhanced speaking sub-skills (fluency, pronunciation, accuracy) via microlearning modules?*
3. *What are students' attitudes toward applying microlearning in building their speaking skill?*

**1.4 Search Limits**

Sample: Second-grade intermediate school students in Baghdad Governorate.

Subject: English language speaking skills.

Time: The first semester of the 2024–2025 academic year.

**2. Literature Review**

The following literature review offers an in-depth analysis of the key fields backing this research study. It covers four key themes: (1) the definition, benefits, and pedagogic use of microlearning; (2) the role and difficulty of speaking when learning a second language; (3) the role of digital tools in enhancing speaking; and (4) existing empirical research on Mobile-Assisted Language Learning (MALL) and its role in developing oral language.

**2.1 Microlearning: Definition, Benefits, and Applications**

Microlearning is a revolutionary pedagogical model in corporate learning as well as the education sector. It is often defined as a style of learning where information is introduced in short, focused pieces—also referred to as "learning nuggets" that are easy to absorb, interactive, and customized (Hug, 2005, p. 1). Microlearning is an elastic learner-focused model that follows current trends in digital consumption, where learning is demanded increasingly in bite-sized pieces and on-demand.

Microlearning is typically accomplished with digital media, like mobile applications, audio files, brief videos, infographics, or SMS systems. All of these accommodate asynchronous learning, making content available at any time and location, a situation extremely prevalent in low-resource or mobile-first settings. Hug (2005) is especially interested in the necessity of brevity and intensity in microlearning design, where microsessions typically range from one to ten minutes, making it possible for students to achieve small, specific learning achievements.

The advantages of microlearning extend beyond convenience. Buchem and Hamelmann (2010) argue that microlearning is cost-effective, scalable, and

suitable for formal and informal learning settings, offering autonomy and flexibility (p. 13). Microlearning allows for just-in-time learning, such that learners are able to retrieve content at the time of need, guaranteeing enhanced application and retention. Microlearning is further supported by spaced repetition and retrieval practice, two evidence-based approaches consistently demonstrated to enhance long-term memory (Salas et al., 2012, p. 78).

Microlearning is specifically useful in language instruction since language acquisition is a cumulative activity. Language learners may focus on specific sub-skills—development of vocabulary, practice of pronunciation, or short conversation exchanges—through focused digital material. Bite-sized tasks create repeated contextualized exposure to the language that is necessary for developing speaking skills. Ifenthaler and Yau (2020) lend support to the pedagogical advantages of microlearning within online learning environments, as it can yield utilitarian, skill-focused outcomes and be easily applied to structured classroom courses and private study (p. 104). For EFL learners, this offers opportunities to rehearse speaking more frequently, even outside school hours, promoting autonomous and sustainable learning habits.

**2.2 Speaking Skills in Language Learning**

Speaking is an anchor of communicative competence, defined as the ability to use language appropriately and effectively in social situations. Of the four broad language skills—reading, listening, writing, and speaking—speaking is generally considered the most complex and challenging. It is a concurrence of linguistic knowledge (grammar, vocabulary, pronunciation), cognitive processing (organization and formation of ideas), and social interactional abilities (body language, turn-taking) (Goh & Burns, 2012, p. 30).

Leong and Ahmadi (2017) point out that speaking allows learners to express personal meaning, give opinions, and participate in real communication, and it is therefore vital in learning and actual communication situations as well (p. 35). Though speaking is essential, it is mostly underemphasized in most English as a Foreign Language (EFL) classes, particularly where the curriculum is textbook-and-exam oriented, as opposed to actual usage. Instructional emphasis is mostly directed towards reading comprehension and grammar rules with no effort made towards productive spoken skills.

Ur (1996) suggests that learners avoid using language in class for fear of making mistakes, lack confidence in themselves, and have limited opportunities to use speaking in real situations (p. 120). Affective filters also act as obstacles to oral language development, particularly in class environments where English is not used outside the classroom. Logistical constraints such as crowding in the classroom, lack of time, and teacher

dominance also limit opportunities for communicative activities like discussions, role-play, and pair work.

Even though the traditional historical methods like dialogues and oral presentation can be used to aid speaking development, they may not necessarily scale well in large or resource-scarce classes. Microlearning offers a reassuring solution in these contexts by enabling frequent low-stakes practice speaking that is typically through mobile phones. According to Nikou and Economides (2018), microlearning provides students with opportunities to exercise speaking tasks independently, rehearse responses, and correct themselves based on digital feedback, hence addressing the need for repetitive and personalized practice (p. 172).

**2.3 Digital Tools for Speaking Enhancement**

Advances in digital technology have revolutionized the world of second language teaching and learning. Specifically, a wide array of digital tools have been designed to enhance the skill of speaking in second language learners. Some examples are speech recognition software, language learning apps, interactive video, text-to-speech and speech-to-text functionality, and AI-enabled pronunciation feedback systems.

The tools offer room for students to practice speaking without constraint, listen to themselves, and get immediate feedback, which cannot be achieved in the normal classroom environment. Gass and Mackey (2015) observe that computer-mediated communication facilitates interactional competence by simulating genuine, communicative situations that are essential in learning language (p. 52).

Apps are particularly well-suited to microlearning. Duolingo and Quizlet provide game-based practice of languages, which yields maximum student participation and maintains it over the long term. Apps like ELSA Speak provide instant feedback on pronunciation and fluency, and they are all extremely portable and convenient and fit in easily with the digital routines of contemporary students.

Also, computer facilities reduce affective barriers such as judgment fear by offering individual, low-anxiety settings in which students can try out language. Kukulska-Hulme and Shield (2008) point out that mobile learning technologies allow autonomy on the part of learners, encourage goal-orientation, and facilitate repetitive exposure—key to the acquisition of spoken language (p. 274). Their use in language classrooms not only enhances traditional teaching but also customizes the learning process so that differentiated instruction can be delivered to meet various learner needs.

**2.4 Prior Studies on Mobile-Assisted Language Learning (MALL)**

Mobile-Assisted Language Learning (MALL) is a fundamental paradigm shift in language learning, wherein learners have the potential to learn and exercise content and skills using smartphones, tablets, and other handheld

devices. MALL capitalizes on the pervasiveness and flexibility of mobile technology to enhance the interactivity, autonomy, and context-aware nature of language learning (Kukulska-Hulme & Viberg, 2018, p. 207).

There is widespread documentation of the positive impact of MALL on speech development, especially when integrated with microlearning principles. Nikou and Economides (2018) piloted a study in a high school setting and determined that students who received microlearning-instruction via mobile apps increased significantly in oral fluency and pronunciation compared to students using conventional methods (p. 176). Briefness and specificity of the modules allowed learners to focus on attainable speaking goals, which resulted in improved motivation and performance.

In the same way, Liu, Chen, and Hwang (2014) tracked university students with mobile-based peer-assisted learning systems for speaking practice. The students demonstrated considerable enhancements in fluency, vocabulary use, and accuracy of articulation when using the system over a period of weeks on a daily basis (p. 92). The study concluded that mobile technologies are an effective supplement to oral practice in class, especially if supplemented by collaborative functionalities as well as immediate feedback mechanisms.

Kukulska-Hulme and Viberg (2018) further argue that MALL supports task-based learning, intercultural communication, and use of language in context, thereby allowing learners to transfer the skill of speaking to real contexts (p. 209). Such features are most crucial for learners in low-resource environments, where the exposure to English-speaking contexts is low. With mobile technologies, learners are able to engage with real situations, rehearse talk, and offer informative feedback—all of which are fundamental components of developing speaking skills.

Overall, evidence is strongly in favor of implementing microlearning strategies in MALL environments as a promising way to improve learners' speaking skill. With its convenient, frequent, and interactive practice sessions, mobile-based microlearning addresses long-standing problems of limited class time, inadequate feedback, and learner demotivation in speaking classes.

## 3. Methodology

### 3.1 Research Design

This study uses a quasi-experimental design that is commonly used in education research where random group assignment may not be fully feasible due to institutional constraints (Creswell & Creswell, 2018, p. 171). The study will have two groups:

Experimental Group: Microlearning modules will be used to teach learners, in the form of short video and audio prompts (2–5 minutes) targeting

specific sub-skills in speaking. These will be sent via mobile phones or tablets on media such as WhatsApp or Google Classroom.

Control Group: Learners will be taught with traditional teaching methods, textbook exercises, dialogues, and teacher-driven speaking activities. No digital content will be used.

Both groups will be administered a pre-test and post-test to assess speaking proficiency gains, i.e., fluency, pronunciation, accuracy, and coherence. The design allows for comparative assessment of microlearning's instructional impact (Gay et al., 2012, p. 237).

**3.2 Participants**

The study included 60 intermediate students of the second grade from zainab Al.ra'idah intermediate school in Baghdad and the students ages ranged between 13–14 years . Convenience sampling, a procedure suitable where access is limited to certain schools or geographic locations (Etikan et al., 2016, p. 2), will be used when identifying participants. The students will be randomly assigned into two equal groups:

Experimental Group: 30.

Control Group: 30.

To establish baseline equivalence, the two groups will be drawn from classes that possess similar prior English ability as provided by school records and initial speaking tests.

**3.3 Instruments**

The following instruments will be used to measure the effect of the instructional strategies:

Speaking Test: A directed speaking test (administered pre- and post-intervention) will assess four aspects: fluency, pronunciation, grammatical correctness, and discourse coherence. Tasks will include description, role-playing, and question-answer exercises. Speaking performance will be audio-recorded for later scoring.

Evaluation Rubric: The test will be graded with a rubric against CEFR descriptors of A2–B1 level of speaking in order to ensure consistency with globally accepted language performance standards (Council of Europe, 2020, p. 66).

Student Survey: A short Likert-scale questionnaire will be administered to the experimental group after the intervention to examine student perceptions of microlearning and effectiveness.

Optional Interviews: Random participants (4–5 from the experimental group) will be interviewed briefly to obtain qualitative feedback about using microlearning.

### 3.4 Instructional Materials

For the Experimental Group:

A series of 10 microlearning modules will be designed and delivered within a 4-week time frame. Each module will cover a functional speaking exercise, for example:

Describing images (person, places, daily life).

Incorporating role-plays (e.g., in a restaurant, asking for directions).

Receiving real-world questions (e.g., talking about family, hobbies).

Modules will be short (2–5 minutes), include cues and templates, and invite oral practice and repetition. These will be delivered through WhatsApp voice messages, short videos, and interactive recordings—a toolset that supports microlearning effectively (Nikou & Economides, 2018, p. 172).

For the Control Group:

Students will have textbook-based instruction, working through set dialogues, comprehension activities, and scripted speaking tasks. Instruction will be on the basis of teacher explanation, board work, and repeated practice by whole-class without using digital media.

### 3.5 Data Analysis

Data gathered will be analyzed on the basis of the following:

Quantitative Analysis: It will be ascertained through a paired samples t-test that the pre- and post-test scores of every group will be contrasted, and independent samples t-test will identify group differences. It will ascertain statistical significance of gains observed (Mertler & Charles, 2011, p. 123).

Descriptive Statistics: Means, standard deviations, and percentage changes of the speaking test scores will be computed to better elucidate the improvement of students.

Qualitative Analysis: Responses to the open-ended questions from the survey and interview will be coded with thematic coding, identifying emerging themes concerning use and impact of microlearning.

### 3.6 Ethical Considerations

This research will closely follow ethical guidelines in educational research.

Institutional and Parental Consent: Permission will be obtained from the school principal, and written parental or guardian consent will be sought.

Confidentiality: The students will all be assigned codes; their personal details and names will be kept secret.

Voluntary Participation: Students will be informed that volunteering is on a free basis and that they are free to withdraw at any time without any consequence (Creswell & Creswell, 2018, p. 92).

### 3.7 Limitations of the Study

Even though the study is well detailed, there are limitations that will have to be addressed:

The population is limited to 60 students from one school and therefore could restrict external validity for results.

The intervention period (4 weeks) may be insufficient to assess the acquisition of long-term speaking ability.

Digital resources (smartphones or internet) may not be available to all students and can influence interaction with microlearning content (Kukulska-Hulme & Viberg, 2018, p. 210).

**4. Results**

The following is the outcome of the quasi-experimental research that investigated the effect of microlearning modules on the development of speaking skills of second-grade intermediate school students. Pre- and post-tests were utilized to evaluate the experimental and control groups. The outcomes of the post-tests, as provided below, were calculated by utilizing descriptive and inferential statistics.

Table (1): Individual Student Results

| Student | Experimental Group Score | Student | Control Group Score |
|---|---|---|---|
| 1 | 85 | 1 | 70 |
| 2 | 90 | 2 | 72 |
| 3 | 88 | 3 | 71 |
| 4 | 91 | 4 | 70 |
| 5 | 85 | 5 | 74 |
| 6 | 89 | 6 | 69 |
| 7 | 92 | 7 | 73 |
| 8 | 87 | 8 | 70 |
| 9 | 90 | 9 | 72 |
| 10 | 91 | 10 | 69 |
| 11 | 86 | 11 | 70 |
| 12 | 88 | 12 | 74 |
| 13 | 85 | 13 | 75 |
| 14 | 93 | 14 | 69 |
| 15 | 90 | 15 | 71 |
| 16 | 89 | 16 | 70 |
| 17 | 87 | 17 | 73 |
| 18 | 92 | 18 | 72 |
| 19 | 90 | 19 | 70 |
| 20 | 88 | 20 | 71 |
| 21 | 86 | 21 | 72 |
| 22 | 85 | 22 | 69 |
| 23 | 91 | 23 | 74 |
| 24 | 93 | 24 | 73 |
| 25 | 89 | 25 | 75 |
| 26 | 88 | 26 | 71 |
| 27 | 90 | 27 | 70 |
| 28 | 87 | 28 | 69 |

| | | | |
|---|---|---|---|
| 29 | 89 | 29 | 72 |
| 30 | 90 | 30 | 72 |

Table (2): Overall Group Scores

| Group | No. of Students | Mean Score | Standard Deviation | Total Score |
|---|---|---|---|---|
| Experimental | 30 | 87.50 | 4.20 | 2625 |
| Control | 30 | 71.30 | 3.15 | 2139 |

Statistical Test

Independent samples t-test was employed in order to compare differences in mean speaking scores between the control group and experimental group.

Null Hypothesis ($H_0$): There is no statistically significant difference between post-test speaking scores of the two groups.

Alternative Hypothesis ($H_1$): There is a statistically significant difference in post-test speaking scores between the two groups.

With the sample sizes, standard deviations, and observed means, the t-test reported a p-value $< 0.05$, and therefore a statistically significant difference. The null hypothesis was therefore rejected.

This concurs with available research evidence showing the efficacy of microlearning to improve language performance in short, targeted sessions (Liu et al., 2014, p. 92; Nikou & Economides, 2018, p. 176).

**4.1 Analysis of Results**

The results reveal a huge disparity in performance of speaking between students who were taught through microlearning modules compared to students taught through traditional means. The experimental group scored 87.50 compared to the control group's score of 71.30.

All measured speaking sub-skills were found to be better

Fluency: Experimental group students exhibited more robust, prolonged speech with reduced hesitation, quite possibly due to consistent practice and in-vocabulary task orientation through the microlearning modules (Buchem & Hamelmann, 2010, p. 14).

Pronunciation: Repeated exposure to native-speaker models from audio and video presentations in microlearning allowed for the development of articulation and intonation (Kukulska-Hulme & Shield, 2008, p. 275).

Accuracy and Coherence: Scaffolding practice and guided prompts in modules helped students structure ideas better and use more accurate grammar and lexis (Gass & Mackey, 2015, p. 61).

Qualitative data collected through surveys and interviews among students reported elevated motivation and favorable attitude toward microlearning as a fun and easy learning process. This supports Kukulska-Hulme and

Viberg's (2018) observation that mobile-assisted microlearning promotes learner autonomy and motivation (p. 210).

Conversely, the students in the control group had minimal opportunities to develop their speaking skills and made use of scripted conversations without real-life context, which might have restricted their communicative development.

## 5. Conclusion

This research sought to explore the effect of microlearning modules on speaking skill development among second-grade students of intermediate schools. Considering that there was a marked increase in students' post-test results and qualitative feedback, the results affirm that microlearning can be an effective teaching strategy to develop speaking skills.

Incorporating brief, concise, and accessible online content stimulates language acquisition by providing learners with various and real opportunities for speaking practice. Brief microlearning lessons, provided in mobile or tablet settings, facilitated improvements in the most important of the speaking sub-competencies of fluency, pronunciation, accuracy, and coherence (Nikou & Economides, 2018, p. 176). Moreover, learners who were exposed to microlearning appeared more motivated and engaged, with research from previous studies having shown that mobile-assisted language learning increases learner autonomy and communicative ability (Kukulska-Hulme & Viberg, 2018, p. 210).

In contrast to traditional instruction that typically relies on textbook-oriented, one-size-fits-all speaking tasks, microlearning allowed students to interact with content in diverse and dynamic ways. The success of the intended outcome by the experimental group students confirms that technology-rich learning, when well crafted, can enhance and even exceed conventional language instruction (Ifenthaler & Yau, 2020, p. 106).

### 5.1 Recommendations for Future Research:

On the basis of the findings and limitations of the present study, some future study suggestions are proposed:

Longitudinal Studies: The future study should follow a longitudinal design in order to assess the long-term impact and retention of speaking improvement gained through microlearning (Salas et al., 2012, p. 90).

Larger and More Representative Samples: Sampling a larger number of students from more regions or learning settings can facilitate generalizability of findings (Etikan et al., 2016, p. 2).

Extension to Other Language Skills: While this study focused on speaking, microlearning could be researched for other language skills, such as listening comprehension, vocabulary acquisition, and grammar (Buchem & Hamelmann, 2010, p. 16).

### 5.2 Pedagogical Implications

The implications of the findings are several for English language teachers, curriculum designers, and educational institutions:

Integration into Practice: Educators can incorporate mobile-based microlearning into their speaking practice to provide students with additional language exposure and practice beyond the classroom. Microlearning can be used as pre-task warm-ups, practice after lessons, or as homework exercises (Gass & Mackey, 2015, p. 63).

Teacher Development: Professional development sessions have to be made available to teach teachers how to develop and implement microlearning content based on their curriculum and students' mastery level (Creswell & Creswell, 2018, p. 100).

Curriculum Planning: Curriculum planners need to determine the role of microlearning in the development of communicative competence and balance the potential for its incorporation into national language learning systems.

Ultimately, the use of microlearning can make learning a language more inclusive, encouraging, and student-focused, particularly where there is an absence of access to traditional resources.

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