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THE IMPACT OF SMART LEARNING ON ENHANCING EFL STUDENTS' SPEAKING SKILLS AT HEBRON UNIVERSITY

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ABSTRACT

This study investigates the effect of smart learning tools on fostering the English-speaking skills of EFL students who are enrolled in the applied English programs at Hebron University. A one-group pretest-posttest design was used in this mixed-methods study to assess improvements in vocabulary, pronunciation, fluency, tone, and intonation. The participants consisted of 24 first-year female students enrolled in the newly established Applied English specialization within the Faculty of Sciences and Applied Professions. Over a ten-week period, students employed various smart learning technologies, including AI-driven programs (SmallTalk2Me, Duolingo), instructional channels on TikTok and Snapchat, and multilingual learning applications, in conjunction with their major curriculum, Real 2: Listening and Speaking. Quantitative data were obtained using the EF SET speaking test and a Likertscale perception questionnaire, while qualitative insights were gathered from open-ended student remarks. Results indicate substantial enhancement in essential speaking competencies such as tone, intonation, vocabulary, and fluency, accompanied by elevated levels of motivation, engagement, and connection with digital learning resources. The findings highlight the educational potential of incorporating technology-driven smart learning into EFL training to promote independent and interactive language development.

Keywords: Smart Learning, Speaking skills, Duolingo, SmallTalk2Me, Tiktok, EFL Learners

1. INTRODUCTION

Recently, the rapid progression of technology has transformed various educational methodologies and practices, leading to the rise of smart learning. Smart learning incorporates digital tools, artificial intelligence (AI), mobile applications, and online platforms to establish an interactive and adaptive educational setting. [1] contend that smart learning and technology with pedagogical principles create a unified, interactive, and adaptive educational experience that enhances students' cognitive and linguistic abilities. It encompasses the utilization of digital tools to enhance learning flexibility and student-centeredness, providing real-time feedback that improves communication between educators and learners [2]. Unlike traditional learning, which relies heavily on textbooks and instructor-led lessons. Smart learning employs technology to provide personalized learning experiences, real-time feedback, and multimodal engagement. This approach is designed to enhance and improve student motivation, engagement, and overall language proficiency by utilizing interactive and autonomous learning strategies. Smart learning specifically enhances and motivates students to speak English in language classrooms. [3] asserts that success in language acquisition is evaluated based on students' ability to interact and converse with speakers of the target language. Therefore, there is a giant need to develop strong speaking skills to enable efficient communication.

Still, for all its significance, speaking is among the most difficult tasks for Arab speakers. As students are hampered by limited language exposure, lack of confidence, and particularly lack of speaking practice. [4] claim that Palestinian EFL students find it difficult to communicate effectively, which impedes their ability to advance academically and professionally. Therefore, innovative teaching techniques that provide captivating speaking opportunities are necessary to overcome these obstacles. By integrating technological methods with creative teaching strategies, teachers can create new chances for learners to participate and suitably enhance their speaking abilities [5]. This study evaluates the effectiveness of smart learning tools in improving students' speaking skills. It provides insights for

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educators, curriculum designers, and institutions on integrating technology to enhance language proficiency. The findings may help develop more effective pedagogical approaches to boost university students' confidence and fluency in English speaking. To address this gap, the study aims to answer the following questions:

• What is the effect of smart learning tools on students' fluency, vocabulary enhancement, pronunciation, tone, and intonation?

• To what extent do these tools impact students' speaking fluency and vocabulary use?

• What are students' perceptions of using these smart

learning tools to strengthen their speaking skills?

2. LITERATURE REVIEW

Smart learning is a dynamic and transforming approach that offers students access to smart tools which enhance and develop their interaction, engagement, communication skills, and particularly their autonomous learning. Smart learning also aids in the enhancement and development of their speaking skills, and through the growing prevalence of mobile applications, social media platforms like TikTok, Snapchat channels, gamified learning environments, and multimedia resources, English as a Foreign Language (EFL) students are increasingly exposed to opportunities that support the development of essential communication skills—particularly speaking.

Social media is a new learning strategy that is familiar and popular with students. According to [10], social media serves multiple purposes—entertainment, socialization, informativeness, and academics. However, most studies emphasize its entertainment value rather than its role in academic speaking development, leaving a gap that this study addresses." Additionally, social media platforms have quickly taken the lead due to their viral content, easy and friendly way of using. They noted that the most significant app is TikTok as it offers an innovative technique for teachers to engage students in an intriguing manner.

While the origins of smart learning date back decades to CALL in the 1960s, its modern form integrates AI, mobile platforms, and gamified applications to provide more adaptive and personalized instruction [11–12]. it adapts instruction to the unique characteristics and development of each learner.This evolution suggests a shift from teacher-centered delivery to learner-centered autonomy, with smart tools acting as virtual tutors [13]. Yet, despite evidence that such tools enhance pronunciation, fluency, and vocabulary outside the classroom, most studies have focused on general EFL populations in technologically advanced settings. Far fewer have examined whether these tools maintain the same effectiveness in under-resourced or conflict-affected contexts, where infrastructure and learner attitudes may differ significantly. Addressing this limitation is critical for understanding whether the promises of smart learning are universally applicable or context-dependent, which is precisely what the current study explores.

Duolingo and TikTok have been widely recognized for their ability to support speaking development in EFL contexts. As Duolingo shown to enhance vocabulary retention and pronunciation through gamified repetition [14]. In an Iranian EFL study, learners utilizing mobile-based vocabulary applications exhibited elevated motivation levels attributed to the apps interactive and competitive attributes. For example, TikTok is providing authentic exposure to spoken English in short, engaging formats [16]. Together, these findings illustrate that smart tools are not only supplementary but also capable of creating authentic communicative environments outside the classroom. However, most of these studies were conducted in a stable and well-resourced educational setting, raising the question of whether similar outcomes would emerge in contexts where access, infrastructure, and learner motivation differ significantly, such as Palestine.

Beyond linguistic gains, smart learning tools are strongly linked to increased motivation and engagement. For instance, [15] showed that gamified apps boost motivation through competition, while [16] confirmed that TikTok promotes more engagement than traditional textbook instruction. Yet, while motivation is a consistent outcome, few studies clarify which specific design features (e.g., gamification, feedback systems, or authentic input) are most effective for improving speaking fluency. This lack of precision highlights the need for more targeted, context-sensitive research.

Importantly, smart learning also enhances learner autonomy by enabling flexible, self-directed practice. Research on mobile-assisted language learning confirms that tools such as Duolingo, HelloTalk, and SmallTalk2Me allow learners to monitor their progress and engage in repeated practice independently [17–18]. However, despite these advantages, little is known about how learners in under-researched contexts—particularly diploma-level students in Palestine—perceive and utilize these tools. This gap is critical for evaluating the scalability and adaptability of smart learning across diverse educational settings.

Equally important are learners' perceptions of these tools, as attitudes often shape actual learning outcomes. Studies consistently report positive perceptions, with students emphasizing adaptability and personalization as key benefits. For instance, [16] found that Jordanian learners regarded TikTok as both enjoyable and effective for enhancing spoken English, particularly pronunciation and fluency. Yet, most perception studies have been conducted in regional or global contexts outside Palestine, leaving unanswered questions about whether Palestinian learners share similar attitudes or face distinct challenges when adopting smart learning strategies. Similarly, [18] noted that students utilizing Duolingo experienced enhance confidence in their vocabulary retention owing to the app's prompt feedback systems. [14] showed that the finding underscores the significance of user experience and pedagogical design in influencing perceptions. There is also limited qualitative research on how learners in conflict-affected regions view these tools.

Therefore, recent studies reinforce the value of AI-enhanced tools in advancing EFL speaking proficiency. For example, [17] found that AI-powered conversational apps improved fluency, motivation, and self-confidence, while [18] *verified* their role in fostering autonomy and independent practice. Collectively, these findings suggest that AI-driven platforms extend beyond vocabulary or grammar drills by creating interactive learning environments that simulate real communication.

Widely accessible tools such as Duolingo have also received considerable attention for their effectiveness in improving vocabulary and pronunciation. Research demonstrates measurable progress in both formal classroom contexts ([19]) and teacher training programs (Erizara & Wijirahayu), confirming its versatility across learner populations. Similarly, SmallTalk2Me has been recognized for its CEFR-based assessments and real-time feedback, features that provide learners with structured, individualized support [20]. These results indicate a growing consensus that smart learning platforms can serve as reliable complements to traditional instruction.

Despite this evidence, however, most evaluations of AI-enhanced tools have been conducted in international or teacher-training contexts, with little investigation of their impact on diploma-level EFL learners in Palestine. This gap is particularly significant given the distinct challenges posed by under-resourced and conflict-affected settings. The present study addresses this limitation by examining how Palestinian diploma students perceive and benefit from smart learning tools such as Duolingo and SmallTalk2Me in the development of their speaking skills.

3. THEORITICAL FRAMEWORK

This research is grounded in several interrelated concepts and theories that investigate how smart learning tools can enhance EFL students' speaking skills.

3.1 Sociocultural Theory

[6] Sociocultural Theory underscores the significance of social interaction, language, and cultural instruments in influencing cognitive development. The core of this theory is the Zone of Proximal Development (ZPD) — the gap between a learner's independent capabilities and what they can achieve with assistance from a more knowledgeable individual. Smart learning instruments, including AI-driven speaking applications and interactive social media platforms, function as mediating tools within the Zone of Proximal Development (ZPD). They offer scaffolding via prompt feedback, directed practice, and tailored tasks, allowing learners to advance beyond their autonomous abilities.

3.2 Communicative Language Teaching (CLT)

The Communicative Language Teaching approach perceives interaction as both the method and the ultimate objective of language acquisition. The Communicative Language Teaching (CLT) approach prioritizes genuine communication, the advancement of fluency, and active learner participation. Smart learning tools correspond with this methodology by offering real-world contexts (e.g., brief videos, conversational simulations) and allowing learners to apply target structures in significant, interactive scenarios outside the classroom.

3.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model [7] asserts that perceived usefulness and ease of use are key determinants affecting a learner's acceptance of technology. Within the framework of this study, smart learning applications like Duolingo, TikTok, and SmallTalk2Me are more likely to be embraced if learners regard them as efficacious for enhancing speaking skills and seamlessly incorporable into daily routines. This framework elucidates the reasons for the consistent engagement of learners with smart tools throughout the intervention period in this study.

3.4 Self-Directed and Autonomous Learning Theory

The theory of self-directed learning highlights learner autonomy, goal establishment, and self-regulation [8]. Mobile-assisted language learning fosters autonomy by allowing students to access resources at any time and place, select content pertinent to their objectives, and track their own progress. Smart learning tools, equipped with gamified elements, progress monitoring, and adaptive feedback, promote autonomy while maintaining learner engagement through motivation-boosting components such as challenges, badges, and streaks [9].
These theories collectively offer the conceptual framework for the current study. The Sociocultural Theory elucidates the mediating function of smart learning tools in skill acquisition. For the Communicative Language Teaching framework, it contextualizes these instruments within authentic language engagement. The Technology Acceptance Model delineates the determinants affecting learners' adoption and continued utilization of the instruments. Finally, the Self-Directed Learning Theory emphasizes how these instruments foster learner independence. Collectively, they direct the analysis of the study's findings concerning the influence of smart learning on EFL students' speaking abilities.

3.1 Research Gap

A growing number of studies have shown that smart learning tools like, Duolingo, TikTok, and AI-powered apps help people improve their EFL speaking skills. However, most of these studies have taken place in international, well-resourced, or teacher-training settings. The evidence strongly indicates enhancements in vocabulary, pronunciation, fluency, and learner motivation; however, it predominantly exists within higher education systems in regions that are not conflict-affected or under-resourced.

Additionally, although research consistently indicates that smart learning enhances motivation, engagement, and autonomy, there is a notable lack of clarity regarding which

particular design elements (e.g., gamification, real-time feedback, or authentic content) most significantly contribute to the improvement of oral fluency. Research learners' perceptions of these tools has predominantly focused on global or regional contexts, including Jordan and Iran, while neglecting the distinct challenges and experiences faced by Palestinian students.

There is a significant lack of empirical evidence regarding the utilization of smart learning tools in diploma-level programs in Palestine. This absence is significant, as these learners frequently encounter unique infrastructural, linguistic, and contextual barriers that may influence both the efficacy of these tools and students' perceptions of them.

This study aims to fill the existing gap by analyzing the influence of smart learning applications—namely Duolingo and SmallTalk2Me—on the speaking proficiency of diploma students enrolled in the Applied English Program at Hebron University. It also looks into how students feel about these tools, making it one of the first studies of smart learning in Palestinian diploma-level education.

4. Methodology and Research design

acknowledged as a limitation. Participants were approximately 18 to 19 years old and had successfully completed their secondary education prior to entering the program. Participants in the study were informed of the main aim and scope of this study. Also, ethical consideration such as informed consent and confidentiality of responses were maintained throughout the process.

4.1 Instrumentation

The instruments focused on measuring key speaking features such as fluency, pronunciation, tone, intonation, and vocabulary usage. The following tests were used: 1. EF SET Speaking Test (Pre- and Post-Test) Students' speaking abilities were evaluated both pre- and post-intervention using the EF Standard English Test (EF SET). In this study, only the speaking component was used. 2. Teacher Analytical Speaking Rubric: The instructor utilized an analytical speaking rubric test. it was administered through students' speaking activities and responses; their responses were evaluated using a reliable custom-designed speaking rubric. This rubric included five main categories: Fluency, Pronunciation, Tone, and Intonation. Pre- and post-test performance contain a 4-point rating system for each category. 3. Perception Questionnaire: After the post-test, we administered a 5-point Likert scale to assess students' perceptions of using smart learning tools. The survey included both scaled items and open-ended questions related to perceived improvement, motivation, usability of the tools, and overall learning experience. The full rubric and open-ended questions are provided in Appendix A, accessible at: https://docs.google.com/document/d/189xxV5fc_MxXGaImkqKejXjgGkOYILdh/edit?usp=sharing&ouid=107559237836500403567&rtpof=true&sd=true

4.2 Procedures

During the intervention period, students were engaged with:
regular coursework in the Real 2: Listening and Speaking textbook. 'Listening practices to multimedia Input and Observation like, watching and listening to relevant YouTube videos, TikTok channels and role plays, and Snapchat videos. Interactive Speaking and Role-plays; the Instructor motivated the students through students' participation in facilitated role plays that reflected the situations they had heard and seen. They practiced the introduced vocabulary and structures in small groups or pairs, emphasizing intonation, tone, pronunciation and fluency. App-Based Smart Reinforcement; students were assigned multiple interactive tasks on apps like Duolingo, SmallTalk2Me, and LyricsTraining. These platforms and apps were chosen based on their pedagogical relevance, widespread availability, and previous empirical support in enhancing English language speaking skills. [18,19,20] support their effectiveness in EFL context.
To ensure a well-designed engagement with these smart tools, students were assigned daily practice tasks across a 10-week intervention period. Duolingo was used five days per week for at least 15 minutes per session, with progress tracked through the app's internal reporting (e.g., their daily scores and strikes and their completion of speaking modules). For SmallTalk2Me, assessments were administered at the beginning and end of the intervention to evaluate CEFR-aligned speaking levels. TikTok and Lyrics Training were used at students' decision, with at least two reflective tasks per week where students recorded speaking samples or completed pronunciation exercises.

4.3 Population and Sample

The population of the study consisted of students from the *Faculty of Sciences* and the *Faculty of Professions and Applied Sciences* at Hebron University. The sample consisted of 24 first-year female students participating in the inaugural year of the Applied English Diploma Program. The researcher did not intentionally choose the gender composition; rather, it was a natural outcome of the cohort that registered for the program. This limitation in sample size and diversity was due to the program's recent launch and the limited number of enrollees, yet it also provided an important opportunity for an *experimental case study* to assess the progress of the first cohort.
Participants in the study were informed of the main aim and scope of this study. Also, ethical considerations such as informed consent and confidentiality of responses were maintained throughout the process.

5. RESULTS AND DATA ANALYSIS

This study analyzed the collected data through quantitative and qualitative methods; quantitative data were derived from the EF SET speaking pre- and post-tests, Duolingo and SmallTalk2me progress, Academic assessment and from a 5-point Likert-scale perception questionnaire. It was analyzed using **Microsoft Excel** to examine changes in speaking performance before and after the intervention. A paired samples *t*-test was applied to the pre- and post-test results. The **degree of freedom (df = 23)** was based on the number of participants (n = 24). Descriptive statistics, including means and standard deviations, were calculated to examine changes in speaking performance before and after the intervention.

This study primarily utilized the paired samples t-test because of the limited sample size and that it's a one-group design. The questionnaire responses were analyzed with Microsoft Excel, and the results were presented as frequencies, percentages. Qualitative data were gathered through open- responses from the questionnaire. Thematic analysis was used to identify the themes and categories relevant to students' learning experiences. Recurring themes included perceived advancements in pronunciation and fluency. It also included themes about increased motivation, augmented engagement with English both inside and outside the classroom, and the efficacy of particular tools such as TikTok, Speak 2 Me, and Duolingo. The integration of quantitative and qualitative data improved and enriched the analysis of the interpretation of results.

6. DISCUSSION

To address the research questions, multiple data tests and ssources were used to assess the impact of smart learning tools on five key speaking skills: fluency, vocabulary, pronunciation, tone, and intonation.

6.1 Quantitative Results

The following table presents a comparison of students' speaking performance as measured through Duolingo, SmallTalk2Me, and the EF SET standardized test, highlighting pre- and post-intervention results. (see Table 1)

Table 1: Mean and Standard Deviation of Participants' Pre-Post Test Scores in Duolingo App, SmallTalk2Me and EF Set

APP/ Tests	**Mean**		**STD**	
	Pre	Post	Pre	Post
Duolingo	41.67	81.875	15.93	27.40
SmallTalk 2Me	2	3.56	0.67	0.84
EFSET	32.81	48.04	5.23	6.29

A paired-sample t-test revealed a significant improvement in Duolingo scores, increasing from a pre-test mean of 41.67 (SD = 15.93) to a post-test mean of 81.88 (SD = 27.40), t (23) = 7.51, p < .001**,**. These findings align with [21], who investigated the effectiveness of using Duolingo in EFL classrooms to enhance speaking proficiency among Saudi secondary school students. The study concluded that the integration of Duolingo had a fundamental positive impact on enhancing participants' speaking proficiency as well as strengthening their overall language skills.

Similarly, the results from the SmallTalk2Me application demonstrated a statistically significant improvement in students' speaking proficiency. The application originally assessed students using CEFR levels (A1–C2), which were converted to numerical values for statistical analysis (A1 =1, A2 = 2, B1 = 3, B2 = 4, C1 = 5, C2 = 6). Mean scores improved from 2.00 (SD = 0.67) to 3.56 (SD = 0.84). A paired-sample t-test confirmed the improvement was statistically significant, t (23) = 9.21, p < .001**.**

These findings support the effectiveness of SmallTalk2Me in enhancing students' speaking level in a structured, CEFR aligned environment. The study of [22] has also investigated the impact of the SmallTalk2Me app for higher education students in Loja, Ecuador. The findings indicated significant improvements in students' oral performance. Moreover, the results of EF set showed a clear upward shift in overall speaking proficiency. Students initially scored at levels ranging from A1, A2, but after engaging with smart learning tools during the in-class speaking tasks, most students advanced to B1 or B2 levels. This improvement was statistically significant as scores improved significantly from 32.81 (SD = 5.23) to 48.04 (SD = 6.29), p < .001.

6.2 Academic Rubric Evaluation

For extra clarification, pre-post assessment rubrics were designed by the instructor to evaluate five key speaking subskills (See Appendix A): fluency, pronunciation, vocabulary, tone, and intonation. Each student was scored on a scale from 1 to 5 for each category, and both pre- and post-test rubrics were completed by the instructor. (see Table 2)

Table 2 : Pre and Post-Test Mean Scores, Mean Gains, and P-Values for Speaking Skills of Academic Rubrics

Skills	**Pre Mean**	**Post Mean**	**Mean Gain**	**P Value**
Fluency	2.088	3.21	1.113	0.00
Vocabulary Use	2.17	3.04	0.87	0.00
Tone	2.373	3.565	1.192	0.00
Intonation	2.424	3.422	0.998	0.00
Pronunciation Accuracy	2.46	3.42	0.96	0.00
Total Score	11.46	16.21	4.75	0.00

The results revealed varying degrees of improvement across all subskills. The greatest improvement was seen in fluency, followed by pronunciation accuracy and tone, suggesting that the intervention was particularly effective in enhancing natural and expressive speech delivery. Therefore, these results strongly confirm the effectiveness of the smart learning intervention in improving students' speaking subskills in and outside a classroom setting. All five subskills

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demonstrated statistically significant gains. Fluency improved from a mean of 2.088 to 3.21 (t (23) = 6.83, p < .001), vocabulary use from 2.17 to 3.04 (t (23) = 5.94, p < .001), and tone from 2.373 to 3.565 (t (23) = 7.15, p < .001). These results align with [17] as highlighting AI- Powered tools as beneficial for enhancing fluency and learner engagement.

6.3 Students' Perception

To collect information regarding students' perspectives on the impact of smart learning tools, a perspectives questionnaire was applied (See Appendix A). It included a question requesting their personal information such as their university email address. The second part is a 5-point Likert scale asking about their perspectives on smart learning tools. The third part consists of six open-ended questions. to ask about more clarification on the most helpful tool, benefits, and challenges. The result from the students' perception questionnaire revealed a highly positive attitude, as all participants either strongly agreed or agreed with questionnaire items. The exclusion of neutral, disagree, or strongly disagree responses indicates a higher approval of the smart learning approach among students. Table III presents the means and standard deviations for the five questionnaire items that students most strongly agreed upon. (see table 3)

Table 3: Mean Scores and SDS of Questionnaire Items Strongly Agreed Upon by Participants

No	Item	Mean	STD
1	Using smart learning tools helped me strengthen my speaking skills	1.66	0.63
5	I expanded my vocabulary through the use of smart learning applications.	1.79	0.46
9	I would recommend using smart learning tools for other students studying English.	1.625	0.575
10	I prefer combining traditional classroom learning with smart learning tools.	1.75	0.60
11	I believe traditional classroom lessons alone are not enough to strengthen my speaking skills	1.79	0.72

Table 4 presents the means and standard deviations of the questionnaire items with which the participants agreed. (see Table 4)

Table 4: Mean Scores and Questionnaire Items Agreed Upon by Participants

No	Item	Mean	STD
2	These tools helped me improve my pronunciation.	1.83	0.48
3	Using the LyricsTraining app helps me strengthen my pronunciation.	1.83	0.48
4	I noticed an improvement in my speaking fluency after using the apps regularly.	2.04	0.69
6	I felt more motivated to practice English because of smart learning tools.	1.91	0.58
7	The smart learning tools were simple to use and accessible.	1.96	0.62
8	Using apps and digital media made speaking practice more enjoyable for me.	1.83	0.64

Additionally, using digital media with the use of apps made practice more enjoyable. These results reflect strong engagement with the smart learning tools and further validate their role in supporting students' speaking development.

6.4 Open ended Questions

To gain more profound insights into student preferences, participants were asked to identify the smart tool they found most helpful for strengthening their speaking skills. Most students indicated that Duolingo was the most beneficial tool. TikTok was the second most frequently mentioned tool, praised for its short, engaging videos (see table 5).

Table 5: Preferences of Students' Responses Regarding Areas of Speaking Improvement

Smart Tool	Mention	Percentage
Duolingo	12	50%
TikTok	9	38%
SmallTalk2Me	2	8%
All Tools combined	1	1.91
Other (e.g., PUBG, Instagram	1	1.96

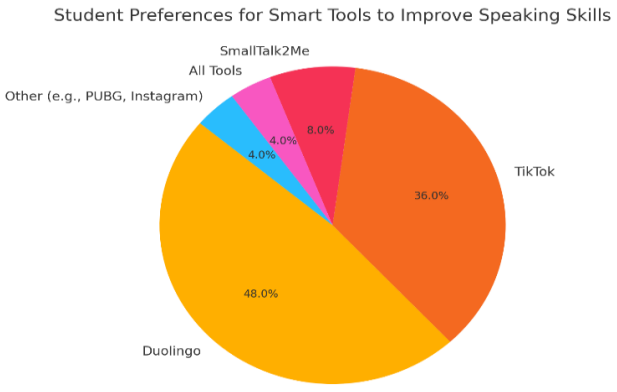

Figure 1. Distribution of Student Preferences for various smart tools used to enhance speaking fluency

After using these tools, students were asked about the specific improvement they noticed in their speaking. After coding 24 responses, several themes were as follows:

Table 6: Frequencies of Students Responses Regarding Areas of Speaking Improvement

Themes	Examples of Responses	F
Improved Pronunciation	"My pronunciation became clearer,"	6
Expanded Vocabulary	"I learned more vocabulary,"	6
Greater Fluency & Confidence	"I speak more easily," "More fluency and confidence," "They gave me the confidence…"	4
Better Listening	"Improved listening accuracy," "better listening comprehension,"	3
Improved Sentence Formation & Grammar	"Improved my ability to form sentences," "Improved grammar,"	5

The most frequently mentioned improvements were in pronunciation and vocabulary acquisition. A significant number of students also reported enhanced fluency and confidence. Similar results were found in [21], as students have reported enhanced fluency, vocabulary acquisition, and pronunciation. In answer to the third open-ended question concerning the challenges experienced with smart learning tools, most students indicated that they encountered no substantial difficulties. Numerous individuals asserted that they encountered "no challenges" or "nothing at all" while utilizing the tools. In the fourth open-ended question, students' responses to the inquiry about motivation indicated that smart learning tools substantially improved the encouragement of English practice outside the classroom. A significant number of students reported that these tools made learning more enjoyable, engaging, and personalized, thus increasing their motivation for independent study. (See Table 7).

Table 7: Themes from Students' Regarding Motivation and Engagement with Smart Learning Tools

Themes	Responses	F
Increased Motivation to Practice	"It made me want to be excited to learn," "It effects good," "These apps encourage learning."	7
Enjoyment of Learning (Fun)	"They made practice more fun," "I see it like a game," "More interesting," "Learning became enjoyable."	6
Self-Directed Learning & Autonomy	"I study whenever I want," "Freedom to choose topics," "Learning what matters to me"	5
External Motivation	"Apps send me a notification." "Duolingo reminds me to practice.	2
Media-Based Practice	"Watching movies," "Listening to music helps me stay motivated."	3
Improved Fluency and Confidience	"My fluency is improving," "I learned good skills," "Understanding meaning better"	3
Classroom Learning is Not Enough	"We must rely on ourselves," "Classroom is not enough."	2

Consequently, these smart tools improved engagement, accessibility, and the incorporation of English learning into everyday life, thus strengthening practice beyond the classroom. This corresponds with [23], who determined that smart learning significantly boosts learners' motivation via its interactive and user-centric design, fostering continuous practice outside traditional classroom environments. The last open- ended question was which do you find more effective for speaking practice traditional or smart learning, and why? Students' responses to the comparative question demonstrated a pronounced preference for smart learning tools as more efficacious for speaking practice. Notably, numerous responses indicated a conviction in the merits of blended learning. Students preferred integrating both approaches: utilizing smart tools for adaptable, self-directed practice, and depending on classroom engagement for comprehensive elucidation and immediate feedback. (see table 8).

Table 8: Students Perspectives on The Effectiveness of Smart Learning Versus Traditional Classroom Learning

Themes	Responses	F
Smart learning is more effective and enjoyable	"More enjoyable," "Less boring,""Easier to use,"I can learn anytime and anywhere"	10
Blended learning is best (both are needed)	"Both are important," "Best results come from both," "Smart tools support learning"	5
Traditional classroom Preferred for correction/ support	"Teacher corrects mistakes,""More effective with real interaction," "I feel more comfortable"	4
Smart tools increase fluency and confidence	"I don't feel embarrassed when I'm alone,""Instant feedback from tools"	3
Classroom lessons are boring or less engaging	"Teacher speaks all the time," "No chance to speak," "Depends only on grammar and exams"	3
Smart learning offers unlimited speaking opportunities	"Duolingo offers unlimited practice," "Time is limited in class"	2
Traditional learning builds commitment	"Traditional learning forces you to commit"	1

7. CONCLUSION AND LIMITATION

It is worth mentioning that findings of this mixed method study provide a strong significance in the influence of smart learning tools on the speaking performance of EFL

students. Quantitative results revealed statistically significant improvement in subskills including fluency, vocabulary, pronunciation, tone, and intonation across multiple platforms like, Duolingo, SmallTalk2Me, and EF SET. These integrations led to significant improvements in students' performance on standardized assessments and rubric based evaluations. Also, qualitative data supported these findings, with students demonstrating increased motivation and engagement, confidence, and enjoyment. Additionally, most participants expressed a preference for blended learning approaches that integrate smart applications with classroom instruction. These results confirm that technology-enhanced learning can be an effective supplement to traditional speaking pedagogy.

The study has several limitations that should be acknowledged. First, there are only 24 female students from a single department in a newly established diploma program. were studied. Thus, the findings may not be generalizable to boarder EFL populations. Second, the 10-week intervention may not have captured the long-term effects of intelligent learning tools. Third, the study employed a single-group pretest-posttest design without a control group, which limits the ability to attribute improvements solely to the intervention. Despite using teacher rubrics, standardized assessments, and app-generated data, the study did not involve independent raters, which may have biased the assessment of speaking performance and introduced a degree of subjectivity.

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Appendix

Appendix A is shown in the following URL: https://docs.google.com/document/d/189xxV5fc_MxXGaImkqKejXjgGkOYILdh/edit?usp=sharing&ouid=107559237836500403567&rtpof=true&sd=true