



STUDENTS' SELF-ASSESSMENT EXPERIENCE USING DUOLINGO SPEAK: A CASE STUDY IN SPEAKING CLASS

PENGALAMAN PENILAIAN DIRI MAHASISWA MENGGUNAKAN DUOLINGO SPEAK: STUDI KASUS PADA PEMBELAJARAN BERBICARA

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DOI: <https://doi.org/10.62567/ijosse.v2i3.2887>

Abstrack

This study aims to analyze students' experiences in conducting self-assessment using the Duolingo Speak application in speaking skills learning at a higher education institution in Indonesia. The focus of this research covers five main aspects, namely: students' self-assessment strategies, increased speaking confidence, improved vocabulary mastery, challenges encountered while using Duolingo Speak, and the enhancement of learner autonomy. This study employs a qualitative approach with a case study method, which aims to gain an in-depth understanding of students' experiences in utilizing Duolingo Speak as a self-assessment tool in speaking learning. Data were collected through semi-structured interviews and documentation involving five students selected through purposive sampling, namely students who had used Duolingo Speak for at least one semester. The data were analyzed using thematic analysis through data organization, coding, theme identification, and conclusion drawing. The findings show that the use of Duolingo Speak provides positive learning experiences for students. The application helps students apply various self-assessment strategies, increases speaking confidence, enriches vocabulary mastery, and fosters learner autonomy. However, several challenges were also found, such as limitations in speech recognition accuracy and feedback that is not yet sufficiently detailed to support optimal reflective learning. Overall, Duolingo Speak can serve as an effective supporting tool in speaking skills instruction when combined with structured self-assessment guidance from lecturers, thereby enhancing the effectiveness of English as a Foreign Language (EFL) learning.

Keywords: *Duolingo Speak, Self-Assessment, Speaking Skills, Learner Autonomy, EFL.*

Abstrak

Penelitian ini bertujuan untuk menganalisis pengalaman mahasiswa dalam melakukan penilaian diri (*self-assessment*) menggunakan aplikasi Duolingo Speak pada pembelajaran keterampilan berbicara di salah satu perguruan tinggi di Indonesia. Fokus penelitian meliputi lima aspek utama, yaitu: strategi



penilaian diri yang digunakan mahasiswa, peningkatan kepercayaan diri dalam berbicara, peningkatan penguasaan kosakata, tantangan yang dihadapi selama menggunakan Duolingo Speak, serta peningkatan kemandirian belajar mahasiswa. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus yang bertujuan untuk memahami secara mendalam pengalaman mahasiswa dalam memanfaatkan aplikasi Duolingo Speak sebagai media penilaian diri pada pembelajaran berbicara. Data dikumpulkan melalui wawancara semi-terstruktur dan dokumentasi terhadap lima mahasiswa yang dipilih menggunakan teknik *purposive sampling*, yaitu mahasiswa yang telah menggunakan aplikasi Duolingo Speak selama minimal satu semester. Analisis data dilakukan menggunakan analisis tematik melalui proses pengorganisasian data, pengkodean, identifikasi tema, serta penarikan kesimpulan. Hasil penelitian menunjukkan bahwa penggunaan Duolingo Speak memberikan pengalaman belajar yang positif bagi mahasiswa. Aplikasi ini membantu mahasiswa menerapkan berbagai strategi penilaian diri, meningkatkan kepercayaan diri dalam berbicara, memperkaya penguasaan kosakata, serta mendorong kemandirian dalam belajar. Namun demikian, masih ditemukan beberapa kendala, seperti keterbatasan akurasi pengenalan suara dan umpan balik yang belum cukup mendalam untuk mendukung refleksi belajar secara optimal. Secara keseluruhan, Duolingo Speak dapat menjadi media pendukung yang efektif dalam pembelajaran keterampilan berbicara apabila dipadukan dengan bimbingan penilaian diri yang terstruktur dari dosen, sehingga mampu meningkatkan efektivitas proses pembelajaran bahasa Inggris sebagai bahasa asing.

Kata Kunci: Duolingo Speak, Penilaian Diri (*Self-Assessment*), Keterampilan Berbicara, Kemandirian Belajar, EFL.

1. INTRODUCTION

English language learning in the digital era is currently experiencing very rapid development, especially with the presence of various technology-based applications that support independent language learning processes. One of the most challenging language skills for learners is speaking, as it requires not only vocabulary and grammar mastery, but also courage, fluency, and the ability to overcome anxiety in communication. The use of technology such as language learning applications has become one of the solutions widely applied in English language learning at various levels of education.

One of the popular applications used in language learning is Duolingo Speak, which is designed to help learners improve their speaking skills through interactive, technology-based practice. Previous studies have shown that Duolingo can help improve students' English speaking skills through a more flexible and enjoyable approach (Fitria et al., 2023). The use of AI-based applications in language learning has also been proven to increase student engagement and support a more independent and sustainable learning process (Hanifah & Lisan, 2024).

The development of Artificial Intelligence (AI) in language education also shows a significant impact on the speaking learning process. AI chatbots and voice-based applications can provide immediate feedback to students, helping them correct mistakes in real time and increasing their confidence in speaking. This is in line with Han, (2020) findings, which show that the use of voice-based AI can improve speaking competence as well as students' affective aspects, such as motivation and confidence. Hapsari & Wu, (2022) also emphasize that AI-based learning can reduce speaking anxiety, increase learning enjoyment, and encourage students' critical thinking skills.

However, although various studies have shown the benefits of using technology in speaking learning, there are still several limitations in existing research. First, most studies focus on the improvement of language skills outcomes without deeply exploring students' reflective experiences in the learning process itself, particularly in the context of self-assessment. Second, there are still limited studies that specifically examine the use of Duolingo Speak in real classroom speaking contexts, especially at the higher education level or speaking classes in Indonesian educational institutions.

The aspect of self-assessment in language learning has also received less attention, even though self-assessment plays an important role in increasing learning awareness, learner autonomy, and students' reflection on their language abilities. In technology-based learning, self-assessment can serve



as an important tool to help students evaluate their progress independently, especially when using applications like Duolingo Speak that provide automatic feedback features.

Psychological factors such as speaking anxiety are also major challenges in speaking learning. Research shows that language anxiety is closely related to students' learning motivation. Alamer & Almulhim, (2021) state that language anxiety can influence self-determined motivation, which in turn affects language learning success. In addition, Bashori et al., (2022) found that web-based language learning can influence students' speaking anxiety levels, either positively or negatively, depending on instructional design and user experience.

Based on these conditions, it can be concluded that the use of Duolingo Speak in speaking learning has great potential, but students' experiences in conducting self-assessment through this application have not been widely studied in depth. Therefore, this study is important to understand how students evaluate their own experiences in using Duolingo Speak, particularly in the context of speaking classroom learning.

This study focuses on exploring students' self-assessment experiences in using Duolingo Speak in speaking classes. Various previous studies have discussed the use of technology in language learning, such as Duolingo, AI chatbots, and digital-based learning. (Pustika, 2021) highlights the importance of conversational interaction analysis in English learning among young learners, showing that verbal interaction remains an essential aspect of language learning. Studies on Duolingo also show benefits in improving language skills such as vocabulary and listening (Tiara et al., 2021), while research on AI in language learning is mostly focused on motivation, communication, and learning outcomes (Kim & Su, 2024). Based on these studies, it can be concluded that digital technology, especially AI-based applications such as Duolingo Speak, has great potential in supporting English language learning, particularly speaking skills.

However, these studies do not specifically address students' self-assessment experiences in using Duolingo Speak in speaking classes, and very few studies examine how students evaluate their own learning process. There is therefore a clear research gap in this area. This research does not only aim to describe students' experiences but also to evaluate the benefits, challenges, and their perceptions of using the application in the speaking learning process. This study aims to fill this gap by providing an in-depth understanding of how students evaluate their own learning experiences through the application, and how this contributes to the overall language learning process (Guan et al., 2025). Thus, this study is expected to provide a more comprehensive picture of the role of technology in supporting English language learning, especially in the development of speaking skills.

The contribution of this research is expected to benefit various parties. For students, this study can increase their awareness of the importance of self-assessment in language learning. For teachers and lecturers, the results of this study can serve as a reference in integrating AI-based technology such as Duolingo Speak into speaking instruction. For curriculum developers, this study can be considered in designing more technology-adaptive language learning programs. In addition, for future researchers, this study can serve as a foundation for further research on language learning technology and self-assessment.

2. RESEACH METHOD

This study employs a qualitative approach with a case study design. The qualitative approach is chosen because this study aims to explore in depth students' experiences in conducting self-assessment while using the Duolingo Speak application in speaking learning. As Creswell (2014) states, qualitative research is appropriate when the goal is to explore and understand the meaning individuals or groups ascribe to a social or human problem. A case study design is used because the research focuses on a specific context, namely a speaking class, which allows the researcher to understand the phenomenon in a detailed and contextualized way. According to Yin (2018), a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context.

This research was conducted at one higher education institution in Indonesia, specifically in a speaking class within an English education study program. The participants of this study were students



enrolled in the speaking course who had used the Duolingo Speak application as part of their learning process. The number of participants in this study was approximately 5 students, selected based on their active involvement in using the Duolingo Speak application. The participants had experience using the application in speaking learning for at least one semester. The sampling technique used was purposive sampling, in which participants were selected based on specific criteria relevant to the research purpose. As Merriam (2009) explains, purposive sampling is commonly used in qualitative research to select information-rich cases that are most relevant to the research questions.

The data in this study were collected using three main instruments: semi-structured interviews, classroom observation, and documentation. Semi-structured interviews were conducted to explore students' experiences, perceptions, benefits, and challenges in conducting self-assessment using Duolingo Speak. According to Cohen, Manion, and Morrison (2018), semi-structured interviews allow researchers to obtain detailed information while still providing flexibility for participants to express their views. Classroom observation was conducted to directly examine how students used the Duolingo Speak application in speaking learning activities. As Merriam (2009) notes, observation enables researchers to gather firsthand data about the phenomena being studied in its natural setting. Documentation, including learning notes, student tasks, and records of Duolingo Speak usage, was also collected to support and triangulate the primary data.

The data collection procedures in this study were carried out in several stages. First, the researcher conducted a preliminary observation to understand the speaking class context and the use of Duolingo Speak. Second, the researcher selected participants based on the predetermined criteria using purposive sampling. Third, the researcher collected data through classroom observations of learning activities, followed by semi-structured interviews with students to obtain data about their self-assessment experiences. Finally, the researcher collected supporting documentation such as learning records and application usage activities. All collected data were then systematically analyzed to answer the research questions.

The data in this study were analyzed using thematic analysis, as proposed by Braun and Clarke (2006). This analysis was conducted by identifying patterns or main themes from interview data, observations, and documentation. The steps of data analysis included transcribing interview data into written form, reading and understanding the data repeatedly to gain initial insights, coding the data relevant to the research focus, and grouping codes into categories and main themes, such as self-assessment experiences, benefits of using Duolingo Speak, and challenges faced. Finally, conclusions were drawn based on the identified themes to answer the research questions. Braun and Clarke (2006) emphasize that thematic analysis is a flexible and useful research tool that can provide a rich and detailed account of data.

To ensure the trustworthiness of the data, this study applied several techniques as proposed by Lincoln and Guba (1985). Credibility was ensured through data triangulation, by comparing interview results, observations, and documentation to ensure data consistency. Transferability was addressed by providing a detailed description of the research context so that the findings could be understood and applied in similar contexts. Dependability was maintained by documenting the entire research process systematically so that it can be traced by other researchers. Confirmability was ensured by keeping the data and analysis results objective based on field findings rather than the researcher's subjective interpretation. In addition, member checking was conducted by asking participants to verify the interview results to ensure that the data accurately reflected their experiences, as recommended by (Creswell, 2015).

3. RESULT AND DISCUSSION

A. Students' Self-Assessment Experiences Using Duolingo Speak

The findings of this study reveal how five students enrolled in a speaking class experienced self-assessment while using the Duolingo Speak application. Semi-structured interviews conducted with each participant yielded rich descriptive data organized into five interrelated themes: (1) self-assessment



experience, (2) benefits of using Duolingo Speak, (3) challenges encountered, (4) learner autonomy, and (5) overall perceptions and recommendations.

The five participants were: Vaïen Vebrianti (P1), a female student who had been using Duolingo Speak for approximately one year, using it 3–4 times per week; Muhammad Ilyas (P2), a male student with one and a half years of experience, using the application almost every day; Rina Aprilia (P3), a female student using the app for about one year, 2–3 times per week; Fauzan Hidayat (P4), a male student who had used the application for two semesters at a frequency of 4–5 times per week; and Siti Rahma (P5), a female student who had been using Duolingo Speak for one semester, 2–3 times per week. All participants were enrolled in the same speaking class at a higher education institution in Indonesia.

Regarding initial experiences, P1 reported feeling slightly nervous when first using the application because she was required to speak in English, but the ease of use encouraged her to continue. P2, in contrast, expressed immediate excitement, noting that his English vocabulary increased noticeably soon after starting, which became a strong motivation to persist. P3 recalled feeling encouraged because the app felt less judgmental than speaking in front of classmates. P4 stated that the competitive scoring system motivated him to keep improving, while P5 described initial hesitation due to microphone sensitivity concerns, which gradually subsided as she became more accustomed to the interface.

In terms of the self-assessment process itself, participants demonstrated diverse strategies. P1 assessed her progress by comparing her fluency, pronunciation, and instructional ability before and after using Duolingo, focusing on pronunciation, fluency, and vocabulary as her primary evaluation aspects. P2 used an informal method of watching English-language films without subtitles to gauge how many words he could recognize for speaking purposes. P3 reflected on her performance by replaying audio feedback from the app and tracking her scores across sessions. P4 maintained a personal progress chart and compared his weekly scores to monitor improvement. P5 relied primarily on the app's automated feedback and occasionally discussed her results with a classmate to gain additional perspective.

When asked whether the application's automatic feedback assisted them in evaluating their progress, all five participants responded affirmatively, though with different emphases. P1 stated she was able to identify her own errors through the feedback. P2 emphasized that the feedback on pronunciation and vocabulary helped him recognize areas of improvement. P3 appreciated that the feedback was consistent and immediately available after each practice session. P4 noted that the feedback confirmed what he already suspected about his weaknesses, making his self-evaluations more precise. P5 expressed that while the feedback was helpful, she wished it were more detailed, particularly for grammatical errors in spoken sentences.

B. Benefits of Using Duolingo Speak in Speaking Learning

All participants reported meaningful benefits from using Duolingo Speak across multiple dimensions of speaking competence.

1. Increasing confidence in speaking English

The most prominent benefit identified was increased confidence in speaking English. P1 explicitly stated that she felt more confident speaking in English as a result of consistent practice through the app. P3 echoed this sentiment, adding that the private, non-judgmental environment of the app allowed her to make mistakes without feeling embarrassed, which gradually built her confidence. P4 described how achieving higher scores over time provided tangible evidence of his progress, boosting his motivation to speak more in classroom settings as well.

2. Expand Students' Vocabularies

Vocabulary expansion emerged as another key benefit, particularly noted by P2 and P4. P2 reported that his English vocabulary grew substantially, which he attributed directly to the contextual and repetitive nature of the app's speaking exercises. P4 similarly reported both vocabulary growth and improved pronunciation after one semester of use. P5 noted an improvement in her ability to recall vocabulary spontaneously during speaking tasks, which she attributed to the app's spaced repetition



model. These findings align with the broader literature on Duolingo's positive effects on vocabulary acquisition (Tiara et al., 2021).

3. Reducing Students' speaking anxiety

Regarding speaking anxiety, responses varied among participants. P1 and P3 reported a notable reduction in speaking anxiety through regular practice. P1 indicated that consistent, routine practice reduced her nervousness over time, while P3 noted that the low stakes environment of the app helped desensitize her to the fear of making errors. However, P2 noted that as of the time of the interview, the application had not yet fully resolved his speaking anxiety, suggesting that technology-based tools may be more effective for some learners than others. P5 reported moderate reduction in anxiety, particularly for pronunciation-related concerns.

C. Challenges and Limitations Encountered by Students

Despite the benefits identified, participants also encountered several challenges in using Duolingo Speak for self-assessment purposes. The most commonly cited technical challenge was the application's difficulty in accurately recognizing speech. P1 reported that the app sometimes failed to recognize her spoken input, which disrupted her practice flow. P2 highlighted a similar issue, specifically that the microphone feature was insufficiently responsive during pronunciation tests. P3 noted that the voice recognition system occasionally misidentified correct answers as incorrect, creating confusion and mild frustration. P4 mentioned connectivity issues that occasionally interrupted his sessions, while P5 pointed out that the app's feedback on grammar was insufficiently detailed for advanced self-assessment.

In terms of features inadequate for supporting self-assessment, P1 observed that explanations of pronunciation errors remained limited, making it difficult to understand the precise nature of her mistakes. P2 reiterated the microphone responsiveness issue as the main constraint on effective self-assessment during pronunciation exercises. P3 wished the app provided more comparative feedback, such as a direct comparison between her pronunciation and a native speaker's model. P4 suggested that the app lacked a comprehensive speaking portfolio feature that would allow him to track long-term progress in a structured manner.

Psychological barriers were also reported, though they diminished over time for most participants. P1 acknowledged experiencing shyness and fear of making errors at the beginning of her use, but these feelings subsided as she grew more comfortable with the application. P3 similarly described initial embarrassment when speaking alone into a device, which she overcame through repeated exposure. P4 and P5 both reported minor psychological discomfort in the early stages, while P2 indicated no significant psychological barriers throughout his experience. These findings suggest that initial hesitation is common among EFL learners using voice-based applications, but tends to decrease with sustained engagement.

D. Learner Autonomy and Reflective Practice

All five participants reported that Duolingo Speak enhanced their learner autonomy to varying degrees. P1 highlighted the flexibility of the application, noting that she could practice whenever and wherever she wished. P2 emphasized that the app offered diverse skill areas speaking, listening, and reading allowing him to tailor his independent learning experience. P3 noted that the gamified structure of the app encouraged her to set personal goals and maintain daily practice without external prompting from a teacher. P4 described how the application empowered him to identify his own weaknesses and seek out additional resources accordingly. P5 agreed that the app supported autonomous learning, particularly during holidays or periods when classroom instruction was unavailable.

With respect to reflective practices beyond the app itself, responses varied considerably. P1 reported keeping personal notes documenting new vocabulary and pronunciation errors encountered during sessions. P3 also maintained a written reflection journal in which she recorded mistakes and strategies for improvement. P4 created visual progress charts to monitor his weekly development. In contrast, P2 did not make any separate notes after his practice sessions, relying entirely on the app's built-in feedback system. P5 occasionally discussed her results with peers but did not maintain a formal



reflective record. These variations suggest that reflective habits outside the application are individually determined and may benefit from structured guidance from instructors.

E. Overall Perceptions and Recommendations

Overall perceptions of Duolingo Speak were highly positive across all participants. P1 described the application as “very effective” in supporting English language learning. P2 rated the application as “very good” due to its wide range of features. P3 emphasized that the app had transformed her approach to practicing English outside the classroom. P4 expressed strong satisfaction with the application’s ability to track progress and provide targeted feedback, while P5 appreciated its accessibility and convenience for learners with busy schedules.

Regarding significant changes experienced after one semester of use, participants consistently reported gains in confidence and vocabulary. P1 and P3 primarily emphasized increased confidence, while P2 and P4 highlighted vocabulary growth and improved pronunciation as the most significant changes. P5 noted an overall improvement in her willingness to speak English in everyday situations, indicating a broader affective transformation beyond technical skill development.

Recommendations offered by participants converged around the improvement of the speech recognition system. P1 suggested that the app’s speech detection capabilities should be enhanced to better recognize diverse accents and dialects. P2 recommended removing internet connection restrictions that sometimes limit practice sessions. P3 proposed the addition of a feature that enables direct pronunciation comparison with native speakers. P4 suggested the development of a structured portfolio feature for long-term progress documentation, while P5 recommended more detailed grammatical feedback to support higher-level self-assessment.

The findings of this study illuminate several important dimensions of students’ self-assessment experiences using Duolingo Speak in speaking classes, which align with and extend existing literature on technology-enhanced language learning and self-assessment.

First, the diversity of self-assessment strategies employed by participants suggests that students do not engage with Duolingo Speak in a uniform manner. While some relied exclusively on the application’s built-in feedback (P2, P5), others developed complementary reflective practices such as journaling and progress tracking (P1, P3, P4). This variation supports the argument made by Rasyid et al. (2023) that self-assessment in Indonesian EFL contexts is largely underdeveloped as a structured practice, and that students benefit from explicit guidance in how to use technological feedback for reflective learning. The findings suggest that integrating structured self-assessment tasks such as reflection journals or guided peer comparison alongside app-based practice could strengthen the depth and consistency of students’ evaluative processes.

Second, the finding that increased confidence was the most universally reported benefit resonates strongly with prior research on AI-based speaking tools. Han (2020) found that voice-based AI systems positively influenced students’ affective aspects, including motivation and confidence, and the present study provides further empirical support for this relationship in an Indonesian EFL higher education context. The private, low-stakes environment of Duolingo Speak appears to function as a “safe space” for learners to practice without social judgment, which is particularly valuable for students who experience high levels of speaking anxiety. This aligns with Hapsari and Wu (2022), who found that AI-based learning tools can alleviate speaking anxiety and boost learning enjoyment among EFL students.

Third, the vocabulary gains reported by participants corroborate the findings of Tiara et al. (2021), who demonstrated that Duolingo use positively impacts English vocabulary mastery. Importantly, in the present study, vocabulary improvement was linked not only to passive learning but also to students’ active strategies, such as P2’s practice of watching English films without subtitles as an informal self-assessment method. This suggests that the application may catalyze broader autonomous learning behaviors beyond its immediate interface, contributing to what Hanifah and Lisan (2024) describe as a more independent and sustainable language learning process.

Fourth, the technical challenges identified by participants most notably the limited accuracy of the speech recognition system and insufficient detail in pronunciation feedback point to a significant



gap between the application's current capabilities and the demands of rigorous self-assessment. For self-assessment to be pedagogically meaningful, students require feedback that is not merely evaluative but also diagnostic and formative (Braun & Clarke, 2006). The current feedback system in Duolingo Speak, while useful for identifying errors, does not consistently provide the explanatory depth needed for students to understand why an error occurred and how to correct it. This limitation reduces the app's effectiveness as a standalone self-assessment tool, suggesting that it should be positioned as a complementary resource within a broader instructional framework rather than a primary assessment mechanism.

Fifth, the enhanced learner autonomy reported by all participants reflects the broader potential of mobile language learning applications to support self-directed study. The flexibility of Duolingo Speak accessible anytime and anywhere enabled students to maintain consistent practice beyond formal classroom hours. This finding is consistent with Mohammed and Kinyó (2022), who emphasize that technology-enhanced learning environments support more active and autonomous engagement with language. However, the variability in reflective depth among participants also indicates that autonomy without structured scaffolding may lead to surface-level self-assessment, reinforcing the need for instructor-guided reflection as a complement to app-based practice.

Overall, this discussion highlights that Duolingo Speak holds considerable promise as a self-assessment tool in EFL speaking classrooms, but its effectiveness is mediated by individual learning strategies, the quality of technological feedback, and the degree of instructional scaffolding provided. Future integrations of this application into speaking curricula should be accompanied by explicit self-assessment training to maximize its reflective and evaluative potential.

4. CONCLUSION

This study explored the self-assessment experiences of five EFL students using Duolingo Speak in a higher education speaking class in Indonesia. Through semi-structured interviews and supporting documentation, the study identified five key themes: self-assessment experiences, benefits of use, challenges and limitations, learner autonomy, and overall perceptions and recommendations.

The findings demonstrate that students engage in diverse and individualized self-assessment practices when using Duolingo Speak, ranging from reliance on built-in feedback to complementary reflective strategies such as journaling and progress tracking. Increased speaking confidence and vocabulary growth were the most consistently reported benefits, while speech recognition inaccuracies and limited feedback detail were the most commonly cited challenges. All participants reported enhanced learner autonomy as a result of the application's flexible and accessible design.

These findings carry important implications for EFL practitioners and curriculum developers. For instructors, the results suggest that Duolingo Speak is most effective when integrated into a broader instructional framework that includes structured self-assessment guidance, such as reflection journals, peer comparison activities, and goal-setting exercises. Simply assigning students to use the application without accompanying pedagogical scaffolding may result in inconsistent or superficial self-assessment practices. For developers, the study highlights the need for more diagnostic and explanatory feedback mechanisms within the application, particularly for pronunciation error analysis, to better support learner self-evaluation.

This study has several limitations that should be acknowledged. The sample was limited to five participants from a single institution, which constrains the generalizability of the findings to other educational contexts. Additionally, the reliance on self-reported interview data may be subject to social desirability bias. Future research should employ larger and more diverse participant samples, incorporate longitudinal designs to track the development of self-assessment skills over time, and triangulate interview data with direct observation of students' in-app behavior. Comparative studies across different institutions and technological platforms would also contribute to a more comprehensive understanding of AI-assisted self-assessment in EFL speaking education.

In conclusion, Duolingo Speak represents a valuable and promising tool for supporting self-assessment in EFL speaking classes when used thoughtfully and in conjunction with appropriate



instructional support. Its capacity to foster confidence, vocabulary development, and learner autonomy makes it a meaningful addition to the digital language learning ecosystem. However, realizing its full potential as a self-assessment instrument requires both technological improvements and pedagogically informed implementation strategies.

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