"Ispeak" an Application to Improve student's speaking competencies

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Abstract- The rapid progress of technology in recent years has introduced innovative approaches to education, enabling educators to leverage technology for teaching. This study examines the "Ispeak" application's impact on junior high school students' speaking skills, specifically focusing on fluency, pronunciation, and vocabulary usage. The research aims to identify the specific features of the Ispeak application that enhance these aspects of speaking skills and explore its potential as an effective tool in technology-enhanced learning environments. Utilizing qualitative methods, the study collects and analyzes data through questionnaires, interviews, and documented sources. The findings reveal that the Ispeak application significantly supports English language learning by offering a flexible and cost-effective learning experience. Key to its effectiveness are the supportive role of teachers and the consistent use of the app by students, both of which contribute to improvements in speaking competencies.

Keywords: Technology-Enhanced Learning, Speaking Proficiency, Ispeak Application

I. INTRODUCTION

Junior high school students often face significant challenges in developing their oral communication skills due to insufficient opportunities for practical application within the classroom. This issue arises from an overemphasis on written assessments, a lack of interactive speaking exercises, and limited teacher training in facilitating speaking proficiency. Additionally, students' reluctance to engage in verbal expression is frequently driven by fears of making mistakes, self-doubt, and anxiety about peer or instructor judgment. As effective oral communication skills are crucial for academic success and future career prospects, it is essential to address these deficiencies in speaking practice. In response to these challenges, digital technology offers promising solutions. The integration of advanced tools into education has transformed traditional teaching methods, yet there remains a gap in leveraging these technologies specifically for improving speaking skills. The "Ispeak" application is designed to address this gap by providing a dynamic platform for interactive speaking practice. Utilizing advanced voice recognition technology, "Ispeak" offers real-time feedback on pronunciation, grammar, and fluency, which helps students enhance their speaking competencies.

Technology has permeated all facets of our life, with education being the most crucial domain, namely the teaching-learning process. Contemporary classrooms are often characterized by their creative features, such as the inclusion of a smart-board or a data-show

projector. The conventional classroom setting, characterized by a teacher delivering a standardized curriculum in person, and where traditional pen-and-paper assessments are conducted, is no longer the preferred choice. In our modern society, advanced digital technology, such as smartphones, iPads, and YouTube videos, plays a dominant role. These technologies are backed by highly advanced information and communication technology (ICT) applications, which are used in all aspects of life, with education being one of the most prominent areas. In response to this significant and widespread change in educational technology, educators, curriculum designers, and specialists in EFL pedagogy have recognized the urgent need for a corresponding transformation in teaching and assessment methods across all levels of education (Saed et al., 2021). The swift progress of technology in the past few years has sparked fresh ideas for educators, empowering them to utilize technology for teaching purposes. Concurrently with the growing focus on student involvement, digital technology has become a fundamental element of higher education, influencing every part of the student experience (Barak, 2018; Henderson, Selwyn, & Aston, 2017; Selwyn, 2016). The utilization of these technologies in education presents a multitude of novel concerns and obstacles: the possibility of algorithmic bias stemming from skewed training datasets, heightened surveillance and monitoring, erosion of privacy, and oversimplified approaches to comprehending students' learning, educational processes dynamics, and development. Conversely, it emphasizes the significance of inventive educational methods that include these factors and enhance the comprehension of data for both students and instructors, so empowering them (Harrison et al., 2020; Loftus & Madden, 2020). Utilizing technology in the classroom may enhance children's level of involvement in the learning process. Given the familiarity of young people with electronic devices, integrating them into education would surely help to stimulate their interest and increase their engagement. Incorporating technology into education offers students a captivating learning experience, enabling them to maintain higher interest in the subject matter without becoming diverted. The use of projectors, computers, and other advanced technological equipment in the classroom may enhance the students' learning experience by making it captivating and enjoyable. Enhancing

student learning may be achieved by implementing projects in the classroom that integrate electronic resources, spoken presentations, and group involvement, making the learning experience more dynamic and engaging. Participation might include more than just verbal communication (Gleason, 2018; Lopez-Fernandez, 2021). Digital technology in the classroom encompasses a range of applications and devices designed to assist students with specific accessibility requirements. Utilizing technology in the classroom is the most efficient method to decrease the amount of repetitive and time-consuming tasks that teachers must do. Implementing educational technology tools may significantly streamline and optimize routine tasks such as attendance tracking and performance monitoring, resulting in substantial time and energy savings. Students get instruction on the responsible and strategic use of technology, enabling them to make informed choices and cultivate self-discipline. Utilizing technology in education may assist students in developing the necessary skills and knowledge for continuous learning throughout their lives. These technologies provide pupils a simulated environment and the autonomy to acquire digital information based on their own learning preferences. Due to the availability of digital content generation technologies that personalize education, students have the ability to learn at their own speed (Haleem et al., 2022). Digital technologies are a potent tool that may enhance education in several ways, including facilitating the creation of instructional materials by instructors and offering novel approaches for individuals to learn and contribute. The advent of the Internet and its global connectivity has ushered in a new age, marked by the proliferation of intelligent gadgets interconnected via it. Therefore, it is the responsibility of instructional designers and educators to harness the full potential of sophisticated digital technology in order to transform education and make it accessible to all individuals, regardless of their location (Carvalho et al., 2022; Varea et al., 2022). The integration of technology in education significantly enhances student engagement and learning experiences while also presenting challenges such as privacy concerns and algorithmic bias. It is essential for educators to effectively leverage these digital tools to foster an inclusive and dynamic learning environment that prepares students for lifelong learning. This development has resulted in the widespread

incorporation of technology, notably smartphones, into language learning. These occurrences highlight the profound influence of technology on education and its increasing importance in the experiences of learners globally, particularly within English Education.

Recent studies in the area of improving speaking skills of junior high school students have focused on various strategies and methods to enhance their proficiency. Elsewhere, (Mistar, Zuhairi, and Umamah (2014)) have reported on the discovery of learning strategies for speaking skills, the frequency of their usage, and the variation in strategy use between successful and less successful learners. For instance, research has explored the effectiveness of using storytelling as a teaching strategy to improve students' speaking skills. Another study examined the impact of the show and tell method on the speaking skills of eighth-grade students, finding significant improvements in grammar, vocabulary, comprehension, fluency, and pronunciation. Additionally, the use of authentic assessment methods, such as oral performance, debate, interview, role play, discussion, and presentation, has been found to be valuable in measuring students' speaking skills. Effective classroom management and instruction on speaking are necessary to assist students' abilities to talk successfully in the speaking class. Speaking refers to the deliberate use of language to convey ideas or information in a manner that may be comprehended by others (Arini & Wahyudin, 2022). Speaking sessions aim to enhance pupils' ability to communicate effectively, including not just grammatical accuracy but also fluency. In Indonesia, where English is considered a foreign language, pupils may have difficulties when it comes to speaking English (Mandasari & Aminatun, 2020). Recognizing the significance of oral proficiency in a foreign language, particularly English, this article emphasizes the need for English learners to possess the ability to speak English with confidence and proficiency. However, in fact, many English learners have difficulties in communicating. Speaking difficulties refer to issues that hinder someone's ability to communicate effectively via speech. Riadil (2019) said that linguistic difficulties might have a detrimental impact on pupils' academic achievement. Students with poor speaking abilities sometimes struggle with deficiencies in vocabulary, grammar, and pronunciation, which are all linguistic challenges. These issues hinder

pupils from enhancing their oral communication skills. Another factor that affects students' speaking abilities is psychological issues, namely those linked to mental and physical well-being and self-efficacy. These issues may manifest as a lack of self-confidence, nervousness, and shyness while speaking English. Furthermore, speaking is the primary method of expressing viewpoints, inquiries, and other forms of expression to interact with others. Nevertheless, several pupils encounter various challenges when it comes to enhancing their speaking abilities. The common challenges encountered by students in enhancing their speaking skills include feelings of shyness and nervousness when speaking in front of the class, a lack of confidence in responding to the teacher's questions, anxiety when presenting something, and difficulty in using appropriate vocabulary and correct grammar while speaking. In addition, he contends that the approach often used by instructors to teach speaking skills in the classroom is often repetitive and seldom encourages pupils to actively participate in speaking. Nevertheless, the challenges encountered by students in their speaking abilities may be enhanced by the use of a novel teaching technique for speaking skills. The plan may be implemented by using technology advancements (Kristiani & Pradnyadewi, 2021).

Existing research has explored various methods to enhance speaking skills, such as storytelling, show-and-tell, and authentic assessments. However, there is a notable gap in integrating digital tools that provide real-time, personalized feedback. Current methods often lack the continuous, individualized practice necessary for significant improvement. For instance, storytelling and show-and-tell engage students but do not always offer detailed, actionable feedback. Similarly, while authentic assessments are valuable, they are not consistently combined with technology that facilitates immediate, interactive practice.

The "Ispeak" application addresses these gaps by leveraging advanced technology to offer a comprehensive solution for improving speaking skills. The application uses voice recognition technology to provide real-time feedback on various aspects of speaking, including pronunciation, grammar, and fluency. It includes practice modules such as role-playing and storytelling, which simulate real-life conversations, and features progress monitoring tools that allow students to track their improvement. Interactive elements, like quizzes

and peer engagement opportunities, make the learning experience more dynamic and enjoyable. Additionally, "Ispeak" incorporates cultural context insights to help students understand idiomatic expressions and cultural nuances.

However, these studies do not fully address the current empirical and theoretical aspects of the problem. The current state of research in this area is characterized by a lack of exploration into the specific challenges faced by junior high school students in developing effective speaking competencies, particularly in the context of technology-enhanced learning environments. There is a need for more research that integrates the use of digital tools and platforms, such as the Ispeak application, into speaking skill development strategies. This gap in the literature highlights the need for further investigation into the potential of technology to enhance speaking skills and bridge the gap between theoretical frameworks and practical applications in junior high school settings. The "Ispeak" application is a cutting-edge tool that aims to greatly improve pupils' speaking skills via the use of modern technology and interactive learning techniques. The software utilizes advanced voice recognition technology to precisely transcribe pupils' spoken words, offering instant feedback on pronunciation, grammar, and fluency. This instantaneous feedback assists students in refining their oral communication abilities, facilitating the correction of errors and enhancing their articulation.

The program provides a range of practice modules, such as role-playing situations and narrative activities, that replicate real-life conversations and allow students to enhance their ability to talk spontaneously. The progress monitoring capabilities let users to measure their advancement over time, providing valuable information on their pronunciation precision, fluency, and vocabulary use.

In order to maintain an interesting learning experience, "Ispeak" integrates interactive courses and quizzes, along with gamification components that enhance the enjoyment and motivation of practice. In addition, the application offers chances for peer engagement, allowing students to enhance their speaking skills by conversing with others, including those who are native speakers, in order to promote cooperative learning and gain practical experience.

Users may customize their learning experience based on their own competence levels and objectives. Additionally, offline access enables uninterrupted practice even without an internet connection. The application furthermore incorporates cultural context insights, aiding pupils in comprehending idiomatic phrases and cultural subtleties, which are essential for achieving proficiency in a new language. Ultimately, the ability to work well with other educational tools and platforms guarantees a smooth and uninterrupted learning experience, establishing "Ispeak" as a complete and efficient tool for enhancing speaking abilities.

By focusing on "Ispeak," this study seeks to contribute to the existing body of knowledge on improving speaking skills among junior high school students. The research will offer insights into how integrating advanced technology with practical speaking exercises can address the identified gaps in current methods, providing a theoretical and practical foundation for enhancing oral communication skills in educational settings.

II. METHODS

This research aims to provide a comprehensive understanding of the effectiveness of the "Ispeak" application in improving junior high school students' speaking competencies, considering both student and teacher perspectives, and to explore the factors influencing its success. This study utilizes qualitative methodologies, such as surveys, semi-structured interviews, and documentation, to assess the efficacy of the "Ispeak" application in improving the speaking abilities of junior high school pupils. The research focuses on junior high school pupils using the "Ispeak" program. Participants were selected from schools that were actively use the program. In order to collect extensive data, the study used three main methodologies: 1. Questionnaires: Questionnaires were created to gather information on the experiences of students and instructors using the "Ispeak" application. The surveys included of both closed and open-ended inquiries to evaluate several facets such as the usability of the program, perceived enhancements in speaking abilities, and general contentment. Prior to administration, the questionnaires underwent a pre-testing phase with a limited number of participants in order to enhance the clarity and relevance of the questions. The feedback obtained from this pre-test was used to modify the phrasing and

guarantee that the questions accurately reflected the participants' experiences. 2. Semi-Structured Interviews: We performed semi-structured interviews with students and instructors to get comprehensive understanding of their viewpoints on the efficacy of the application. The interview instructions were produced by extracting significant topics from the literature and preliminary research. These tips were also pre-tested to ensure that they generated comprehensive and pertinent replies. The interviews were conducted to investigate users' experiences with certain functionalities of the program, such as "Repeat" and "Listen and Repeat," and to collect feedback on how these functionalities affect their speaking abilities. 3. Documentation: The investigation included recording diverse actions by means of images and written notes. This documentation included an elaborate description of the study methodology and the way participants engaged with the application, as recommended by Sugiyono (2014).

The data analysis process, as outlined by Miles, Huberman, and Saldana (2014), encompassed the gathering of data through interviews and questionnaires, followed by data reduction, the presentation of relevant data in a descriptive manner, and the drawing of conclusions. These steps were guided by criteria such as relevance, frequency of recurring themes, and the depth of insight. The study sought to evaluate the efficacy of the "Ispeak" application in enhancing the oral communication skills of junior high school pupils. The strategies used consisted of pre-testing, triangulation, and member verification. The ethical issues were obtaining informed permission, ensuring anonymization, and ensuring voluntary involvement. The research sought to ascertain the characteristics that contribute to the success of the application and suggest areas where enhancements might be made.

III. RESULT AND DISCUSSION

Prior to conducting interviews, a pre-interview questionnaire was distributed to 26 participants in a classroom setting to gauge their use and perceptions of the Ispeak application. Subsequently, individuals were selected for interviews based on their responses to the questionnaire, ensuring a diverse representation of user experiences and perspectives.

The study investigated the efficacy of the Ispeak application in enhancing English speaking skills among users. Four participants provided insights into their experiences with the application.

"I like all aspects of this program, as it allows me to use my time more efficiently for productive purposes, regardless of my location or the availability of a high-speed network."
Respondent 1 highlighted the versatility of Ispeak, using it up to twice daily outside school hours. She particularly favored the "Repeat miss" feature for improving pronunciation accuracy, emphasizing its offline usability and flexibility.

"I like this program due to its lightweight nature, little memory and storage use, as well as its user-friendly and comprehensible interface."
Similarly, respondent 2 acknowledged Ispeak's contribution to her English proficiency, using it once daily and occasionally twice during weekends. She appreciated the lightweight design and minimal data consumption, attributing her increased confidence in speaking to the application's interactive "Repeat miss" feature.

"I am not fond of the quiz component in this program since I often make errors due to seeing all the options as accurate. However, I acknowledge that it provides an opportunity for me to enhance my knowledge"
Respondent 3 shared his preference for Ispeak's listening and repetition feature, utilizing it daily to practice English speech. Despite finding the quiz section challenging due to its subjective nature, he noted the application's user-friendly interface and swift loading times.

"As an application, I can conveniently use it at any location and time by just adhering to the directions and learning from it. Whenever I feel bored, I will engage with this program to enhance my proficiency in speaking English accurately."
Respondent 4 found Ispeak beneficial for learning new vocabulary and pronunciation through its "Repeat" and quiz features. She integrated the application into her daily routine, using it one to two times per day depending on her schedule. Intan praised Ispeak for its accessibility and ease of use, catering well to beginners in English language learning.

Overall, the Ispeak application demonstrated a positive impact on participants' English speaking skills. Its emphasis on

repetition, pronunciation correction, and vocabulary acquisition facilitated incremental improvements in speaking fluency and confidence among users. Participants appreciated its user-friendly interface, offline accessibility, and data-efficient operation, highlighting Ispeak as a valuable tool in enhancing English language proficiency.

Evaluation of students' progress is done by comparing their voice recordings over time. The interviewees observe improvements in students' pronunciation, clarity, and fluency through the recordings, and this evaluation is done periodically, usually once a week. This method allows for accurate monitoring of students' progress and timely feedback. During the use of the ISpeak app, several challenges were faced, including ensuring that all students felt comfortable using the technology and received appropriate feedback. To overcome these challenges, the interviewees provided additional time for practice and provided technical support to students who were having difficulties. This approach helped students adapt to the technology and maximize the benefits of the app.

Interviewees also considered the ISpeak app to be more effective than traditional English learning methods. The app offers immediate feedback and exercises that can be personalized according to each student's needs. The use of this technology makes the learning process more interesting for students, especially those who grow up in the digital era, thus accelerating their learning process. As teachers, resource persons play an important role in supporting the use of the ISpeak application outside of class hours. Resource persons provide additional feedback, provide additional practice resources, and motivate students to use the application regularly outside of class. This support is important to ensure that students can fully utilize the potential of the ISpeak application in learning English.

Overall, the ISpeak application has proven to be effective in improving students' English speaking skills, despite some challenges in its implementation. The main benefits of this application include direct feedback and personalized practice. Additional support from teachers is also a key factor in ensuring the effectiveness of this application in learning.

Interviews with four Ispeak users revealed both consistency and variation in their use and experiences with the app. While each individual had slightly different preferences and experiences, several common themes emerged from their responses. All interviewees expressed interest in certain features of the Ispeak app. Participant 1 and partispan 2 liked the Repeat feature, which allows them to listen and repeat the pronunciation of English words. Meanwhile, partisipan 3 liked Repeat and Quiz, as both helped expand her vocabulary and improve her pronunciation. Satria Darma also mentioned the listen and repeat feature as his favorite, as it allowed him to practice as much as possible without having to ask anyone else.

The frequency of use of the app varied among users. Participant 1 and participant 3 used it between 1 and 2 times a day, depending on whether it was a weekday or a weekend. Participant 2 used the app once a day, but increased her frequency on weekends. Participant 4 used the app once a day. This variation suggests that each user's needs and time of day can influence the frequency of use of the app. Users generally praised the ease of use of the Ispeak app. Participant 1 and 2 appreciated the application because it was lightweight and did not require a lot of memory or quota. Intan also liked the ease of use of the application which was friendly for beginners like her. Satria said that the application was very easy to use and had a fast loading time. These advantages indicate that the application is well designed to meet the needs of various levels of users.

The interviews conducted with students from SMP S Bhayangkari 3 Rantauprapat consistently demonstrate a good influence of the "Ispeak" program on their proficiency in spoken English. Among all participants, "Ispeak" receives acclaim for its intuitive characteristics, including the Repeat feature and interactive quizzes, which facilitate the improvement of pronunciation and vocabulary. Students like the app's versatility, as it enables them to engage in English speaking practice at any time and in any location, therefore enhancing their learning experience. Although there are some small individual preferences, such as the difficulties with quizzes stated by one student, there is a general consensus on the app's efficacy in enhancing their speaking abilities. The capacity to get prompt feedback and engage in self-directed practice plays a crucial role in their development. Students have indicated a notable improvement in their speaking skills, a more comprehensive understanding of vocabulary, and a general advancement in pronunciation and fluency. Essentially, "Ispeak" functions as a beneficial instrument for kids, augmenting their

classroom education and offering a customized and easily accessible method to improve their English speaking abilities. The favorable response from users highlights its efficacy as a valuable instructional tool, aiding students in attaining higher levels of skill and self-assurance in their English language ability.

Although generally satisfied with the application, some users identified areas for improvement. Satria expressed dissatisfaction with the quiz feature, which often confused him because he felt that all answers could be considered correct. However, he saw this shortcoming as an opportunity to learn more. Most users, such as Nabila, Hafni, and Intan, did not find any significant shortcomings in the application.

All users agreed that the Ispeak application had helped them improve their English speaking skills. Participant 1 and 2 felt that the application had helped them understand vocabulary and pronunciation better, while participant 3 and 4 felt that the application had provided useful feedback to correct their mistakes. Regular use of the application allowed them to hone their speaking skills and increase their confidence in speaking English.

The "Ispeak" application has been widely praised for its usability and features, particularly its "Repeat miss," "Repeat," and interactive quizzes. Participants found the app user-friendly, with a lightweight design that does not require substantial memory or data. The "Repeat miss" feature was noted for its effectiveness in improving speaking skills, as it allowed users to practice pronunciation with real-time feedback, contributing significantly to their progress.

Interactive components of the application were appreciated for their role in vocabulary acquisition and pronunciation practice. However, there were mixed feelings about the quiz feature, with respondents 3 and Satria Darma expressing challenges with the subjective nature of the questions. Despite these issues, participants acknowledged that the quizzes provided valuable learning opportunities.

Users generally reported high satisfaction with the Ispeak application, valuing its flexibility, accessibility, and ability to practice English speaking skills independently. They praised the app for its practicality and positive impact on their English speaking skills, reporting increased confidence and better pronunciation as key outcomes. However, some challenges were noted, particularly with the quiz feature.

Respondents 3 and Satria Darma suggested that clearer options and more objective questions could improve the quiz experience. Compared to traditional English learning methods, the Ispeak application offered several advantages, such as immediate feedback through voice recognition technology, personalized practice, and the ability to adapt to each student's proficiency level.

Several challenges were identified during the study, particularly related to the quiz feature. The subjective nature of some questions led to confusion and difficulty for users. Future updates could focus on improving the quiz component by providing more objective questions and clearer answer choices. Potential solutions for the quiz feature include incorporating more structured and objective quizzes, offering detailed explanations for each question, and providing additional support from teachers and resource persons. Overall, the Ispeak application has proven to be an effective tool for enhancing English speaking skills among junior high school students. Further research and development can address existing challenges and enhance the application's effectiveness in supporting language learners.

The Ispeak application has proven to be a useful tool in improving English speaking skills, both from the perspective of users and teachers. Features such as Repeat and Quiz support speaking practice, while regular assessments and teacher support ensure that progress can be monitored and improved. While there are some challenges in using technology, the app offers significant advantages over traditional learning methods, especially in providing immediate feedback and exercises that can be tailored to each student's needs.

IV. CONCLUSION

The Ispeak application has proven to be a useful tool in improving English speaking skills, both from the perspective of users and teachers. According to interviews conducted with students and instructors, the "Ispeak" program has shown to be successful in enhancing English speaking abilities. Students used the program on a daily basis, often between one and two times per day. They specifically highlighted the advantages of the "Repeat" and "Listen and Repeat" functions, which enabled them to engage in self-directed practice and improve their pronunciation. Evidence suggests that these characteristics had a role in significant enhancements in pupils' enunciation and fluidity. Teachers saw considerable improvements in students' speaking

abilities, including improved articulation and enhanced fluency, as shown by the comparison of voice recordings over a period of time. Nevertheless, some constraints were recognized. For instance, students had occasional confusion with the quiz function, as many answers seemed to be accurate but were erroneously marked as wrong. This criticism emphasizes the need for improvements in the quiz function to augment clarity and precision.

Not with standing these obstacles, "Ispeak" has shown its worth as an invaluable instructional instrument. The accessibility and practicality of this application are enhanced by its lightweight design, little data use, and user-friendly interface. The program excels in providing real-time feedback, allowing for customized learning paths, and offering interactive practice modules. These features work together to provide a personalized and captivating learning experience.

Potential future investigations might delve into methods for enhancing the quiz functionality and broadening the application's range to include more sophisticated language proficiencies. Furthermore, doing research on the application's efficacy in other educational environments might provide further knowledge on its wider suitability.

Overall, "Ispeak" makes a substantial contribution to enhancing students' speaking abilities via its efficient, adaptable, and cost-effective learning options. The possibility of integrating technology into educational practices, with the support of teacher involvement and frequent student usage, highlights its capacity to be a transformational instrument in language acquisition.

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