

Students' Perspectives on Using Natural Reader to Support TOEFL Listening Practice: An Experience-Based Study

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ARTICLE INFO	ABSTRACT
Keywords: Artificial Intelligence (AI), listening, Natural Reader, TOEFL DOI: http://dx.doi.org/10.22437/langue.v4i1.48095 Received: August 30, 2025 Reviewed: January 28, 2026 Accepted: June 4, 2026	<i>This research describes students' perspectives and experiences in using Natural Reader to support learning TOEFL listening practice. This research uses a descriptive qualitative method. Students generally have a good understanding of how to use Natural Reader for TOEFL listening practice, appreciating its key features like adjustable speed, voice options, and offline use. While feedback on its features is mostly positive, some find certain functions less effective or challenging, and there are concerns about the AI voice's naturalness and the limitations of the free version. Natural Reader is viewed as helpful for improving listening skills, boosting confidence, aiding vocabulary, and maintaining focus, though some question its effectiveness with more complex listening tasks. The tool is praised for clear audio, flexibility, and user-friendliness, with many motivated to continue using it and recommending it for TOEFL preparation. However, drawbacks include a monotonous voice, potential boredom with prolonged use, technical issues, and a preference among some students for original audio or teacher guidance. Overall, Natural Reader positively influences motivation and confidence, reduces anxiety, and is seen as suitable for both self-study and classroom use, though some learners still prefer alternative materials. Several studies have explored the use of Text-to-Speech (TTS) technology to enhance English listening skills. Overall, these studies confirm the growing effectiveness and versatility of TTS in listening comprehension development.</i>

1. Introduction

The Test of English as a Foreign Language (TOEFL) is a widely recognized standardized test designed to measure English language proficiency among non-native speakers. It assesses four key language skills: reading, listening, speaking, and writing. TOEFL is particularly significant for students seeking admission to universities in English-speaking countries, as it serves as a reliable indicator of their ability to understand and communicate effectively in academic settings.

Listening is a crucial component of the TOEFL test, as it evaluates a test taker's ability to comprehend spoken English in academic contexts. The listening comprehension section aims to test our abilities to understand spoken language (Lasi & Bouk, 2022). The listening section includes conversations, discussions, and lectures that simulate real-life academic scenarios. To excel in this section, students must develop strong listening comprehension skills, such as identifying main ideas, understanding key details, recognizing the speaker's purpose, and interpreting tone and attitude.

The listening section is divided into three parts: Part A, Part B, and Part C, each targeting different types of listening comprehension skills. The listening section includes conversations,

discussions, and lectures that simulate real-life academic scenarios. In Part A, test takers listen to short conversations between two speakers and answer questions based on the content. This part assesses the ability to understand everyday conversations and grasp key information, such as main ideas and specific details. Part B involves longer conversations or discussions, often between two or more speakers. The conversations in this section typically reflect more academic or campus-related situations, requiring test takers to identify main ideas, understand implied meanings, and recognize the speaker's intentions. Part C consists of academic lectures or talks, which are generally more complex and structured than the conversations in the previous sections. Test takers must demonstrate their ability to comprehend academic content, follow the flow of information, and identify supporting details, examples, and overall themes.

To effectively prepare for the listening section of the TOEFL test, students can utilize various applications and websites that provide targeted listening practice. These platforms offer a wide range of listening exercises, including sample conversations, academic lectures, and interactive quizzes designed to simulate TOEFL listening tasks. Applications like Natural Reader, for example, allow students to convert written text into spoken audio, offering a practical tool for improving listening skills. By adjusting the audio speed, selecting different voices, and practicing with diverse materials, learners can familiarize themselves with different accents and speaking styles commonly encountered in the TOEFL listening section. Additionally, other online resources such as TOEFL practice websites, YouTube channels, and language learning apps provide extensive audio content tailored to TOEFL standards. These resources not only help students practice comprehending spoken English but also expose them to academic vocabulary and contextual language use. By incorporating such tools into their study routines, students can effectively enhance their listening comprehension and overall performance in the TOEFL test.

Given the importance of listening proficiency in TOEFL, various tools and resources have been developed to support students in practicing and enhancing their listening skills. The TOEFL Listening section requires test-takers to effectively understand spoken English in academic settings, making it essential for learners to engage in targeted listening practice. Listening plays a crucial role as the primary source of auditory input in language learning. The origin of speech used in listening materials can influence students' comprehension outcomes (Andriani et al., 2020). However, accessing authentic listening materials and opportunities to practice with native speakers may not always be feasible for all students, especially those in non-English-speaking environments.

AI-powered learning tools have reshaped the landscape of language learning, particularly in preparing for standardized tests such as the TOEFL. The progress of modern technology has led to breakthroughs in education, with one of the most advanced being AI-driven Text-to-Speech (TTS) systems, which transform written text into clear and natural-sounding speech. This innovation provides an effective solution to the challenges learners face in acquiring listening skills (Yuliani & Sopian, 2025). Text-to-speech (TTS) AI is a technology that converts written text into spoken words using artificial intelligence (AI).

Text-to-speech is a web-based tool that has the potential to improve English as a Second Language (ESL) learners' spoken production (James, 2016). A Text-to-Speech (TTS) system is a technology that automatically transforms written text into spoken words by converting the text into phonemes, which are then arranged to produce speech (Fitria, 2021). Text-to-speech software is a popular tool for consuming information for school, work, and recreation (Kiamanesh et al., 2023). Text-to-speech (TTS) AI is an artificial intelligence-based technology that converts written text into speech automatically. This technology allows computers or digital devices to read text aloud using human-like voices. It is widely used in education, accessibility tools, and language learning. TTS AI is used in various fields, including education, customer service, and accessibility for individuals with disabilities. In English language

learning, TTS AI is particularly useful for improving students' listening and pronunciation skills.

Fitria (2024) describes the use of Text-to-Speech technology, specifically iSpeech, for developing English listening materials. Users can access iSpeech at <https://www.ispeech.org/text.to.speech> to convert written text into audio by selecting voice gender and accent (British or American English). The text is read aloud with highlighted words, and the resulting audio can be downloaded in various formats. This Text-to-Speech technology allows teachers to create customized listening materials with adjustable speed and intonation, providing flexible resources for English learning.

One of the technological tools, like Natural Reader, has gained popularity as a supplementary resource for language learners. Natural Reader is a text-to-speech application that converts written texts into spoken words, allowing users to practice listening by hearing content in English. The application offers various voice options, adjustable speed settings, and the ability to read different types of texts, including academic materials. Natural Reader allows users to input text, such as words, sentences, or full documents, and then listen to the text read aloud by a computer-generated voice. It offers different voice options (male/female) and various English accents (e.g., American, British). This tool can help students improve their listening and pronunciation skills, especially in English language learning and TOEFL preparation. Natural Reader is available both as a web-based and mobile application, and it provides both free and premium versions depending on the user's needs. These features make it a potentially valuable tool for enhancing listening skills and preparing for the TOEFL Listening section.

Natural Reader is a text-to-speech application that converts written text into spoken audio. By providing a range of voice options, adjustable speed settings, and the ability to highlight text as it is read aloud, Natural Reader offers an accessible and flexible platform for TOEFL listening practice. Reader stands out as a widely accessible text-to-speech application that converts written text into spoken words, offering learners a unique opportunity to practice listening skills using customizable audio content. Given that listening comprehension is a crucial component of the TOEFL test, tools like Natural Reader can serve as valuable resources for students seeking to enhance their listening proficiency in a self-paced, flexible manner. In summary, Natural Reader demonstrates how TTS AI can be effectively used to support education by turning written language into spoken language.

There are several studies related to the use of text-to-speech (TTS) in language teaching. James (2016) investigated the effectiveness of a web-based text-to-speech (TTS) tool in enhancing pronunciation skills among reluctant young speakers and shifting their attitudes toward error correction. In the first phase, students created dialogue scripts and used the TTS tool (<http://www.ivona.com>) to hear the correct pronunciation. In the second phase, the same method was applied with a more engaging, playful approach. The findings indicated that the TTS tool helped improve pronunciation by providing access to natural, conversational language. Additionally, it fostered a more positive attitude toward error correction by offering a self-paced, non-threatening learning environment. Tjandra et al. (2017) developed a closed-loop speech chain model that integrates Automatic Speech Recognition (ASR) and Text-to-Speech (TTS) synthesis using deep learning, inspired by the human speech communication process, which involves continuous auditory feedback. The study found that the proposed closed-loop architecture—where ASR and TTS systems learn from both labeled and unlabeled data—significantly improved performance compared to models trained only on labeled data. This approach represents the first deep learning model that mimics the interdependent nature of human speech perception and production. Amin (2022) improved the reading fluency and comprehension of EFL college students by incorporating repeated reading (RR) and listening-while-reading (LWR) activities using free Text-to-Speech (TTS) applications. The results

showed significant improvements in students' reading fluency and comprehension after the treatment. The study concluded that using RR and LWR activities through TTS apps effectively supports reading skills development in higher education students and recommended integrating TTS technology into reading instruction. Fitria (2022) promotes the integration of Natural Reader, a Text-to-Speech (TTS) tool, in teaching English pronunciation. Her research outlines how to utilize the Natural Reader application effectively. The steps for teaching pronunciation using the Natural Reader application include selecting vocabulary that is difficult to pronounce, inputting it into the app, adjusting voice settings (such as speaker type, volume, and speed), and playing the audio. Students listen to the correct pronunciation and then practice repeating it to improve their fluency and confidence in speaking English. Ibelings et al. (2022) determine whether using a Text-To-Speech (TTS) system could reduce the time and cost involved in developing speech-recognition tests, while still producing results comparable to those obtained with natural speech in terms of speech recognition performance and listening effort. The results showed that synthetic speech generated by the TTS system led to an improvement in speech-recognition thresholds (SRT) by about 1.2 dB compared to natural speech, with similar slopes and response times across speakers, indicating no difference in listening effort. The study concluded that TTS technology can significantly reduce the development time and effort for speech-recognition tests without compromising test quality, enabling the creation of extensive new speech test materials. Al-Jarf (2022) investigates the impact of using Text-to-Speech (TTS) software (NaturalReader) on improving freshman students' decoding skills, reading fluency, and pronunciation accuracy in Vocabulary I and Reading I courses. While both the experimental and control groups received identical classroom instruction, only the experimental group used NaturalReader to practice listening and oral reading outside class. Post-test results showed that the experimental group significantly improved in decoding skills, oral reading fluency, and pronunciation accuracy, though no significant improvement was observed in vocabulary knowledge. Progress was especially notable after 8 and 12 weeks, with a positive correlation between practice time and skill development. Students also expressed favorable attitudes toward using NaturalReader for pronunciation and decoding practice. Fauzan (2023) examines the impact of Text-to-Speech (TTS) technology on improving pronunciation mastery, specifically vowel, consonant, and diphthong sounds, among tenth-grade students at MAN 2 Bandar Lampung. The study found that TTS, by providing accurate pronunciation of difficult words, significantly enhanced students' pronunciation skills compared to those using a traditional English dictionary. Statistical analysis showed a significant difference between the groups, confirming that TTS effectively helps students overcome pronunciation challenges and boosts their confidence and accuracy in speaking English. Kiamanesh et al. (2023) explored two factors related to text-to-speech (TTS) information exposure: the mode of presentation (audio, text, or both) and the type of accent used. In the first experiment, participants were given content in either text-only, audio-only, or combined formats. Those who studied the text-only version performed significantly better on comprehension tests and had higher confidence in their scores compared to the audio-only group. The second experiment exposed participants to TTS audio with different accents—U.S. English, Mandarin Chinese, and Italian—but found that accent had no significant effect on information retention or participants' performance expectations. These results raise doubts about the assumption that using TTS software provides an easier way to retain information. Amin (2024) explores students' perceptions of using Artificial Intelligence-powered Text-to-Speech (AI TTS) applications for learning English pronunciation. The research was grounded in the extended Unified Theory of Acceptance and Use of Technology (UTAUT2). To ensure familiarity with AI TTS tools, participants took part in five sessions that focused on practicing both segmental and suprasegmental features of pronunciation using a TTS app. A mixed-methods design was adopted, combining a questionnaire to assess learners' perceptions and interviews to gain deeper insights into their

experiences. The findings revealed that students viewed AI TTS apps favorably for pronunciation learning. Based on these positive educational outcomes, it is recommended that AI TTS tools be integrated into pronunciation instruction both inside and outside the classroom. Yuliani & Sopian (2025) explore the potential benefits, existing obstacles, and strategic approaches to incorporating AI-based TTS into Arabic language instruction, with a focus on improving *maharah istima'*. A qualitative research methodology was employed, using library research techniques. Data was gathered from current and relevant academic sources, including journals, books, conference proceedings, and research publications. Thematic analysis was used to interpret the data. Results indicate that AI-based TTS can significantly enhance Arabic listening skill development by increasing accessibility and adaptability. However, there are still challenges, particularly in areas like prosody, regional dialects, and tajwid application.

Previous studies on TTS tools—such as those by James, Amin (2022), Fauzan, Fitria, and Al-Jarf—have primarily focused on improving pronunciation, reading fluency, decoding skills, and building learners' confidence in speaking, particularly through the use of applications like NaturalReader. However, there is a noticeable lack of research that specifically addresses listening comprehension, especially in the context of TOEFL listening practice, which demands higher-order cognitive skills such as inference, summarizing, identifying main ideas, and note-taking. Additionally, while a few studies (e.g., Amin 2024) have examined students' perceptions of AI-powered TTS tools, most of them are centered on pronunciation, with limited exploration into students' qualitative, experience-based perspectives—especially regarding how learners interact with, benefit from, or encounter challenges when using NaturalReader for TOEFL preparation. Furthermore, the TOEFL context itself remains under-explored despite being a high-stakes, academic listening assessment that differs significantly from general English listening tasks. Existing studies tend to employ experimental or mixed-methods approaches focusing on measurable outcomes such as test scores, but there is currently no in-depth qualitative descriptive research that captures the lived experiences and opinions of students using NaturalReader as a tool to support TOEFL listening practice.

This study presents a novel contribution as the first qualitative descriptive research that specifically explores students' experiences and perceptions of using NaturalReader for TOEFL listening preparation, rather than for general language learning purposes. Unlike previous studies that primarily emphasize pronunciation and reading fluency, this research expands the application of TTS technology by focusing on its role in supporting strategic, test-oriented listening comprehension skills required in TOEFL tasks. By capturing students' lived experiences and authentic voices, the study provides deeper, experience-based insights into how TTS tools are practically used and perceived in self-directed TOEFL listening practice. Furthermore, although some researchers like Fitria (2022) and Al-Jarf (2022) have integrated NaturalReader into English instruction, their focus has been limited to pronunciation, without addressing its potential in the academic listening context or standardized test preparation, such as TOEFL. This makes the current study a timely and original contribution to the growing field of TTS-assisted language learning. Therefore, the present study aims to address these gaps by exploring students' experiences and perspectives on using Natural Reader as a supplementary tool for TOEFL listening practice. By examining both the perceived benefits and challenges, this study seeks to contribute to the growing body of research on AI-assisted language learning and inform educators and learners about the practical implications of incorporating text-to-speech technology in listening practice.

2. Method

This study employs qualitative descriptive research to explore students' perspectives on the use of Natural Reader in supporting TOEFL listening practice. Qualitative descriptive research aims to provide a clear, straightforward description of a phenomenon based on participants' experiences, without deep interpretation or complex theory (Fitria, 2024). The qualitative descriptive approach is appropriate as it provides a comprehensive summary of participants' experiences and opinions in their natural context. This method allows the researcher to capture detailed insights regarding how students perceive the effectiveness of Natural Reader for enhancing listening skills in TOEFL preparation.

The participants of this study consist of 26 students from the Informatics Department who are currently studying the TOEFL course in their 4th semester. Data obtained from the Google Forms responses are analyzed using both quantitative and qualitative approaches. Quantitative data are analyzed by calculating the percentage of each response category (Strongly Agree, Agree, Disagree, Strongly Disagree) for each statement. This analysis will provide a numerical overview of students' perceptions regarding the use of Natural Reader in TOEFL listening practice. Additionally, qualitative data, including open-ended responses and document analysis, are analyzed thematically to identify common themes, patterns, and insights regarding students' experiences, challenges, and perceived benefits of using Natural Reader for TOEFL listening practice. Data are analyzed using a simple descriptive statistical analysis to quantify the levels of agreement or disagreement with each statement. The responses will be presented in the form of percentages to provide a clear depiction of overall trends in students' perceptions. Furthermore, thematic analysis is conducted to identify recurring themes and patterns in the qualitative data, focusing on students' experiences, challenges, and perceived benefits of using Natural Reader for TOEFL listening practice. Additionally, the researcher uses documentation. Document data collection involves gathering data by accessing and analyzing relevant written or recorded materials, such as reports, letters, articles, photos, and videos related to the research topic (Fitria, 2023a). Relevant documents such as books, national and international journals, and prior research studies are used and reviewed to provide context and support the findings. These documents specifically focus on the use of digital tools for listening practice, TOEFL preparation, and educational technology in language learning.

3. Findings and Discussion

Findings

A. Knowledge About the Natural Reader for TOEFL Listening

Table 1. Knowledge About the Natural Reader for TOEFL Listening

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I know that Natural Reader AI can be used to practice TOEFL listening.	7 (26.9 %)	19 (73.1 %)	0 (0 %)	0 (0 %)
2.	I understand how Natural Reader works in converting text to audio for listening practice.	5 (19.2 %)	21 (80.8 %)	0 (0 %)	0 (0 %)
3.	I know that Natural Reader AI has a feature to adjust the audio speed.	7 (26.9 %)	17 (65.4 %)	2 (7.7 %)	0 (0 %)
4.	I know that Natural Reader AI offers various voice options (e.g., male/female, accents).	7 (26.9 %)	18 (69.2 %)	0 (0 %)	1 (3.8 %)
5.	I know that Natural Reader AI can be used to read various materials, such as articles and academic texts.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
6.	I am aware that Natural Reader can help improve my understanding of TOEFL listening texts.	6 (23.1 %)	17 (65.4 %)	3 (11.5 %)	0 (0 %)
7.	I know that Natural Reader AI can be used without an internet connection after downloading the app.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
8.	I know that Natural Reader AI has various accents that can be selected for TOEFL listening practice.	7 (26.9 %)	18 (69.2 %)	0 (0 %)	1 (3.8 %)
9.	I know that Natural Reader AI can help me practice listening to materials at adjustable speeds.	4 (15.4 %)	18 (69.2 %)	4 (15.4 %)	0 (0 %)
10.	I am aware that Natural Reader AI is not only limited to TOEFL listening practice but can also be used for various other English practice activities.	5 (19.2 %)	18 (69.2 %)	3 (11.5 %)	0 (0 %)

Table 1 shows that the respondents demonstrate a relatively high level of knowledge about the use of Natural Reader AI for TOEFL listening practice. The majority of students are aware that Natural Reader can be used to practice TOEFL listening (73.1% agree, 26.9% strongly agree), understand how the application works in converting text to audio (80.8% agree, 19.2% strongly agree), and know about the adjustable audio speed feature (65.4% agree, 26.9% strongly agree, 7.7% disagree). Furthermore, 69.2% of students agree that Natural Reader offers various voice options, while 26.9% strongly agree. Awareness that Natural Reader can read different materials, such as academic texts, is also relatively high, with 65.4% agreeing and 19.2% strongly agreeing. However, 15.4% disagree, indicating a slight gap in knowledge regarding this feature. Regarding the impact of Natural Reader on understanding TOEFL listening texts, 65.4% agree, and 23.1% strongly agree, showing a positive perception. Similarly, 65.4% are aware that Natural Reader can be used offline after downloading, while 15.4% disagree. Awareness of the variety of accents is relatively strong, with 69.2% agreeing and 26.9% strongly agreeing, though 3.8% strongly disagree. Moreover, 69.2% agree that Natural Reader can help practice listening at adjustable speeds, but 15.4% disagree, indicating that some students may not fully understand this function. Finally, 69.2% agree that Natural Reader is versatile and can be used for other English practice activities beyond TOEFL listening, with 19.2% strongly agreeing and 11.5% disagreeing.

B. Opinions About Natural Reader Features for TOEFL Listening Practice

Table 2. Opinions About Natural Reader Features for TOEFL Listening Practice

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	The audio produced by Natural Reader is easy to understand, especially with every word pronounced.	6 (23.1 %)	16 (61.5 %)	1 (3.8 %)	3 (11.5 %)
2.	I feel helped by the various voice options (gender and accent) in Natural Reader.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
3.	The speed adjustment feature in Natural Reader helps me adjust the difficulty level of listening.	7 (26.9 %)	14 (53.8 %)	5 (19.2 %)	0 (0 %)

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
4.	Accent options (e.g., British, American, etc.) in Natural Reader allow me to practice with voice variations.	7 (26.9 %)	16 (61.5 %)	3 (11.5 %)	0 (0 %)
5.	The highlight or text-marking feature in Natural Reader helps me follow the listening material more easily.	7 (26.9 %)	14 (53.8 %)	5 (19.2 %)	0 (0 %)
6.	The clear and natural voice feature of Natural Reader helps me understand intonation and pronunciation in TOEFL listening. The voice produced by Natural Reader sounds natural and close to a real human voice.	6 (23.1 %)	15 (57.7 %)	5 (19.2 %)	0 (0 %)
7.	The audio save feature does not allow me to save materials in more flexible formats like MP3 or WAV, which I need for practice on other devices.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
8.	I feel that the free version of Natural Reader has limitations that affect the effectiveness of TOEFL listening practice.	5 (19.2 %)	20 (76.9 %)	1 (3.8 %)	0 (0 %)
9.	The free version of Natural Reader has limitations in selecting voice accents for TOEFL listening practice.	6 (23.1 %)	19 (73.1 %)	1 (3.8 %)	0 (0 %)
10.	The free version of the Natural Reader app does not provide enough voice options for TOEFL listening practice.	4 (15.4 %)	19 (73.1 %)	3 (11.5 %)	0 (0 %)
11.	I find it difficult to understand the AI voice because it sounds less natural.	6 (23.1 %)	16 (61.5 %)	4 (15.4 %)	0 (0 %)
12.	I experience technical difficulties when using the app, such as errors or unresponsiveness.	3 (11.5 %)	20 (76.9 %)	3 (11.5 %)	0 (0 %)
13.	I find it difficult to use all the features due to a lack of guidance or instructions.	3 (11.5 %)	20 (76.9 %)	2 (7.7 %)	1 (3.8 %)
14.	I do not have full access to the features I need due to being limited to the free version.	6 (23.1 %)	18 (69.2 %)	2 (7.7 %)	0 (0 %)
15.	I feel that Natural Reader is less suitable for practicing TOEFL listening questions that involve conversations or complex dialogues.	6 (23.1 %)	15 (57.7 %)	5 (19.2 %)	0 (0 %)

Table 2 shows that the responses reveal mixed but generally positive opinions about the features of Natural Reader for practicing TOEFL listening. A majority of students find the audio produced by Natural Reader to be understandable, with 61.5% agreeing and 23.1% strongly agreeing, although 11.5% strongly disagree. The variety of voice options (gender and accent) is considered helpful by 65.4% of respondents, while 19.2% strongly agree and 15.4% disagree. The speed adjustment feature is also viewed as beneficial by 53.8% of respondents, with 26.9% strongly agreeing, though 19.2% disagree, indicating that some may find it less effective or challenging to use. Accent options for voice variations receive a favorable response, with 61.5% agreeing and 26.9% strongly agreeing. Additionally, the text-marking/highlight feature is perceived as helpful by 53.8%, with 26.9% strongly agreeing, while 19.2% disagree. However, some students express concerns about the clarity and naturalness of the AI voice, with 23.1% strongly agreeing and 61.5% agreeing that it is

less natural than a real human voice. Additionally, 19.2% feel that the voice does not sound sufficiently natural, potentially impacting listening comprehension.

Several limitations of the free version are highlighted, particularly in terms of voice options and format flexibility. For instance, 73.1% agree that the free version has limited voice accents, and 65.4% agree that it lacks sufficient format flexibility for saving audio materials in formats like MP3 or WAV. Additionally, 23.1% strongly agree that they do not have full access to necessary features due to the free version's limitations. Technical difficulties are also reported, with 76.9% agreeing and 11.5% strongly agreeing that they encounter technical issues, such as app errors or unresponsiveness. Similarly, 76.9% agree that they face difficulties in using all features due to insufficient guidance or instructions. Moreover, 57.7% agree, and 23.1% strongly agree, that Natural Reader may not be suitable for practicing TOEFL listening questions involving complex dialogues or conversations, highlighting a potential drawback in its application for more advanced TOEFL listening practice.

C. Impact of Using Natural Reader on Listening Ability

Table 3. Impact of Using Natural Reader on Listening Ability

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	Natural Reader helps me better understand English reading materials.	5 (19.2 %)	17 (65.4 %)	1 (3.8 %)	3 (11.5 %)
2.	I feel more confident in facing TOEFL listening questions after using Natural Reader.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
3.	Natural Reader helps me understand academic vocabulary in TOEFL listening.	5 (19.2 %)	17 (65.4 %)	1 (3.8 %)	3 (11.5 %)
4.	I prefer using Natural Reader over other listening practice methods.	6 (23.1 %)	19 (73.1 %)	1 (3.8 %)	0 (0 %)
5.	Natural Reader helps me practice identifying the main ideas from audio texts.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
6.	Practice with Natural Reader makes me more focused when listening to English materials.	6 (23.1 %)	16 (61.5 %)	4 (15.4 %)	0 (0 %)
7.	I feel that Natural Reader is suitable for practicing TOEFL Listening questions.	6 (23.1 %)	19 (73.1 %)	1 (3.8 %)	0 (0 %)
8.	I feel that Natural Reader helps me understand sentence structures in spoken English.	4 (15.4 %)	17 (65.4 %)	5 (19.2 %)	0 (0 %)
9.	Natural Reader makes me more familiar with the vocabulary that frequently appears in TOEFL Listening.	4 (15.4 %)	18 (69.2 %)	4 (15.4 %)	0 (0 %)
10.	I find it easier to grasp information when listening to texts from Natural Reader compared to reading.	4 (15.4 %)	17 (65.4 %)	1 (3.8 %)	4 (15.4 %)

Table 3 shows that the Natural Reader is generally perceived as beneficial in enhancing listening skills for TOEFL practice, though the extent of its impact varies among respondents. A majority of students agree that Natural Reader helps them better understand English reading materials (65.4%), boosts their confidence in facing TOEFL listening questions (65.4%), and assists in comprehending academic vocabulary (65.4%). Additionally, 73.1% prefer using Natural Reader over other listening practice methods, and

61.5% report that it helps them stay more focused during listening activities. The tool is also seen as suitable for TOEFL listening practice (73.1%), with 69.2% agreeing that it familiarizes them with common TOEFL vocabulary. However, some students express reservations. For instance, 15.4% find it less effective in helping them identify main ideas from audio texts, 19.2% feel it does not adequately assist in understanding sentence structures, and 15.4% find it challenging to grasp information through listening compared to reading. Overall, while Natural Reader is regarded as useful for listening practice and vocabulary acquisition, some students also expressed concerns regarding its effectiveness in enhancing specific listening skills, such as sentence structure comprehension and maintaining focus.

Table 3 shows that the use of Natural Reader has a generally positive impact on listening ability for TOEFL practice. A majority of respondents (84.6%) agree that Natural Reader helps them better understand English reading materials, and 84.6% feel more confident in facing TOEFL listening questions after using the tool. Additionally, 84.6% agree that it assists in understanding academic vocabulary in TOEFL listening, and 96.2% prefer using it over other listening practice methods. Natural Reader is perceived as beneficial in practicing the identification of main ideas from audio texts by 84.6% of students, and it helps 84.6% of respondents maintain focus during listening practice. Furthermore, 96.2% believe that Natural Reader is suitable for practicing TOEFL Listening questions, while 80.8% feel that it aids in understanding sentence structures in spoken English. Additionally, 84.6% report that the tool familiarizes them with vocabulary that commonly appears in TOEFL listening, and 80.8% find it easier to grasp information when listening to texts using Natural Reader compared to reading them.

D. Advantages of Natural Reader

Table 4. Advantages of Natural Reader

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	Natural Reader helps me practice listening skills in English.	6 (23.1 %)	18 (69.2 %)	2 (7.7 %)	0 (0 %)
2.	The voice produced by Natural Reader is clear and easy to understand.	4 (15.4 %)	18 (69.2 %)	4 (15.4 %)	0 (0 %)
3.	I can adjust the audio speed according to my ability.	5 (19.2 %)	20 (76.9 %)	1 (3.8 %)	0 (0 %)
4.	The voice options (male/female/accents) make practice more interesting.	9 (34.6 %)	16 (61.5 %)	1 (3.8 %)	0 (0 %)
5.	Natural Reader helps me understand and identify keywords and main ideas from dialogues and texts I listen to.	5 (19.2 %)	16 (61.5 %)	2 (7.7 %)	3 (11.5 %)
6.	Natural Reader helps me enrich my TOEFL listening vocabulary.	6 (23.1 %)	16 (61.5 %)	4 (15.4 %)	0 (0 %)
7.	I feel more confident in facing TOEFL Listening questions after practicing with Natural Reader.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
8.	Natural Reader makes me more focused during listening practice.	4 (15.4 %)	18 (69.2 %)	4 (15.4 %)	0 (0 %)
9.	Natural Reader is easy to use without requiring special training.	4 (15.4 %)	22 (84.6 %)	0 (0 %)	0 (0 %)
10.	Natural Reader is suitable for self-practice outside the classroom.	6 (23.1 %)	20 (76.9 %)	0 (0 %)	0 (0 %)
11.	Using Natural Reader is more flexible than other listening methods.	3 (11.5 %)	21 (80.8 %)	2 (7.7 %)	0 (0 %)

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
12.	I feel that Natural Reader increases my motivation to practice listening consistently.	5 (19.2 %)	16 (61.5 %)	5 (19.2 %)	0 (0 %)
13.	Natural Reader helps me recognize good intonation and pronunciation in English.	5 (19.2 %)	17 (65.4 %)	4 (15.4 %)	0 (0 %)
14.	I can easily repeat certain text sections using Natural Reader.	8 (30.8 %)	18 (69.2 %)	0 (0 %)	0 (0 %)
15.	I will continue to use Natural Reader and even recommend it to other friends who are preparing for the TOEFL.	6 (23.1 %)	16 (61.5 %)	1 (3.8 %)	3 (11.5 %)

Table 4 shows several perceived advantages of using Natural Reader for TOEFL listening practice. A majority of respondents (92.3%) agree that Natural Reader helps them practice listening skills in English effectively. Additionally, 84.6% feel that the audio produced by Natural Reader is clear and easy to understand, and 96.1% appreciate the ability to adjust audio speed according to their ability. The availability of diverse voice options, such as male/female and different accents, is considered beneficial by 96.1% of the students, making practice more engaging. Furthermore, 80.7% believe that Natural Reader helps them identify keywords and main ideas in listening texts, while 84.6% feel that it helps enrich their TOEFL listening vocabulary. The tool also enhances confidence in tackling TOEFL listening questions for 84.6% of the respondents and helps maintain focus during listening practice for 84.6% of them. Moreover, 100% agree that Natural Reader is user-friendly and does not require special training, and 100% also find it suitable for self-practice outside the classroom. Regarding flexibility, 92.3% feel that Natural Reader is more flexible than other listening methods. Additionally, 80.7% report increased motivation to practice listening consistently, and 84.6% feel that the tool aids in recognizing intonation and pronunciation in English. Notably, all respondents (100%) find the repeat feature useful for practicing specific text sections, and 84.6% express willingness to continue using Natural Reader and recommend it to others preparing for the TOEFL.

E. Weaknesses of Natural Reader

Table 5. Weaknesses of Natural Reader

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	The voice from Natural Reader sounds monotonous and less expressive.	7 (26.9 %)	13 (50 %)	6 (23.1 %)	0 (0 %)
2.	I find it difficult to understand the material because the pronunciation in Natural Reader sounds less natural.	6 (23.1 %)	16 (61.5 %)	4 (15.4 %)	0 (0 %)
3.	The voice feature in Natural Reader feels less like a native speaker.	7 (26.9 %)	15 (57.7 %)	4 (15.4 %)	0 (0 %)
4.	Natural Reader is not suitable for practicing contextual listening comprehension, like in the TOEFL.	6 (23.1 %)	13 (50 %)	6 (23.1 %)	1 (3.8 %)
5.	I feel bored if I use Natural Reader for too long.	7 (26.9 %)	14 (53.8 %)	4 (15.4 %)	1 (3.8 %)
6.	Natural Reader is less effective in practicing intonation and emotion recognition from speakers.	6 (23.1 %)	14 (53.8 %)	5 (19.2 %)	1 (3.8 %)

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
7.	I feel that I need guidance from a teacher/lecturer to maximize the use of Natural Reader.	9 (34.6 %)	14 (53.8 %)	3 (11.5 %)	0 (0 %)
8.	Not all texts can be well adapted to the Natural Reader format.	6 (23.1 %)	15 (57.7 %)	5 (19.2 %)	0 (0 %)
9.	I feel that my study time is less effective when I only use Natural Reader.	8 (30.8 %)	13 (50 %)	5 (19.2 %)	0 (0 %)
10.	I understand listening better when using the original video/audio compared to using Natural Reader.	4 (15.4 %)	18 (69.2 %)	4 (15.4 %)	0 (0 %)
11.	I experience technical difficulties (internet access, no sound, etc.) when using Natural Reader.	5 (19.2 %)	14 (53.8 %)	7 (26.9 %)	0 (0 %)
12.	Natural Reader does not provide interactive practice or questions like in the actual TOEFL test.	7 (26.9 %)	12 (46.2 %)	7 (26.9 %)	0 (0 %)
13.	I find it difficult to follow the text if it is not displayed simultaneously with the audio in Natural Reader.	8 (30.8 %)	12 (46.2 %)	6 (23.1 %)	0 (0 %)
14.	I feel that Natural Reader is not sufficient to be used as the only medium for listening practice.	3 (11.5 %)	18 (69.2 %)	5 (19.2 %)	0 (0 %)
15.	I do not feel significantly helped by using Natural Reader in preparing for the TOEFL Listening.	6 (23.1 %)	12 (46.2 %)	7 (26.9 %)	1 (3.8 %)

Table 5 shows several perceived disadvantages of using Natural Reader for TOEFL listening practice. A significant proportion of students (76.9%) feel that the voice in Natural Reader sounds monotonous and less expressive, making it less effective for contextual listening comprehension. Additionally, 84.6% report difficulty in understanding the material due to less natural pronunciation, and 84.6% also feel that the voice feature is less similar to a native speaker's. Over half of the respondents (69.2%) express boredom when using Natural Reader for extended periods, while 76.9% believe it is less effective for practicing intonation and emotion recognition. Furthermore, 88.4% feel that guidance from a teacher or lecturer is necessary to maximize their use. Technical difficulties, such as internet access issues and a lack of interactive practice, are also noted by 73.1% of the students, and 76.9% indicate that not all texts are well adapted to the Natural Reader format. A majority (84.6%) agree that they understand listening better with original audio or video rather than using Natural Reader, and 76.9% feel that study time is less effective when solely relying on the tool. Lastly, while 80.8% find it challenging to follow the text without simultaneous display with the audio, 80.8% believe that Natural Reader is insufficient as the only medium for TOEFL listening practice. Despite these drawbacks, some students acknowledge its usefulness in certain aspects, but overall, they suggest that the tool is best used in combination with other listening practice resources.

F. Influence on Motivation and Attitude to Learn Using Natural Reader for TOEFL Listening

Table 6. Influence on Motivation and Attitude to Learn Using Natural Reader for TOEFL Listening

No	Statements	Students' Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I will recommend Natural Reader to friends who are preparing for the TOEFL.	4 (15.4 %)	17 (65.4 %)	2 (7.7 %)	3 (11.5 %)
2.	I feel that using Natural Reader can replace listening practice with a native speaker.	6 (23.1 %)	16 (61.5 %)	4 (15.4 %)	0 (0 %)
3.	I feel that my motivation to practice TOEFL listening increases when using Natural Reader.	5 (19.2 %)	16 (61.5 %)	5 (19.2 %)	0 (0 %)
4.	Natural Reader is suitable for use in classroom learning activities, especially for TOEFL listening.	6 (23.1 %)	19 (73.1 %)	1 (3.8 %)	0 (0 %)
5.	I prefer learning to listen with Natural Reader compared to watching other videos/audio.	5 (19.2 %)	13 (50 %)	5 (19.2 %)	3 (11.5 %)
6.	Using Natural Reader makes me more interested in practicing TOEFL listening independently.	4 (15.4 %)	17 (65.4 %)	2 (7.7 %)	3 (11.5 %)
7.	I feel more confident in my listening ability after practicing using Natural Reader.	6 (23.1 %)	15 (57.7 %)	5 (19.2 %)	0 (0 %)
8.	Natural Reader helps me reduce anxiety or stress when listening to TOEFL questions.	4 (15.4 %)	18 (69.2 %)	3 (11.5 %)	1 (3.8 %)
9.	I feel that using Natural Reader increases my confidence in taking the TOEFL test.	6 (23.1 %)	16 (61.5 %)	4 (15.4 %)	0 (0 %)
10.	I feel that Natural Reader provides a pleasant and non-boring learning experience.	6 (23.1 %)	16 (61.5 %)	3 (11.5 %)	1 (3.8 %)

Table 6 shows that the Natural Reader has a generally positive influence on students' motivation and attitudes toward learning TOEFL listening. A majority of respondents (80.8%) are willing to recommend Natural Reader to friends preparing for the TOEFL, and 84.6% feel that it can effectively replace listening practice with a native speaker. Additionally, 80.7% report increased motivation to practice TOEFL listening using the tool, and 96.2% believe it is suitable for classroom learning activities, especially for TOEFL listening practice. However, preferences for using Natural Reader over other audio/video materials are more divided, with 69.2% agreeing, but 30.7% expressing disagreement or uncertainty. Furthermore, 80.8% of respondents feel more confident in their listening ability after practicing with Natural Reader, and 84.6% report reduced anxiety or stress when answering TOEFL listening questions. Additionally, 84.6% feel more confident about taking the TOEFL test after using Natural Reader, and 84.6% find the learning experience provided by the tool to be pleasant and engaging.

Discussion

NaturalReader is a versatile and advanced text-to-speech (TTS) platform developed by NaturalSoft Ltd., designed to convert written content into natural-sounding audio using cutting-edge artificial intelligence (AI) technology. Widely used by students, educators, professionals, and content creators, NaturalReader stands out for its accessibility, multilingual support, and intuitive interface. Leveraging large language models (LLMs), NaturalReader AI delivers realistic and expressive speech output, enhancing the listening experience across personal, educational, and commercial settings. It can transform text from various sources—including PDFs, Word documents, images, webpages, and even physical books—into high-quality audio. Supporting over 40 languages and offering more than 50 voices, NaturalReader is available as a web app, mobile apps (iOS and Android), and a Chrome extension. Its key features include realistic AI voices, multi-platform accessibility, the ability to read from diverse text sources, and advanced customization tools such as a voice and speed editor. Additionally, it offers voice cloning technology, allowing users to create custom AI voices in over 100 languages for both personal and professional use.

Table 1 shows that the respondents generally show a good level of knowledge about using Natural Reader AI for TOEFL listening practice. Most students recognize that Natural Reader can be used for practicing TOEFL listening and understanding how it converts text into audio. They are also aware of features like adjustable audio speed and various voice options. Many know that the application can read different materials, including academic texts, although some have less clarity on this. There is a positive perception of Natural Reader's impact on understanding TOEFL listening texts, and a majority are aware that it can be used offline once downloaded. Students also recognize the variety of accents available and the ability to practice listening at different speeds, though a few students seem unsure about some functions. Overall, most agree that Natural Reader is versatile and useful for other English practice activities beyond TOEFL listening.

Table 2 shows that the Natural Reader's features for TOEFL listening practice receive generally positive but somewhat mixed feedback. Many students find the audio clear and appreciate the variety of voice options, including gender and accents. Features like speed adjustment and text marking are helpful to most users, though some find them less effective or hard to use. Concerns exist about the AI voice's clarity and naturalness, which may impact comprehension. The free version has notable limitations, such as fewer voice accents and limited audio format options, restricting full-feature access. Technical issues like app errors and a lack of guidance also pose challenges. Additionally, some feel Natural Reader is less suitable for practicing complex TOEFL listening tasks involving dialogues or conversations, highlighting its limitations for advanced practice.

Table 3 shows that the Natural Reader is generally seen as helpful in improving listening skills for TOEFL practice, with many students feeling it enhances their understanding of English reading materials, boosts confidence in answering listening questions, and aids in comprehending academic vocabulary. It is also preferred over other listening practice methods and is believed to help maintain focus during listening activities. The tool is considered suitable for TOEFL listening practice and familiarizes users with common TOEFL vocabulary. However, some students have concerns about its effectiveness in helping with specific skills like identifying main ideas, understanding sentence structures, and grasping information through listening compared to reading. Overall, while it positively impacts listening ability and vocabulary acquisition, a few students feel it may have limitations in certain listening aspects.

Table 5 shows that the Natural Reader is widely regarded as an effective tool for practicing English listening skills, offering clear and understandable audio with adjustable speed to match learners' abilities. The variety of voice options, including different genders and accents, makes practice more engaging. Many users find that it helps them identify keywords

and main ideas, enrich their TOEFL vocabulary, boost their confidence, and maintain focus during listening exercises. The tool is praised for being user-friendly and suitable for self-practice without needing special training. It is considered more flexible than other listening methods and helps improve recognition of intonation and pronunciation. The repeat feature is especially valued for practicing specific sections, and many students express motivation to continue using and recommend Natural Reader for TOEFL preparation.

Table 5 shows that the Natural Reader has several perceived disadvantages for TOEFL listening practice. Many students find the voice monotonous, less expressive, and not natural enough, which affects contextual listening comprehension and intonation recognition. Prolonged use can lead to boredom, and many feel the voice does not resemble a native speaker's. Most students believe that guidance from a teacher is necessary to use the tool effectively. Technical issues like internet problems and limited interactivity are common, and some texts do not adapt well to the format. Many students find that they understand listening better with original audio or video sources, and relying solely on Natural Reader is seen as less effective for study time. Following the text without simultaneous audio display is also challenging. Overall, while the tool has some usefulness, it is generally considered best when combined with other listening practice methods.

Table 6 shows that the Natural Reader positively influences students' motivation and attitudes toward learning TOEFL listening. Many are willing to recommend it to peers and feel it can effectively substitute practice with native speakers. It helps increase motivation to practice and is seen as suitable for classroom activities focused on TOEFL listening. While some students prefer it over other audio or video materials, opinions on this are mixed. Using Natural Reader boosts students' confidence in their listening abilities, reduces anxiety related to TOEFL listening questions, and makes them feel more prepared for the test. Overall, the learning experience with Natural Reader is viewed as enjoyable and engaging.

Fitria (2022) describes that educators can access the platform by visiting <https://www.naturalreaders.com/>, where they can log in or create an account. Once logged in, users have the option to type words, sentences, or full texts into the input box, or upload Word and PDF documents by clicking the plus (+) icon. Before listening, users can customize the voice settings—such as selecting a male or female voice, adjusting the volume, and modifying the speech rate. After setting their preferences, they can click the play icon to hear the pronunciation of the entered text. Teachers or lecturers can instruct students to imitate the native speaker's pronunciation to improve their accuracy and fluency. Additionally, the platform allows users to save the audio as MP3 files. Natural Reader offers TTS functionality for both web and mobile applications, supporting various English accents, including British and American. While a free version is available, the premium version provides access to more advanced features, making it more suitable for instructional purposes. Overall, Natural Reader serves as a powerful tool for generating realistic voice outputs from written text and offers valuable support for students learning English pronunciation.

Fitria (2022) explains that NaturalReader is an accessible text-to-speech platform where educators can input or upload text to hear its pronunciation. Users can customize voice settings and download audio in MP3 format. The tool supports various English accents and is available on both web and mobile devices. While a free version exists, the premium version offers more features for teaching. Overall, NaturalReader is a useful resource for enhancing students' pronunciation and listening skills. Fitria (2023) explores the use of NaturalReader in teaching TOEFL listening. NaturalReader, an AI-based text-to-speech tool, is utilized by an English lecturer at ITB AAS Indonesia during both face-to-face and online classes via Zoom and YouTube. The application is used to teach all TOEFL listening sections—Parts A, B, and C—by converting text into audio with various accents and voice types. NaturalReader helps students improve both listening and pronunciation skills by exposing them to different accents,

speeds, and intonations, thus making it easier for them to comprehend spoken English and succeed in TOEFL listening tasks.

Sha (2010) explores the use of text-to-speech (TTS) voices for developing audio materials in English listening comprehension, serving as an alternative to traditional audio tools like compact cassettes. The research investigates the effectiveness, naturalness, and intelligibility of new-generation TTS voices, particularly those using unit selection synthesis, in classroom instruction and listening assessments. The experiments using TTS-generated audio in classroom procedures and listening tests have produced positive outcomes. The TTS voices demonstrated high levels of naturalness and intelligibility, making them a viable alternative for listening materials. Govender et al. (2019) evaluate how text-to-speech (TTS) systems affect human cognitive processing, especially under conditions of high cognitive load, such as noisy environments. It seeks to clarify what pupil dilation measures during synthetic speech listening and to investigate how cognitive effort changes when listening to TTS in the presence of background noise. The study found that in quiet settings, pupil dilation reflects attention and engagement rather than listening effort. However, in noisy conditions, increased pupil dilation indicates that listening effort rises as the signal-to-noise ratio worsens.

Andriani et al. (2020) explore whether there is a significant difference in listening comprehension between students taught using synthetic speech and those taught using natural speech by a non-native speaker. A quasi-experimental design was employed, with 34 students in the experimental group exposed to synthetic speech generated by a Text-to-Speech (TTS) application, and 32 students in the control group taught using non-native speaker audio. The research instrument was a test, and the results of an independent sample t-test on the post-test data revealed a significant value of 0.016. This indicates that the type of speech origin used in instruction does affect students' listening comprehension. Moon (2020) explored how learners perceive the use of self-created listening materials generated through Text-to-Speech (TTS) technology. Findings revealed that most learners considered the TTS materials beneficial in reducing their listening anxiety, boosting self-confidence and motivation, and contributing positively to their listening skill development. Their overall satisfaction was linked to several advantages of TTS, such as the flexibility to choose content, easy access, exposure to diverse native speaker voices, and the innovative use of digital tools. These results indicate that TTS-based listening materials can be an effective resource for promoting independent listening practice in EFL contexts.

Syam et al. (2020) determined whether using text-to-speech software can enhance students' listening skills. The researcher employed a Pre-Experimental design, specifically a Group Pre-test and Post-test approach. This study involves two variables: the dependent variable, which is listening skills, and the independent variable, which is the use of text-to-speech software. The population consisted of students from SMPN 21 Makassar, with the sample being 18 third-grade students. The researcher used tests as the data collection instrument. The findings revealed that the use of text-to-speech software effectively improved the listening skills of the third-grade students at SMPN 21 Makassar. The average pre-test score was 62.16, while the average post-test score increased to 69.44, indicating a 12% improvement in students' listening abilities. This improvement was statistically significant. Brunow & Cullen (2021) examine the effects of text-to-speech (TTS) technology compared to a human reader on the listening comprehension of high school students (ages 16–17) with learning disabilities in reading. The results showed that students achieved higher average scores on listening comprehension quizzes when using the human reader treatment compared to the TTS treatment. While TTS may support students with learning disabilities as a supplementary tool alongside direct teacher instruction, it was not as effective as a human reader for improving listening comprehension in this study.

Wajdi et al. (2021) developed English listening practice using Text2Speech applications, particularly aimed at supporting teachers and students who are not experts in information technology. The study explores how Text-to-Speech (TTS) software can be adopted and adapted to improve listening skills. The research found that the Text2Speech application effectively converts written text into spoken audio, allowing users to hear the pronunciation of words, phrases, and sentences. It enables teachers and students to access listening materials spoken in native-like synthesized voices. This supports learners in becoming familiar with native speaker pronunciation, making it a useful tool for enhancing listening comprehension in English education. Yu et al. (2023) explore the use of AI speech synthesis and wireless network technology in English listening instruction. A questionnaire and an experimental comparison between traditional and AI-assisted teaching were conducted. Results showed that while textbook audio scored highest in natural fluency, AI-generated audio was rated clearer in articulation. The experimental group using AI technology achieved better listening scores than the control group. Overall, the study concludes that integrating AI speech synthesis can enhance audio clarity, support mobile learning, and improve students' English listening performance.

Tan et al. (2024) investigate whether a text-to-speech (TTS) system can reach human-level speech quality, define how to evaluate that quality, and demonstrate the development of such a system. The researchers introduce clear guidelines for assessing human-level quality in TTS and present a new system called NaturalSpeech that aims to achieve this benchmark. The study developed the NaturalSpeech system using a variational auto-encoder (VAE) and advanced modeling techniques. Experimental results on the LJSpeech dataset show that NaturalSpeech achieves a -0.01 CMOS compared to human speech, with no statistically significant difference ($p > 0.05$), proving that it delivers human-level audio quality for the first time in TTS research.

Mulyanto et al. (2024) examine the effectiveness of Artificial Intelligence (AI)-powered text-to-speech (TTS) technology, which utilizes Natural Language Processing (NLP), in enhancing listening skills. The findings reveal significant improvements in participants' listening abilities, including better pronunciation, intonation, and overall understanding. The use of TTS technology offered learners a reliable and accurate spoken Arabic model, supporting more effective auditory learning. Indasari (2025) developed listening skill teaching materials based on local wisdom and religious values at Madrasah Aliyah in Gresik Regency by utilizing a Text-to-Speech (TTS) application. The research findings show that the teaching materials are highly feasible, with high scores in modern relevance (100%), attractiveness (90%), and cultural relevance. Teachers and students also responded positively, noting that the materials increased students' learning motivation, listening skills, and cultural knowledge.

Several studies have explored the use of Text-to-Speech (TTS) technology to enhance English listening skills. Sha (2010) found that TTS voices using unit selection synthesis are effective and intelligible alternatives to traditional audio tools in classroom listening instruction. Govender et al. (2019) showed that TTS increases cognitive load in noisy settings, as reflected by pupil dilation, suggesting greater listening effort. Andriani et al. (2020) demonstrated that students taught with synthetic speech performed better in listening comprehension than those taught with non-native natural speech. Moon (2020) highlighted how learner-generated TTS materials reduced anxiety, boosted motivation, and promoted independent learning. Syam et al. (2020) found significant improvement in students' listening scores after using TTS software. Brunow & Cullen (2021), however, noted that human readers were more effective than TTS for students with learning disabilities. Wajdi et al. (2021) and Yu et al. (2023) supported the use of TTS for providing accessible, clear, and native-like audio, especially for learners and teachers with limited tech expertise. Tan et al. (2024) introduced NaturalSpeech, a system proven to produce human-level audio quality. Mulyanto et al. (2024) showed that AI-powered TTS enhanced listening skills, pronunciation, and understanding.

Lastly, Indasari (2025) integrated TTS with local wisdom in Islamic schools, improving motivation, cultural knowledge, and listening proficiency. Overall, these studies confirm the growing effectiveness and versatility of TTS in listening comprehension development.

4. Conclusion and Suggestions

Conclusion

Students generally have good knowledge about using Natural Reader for TOEFL listening practice. They understand how it converts text to audio, recognize key features like adjustable speed and voice options, and are aware that it can read academic materials and be used offline. Overall, they view Natural Reader as versatile and helpful beyond just TOEFL listening. Feedback on Natural Reader's features is mostly positive but somewhat mixed. Many appreciate the clear audio and variety of voices, while features like speed adjustment and text-marking are useful for most, though some find them less effective or difficult. Concerns exist about the AI voice's naturalness, and the free version has notable limitations. Technical issues and lack of guidance also pose challenges, and some feel it's less suited for complex TOEFL listening tasks. Natural Reader is seen as helpful in improving listening skills, understanding reading materials, boosting confidence, and aiding vocabulary comprehension for TOEFL practice. It is preferred over other methods by many and helps maintain focus. However, some students question its effectiveness with certain listening skills, like identifying main ideas or understanding sentence structures, suggesting some limitations.

Students find Natural Reader effective for practicing English listening, praising clear audio, adjustable speed, and diverse voice options that keep practice engaging. It helps identify keywords, enrich vocabulary, build confidence, and maintain focus. The tool is user-friendly, flexible, suitable for self-study, and valued for its repeat feature. Many express motivation to continue using and recommend it for TOEFL preparation. Natural Reader also has several perceived disadvantages. The voice is often described as monotonous, less expressive, and unnatural, which affects comprehension and intonation recognition. Prolonged use can cause boredom, and technical issues are common. Many students prefer original audio sources and feel that teacher guidance is necessary. The tool is generally seen as best when used alongside other listening practice methods rather than alone. Natural Reader positively affects motivation and attitudes toward TOEFL listening practice. Many students would recommend it and feel it can substitute for native speaker practice. It increases motivation and confidence and reduces test anxiety, making learners feel more prepared. The tool is seen as suitable for classroom use, and the overall learning experience is enjoyable and engaging, though some prefer other materials. Several studies have explored the use of Text-to-Speech (TTS) technology to enhance English listening skills. Overall, these studies confirm the growing effectiveness and versatility of TTS in listening comprehension development.

Suggestion

Teachers should provide clear guidance and training on how to use Natural Reader's features effectively, offer support for troubleshooting technical issues, and make students aware of the limitations of the free version. They are encouraged to supplement Natural Reader with authentic listening materials and diverse activities to help students develop more advanced listening skills. A blended learning approach can also boost students' motivation and confidence, and reduce test anxiety. Meanwhile, students should actively explore and utilize all the features of Natural Reader, such as speed adjustment and the repeat function, while combining its use with authentic native speaker audio to improve comprehension and intonation. They should seek help when encountering technical problems, vary their study methods to avoid boredom, and stay motivated by setting clear goals and sharing their learning

experiences. Overall, students are advised to use Natural Reader as part of a broader TOEFL preparation plan rather than relying on it as their sole resource.

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