

Perceptions of English language teachers on the use of text-to-speech systems and the google site towards speaking competence

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Abstract

Instructors may benefit from learning by conveniently accessing various listening resources. While obtaining listening resources is simple, there is no assurance that they will meet students' needs or learning objects; using Text to Speech technology to generate listening resources is one option. Text to Speech may be a viable choice because not all listening resources are acceptable for students' requirements and learning situations. Using the Technological, Pedagogical, Content, Knowledge paradigm and the Google website as the medium for delivering the listening material, this study will look into how EFL instructors feel about using Text to Speech to create listening resources. This study used a qualitative technique in conjunction with an individual interview style. This learning included eight EFL instructors as participants. Numerous efforts were taken to assess instructors' attitudes on the usage of Text to Speech in creating listening resources. To begin, to familiarize EFL instructors with the Text to Speech program, a computer training session was conducted; second, instructors' prepared listening material was uploaded to a Google site for distribution to students; third; finally, conferences were held to establish EFL instructors' opinions of the Text to Speech software and Google website, and instructors experimented with the ready listening material and Google website feature. The results indicate that EFL instructors favor incorporating Text to Speech programs via the TPACK paradigm. EFL instructors found this digital technique beneficial in language acquisition.

Keywords: EFL instructors' perspectives; TPACK framework; listening Resources; Text to Speech Program; English as a Foreign Language

Introduction

Due to developments in information, communication, and technology, EFL educators

may quickly get listening Resources over the internet. Numerous hearing sources, such as native-like listening resources, may be utilized to promote an acceptable prototype for language usage. These native-like sources are an excellent illustration of teaching toddlers to listen (Avelar et al., 2019). While accessing listening materials is simple, their validity may be a challenge for students; the hearing material may lack universal validity, causing students to struggle (Aylet et al., 2020). Audio resources may not be appropriate for all classroom processes since no evidence exists to demonstrate that listening Resources can be employed in every circumstance (Canals & Al-Rawashdeh, 2019). The authenticity of the content is critical to check because students have specific characteristics related to the listening Resources offered by instructors. Students may struggle to keep up with the learning process if instructors develop listening resources incompatible with their listening ability. Other issues arise due to students' lack of exposure to native-like listening resources. They may have difficulty comprehending the listening content due to the scarcity of native-like hearing resources (Chan 2021).

Instructors often skip classroom listening exercises due to their reliance on online listening material (Correa-Baena et al., 2018). They may be unable to locate appropriate content and avoid the listening part. This reliance exposes instructors to additional difficulties, such as technical difficulties with the school's facilities and services (Fu et al., 2019). Despite the government's strong support for school technology integration (Hackl & Ermolina, 2019, Arcinas, 2021), many English instructors cannot access the Internet (Hux et al., 2019). Meanwhile, it has been shown that incorporating technology into language acquisition is advantageous (Hwang et al., 2019).

Text to Speech has previously been suggested as a possible language-learning method. TTS was employed in various studies, including reading (Lau & Gardner, 2019) and pronunciation. (Li & Flowerdew, 2020). Additionally, TTS is seen as a remedy to the shortage of native-language listening resources. The TTS software is advantageous for EFL instructors since it enables them to adjust the natural voice to contextualize listening Resources and make them more appropriate for their students'

English Competence (Macalister & Nation, 2019). Additionally, the TTS software may aid students by serving as a model for pronunciation, a reading assistant, and a conversation companion (Marcoux et al., 2021).

Instructors might utilize the TPACK paradigm to present the listening content when incorporating TTS into the learning process. TPACK refers to integrating instructors' content, pedagogical, and technical expertise (Mira & Fatimah, 2020, Veluri et al, 2021, De Souza et al, 2021, Arcinas, 2021a, Charernnit ey al, 2021). The TPACK paradigm has been effectively applied to teaching and learning, implying that it can be used to language acquisition (Nakayama et al., 2018, Magulod, 2018a, 2018b). On the other hand, some research has explored the integration of TTS and TPACK models, precisely the benefits that instructors may get from the program. As such, this research aims to discover instructors' opinions in the production of native-like listening Resources.

In the EFL Classroom, Text to Speech Application

Numerous research on Text to Speech in English language acquisition has been undertaken. According to research conducted by Newton & Nation (2020), many studies examining the usage of Text to Speech in the classrooms suggest that the software may help language acquisition. TTS enables the output to be utilized as listening Resources by establishing three conditions: a proper pronunciation model, communicative phrases that enhance genuine interaction, and practical advantages (Prakash & Murthy, 2019). According to Raygan & Moradkhani (2020), TTS can correctly pronounce 72 percent of English words; however, when suitable pronunciation criteria are utilized, the accuracy reduces to 25.7 percent.

TTS has garnered considerable interest from academics, prompting them to create an expressive and emotional output (Schmid et al., 2020). The output speech quality from TTS is exceptional since it utilizes the genuine voice from the program's given speakers. Additionally, TTS incorporates emotional and expressive noises (Sefara et al., 2019).

According to Truong & Wang (2019) research, TTS applications benefit from the correctness and naturalness of the voice at the phonetic pronunciation level. Phonetic pronunciation is preferable to prosodic accent in terms of quality. Tsai (2019) shows that this measure has no impact on the prosodic aspect.

Additionally, the adoption of TTS in the EFL classroom is primarily motivated by its practical advantages. According to Vanslambrouck (2019), there are numerous beneficial reasons to use TTS in the development of listening Resources: the technology's adaptability and flexibility, the ability to adjust voice speed, the accessibility of a large number of speakers, the technology's cost-effectiveness in comparison to traditional speech recording, and the ease with which they may be transmitted. These benefits are beneficial to educators in a variety of ways. First, the Use of flexibility and adaptation enables instructors to enhance syllabus demands and the everyday context of their students in the listening comprehension classroom. Second, it is considered that the speech rate adjustment meets the needs of students. Thirdly, the audio is portable and may be utilized whenever instructors want it.

Native-like Listening Resources

The term "native speaker" refers to someone who, while error-free, has features those generally prompt native speakers to throw doubt on whether the language is native or non-native in origin. Vattøy & Smith (2019) identified six characteristics that may contribute to NS: Early language acquisition and ongoing usage, linguistic knowledge, communicative skill, and the ability to use the language spontaneously in a variety of social situations are all important.

Two characteristics are used to determine NLS competency in this research. The phrase "native-like speaker" refers to a speaker's ability to pronounce English words "accurately." A computer application that can say or construct English words is a "native-like speaker." TTS systems can generate a native-sounding voice from the input text and can be used as a teaching tool by educators.

Although NS and non-NS instructors contribute differently to students' learning in an EFL classroom, both contribute to students' academic

performance. According to Villegas et al. (2020), the present study's use of native-like speaker Resources reinforces the need for Native Speaker instructors when confronted with frequent classroom challenges. Native-like listening resources encourage students to assume the accents of native American and British speakers, enhancing the language's realism (Wang 2019). TPACK is a term that refers to the sorts of knowledge that instructors should acquire to combine language learning processes and technology. The context emphasizes instructors' grasp of the material, pedagogy, and technology and how these interact to provide successful teaching (Wilson et al., 2020). This new idea, research, and practice have already influenced instructor education and professional development. Instructors should have a thorough grasp of technology, content, pedagogy, and knowledge to integrate those components into the teaching and learning process effectively. TPACK entails more than just integrating technology into the learning process; instructors must also enhance their teaching and learning processes due to the integration. TPACK should serve as a foundation for instructors to connect technology integration and alter curriculum and pedagogy (Yasuda 2021).

Methodology

Research Design

They used a narrative, qualitative design to take a qualitative approach. Because the narrative qualitative approach enables instructors to absorb material more thoroughly through their teaching experience, it was chosen (Monteiro et al., 2020). Before conducting the interviews, TTS was used to develop the hearing Resources, and Google Sites provided the listening Resources in this qualitative design. Instructors were polled after the listening sessions to gauge their feelings about integrating TTS and Google sites.

Participants

The participants in this training were EFL instructors from English schools. They also had comparable computing abilities. They are capable of using Microsoft Office and browsing the web. They were able to locate listening resources online.

Instrumentation

The data for the analysis were gathered via a semi-structured interview. The interviews were conducted to elicit instructors' perspectives on their experiences using TTS and the Google website to create native-like listening resources. The meeting inquiries were designed following the standards established by Fandiño et al., (2019). The questions focus on the advantages of using a Text to Speech application and the Google website and the limitations of TTS the Google website when using prepared listening Resources.

Data Analysis and Procedure

Instructors received computer training to become familiar with TTS and the Google site. Instructors were encouraged to construct their listening tools and submit them to the Google site following numerous conversations. The produced listening Resources were then distributed to students by instructors. We examined the interview data using both content analysis and descriptive analysis. The researcher examined and interpreted participant interview responses using criteria for developing learning material.

Findings and Discussion

Most instructors agreed that using ICT in English language study is good. They said that incorporating Text to Speech and Google's website helped them construct instructional Resources. Accessible and usable programs for teaching and learning languages include Text to Speech and Google Site.

"I believe that TTS will assist me in developing listening resources since it is highly accessible to both instructors and students." Not to add that we are capable of analyzing the stuff we provide to our children." -Associate Professor

"Google Sites is a wonderful tool for supporting instructors with content delivery. It may be an excellent tool for presenting information, submitting assignments, and providing feedback to the instructor and the students. The layout is simple, minimalist, and rather convenient, which means that anybody can use it." -Assistant Teacher-

"This is my first visit to the Google website, and I find it rather fascinating. It is an effective method of distributing content, particularly on an internet platform. It's simple to use, and I can utilize Google Sites to construct my online lesson. I can incorporate my learning aim and information and build an attractive visual for a web-like interface. Additionally, it may be accessed at any time and from any location by my students, so distance will no longer be an issue." -Mrs. D-

EFL instructors agree that TTS may aid their learners' listening comprehension abilities because TTS and the Google website are easily accessible. This gives students more time to learn English independently. Additionally, they believe that incorporating ICT into the learning process would increase students' excitement for the course at hand.

"I think that students will benefit from self-directed learning and access to knowledge. Additionally, including this kind of ICT into the learning process may heighten students' enthusiasm for the subject at hand." -Teacher B-

"Because the audio is native-like, I believe that if I can assist my students in getting comfortable with normal spoken English via the use of TTS, they will improve their listening abilities." -Mrs. D-

Concerning the TTS program's output, most EFL instructors said that it might be utilized to teach listening comprehension. The outcome is identical to that of native speakers, particularly word pronunciation. Instructors can select speakers and even the spoken English dialect, resulting in a variety of different forms of output.

"In terms of pronunciation, the output provided by TTS is already clear, as is the audio." - Teacher A-

"Anyone may choose an accent from this program in addition to the natural ones." - Teacher C

Additionally, they said that the TTS program's output met the demands of the classroom. TTS enables them to develop listening resources aligned with the learning syllabus's skills and goals.

"I am capable of developing content that is relevant to the curriculum." -Faculty F-

Additionally, TTS's output aids instructors and students in learning how to pronounce words correctly. According to instructors, TTS output is also adequate for youngsters' English skills and day-to-day contexts.

"This is my first usage of this program, and I'm rather pleased. It enables me to create listening Resources and also allows me to adjust them according to the curriculum and the English Competence of my students; moreover, it is straightforward to use."—Children's Teacher C-

The first downside of TTS is related to the output generating system. Additionally, EFL instructors identified several flaws that may be regarded as TTS and Google site interaction concerns when using TTS to build listening Resources and sending them over the Google site. Because instructors must ensure proper pronunciation, inevitable typographical mistakes may occur, as TTS turns words to sound without verifying if the written word is valid. Additionally, TTS cannot produce an excellent intonation for numerous texts, such as story or conversation text; that would be considered natural output for listening comprehension. Furthermore, for some punctuation signs, such as the question mark, TTS cannot produce the correct tone. These flaws make TTS output less appealing because of the lack of variation in tone.

"While TTS output is already spoken by a natural speaker and is unique to the listening product, it's a bit uncommon to listen to it for a variety of different sorts of material. When we use this application to discuss, the speaker's intonation is flat, not sounding genuine. This might distract students and make them less interested in attending the lesson. Additionally, when certain punctuations are present, the software is incapable of determining the suitable intonation for such punctuations"—Teacher E-

"The shortcoming of TTS is that the speaker's tone and voice do not fluctuate much, which might be confusing to the listener."—Assistant Professor B-

EFL instructors encountered several technical difficulties with TTS and the integration of the Google site. They could not locate an advanced parameter in the TTS application to improve output. Additionally, they're having trouble submitting the data to the Google site since they must first submit it to Google Drive.

Furthermore, there is no chat box for students to contact the instructor or friends to discuss their concerns through discourse when they are having difficulty listening.

"It lacks an advanced intonation option or simply a setting that may assist me in establishing some context for producing better work, and it does not speak good punctuation intonation. There is no option to convert it straight to MP3"—Employee E-

"When I want to submit my prepared content, I have to utilize Google Drive, which takes time since I have to upload it to G-drive and then to my Google Site; there is no direct option to transfer my material to Google Site."—D-teacher.

"What I discovered is a technical issue, in that my students must first download the audio from the Google Site; they cannot listen to it immediately from the Google Site." Additionally, some of the content we submit are inaccessible. Then, if they encounter difficulty during the online learning process, no such chat box will enable them to communicate with their peers or with me, their instructor. One may argue that this Google site encourages one-way learning."—Mrs. B-

The results show that instructors were confident about using Text to Speech in English language training and using Google as a media platform. Most of them said that using native-like listening Resources and a Text to Speech tool to teach listening could help them. They believe the TTS program's output is sufficiently qualified to be used as listening resources. The content should be relevant to the learners' experiences and backgrounds and the needs of the target audience and the students themselves (Vattoy, 2020). The Text to Speech application also enables users to generate Resources following the prescribed syllabus and curriculum. This conclusion is consistent with the criterion for designing a material, which is that the item should have a connection to the curriculum being employed (Jiang, 2018). Meanwhile, due to the usage of Google's website as the delivery medium, they believe it is beneficial to use since it enables them to create an online class, which allows their students to access the information regardless of where they are.

Additionally, EFL instructors can blend technology, pedagogy, material, and expertise

by integrating the Text to Speech application with the Google site. This is a component of the TPACK model. The TPACK paradigm places a premium on the interaction of content, pedagogy, and technology. It also helps instructors become more aware of how technology may be used to better their teaching. Adding technology to an existing teaching method or topic area does not constitute successful teaching. It is about introducing technology that leads to the representation of a new idea and needs the development of sensitivity to the dynamic evolution of English education (Jansen et al., 2021). The changing nature of the educational environment necessitates the adoption of a new teaching paradigm. Technology advancements should benefit both instructors and kids. Apart from utilizing technology exclusively, when integrating technology into their classroom instruction for the benefit of students, instructors must develop pedagogical understanding to participate in the pedagogy and content of their classroom instruction with the technology acquired through their experiences in such programs (Butler & Le, 2018).

The findings reveal that the TTS program's output is comparable to that of a native speaker because it can give faultless pronunciation. The output tone can become less natural when the speed is reduced. The slower pace may benefit students' listening comprehension (Mackay, 2019). This might be because the slower pace allows kids to absorb what presenters say. It enables them to digest the information provided to have better comprehension. Regrettably, this may result in monotony in the TTS output during the declining speed. According to Bernstein & Woosnam (2019), If the output speed is reduced to the point where only vowels and some consonants are strained, the output quality may suffer, but voiceless consonants are unaffected. At the same time, the primary issue with the Google site is a technical one, such as the lack of a chatbox for additional conversation. Sometimes, they have difficulty uploading the listening Resources since they must first upload them to Google Drive.

Conclusion

The primary goal of this research was to find out how EFL instructors felt about using Text to

Speech and Google in language learning, namely during the listening comprehension phase. EFL instructors have a favorable attitude toward the two teaching tools mentioned above. They believe that the TTS software enables instructors to design listening Resources tailored to the students' requirements or correspond to the specified curriculum. It is beneficial for teaching listening comprehension since it can generate proper pronunciation, which may help learners improve their listening comprehension capacity. Additionally, the usage of the Google website is regarded as helpful since it enables professors to develop their online classrooms that students can access at any time and from any location.

Although TTS and the Google site were deemed adequate, EFL instructors had various difficulties using those two teaching tools. The main issue with TTS output is the audio, which will appear less authentic if the pace is slowed or if specific punctuation cannot be converted into voice, resulting in a monotonous sound. While instructors may find the Google site difficult to use due to the lack of a chatbox that could be used for an online forum and the inability to submit listening material directly, EFL instructors should first upload the material to Google Drive before re-uploading it to the Google website.

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