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ELECTRONIC TOOLS FOR PRONUNCIATION IN ENGLISH LANGUAGE IN THE 21ST CENTURY

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Abstract

This study examined electronic tools for pronunciation in the English language in the 21st century. It was noted that technology has advanced at an exponential rate in the twenty-first century, changing many facets of human life, including education. The impact of technology on language learning is particularly noticeable when it comes to learning how to pronounce words in English. The study further noted that the English language has emerged as the lingua franca of international communication, serving as a bridge that connects people from diverse linguistic backgrounds. And hence, it requires being pronounced correctly. The study detailed the different types of electronic tools for English pronunciation, including text-to-speech (TTS) tools, audio dictionaries and pronunciation apps, online pronunciation courses and tutorials, speech recognition software, and online language learning platforms. It further provided remedies for the disadvantages of each of the tools. The study concluded that the 21st century has seen significant technological advancements, particularly in language learning and English pronunciation, and also that the integration of electronic tools, including CALL systems, mobile applications, and interactive software, offers personalised learning, real-time feedback, and increased accessibility for English language learners. One of the recommendations of the study was that teachers should integrate electronic tools such as speech recognition software and mobile applications like Duolingo and Rosetta Stone into their curriculum. Utilising these resources in the classroom can enhance engagement and improve pronunciation proficiency.
Keywords: Electronic Tools, Pronunciation, English Language and 21st Century

Introduction

Technology has advanced at an exponential rate in the twenty-first century, changing many facets of human life, including education. The impact of technology on language learning is particularly noticeable when it comes to learning how to pronounce words in English. The incorporation of electronic resources into pronunciation instruction presents innovative methods that address the demands of a wide range of learners, increase accuracy, and boost engagement. As English continues to solidify its status as a global lingua franca, the importance of mastering its phonetic intricacies becomes ever more pronounced, necessitating effective and accessible instructional methods (Adegbija & Fakeye, 2015).

However, a study by James, Okon & Ohiagu (2019) explored that communication can only be said to be effective when the end receiver is able to get the same information as intended by the source making the receiver feel what the source feels and experience what the source experiences, thereby making the message sent to be equal to the message received.

According to James (2018) every form of art including communication requires the application of skill and intelligence to achieve effective ends. A wide range of technologies, including computer-assisted language learning (CALL) systems, mobile applications, and interactive software, have contributed to the development of electronic tools for pronunciation in English language learning. These tools use machine learning and artificial intelligence to deliver immersive experiences, personalised learning routes, and real-time feedback. For instance, Oladipupo and Adebayo (2016) highlight how speech recognition software can identify pronunciation errors and suggest corrective measures, thereby facilitating autonomous learning and consistent practice.

Moreover, the rise of mobile learning has revolutionised access to pronunciation resources, making them available anytime and anywhere. Mobile applications such as Duolingo and Rosetta Stone offer comprehensive pronunciation modules that allow learners to practice and refine their skills on the go. This accessibility is particularly beneficial in contexts where traditional classroom settings are less feasible, providing an inclusive platform for a wider audience (Okoro, 2017). The portability and convenience of mobile devices thus play a critical role in modern language education.

Electronic tools encourage group learning as well as solitary study, allowing students to communicate and practise pronouncing words correctly with classmates and native speakers in real time. Online discussion boards and virtual classrooms enable both synchronous and asynchronous communication, encouraging participation and quick response times. According to Adeoye and Olaoye (2018), these interactive platforms not only enhance pronunciation skills but also build learners' confidence in using the language in real-life situations.

The acceptance and use of these electronic tools, despite their obvious benefits, might differ greatly depending on technological infrastructure, educational policy, and socioeconomic circumstances. A paradigm shift in language education is being brought about by the incorporation of electronic tools into English pronunciation instruction. These new solutions address the changing needs of learners in the twenty-first century. These resources improve education while also democratising access to high-quality instruction in a variety of settings. As highlighted by recent studies and Nigerian scholars, the potential of these technologies can be fully realised through strategic investments and inclusive policies that bridge existing gaps and foster sustainable development in language education (Nwogu & Edebor, 2020).

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Concept of Pronunciation

Pronunciation can be defined as the act or manner of pronouncing syllables, words, and phrases with regard to the production of sounds and the placement of stress, intonation, and many more. Effective pronunciation often leads to effective communication which is essential for information (Akpan and James, 2022). It is the form in which the elementary symbols of language, the segmental phonemes or speech sounds, appear and are arranged in patterns of pitch, loudness, and duration (Britannica 2024). According to Okono (2023),

pronunciation is associated with the production of fricative sounds. Pronunciation is the way in which a language is spoken, pronounced, and how an individual speaks the word of the language. Pronunciation, however, also describes how people make the sounds necessary to convey meaning when speaking. Phonetics is the study of the variety of sounds that occur in speech, including how the speech organs produce them and their acoustic characteristics. Pronunciation is the study of phonetics. Selvarajan (2022) also explained that phonetics includes the study of how sounds are physically produced (by positioning the mouth, lips, and tongue) and how sounds are perceived by a listener.

The Cambridge dictionary (2024) defined pronunciation as the way in which a word or letter is said or said correctly, or the way in which a language is spoken. Pronunciation is also said to be the phonetic transcription of a word, sound, and so on (Collins dictionary, 2024). It is an accepted standard for the sound and stress pattern of a syllable or word. According to Nordquist (2020), pronunciation is the act or manner of speaking a word. Many English words are pronounced differently than how they are spelt for a variety of reasons, and certain sounds can be represented by more than one letter combination. One of the most crucial components of speaking English is pronunciation, particularly when communicating orally. It entails making speech sounds, such as articulation, emphasis, and intonation, and frequently involves adhering to accepted norms of accuracy and acceptability.

Furthermore, pronunciation is the process of producing a spoken word, especially so that it is accepted or generally understood (Susannah 2019). In order to effectively communicate and express oneself and one's views, pronunciation is equally crucial when speaking English. There are guidelines for word pronunciation, however mispronouncing a word can give the wrong impression. Proper word pronunciation is important for clear communication and to prevent miscommunications. Gilakjani (2016) defined pronunciation as the production of English sounds, as it involves the process of repeating sounds and correcting them when produced inaccurately. There are also two different ways to pronounce a word: segmental features (English vowels, diphthongs, and consonants) and supra-segmental features (stress, intonation, and rhythm).

Concept of English Language

In general, language can be viewed as a special gift that people from diverse backgrounds have learned to rely on as a vital tool for communication. As mentioned by Okono (2020), language is used naturally as a tool of expression and interaction. According to Nwagbara and James (2016), English Language is predominant for news and information diffusion Anglophones are people who speak English, an Indo-European language that belongs to the West Germanic language family. Early mediaeval England is where it all began. English is the most spoken language in the world, and as noted by Okono (2019), it has arguably become the world language, primarily due to the global influences of the former British Empire and the United States. The English language has become one of the official languages in the 59 sovereign states.

According to Potter & Crystal (2024), the English language is the first choice of foreign language in most other countries of the world, and it is that status that has given it the position of a global lingua franca. Moreover, Nordquist (2020) postulated that the English language is the primary language of several countries, including Australia, Canada, New Zealand, the United Kingdom and many of its former colonies, and the United States, and the

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second language in a number of multilingual countries, including India, Singapore, and the Philippines. Though spoken all over the world, it is an official language in a number of African nations, including South Africa, Nigeria, and Liberia.The Anglo-Saxon era in Britain dates the origins of the English language to 450 CE. The early version of English known as Old English was mostly influenced by the old Germanic languages. After the Second World War, the English language continued to grow and acquire greater cultural and economic influence until it was acknowledged as a universal language. With over 1.5 billion English learners globally, the English language has transformed from a simple tool for communication to a global currency of opportunity. It is a unifying force in a world where linguistic diversity abounds.

Furthermore, Koothrapalli (2023) postulated that the English language has emerged as the lingua franca of international communication, serving as a bridge that connects people from diverse linguistic backgrounds. Additionally, because the language makes cross-border communication easier, it has created new avenues for international cooperation, economic negotiations, and the dissemination of research. Furthermore, American or British English norms are typically the foundation for the English language. The English language also helps to keep pace with the exposure of knowledge and scientific and technological advancements (Patel & Jain, cited by Hanifa, 2018).

Since English is taught and encouraged to be learned as a second language by children in many nations, the English language is also very important in education. The English language's phonology varies greatly between dialects, showing significant differences in vowel sounds, stress patterns, and intonation; yet, this diversity is mirrored in the wide range of accents and pronunciations that can be found worldwide.

Types of Electronic Tools for English Pronunciation

The following are electronic tools for English Pronunciation:

1. Text-to-Speech (TTS) Tools:

Operation: To convert any text into spoken audio, just enter it in. Many let you select different accents and change the reading pace. Examples: Natural reader, Google Text-to-Speech, Amazon Polly, Descript, Apple Text-to-Speech etc.

- **Advantages:**

Auditory Reference: Hear the proper pronunciation of words and sentences to serve as a guide for your own pronunciation attempts.

Customizable Accents: Choose the specific accent (American, British, etc.) you want to learn.

Speed Control: Slow down the pace for beginners to focus on complex sounds.

Repetition on Demand: Repeat challenging sections for targeted practice.

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- Disadvantages:

Machine-Generated Voice: The synthesized voice might sound unnatural compared to a human speaker.

Limited Intonation: TTS may lack the subtle variations in tone that convey emotion in natural speech.

2. Audio Dictionaries and Pronunciation Apps:

Operation: Look up words and hear their pronunciations, often with variations for different parts of speech. Some apps use phonetic symbols or visual aids to show sound production. Examples: ELSA Speak, Pronunciation by YouGlish, LyricsTraining, Duolingo and Rosetta Stone.

- Advantages:

On-Demand Audio Reference: Instant access to pronunciations for any word you encounter.

Visual Aids: Phonetic symbols or mouth diagrams can enhance understanding of sound formation.

Gamification: Some apps turn pronunciation practice into a fun and engaging experience.

- Disadvantages:

Limited Scope: Focuses on individual words, not pronunciation in context.

Static Learning: May lack interactive features for personalized feedback.

3. Online Pronunciation Courses and Tutorials:

Operation: Enroll in online courses with structured lessons, video demonstrations by native speakers showcasing proper mouth and tongue placement, and interactive exercises like quizzes and recording features for self-assessment. Examples: YouTube Channels (Rachel's English), Coursera, Udemy, italki etc.

- Advantages:

Structured Learning: Provides a clear roadmap for pronunciation improvement.

Visual Learning: Video demonstrations help visualize proper sound production.

Self-Assessment: Record yourself and compare with the instructor's pronunciation.

- Disadvantages:

Cost: Some courses may require a subscription fee.

Limited Interaction: May not offer personalized feedback from instructors.

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4. Speech Recognition Software:

Operation: Speak into a microphone and the software compares your pronunciation to a reference database. It can identify specific sounds or words that need correction. Some offer gamified elements for motivation.

- **Advantages:**

Instant Feedback: Receive immediate feedback on your pronunciation accuracy.

Targeted Practice: Identify specific areas needing improvement for focused learning.

Gamification: Makes practicing pronunciation more engaging and fun.

- **Disadvantages:**

Accuracy Limitations: Speech recognition technology might not always be perfect, especially for complex accents.

Limited Feedback: May not offer detailed explanations for incorrect pronunciations.

5. Online Language Learning Platforms:

Operation: Many platforms integrate pronunciation practice alongside grammar and vocabulary lessons. They may offer interactive activities with immediate feedback, pronunciation challenges, or even connect you with native speakers for conversation practice.

- **Advantages:**

Holistic Approach: Combines pronunciation practice with other language learning skills.

Interactive Features: Provides instant feedback and opportunities for self-assessment.

Native Speaker Interaction: Connect with native speakers for personalized feedback and real-life practice.

- **Disadvantages:**

Subscription Fees: Platforms often require paid subscriptions.

Effectiveness Varies: The quality and focus on pronunciation practice can vary across platforms.

Remedies to the Disadvantages of each of the Tools

- **-Text-to-Speech (TTS) Tools:**

Supplement with Human Speech: Pair TTS practice with listening to audiobooks or podcasts narrated by native speakers to get a feel for natural intonation and speech patterns.

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Focus on Individual Words: Use TTS for individual words or short phrases where the focus is on specific sounds. For longer passages, consider alternative tools.

- **Audio Dictionaries and Pronunciation Apps:**

Use Alongside Context: Once you learn a word's pronunciation from the app, look for examples of its usage in sentences or listen to recordings of native speakers using the word in context.

Combine with Other Resources: Complement audio resources with pronunciation exercises from online courses or textbooks that offer visual aids or explanations for sound production.

- **Online Pronunciation Courses and Tutorials:**

Seek Courses with Feedback: Look for online courses with features like instructor feedback on pronunciation recordings or opportunities for live chat with instructors.

Practice with Native Speakers: Supplement online courses with conversation practice with native speakers on platforms like italki or HelloTalk.

- **Speech Recognition Software:**

Cross-Check with Other Tools: If unsure about the software's feedback, check your pronunciation using a different tool like a pronunciation app or online dictionary.

Focus on Specific Sounds: Use speech recognition software to isolate and practice specific sounds you struggle with, rather than relying solely on overall pronunciation feedback.

- **Online Language Learning Platforms:**

Choose Platforms with Strong Pronunciation Focus: Research and compare platforms, prioritizing those with dedicated pronunciation modules, live sessions with native speakers, or advanced feedback features.

Utilize All Available Resources: Do not just rely on the platform's automated pronunciation features. Take advantage of other resources like interactive activities, conversation opportunities, and pronunciation-focused lessons.

Conclusion

The 21st century has seen significant technological advancements, particularly in language learning and English pronunciation. The integration of electronic tools, including CALL systems, mobile applications, and interactive software, offers personalised learning, real-time feedback, and increased accessibility. Mobile learning provides pronunciation resources anytime and anywhere, enhancing language education's reach. Collaborative platforms further boost engagement and confidence in real-life usage. However, effectiveness varies due to socio-economic and infrastructural factors. Ultimately, these tools democratise access to quality education, necessitating strategic investments and inclusive policies for sustainable development in language learning.

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Recommendations

- Teachers should integrate electronic tools such as speech recognition software and mobile applications like Duolingo and Rosetta Stone into their curriculum. Utilizing these resources in the classroom can enhance engagement and improve pronunciation proficiency.
- Students should take advantage of available electronic tools, including pronunciation apps and online forums, to practice regularly.
- Parents should encourage their children to use mobile learning apps and interactive software at home to practice English pronunciation. By supporting consistent practice, parents can help their children develop stronger pronunciation skills.

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