TẠP CHÍ KHOA HỌC VÀ CÔNG NGHỆ ĐẠI HỌC DUY TÂN DTU Journal of Science and Technology 05(66) (2024) 174-184



# The situation of using ELSA Speak application by English majored students - Duy Tan University and some suggestions

Thực trạng sử dụng phần mềm ELSA Speak của sinh viên chuyên ngành tiếng Anh -Trường Đại học Duy Tân và một số đề xuất

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#### **Abstract**

The Faculty of English at School of Languages, Humanities and Social Sciences, Duy Tan University has implemented an artificial intelligence-based application called ELSA Speak to assist students in improving their language skills, particularly English pronunciation. However, as this is a new application, research on its effectiveness is limited. A survey conducted with first-year English majored students at Duy Tan University revealed that ELSA Speak was generally positively evaluated by most students and helped improve their pronunciation abilities. However, the research also indicated that ELSA Speak needs further development to provide the best learning experience for students. The study also made suggestions to maximize the potential of ELSA Speak.

Keywords: English majored students; application; ELSA Speak; language skills; pronunciation.

#### Tóm tắt

Khoa Tiếng Anh, Trường Ngôn ngữ - Xã hội Nhân văn, Trường Đại học Duy Tân đã triển khai áp dụng một ứng dụng dựa trên trí tuệ nhân tạo được gọi là ELSA Speak để hỗ trợ sinh viên cải thiện kỹ năng ngôn ngữ của mình, đặc biệt là phát âm tiếng Anh. Tuy nhiên, vì đây là ứng dụng mới, nghiên cứu về hiệu quả của ứng dụng này còn hạn chế. Kết quả khảo sát với sinh viên năm Một chuyên ngành tiếng Anh tại Trường Đại học Duy Tân cho thấy rằng ELSA Speak được hầu hết sinh viên đánh giá tích cực và giúp cải thiện khả năng phát âm. Tuy nhiên, nghiên cứu cũng chỉ ra rằng ELSA Speak cần tiếp tực phát triển để mang lại trải nghiệm học tập tốt nhất cho sinh viên. Nghiên cứu cũng đưa ra các đề xuất để tối đa hóa tiềm năng của ELSA Speak.

Từ khóa: Sinh viên chuyên ngành tiếng Anh; ứng dụng; ELSA Speak; kỹ năng ngôn ngữ; phát âm.

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#### 1. Introduction

Nowadays, communication is an essential part of our daily lives. People who can communicate effectively are more likely to succeed in their careers, as they can articulate thoughts ideas and clearly persuasively. Studying and working in the Faculty of English, we have recognized that speaking is one of the most important aspects of communication. From our experience, it is evident that the objective of the speaking courses, Speaking 1 through Speaking 4 at Duy Tan University, is to assist students in increasing their vocabulary on a variety of everyday themes and articulate their thoughts in conversation. Nevertheless, through the courses, we have witnessed numerous situations in which the students have struggled to produce basic with correct grammar sentences pronunciation. Other students are lacking the critical vocabulary to explain their specific ideas. This, in turn, hinders their ability to communicate effectively and lowers their confidence. In recent years, the faculty has taken action to resolve this problem, and ELSA Speak is applied in pronunciation and speaking lessons.

The study is carried out with the following objectives. Firstly, the study is conducted in order to investigate the implementation of a pronunciation application - ELSA Speak (English Language Speech Assistant) to enhance speaking skills, especially pronunciation, of students in English majors at Duy Tan University. Secondly, it is aimed to point out the strengths and flaws of the application. Finally, suggestions are given for the application enhancement as well as more efficient learning ways on ELSA Speak.

#### 2. Literature review

ELSA Speak is an educational technology startup founded in July 2015 by Van Dinh Hong

Vu and Xavier Anguera. Up to now, there have been some noticeable researches available on it.

Kholis [5] made an investigation into classroom action and found out that ELSA Speak helped the students pronounce diverse words more easily and comprehensively. Also, the available features offered by this app like instant feedback enabled the students to pronounce precisely.

Another study conducted by Smith, Johnson, and Lee [6] focuses on the efficacy of ELSA Speak in improving English pronunciation. The study highlights the potential of ELSA Speak as an AI-based mobile app for addressing pronunciation challenges and aiding language learners in achieving better pronunciation.

The study by Chen, Davis, and Johnson [2] explores the development of an adaptive learning system for English pronunciation training using ELSA Speak. The system provides instant feedback and personalized recommendations to help learners improve their pronunciation skills. This research highlights the value of incorporating ELSA Speak into adaptive learning environments to enhance pronunciation training and cater to learners' diverse language backgrounds and preferences.

Duy, P. L. N. [3] carried out a general review on the advantages and disadvantages of using two applications ELSA Speak and Duolingo for English-majored students at Duy Tan University and suggest using these two applications to support students' English learning.

Currently, the Faculty of English at Duy Tan University has implemented the use of ELSA Speak for all first-year students in the faculty. In order to understand the usage and evaluate the practical advantages and disadvantages of this application in the context of the students within the faculty, it is necessary to conduct a separate survey specifically with the students and instructors in the faculty.

### 3. Methodology

By conducting a survey of 209 freshmen from Faculty of English who have already used ELSA Speak in their Speaking and Pronunciation classes using the questionnaire, we compiled the data to write the research. The sample questionnaire is composed of 3 parts. Part 1 mainly investigates the students' perspectives on the current situation of ELSA Speak usage. Part 2 chiefly examines their opinions about the efficiency of ELSA Speak. Part 3 is about these students' suggestions to improve ELSA Speak. This provided insight into the practical achievements useful for drawing the conclusions presented in this paper. Before distributing questionnaires to the participants, explicit complete instructions on how to the questionnaires are provided. Regarding the advantages of ELSA Speak, participants are required to evaluate on a five-point Likert scale for each question, ranging from completely disagree (1 point), disagree (2 points), doubt (3 points), agree (4 points), and completely agree (5 points).

In addition to the questionaire handed to students, we carried out interviews with some students and teachers in the Faculty of English, Duy Tan University to get some useful recommendations for completing the research.

### 4. Theoretical background

### 4.1. The importance of pronunciation features

According to Suwartono [7], understanding pronunciation features is essential for effective communication. Pronunciation encompasses the way words are spoken, including factors such as stress, intonation, and accent. When speakers mispronounce words, they may not convey the intended meaning, leading to confusion or misunderstandings [4]. Furthermore, improper pronunciation can make it difficult for listeners to understand the speaker, and can even impede

their ability to learn a new language. The incorrect production of a phoneme can result in miscommunication.

Gerald [4] supposed that a speaker of a different linguistic group may find it incredibly challenging to understand a learner who repeatedly pronounces a variety of phonemes incorrectly. This can be quite frustrating for learners who may have a strong grasp of grammar and vocabulary yet struggle to understand and be understood by a native speaker. According to Cakir and Baytar [1, p.100], correct pronunciation can help boost language learners' confidence and even helps them in socialization making them feel more at ease when expressing themselves and engaging in conversations. Therefore, it is beneficial to take into account students' pronunciation difficulties and how these can obstruct successful communication to evaluate how to address pronunciation instruction in the classroom.

### 4.2. Functions of ELSA Speak

ELSA Speak supplies a range of functions designed to help users improve their speaking and listening skills in a foreign language, including speech recognition, customized lessons, interactive exercises, progress tracking, and game-based learning [5].

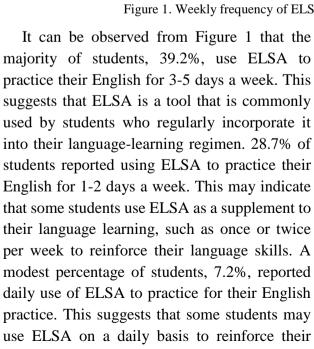
- 1. Speech recognition: One of the main functions of ELSA Speak is its speech recognition technology. The app utilizes advanced algorithms to analyze the user's pronunciation and provide advice on areas where refinement is necessary. This feature supports users to practice speaking in a natural and conversational approach, while also receiving feedback on their pronunciation accuracy.
- 2. Customized lessons: Another important function of ELSA Speak is its ability to provide customized lessons tailored to each user's

individual needs. When a user first signs up for the app, they are prompted to take a brief quiz to assess their current skill level. Based on the results of this quiz, the app generates a personalized curriculum that emphasizes the problem areas.

3. Interactive exercises: ELSA Speak provides a range of interactive exercises designed to help users practice their speaking and listening skills. These exercises consist of conversation simulations, role-playing scenarios, and pronunciation drills. The app also contains a variety of multimedia content, such as videos and audio recordings, to assist users in learning new vocabulary and phrases in context.

### 5. Findings and discussions

# 5.1. The frequency of using ELSA Speak



- 4. Progress tracking: ELSA Speak allows users to track their progress over time, allowing them to see how much their language skills have improved. The app provides detailed feedback on pronunciation accuracy and other areas of focus, and users can track their progress through graphs and charts.
- 5. Gamification: Finally, ELSA Speak incorporates gamification, with users earning points and unlocking new levels as they advance through the app's curriculum. This feature adds an element of enjoyment and motivation to the language-learning process, making it more engaging and delightful for users.

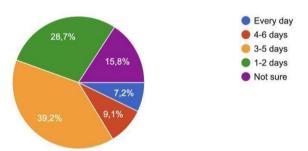


Figure 1. Weekly frequency of ELSA usage to practice English by students

learning. 9.1% of students reported using ELSA to practice their English for 4-6 days per week. This indicates that students may use ELSA as a regular tool in their language-learning routine, with occasional breaks on certain days. 15.8% of students, were not sure of how frequently they used ELSA to practice their English. This could mean that some students either do not utilize ELSA consistently or follow a sporadic schedule. Overall, the survey data suggests that ELSA is a tool that is commonly used by students for regular language practice, with most of the students using ELSA for 3-5 days a week. With such a high frequency of usage among the students, their evaluation of this application in

the survey proved to be of high reliability because they have all experienced using it with a sufficient frequency to provide fairly accurate feedback.

### 5.2. Favorite features of ELSA Speak

As one of the leading AI platforms in recent years, ELSA Speak has garnered recognition and popularity as an effective tool for language learners, especially in the area of pronunciation improvement. It is not surprising that the Faculty of English has adopted ELSA Speak as a way to support students in their pronunciation courses.

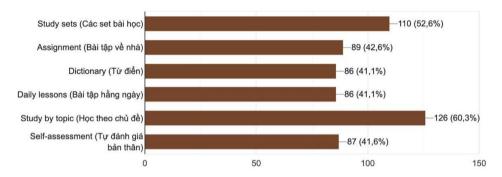


Figure 2. Student's favorite features of ELSA Speak

Based on the chart survey of 209 students regarding their favorite features of ELSA Speak app, *study by topic* is the most popular feature, with 60.3% of students indicating that they enjoy this. This feature allows students to focus on specific topics of interest or areas where they need improvement, making it a valuable tool for targeted learning.

It can be found from Figure 1 that the second highest percentage of respondents, 52.6%, indicated that they appreciate *the study sets* feature. It can be explained that this feature allows students to practice their language skills through various exercises and quizzes, providing them with a structured way of learning that is engaging and effective.

The third most popular feature is assignments, with 42.6% of students indicating that they enjoy completing assignments on the app. This feature allows students to receive personalized assignments that are tailored to their level and specific learning needs, allowing them to focus on areas where they need improvement.

The fourth most popular feature is the *self-assessment*, with 41.6% of students indicating that this is their favorite feature. The self-assessment provides students with an opportunity to evaluate their own language skills and progress, allowing them to set goals and track their improvement over time.

Daily lessons and dictionary are also nearly tied for the fifth most popular features, with 41.1% of students indicating that they enjoy these features. Daily lessons may be preferred by students who want to learn new concepts or refresh their knowledge daily. Meanwhile, the dictionary feature may be useful for students who want to look up unfamiliar words and phrases as they practice their language skills.

Overall, ELSA Speak offers a wide range of features that cater to different aspects of speaking practice. These features are designed to help users improve their speaking ability in an engaging and effective way. These features offer valuable tools for students to improve their language skills, stay engaged, and track their progress over time.

### 5.3. ELSA Speak's advantages

| Aspects ELSA Speak<br>helped students<br>improve | Completely<br>agree<br>(No.) | Agree<br>(No.) | Doubt<br>(No.) | Disagree<br>(No.) | Completely<br>disagree<br>(No.) | Total<br>(No.) | Average<br>value |
|--|------------------------------|----------------|----------------|-------------------|---------------------------------|----------------|------------------|
| English pronunciation                            | 64                           | 120            | 22             | 3                 | 0                               | 209            | 4.17             |
| Pronunciation/speaking techniques                | 61                           | 119            | 24             | 2                 | 3                               | 209            | 4.11             |
| Self-study abilities                             | 49                           | 132            | 21             | 6                 | 1                               | 209            | 4.06             |
| Confidence in English communication              | 45                           | 127            | 34             | 2                 | 1                               | 209            | 4.02             |
| Learning cost saving                             | 43                           | 119            | 36             | 9                 | 2                               | 209            | 3.92             |
| Time-management skills                           | 38                           | 114            | 50             | 4                 | 3                               | 209            | 3.86             |
| Interaction with online partners                 | 36                           | 103            | 60             | 5                 | 5                               | 209            | 3.77             |

Table 1. Students' evaluation on the advantages of ELSA Speak

According to the survey results, 7 main aspects that ELSA Speak helps students to improve from the most to the least include English pronunciation, Pronunciation/speaking techniques, Self-study abilities, Confidence in English communication, Learning cost saving, Time-management skills, and Interaction with online partners. This result is quite similar to the survey findings by Kholis [5] because the strengths of ELSA Speak are focused on pronunciation and pronunciation techniques.

#### 5.4. Disadvantages of ELSA Speak

ELSA Speak is an AI-powered language learning application that has gained popularity in recent years. While the app offers numerous benefits to language learners, it is not without its disadvantages. These disadvantages ranging from technical issues to limitations in the app's teaching methodology impact can effectiveness language of the learning experience. In this context, it is essential to evaluate the potential downsides of using ELSA Speak to explore their impact on language learners.

#### 5.4.1. Technical issues

One of the primary flaws of ELSA Speak is that it can be excessively dependent on technology. The issue with relying too heavily on technology is that it can be unreliable on occasion. If there is a problem with the app or the user's device, it is possible that the app will not function effectively or provide accurate feedback. Users who rely on the app to help them enhance their English pronunciation may find this frustrating. Some students with proficient pronunciation obtain low scores on ELSA's test, which affects their self-assurance. According to the survey, students found it discouraging to use the app when it pointed out and did not recognize their pronunciations of certain words, such as "education"; as a result, they are unable to progress through the courses.

Additionally, excessive reliance on technology can sometimes result in a lack of human interaction. ELSA Speak can provide feedback on pronunciation, but it cannot provide the same personalized feedback and instruction as a human teacher. According to the instructors,

some feedback given to students to help them improve their pronunciation is insufficiently detailed and obvious.

What's more. excessive reliance technology may result in a lack of motivation or engagement. If a student becomes overly dependent on the app for feedback and direction, they may lose interest in the learning process or become frustrated if their pronunciation does not improve immediately. This can hinder the learner's ability to acquire more complex skills, such as engaging language conversation, comprehending cultural nuances, and responding in real-time to questions and feedback.

In conclusion, while technology can be a useful tool for language acquisition, relying too heavily on it can result in reliability issues, limited interaction, and a possible lack of motivation or engagement.

## 5.4.2. Unsuitability for all types of learners

Another disadvantage of ELSA Speak is that it may not be suitable for all types of learners. For example, some learners may struggle with using technology or feel uncomfortable speaking on a device. Furthermore, the instructor believes that the app's ability to evaluate students' pronunciation is too strict, making it difficult for beginners to meet the high standards. They may prefer more traditional methods of language learning, such as textbooks, in-person guidance, or conversation partners.

Additionally, ELSA Speak may not be effective for learners who need more personalized feedback and guidance. The app is designed to provide automated feedback based on speech recognition, which may not always be accurate or helpful for every learner. Some learners may benefit more from working with a teacher or tutor who can provide individualized feedback and instruction.

Some people may prefer more traditional methods of learning, such as classroom instruction or one-on-one tutoring. ELSA Speak's game-like approach may not be suitable for people who prefer a more structured and formal learning environment. However, the complexity of ELSA Speak's interface may also depend on the user's level of familiarity with technology and their previous experience with similar apps. It is worth noting that user experience can vary from person to person, and what may be complicated for one user may not be for another. Some students might find it hard to get familiar with ELSA Speak, some find it boring to stay in the app after 15 minutes.

In conclusion, while ELSA Speak can be a useful tool for improving pronunciation skills, it may not be the best fit for all learners, especially those who prefer more traditional learning methods or need personalized feedback and instruction.

# 5.4.3. Problems with the app's class sign up process

According to the teachers' feedback, ELSA Speak's class sign-up process has several disadvantages. The instructors note that the process is slow and can waste valuable time as students wait to be invited to join their class in the app after purchasing it. Additionally, students have reported experiencing problems during the sign-up process, which can be frustrating for both students and instructors alike. These issues could potentially deter potential users from using ELSA Speak as a language learning tool and may need to be addressed to improve the overall user experience.

#### 5.5. Suggestions

### 5.5.1. To ELSA Company

In today's digital age, it's becoming increasingly common for companies,

universities, and educational institutions to utilize mobile applications to enhance their operations and streamline their processes. The ELSA company has developed a language-learning app that has gained popularity among students and instructors alike. However, to make the most out of the app's capabilities, there are certain suggestions that can be implemented to improve its efficiency.

# 5.5.1.1. Expanding the focus

One proposal that ELSA Speak company could consider to improve their app is to expand its focus beyond pronunciation. Although the app is currently designed to help users improve their pronunciation skills, it could be enhanced by incorporating other language learning aspects such grammar, vocabulary, comprehension. For example, the study-set of vocabulary should be expanded to include more phrases. By integrating these components into the app, users would be able to develop a more comprehensive understanding of the language learning, allowing they are them communicate more effectively in real-life situations. Additionally, this would make the app more appealing to users who are looking for a comprehensive language learning solution. Therefore, by expanding the focus of the app, ELSA Speak could improve its effectiveness and attract more users to its platform.

### 5.5.1.2. Incorporating human interaction

Another suggestion for ELSA Speak to improve its effectiveness is incorporating human interaction into the app. Live instructors and peer-to-peer interactions could complement the automated learning experience and provide more personalized feedback to the users. By considering these proposals, ELSA Speak company could significantly improve their app and provide a more effective language learning tool for its users.

### 5.5.1.3. Improving technical accuracy

Another proposal that ELSA Speak company could consider to improve their app in an effective way is to focus on improving the technical accuracy of the app. This would involve improving the speech recognition technology used by the app to provide more accurate feedback to users. By minimizing technical issues and errors, users would have a better experience with the app and be more likely to continue using it. ELSA Speak could invest in research and development to improve the app's algorithm and machine learning capabilities, as well as hire technical experts to ensure the app is functioning at its best. Improving technical accuracy would not only enhance user experience but also increase the app's credibility in the market.

### 5.5.1.4. Providing customization

By allowing users to choose specific pronunciation areas to focus on or to adjust the speed and difficulty level of the lessons, the app could better meet the individual needs of each user. This would not only make the learning experience more enjoyable and effective but also increase user engagement and satisfaction with the app. Additionally, offering customization options could differentiate ELSA Speak from other language learning apps on the market and attract new users who are looking for a more personalized approach to language learning.

# 5.5.1.5. Adjusting the grading assessment process

To improve the app in an effective way, ELSA Speak company could consider adjusting their grading process. While the app has the ability to evaluate students' pronunciation, it can be too strict and intimidating for beginners who may struggle to control their pronunciation at many points. By lowering the requirement for difficult pronunciation, students can feel more encouraged to practice and continue using the

app. This adjustment would not only help students to feel more confident but also increase the overall effectiveness of the app in teaching English pronunciation.

# 5.5.1.6. Streamlining the sign-up process

The importance of a smooth sign-up process will help to reduce any potential barriers to student participation. By streamlining the sign-up process, students will be able to easily register for the program, allowing them to start using the ELSA Speak app more quickly. This will ultimately lead to more effective language learning outcomes, as students will have more time to practice their speaking skills with the app. Therefore, the proposal to streamline the sign-up process for ELSA Speak is a positive step towards improving the language learning experience for students at Duy Tan University.

#### 5.5.2. To instructors

### 5.5.2.1. Doing close monitoring

Using ELSA Speak app in class can be an effective way to support students' pronunciation. Instructors should monitor closely to ensure that students are practicing using the app, as consistent practice is key to improving pronunciation. Additionally, the speaking vocabularies and speaking phrases should be expanded and reviewed in-class. It is important to evaluate the benefits and drawbacks of the app and consider how it can be integrated into a broader language learning curriculum. While ELSA Speak can be a helpful tool, it should not be the only method of language instruction. Instructors should supplement it with other activities and exercises to provide students with a well-rounded language learning experience.

# 5.5.2.2. Designing proper levels of tests from ELSA Speak for students

It is important for instructors to design tests that are appropriately challenging and reflect the language skills of their students. If a test is too easy, it may not accurately reflect the proficiency of the students, leading to inflated grades. Conversely, if a test is too difficult, it may unfairly penalize students who are still developing their language skills. By designing tests that are tailored to the specific needs of their class, instructors can ensure that grades are consistent and reflective of their students' progress in developing their pronunciation skills using ELSA Speak.

# 5.5.2.3. Taking a proactive approach on using ELSA Speak in class

A proposal for instructors who use ELSA Speak in class to support students' pronunciation involves taking an active role in helping students the and overcome navigate app their pronunciation errors. While the app provides feedback when students mispronounce words, this feedback can sometimes be confusing or insufficient. By offering additional explanations and guidance, instructors can help students better understand their mistakes and correct them more effectively. This support is particularly important for students who may struggle to correct their own pronunciation errors through self-study. Overall, instructors who take a proactive approach to using ELSA Speak in class can help students improve their pronunciation and build confidence in their language abilities.

# 5.5.2.4. Becoming better equipped at using ELSA Speak

To use ELSA Speak in class to support students' pronunciation more effectively, teachers should become familiar with the application and use ELSA Speak to improve their own pronunciation. By doing so, they can become better equipped to assist students in the pronunciation improvement process. Teachers can set an example for their students by using the application themselves, which can serve as motivation for students to improve their own

provide guidance on the best ways to use the application and offer feedback on their students' progress. By working together, both teachers and students can benefit from using ELSA Speak to improve their pronunciation skills.

#### 5.5.3. To students

5.5.3.1. Incorporating ELSA Speak into daily routine

By incorporating this app into their daily routine, students can practice speaking and listening skills outside of class, leading to more confident communication in the classroom. However, it is important for students to use the app consistently and regularly in order to see the greatest benefits. To truly improve their pronunciation, students should aim to practice with the app for at least ten to twenty minutes every day. By doing so, they can build a strong foundation of speaking skills that will serve them well in their academic and professional endeavors.

5.5.3.2. Seeking opportunities to practice their pronunciation with real human interaction

ELSA Speak can be beneficial for learners to practice their pronunciation and gain immediate feedback on their mistakes. However, it is important to note that the app's feedback is based on algorithms and may not be able to account for all aspects of human speech. Therefore, learners should also seek opportunities to practice their pronunciation with real human interaction, such language exchange programs as or conversations with native speakers. By utilizing ELSA Speak in conjunction with other resources. learners can enhance their pronunciation skills and develop a more wellrounded understanding of the language.

#### 6. Conclusions

Pronunciation is an important part in language fluency. In order to speak and

understand what others are saying, second language learners need to know the foundational sounds that build a language. Poor or unintelligible pronunciation often leads to slowed learning progress and miscommunication between students. There is a lot of data on the effects of pronunciation so it is understandable that ELSA would focus on such a crucial aspect of language learning.

The data suggest that students enjoy the app overall and claim that its most prominent features are also the apps best features. The survey results show the trends of use of ELSA and the learners' perception of its effectiveness throughout the course of studying English. The results lean heavily towards a positive outlook towards using the app and the effects the app has on learners' fluency. However, ELSA is not without its drawbacks as well. As with any new application, it is important that ELSA continue to develop its software in order to provide students with the best and most complete learning experience.

In order to provide students with this experience, we have outlined a series of suggestions both on how to improve the app and on how to maximize the app's potential in the current status. As goes with any study method, the most important tip is to routinely use ELSA speak as a way to improve learners' pronunciation. Instructors have the ability to employ the app as homework and students can engage with the app at any time. This makes ELSA a convenient app for students and teachers who are committed to progress.

Students should be aware that the app does not provide human interaction and the AI, while a powerful tool for learning, can sometimes cause frustrations when using the app. By implementing the best use practices we have outlined above, students should be able to see progress in their English pronunciation during the course of their study.

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