



Exploring EFL students' pronunciation through the application of AI-powered tool Reading Progress: A case study in Vietnam

Pham Duc Thuan*

Hoa Lu University, Vietnam

*Corresponding Author: pdthuan@hlu.edu.vn

ABSTRACT

This study employed AI-powered tool Reading Progress in Microsoft Teams as a tool to investigate challenging sounds encountered by Vietnamese students and to examine the effectiveness of the application in learning English pronunciation. Participants in this six-week study were thirty-four first-year students enrolled in English-as-a-foreign-language (EFL) course at a university in northern Vietnam. Semi-structured interviews with the students and AI-generated analysis results in Reading Progress were used as instruments to collect data. The findings indicated that the five most notable challenging sounds analyzed by AI were /ɪ/, /z/, /ə/, /f/, and /t/. The results also showed significant progress among students across various categories of pronunciation, particularly in reading speed and in the reduction of mispronunciations and omissions through pronunciation training in the tool. Students reported increased engagement and confidence, alongside decreased anxiety, when practicing with Reading Progress. The findings contribute to advancing AI integration in language teaching, offering valuable insights for educators and policymakers. While the study highlights the advantages of Reading Progress in EFL education, limitations include the short duration and the specific text constraints. Future research should investigate long-term effects, diverse language learning contexts, and additional AI tools to maximize learning outcomes.

Keywords: English pronunciation, Reading Progress, AI-powered learning tool, EFL students

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INTRODUCTION

English pronunciation is a cornerstone of effective communication and learner confidence in EFL learning. Beyond accurate sound production, pronunciation is crucial for improving the clarity of communication and minimizing misunderstandings, particularly for non-native speakers (Bakar & Abdullah, 2015). Proficiency in pronunciation is believed to promote comprehension as well as enhance fluency and engagement (Derwing & Munro, 2022). For learners, accurate pronunciation also builds confidence and promotes favorable attitudes toward the language, encouraging active participation in speaking activities (Almusharraf, 2021). However, learners are often found to face challenges in learning pronunciation. Similar pronunciation difficulties are also commonly reported in other EFL contexts, where learners experience anxiety and lack of practice opportunities that impede their oral fluency (Syafryadin & Boulahnane, 2021).

For example, Vietnamese students commonly experience with affricate sounds (Do, 2018), native-language interference in phonological principles (Duong, 2009) and the mispronunciations of /θ/ and /ð/ (Ly, 2020); Saudi students struggle with both vowel sounds and consonant sounds (Hameed & Aslam, 2015); and Yemeni students encounter difficulties with front vowel sounds (Al-Hamzi et al., 2021). Supra-segmental challenges, including intonation and rhythm, further complicate pronunciation for Vietnamese learners, whose native language patterns differ significantly from English (Do, 2021).

Automatic voice recognition and computer-assisted pronunciation training have transformed English pronunciation training for EFL learners. This growing integration of digital tools in EFL settings is aligned with recent findings highlighting how teachers and institutions enhance students' language learning through technology-based literacy and communication strategies (Razak et al., 2022). Among these tools artificial intelligence (AI) technologies enhance pronunciation accuracy and student engagement by providing real-time mistake correction and individualized feedback (Bashori et al., 2022; Liu & Quan, 2022). AI-driven approaches improve learning by evaluating speech patterns, identifying errors, and recommending adjustments (Dai, 2022; Jiao et al., 2021; McCrocklin, 2019). AI-powered applications such as Duolingo make pronunciation practice more accessible and interactive for learners of all ages (Chuyen et al., 2021). These technologies also promote autonomous learning by adapting to learners' ability levels and providing focused challenges, boosting English confidence (Nasim et al., 2022; Mohammadkarimi, 2024). During the COVID-19 pandemic, AI technologies allowed continuous language practice without direct teacher supervision (Noviyanti, 2020). Overall, AI technologies are projected to continue improving pronunciation and informing pedagogical practices in language instruction (Rogerson-Revell, 2021; O'Brien et al., 2018; Tejedor-Garcia, 2020).

Reading Progress in Microsoft Teams stands out as a versatile resource for improving pronunciation among EFL learners with AI-supported technology. Designed to enhance reading fluency, Reading Progress assists students by enabling them to read assigned texts aloud while automatically recording their readings, with the tool leveraging AI to provide immediate feedback on pronunciation accuracy, fluency, and intonation (Burns, 2021). This functionality enables learners to identify specific errors and focus on targeted practice (Maggin & Irani-Tehrani, 2023). Moreover, the tool accommodates various proficiency levels through customizable reading passages, making it adaptable to diverse learning needs (Hasan, 2024). Studies have consistently demonstrated the efficacy of the tool in improving learners' pronunciation skills. Alahmadi (2024)'s study revealed that Saudi learners showed marked improvements in reading aloud and overall proficiency after using the tool. Similarly, Molenda and Grabarczyk (2022) found that Reading Progress alleviated anxiety related to speaking tasks, thereby fostering a more conducive learning environment. Thai EFL students also exhibited reduced pronunciation anxiety and enhanced oral reading fluency when using the tool (Hongnaphadol & Attanak, 2022). In another study, Prasetya (2022) highlighted the tool's effectiveness in improving both speaking and listening competencies among EFL learners.

Reading Progress effectively addresses challenges in teaching and learning pronunciation by providing consistent, immediate feedback and personalized learning experiences. Its AI-driven capabilities analyze each learner's specific pronunciation difficulties, offering a scalable solution that traditional classroom settings often cannot match due to resources and time constraints (Jarrah, 2024). Furthermore, the tool aligns with contemporary pedagogical approaches that integrate technologies to enhance teaching practice (Sirichote & Kanokpermpoon, 2023). By fostering motivation and autonomy through interactive and engaging methods, Reading Progress represents a significant advancement in pronunciation training (Alahmadi, 2024).

Additionally, Reading Progress's potential is reflected in its ability to integrate seamlessly into EFL curricula, addressing both individual and systemic pronunciation challenges. Studies have shown that AI-driven tools like Reading Progress not only improve learners' pronunciation but also enhance their overall language competences, including speaking and listening skills. For instance, Pham (2023) reported favorable perceptions of Reading Progress among Vietnamese EFL students, emphasizing its AI-driven feedback as a critical factor in identifying and correcting pronunciation errors. Similarly, Taylor et al. (2023) highlighted the tool's role in enhancing fluency and accuracy through systematic and regular practice. However, broader adoption may face challenges, such as resource limitations and varying levels of digital literacy among educators and learners (Jarrah, 2024). Despite these hurdles, the efficacy and accessibility of Reading Progress make it a valuable addition to language instruction.

In conclusion, the integration of AI technologies like Reading Progress into EFL pronunciation training offers significant benefits. These tools address persistent pronunciation challenges by providing immediate, tailored feedback and fostering learner autonomy. The

effectiveness of Reading Progress in improving pronunciation, reducing anxiety, and enhancing overall language competence underscores its potential as a transformative resource in language education. By employing Reading Progress as a tool to measure and improve pronunciation, this study aims to explore the challenging sounds encountered by students when learning English pronunciation and to evaluate the effectiveness of the application. By investigating its impact, the research seeks to contribute to EFL teaching methodologies and provide valuable insights for educators on leveraging AI technologies to enhance student engagement and learning outcomes.

METHOD

Context and participants

The study was conducted at a university in a northern Vietnamese region during the second semester of the 2023–2024 academic year. The university was established in 2007 aimed to produce a highly qualified workforce in higher education to meet the demands of regional economic and social development. The institution provides instruction in two main areas: pedagogy and non-pedagogy. The former included preschool, elementary, and secondary teacher education were included in the former, while the latter included the fields of accounting, business administration, information technology, and tourism. All students, irrespective of their major, were required to take English as a foreign language. English courses were divided into two main categories: GE (General English) and English for Specific Purposes (ESP). GE consisted of three consecutive courses: General English 1 - GE1, General English 2 - GE2, and General English 3 - GE3, which were scheduled in the first two years of the training program within 15 weeks per semester. Students in their third and fourth years of study were for ESP courses.

The subjects of this study comprised 34 first-year students enrolled in GE2 course, comprising 29 females and 5 males. The students were part of class code D16 (KTDN) and were pursuing a degree in accounting. They had completed their GE1 course in the first semester and proceeded to GE2 in the second semester, with language proficiency levels ranging from A2 to B1. The textbook used in the course was *Smart Choice 2* (third edition). GE2 was designed with three academic credits. Each week, the educational activities were planned with two in-class sessions allowing students to practice their language skills in listening, speaking, reading, and writing. The course enhanced the understanding of vocabulary, phonetics, grammar by topic based on the contents of the textbook. In terms of pronunciation, the GE2 course book offered thorough practice of specific phonetic sounds, precision, word emphasis, phrase emphasis, and intonation throughout the modules. Generally, the instruction and acquisition of pronunciation followed a traditional method, taking place in a classroom environment where the teacher and students participated in oral repetition activities.

The institution did not have its own learning management system from a technological standpoint. In 2018, the institution opted for Microsoft Teams as its educational technology platform and registered for package A1 in Microsoft 365 for Education, which was provided free of charge to qualifying students in Vietnam. The institution offered accounts to both instructors and students to fulfill their educational requirements across all departments. Amidst the COVID-19 outbreak, Microsoft Teams functioned as the principal digital learning platform.

Implementation of reading progress in the learning process

Microsoft Teams was introduced at the start of the course to help with GE2 instruction and learning. Both the instructor and the students in the class primarily utilized the platform as a communication tool. Since every student regularly used a smartphone, Microsoft Teams served as a mobile application to keep the learning current. During the first few weeks, the instructor remained connected with the students about the learning schedule and activities and disseminated the teaching materials using Microsoft Teams. The use of Reading Progress in Microsoft Teams was implemented for oral reading assignments over a six-week period, from Week 7 to Week 12. The six successive tasks that made up the curriculum, which was divided into two phases, were referred to as Practices 1–6. Practice 1, 2, and 3, which matched three texts, A, B, and C, were the three tasks given during the first phase. The second phase, which entailed replicating the texts

used in phase 1, was finished with the next three assignments: Practice 4 (Text B), Practice 5 (Text A), and Practice 6 (Text C). The second phase was designed with attention to students' pronunciation enhancement.

In the oral reading assignments, three texts were utilized: Text A, Text B, and Text C. The teacher compiled Text A, while the contents of Texts B and C were sourced from extant textbooks. The emails were between 40 and 60 words in length. Text A was composed of 60 syllables and pertains to the mother of an individual. Consequently, text B and C contained 51 and 40 words, respectively, regarding a location (the Nevada desert) and a technological object (a drone), respectively. These elements were derived from the reading passages in the textbook *Smart Choice 2*.

Data collection and analysis

This study employed both qualitative and quantitative data, which were believed to provide a more comprehensive insight into the subject matter (Almeida, 2018; McKim, 2017). Two main sources were used for data collection, including statistical analysis results produced by AI integrated into Reading Progress and semi-structured interviews. The findings from the AI analysis clearly identified the phonetic challenges encountered by students, encompassing both vowels and consonants. The analysis of the pronunciation results from three selected oral reading texts across two stages demonstrated improvements in students' pronunciation skills. After the completion of applying Reading Progress, the recorded results in the system were gathered and downloaded including the number and percentage of the instances of challenging sounds, the percentage of accuracy rate, mispronunciations, omissions, and insertions of sounds.

For the interviews, participants were informed of the purpose, contents, and procedures of the interviews, which were conducted at the end of the implementation period during the break times between in-class sessions in Weeks 13 and 14. They were invited to participate in the interviews voluntarily. As the results, eight students agreed to take the interviews with voluntary willingness. The interviews were carried out in Vietnamese to make the most of the convenience in sharing ideas of the participants. The interviews were audio recorded and stored on smartphones. The duration of each interview session was around two to six minutes. After being transcribed with great care, the data recorded were then translated into English. Theme analysis was utilized for data analysis of interview data. In Creswell and Clark's (2018) research, the data were analyzed and interpreted by using ideas and themes that were comparable to those found in the text. Two major themes were found from the interviews including increased engagement and reduced anxiety in pronunciation learning.

FINDINGS AND DISCUSSION

Findings

Challenging sound

The AI-powered analysis of the students' pronunciation in Reading Progress points out five most challenging sounds including /ɪ/, /z/, /ə/, /ʃ/, and /t/. The detailed results, which are shown in Table 1, provide each phoneme's rank, sound, occurrences, and accuracy.

Table 1. Ranking of challenging sounds

Rank	Sound	Instances	Accuracy
1	/ɪ/	289	21%
2	/z/	1261	29%
3	/ə/	126	31%
4	/ʃ/	344	43%
5	/t/	1175	43%

Vowel /ɪ/ is very tough to learn, as shown by an accuracy rate of just 21% across 289 examples, indicating that this common vowel sound is not easy to grasp. The schwa sound /ə/ has a 31% accuracy rate in 126 cases, suggesting considerable difficulty, perhaps due to its unstressed

nature in many words. The accuracy rating of 29% across 1261 cases indicates that the /z/ sound poses significant difficulty. Although it is common in basic language, this suggests persistent difficulties. With an accuracy rate of 43% over 344 cases, the /j/ sound performs better with further exposure. In comparison to other sounds, the /t/ sound is rather easy, with a rate of 43% of accuracy over 1175 occurrences, indicating a moderate degree of difficulty.

Effectiveness of reading progress usage in learning pronunciation

Pronunciation enhancement

The findings indicate that students developed their pronunciation abilities in a consistent manner across all categories (Appendix 2). It was noticed that there was an improvement in fluency, which was shown by the average number of words per minute. Text B had the most noticeable developments, with a 10 word per minute increase comparing Practice 2 results with Practice 4 results. This indicates that students increased their comfort level and skill in reading speed throughout the course of the instructional period. There was a discernible improvement in the accuracy rates across the board for all publications. Text B and Text C both displayed the most significant improvements, with each of them experiencing a 7% rise from their respective Phase 1 practices.

According to this, it seems that students increased their pronunciation accuracy by engaging in continuous practice and receiving feedback. It was found that there was a considerable reduction in the number of mispronunciations, particularly in Text B, where the rate reduced from 23.50% to a smaller percentage of 19%. This demonstrates that pupils were able to enhance their pronunciation accuracy more effectively via practice. The decrease in omissions reveals an increase in word identification and accuracy rate with the most noticeable improvement displayed in Text C, and with omissions falling from 7.80% to 4.30%.

A decrease in the occurrence of superfluous sounds or words during pronunciation is shown by the decrease in the number of insertions, which is especially noticeable in Text C, which went from 6.10% to 3.30%. According to the results, the pronunciation abilities of English as a Foreign Language (EFL) students were significantly improved by using AI-driven tools such as Reading Progress. The technology provided insights that were informed by data, which made focused practice and feedback easier to implement, ultimately leading to improved results. The usefulness of this technology in improving pronunciation was shown by the continual gains in fluency, accuracy, and mistake reduction that have been made.

Increase in engagement and reduction in anxiety

The data collected from both AI analysis in Reading Progress and semi-structured interviews indicate that students were actively engaged in the learning process and were passionate about improving their pronunciation in Reading Progress. Every student confirmed that they repeatedly rehearsed reading the materials aloud for the tape, since it was a mandatory part of their homework. Prior to submitting their ultimate recording, they engaged in the exercise of rehearsing the pronunciation of individual words and the whole of the text in order to attain a certain degree of fluency and self-assurance. Below are a few of the answers:

"I am afraid of making pronunciation mistakes, so I read the texts again and again. It usually takes me about five times. I do this for all the texts. Then I listen to the recording again before I submit it." (Student 1)

"If I read the text once only, I will not make the pronunciation fluent. My experience is that the first time is just for acquainting with the contents and the pronunciation. For me, when I get right into reading, I often make pauses and stops. I am sure reading the texts many times will help you become more confident with the pronunciation of the whole texts. Actually, I often spent about twenty minutes on practicing reading aloud before I get a satisfied version for submission." (Student 4)

"For me, I usually did some preparation before a real reading practice. I looked for the pronunciation of unfamiliar words in online dictionaries and practiced

pronunciation of those single words. Before the final submission, I usually did several times of reading aloud of the whole texts.” (Student 5)

“I often practiced reading the text aloud many times. I think the first assigned text is easier than the other two. But recording all the texts needs a lot of my practicing.” (Student 8)

When it comes to the check-in of their work, students exhibited a wide spectrum of emotions, as shown by the data that was collected from the Insights feature of the system. According to the statistics, during the check-in procedure, on average, 66.4% of respondents reacted to the check-in question "How are you feeling about this assignment?". This shows that the students were satisfied with the assignment. Students chose the following five words the most often in answer to the question: inspired, calm, motivated, happy, and optimistic. These 5 words are shown in Figure 1. Based on the findings, it seems that the students participated actively in the learning activities by sharing their own personal experiences with learning and expressing their own thoughts. The fact that students exhibited positive attitudes toward learning rather than dread is shown by the fact that they did not experience terror. The findings shown in Figure 1 indicate that a sizeable proportion of the participants experienced a rise in both their self-assurance and their level of pleasure in the process of learning.

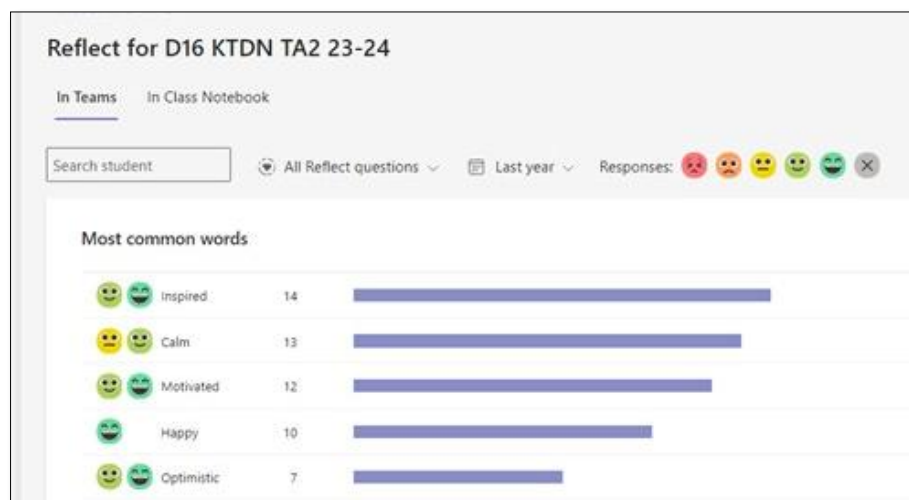


Figure 1. Students' Reactions to Check-in Questions for Each Assignment

The data collected from the semi-structured interviews correspond with the conclusions obtained from AI analysis records in Reading Progress. The majority of students acknowledged the favorable impact on their pronunciation skills resulting from engaging in oral reading assignments using the tool. Students recognized the application's efficacy and use, resulting in less stress and enhanced attitudes towards the issue. Here are a few concepts that they both have in common:

“Pronunciation has never been an easy thing for me. I usually feel shy and afraid of reading aloud in front of many classmates. However, I feel more comfortable when I read a text in front of my smartphone. That’s why I have completed all the reading assignments easily. I think I feel more confident practicing pronunciation with the app.” (Student 1)

“I like learning English pronunciation with reading aloud texts in the app. After each submission, the app suggests five words for more practice. It helped me with more opportunities to improve my pronunciation of the words. I think it’s interesting and effective for me.” (Student 2)

“For me, pronunciation is always challenging. In learning English, I usually avoid it. I know that my pronunciation is not good. However, learning pronunciation with the app this semester, I feel more confident because the app brings me an effective

and suitable way of practicing pronunciation. I become more hardworking thanks to this app.” (Student 3)

“I think the use of the app is easy so I can practice pronunciation better.” (Student 6)

“I think my pronunciation has become better thanks to the application of this technological tool. I pay more attention to the pronunciation every time I read aloud some thing in English. I feel happy when I do the reading on the app.” (Student 7)

Overall, the data from Insights and student interviews indicate that there was a high level of engagement and a positive attitude toward the practice of pronunciation using Reading Progress. Consistently practicing reading aloud multiple times, students were able to attain fluency and reduce errors, which led to a boost in confidence and satisfaction. The data from insights indicated that the majority of students experienced positive emotions, including motivation, serenity, and inspiration, while completing assignments. This positive affective response suggests that there has been a decrease in anxiety and an improvement in attitudes toward pronunciation practice. The interviews further substantiated these findings, as students commended the app for its potential to enhance their pronunciation skills and make the practice process more pleasant and comfortable. In general, the incorporation of Reading Progress substantially enhanced the learning experience and pronunciation confidence of students.

Discussion

The results of this research give a complete knowledge of the difficulties that Vietnamese students of English as a foreign language encounter with pronunciation, as well as the efficiency of the Reading Progress tool that is driven by artificial intelligence in resolving these difficulties. This discussion will concentrate on three primary points: the errors in pronunciation that were encountered, the improvement of pronunciation, and the greater engagement and decreased anxiety, respectively.

An examination of the sounds that posed the greatest challenge for Vietnamese students of English as a foreign language indicated that specific vowel and consonant sounds presented substantial challenges. The lowest accuracy rate was recorded for the vowel sound /ɪ/, which was 21%, followed by the consonant sound /z/, which had a 29% accuracy rate. It is consistent with the findings of earlier study that some English sounds, particularly those that are lacking in the learners' original language, provide significant obstacles (Do, 2021; Ly, 2020). These findings are consistent with the findings of the previous research by Do (2018) indicating that Vietnamese students often have difficulty with the affricates in the English language, which might result in recurrent pronunciation mistakes. The results also echo the finding from Duong (2009)'s study pointing out that learners in Vietnam use their native language pronunciation structures while speaking English, emphasized that these segmental challenges are aggravated by the interference of native phonological principles. This interference is especially problematic for Vietnamese students. Therefore, the results of this research are consistent with the current body of literature on the prevalent pronunciation problems that are made by EFL students, and they highlight the need for specialized treatments to address these issues.

Evidently, students demonstrated a significant increase in their accuracy of pronunciation throughout the implementation of Reading Progress. Across all the texts that were presented, there was a demonstrable increase in terms of pronunciation correctness, fluency, and mistake reduction. With Text B, the average number of words per minute grew from 62 to 72, and the accuracy rate climbed from 61.40% in Phase 1 to 68.60% in Phase 2. According to Alahmadi (2024) and Molenda and Grabarczyk (2022), the enhancement of fluency and accuracy demonstrates the efficacy of AI-driven instruments in giving feedback that is both immediate and exact. This input is essential for successful pronunciation practice. The reduction in mispronunciations and omissions is evidence that the dedicated practice and feedback provided by the tool are beneficial in assisting students in rectifying their errors. As a result of the study conducted by Bashori et al. (2022) and McCrocklin (2019), it has been shown that artificial intelligence tools like Reading Progress facilitate continual practice and independent learning,

which ultimately results in an improvement in pronunciation. The results of the literature are believed to be congruent with this.

Additionally, the research revealed the positive influence of the Reading Progress tool on student involvement and the reduction of anxiety. The information that was gathered via interviews and the "Reflect" function in Insights revealed that students experienced increases in self-assurance and decreased levels of anxiety when it came to practise pronunciation. One student said that "I feel more comfortable when I read a text in front of my smartphone," which revealed that the use of the tool alleviated the anxiety that was linked with assignments that required public speaking. This conclusion is corroborated by the results in Hongnaphadol and Attanak (2022)'s study, who observed that Japanese EFL students in Thailand showed less concern over pronunciation when they used a Reading Progress application that was based on computer assisted pronunciation training. The capability of the application to supply a helpful and non-judgmental learning space for students to practice most certainly contributed to anxiety decreasing. Students were able to concentrate on practicing their pronunciation confidently without worrying about making errors in front of their classmates, which allowed them to focus on developing their pronunciation. Moreover, the increased engagement that was found in this research, in which students practiced their language skills numerous times before submitting their work and carefully checked their outcomes, illustrates the motivating elements of employing AI-powered tools in language acquisition (Nasim et al., 2022; Mohammadkarimi, 2024). It has been underlined by Alahmadi (2024) that the interactive and engaging ways of the tool contribute to an increase in student motivation.

The incorporation of the AI-supported tool Reading Progress into EFL pronunciation instruction provides an efficient method for resolving pronunciation difficulties, improving pronunciation abilities, and boosting student involvement while simultaneously lowering anxiety levels. The results of the study are in line with the results of previous research on the advantages of using AI-powered tools in language teaching. The study highlights the usefulness of the tool in terms of delivering exact feedback, supporting individualized learning, and creating an atmosphere that is conducive to learning. Educators who are interested in incorporating novel technologies into their language education practices will benefit greatly from the insights provided by these findings, which show the potential of artificial intelligence technology to revolutionize conventional methods of teaching pronunciation.

CONCLUSION

This research examined the pronunciation obstacles encountered by students in the EFL context in Vietnam and evaluated the efficacy of the AI-driven Reading Progress tool in mitigating these issues. The results indicated notable pronunciation problems, especially with the phonemes /v/, /z/, /ə/, /f/, and /t/, which consistently posed challenges for the pupils. The use of Reading Progress significantly improved pronunciation precision, fluency, and the decrease of errors across all practice stages and texts. Students demonstrated enhanced reading velocity, precision, and a decrease in mispronunciations and omissions. Moreover, the tool enhanced engagement and alleviated fear, with students indicating elevated confidence and drive in practicing pronunciation.

The research underscores the prospective advantages of using AI technologies such as Reading Progress into English as a Foreign Language teaching approach. EFL instructors are advised to use these tools to provide tailored and prompt feedback, essential for successful pronunciation training. The beneficial effect on student engagement and anxiety alleviation reinforces the use of AI-driven technologies in fostering a conducive learning atmosphere. Future study should investigate the many uses of AI in language instruction, analyzing how diverse technologies might improve other facets of language acquisition beyond pronunciation. Further research is recommended to examine the long-term effects of the AI-powered program Reading Progress on pronunciation and other language competencies. Furthermore, examining the efficacy of diverse AI technologies in various language learning environments and skill tiers would provide profound insights into their potential. Subsequent research should investigate the

incorporation of AI technologies inside blended learning contexts, merging conventional pedagogical approaches with sophisticated technology to optimize educational results. The research was performed over a brief period and used a restricted selection of texts with certain durations and degrees of complexity. These limitations may have affected the degree of the observed enhancements and the applicability of the results. Subsequent research should use extended durations and a broader variety of texts to corroborate and enhance these findings.

The AI-driven application Reading Progress holds significant potential for improving pronunciation skills among EFL students. This tool enhances language instruction by addressing specific pronunciation challenges, offering comprehensive feedback, and cultivating a supportive learning atmosphere. The ongoing investigation and integration of AI technologies promise to change EFL teaching and learning, facilitating more effective and engaging educational methods.

REFERENCES

- Al-Hamzi, A. M. S., Al-Shrgabi, A. hakim A. S., Al-Haidari, A. S. A., Faraj, M. M. A., & Al-Housali, T. A. A. (2021). Pronunciation errors of English front vowels by Yemeni EFL learners. *PAROLE: Journal of Linguistics and Education*, 11(1), pp. 41–46. <http://ejournal.undip.ac.id/index.php/parole>
- Alahmadi, N. S. (2024). Examining the impact of a digital Reading Progress tool on Saudi L2 learners' reading aloud performance and proficiency. *International Journal of Arabic-English Studies*, 24(2). DOI: <https://doi.org/10.33806/ijaes.v24i2.661>
- Almeida, F. (2018). Strategies to perform a mixed methods study. *European Journal of Education Studies*, 5(1). DOI: <https://doi.org/10.46827/ejes.v0i0.1902>
- Almusharraf, A. (2021). EFL learners' confidence, attitudes, and practice towards learning pronunciation. *International Journal of Applied Linguistics*, 32(1), pp. 126–141. DOI: <https://doi.org/10.1111/ijal.12408>
- Bakar, Z. A., & Abdullah, M. R. T. L. (2015). Importance of correct pronunciation in spoken English: Dimension of second language learners' perspective. *Pertanika Journal of Social Sciences & Humanities*, 23(S), pp. 143–158. <http://www.pertanika.upm.edu.my/pjssh/browse/special-issue?article=JSSH-S0023-2015>
- Bashori, M., van Hout, R., Strik, H., & Cucchiari, C. (2022). "Look, I can speak correctly": learning vocabulary and pronunciation through websites equipped with automatic speech recognition technology. *Computer Assisted Language Learning*, pp. 1–29. DOI: <https://doi.org/10.1080/09588221.2022.2080230>
- Burns, M. (2021, June 1). *Reading progress: A reading fluency app in Microsoft Teams*. Class Tech Tips. <https://classtechtips.com/2021/06/01/reading-progress-a-reading-fluency-app-in-microsoft-teams/>
- Chuyen, N. T. H., Linh, H. T., & Phuc, N. T. H. (2021). Enhancing English pronunciation for high school students through Duolingo application. *International Journal of All Research Writings*, 3(1), 46–54.
- Creswell, J. W., & Clark, V. L. P. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.
- Dai, Y. (2022). An automatic pronunciation error detection and correction mechanism in English teaching based on an improved random forest model. *Journal of Electrical and Computer Engineering*, pp. 1–9. DOI: <https://doi.org/10.1155/2022/6011993>
- Derwing, T. M., & Munro, M. J. (2022). Pronunciation learning and teaching. In *The Routledge Handbook of Second Language Acquisition and Speaking*. Routledge.
- Do, A. T. (2021). Intelligible pronunciation: Teaching English to Vietnamese learners. *VNU Journal of Foreign Studies*, 37(1), pp. 176–182. DOI: <https://doi.org/10.25073/2525-2445/vnufs.4666>
- Do, P. L. (2018). An analysis of Vietnamese EFL students' pronunciation of English affricates and nasals. *International Journal of English Linguistics*, 8(2), pp. 298–306. DOI: <https://doi.org/10.5539/ijel.v8n2p298>

- Duong, T. N. (2009). Mistake or Vietnamese English. *VNU Journal of Science, Foreign Languages*, 25(2009), pp. 41–50. <https://js.vnu.edu.vn/FS/article/view/2233/2129>
- Hameed, P. F. M., & Aslam, M. S. (2015). Pronunciation as a stumbling block for the Saudi English learners: An analysis of the problems and some remedies. *Theory and Practice in Language Studies*, 5(8), pp. 1578–1585. DOI: <https://doi.org/10.17507/tpls.0508.06>
- Hasan, M. U. (2024, May). *Research guides: AI tools for education: Microsoft Reading Progress*. Guides.libraries.uc.edu. <https://guides.libraries.uc.edu/ai-education/mrp>
- Hongnaphadol, W., & Attanak, A. (2022). Reducing Thai EFL students' pronunciation anxiety through a CAPT-Based Reading Progress application. *Journal of Liberal Arts Prince of Songkla University*, 14(1), pp. 83–122. DOI: <https://doi.org/10.14456/jlapsu.2022.4>
- Jarrah, M. A. M. (2024). The reality of using the Artificial Intelligence-based Reading Progress tool in Microsoft Teams to enhance the reading skills among English language teachers of the education department in Jazan region and the obstacles to its use. *Educational Sciences Journal*, 32(1), pp. 33–56. DOI: <https://doi.org/10.21608/ssj.2024.348017>
- Jiao, F., Song, J., Zhao, X., Zhao, P., & Wang, R. (2021). A spoken English teaching system based on speech recognition and machine learning. *International Journal of Emerging Technologies in Learning (IJET)*, 16(14), p. 68. DOI: <https://doi.org/10.3991/ijet.v16i14.24049>
- Liu, Y., & Quan, Q. (2022). AI recognition method of pronunciation errors in oral English speech with the help of big data for personalized learning. *Journal of Information & Knowledge Management*, 21(Supp02). DOI: <https://doi.org/10.1142/s0219649222400287>
- Ly, C. K. (2020, July 18). The problem of pronouncing the English sounds /θ/ and /ð/ of Vietnamese learners. *Workshop on Innovation in Language Teaching and Learning (WILTAL)*. Workshop on Innovation in Language Teaching and Learning (WILTAL), Ho Chi Minh City, Vietnam. DOI: <https://doi.org/10.5281/zenodo.3947213>
- Maggin, S., & Irani-Tehrani, S. (2023, June 23). *Microsoft's Reading Progress tool: Harnessing the potential of L2 oral reading assignments through technology*. The FLTmag. <https://fltmag.com/microsoft-reading-progress/>
- McCrocklin, S. (2019). ASR-based dictation practice for second language pronunciation improvement. *Journal of Second Language Pronunciation*, 5(1), pp. 98–118. DOI: <https://doi.org/10.1075/jslp.16034.mcc>
- McKim, C. A. (2017). The value of mixed methods research. *Journal of Mixed Methods Research*, 11(2), pp. 202–222. DOI: <https://doi.org/10.1177/1558689815607096>
- Mohammadkarimi, E. (2024). Exploring the use of artificial intelligence in promoting English language pronunciation skills. *LLT Journal: A Journal on Language and Language Teaching*, 27(1), pp. 98–115. DOI: <https://doi.org/10.24071/llt.v27i1.8151>
- Molenda, M., & Grabarczyk, I. (2022). Microsoft Reading Progress as CAPT tool. *Research in Language*, 20(2), pp. 197–214. DOI: <https://doi.org/10.18778/1731-7533.20.2.05>
- Nasim, S. M., AlTameemy, F., Ali, J. M. A., & Sultana, R. (2022). Effectiveness of digital technology tools in teaching pronunciation to Saudi EFL learners. *FWU Journal of Social Sciences*, 16(3), pp. 68–82. DOI: <https://doi.org/10.51709/19951272/fall2022/5>
- Noviyanti, S. D. (2020). Artificial Intelligence (AI)-based pronunciation checker: An alternative for independent learning in pandemic situations. *ELT Echo: The Journal of English Language Teaching in Foreign Language Context*, 5(2), p. 162. DOI: <https://doi.org/10.24235/eltecho.v5i2.7246>
- O'Brien, M. G., Derwing, T. M., Cucchiari, C., Hardison, D. M., Mixdorff, H., Thomson, R. I., Strik, H., Levis, J. M., Munro, M. J., Foote, J. A., & Muller Levis, G. (2018). Directions for the future of technology in pronunciation research and teaching. *Journal of Second Language Pronunciation*, 4(2), pp. 182–207. DOI: <https://doi.org/10.1075/jslp.17001.obr>
- Pham, D. T. (2023). Vietnamese EFL students' perspectives on application of artificial intelligence technology tool Reading Progress in learning English pronunciation. *Educational Administration: Theory and Practice*, 29(4), pp. 1043–1049. <https://kuey.net/index.php/kuey/article/view/4597>

- Prasetya, R. E. (2022). Utilizing reading progress feature in Microsoft Teams to improve speaking and listening competence of English foreign language learners. *Channing: Journal of English Language Education and Literature*, 7(1), pp. 21–29. DOI: <https://doi.org/10.30599/channing.v7i1.1564>
- Razak, H. M., Razak, N. A., & Krish, P. (2022). Enhancing students' digital literacy at EFL classroom: Strategies of teachers and school administrators. *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, 41(3), pp. 653-664. DOI: <https://doi.org/10.21831/cp.v41i3.43107>
- Rogerson-Revell, P. M. (2021). Computer-Assisted Pronunciation Training (CAPT): Current issues and future directions. *RELC Journal*, 52(1), pp. 189–205. DOI: <https://doi.org/10.1177/0033688220977406>
- Sirichote, P., & Kanokpermpoon, M. (2023). Investigation into Thai EFL learners' English pronunciation using Mircrosoft Reading Progress. *12th LITU International Graduate Conference X FLLT 2023*, 123–137. <https://sites.google.com/litu.tu.ac.th/litugraduateconference2023/proceedings-12th-litu-graduate-conferencexflit2023>
- Syafriyadin, S. & Boulahnane, S. (2021). Immersing Japanese students into English language learning: Songs, games, and cultures. *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, 40(3), pp. 554-563. DOI: <https://doi.org/10.21831/cp.v40i3.37153>
- Taylor, P., Argasvipart, K., Kanokpermpoon, M., Rattanawisadtrat, N., Dyamond, B. J., & Hrylytskyy, A. (2023). Stakeholders' perceptions related to technology acceptance of Reading Progress in Microsoft Teams: A case study of a trilingual program at a secondary school in Thailand. *LEARN Journal: Language Education and Acquisition Research Network*, 16(2), pp. 718–736. DOI: <https://so04.tci-thaijo.org/index.php/LEARN/article/view/266981>
- Tejedor-Garcia, C., Escudero-Mancebo, D., Camara-Arenas, E., Gonzalez-Ferreras, C., & Cardenoso-Payo, V. (2020). Assessing pronunciation improvement in students of English using a controlled computer-assisted pronunciation tool. *IEEE Transactions on Learning Technologies*, 13(2), pp. 269–282. DOI: <https://doi.org/10.1109/tlt.2020.2980261>