



Investigating Students' Perspective on the Use of SpeechAce Platform in Pronunciation Skills of English Department Freshman Students

Dilla Fransisca Rosita^{1*}, Iin Baroroh Ma'arif², Ulfa Wulan Agustina³, Khalawatul Iman⁴

^{1,2,3,4}English Department, Universitas KH. A. Wahab Hasbullah

*Email: dillafransisca01@gmail.com

ABSTRACT

This study aimed to identify the obstacles students experienced when using SpeechAce, an artificial intelligence-based website designed to assist in learning English pronunciation. In addition, this study also aimed to investigate the role of SpeechAce in supporting lecturers in English learning at English department. The method used in this study was a mixed method with a convergent parallel design conducted in three stages. On the first day, freshman students were introduced to SpeechAce and asked to practice independently at home. On the second day, students engaged in a collaborative practice using the vowels 1 feature in SpeechAce. The last day was the evaluation and filling of questionnaires to collect data related to student experience and responses. The results of students' responses showed that some students experience network constraints when using campus WiFi to access SpeechAce. However, such problems can be solved by using private data networks that provide faster access. This is because SpeechAce requires stable network connectivity. Acquisition of data collected by field notes, questionnaires, and documentation techniques produce that SpeechAce and lecturers complement each other to create a more effective learning experience. SpeechAce helps lecturers in teaching speaking skills with a live evaluation feature.

Keywords: *SpeechAce; Artificial Intelligence; Pronunciation*

INTRODUCTION

English has become an international communication language that allows individuals to interact without language barriers. Technological advances such as artificial intelligence, the Internet of Things, and big data are driving Revolution 4.0. Mastery of English is essential for those involved in technological innovation because many resources and information related to that technology are available in that language. Mastering English helps individuals to stay relevant and adapt to change. Mastery of English is a valuable asset in facing the challenges and opportunities offered in the Revolution 4.0 era. Language ability is related to speaking development, the more people are able to speak, the richer their language skills are, and the richer language skills make children more confident in speaking. Students with good speaking skills become more active in class discussions, participate in presentations, contribute to group projects, and engage in other learning activities, which increases their involvement and understanding. Developing social skills, such as self-confidence, argumentative abilities and adaptation to diverse communications can be made easier by speaking English. In this way, mastering English speaking skills in education not only supports students' learning process but also helps them to be ready to face challenges in the era of Revolution 4.0.

Education 4.0 is a response to the needs of the industrial revolution 4.0 where humans and technology are aligned to create new opportunities creatively and innovatively. There are a lot of technologies that can be used as a means of supporting learning, plus internet access makes it easier for students to gain extensive knowledge. Artificial intelligence (AI) technology has brought many innovations in the field of education (Darmawan et al., 2024).

According to Mardhiah et al., (2024), AI can be used to personalize student learning experiences, provide timely feedback, and assist in assessment and data analysis to increase learning effectiveness. In addition, according to Zhang et al., (2020), AI can also be used to develop smart tutor systems that can help students understand lesson material individually. The use of artificial intelligence (AI) technology in education, especially through applications such as SpeechAce, has great potential to improve English speaking skills. SpeechAce AI is an artificial intelligence technology used in developing speaking skills, especially in the context of language learning. Using SpeechAce AI in education can facilitate students' speaking skills through personalized speaking exercises, real-time feedback, and accurate evaluations. According to Sharma et al. (2022), the application of SpeechAce AI in education has proven effective in helping students improve their speaking skills in an interactive and engaging way.

Previous research has revealed the benefits of using artificial intelligence (AI) technology in developing speaking abilities. According to research conducted by Ningsih (2024), the implementation of AI in speaking practice can improve students' confidence and speaking skills by providing timely and accurate feedback. The results of this research show that the use of AI in speaking learning can speed up the learning process and improve student learning outcomes in terms of speaking ability. Previous research has highlighted the use of SpeechAce AI in the development of students' speaking skills. According to research conducted by Sharma et al., (2022). The integration of SpeechAce AI as an assessment tool for speaking practice in English courses has had a positive impact on improving students' speaking abilities. This research shows that the use of SpeechAce AI can facilitate effective speaking practice and provide useful feedback for students' speaking learning. SpeechAce, as an artificial intelligence (AI) based platform, offers interactive and personalized learning solutions to practice speaking skills (Zainuddin & Mohamad, 2024).

KH. A. Wahab Hasbullah University is one of the educational institutions that promotes Islamic values and academic excellence and offers an ideal learning environment for students to develop their academic and spiritual potential. The English Department at the university is designed to provide an in-depth understanding of the language and culture while preparing students to become competent and competitive educators. That is why it is important to explore how they adapt to the new academic environment, start the process of learning English, and build a scientific foundation that will support their academic journey. Freshman students in this English department are in the early stages of learning, where they need effective methods to improve basic skills, especially in speaking.

SpeechAce, as an artificial intelligence (AI) based platform, offers interactive and personalized learning solutions to practice speaking skills. Freshman students in this study program are in the early stages of learning, where they need effective methods to improve basic skills, especially in speaking. This research was conducted to implement SpeechAce in the learning process of freshman students at KH. A. Wahab Hasbullah University. The focus of this research is to implement SpeechAce as an AI platform for English-speaking practice for students of the English department at KH. A. Wahab Hasbullah University.

METHOD

This study used a mixed method with a convergent parallel design to obtain more comprehensive results. This design allows the researcher to collect qualitative and quantitative data simultaneously, analyze them separately, and then combine them in the interpretation stage of the results to obtain a more complete understanding of the research problem. The instrument of the research uses field notes, a questionnaire, and, documentation. The questionnaire is analyzed using the Likert scale formula. The subjects of this study are freshmen of English department at KH. A. Wahab Hasbullah University with a total of 34 students.

The procedure is as follows: a) In the implementation phase, the researcher introduces SpeechAce to students through initial training sessions. Students are directed to access the SpeechAce website through available devices and are given directions on how to use SpeechAce, b) Then on Self-training, students are required to practice using SpeechAce independently to improve their pronunciation and speaking skills, c) On the next step, Classroom activities, the researcher utilizes the SpeechAce feature to provide speaking tasks, evaluations, and feedback directly, d) After they get used to use SpeechAce, researcher collects data using questionnaires by providing questions or statements to students. The questionnaire is in the form of sheets of paper filled directly by 34 freshman students. Data were collected through questionnaire answers and observations as evidenced by field notes and documentation, e) Then on data analysis the researcher analyzes the data by data reduction, data display, and verifying data process.

RESULT AND DISCUSSION

Result

1. The obstacle factors encountered when implementing SpeechAce

Based on the results of the study, there are 3 instruments used in data collection, namely field notes, documentation, and questionnaires. The findings are shown below:

- Field notes

On day one, this website did not require creating an account and could be accessed on Google or Chrome, making it easy for students to access the SpeechAce website. However, some students had difficulty with networking when opening the SpeechAce website. At that time the website could not be opened and the students waited about two minutes to be able to access the SpeechAce website. After waiting a few minutes, students were able to access the website, but some students could not access it due to network problems on their mobile phones. Then the researcher asked the students to pay attention to the direction of the researcher. Then the researcher explained the various features contained in SpeechAce such as pronunciation evaluation features, voice analysis, and interactive exercises.

On day two several technical obstacles were encountered, including network disruptions that caused delays in accessing the platform and instability in detecting sound through mobile devices. That was because, when students spoke and practiced, their voices were less loud and clear while using SpeechAce. To solve the problem, the researcher and observer provided technical assistance, including network connection optimization and system retesting on student devices that encountered problems. One student who used a mobile phone brand Xiaomi experienced interference in accessing the application because SpeechAce could not be accessed in (Mi browser) default of the phone. So, what the researcher did was to lend the researcher's cellphone to one student who had problems with his cellphone so that he could still practice pronunciation in SpeechAce. Some of them were also more comfortable using mobile data than using campus WiFi.

The last day of the study focused on the evaluation stage. The researcher asked students to fill out a questionnaire that had been designed to explore their perception of the use of SpeechAce. This questionnaire covered various aspects. The questionnaire was completed, and students gave responses based on their experiences.

- Questionnaire

Table 1 Percentage of Student Responses

No	Max Score	Score	Average of Percentage	Description
1.	136	81	59,5%	Respondents disagreed with the statement "SpeechAce application is quite difficult to access due to internet network constraints in the campus environment" which shows that most students do not experience access difficulties due to network problems.
2.	136	101	74,2%	Respondents disagreed with the statement "I find it difficult to understand the instructions or instructions in the SpeechAce application " which showed that the majority of students did not have difficulty in understanding the instructions or instructions in the platform.
3.	136	90	66,1%	Respondents disagreed with the statement "devices that are used frequently experience interference (such as computers or smartphones) often experience interference when using SpeechAce" which indicates that the majority of students do not experience problems on their devices when using the platform.
4.	136	103	75,7%	Respondents strongly disagreed with the

				statement "I feel less confident when I have to practice English pronunciation with the SpeechAce application" which showed that the majority of students felt very confident when using the platform.
5.	136	99	72,7%	Respondents disagreed with the statement "features in SpeechAce less interesting or boring so as to reduce the motivation to learn" which shows that the majority of students consider that the features in SpeechAce interesting and do not reduce the motivation to learn.
6.	136	53	74,2%	Respondents disagreed with the statement "the time required to access or process answers in SpeechAce is long enough to interfere with learning time" which showed that the majority of students did not feel processing time in SpeechAce hampered their activities.
7.	136	110	80,8%	Respondents strongly disagree with the statement "I feel the material presented by SpeechAce is too difficult to understand" which shows that the majority of students consider the material presented by SpeechAce very easy to understand.
8.	136	97	71,3%	Respondents disagreed with the statement "Feedback provided by SpeechAce was less helpful in correcting my mistakes" which showed that the majority of students felt that feedback from SpeechAce was quite helpful in correcting their mistakes.
9.	136	100	73,5%	Respondents disagreed with the statement "I feel less comfortable learning to speak English using SpeechAce " which showed that the majority of students felt comfortable learning to speak English using SpeechAce.
10.	136	76	55,8%	Respondents disagreed with the statement "I feel more helpful in learning to speak English when there is direct guidance from a lecturer rather than just using SpeechAce" which showed that more than half of students felt that learning was more effective with direct guidance from a lecturer than using only the platform from SpeechAce.
		958	70,44%	Sum Average

Based on the table, the results of the response of the average score of student questionnaires obtained 70.44% included in the category of disapproval. This meant that the results of student responses stated that the majority of students did not experience obstacles when using SpeechAce. This showed that SpeechAce had provided a good and adequate user experience.

2. The role of SpeechAce in supporting Lecturers in English Learning

To find out the role of SpeechAce in supporting lecturers in English learning, a negative statement questionnaire was used.

Table 2 Percentage of Student Responses

No	Max Score	Score	Average of Percentage	Description
1.	136	96	70,5%	Respondents disagreed with the statement "SpeechAce does not provide accurate feedback in learning to speak English" which showed that the majority of students considered the feedback given by SpeechAce accurate in supporting their learning.
2.	136	98	72,0%	Respondents disagreed with the statement "I find it more difficult to learn to speak English using SpeechAce compared to lecturers" which showed that the majority of students felt that learning with SpeechAce was no more difficult than with lecturers.
3.	136	95	69,8%	Respondents disagreed with the statement "SpeechAce cannot adjust the learning of speaking according to individual needs" which shows that the majority of students consider learning to speak English through SpeechAce has been tailored to individual needs.
4.	136	86	63,2%	Respondents disagreed with the statement "using SpeechAce reduces the interaction necessary to improve speaking skills" which showed that the majority of students did not feel the use of SpeechAce reduced the interaction that is important to develop speaking skills.
5.	136	104	76,4%	Respondents strongly disagree with the statement "I feel unmotivated to learn to speak English using SpeechAce " which shows that the majority of students feel very motivated to learn to speak English using SpeechAce.
6.	136	70	51,4%	Respondents disagreed with the statement "SpeechAce cannot replace the role of lecturers in providing in-depth explanations related to the material" which showed that the majority of students felt that SpeechAce could support the role of lecturers in providing in-depth explanations related to the material.
7.	136	89	65,4%	Respondents disagreed with the statement "SpeechAce is not flexible enough to be used in a variety of learning situations" indicating that the majority of students felt SpeechAce was flexible enough to be used in learning situations.

8.	136	96	70,5%	Respondents disagreed with the statement "I do not feel confident using SpeechAce to improve my speaking skills" which showed that the majority of students felt confident using SpeechAce to improve their speaking skills.
9.	136	104	76,4%	Respondents disagreed with the statement "the combination of lecturers and SpeechAce does not give better results in learning to speak" which showed that the majority of students felt that between lecturers and SpeechAce gave better results in learning to speak.
10.	136	96	70,5%	Respondents disagreed with the statement "using SpeechAce fully in speech learning will reduce the quality of Education" which showed that the majority of students felt that the use of SpeechAce fully would not reduce the quality of Education.
		934		Sum
		68.68%		Average

Based on the table, the results of the response of the average score of student questionnaires obtained 68.68% included in the category of strongly disagree. This means that the results of student responses stated that the majority did not agree with the negative statements related to the role of SpeechAce in English learning. This reflects that students have a positive view of the use of SpeechAce as a tool to support lecturers in the process of Learning English.

Discussion

After the researcher described all the findings, the researcher discussed the findings and supported them with several theories related to the findings. The discussion was presented below:

- The Obstacle Factors are Encountered when Implementing Speechace

In this study, several obstacles were found when using SpeechAce, including technical aspects. SpeechAce required a stable internet connection to perform analysis and provide feedback. In areas with weak networks, the evaluation process was often hampered. Despite challenges such as internet connectivity issues, SpeechAce provided a positive learning experience. SpeechAce automatically recognized the user's speech and provided immediate feedback on pronunciation, intonation, and common mistakes. Users could record and replay their own speech to compare it with the provided audio examples (Vu et al., 2025).

- The role of SpeechAce in Supporting Lecturers in English learning

Based on the results of the study, it was found that SpeechAce could not completely replace the role of lecturers in learning English. This was because SpeechAce focused only on pronunciation and sound evaluation, while English learning involved other aspects such as grammar, vocabulary, contextual understanding, and communication skills (Amin et al., 2024). One of the main features of SpeechAce is that it provides immediate feedback on pronunciation. This feature not only helps students in identifying and correcting errors but also supports lecturers by automating the evaluation process. With the help of this tool, the lecturer can focus more on other aspects of learning, such as grammar, vocabulary, and speech fluency. Thus, SpeechAce serves as an additional medium that supports lecturers in learning English.

CONCLUSIONS

Based on the results of research on the use of SpeechAce in learning English, found some obstacles encountered during implementation. The main obstacle that arises is related to the internet network. SpeechAce requires a stable and strong internet connection to function optimally. Relying on on-campus Wi-Fi networks alone is not enough as they are often unstable, especially when used simultaneously by multiple users. Therefore, the use of personal data packages (internet quota) is a better alternative to ensure the smooth use of SpeechAce in learning activities.

SpeechAce has an important role in supporting lecturers in the learning process, especially in training speaking skills. With the live evaluation feature, SpeechAce allows students to correct their mistakes independently, as well as provide opportunities for more practice outside of class hours. The role of lecturers is very important because lecturers can provide more in-depth explanations and broad understanding in the context of language. Thus, SpeechAce and lecturers complement each other, creating a better and more effective learning experience.

REFERENCES

- Amin, J. A., Nurhamdah, & Kalsum. (2024). *Speechace ' s Action In Improving Pronunciation at Senior High*. 5(2), 290–294.
- Darmawan, A. A., Hariri, A., & Vega, D. (2024). Students ' Attitude in Using Artificial Intelligence-Based Speaking Activity in Classroom. *E-Link Journal Journal of English Teaching and Learning*, 11((2)), 183–192.
- Mardhiah, A., Purwati, D., & Muna, H. (2024). *Artificial Intelligence (AI) in Enhancing Spoken English Proficiency : A Systematic Literature Review*. 6(2), 156–169.
- Ningsih, F. (2024). *Analyzing students ' English-speaking skills using speechace: insights from an AI-powered assessment tool*. Vol 1 No 3(July), 111–124. <https://doi.org/10.70574/9w2prx09>
- Sharma, M., Banerjee, S., & Paul, J. (2022). Technological Forecasting & Social Change Role of social media on mobile banking adoption among consumers. *Technological Forecasting & Social Change*, 180(April), 121720. <https://doi.org/10.1016/j.techfore.2022.121720>
- Vu, N. N., Thach, V. T., Vu, T., & Thuy, D. (2025). *AI-Driven Pronunciation Assessment : The Impact of SpeechAce on EFL Learners ' Pronunciation Competency*. 26(3), 84–106.
- Zainuddin, N. M., & Mohamad, M. (2024). *Utilizing Speechace to Enhance Speaking Skills among English as a Second Language Pre- University Students*. 13(2), 1206–1219. <https://doi.org/10.6007/IJARPED/v13-i2/21458>
- Zhang, Y., Xiong, F., Xie, Y., Fan, X., & Gu, H. (2020). The Impact of Artificial Intelligence and Blockchain on the Accounting Profession. *IEEEAccess*, 8, 110461–110477. <https://doi.org/10.1109/ACCESS.2020.3000505>