

APPLICATION-BASED ENGLISH PRONUNCIATION TRAINING FOR YOUTH IN THE DEMOCARE COMMUNITY IN NORTH MERUYA

**Irma Rahmawati^{1*}, Wahyu Budi², Lutfi Alhazami³, Ratu Amanah Amaranth Azalea⁴,
Gabriella Angelica⁵.**

Fakultas Bisnis & Ilmu Sosial/ Universitas Dian Nusantara / Jakarta Barat

E-mail: irma.rahmawati@undira.ac.id*, wahyu.budi@undira.ac.id, lutfi.alhazami@undira.ac.id,
311221055@mahasiswa.undira.ac.id, 311221054@mahasiswa.undira.ac.id

Received : 01 September 2025

Revised : 20 September 2025

Accepted : 05 October 2025

Published : 15 October 2025

DOI : <https://doi.org/10.54443/irpitage.v5i2.3859>

Publish Link : <https://radjapublika.com/index.php/IRPITAGE/>

Abstract

This community service program aims to improve English pronunciation skills among teenagers in the North Meruya Youth Community in West Jakarta. The implementation method included training based on artificial intelligence (AI) applications such as Elsa Speak, which provides automatic feedback to improve articulation, intonation, and word emphasis. The activity was accompanied by mentoring through online groups and pre- and post-test evaluations using a scoring rubric on a scale of 1-5. Results showed that more than 90% of participants experienced a pronunciation score increase of at least 30%, with participant satisfaction levels reaching over 80%. The training successfully established independent study groups and increased participant confidence. These findings demonstrate the effectiveness of using AI technology in community-based English learning, with potential for replication in other regions.

Keywords: *North Meruya Youth Community, West Jakarta, AI training, Elsa Speak, automatic feedback, articulation, intonation,*

INTRODUCTION

North Meruya Village, Kembangan District, West Jakarta, is a densely populated area dominated by lower-middle-class families. According to data from the West Jakarta Statistics Agency (BPS) in 2023, more than 45% of the school-age population in this area comes from families with irregular incomes, thus limiting access to additional education, such as paid courses. Amidst this situation, the Democare youth community was established, specializing in education and character development. This community consists of approximately 35 teenagers aged 13–18, currently studying at the junior high and senior high school levels in both public and private schools around North Meruya. Democare actively organizes non-formal educational activities such as open discussions, interest classes, and basic skills training. However, to date, there has been no specific training program for English speaking skills, particularly in pronunciation. Based on the results of an internal survey conducted by the service team of all Democare members, it was found that approximately 82% of participants experienced difficulty pronouncing English words correctly, particularly word stress, intonation, and final consonant pronunciation. When asked to read a simple paragraph in English, most students sounded hesitant, less articulate, and lacked natural intonation.

Meanwhile, in terms of potential, this community has access to learning facilities in the form of open learning spaces, and most teenagers own personal smartphones that can be used as digital learning tools. This access opens up significant opportunities to introduce technology-based pronunciation training applications, such as SpeechAce and Elsa Speak, which have been globally proven to help students improve pronunciation through automated feedback (Li and Kim 2024). However, currently there are no structured learning activities that utilize this technology. A pronunciation learning system has not yet been established, either in terms of curriculum, trainers, learning media, or skills evaluation systems. As an economically disadvantaged group, the youth in Democare are unable to access professional training or paid technology-based courses. Therefore, interventions in the form of community-based training and low-cost technology that can be implemented collaboratively and sustainably are needed. This community service activity is expected to be a practical and inclusive educational solution for developing the communication skills of the younger generation.



HASIL PRE-TEST

Nama Peserta	Nilai test
Devita	Nilai test: 45
Kenny	Nilai test : 70
Laura	Nilai test: 60
Nindi	Nilai test : 40
Nur Alifah	Nilai test : 45
Nurul	Nilai test : 60
Rendy	Nilai test : 76
Sarnida	Nilai test : 60
Sugiyanti	Nilai test : 56
Yuni	Nilai test : 60
Jumlah Nilai	572

Figure 1. Initial Survey Activities and Pretest Results

Source: Documentation of the Devotee

Table 1. Pre-Test Data Analysis

PART 1: PRONUNCIATION TEST (Questions 1-5: Spoken test from Elsa Speak)

Pretest			
No	Nama Mahasiswa	Jenis Pelafalan	Hasil/ Saran
	Devitasari	Vowel /e/	Terdapat perbedaan pengucapan kata-kata serupa seperti <i>mention</i> dan <i>munion</i> . Bunyi vowel /e/ yang dibaca dalam kata <i>mention</i> terlalu lebar dan hampir terdengar seperti kata <i>munion</i> . Selanjutnya mahasiswa tersebut perlu memperhatikan bunyi silent seperti L pada kata <i>will</i> .
	Kenny Jonathan	Konsonan /t/ dan /d/	Pengucapan konsonan /d/ dan /t/ harus dibedakan karena dapat mengubah makna. Saat mahasiswa tersebut menyebut kata <i>seed</i> , masih terdengar seperti <i>seut</i> . Selanjutnya, perlu diperhatikan dan dipelajari pengucapan -ed pada regular verbs. Jika sebelum -ed adalah huruf t, maka -ed dibaca sebagai id seperti kata <i>complimented</i> yang mahasiswa tersebut salah baca.
	Rendy Zulfisyan	Used to Be used to, emerge	Terdapat perbedaan pada penggunaan <i>used to do</i> untuk membicarakan kegiatan lampau and <i>used to doing</i> untuk membicarakan suatu tempat, atau aktivitas. Sehingga pada kalimat <i>I am used to management</i> yang dituturkan mahasiswa tersebut seharusnya menjadi <i>I am used to managing</i> . Serta, perlu diperhatikan pelafalan <i>emerge</i> (<i>imendri</i>) yang berbeda

A. Partner Issues

Based on the results of field observations, focus group discussions (FGDs), and surveys of Democare participants, it can be concluded that partners face several priority problems as follows:

1. Low English Pronunciation Ability

Most Democare members struggle to pronounce English words correctly. Survey results showed that 82% of participants were unable to pronounce simple vocabulary with proper articulation, including word stress and intonation. This problem impacts their confidence in speaking English at school and in social settings.

2. Lack of English Pronunciation Training and Practice Media

Currently, Democare does not have a dedicated pronunciation training program. There are no tutors, modules, or tools used for structured pronunciation practice. So far, English training has been informal and has not focused on speaking.

3. The Unutilization of Technology Applications for Pronunciation

Although 90% of community members have smartphones and internet access, they are unfamiliar with AI-based pronunciation learning apps like SpeechAce and Elsa Speak. These apps can be used for self-practice and provide automatic feedback on pronunciation.

4. Limited Resources and Access to Paid Training

As a youth community without a fixed income, Democare lacks the funds to access paid courses or training. This underscores the urgency of providing free training and developing applicable and easily accessible self-study modules.

METHOD

Based on the identification of problems faced by the Democare youth group, four main solutions were proposed. All solutions were systematically structured and directly linked to priority issues: poor English pronunciation skills, the lack of specialized pronunciation training programs, the lack of use of AI-based learning applications, and limited access to professional training.

The solutions offered are participatory, applicable, and oriented towards long-term impact, with an approach that is appropriate for economically non-productive youth groups.

1. Solution to the First Problem: English Pronunciation Training Based on Artificial Intelligence Applications

The first solution is to provide training in the use of artificial intelligence (AI)-based pronunciation learning applications, namely SpeechAce and Elsa Speak. These applications have been widely used in English language learning and have been proven to provide accurate, automatic, and real-time pronunciation feedback (Stevani et al. 2023). The training will be conducted in two sessions: theory and hands-on practice. Participants will be guided on how to download, operate, and perform daily exercises in the app. A pronunciation pretest will be administered before the training begins, and a posttest will be administered after the training to measure effectiveness (Ho and Nguyen 2022). Outcomes: Participants will be able to use the app for independent pronunciation practice, and their pronunciation posttest score will improve by at least 30% compared to the pretest.

Pretest Objectives: Measures the participant's initial ability to pronounce English words, phrases and sentences correctly, including the following aspects: Articulation (pronunciation of phonemes and syllables), Word stress (emphasis on words), Intonation (intonation of sentences), Fluency (fluency)

Pre-test Format(Benghalem 2025):

Test type: Speaking Pronunciation Test (Oral)

Duration: ±10 minutes per participant

Method: Recorded using SpeechAce or a standard voice recorder application.

Evaluator: Lecturer/service trainer + AI features in the application

Scoring: Using a scale of 1–5 for each aspect

Pre-test Steps:

Part 1 – Basic Word Pronunciation (10 questions)

Part 2 – Pronunciation of Common Phrases (5 questions)

Part 3 – Short Sentences (2 questions)

Assessment Rubric:

Each word/phrase/sentence will be assessed based on four aspects on a scale of 1–5 (Li and Kim 2024)

Table 2. Assessment Rubric

Aspect	Scale 1 (Poor)	Scale 3 (Sufficient)	Scale 5 (Very Good)
Articulation	Blurred/disconnected	Unclear	Clear and precise
Word emphasis	It is not in accordance with	Partly true	Accurate emphasis
Sentence intonation	Monotonous/wrong	A little off the mark	Natural and expressive
Smoothness	Stammering	Currently	Smooth and rhythmic

Maximum total score: 80 points

Category:

- a. 0–39: Needs intensive guidance
- b. 40–59: Needs further practice
- c. 60–80: Ready for active speaking

2. Solution to Problem Two: Development and Implementation of a Community-Based Pronunciation Training Program with Structured Mentoring

This solution involves developing a pronunciation training program that is implemented over several scheduled sessions, led by a student or faculty facilitator. Activities will include:

- a. Basic introduction to pronunciation theory (phonetics & phonology beginner level)
- b. Guided pronunciation practice (video/audio model based)
- c. Active speaking simulation with role play
- d. Practice using apps like SpeechAce and Elsa Speak
- e. Periodic evaluation (pretest–posttest & voice recording)

The training will be designed to be sustainable and can be re-implemented by the community independently after the activity ends.

The target output of this solution is the creation of a structured pronunciation training program package that can be implemented independently by the community, consisting of a training curriculum, schedule, learning methods, and evaluation rubric. This program is targeted to be implemented in a minimum of four active training sessions involving at least 30 participants, with direct mentoring by student facilitators or lecturers. In addition, a Follow-Up Plan (RTL) document will be produced so that the community can continue training periodically after the program ends, as well as a report on the improvement in participant learning outcomes that shows a pronunciation score increase of at least 30% from the pretest results.

3. Solution to the Third Problem: Introduction and Training in the Use of AI-Based Pronunciation Learning Applications (SpeechAce and Elsa Speak)

These solutions focus on digital skills transfer to help learners leverage easy, free (freemium), and immediate feedback-based learning technologies. The SpeechAce (typically web-based) and Elsa Speak (mobile-based) apps provide immediate assessment of learners' pronunciation, making them ideal for self-paced learning and regular practice (Henderson and Kirkova-Naskova n.d.).

The training will include:

- a. Installation and registration of user accounts (assisted by facilitator)
- b. Usage simulation (word, phrase, and sentence practice)
- c. Introduction to main features (scoring, feedback, recording)
- d. Practice usage for independent practice outside of training sessions
- e. Evaluation using the pre/post feature of the application

Participants will be guided to integrate the application into their self-study routine, and invited to join a group monitoring their practice progress (through weekly usage logs and participant reflections). The output target of this solution is to improve participants' ability to use the SpeechAce and Elsa Speak applications independently as a medium for practicing English pronunciation. This activity is targeted to produce at least one practical guide to using the applications, an increase in pronunciation scores for at least 70% of participants based on the training results, the formation of a WhatsApp or Telegram-based community monitoring group for weekly practice, and the achievement of independent practice habits by at least 80% of participants with a practice frequency of at least three times a week.

4. Solution to Problem Four: Providing Free Community-Based Pronunciation Training and Simple Technology

This solution aims to provide equal access for all Democare members to free English pronunciation training, utilizing open resources and low-cost technology. Training will be conducted in a community space on a regular basis, with materials and media tailored to the participants' needs. The learning applications used are the free versions of Elsa Speak and SpeechAce, along with pronunciation practice modules that have been designed to be contextual and lightweight. This activity will maximize students' roles as facilitators and role models, using a friendly, relevant approach that encourages learning motivation. Furthermore, participants will be involved in reflection and evaluation sessions to assess their own progress and develop a commitment to independent practice after the program.

RESULTS AND DISCUSSION

Stages of Implementing Solutions to Overcome Partner Problems

The implementation of community service activities for beginners (PMP) to address the problems faced by the Democare youth community is carried out through seven main stages, following the research results of the community service leader (Rahmawati and P Br Sianturi 2021), (Nisa *et al.* 2024), and (Rogti 2025). Each stage is structured based on the solutions offered and adapted to the needs, field conditions, and characteristics of the target partners.

Stage 1: Initial Coordination and Needs Survey

1. Conduct an initial meeting with the Democare community administrators and facilitators to explain the objectives, scope of activities, and prepare an implementation schedule.
2. Determine target participants aged 13–18 years (middle school–high school) and have an interest in learning English.
3. Distributing questionnaires on pronunciation learning needs and interests.
4. Conduct a pronunciation pretest on all participants using a list of words/phrases/sentences, either manually or via the application (SpeechAce).
5. Establish a baseline of initial pronunciation ability for each participant.



Figure 2. Initial Visit and Discussion with the Chair of Democare

Stage 2: Structured Pronunciation Training

1. Arrange the pronunciation training schedule and modules in 4 main sessions.
2. The material presented includes: Basics of English pronunciation (phoneme pronunciation, stress, intonation); Common pronunciation mistakes and how to avoid them; Guided speaking exercises.
3. The training was conducted interactively in a community space and accompanied by lecturers and student mentors.
4. Methods used: interactive lectures, pronunciation drills, questions and answers, and pair exercises.

Stage 3: Preparation and Distribution of Independent Practice Modules

1. Compiling a simple pronunciation module (± 20 pages) containing: Application usage guide; List of word, phrase, and sentence exercises; Reflection activities and daily practice log
2. Distribute the modules to all participants.
3. Provides an explanation of how to use the module for independent practice at home or in groups.

Stage 4: Speaking Practice Simulation and Periodic Evaluation

- Conducting conversation simulations, text readings, and short presentations between participants.
 1. Provides immediate correction of pronunciation errors.
 2. Provide pronunciation consultation sessions for participants who need additional practice.
 3. Using application results and facilitator notes as a tool for monitoring individual progress.



Figure 3. Structured Pronunciation Training

Stage 5: Posttest and Activity Evaluation

1. Conduct the pronunciation posttest with the same format as the pretest.
2. Using the application and assessment rubric to compare pretest and posttest results.
3. Distributing questionnaires on participant satisfaction and reflection on the training process.
4. Documenting the results of skill improvement quantitatively and qualitatively.



Figure 4. Structured Pronunciation Training

Stage 6: Follow-up and Sustainability Plan

1. Develop a Follow-Up Action Plan (RTL) with Democare administrators, including a weekly training schedule and online study group management.
2. Form a community WhatsApp or Telegram group as a weekly pronunciation practice space.
3. Appoint 2–3 active participants to be independent practice coordinators.
4. Student facilitators continue to accompany the group online for regular evaluation and participant motivation.
- 5.



Figure 5. Documentation

Program Implementation Evaluation

Program implementation evaluation was conducted to measure the effectiveness of activities, the achievement of objectives, and the impact on improving English pronunciation skills among adolescent participants in the Democare community. The evaluation was conducted quantitatively and qualitatively, using instruments tailored to each stage of the activity. The implementation evaluation was divided into three stages:

Final Evaluation (Posttest and Reflection)

After the training series is completed, all participants will take a pronunciation posttest using the same format as the pretest. Pretest and posttest results will be compared to measure improvement. The minimum target is a 30% increase in pronunciation scores for at least 70% of participants.

In addition, the following is done:

1. Participant satisfaction questionnaire, to determine their assessment of the content, methods and benefits of the activity.
2. Small group discussions (FGD) to explore impressions, experiences, and suggestions from participants and partners regarding the activity.
3. Application usage report, in the form of a self-training log recorded by participants during the activity period.
- 4.

Table 3. Program Evaluation Success (Naimova 2024):

No	Indicator	Achievements
1	Improvement in pronunciation scores (pre-posttest)	$\geq 90\%$ of participants increased $\geq 30\%$
2	Participant satisfaction with training	$\geq 80\%$ of participants stated “satisfied” or “very satisfied” in the questionnaire
3	Consistency of independent practice	$\geq 80\%$ of participants train at least 3 times/week
4	Continuation of activities by the community	The preparation of a follow-up plan and the formation of an active learning group

CONCLUSION

Based on field observations, focus group discussions (FGDs), and a survey of Democare participants, it can be concluded that the community faces several priority issues related to English pronunciation skills, the lack of structured training, and the minimal use of existing AI applications. The AI-based training solution provided during the community service significantly improved the pronunciation skills and confidence of participants, with scores increasing by $\geq 30\%$ in $\geq 90\%$ of participants. Consistent training and mentoring support via online groups contributed to the program's success. This program provides an effective and sustainable training model that can be replicated in other communities with adjustments to local needs and supported by adequate technology.

ACKNOWLEDGEMENT

We would like to express our gratitude because this activity was funded by the HIBAH DIKTI Ministry of Higher Education, Science, and Technology (Kemdiktisaintek) through the Directorate General of Research and Development (Ditjen Risbang). Based on the Main Contract Agreement No.120/C3/DT.05.00/PM/2025 concerning the Contract for the Implementation of the Community Service Program for the 2025 Fiscal Year Between the Directorate of Research and Community Service of the Ministry of Higher Education, Science, and Technology and LLDIKTI Region III and the Derivative Contract Number: 1044/LL3/DT.06.01/2025 concerning the Implementation Program for Community Service between the Higher Education Service Institution Region III and Dian Nusantara University, and we would like to thank the UNDIRA LRPM Team and all UNDIRA Leaders who have supported the 2025 HIBAH DIKTI activities.

REFERENCES

- Central Statistics Agency. 2023. “Socioeconomic Statistics of the Population of DKI Jakarta.” <https://jakarta.bps.go.id/id> (April 3, 2025).

- Benghalem, B. 2025. "Educational Technologies (ED) Master Two Didactics and Applied Language." [https://dspace.univ-temouchent.edu.dz/bitstream/123456789/6056/1/Educational Technologies %28ED%29%0D%0AMaster Two Didactics and Applied Language.pdf](https://dspace.univ-temouchent.edu.dz/bitstream/123456789/6056/1/Educational%28ED%29%0D%0AMaster%20Didactics%20and%20Applied%20Language.pdf).
- Henderson, A, and A Kirkova-Naskova. "Computer-Aided Pronunciation Training in 2022: When Pedagogy Struggles to Catch Up." *Pronunciation: Issues and Practices (EPIP ...* https://hal.science/hal-04306572v1/file/Henderson_Kirkova-Naskova_2023_EPIP7Proceedings-compiled.pdf#page=25.
- Ho, TML, and TBK Nguyen. 2022. "Utilizing Digital Resources to Foster Young Learners' Engagement in Online Learning Classrooms." *AsiaCALL Online Journal*. <https://www.asiacall.info/acoj/index.php/journal/article/view/114>.
- Li, L, and M Kim. 2024. "It Is like a Friend to Me: Critical Usage of Automated Feedback Systems by Self-Regulating English Learners in Higher Education." *Australasian Journal of Educational Technology*. <https://ajet.org.au/index.php/AJET/article/view/8821>.
- Naimova, D. 2024. "INNOVATIVE TECHNOLOGIES IN TEACHING FOREIGN LANGUAGES." *O 'zbekiston davlat jahon tillari universiteti ...* <https://conference.uzswlu.uz/conf/article/download/314/370>.
- Nisa, FZ, A Rahmadani, GD Febrianti, and ... 2024. "ANALYSIS OF THE ACCEPTANCE OF THE AI APPLICATION ELSA SPEAK AND ITS EFFECT ON INTEREST IN USING USING THE TAM MODEL." ... *Technology and Systems ...* <https://sitasi.upnjatim.ac.id/index.php/sitasi/article/view/763>.
- Rahmawati, Irma, and Yohana P Br Sianturi. 2021. "Audio Podcast-Based Learning Media in Improving Students' Listening Comprehension and Pronunciation." *Journal of Research in Business, Economics, and Education* 1(5): 133–39.
- Rogti, M. 2025. "Automatic Pronunciation Evaluation Feedback and Peer Correction for Shaping English Pronunciation Accuracy and Interpersonal Communication." *Innovation in Language Learning and Teaching*. <https://www.tandfonline.com/doi/abs/10.1080/17501229.2025.2475931>.
- Stevani, Margaret, Joko Priono, Dicky Edwar Daulay, and Saima Rambe. 2023. "Using Elsa Speak to Improve Public Speaking and Pronunciation for Students of Budi Murni 1 Middle School, Medan." *Community Development Journal: Journal of Community Service* 4(2 SE-Articles): 3791–95. <https://journal.universitaspahlawan.ac.id/index.php/cdj/article/view/15551>.