

English Vowel Pronunciation Errors among Vocational High School Students

Nurlaila¹, Andi Rachmawati Syarif², Muflihun³

^{1,2}English Language Education, Universitas Muhammadiyah Kendari

Article Info	Abstract
Received: 2026-02-08 Revised: 2026-06-13 Accepted: 2026-07-13	<i>This study identifies and classifies English vowel pronunciation errors produced by eleventh-grade students at SMK Negeri 1 Kendari while reading English words aloud. A descriptive qualitative approach, supported by frequency-based summaries, was employed. The participants were 20 students from Class XI Office Major 4. Data were collected in two pronunciation-test sessions using a predetermined list of English words representing short vowels, long vowels, and diphthongs. Students' productions were audio-recorded, transcribed with an MP3-to-IPA transcription tool, and compared with reference pronunciations in the Oxford Advanced Learner's Dictionary. The original coding classified the data as substitution, addition, or omission following Crystal's (2008) framework. The analysis yielded 106 coded vowel-error instances: 94 substitutions, 9 additions, and 3 omissions. Substitution was therefore the most frequent category. Recurring difficulties were also observed in words containing diphthongs, while addition commonly involved vowel insertion and omission involved the deletion of weak vowels. These patterns may be associated with differences between learners' familiar sound system and English pronunciation, although the study did not directly investigate causal factors. The findings support the need for explicit pronunciation instruction, repeated listening and production practice, and systematic feedback on English vowel contrasts in vocational high school classrooms.</i>
Keywords: English pronunciation; error analysis; vowel sounds; vocational high school; Indonesian EFL learners	
DOI: 10.24256/ideasv14i1.9636	
Corresponding Author: Nurlaila nurlailahamdin@gmail.com	

1. Introduction

Pronunciation is a central component of intelligible spoken communication. In foreign-language learning, inaccurate production of speech sounds may obscure meaning, slow interaction, and reduce learners' confidence when speaking or reading aloud. Hornby (2008) defines pronunciation as the manner in which a language, word, or sound is spoken, while Rebecca (1993) emphasizes the production of speech sounds, including vowels, articulation, intonation, and accent. Accordingly, pronunciation instruction should help learners produce forms that

listeners can understand rather than merely imitate an idealized accent. Recent classroom studies likewise show that pronunciation accuracy influences learners' oral performance and the comprehensibility of spoken English (Siahaan et al., 2023; Sundari et al., 2023).

English pronunciation presents persistent challenges for Indonesian learners because the sound inventories and phonological patterns of English and Indonesian are not identical. Learners may rely on familiar first-language categories when producing unfamiliar English vowels, vowel length contrasts, weak vowels, or vowel glides. Brown (2007) describes this influence as interlingual transfer, although pronunciation difficulty can also arise from limited exposure, developing phonological awareness, spelling-based pronunciation, and insufficient corrective feedback. Learners' linguistic environments also extend beyond formal classrooms.

Munawir (2019), for example, demonstrated that interaction in online gaming environments can shape children's language behavior, highlighting the broader influence of digitally mediated language exposure. Although that study did not examine English pronunciation, it reinforces the importance of considering the language models and interactional environments encountered by learners. In vocational high schools, pronunciation difficulties are pedagogically important because students may need spoken English for workplace communication, presentations, customer service, and further training.

Previous Indonesian studies have reported recurring pronunciation errors in reading and speaking tasks. Pratiwi et al. (2024) found that vowel substitution was common among vocational high school learners, whereas Munandar et al. (2021) identified substitution, addition, and omission in university students' vowel production. Ningsih et al. (2024) reported continuing difficulty with English vowels and diphthongs, and Ramadani et al. (2022) associated students' vowel errors with both interlingual and intralingual processes. Studies of other segmental sounds have similarly shown that learners may replace unfamiliar English sounds with more accessible forms (Yuliati et al., 2021). These findings indicate that a systematic description of learners' recurring errors can provide a useful basis for targeted instruction.

Error analysis has also been used in Indonesian EFL research to identify patterns that require instructional attention. Although Masruddin and Nasriandi (2022) examined lexical and syntactic errors in writing rather than pronunciation, their study illustrates the pedagogical value of classifying learner errors before planning remedial teaching. In pronunciation research, such classification is especially useful when the analysis distinguishes the target sound, the learner's production, and the type of deviation. Nevertheless, many studies combine vowels, consonants, stress, and intonation in a single analysis, which can limit detailed understanding of specific vowel-related problems.

The present study addresses this limitation by focusing exclusively on vowel

pronunciation in a vocational high school context. The analysis uses Crystal's (2008) categories of substitution, addition, and omission and compares the students' productions with dictionary-based reference pronunciations. Its contribution lies in documenting the vowel-error patterns produced by one class of eleventh-grade vocational students and linking those patterns to practical pronunciation instruction. The study does not attempt to establish the causes of the errors experimentally; rather, it provides a descriptive account that can guide subsequent classroom intervention and further research

2. Method

This study employed a descriptive qualitative approach supported by frequency-based summaries. The qualitative component was used to identify and describe recurring pronunciation patterns, while numerical totals were used to show the relative frequency of the three error categories. The study was conducted at SMK Negeri 1 Kendari, Jalan Jenderal Ahmad Yani No. 17, Bende, Kadia District, Kendari, Southeast Sulawesi, during the 2025/2026 academic year.

The participants were 20 male and female students from Class XI Office Major 4. All students in the selected class participated in the two reading-aloud sessions. The original manuscript did not report the class-selection technique or detailed participant characteristics; therefore, the findings are interpreted as a description of this class rather than as evidence that can be generalized to all vocational high school students.

The primary instrument was a pronunciation test consisting of a predetermined list of English words selected from an eleventh-grade English textbook. The words represented the vowel categories examined in the study, including short vowels, long vowels, weak vowels, and diphthongs. The complete word list and the original coded productions are presented in Appendix A. Each student read the words individually, and the productions were recorded with a voice recorder. The original study did not report a separate pilot test or formal content-validation procedure for the word list.

Data were collected in two pronunciation-test sessions. The audio recordings were processed using an MP3-to-IPA transcription tool [software name and version to be confirmed by the author]. The resulting transcriptions were compared with reference pronunciations obtained from the Oxford Advanced Learner's Dictionary. Because the original dataset contains mixed transcription conventions, the dictionary edition, selected accent model, and row-level IPA forms should be verified by the author before final publication. Consonant errors, intonation, stress, and other suprasegmental features were outside the stated scope of the analysis.

The data were analyzed through data reduction, data display, and conclusion drawing, following the general analytical procedures described by Miles et al. (2014). First, the recordings and transcriptions were reviewed to identify vowel deviations. Second, each coded instance was assigned to substitution, addition, or

omission using Crystal's (2008) classification. Third, the coded data were summarized by test session and error category and presented in tables with representative examples. The totals reported in this article follow the original coding decisions in the dataset. No independent second-rater analysis or inter-rater agreement statistic was reported; this limitation is considered when interpreting the findings.

3. Results

The analysis produced 106 coded vowel-error instances across the two pronunciation-test sessions. Table 1 presents their distribution according to Crystal's (2008) categories.

Table 1. Distribution of the Students' Coded Vowel-Pronunciation Errors

No.	Error category based on Crystal (2008)	Session 1	Session 2	Total
1	Substitution	40	54	94
2	Addition	5	3	9
3	Omission	1	2	3
	Total	46	59	106

Substitution was the most frequent category, with 94 coded instances: 40 in the first session and 54 in the second. Students replaced target vowels with other vowel qualities or reduced a diphthong to a monophthong. Representative examples included pen /pen/ produced as /pɛn/, should /ʃʊd/ produced with /oʊ/ or /ɔ/, face /feɪs/ produced with /æ/, and light /laɪt/ produced with /i:/. Similar substitutions occurred in words such as notes, serious, about, choice, and fair.

Nine coded addition instances were reported. The added sound was commonly a schwa or another vowel inserted into a consonant sequence or at the end of a word. Examples included students produced with an inserted /ə/, voice produced with an additional vowel, and pure produced as /pjʊər/. These examples show that some learners inserted vowels while attempting to articulate unfamiliar syllable structures.

Omission was the least frequent category, with three coded instances. The original dataset included the deletion of weak vowels in words such as aware and about, as well as a reported vowel deletion in engineer. Although few in number, these cases indicate difficulty maintaining vowels in unstressed positions.

The appendix also contains repeated substitutions in words with /eɪ/, /aɪ/, /aʊ/, and /ɔɪ/. These examples suggest that vowel movement within diphthongs was challenging for several students. However, because the original study did not provide the number of opportunities for each vowel category, the data do not permit a normalized comparison showing which individual vowel was

proportionally most difficult.

4. Discussion

The predominance of substitution indicates that the students more often replaced a target vowel than inserted or deleted one. This pattern is consistent with Pratiwi et al. (2024), Ramadani et al. (2022), and Munandar et al. (2021), who also reported vowel replacement among Indonesian learners of English. A plausible interpretation is that students mapped unfamiliar English vowels onto categories that were more familiar to them. Brown's (2007) account of interlingual transfer provides one explanation for this tendency, but the present study did not collect interview, exposure, or language-background data that could establish first-language influence as the sole cause. Spelling-based pronunciation, limited listening exposure, and developing phonological awareness may also have contributed.

Recurring substitutions in words containing diphthongs further suggest difficulty producing a controlled movement from one vowel quality to another. Learners sometimes simplified /eɪ/, /aɪ/, /aʊ/, or /ɔɪ/ into a single vowel or produced a different glide. Ningsih et al. (2024) reported comparable difficulties with English diphthongs. These patterns should be interpreted carefully: Indonesian varieties and local languages differ in their treatment of vowel sequences, and the present study did not conduct a contrastive analysis of each participant's linguistic background. The findings therefore support the need for closer phonetic instruction without justifying a categorical claim that a single first language caused every error.

Addition errors were much less frequent than substitutions. The insertion of /ə/ in students and pure may reflect an attempt to make complex syllable structures easier to articulate. Munandar et al. (2021) similarly described vowel insertion as a strategy found in Indonesian learners' English pronunciation. Omission occurred only three times in the original coding and mainly involved weak vowels. These cases point to the importance of teaching unstressed syllables and vowel reduction alongside isolated vowel quality.

The findings have practical implications for vocational high school instruction. Teachers can use minimal-pair work, articulatory explanation, visual vowel charts, slowed model recordings, shadowing, and repeated reading to focus attention on contrasts that are not immediately salient to learners. Learners can also record their own speech and compare it with a reliable dictionary model. Error classification should be used diagnostically rather than punitively: as demonstrated more broadly in Indonesian EFL error-analysis research, identifying recurring patterns can help teachers plan targeted remedial activities (Masruddin & Nasriandi, 2022). Pronunciation practice may also be integrated into meaningful vocabulary games and locally contextualized tasks. Masruddin and Munawir (2021) reported that a treasure-hunt activity incorporating Luwu cultural content

supported students' English vocabulary learning, while Munawir et al. (2024) emphasized the value of educational materials that connect learning with students' local contexts. Although these studies did not investigate pronunciation, their pedagogical principles support the use of meaningful, culturally familiar activities alongside focused phonetic practice.

Several limitations affect the interpretation of the study. The sample consisted of only one class of 20 students, and the test involved isolated words rather than extended spontaneous speech. The software used for automatic IPA transcription was not identified in the original manuscript, and no independent phonetic rater or agreement measure was reported. In addition, the target transcriptions in the appendix require verification for consistent use of one dictionary edition and accent convention. Finally, the totals represent the original coding decisions, and some productions may contain more than one phonetic deviation. These limitations do not eliminate the descriptive value of the data, but they mean that the findings should be treated as an initial classroom-based account rather than a definitive profile of vocational students' pronunciation.

5. Conclusion

This study identified 106 coded vowel-error instances in two pronunciation-test sessions involving 20 eleventh-grade students at SMK Negeri 1 Kendari. Substitution was the dominant category, with 94 instances, followed by addition with 9 and omission with 3. The students frequently replaced target vowels with other vowel qualities, and the appendix shows recurring difficulty in words containing diphthongs. Addition mainly involved vowel insertion, whereas omission involved the deletion of weak vowels.

The results indicate that the students would benefit from explicit instruction on English vowel contrasts, diphthong movement, weak vowels, and syllable structure. Possible first-language influence should be investigated further rather than assumed from pronunciation-test data alone. Because the study involved one class and relied on tool-assisted transcription without reported inter-rater verification, the findings should be interpreted within the limits of the original design.

6. References

- Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Longman.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed.). Blackwell Publishing.
- Fitria, R., & Asrori, I. (2022). Improving students' pronunciation skills by using songs at the eleventh grade of SMK Pangeran Jayakarta. *Jurnal Web*

- Informatika Teknologi, 3(2), 111-119.
- Hornby, A. S. (2008). Oxford advanced learner's dictionary of current English. Oxford University Press.
- Masruddin, M., & Munawir, A. (2021). The efficacy of Treasure Hunt Game with Luwu local culture based in teaching English vocabulary and introducing cultures heritages of Luwu at SMPIT Al Hafidz Kota Palopo. Kongres Internasional Masyarakat Linguistik Indonesia, 204-208. <https://doi.org/10.51817/kimli.vi.51>
- Masruddin, M., & Nasriandi, N. (2022). Lexical and syntactical errors performed by junior high school students in writing descriptive text. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 10(1), 1094-1100. <https://doi.org/10.24256/ideas.v10i1.3024>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Qualitative data analysis: A methods sourcebook (3rd ed.). Sage.
- Munandar, I., Indira, D., & Darmayanti, N. (2021). Kesalahan pengucapan vokal bahasa Inggris mahasiswa 'kelas berbicara' UIN Sunan Gunung Djati. Jurnal Bahasa dan Sastra, 5(2), 157-177. <https://doi.org/10.14421/ajbs.2021.05202>
- Munawir, A. (2019). Online game and children's language behavior. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 7(2), 337-342. <https://doi.org/10.24256/ideas.v7i2.1050>
- Munawir, A., Yaumi, M., Sulaiman, U., & Rahman, U. (2024). Integrating local wisdom in elementary education: Evaluating the impact of thematic curriculum in Palopo City. Tadris: Jurnal Keguruan dan Ilmu Tarbiyah, 9(1), 139-149. <https://doi.org/10.24042/tadris.v9i1.17105>
- Ningsih, N., Mulyadi, M., & Indahyanti, R. (2024). The error analysis of students' pronunciation of English vowels. VERBA: Journal of English Language Issues, Trends and Studies, 2(3), 1-8.
- Pratiwi, N. R., Affini, L. N., & Musarokah, S. (2024). Students' word pronunciation errors in reading aloud English paragraphs. Journal of English Language and Education, 9(4), 97-103. <https://doi.org/10.31004/jele.v9i4.515>
- Ramadani, J., Martono, & Zainnuri, H. (2022). Error analysis in pronouncing English vowels of eleventh-grade students in a senior high school in Sukoharjo. English Education Journal, 10(2), 130-137.
- Rebecca, M. (1993). Accurate English. Prentice Hall Regents.
- Siahaan, M. L. A., Napitupulu, S., & Marpaung, T. I. (2023). The effect of the reading-aloud strategy on seventh-grade students' pronunciation ability at SMP Negeri 3 Pematangsiantar. Jurnal Ilmu Pendidikan dan Sosial, 2(4), 428-437. <https://doi.org/10.58540/jipsi.v2i4.450>
- Sundari, D. T., Nugraha, M. A., & Sunara. (2023). The analysis of pronunciation errors in students' reading aloud. Journal of English Pedagogy and Applied Linguistics, 3(2), 96-110.

Yuliati, P., Rita, F., & Hasyim, Z. (2021). An analysis of errors in pronouncing dental fricative sounds by first-year students of an English education study program. *ELTS: English Language Teaching Society*, 9(2), 107-116. <https://doi.org/10.22487/elts.v9i2.1874>