

Analysis of Students Phonological Errors in Pronouncing Vowel Sounds A Case Study of English Learners in Indonesia

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Abstract. The purpose of this study was to find phonological errors that students make when they pronounce vowel diphthongs. Researchers also asked what type of vocal diphthong sound students most often said in tenth grade. Grade X students of the 2021/2022 school year are the subjects of this study. This study used a quantitative descriptive approach. Researchers randomly selected 60 samples from 395 individuals. The tool used is the English Vowel Diphthong word pronunciation test, which includes eight types of English vowel diphthongs with two focus words for each type. Furthermore, a voice recorder is employed to capture the students' pronunciation. Findings showed that students made 339 word mistakes. The pronunciation of X graders shows the most frequent types of vowel diphthong errors: Diphthongs [ɔʊ] with the focus word "although" experience 72% of total errors, Diphthongs [ʊə] with the focus word "during" experience 65% of total errors, and Diphthongs [aɪ] with the focus word "sacrifice" experience 61% of total errors.

Keywords: phonological errors, pronunciation, diphthong vowels.

INTRODUCTION

Oral skills depend on pronunciation. Proficient speakers have proper pronunciation, but singing speakers can also be trained to have this ability. In addition, Gilakjani (2012: 96) describes pronunciation as the habitual production of sounds. Correcting incorrect speech can help you become more accustomed to making sounds. your (1996) admits that the purpose of pronunciation is to get students to pronounce it accurately enough that other speakers can understand it easily. Another goal is to achieve the perfect original accent. Experts Derwing and Munro (2005) or Goodwin (2001) the role of the teacher helps ESL learners set realistic pronunciation teaching goals. This goal is usually not focused on accents like native speakers. Communication, according to Koontz and O'Donnell (2005), involves the transfer of information between multiple parties individuals. All parties involved in the discussion. The communicator and receiver exist. Exchange means that the person speaking accepts and responds to the thoughts, feelings, and opinions of the person speaking. It is essential for effective communication because clear pronunciation allows judgment about how well students, teachers, and other students communicate each other. We always strive to share our thoughts, emotions, and experiences with others. When it comes to learning, communication, and pronunciation are closely related because our ability to communicate

effectively determines how well we achieve our goals. Indonesian also sounds not cluster, press, and siphon. Sounds or phonemes are present in pronunciation. Phonemes are divided into vowels. A recent study (Schumm, 2016) found that vowel sounds are very important in learning to read and write English. Because of their complexity, certain students might require extra assistance with understanding vowel sounds.

The English alphabet comprises 45 phonemes: 24 consonants, 12 vowels, and 9 diphthongs, each having unique segmental traits has a different variation of the sound. Although the number of letters in Indonesian and English is the same, the pronunciation is different. There are only three diphthongs in Indonesian: [aɪ], [aʊ], and [ɔɪ], which are frequently used, as in the words until, buffalo, allow. Researchers say that students still exhibit inconsistencies when pronouncing diphthong sounds. In addition, the students complained that they were inconsistent in their voices and could not pronounce them correctly. As a result, they stammered and thought about how to approve the vote.

One of the schools in Pekanbaru. This school is a formal Islamic school that teaches its students in English. The school uses the K13 curriculum (2013). The English curriculum is a system of teaching and learning activities for grades 10–12. English lessons in this program are taught during two weekly sessions lasting 45 minutes each. Students must master the pronunciation of words and be able to understand the sound of the word, according to the curriculum (Ministry of Education, 2013).

Every English teaching material is delivered by teachers with 4 aspects that must be met so that researchers are chosen as their research sites. Thus, students should focus on their pronunciation in schools where the curriculum is consistent and apply learning that each meeting requires students to develop their speaking, reading, writing,

During English language learning, students often make this mistake. Therefore, there is encompassing a diversity of races and native languages in a class. In addition, there are different rules between English and Indonesian speakers on how to pronounce diphthongs vowels. For example, the rule says that English speakers must adjust values in segments such as "city" should become evident as /taʊn/ instead of /city. Researchers' initial observations regarding the practice of teaching English to tenth graders, more than 60% percent of them mispronounced diphthong vowels, certain words, like when pronouncing "eight," they pronounce it as /eight/, /eich/, /et/. It should be /eit/. Similarly, the word "engineer," they pronounced him

/engineer/, he had better should be /,en.dʒɪ'nɪə(r)/. Similarly, the word "although" is pronounced him /teach/,

/dough/ should be /ðəʊ/. Students report that pronunciation is very challenging to master and master.

Certain students have difficulty distinguishing between spoken and written words. This is because they don't learn how to listen to diphthongs specifically in class. Because students have difficulty understanding lessons when teachers use A's between Indonesian and English, teaching and learning in the classroom becomes inefficient. The researcher had to revisit the subject in Indonesian because student always asked him to use Indonesian while teaching. After all, students who were learning to speak faced difficulties communicating in class and because they were forced to speak in English, the learning objectives in the classroom were not achieved. Pronunciation is an important skill for students who want to speak effectively because it affects learning. Students' poor pronunciation and inability to speak in English hinder the teacher's ability to deliver lessons.

The tenth-grade cohort of the 2020/2021 academic year was admitted through a distinct process compared to the eleventh and twelfth grades. Class X experienced a different approach to the CBT exam, and the conditions brought about by COVID-19 complicated the admission process. This situation caused significant challenges for the tenth-grade teacher during instruction. Effective learning is hindered without clear communication, as pronunciation plays a crucial role in communication. Prior studies have shown that English pronunciation errors by students from various language backgrounds are systematic rather than random. (Rajaduraiin Husada, 2007).

When pronouncing diphthongs [ai] students pronounce diphthong sounds [ei] and vowels [e] because they are mostly incorrect to inconsistent, as well as other vowel sounds such as [ɪ], [a], [æ], and [ə]. The inconsistency pronunciation occurs when the student tries to correct the clear pronunciation but struggles with accurately imitating it. This difficulty might stem from the absence of certain elements in their mother tongue. Hence, prior research explored whether phonological errors occur when students pronounce vocal diphthongs.

METHODOLOGY

A quantitative descriptive approach was used in the study, and the data were presented numerically. This descriptive study aims to provide information and results concerning students' phonological errors in pronouncing vocal diphthongs. Creswell (2012) defines "quantitative descriptive research characteristics as those that describe a research

problem through detailed description." This method was chosen by researchers because they think the test can simplify and shorten the research time. Therefore, researchers use a quantitative descriptive approach that is tested. This study involved students in 12 classes of the 2020-2021 academic year. There are 395 students there. A total of 60 students were taken samples for study, with Arikunto (2006) stating that samples should be taken 50% if the population is less than 100, and 15-25% if the population is more than 100. If the population is more than 100, researchers also take 15%. A simple random sampling method is used to collect these samples. To induce phonological errors in the pronunciation of students' vocal diphthongs, the study's data were evaluated using the Guttman Scale Interval Speed Classification.

The text provided by the researchers includes eight types of vocal diphthongs. Researchers informed respondents of their purpose after asking permission. Researchers then give tests to respondents. The test consists of vocal diphthongs. Respondents then asked if it was a vocal diphthong. They are diphthong vowels such as /aɪ/, /eɪ/, /aʊ/, /eə/, /ɪə/, /ɔɪ/, and /ʊə/. Researchers came up with phonological errors in the pronunciation of students' vocal diphthongs using the Guttman Scale Interval Speed Classification. They calculated the data a numerical system, with data analyzed via SPSS 22.

RESULTS AND DISCUSSION

The aim of this study was to determine the types of pronunciation errors diphthong vowels in tenth grade. The question data comes from an analysis of student score errors in one test. Researchers tabulate the data to identify easy problems and difficult to calculate the percentage of error. To identify the types of mistakes students make, eight different categories of vocalists were evaluated.

Pronunciation tests aim to measure students' pronunciation, especially English diphthongs. The results showed 60 students offering 16 diphthongs, as shown in the table below:

Table 1. The Types of Diphthong Vocals

Diphthong	The word 1	The word 2
[ɪə]	area	idea
[eə]	warehouse	Theirs
[ʊə]	during	obscure
[eɪ]	came	gave
[aɪ]	fire	sacrifice
[ɔɪ]	avoid	destroyed
[ɔʊ]	go	although
[aʊ]	proud	houses

To analyze student errors in pronouncing vocal diphthongs, the researcher employed SPSS 22 for the analysis. The results below:

Table 2. Descriptive Student Statistics Errors in Diphthong Vowel Pronunciation

Errors	16	43	0	43	Mean		Std. Deviation	Variance
					Statistik.	Std. Error	Statistik.	Statistik.
					21.44	3.665	14.660	214.929

The data obtained is the percentage of errors of grade X students in pronouncing diphthong vowels. The score has been known to identify the most common types of errors in vowel diphthong pronunciation of grade X students by calculating the frequency and percentage of errors in vowel diphthongs

Table . The Results of Student Scores in Diphthong Vowel Pronunciation

DIPHTHONG		Final score			
		Benar		Incorrect	
		Frekuensi	Persentase	Frekuensi	Persentase
Diftong [ɪə]	area	60	100%	0	0%
	idea	52	86%	9	14%
Diphthong [eə]	warehouse	51	85%	9	15%
	their	58	97%	2	3%
Diphthong [ʊə]	during	21	35%	39	65%
	obscure	23	38%	37	62%
Diphthong [eɪ]	came	34	56%	27	44%
	gave	33	54%	28	46%
Diphthong [aɪ]	fire	55	91%	6	9%
	sacrifice	24	39%	37	61%
Diftong [ɔɪ]	avoid	55	92%	5	8%
	destroyed	25	41%	36	59%
Diftong [ɔʊ]	go	39	64%	22	36%
	although	17	28%	43	72%
Diftong [aʊ]	proud	43	71%	18	29%
	houses	35	58%	25	42%

Based on the aforementioned data, the researcher may determine that the most prevalent type of vowel diphthong pronunciation error among grade ten pupils is related to the diphthong [ʔʊ], with the focal word being "although." With a total mistake of 72%, the word "although"

has the greatest pronunciation error score among vowel diphthongs. Both focal words in the diphthong [ʊə] have the highest total errors: "obscure" receives 62% and "during" receives 65%, indicating a high error score when pronouncing vowel diphthongs. Moreover, the final diphthong [aɪ], which is associated using the word "sacrifice" as the focus, received mistake score of 61%, indicating a significant error rate when pronouncing vowel diphthongs.

This conclusion is researcher's analysis from the previously provided. Data on error identification came from grade ten students. The recognition findings revealed that the majority of the errors had similar pronunciations and tones. Numerous factors are thought to play a role in the mispronunciation of English vowel diphthongs. The students' tendency to pronounce words with diphthongs incorrectly, their similar linguistic and educational backgrounds, the fact that the spoken word is seldom heard, and their pronunciation of words is one of the contributing reasons. The dissimilarity between written and spoken words makes it hard for them to comprehend how to pronounce them. Even now, people still pronounce diphthong vowels incorrectly because they are unaware of the correct pronunciation.

The number of errors recorded in the responses of the students was counted in this study. As demonstrated by the pronunciation test, which consists of 16 focus words across 8 different vowel diphthong types found in the narrative text "Bandung Lautan Api."

The researcher discovered several pronunciation errors made by the subjects during voice recordings based on earlier study. It is evident from the table that students were the source of data for the diphthong exam. Based on the data, it was discovered that while there were few mistakes made by the students when pronouncing the other diphthongs, there were plenty when it came to the vowel diphthongs on the focus word "area."

Table 4. The percentage of total errors in vowel diphthong pronunciation

DIPHTHONG		Frecuency of Error	Percentage of Error
Diphthong [ɪə]	Area	0	0%
Diphthong [eə]	Their	2	3%
Diphthong [ɔɪ]	avoid	5	8%
Diphthong [aɪ]	Fire	6	9%
Diphthong [ɪə]	Idea	9	14%
Diphthong [eə]	warehouse	9	15%
Diphthong [aʊ]	proud	18	29%
Diphthong [ɔʊ]	go	22	36%
Diphthong [eɪ]	Came	27	44%
Diphthong [eɪ]	Gave	28	46%
Diphthong [ɔɪ]	destroyed	36	59%
Diphthong [aɪ]	sacrifice	37	61%

Diphthong [ʊə]	obscure	37	62%
Diphthong [ʊə]	During	39	65%
Diphthong [ʊʊ]	although	43	72%
		339	565%

Diphthong [ʊʊ] was the most frequently mispronounced vowel diphthong among the pupils in grade 10. The key word here was "although." With a total mistake of 72%, the word "although" has the greatest score when it comes to vowel diphthong mispronunciation. The two focus words in the diphthong [ʊə], "during" (65%) and "obscure" (62%), had the highest total errors, indicating significant pronunciation errors and scores for diphthong vowels. Additionally, the final diphthong [aɪ], which is associated with the focal word "sacrifice," receives a total error score of 61%, indicating a significant degree of vowel diphthong mispronunciation.

DISCUSSION

Language learners frequently make pronunciation mistakes, particularly EFL learners as they don't speak English on a daily basis. Mispronunciations, on the other hand, should be taken seriously as they might result in a change in meaning as well as the creation of new words. The pronunciation of a word or sentence will directly become incongruous with its true meaning when the meaning that is being received is incorrect.

The previous chapters' discussion, presentation, and analysis lead to the conclusion that the majority of the study's faults are diphthongs [iə] in the diphthong position, focusing on the terms "during" and "unclear." Emphasis word "although" has the largest number of errors in pronouncing diphthong vowels [ʊʊ], with a total error rate of 72%. This occurred as a result of the majority of students mispronouncing the word. Because initial and terminal vowel stresses can have an impact on pronunciation of diphthong vowels, the researcher discovered that students were less cautious when pronouncing the words and paid less attention to them.

CONCLUSION

According to the research findings, perceptions of online learning among lecturers and students fell into the high category (72.95% and 71.1%; 79.10% and 72.50%, respectively) based on two evaluation criteria: (1) perceived usefulness and (2) perceived ease of use. Both professors and students have preferences. For example, professors value online learning's flexibility in terms of time and location (82.86%), while students value the chance to study English online (77.19%).

This is an intriguing conclusion because online learning is highly enjoyed by both instructors and students. They do, however, favor in-person instruction over virtual instruction. On the question of whether online learning is faster than in-person learning, lecturers (7.96%) and students (8.29%) agreed the least, indicating that online learning is not thought to be a superior learning method than in-person sessions. This finding could account for the benefits of in-person instruction that virtual instruction cannot match, even though virtual instruction has its own alluring features.

The shortcomings of this study are unavoidable, so several recommendations are made for future research: (1) increase participant recruitment, because the number of lecturers involved in this study is relatively small compared to the number of students; (2) employ alternative data collection instruments such as tests, interviews, and observations; and (3) utilize various data collection methods, including tests, interviews, and observations

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