



## Error in Pronouncing English Diphthongs at The First Grade of Merangin University Students

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**Abstract.** Pronunciation is an important component of English language learning because it affects learners' ability to communicate intelligibly. One of the pronunciation aspects that frequently creates difficulties for Indonesian learners is the production of English diphthongs. Unlike Indonesian, English contains several diphthong sounds that require the tongue and lips to move from one vowel position toward another within the same syllable. Differences between the English and Indonesian sound systems may cause learners to substitute, reduce, or incorrectly produce English diphthongs. This study investigates errors in pronouncing English diphthongs among first-grade students of Merangin University. The study employed a descriptive qualitative and quantitative approach. The participants consisted of 25 first-grade university students. Data were collected through an English diphthong pronunciation test consisting of selected English words containing the eight commonly recognized English diphthongs: /eɪ/, /aɪ/, /ɔɪ/, /aʊ/, /oʊ/, /ɪə/, /eə/, and /ʊə/. Students were asked to pronounce the target words individually, and their pronunciation was analyzed based on recorded performances. For purposes of presenting a complete research model, the results reported in this draft use illustrative data. The illustrative findings indicate that the students experienced different levels of difficulty in pronouncing English diphthongs. The greatest difficulties were found in /eə/, /ɪə/, /ʊə/, and /aʊ/, while /eɪ/ and /aɪ/ tended to be produced more accurately. The most frequent types of errors were vowel substitution, monophthongization, inappropriate vowel movement, and inaccurate tongue or lip positioning. The findings suggest that differences between English and Indonesian phonological systems, limited pronunciation practice, spelling pronunciation, and insufficient awareness of English vowel movement may contribute to students' difficulties. The study concludes that systematic pronunciation instruction, listening discrimination activities, phonetic transcription, minimal-pair practice, and repeated oral practice are important for improving students' production of English diphthongs.

**Keywords:** English Diphthongs; English Pronunciation; Error Analysis; Pronunciation Errors; University Students.

### 1. INTRODUCTION

English has become an important means of international communication in education, business, technology, tourism, science, and many other fields. For students learning English as a foreign language, the ability to communicate orally is therefore an important learning objective. Oral communication does not depend only on vocabulary and grammar. Pronunciation also plays a significant role because speakers need to produce sounds that can be understood by listeners.

Pronunciation refers to the way in which speech sounds are produced and organized in spoken language. It involves several aspects, including consonants, vowels, stress, rhythm, intonation, linking, and other features of connected speech. Among these aspects, vowels are particularly important because they form the nuclei of syllables and distinguish many English words. Incorrect vowel production can consequently cause difficulties in understanding spoken English.

One category of English vowels that may be difficult for foreign language learners is the diphthong. A diphthong is generally described as a complex vowel in which the articulatory position changes during its production. Instead of maintaining one relatively stable vowel position, the speaker moves from one vowel quality toward another within a single syllable. English contains several diphthongs, and their production requires appropriate coordination of the tongue, jaw, and lips. For Indonesian learners, English diphthongs may present particular difficulties because the English and Indonesian vowel systems are not identical. Indonesian learners may encounter sounds in English that do not have direct equivalents in their first language. When a sound does not exist or is not commonly used in the learner's first language, the learner may replace it with a familiar sound. This process can result in pronunciation errors. Pronunciation errors can also occur because English spelling does not always provide a reliable indication of pronunciation. The same spelling pattern may have different pronunciations in different words. Conversely, the same diphthong may be represented by different spelling patterns. As a result, learners who rely heavily on spelling may pronounce English words according to Indonesian reading conventions rather than according to English pronunciation patterns.

First-grade university students may have different levels of English pronunciation ability. Some students may have studied English for many years at school, while others may have had limited opportunities to practice spoken English. In many English as a Foreign Language (EFL) contexts, students receive substantial exposure to grammar, reading, and vocabulary but comparatively limited opportunities for systematic pronunciation practice. Consequently, students may know the meaning of a word but still have difficulty pronouncing it accurately.

Error analysis provides a useful framework for investigating such problems. Through error analysis, teachers and researchers can identify the forms of errors produced by learners, determine which errors occur most frequently, and consider possible factors that contribute to those errors. The information can then be used to design pronunciation instruction that addresses learners' actual difficulties. This study focuses specifically on English diphthongs produced by first-grade students at Merangin University. The researchers are interested in identifying which diphthongs cause the greatest difficulties and what types of pronunciation errors occur. Understanding these difficulties is expected to provide useful information for English teachers and lecturers in developing appropriate pronunciation activities.

## **Identification of the Problem**

Based on the background above, several problems can be identified: Some first-grade students have difficulty producing English diphthongs accurately. Students may substitute unfamiliar English diphthongs with vowel sounds that are more familiar to them. Students may pronounce diphthongs as relatively pure or single vowels. Students may rely on English spelling rather than pronunciation when producing target words. Students have different levels of exposure to spoken English and pronunciation practice.

## **Research Questions**

This study addresses the following research questions:

- a. What types of errors do first-grade Merangin University students make when pronouncing English diphthongs?
- b. Which English diphthongs are most difficult for the students?
- c. What factors may contribute to students' errors in pronouncing English diphthongs?

## **Objectives of the Study**

The objectives of this study are: To identify the types of errors made by first-grade Merangin University students in pronouncing English diphthongs. To identify the diphthongs that are most difficult for the students. To discuss possible factors contributing to students' pronunciation errors.

## **Review of Related Literature**

### ***Pronunciation***

Pronunciation can be understood as the production of speech sounds according to the sound system of a particular language. Good pronunciation does not necessarily mean that learners must imitate one particular native-speaker accent. Rather, pronunciation instruction should help learners produce speech that is sufficiently intelligible for effective communication. According to Celce-Murcia et al. (2010), pronunciation teaching involves segmental features such as consonants and vowels as well as suprasegmental features such as stress, rhythm, and intonation. Segmental pronunciation is especially important when learners have difficulty distinguishing or producing particular sounds. Pronunciation involves both perception and production. Learners first need to hear differences between sounds before they can consistently reproduce those differences. Therefore, pronunciation instruction should include listening discrimination as well as speaking practice.

### **English Diphthongs**

English diphthongs are commonly represented using International Phonetic Alphabet (IPA) symbols. A commonly used description identifies eight diphthongs:

Diphthong, example:

/eɪ/ day, make, name

/aɪ/ time, five, my

/ɔɪ/ boy, choice, voice

/aʊ/ now, house, out

/oʊ/ go, home, open

/ɪə/ near, hear, idea

/eə/ hair, care, chair

/ʊə/ poor, tour, cure

The exact inventory and phonetic realization may vary according to the English accent or pronunciation model being used. Therefore, this study uses the symbols above as a pedagogical framework rather than claiming that every English variety realizes these sounds identically.

### **Diphthongs and Indonesian Learners**

Indonesian and English have different phonological systems. Although Indonesian contains vowel combinations and sequences that may resemble some English vowel movements, learners cannot always transfer the pronunciation patterns directly from Indonesian into English. First-language transfer is one possible source of pronunciation difficulty. When learners encounter a sound or sound sequence that differs from their first language, they may interpret it through the categories already established in their linguistic system. This can result in substitutions or other deviations.

### **Error Analysis**

Error analysis is an approach used to investigate learners' errors in second or foreign language learning. Corder (1967) emphasized that learners' errors are significant because they provide information about the learner's developing linguistic system. Errors can be classified according to different criteria. In pronunciation research, errors may include sound substitution, omission, addition, distortion, or incorrect realization of a target sound. An error analysis procedure commonly involves collecting learner data, identifying errors, classifying errors, describing their frequency, and discussing possible causes. The purpose is not simply to identify that learners are incorrect but to understand patterns that may be useful for instruction.

## **Causes of Pronunciation Errors**

Pronunciation errors may be caused by several factors related to both the learner and the learning environment. Kenworthy (1987) explains that pronunciation learning is influenced by factors such as the learner's native language, age, exposure to the target language, phonetic ability, attitude, motivation, and concern for accurate pronunciation. These factors may interact with one another and influence the extent to which learners are able to acquire the pronunciation system of a second or foreign language.

One of the most important causes of pronunciation errors is first-language interference. Learners tend to use the sound categories and pronunciation patterns that already exist in their first language when producing sounds in English. When an English sound does not have an equivalent or a close equivalent in the learners' first language, they may substitute it with a sound that is more familiar to them. This process can result in systematic pronunciation errors.

Rosyid (2016) investigated factors affecting EFL learners in learning English pronunciation and found that mother-tongue influence, age, and target-language exposure were important factors. The study is particularly relevant to the present research because the pronunciation difficulties reported by the participants included segmental features such as vowels, consonants, and diphthongs. This indicates that differences between the learners' first language and English may contribute to difficulties in producing English diphthongs.

Kosasih (2021) examined factors affecting Indonesian students in learning English pronunciation. The participants were 45 first-semester university students. The findings indicated that native-language interference, phonological awareness, pronunciation instruction, and corrective feedback influenced students' pronunciation accuracy. The study suggests that pronunciation errors should not be viewed only as a problem of students' ability to imitate sounds. Rather, pronunciation development is also related to learners' awareness of the sound system and the quality of pronunciation instruction and feedback they receive.

Another factor is exposure to the target language. Learners who have limited opportunities to listen to and use spoken English may have less developed awareness of English sound contrasts. Rosyid (2016) identifies target-language exposure as one of the factors affecting pronunciation learning, while Szyszka (2018) reports that both in-class and out-of-class exposure, including multimedia resources, may contribute to pronunciation acquisition.

Phonological awareness is also important. Learners need to recognize differences between English sounds before they can consistently produce those sounds. According to Kosasih (2021), phonological awareness is one of the factors associated with pronunciation accuracy among Indonesian students. In the context of English diphthongs, students need to

understand that a diphthong involves movement from one vowel position toward another within a syllable. If learners perceive a diphthong as a single stable vowel, they may produce a monophthongization error.

Pronunciation instruction and corrective feedback may also affect learners' pronunciation. When pronunciation is not explicitly taught, students may have limited knowledge of how to position their tongue, lips, and jaw to produce unfamiliar sounds. Corrective feedback can help learners recognize differences between their own production and the target pronunciation. Kosasih (2021) therefore emphasizes pronunciation instruction and corrective feedback as relevant factors in the development of pronunciation accuracy.

In addition, motivation and attitude can influence pronunciation learning. Learners who are motivated to communicate clearly in English may devote more time to listening and pronunciation practice. Khan (2019/2020) categorizes motivation, learner goals, and learner characteristics as factors affecting second-language pronunciation. External factors, such as teachers, teaching methods, classroom environment, and institutional conditions, may also influence pronunciation learning.

Based on the studies discussed above, the causes of pronunciation errors can be broadly classified into two categories: internal and external factors. Internal factors include first-language influence, age, phonological awareness, phonetic ability, motivation, attitude, and learning goals. External factors include exposure to English, pronunciation instruction, corrective feedback, teacher pronunciation, classroom environment, teaching methods, and access to English-language media. These factors provide a useful framework for analyzing the pronunciation errors of first-grade students at Merangin University.

## **2. RESEARCH METHOD**

This study employed a descriptive approach combining qualitative description and quantitative frequency analysis. The qualitative component was used to describe the types of pronunciation errors made by students, while the quantitative component was used to calculate the frequency and percentage of errors.

### **Participants**

The participants consisted of 25 first-grade students of Merangin University. They were selected as the sample for the study. The sample size was 25 students. Each participant was assigned an identification code from S1 to S25 to protect individual identity.

### **Research Instrument**

The main instrument was an English pronunciation test. The test consisted of words containing the eight target diphthongs:

/eɪ/, /aɪ/, /ɔɪ/, /aʊ/, /oʊ/, /ɪə/, /eə/, /ʊə/

The test words included day, name, time, five, boy, choice, house, now, home, go, near, hear, hair, care, poor, and tour. The words were selected to provide examples of the target sounds in recognizable lexical contexts.

### **Data Collection Procedure**

The data collection procedure consisted of several steps. First, the researcher prepared the pronunciation test. Second, the researcher explained the task to the students. Third, each student pronounced the target words individually. Fourth, the students' pronunciation was recorded for subsequent analysis. Finally, the researcher listened to the recordings and compared students' productions with the target pronunciation. The pronunciation assessment focused on whether the target diphthong was produced accurately and whether students demonstrated an appropriate movement from the first vowel element toward the second.

### **Data Analysis**

The data were analyzed by identifying incorrect productions and classifying them into several categories:

- a) Vowel substitution: a target diphthong was replaced by another vowel or vowel-like sound.
- b) Monophthongization: a diphthong was produced as a relatively single vowel without sufficient vowel movement.
- c) Incorrect vowel movement: the student began with an incorrect vowel quality or moved toward an inappropriate second element.
- d) Other pronunciation deviations: pronunciation that did not fit neatly into the categories above.

The frequency of errors was calculated using the following formula:

$$P = F/N \times 100\%$$

where:

P = percentage of errors

F = frequency of errors

N = total number of observations

### 3. RESULTS

The analysis of 25 students indicates that pronunciation errors occurred across all eight target diphthongs. However, the frequency of errors differed among the diphthongs.

The following table presents an summary.

**Table 1.** Number and Percentage of Students' Errors in English Diphthong Pronunciation.

| No. | Diphthong | Number of Students Showing Error | Percentage |
|-----|-----------|----------------------------------|------------|
| 1   | /eɪ/      | 7                                | 28%        |
| 2   | /aɪ/      | 8                                | 32%        |
| 3   | /ɔɪ/      | 10                               | 40%        |
| 4   | /aʊ/      | 13                               | 52%        |
| 5   | /oʊ/      | 9                                | 36%        |
| 6   | /ɪə/      | 14                               | 56%        |
| 7   | /eə/      | 16                               | 64%        |
| 8   | /ʊə/      | 15                               | 60%        |

The results show that /eə/ produced the highest percentage of errors, followed by /ʊə/ and /ɪə/. The lowest error frequency occurred with /eɪ/, followed by /aɪ/. These results suggest that students did not experience equal difficulty with all English diphthongs.

#### Errors in /eɪ/

Seven of the 25 students were classified as having difficulty with /eɪ/. Some students tended to reduce the diphthong or produce a pronunciation closer to a single vowel. For example, words such as day, name, and make could be produced without a sufficiently noticeable movement from /e/ toward /ɪ/. The error pattern may be described as monophthongization. The relatively lower frequency of errors may be associated with students' familiarity with common English words containing /eɪ/. However, familiarity with vocabulary does not necessarily guarantee accurate pronunciation.

#### Errors in /aɪ/

Eight students demonstrated errors involving /aɪ/. Typical deviations included incomplete movement between the two vowel elements and substitution with a sound closer to a single vowel. Words such as time, five, and my were used to examine this diphthong. Students sometimes pronounced the initial vowel but did not sufficiently complete the movement toward the second element.

### **Errors in /ɔɪ/**

Ten students showed difficulties with /ɔɪ/. The students sometimes produced an inaccurate first element or did not complete the movement toward /ɪ/. Words such as boy, choice, and voice demonstrated these difficulties. The findings indicate that students may require greater awareness of the movement involved in this diphthong.

### **Errors in /aʊ/**

Thirteen students demonstrated errors with /aʊ/. Words such as house, now, and out were among the target items. Some students tended to produce the first element without sufficient movement toward the second element. Others produced a vowel quality that differed from the intended target. The relatively high frequency of errors suggests that /aʊ/ deserves particular attention in pronunciation instruction.

### **Errors in /oo/**

Nine students demonstrated difficulty with /oo/. Examples included words such as go, home, and open. Students sometimes produced a more stable vowel instead of a noticeable movement. Another possible pattern was the production of a vowel quality influenced by Indonesian pronunciation habits.

### **Errors in /ɪə/**

Fourteen students demonstrated errors involving /ɪə/. The pronunciation of words such as near and hear was challenging for several participants. Some students reduced the target to a more familiar vowel, while others produced a sequence that did not correspond closely to the intended English pronunciation.

### **Errors in /eə/**

The findings indicate that /eə/ was the most difficult target, with 16 out of 25 students demonstrating an error. This represents 64% of the sample. Words such as hair, care, and chair were particularly useful for identifying the problem. Students often produced the initial vowel but did not complete the expected movement. The difficulty may be related to the limited correspondence between the target sound and familiar Indonesian vowel categories, although such an explanation would require additional evidence from students' linguistic backgrounds.

### **Errors in /ʊə/**

Fifteen students showed errors with /ʊə/. Words such as poor, tour, and cure were used as examples. Students sometimes replaced the diphthong with a more stable vowel or produced a pronunciation influenced by spelling. The relatively high error rate suggests that these sounds may require more explicit instruction.

## **Discussion**

The findings indicate that first-grade students may experience considerable difficulty with English diphthongs. Although the illustrative results show variation among the eight target sounds, the overall pattern suggests that diphthongs involving less familiar vowel movements may require more attention during pronunciation instruction. The highest error rate was associated with /eə/. This result can be discussed in relation to first-language influence and students' familiarity with the sound. Indonesian learners may not have an identical phonological category corresponding to every English diphthong. As a result, they may interpret unfamiliar English sounds using categories that are more readily available in their first language. The high frequency of /ʊə/ and /ɪə/ errors can also be associated with the complexity of producing a changing vowel quality. Students need to coordinate the movement of the tongue and lips while maintaining the sound as one syllabic unit. If students focus only on the first vowel element, the result may sound more like a monophthong. The results also show that /eɪ/ and /aɪ/ had comparatively lower error frequencies. One possible explanation is that these sounds occur frequently in common English words and may therefore be more familiar to learners. However, frequency of exposure should not be considered the only explanation. Actual students' pronunciation histories and exposure to English would need to be investigated before making a stronger causal claim. The occurrence of vowel substitution supports the importance of first-language transfer in pronunciation learning. Learners often use the sound categories available in their existing linguistic system when producing unfamiliar foreign-language sounds. This does not necessarily mean that Indonesian pronunciation is incorrect; rather, it reflects the interaction between two phonological systems.

Monophthongization was another important error pattern. This finding suggests that students may understand the written form of a word but lack sufficient awareness of the dynamic quality of English diphthongs. Teachers therefore need to demonstrate that diphthongs involve movement rather than simply teaching them as labels.

Pronunciation teaching can address this problem through articulatory explanations. For example, teachers can demonstrate the starting position and ending position of a diphthong and ask students to exaggerate the movement during initial practice. Visual diagrams of tongue position can also be used. Listening discrimination is another important strategy. Before asking students to produce a target sound, teachers can provide pairs or groups of words and ask learners to identify differences. This can help students establish perceptual categories before production practice. Minimal-pair activities may also be useful. Students can compare words containing different vowel sounds and listen for contrasts. Repeated exposure can improve

students' awareness of sound differences. The findings also suggest the importance of reducing excessive dependence on spelling. English orthography is not consistently phonemic, meaning that learners cannot always determine pronunciation simply by looking at written letters. Teachers can therefore introduce IPA transcription alongside ordinary spelling. Students can learn to associate phonetic symbols with actual sound categories. Technology can also support pronunciation learning. Students can use pronunciation dictionaries, audio recordings, and speech-recognition tools to compare their production with model pronunciation. However, technological tools should be used as supplementary resources rather than as the only basis for pronunciation assessment.

#### 4. CONCLUSION

This study investigated errors in pronouncing English diphthongs among 25 first-grade students of Merangin University. The study focused on eight commonly recognized English diphthongs: /eɪ/, /aɪ/, /ɔɪ/, /aʊ/, /oʊ/, /ɪə/, /eə/, and /ʊə/. The results indicate that students experienced different levels of difficulty across the target sounds. The greatest difficulties were associated with /eə/, /ʊə/, /ɪə/, and /aʊ/, while /eɪ/ and /aɪ/ showed comparatively lower error frequencies. The major error types included vowel substitution, monophthongization, and incorrect vowel movement.

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