

# Artikel 2.14 Phonological Investigation

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# Phonological Investigation Into Students' Mispronunciation Of English Words Containing Phonemes Absent In Indonesian

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**Abstract**—English phonemes that are absent in the learners' native language are seen as the sources of difficulties. To articulate them, learners need to place their articulators in such positions in order to produce sounds that are similar or at least close to being similar to those phonemic of target language. In such process, learners might produce phonemes that deviate from the Received Pronunciation which may thus disrupt the process of communication. So far little attention has been paid to phonological deviations in the subject of Pronunciation Practice. This study is intended to investigate the case by analyzing the learners' phonological deviations. Ten fifth semester students of English Education Department of UNDIKMA Mataram participated in the study. Data were obtained by recording and transcribing their pronunciation of the words containing the potential English phonemes absent in Indonesian. Analysis was made by comparing the broad transcriptions between the students' pronunciations and the Oxford Advanced Learners' Dictionary. Results showed that there are many deviations in the students' pronunciations of the words containing potential English phonemes absent in Indonesian. Based on the findings it is suggested that the subject of Pronunciation Practice and (Introduction to) English Phonology should consider materials that include such absent phonemes intensively in the weekly meetings.

**Index Terms**—Potential phonemes, phonological deviations, Received Pronunciation

## 1 INTRODUCTION

As a subject in English Education Department, Pronunciation Practice is considered as one of the most difficult subjects. This is one of the reasons why teaching pronunciation is often considered as the Cinderella of language teaching (see: Plaza, 2015, p. 5). The difficulty is due to the complexity of the phonological systems in the target language. Before starting to pronounce a word, learners have to consider the structure of the sounds to produce, place their organs of speech in certain positions, combine one sound and another, and so on. All of these must be faced before producing a pronunciation that is similar or close to being similar to the native pronunciation (RP). In many views, one of the major problems that Indonesian learners of English face is related to their pronunciation skills (see: Muhyidin, 2016, pp. 209-217). Since the two languages have quite a lot of differences in terms of phonetics and phonology, they find it very difficult to articulate specific sounds which do not exist in their native language. Moreover, this problem is strongly associated with the concentration of the EFL/ESL learners more on reading and grammar than speaking and listening. In other words, they tend to learn more about the language and how it is structured than to learn the language itself.

In pronouncing English words correctly, Indonesian learners should consider the articulation of the English phonemes; vowels, consonants, and diphthongs that are potential to cause deviations. In terms of vowels, one important difference between Indonesian and English is that the former is said to have only five up to eight vowel sounds whereas the latter has twelve to fourteen. Besides, while in English short and long vowels are phonemically different, in Indonesian long vowels are only the lengthening of the short vowels; they are only

different phonetically. As a result, they tend to confuse between the words 'ship' and 'sheep' or 'fit' and 'feet'. The case becomes more problematic because some English vowels—like English consonants and English diphthongs—are absent in Indonesian (see: Wiktionary, 2017, pp. 1-2). As far as consonant sounds are concerned, the Indonesian speakers, as EFL learners, also encounter a great amount of problems. A well-known pronunciation problem, which even the highest-level students find it hard to deal with, is the fact that Indonesian has no consonant clusters such as /sl/, /sm/, /sn/, /st/, /str//sp/, /spr/, /sk/, or /skr/ in any position. Consequently, Indonesian speakers usually insert a vowel into the intended consonant clusters. Thus, instead of pronouncing /slm/ Indonesian speakers usually mispronounce it as /sɛlm/ and instead of /spɔ:rt/ Indonesian speakers mispronounce it as /sɛpɔ:rt/ and so on. To make it more problematic, some English phonemes (vowels, consonants, and diphthongs) are also absent in Indonesian (see: Christina, 2019, pp. 1-3; Istati, 2019, pp. 41-47). In this present study, the analysis is intended to investigate such matter by analyzing the phonological deviations in the students' pronunciations of the English words containing the potential English phonemes that are absent in Indonesian. The participants of the study are ten students of the fifth semester of English Education Department of UNDIKMA Mataram, NTB. The students were distributed with a list of the targeted words via Whatsapp; then assigned to pronounce them while at the same time to audio-record their own pronunciation. They had to submit the audio-records of their pronunciation right after the recording. The data were analyzed and discussed using the theory of linguistic deviation proposed by Leech (1969) and other related theories.

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## Review of Related Theories: Phonological Deviations

While in Leech's view (1969, p. 59) linguistic deviations in poetry are artistically significant, the significance of such deviations are hypothetically different in terms of the second or

foreign language learners' deviations. In poetry, linguistic rules have long been broken from the very early of English literature dating back to Chaucer, which gives a certain kind of freedom to the poet in verses (pp. 17-23). In second or foreign language learning, however, the breaking of the rules—that often cause deviations—is due to the lack of knowledge about the linguistic rules. In such relations, Ellis (1994, p. 700) defines an error as an unintended deviation from the immanent rules of a language made by a second language learner. In Ellis' view, such errors result from the learner's lack of knowledge of the correct rules of the target language (Brown, 1994, p. 205). Meantime, Norrish (1983, p. 7) states that error as a systematic deviation taking place when a learner has not learnt something, and consistently gets it wrong. Deviation, therefore, is the violation and breaking of the rules of a language. Such deviations, in Leech's view (1969, pp. 10-12), will give rise to a disorientation and the expected meanings are, therefore, also deviated. In similar relation, Jovanovic (1990, pp. 83-98) views that "deviation is when one is prohibited breaking the rules of language, or deviating from the norm, from the standard, which caused a misunderstanding". He proposes at least two large groups of deviations; they are unintentional deviations and the intentional deviations. Jovanovic further states that there are also "deviation from the norm", "breaking the rules of language" or, sometimes, "illiteracy", "the lack of knowledge of the language", et cetera. In this study, analysis and discussion are focused on the unintentional deviation because that is what happens when students pronounce English words containing phonemes absent in their native language. There are several types of linguistic deviations proposed by Leech. They are Discoursal Deviation, Semantic Deviation, Lexical Deviation, Grammatical Deviation, Morphological Deviation, Phonological Deviation, and Graphological Deviation (1969, pp. 57-59). While Cook (1989, p. 74) perceives deviation as a case of non-conformity to the norms and regularities of discourse structure, Crystal (2003a, p. 134) argues that deviation refers to a sentence, or another unit, which violates the rule and appears either grammatically, phonologically, or even semantically ill-formed. In this sense, linguistic deviation means a disruption of the normal process of communication that leaves a gap in one's comprehension of the text. Since the focus of the study is on the phonological deviations, the analysis was focused on the learners' pronunciation and mispronunciation of each of the words (containing potential English phonemes) under investigation. The term deviation is usually used to describe spelling and pronunciation of a word or a sentence structure which does not conform to a norm (Richard and Richard, 1992, p. 305). It is the specific use of language that goes beyond its linguistic convention. In this relation, Leech (1969, p. 37) discusses different types of linguistic deviations by distinguishing the three main levels of language: realization, form, and semantics. Realization is realized by phonology and graphology; form comprises grammar and lexicon; whereas semantics manifests in

denotative or cognitive meaning. These three main levels of language can be illustrated as below:

TABLE 1  
THE TABLE THREE LEVELS OF LANGUAGE  
(ADAPTED BASED ON LEECH [1969]'S VIEW).

1. Realization	2. Form	3. Semantics
Phonology	Grammar	Denotative meaning or Connotative meaning
Graphology	Lexicon	

Leech's way to classify language into three main levels is very ideal to solve many problems of linguistic deviations. For example, homophones are words with the same pronunciation but different meanings, for example light (as an adjective) and light (as a noun). Synonyms are words with the same meaning but different forms, for example: nonetheless and nevertheless; profound and deep; etc. Homophones are words with the same form and pronunciation but with unrelated meanings, for example head is used to refer to the object on the top of one's body, on the top of a glass of beer on the top of a company, etc. In such case, breaking language down into one or two components, form and meaning is inadequate. Based on the above Leech's view, it can be concluded that knowing a language, thus, means knowing the (1) Realization (its Phonology and Graphology), the (2) Form of a language (its Grammar and Lexicon), and (3) Semantics (its meaning). Meantime, Short (1969, p. 55) stresses that since the sound dimension of a language belongs to speech and most of the literature is written, there is relatively little scope for phonological deviation. The implicit sound pattern can always be made explicit in reading loud. To a large extent, this implicit phonological patterning is determined by the choice of words and structure at the syntactic level, where it can be regarded as an important ingredient of stylistic value (Leech and Short, 1981, p. 132). Very often, however, deviation from the normal use of sounds or commonly called mispronunciation of sounds may be the result of habit of childish mispronunciation which have never be corrected or they may arise from physical defect (Jones, 1918, p. 12). Otherwise, as Trudgill (2000, p. 35) asserts, grammatical deviation from the standard English is associated with phonetic and phonological differences. As far as researcher's knowledge, researches that analyze the students' pronunciation to see why and how the phonological deviations take place are still rare. Indeed, such researches will offer some inputs in the teaching of Pronunciation Practice and offer some idea in designing the materials for teaching it. Many paper articles only discuss about the linguistic and non-linguistic discrepancies in ESL/EFL learners' pronunciation (see: Muhyidin, 2016, 209-217), or only to prove that English phonological systems are different from that of the learners' native language (see: Ristati, 2019, 41-47), otherwise the discussions are only to confirm that that phonological difficulties and deviations are due to the difference in the systems of the two languages (see: Habibi, 2016, 68-75). This present paper was intended to analyze the phonological

deviations made by English department students in pronouncing the English words containing potential (to cause deviations) English phonemes that are absent in Indonesian as the students' native language. It is to find out why they encountered such difficulties and how such mispronunciations caused the deviations. It is expected that once their difficulties are identified and the deviations are analysed, they can offer the clues for the teaching of Pronunciation Practice and (introduction to) English Phonology in better ways in particular, and better ideas in designing the materials for teaching them in general.

## METHOD

This study applied a combination of quantitative and qualitative methods (mixed method) in data collection and analysis. The quantitative method is used to analyze the data taken from the test of students' conjecturing abilities after the application of PBL, while the qualitative method is aimed at analyzing the data taken from observations and interviews with selected students. This study investigated two variables, namely the application of PBL as an independent variable and the test of students' conjecturing abilities in solving the problem of Paving Block as the dependent variable. To find This particular study applied the approach proposed by Ellis's view (1994, p. 700) that an error is defined as an 'unintended deviation' from the inherent rules of a language variety made by a second language learner (in this study Indonesian students). The unintended deviations are caused by the learner's lack of knowledge of the correct rules of English that—in pronunciation—is the target language (Leech, 1969, pp. 56-59). The significant difference is that while in one way, linguistic deviation is intentional and for the purpose of creativity in literary works (as Leech states), in the other, the students' mispronunciation as linguistic deviation is unintentional and due to lack of knowledge in potential English phonemes. The object under analysis is the English words containing potential phonemes that are absent in Indonesian that caused mispronunciation. In eliciting the data, ten students of English Department of UNDIKMA Mataram, NTB were assigned to pronounce the designated words distributed in written via their smart phones (androids). The process was carried out based on Keating (2019, pp. 1-3)'s proposal that "language learning is most effective in an environment where active students feel free to participate, get involved and ask questions; an environment where students know that making mistakes is the best way to learn, and where making a mistake does not result in loss of face". The ten students were seated in a language lab and set in a very relax atmosphere without the lecturer's observation. They were told that this was not a test but to elicit data for a research and they were asked to pronounce each of the designated words as correct as they can. As such they voluntarily participated in the study and submitted their recorded pronunciations in times

## 3 FINDINGS AND DISCUSSION

For easy analysis, the students' pronunciations are put into 4 tables (table 2, 3, 4, and 5). Each table contains the designated words (column 2), followed by the RP based on Oxford Advanced Learners' Dictionary (hereinafter OALD, column 3), and the students' pronunciations (column 4). Both the correct and the incorrect pronunciations are numbered for

analysis. The numbers on the very left (column 1) are the number of the words under analysis. Below is the first table of the students' pronunciation (note that the correctness is based on the vowels under analysis).

TABLE 2  
THE STUDENTS' DEVIATIONS IN PRONOUNCING ENGLISH VOWELS

No.	Potential Words	RP per OALD	Students' Pronunciations
1	Mat	/mæt/	/mæ:t/ = 6 students /met/ = 4 students
2	Fit	/fɪt/	/fɪ:t/ = 5 students /fi:t/ = 5 students
3	God	/gɒd/	/gɒ:d/ = 5 students /gɔ:d/ = 5 students
4	Pool	/pu:l/	/pu:l/ = 8 students /pu:l/ = 2 students
5	Girl	/gɜ:l/	/gɜ:l/ = 3 students /gə:l/ = 7 students
6	Cup	/kʌp/	/kɑ:p/ = 6 students /kɑ:p/ = 4 students
7	Pet	/pet/	/pet/ = 10 students
8	Seat	/si:t/	/si:t/ = 8 students /sit/ = 2 students
9	Hall	/hɔ:l/	/hɔ:l/ = 8 students /hɔ:l/ = 8 students /hɒ:l/ = 2 students
10	Full	/fʊl/	/fʊ:l/ = 10 students
11	Ago	/əgəʊ/	/əgəʊ/ = 10 students
12	Heart	/hɑ:rt/	/hɑ:(r)t/ = 4 students /hʌt/ = 4 students /hɜ:(r)t/ = 2 students

The above table 2 shows that almost all of the words containing the English vowels that are absent or phonemically different from the students' native language were mispronounced by them. In more details, English vowel /æ/ (in 'mat') was articulated incorrectly by four students while vowel /ɪ/ (in 'fit') was articulated incorrectly by five students. Presumably, the deviation is caused by the fact that in English front-low vowel /æ/ is phonemically different from front-mid vowel /e/ and long /i:/ is phonemically different from short /ɪ/, while in Indonesian the two long vowels are only the lengthening of the two short vowels and are therefore only phonetically different. Almost similarly, vowel /ɒ/ (in 'god') was articulated wrongly by five students and vowel /ʊ:/ (in 'pool') was also articulated incorrectly by five students. While English vowel /ɒ/ is absent in Indonesian, in facing the difficulty to articulate it, students usually substitute it with /ɔ/ which is present in Indonesian. While so, long vowel /ʊ:/ in Indonesian is only a lengthening of the short vowel /ʊ/. Since in Indonesian the difference is only phonetical, students usually substitute them (short and long /ʊ:/) one another which in English often results in an unintentional deviation of the pronunciation of the 'pool'.

In pronouncing the word 'girl' seven of them mispronounced it as /gəl/ using short vowel /ə/ as in 'ago' instead of long /ɜ:/ as in 'bird', where the position of /ɜ:/ is a bit lower and a bit further back than short English vowel /ə/ (see: Skandra and Burleigh, 2005, pp. 33-34). Very differently, the word 'cup' was mispronounced by four students as /kɑ:p/ using long /ɑ:/ instead of short vowel /ʌ/ which is much closer to central vowel

/ɜ:/ (see also: Giegerich, 1992, pp. 14-15). Again, this is presumably because students considered that short vowel /ʌ/ and long vowel /ɑ:/ are substitutable one another; just like short /ə/ and long /ɜ:/. The deviation that results, therefore, is phonemic unintentional deviation. Out of the twelve English vowels, three short vowels /e/, /u/, and /ə/might be the easiest to articulate by Indonesian students. In the test, all the of the ten students participating in this study pronounced the words 'pet', 'full', and 'ago' correctly. It can be predicted that this is because the two short English vowels, /e/, /u/, and /ə/ are present in the students' native (Indonesian) language. The case is very different from the long English vowel /i:/. In pronouncing the word 'seat', eight students pronounced it correctly as /si:t/ but two students mispronounced it as /sit/ much rhyming with /st/. While in English short vowel /ɪ/ and long /i:/, are phonemically different, in Indonesian long vowel /i:/ is the lengthening of short vowel /ɪ/. In other words, in Indonesian they are only phonetically different and this made the students interfered the system of their native language into English and caused unintentional deviation. English long vowel /ɔ:/ is probably the most problematic. No one of the ten students participating in this study pronounced the word 'hall' (containing this vowel) correctly as the standard of RP. Instead, eight of them (mis)pronounced this word as /hɔl/ where the long vowel /ɔ:/ was shortened into /ɔ/. Such pronunciation might not cause a deviation as it might not change the meaning of the word. In terms of acceptability, however, the pronunciation does not meet the standard RP (for standard RP, see: Roach, 2004, pp. 239-245). Furthermore, two students (mis)pronounced this word as /hɒl/ where they substituted the long /ɔ:/ with /ɒ/ that caused unfavourable attention from the hearer the meaning is unclear. The mispronunciation of the word 'heart' was also difficult to explain. This particular word was pronounced by the students in three different ways. Four of them pronounced it correctly as /hɑ:(r)t/, four of them mispronounced it as /hʌt/, two others further mispronounced it as /hɜ:(r)t/. In the case of /hʌt/, it can be predicted that the deviation is caused by the fact that the English long vowel /ɑ:/ is absent in Indonesian. In their difficulty to pronounce the long vowel, students might make a short cut by substituting /ɑ:/ with /ʌ/ which results in a phonological deviation. The case of /hɜ:(r)t/ is more difficult to explain. However, one can predict that students might be confused with either the word 'heard' or 'hurt' as they have often seen these two words in some classes. While producing English vowel sounds is often problematic, producing English consonantal sounds are also problematic in different ways. The details can be seen in Table 3 and Table 4 below (note that i = initial position; m = medial position, f = final position). In this study, the correctness in articulating each of the potential English consonants (in the three different positions) is seen based on the pronunciation of the words containing the consonants under analysis.

TABLE 3  
STUDENTS' DEVIATIONS IN PRONOUNCING ENGLISH  
CONSONANTS:

No.	Potential Words	RP per OALD	Students' Pronunciations
1i	Fine	/faɪn/	/faɪn/ = 10 students
1m	Suffer	/sʌfə(r)/	/sʌfə(r)/ = 10 students
1f	Safe	/seɪf/	/seɪf/ = 10 students
2i	Chat	/tʃæt/	/tʃæt/ = 10 students
2m	Teaching	/ti:tʃɪŋ/	/ti:tʃɪŋ/ = 10 students
2f	Teach	/ti:tʃ/	/ti:tʃ/ = 6 students /ti:f/ = 4 students
3i	Zoo	/zu:/	/zu:/ = 10 students
3m	Amaze	/əmeɪz/	/əmeɪz/ = 10 students
3f	Haze	/heɪz/	/heɪz/ = 8 students /heɪf/ = 2 students
4i	Ship	/ʃɪp/	/ʃɪp/ = 10 students
4m	Fishing	/fɪʃɪŋ/	/fɪʃɪŋ/ = 10 students
4f	Fish	/fɪʃ/	/fɪʃ/ = 9 students /fɪs/ = 1 student
5i	Genre	/ʒɑ:nrə/	/ʒɑ:nrə/ = 5 students /zɑ:nrə/ = 3 students /dʒe:nrə/ = 2 students
5m	Vision	/vi:ʒn/	/vi:ʒn/ = 3 students /vi:ʃn/ = 7 students
6i	Thin	/θɪn/	/θɪn/ = 10 students
6m	Soothing	/su:θɪŋ/	/su:θɪŋ/ = 8 students /su:tɪŋ/ = 2 students
6f	Smooth	/smu:θ/	/smu:θ/ = 8 students /smu:t/ = 2 students

In the above table 3a (the first half of potential consonants under investigation), it can be seen that six English consonants (/f/, /ʃ/, /z/, /ʒ/, /θ/) were articulated correctly by 55 (fifty-five) students. This means each of the potential consonants was articulated correctly by an average of 9,16 (nine point sixteen) students when in initial position, which also proves that when in initial position, there is no difficulty for Indonesian students to articulate the English vowels although they are absent in their native language. The only problem is the English consonant /z/ being absent in the students' native language, which was articulated correctly only by five out of the ten students. Differently, those consonants were articulated correctly by 51 (fifty-one) students when in medial position, which means that each of the consonants was articulated correctly by an average of 8,50 (eight point fifty) students. Compared to their initial position, those consonants seem to be more difficult for the students to articulate. In other words, pronouncing English words containing potential English consonantal sounds that are absent in students' native language in medial position is more difficult than pronouncing words containing consonantal sounds in initial position.

TABLE 4  
STUDENTS' DEVIATIONS IN PRONOUNCING  
ENGLISH CONSONANTS

No.	Potential Words	RP per OALD	Students' Pronunciations
7i	Victor	/vɪktə(r)/	/vɪktə(r)/ = 7 students /fɪktə(r)/ = 3 students
7m	Even	/i:vn/	/i:vn/ = 6 students /i:fn/ = 4 students
7f	Save	/seɪv/	/seɪv/ = 6 students /seɪf/ = 4 students
8i	Them	/ðem/	/ðem/ = 10 students
8m	Mother	/mʌðə(r)/	/mʌðə(r)/ = 10 students
8f	Breadth	/breð/	/breð/ = 6 students /breθ/ = 2 students /bred/ = 2 students
9i	Gentle	/dʒentəl/	/dʒentəl/ = 10 students
9m	Inject	/ɪndʒekt/	/ɪndʒekt/ = 10 students
9f	Change	/tʃeɪndʒ/	/tʃeɪndʒ/ = 6 students /tʃeɪŋ/ = 2 students /tʃeɪn/ = 2 students
10i	Dog	/dɒg/	/dɒg/ = 10 students
10m	Leader	/li:də(r)/	/li:də(r)/ = 10 students
10f	God	/gɒd/	/gɒd/ = 8 students /gɒt/ = 2 students
11i	Beg	/beɡ/	/beɡ/ = 10 students
11m	Cable	/keɪbl/	/keɪbl/ = 10 students
11f	Lab	/læb/	/læb/ = 8 students /læp/ = 2 students

Producing similar consonantal sounds absent in students' native language is found to be much more difficult for the students. Those consonants (with the exception of consonant /ʒ/ which is absent in English) were articulated correctly only by 41 (forty-one) students when in final position, which means each of the consonants was articulated correctly only by 8,20 (eight point twenty) students. This further proves that pronouncing English words containing potential consonants that are absent in students' native language in final position is much more difficult than when the consonants are in initial and medial positions. Further details of the students' deviations in pronouncing the English consonants can be seen in Table 4 (the second half of potential consonants under investigation) below. In the above table 3b (the second half of all consonants under investigation), the five potential English consonants (/v/, /ð/, /dʒ/, /d/, /b/) were articulated correctly by 47 (fifty-seven) students, which means each of the consonants was articulated correctly by an average of 9,40 (nine point forty) students when in initial position. This is very slightly different when they are in medial position. They were articulated correctly by 46 (forty-six) students, which means that each of the consonants was articulated correctly by 9,20 (nine point twenty) students when in medial position. The difference is bigger when those potential consonants are in final positions. They were articulated correctly by 34 (thirty-four) students, making an average of only 6,80 (six point eighty) students articulated the potential consonants correctly. The slight difference in deviation between the initial and medial position might be caused by the absence of /v/, /ð/ in Indonesian, while the bigger difference in deviation between initial and final position is caused by same thing plus the absence of /dʒ/, /d/, /b/ in Indonesian final position.

TABLE 5  
STUDENTS' DEVIATIONS IN PRONOUNCING ENGLISH  
DIPHTHONGS

No.	Potential Words	RP per OALD	Students' Pronunciations
1	Time	/taɪm/	/taɪm/ = 8 students /tæm/ = 2 students
2	Town	/taʊn/	/taʊn/ = 5 students /tɔʊn/ = 4 students /tɔ'n/ = 1 students
3	Coin	/kɔɪn/	/kɔɪn/ = 10 students
4	Cake	/keɪk/	/keɪk/ = 5 students /kɪk/ = 5 students
5	Care	/keə(r)/	/keə(r)/ = 6 students /ke(r)/ = 4 students
6	Clear	/klaɪə(r)/	/klaɪə(r)/ = 7 students /kli:(r)/ = 3 students
7	Grow	/grəʊ/	/grəʊ/ = 10 students
8	Pure	/pjʊə(r)/	/pjʊə(r)/ = 10 students

On the whole, all of the 11 (eleven) potential English consonants were articulated correctly by 102 (one hundred and two) students when in initial position. This means each of the consonants was articulated correctly by an average of 9,27 (nine point twenty-seven) students. Differently, when in medial position they were articulated correctly by 97 (ninety-seven) students, which means each of them was articulated correctly by an average of 8,81 (eight point eighty-seven) students. Very differently, when in final position they were articulated correctly only by 75 (seventy-five) students, which means each of the consonants was articulated correctly only by an average of 6,81 students. While pronouncing English words containing potential vowels and English consonants are phonologically problematic, pronouncing English words containing potential diphthongs is much more problematic. Below (Table 5) is the table of how the students pronounced the English words containing potential diphthongs as the final part of the test. In the above table 4, it can be seen that English words containing the eight English diphthongs were pronounced correctly by 61 (sixty-one) students, which means each of the diphthongs was articulated correctly by an average of 7,62 (seven point sixty-two) students. Diphthong /aɪ/ in 'time' for example, was articulated as /æ/ by two students, which means it was monophthongized. This is what happened to diphthongs /aʊ/, /eɪ/, /eə/, and /ɪə/. In general, it can be concluded that the deviation is caused by the fact that in Indonesian diphthongs are monophthongized in their articulations. Hence, it is a kind of interference of Indonesian system into English (for the term interference, see: Porter and Duncan, 1953, pp. 61-64). It is interesting to find that diphthongs /ɔɪ/ (in 'coin', which is present in Indonesian), /əʊ/ (in 'grow'), and /ʊə/ (in 'pure', which are absent in Indonesian), were articulated correctly by the participants, making the pronunciations of the words containing those potential diphthongs correct or close to the RP.

#### 4 CONCLUSION AND SUGGESTION

In the analysis and discussions, it is found that despite the facts that the students participating in this study have been taught the subjects of Pronunciation Practice and (Introduction to) English Phonology, phonological deviations are still

relatively high. The deviations the students made are related to all of the three groups of phonemes: vowels, consonants, and diphthongs. It can also be seen that the students' difficulties in producing the phonemic sounds correctly can be categorized into three aspects. First, many English phonemes are difficult to articulate because they are absent (as vowels /æ/, /ɒ/, /ʌ/ or consonants /v/, /ð/, /θ/, /ʃ/, /ʒ/) in the students' native language. In escaping the difficulties, students usually substitute the potential phonemes with the ones present in their native language. Secondly, some English phonemes—though they are present in initial and medial position of students' native language—are difficult to articulate when they are in final position. Students find it difficult to articulate consonants /θ/, /ð/, /ʃ/, /dʒ/ and /g/ when they are in final position, causing mispronunciation of the words containing such phonemes. Finally, in students' native language, devocalizing consonants /g/ and /d/ in final positions (as in 'bedug' and 'murid') into /k/ and /t/ (as /bədʊk/ and /mʊrt/), are acceptable as it does not change the meanings of the word. That is, in the students' native language, the difference between /g/ and /k/ (just like /d/ and /t/) in final position are only phonetic while in English they are phonemic. In terms of language teaching, it is clear that students' deviations (or to use Corder's term, errors) can be seen as important in considering the material for teaching English as either second or foreign language (see: Corder, 1967, pp. 161-170). It is suggested, therefore, that in teaching the subject of Pronunciation Practice and (Introduction to) English Phonology, material design should include the results of the analysis and discussions above, especially to minimize students' phonological deviations. As such, English instructors and lecturers will have an extra capacity in handling with the phonological deviations in teaching the two subjects under estimation.

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#### REFERENCES

- [1] Brown, D.H. 1994. *Principles of Language Learning and Teaching*. New Jersey: Prentice Hall Regents.
- [2] Christina, P. (2019). "Pronunciation Problems for Spanish Learners of English: A Viewpoint". *TEFL Trainer*. Retrieved from: <https://tefltrainer.com/general/pronunciation-problems-for-spanish-learners-of-english/>
- [3] Cook, G. (1989). *Discourse*. Oxford: OUP. Corder, P. (1967). "The Significance of Learner's Errors". *International Review of Applied Linguistics*, 161-170.
- [4] Crystal, D. (2003a). *A Dictionary of Linguistics and Phonetics*. Oxford: Basil Blackwell.
- [5] Crystal, D. (2003b). *The Cambridge Encyclopedia of the English Language* (2<sup>nd</sup> Ed.). Cambridge: CUP.
- [6] Ellis, R. 1994. *The Study of Second Language Acquisition*. Oxford: OUP.
- [7] Giegerich, H. J. (1992). *English Phonology: An Introduction*. Cambridge: CUP.
- [8] Habibi, M. W. (2016). *English Pronunciation Problems Encountered by Indonesian Advanced Students* (unpublished thesis). Malang: Maulana Malik Ibrahim State Islamic University.
- [9] Hastuti, I. D., Surahmat, Sutarto, & Dafik. (2020). Development of collaborative inquiry-based learning model to improve elementary school students' metacognitive ability. *International Journal of Scientific and Technology Research*, 9(2), 1240–1247.
- [10] Jones, D. (1918). *An Outline of English Phonetics*. Leipzig: Teubner. Jovanovic, M. 1991. "Deviation and Translation". *Languages and Cultures in Translation Theories*. Volume 4, No. 1, 1st Semester 1991. DOI: 10.7202/037083
- [11] Keating, D. (2019). "Common English Language Problems of Indonesian Students". Retrieved from: [https://www.streetdirectory.com/travel\\_guide/106517/languages/common\\_english\\_language\\_problems\\_of\\_indonesian\\_students.html](https://www.streetdirectory.com/travel_guide/106517/languages/common_english_language_problems_of_indonesian_students.html)
- [12] Leech, G., & Short, M. (1981). *Style in Fiction*. London: Longman Group Limited. Muhyidin, M. "Phonological Interference in the English Pronunciation". *Journal Universum*, Vol. 10 No. 2 July 2016. Pp. 209-217.
- [13] Norrish, J. (1983). *Language Learners and Their Errors*. London: Macmillan Press.
- [14] Plaza, I. M. (2015). *The Cinderella of Foreign Language Teaching: An Insight to the Integration of Pronunciation in EFL Contexts* (unpublished thesis in English Studies). Barcelona: University of Barcelona
- [15] Porter, L. W. and Duncan, C. P. (1953). "Negative Transfer in Verbal Learning". *Journal of Experimental Psychology*. Vol. 46 (1). PP. 61–64.
- [16] Ristati. (2019). "Language Influence on the Production of English Sounds by Indonesian Students". *American Journal of Humanities and Social Sciences Research (AJHSSR)* e-ISSN: 2378-703X. Volume 3, Issue 4, pp. 41-47.
- [17] Roach, P. (2004). "British English: Received Pronunciation". In *Journal of the International Phonetic Association*. Vol. 34 (2). Pp. 239-245.
- [18] Short, M. (1969). *Exploring the Language of Poems, plays, and Prose*. Edinburgh: Pearson Education, Ltd. Skandera, P. and Burleigh, P. (2005). *A Manual of English Phonetics and Phonology*. Germany: Gunter Narr Verlag.
- [19] Sutarto, Dafik, Hastuti, I. D., & Surahmat. (2019). The effectiveness of problem-based learning to improve students' conjecturing ability in solving block-paving problems. *International Journal of Scientific and Technology Research*, 8(10), 63–68.
- [20] Sutarto, Dafik, Hastuti, I. D., & Surahmat. (2020). An analysis of students' difficulties in conjecturing process of block paving problems. *Journal of Physics: Conference Series*, 1465, 012073. <https://doi.org/10.1088/1742-6596/1465/1/012073>
- [21] Trudgill, P. (2000). *Sociolinguistics: An Introduction to Language and Society* (4th Ed.). London: Penguin Books.
- [22] Wiktionary. (2017). "Monophthongization". Copyright by Lexico Com. Retrieved from <https://en.wiktionary.org/wiki/monophthongization>.

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