MINIMIZING PHONOLOGICAL [SUPRASEGMENTAL] ERRORS IN READING ALOUD USING CALED
(Stress and Vowel Quality, Intonation-transfer of Indonesians')

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ABSTRACT

In order to minimize students' errors in producing their vowel quality, stress, and intonation, a one-shoot action research was employed. The subjects of this study were 10 students of XII Hotel Accommodation who were failed in Reading Aloud competence. By drilling them using CALED, the students' errors in stress and vowel quality have been decresed significantly. But, intonation produced by students was slightingly still influenced by their Indonesian.

Keywords: suprasegmental errors, CALED

INTRODUCTION

This study is a mini research conducted as one-shoot action research. This research is intended to identify phonological errors done by the third –grade students of Hotel Accommodation who were failed in reading aloud competence; therefore, they were able to minimize them in reading, especially in supra-segmental system. The supra-segmental system in this study refers to stress, vowel quality, and intonation–transfer of Indonesian intonation. Murcia and Olshtain (2000:31) argued that linguists often describe a language in terms of segmental and supra-segmental systems that accompany sound sequences when language is used for oral communication. The 'supra-segmental' refers to the patterns of rhythm and the intonation contours. Furthermore, O'Grady and Dobrovolsky (1989:35) added that pitch, loudness, and length are supra-segmental or prosodic properties that all phones have.

In the stress and vowel quality part, the errors identification covers the absence of stress and wrong placement of stress, as errors made in this area will lead to different meanings and confusions to interlocutor. Let us take an example of the word 'record' which can be a noun /ˈrek.ɔːd/ as well as a verb /rɪˈkɔːd/ depending on the stress position and the vowel quality we produced in pronouncing it. Absence of stress as well as wrong placement of stress will put an interlocutor in difficulties in understanding the word meaning. (O'Grady & Dobrovolsky: 1989) stated that in general, English stressed vowels are higher in pitch, longer, and louder than unstressed ones. They are perceived as relatively more prominent vowel.

In intonation-transfer of Indonesian intonation, the errors identification covers the transfer of Indonesian intonation both in statement and WH-questions. O'Grady and Dobrovolsky (1989) concluded that intonation refers to pitch movement in spoken utterances that is not related to the difference in the word meaning. Moreover, they explain that the falling intonation used in a statement signals that the utterance is complete, whereas the rising intonation at the end of a statement often signals incompleteness. They add that questions containing who, what, when and how question words ordinarily do not have rising intonation. Murcia & Olshtain (2000) aired their view by concluding that unmarked or neutral version of most English declarative sentences have rising – falling intonation that is also used in WH-questions' intonation, while yes/no question is accompanied by rising intonation (Kelly, 2000; 89 and Baker, 1982; 11) when it conveys no special presupposition.

Above all, the point is that "transfer of intonation patterns appears to be a common problem contributing to miscommunication" (Murcia & Olshtain, 2000:47), thus the

identification is aimed to locate the errors for then to be given treatment, so that hopefully the research subject will not produce the same or similar errors related to stress, vowel quality, and intonation.

In this study, the treatment provided is drilling. The drilling is given in both with and without knowledge of how to produce desired vowels and intonation, and to pronounce stressed syllable. It is aimed to see the differences occur prior the treatment and after the treatment.

METHOD

This research is conducted to ten third-grade Hotel Accomodation Program students who did not pass in reading aloud basic competence. They mostly had problems in producing stress, vowel quality, and intonation–transfer of Indonesian. To solve those students' problems, the reseacher employed the study in August 2018 for about tow weeks (six meetings which were held out of the school times). They were carried out on every Tuesday, Friday, and Saturday at 15.30 – 17.00 WITA at SMK Negeri 1 Tarakan. In this study, the researcher applied CALED drilling through 'one-shoot action research' design.

The research instrument consists of ten words containing eight vowels quality [i:, I, æ, ɛ, u, ʊ, ɔ, ɔː] which are arranged systematically based on the number of the syllable, seven sentences made up from those ten words, a paragraph consists of the seven sentences, and five WH-questions related to the paragraph. Before the set of the research instrument was handed out to the research subject, it was handed in to Mr. Hasto as the validator of the instrument for some feedback and revisions and was copied into two sets; one set with phonetic transcription is for the teacher (model), and the other one without any phonetic transcription is for the research subjects.

The research subjects are Kismawati, Arief, Indrayani, Riska,Tony, Andriani, Ahmad, Nanda, Ismail, and Maldenesia. They area third-grade students of Hotel Accommodation Program of SMK Negeri 1 Tarakan, Noth Kalimantan. They have been learning English since they were in Junior High School. The researcher took them as the research subjects based on several considerations,as follows:

First, the research subjects acctually got problems concerning to their ability in producing the appropriate stress, vowel quality, and intonation-transfer of Indonesian. Thus, giving them a correct way of pronouncing English words may lead to giving a correct exposure of English pronunciation to their listeners as listeners may imitate their pronunciation.

Second, to fulfill the condition in which they were mediocre English proficiency learners (Elementary to Intermmediate). In meeting the demand, the researcher applied the technique to them considering that the material given was about stress, intonation, and vowels, where some vowels may have only slight distinction. The researcher assume that drilling the research subjects with slightly different vowels might work better if the research subjects are the third grade high school students, in regard to the assumption that they may have more exposure in English and may have more mature way of thinking to be able to recognize the difference of each vowels drilled.

Having the instruments and subjects of the research set, the next step is collecting data. First, the research instrument, the one without any phonetic transcription, was given to the research subjects to be read and the researcher recorded the reading. The recording was

done in a language laboratory in order to get a good quality recording with the aim of having an accurate analysis result. Next, the recording result was analyzed by the researcher to identify errors made by the research subjects related to vowel quality, stress, and intonation. In doing this, the researcher uses American English pronunciation and phonetic transcription as the guideline. The next step is giving drilling to the research object. The first drilling is simply a repetition of what had been modeled by one of the researchers, and the second drilling was drilling with knowledge, where the researcher gave the knowledge of how to produce the correct vowels, stress, and intonation to correct the errors made by the research subject. Each of the drilling also the result was recorded in a studio. After that, recordings resulted from both treatments were analyzed and compared in terms of the vowel quality, stress, and intonation produced based on the sound transcriptions in CALED.

RESULTS/FINDINGS

Pre-Treatment Data

The following table shows the errors made by students, before the treatment were carried out :

Table 1. Pronunciating Words

No	Words	Phonetic transcription of Research subjects' pronunciation	Phonetic transcription based on CALED
1	Saw	/sɑ:/	/sɑ:/
2	Sat	/set/	/sæt/
3	Put	/pʊt/	/pʊt/
4	Gorgeous	/ˈgɜːr.dʒəs/	/ˈgɔːr.dʒəs/
5	Teaching	/ˈtiː.tʃɪŋ/	/ˈtiː.tʃɪŋ/
6	Selected	/sɪˈlektɪd/	/sɪˈlektɪd/
7	Developed	/dɪˈvel.ɑpt/	/dɪˈvel.əpt/
8	Meaningless	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/
9	Photography	/foʊtoʊgrəfi/	/fəˈtɑː.grəfi/

| 10 | Morphology | /moʊrfoʊloʊdʒi / | /mɔːrˈfɑː.lədʒi / |

A. Reading Sentences

Notes: For the sentences and paragraph parts, phonetic transcription written *next to the word* refers to the *research subject pronunciation*'s transcription, while phonetic transcription written *under the word* refers to phonetic transcription based on Cambridge Advanced Learner's Electric Dictionary (*CALED*).

1. The **gorgeous** /gər.dʒəs/ Annie **sat** /set/ on her chair.

   /ˈgɔːr.dʒəs/   /sæt/

   Intonation: falling

2. She **selected** /sɪˈlektɪd/ some **teaching** /ˈtiː.tʃɪŋ/ materials for the following day's class.

   /sɪˈlektɪd/   /ˈtiː.tʃɪŋ/

   Intonation: falling

3. It should be about **morphology** /moʊrˈfoʊloʊdʒi /, not **photography** /foʊˈtoʊgrəfi/.

   /mɔːrˈfɑː.lədʒi /

   /fəˈtɑː.grəfi/

   Intonation: falling

4. She **developed** /dIvelˈɑpt/ the material herself.

   /dIˈvel.əpt/

   Intonation: falling

5. She **saw** /sɑː/ many mistakes she made.

   /sɑː/

   Intonation: falling

6. She **put** /pʊt/ her pen down desperately.

   /pʊt/

   Intonation: falling

7. All her works seemed **meaningless** /ˈmiː.nɪŋ.ləs/ to her.

   /ˈmiː.nɪŋ.ləs/

   Intonation: falling

B. Reading Paragraph

One summer afternoon the **gorgeous** /gəːr.dʒəs/Annie **sat** /set/ on her chair.

/ˈgɔːr.dʒəs/   /sæt/

She is a teacher in a private language center. She looked really tired that afternoon.

At that time she **selected** /sɪˈlektɪd/ some **teaching** /ˈtiː.tʃɪŋ/ materials for the next

/sɪˈlektɪd/   /ˈtiː.tʃɪŋ/

day's class. Dozens of resource papers, pictures, and photos were scattered on her

desk.

The material she **developed** /dIvelˈɑpt/ should be about **morphology**

/dIˈvel.əpt/

/moʊrˈfoʊloʊdʒi /, not **photography** /foʊˈtoʊgrəfi/. "It's a mistake,"

/mɔːrˈfɑː.lədʒi /   /fəˈtɑː.grəfi/

she said to herself. She **saw** /sɑː/ many mistakes she made on her materials.

/sɑː/

Suddenly, she **put** /pʊt/ her pen down desperately. All her works seemed

meaningless

/pʊt/

/ˈmiː.nɪŋ.ləs/to her.

/ˈmiː.nɪŋ.ləs/

C. Reading Questions

1. Who sat on the chair in the afternoon?

   Intonation: Rising

2. What did Annie select for the following day's class?

   Intonation: Flat

3. Where did Annie sit on?

   Intonation: Rising

4. Which topic did Annie develop for the next day's class?

   Intonation: Flat

5. Why did her works seem meaningless?

    Intonation: Flat

Post – Treatment Data

The following table shows the errors made by students, after the treatment:

Table 2. Pronunciating Words

No	Words	Research Subject	Model	CALED
1.	Saw	/sɑː/	/sɑː/	/sɑː/
2.	Sat	/sæt/	/sæt/	/sæt/
3.	Put	/pʊt/	/pʊt/	/pʊt/
4.	Gorgeous	/ˈgɔːr.dʒəs/	/ˈgɔːr.dʒəs/	/ˈgɔːr.dʒəs/
5.	Teaching	/ˈtiː.tʃɪŋ/	/ˈtiː.tʃɪŋ/	/ˈtiː.tʃɪŋ/
6.	Selected	/sɪˈlektɪd/	/sɪˈlektɪd/	/sɪˈlektɪd/
7.	Developed	/dɪˈvel.əpt/	/dɪˈvel.əpt/	/dɪˈvel.əpt/
8.	Meaningless	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/
9.	Photography	/fəˈtɑː.grəfi/	/fəˈtɑː.grefi/	/fəˈtɑː.grəfi/
10.	Morphology	/mɔːrˈfɑː.lədʒi /	/mɔːrˈfɑː.lədʒi /	/mɔːrˈfɑː.lədʒi /

A. Reading Sentences

Notes: For the sentences and paragraph parts, phonetic transcription written *next to the word* refers to the *research subject* pronunciation's transcription, while phonetic transcription written *under the word* refers to the *model's* pronunciation's transcription. Phonetic transcription in the *third row* refers to phonetic transcription based on *Cambridge Advanced Learner's Electric Dictionary (CALED)*.

1. The **gorgeous** /ˈgɔːr.dʒəs/ Annie **sat** /sɛt/ on her chair.

   /ˈgɔːr.dʒəs/ /sæt/

   /ˈgɔːr.dʒəs/ /sæt/

   Intonation: falling

2. She **selected** /sɪˈlektɪd/ some **teaching** /ˈtiː.tʃɪŋ/ materials for the following day's class.

   /sɪˈlektɪd/ /ˈtiː.tʃɪŋ/

   /sɪˈlektɪd/ /ˈtiː.tʃɪŋ/

   Intonation: falling

3. It should be about **morphology** /mɔːrˈfɑː.lədʒi /, not **photography** /fəˈtɑː.grəfi/.

   /mɔːrˈfɑː.lədʒi / /fəˈtɑː.grefi/

   /mɔːrˈfɑː.lədʒi / /fəˈtɑː.grəfi/

   Intonation: falling

4. She **developed** /dɪˈvel.əpt/ the material herself.

   /dɪˈvel.əpt/

   /dɪˈvel.əpt/

   Intonation: falling

5. She **saw** /sɑː/ many mistakes she made.

   /sɑː/

   /sɑː/

   Intonation: falling

6. She **put** /pʊt/ her pen down desperately.

   /pʊt/

   /pʊt/

   Intonation: falling

7. All her works seemed **meaningless** /ˈmiː.nɪŋ.ləs/ to her.

   /ˈmiː.nɪŋ.ləs/

   /ˈmiː.nɪŋ.ləs/

   Intonation: falling

B. Reading Paragraph

One summer afternoon the **gorgeous** /ˈgɔːr.dʒəs/ Annie **sat** /set/ on her chair.

/ˈgɔːr.dʒəs/   /sæt/

/ˈgɔːr.dʒəs/   /sæt/

She is a teacher in a private language center. She looked really tired that afternoon. At

that time she **selected** /sɪˈlektɪd/ some **teaching** /ˈtiː.tʃɪŋ/materials for the next

/sɪˈlektɪd/   /ˈtiː.tʃɪŋ/

/sɪˈlektɪd/   /ˈtiː.tʃɪŋ/

day's class. Dozens of resource papers, pictures, and photos were scattered on her desk.

The material she **developed** /dɪˈvel.əpt/ should be about **morphology**

/dɪˈvel.əpt/

/dɪˈvel.əpt/

/mɔːrˈfɑː.lədʒi /, not **photography** /fəˈtɑː.grefi/. "It's a mistake," she said

/mɔːrˈfɑː.lədʒi /   /fəˈtɑː.grefi/

/mɔːrˈfɑː.lədʒi /   /fəˈtɑː.grəfi/

 to herself. She **saw** /sɑː/ many mistakes she made on her materials.

/sɑː/

/sɑː/

Suddenly, she **put** /pʊt/ her pen down desperately. All her works seemed

meaningless

/pʊt/

/pʊt/

/ˈmiː.nɪŋ.ləs/ to her.

/ˈmiː.nɪŋ.ləs/

/ˈmiː.nɪŋ.ləs/

C. Reading Questions

1. Who sat on the chair in the afternoon?

   Intonation: flat

2. What did Annie select for the following day's class?

   Intonation: flat

3. Where did Annie sit on?

   Intonation: flat

4. Which topic did Annie develop for the next day's class?

   Intonation: falling

5. Why did her works seem meaningless?

   Intonation: falling

Pre – Treatment Data Vs Post – Treatment Data

Table 3. Pronunciating Words

No	Words	Pre - Treatment Data	Post – Treatment Data	CALED
1.	Saw	/sɑː/	/sɑː/	/sɑː/
2.	Sat	/set/	/sæt/	/sæt/
3.	Put	/pʊt/	/pʊt/	/pʊt/
4.	Gorgeous	/ˈgəːr.dʒəs/	/ˈgoːr.dʒəs/	/ˈgoːr.dʒəs/
5.	Teaching	/ˈtiː.tʃ ɪŋ/	/ˈtiː.tʃ ɪŋ/	/ˈtiː.tʃ ɪŋ/
6.	Selected	/sɪˈlektɪd/	/sɪˈlektɪd/	/sɪˈlektɪd/
7.	Developed	/dɪˈvel.ɑpt/	/dɪˈvel.əpt/	/dɪˈvel.əpt/
8.	Meaningless	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/
9.	Photography	/foʊtoʊgrəfi/	/fəˈtɑː.grəfi/	/fəˈtɑː.grəfi/

| 10. | Morphology | /moʊrfoʊloʊdʒi / | /mɔːrˈfɑː.lədʒi / | /mɔːrˈfɑː.lədʒi / |

From the data, it is known that there are five errors related to vowel quality, and two errors related to absence of stress made by the research subject in the pre-treatment. Yet, there is significant improvement in the post-treatment stage where the research subject made no error at all in vowel quality and stressing. It means that the drilling given to the subject really solved the problem.

Table 4. Reading Sentences

No	Words	Pre - Treatment Data	Into nation	Post – Treatment Data	Into nation	CALED
1.	Gorgeous	/gər.dʒəs/	F	/ˈgɔːr.dʒəs/	F	/ˈgɔːr.dʒəs/
2.	Sat	/set/	F	/sæt/	F	/sæt/
3.	Selected	/sɪˈlektɪd/	F	/sɪˈlektɪd/	F	/sɪˈlektɪd/
4.	Teaching	/ˈtiː.tʃɪŋ/	F	/ˈtiː.tʃɪŋ/	F	/ˈtiː.tʃɪŋ/
5.	Morphology	/moʊrˈfoʊloʊdʒi	F	/mɔːrˈfɑː.lədʒi /	F	/mɔːrˈfɑː.lədʒi /
6.	Photography	/foʊˈtoʊgrəfi/.	F	/fəˈtɑː.grəfi/	F	/fəˈtɑː.grəfi/
7.	Developed	/dɪvelˈɑpt/	F	/dɪˈvel.əpt/	F	/dɪˈvel.əpt/
8.	Saw	/sɑː/	F	/sɑː/	F	/sɑː/
9.	Put	/pʊt/	F	/pʊt/	F	/pʊt/
10.	Meaningless	/ˈmiː.nɪŋ.ləs/	F	/ˈmiː.nɪŋ.ləs/	F	/ˈmiː.nɪŋ.ləs/

The data shows that there is improvement in the research subject's performance in the stress and vowel quality produced. It can be seen that previously, there were five errors

related to vowel quality, one error related to absence of stress, and one error related to wrong placement of stress made. Yet after the treatment, there is no error made by the research subject in both vowel quality and stressing. Furthermore, the research subject made no error in intonation transfer in pre-treatment as well as in post-treatment.

Note: F = Falling intonation

Table 5. Reading Paragraph

No	Words	Pre - Treatment Data	Post – Treatment Data	CALED
1.	Saw	/sɑ:/	/sɑ:/	/sɑ:/
2.	Sat	/set/	/set/	/sæt/
3.	Put	/pʊt/	/pʊt/	/pʊt/
4.	Gorgeous	/gə:r.dʒəs/	/ˈgɔ:r.dʒəs/	/ˈgɔ:r.dʒəs/
5.	Teaching	/ˈtiː.tʃɪŋ/	/ˈtiː.tʃɪŋ/	/ˈtiː.tʃɪŋ/
6.	Selected	/sɪˈlektɪd/	/sɪˈlektɪd/	/sɪˈlektɪd/
7.	Developed	/dɪvelˈɑpt/	/dɪˈvel.əpt/	/dɪˈvel.əpt/
8.	Meaningless	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/	/ˈmiː.nɪŋ.ləs/
9.	Photography	/foʊˈtoʊgrəfi/	/fəˈtɑː.grefi/	/fəˈtɑː.grefi/
10.	Morphology	/moʊrˈfoʊloʊdʒi /	/mɔ:rˈfɑː.lədʒi /	/mɔ:rˈfɑː.lədʒi /

The research subject's error production in the paragraph reading is also decreased. In pre – treatment performance, there are five errors in vowel quality, one error in the absence of stress, and one error in the wrong placement of stress. However, in the post – treatment performance, the errors decreased into two errors in vowel quality, and no errors were made in stressing.

The researchers decided not to analyze the intonation in paragraph since intonation in paragraph may change depending on the speaker's meaning. It is derived from what the researchers conclude from Murcia and Olshtain (2000).

Table 6. Reading Questions

No	Intonation in Pre – Treatment Data	Intonation in Post – Treatment Data	Suggested Intonation
1.	Rising	Flat	Falling
2.	Flat	Flat	Falling
3.	Rising	Flat	Falling
4.	Flat	Falling	Falling
5.	Flat	Falling	Falling

Based on the result of the recording, researchers conclude that there are two improvement from Flat intonation to Falling intonation (question 4 and 5), two improvements from rising intonation to flat intonation (question 1 and 3), and there is only one question does not improve (question 2). Though the rising intonation has improved to flat intonation (question 1 and 3), it does not meet the requirement of a good intonation in WH-questions, that is falling intonation. Those errors were only done by one student.

In this research, the researchers believe that errors made by the research subject relating to stress, vowel quality and intonation is affected by the research subject's habit in using both English and Bahasa Indonesia. The occurrence of transfer error can be detected in the intonation used by research subject in reading WH Question in the pre-treatment stage. Look at the example below taken from the research:
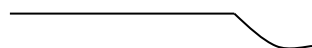
" Where did Annie sit on?"

"Dimana Annie duduk?".

Both sentences were read with the same falling intonation just like the way Indonesian read.

Other errors occurred in the stressing. As Indonesian words do not have stress, the researchers believe that the absence of stress and the wrong placement of stress made by the research subject were influenced by her Bahasa Indonesia. Below are those errors made by the research subject:

'Photography' was pronounced as /f**oʊ**t**oʊ**grəfi/ → absence of stress

'Developed' was pronounced as /dIvel**'ɑ**pt/ → wrong placement of

stress.

Errors relating to vowel quality were the most error produced by the research subjects. One of the causes of those errors might be the absence of certain vowel, meaning that the vowel occur in English, but not in Bahasa Indonesia system. In this case, the vowel is /æ/. Another cause is the miss use of vowels in a word where the appropriate vowels actually occur in both languages (English and Bahasa Indonesia). If the miss use is not corrected, in a long term it will result to 'fossilization'. Below are examples of the errors produced by the research subject in this research:

'Sat' pronounced as /s**e**t/ instead of /s**æ**t/ →absence of certain vowel.

'Morphology' pronounced as /m**oʊ**rf**oʊ**l**oʊ**dʒi /instead of /mɔːr'f**ɑː**.lədʒi /

→ miss use of vowels.

In this research, errors related to the miss use of vowels mostly can be corrected, shown by the improvement made by the research subject. Yet, there is one error remains though the research subject had been given the drilling. The very error is the pronunciation of the word 'sat'.

CONCLUSION

Looking at the result of this research, it can be concluded that drilling can really give significant contribution for ten third-grade-students of Hotel Accommodation; particularly toward their phonological errors, especially in stress and vowel quality, also in avoiding

intonation-transfer of Indonesian. Although the research subject's problems in this research did not a hundred percent solved, the improvement made is very important.

Thus, the researcher believes that drilling using CALED is still a reliable method in solving phonological problems faced by Indonesian learners as foreign language learners.

Furthermore, it is extremely important for a teacher to have a good proficiency in phonology as (s)he is a model in a classroom. Teacher should provide correct pronunciation and clear guidance of how to pronounce words or sentences as well as intonation correctly so that fossilization can be avoided.

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