THE USE OF MINIMAL PAIR TEHNIQUE IN TEACHING PRONUNCIATION AT SECOND GRADE STUDENT OF SMA MUHAMMADIYAH SUNGGUMINASA

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ABSTRACT

The difficulty in distinguishing the pronunciation of words that have similar sound is one of challenges faced in English Classes, especially in pronunciation class. Students usually pronounce words as written. Minimal pair technique is used in this research. This research aims to see whether the use of minimal pair technique have an influence on improving students' pronunciation skills. Problem Statement "Is the use of a minimal pair technique effective in teaching English pronunciation at the second grade students of SMA Muhammadiyah Sungguminasa?" while *Objective of the Research is" To find out whether or not the minimal pair technique* is effective in teaching pronunciation". This research is limited to the use of minimal pair technique as a treatment and focus on vowel sound $(/I//e//\alpha//\sigma//\sigma)/i$: $//a://\sigma://3://u$:/). Quasi-experimental design with nonequivalent control group design was applied. The populations are the students at SMA Muhammadiyah Sungguminasa. The samples are 2 classes as experimented and control class using purposive sampling. The independent variable is the minimal pair technique and the dependent variable is the students' pronunciation. To collects the data, researcher used pre-test and the post-test. The data obtained were analyzed with analysis techniques like descriptive analysis, normality, homogeneity, sample t-test (paired and independent sample t test), N-Gain Analysis test using IBM SPSS 25. The result of this this research shows that minimal pair technique was effective in improving students pronunciation; with probability in sample t test (Sig.) 0,000<0.05 then Ho is rejected. N-Gain value also concluded that experimental class compared to the control class was 0.52>0.26; this shows that the used of the Minimal Pair technique in the experimental class is more effective than control class.

Keywords: Minimal Pair, Pronunciation, Similar sound, effective, vowel

ABSTRAK

Kesulitan dalam membedakan pengucapan kata yang memiliki suara serupa adalah salah satu tantangan yang dihadapi di Kelas Bahasa Inggris, terutama di kelas Pronunciation. Siswa biasanya mengucapkan kata-kata sesuai tulisannya. Teknik Minimal Pair digunakan dalam penelitian ini. Penelitian ini bertujuan untuk melihat apakah penggunaan teknik Minimal Pair akan berpengaruh pada peningkatan keterampilan pengucapan siswa.

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Rumusan Masalahnya adalah "Apakah penggunaan teknik Minimal Pair efektif dalam mengajar Pronunciation bahasa Inggris di siswa kelas dua SMA Muhammadiyah Sungguminasa?" Sedangkan Tujuan Penelitian adalah "Untuk mengetahui apakah teknik minimal pair efektif dalam mengajar pengucapan". Penelitian ini terbatas pada penggunaan teknik minimal pair dan fokus pada suara vocal saja (/ I // e // æ // σ //

Desain Quasi-experimental menggunakan non-equivalent control group digunakan dalam penelitian. Populasinya adalah siswa di SMA Muhammadiyah Sungguminasa. Sampelnya adalah 2 kelas sebagai kelas eksperimen dan control, menggunakan purposive sampling. Variabel bebasnya adalah teknik minimal pair dan variabel terikat adalah pelafalan siswa. Untuk mengumpulkan data, peneliti akan menggunakan pre-test dan post-test. Data yang diperoleh dianalisis dengan teknik analisis seperti descriptive analysis, normality, homogeneity, sample t-test (paired dan independent sample t-test), dan N-Gain Analysis test menggunakan IBM SPSS 25. Hasil penelitian ini menunjukkan bahwa teknik minimal pair efektif dalam meningkatkan pengucapan siswa; dengan probabilitas dalam uji sample t-test (Sig.) 0,000<0,05 maka Ho ditolak. Nilai N-Gain juga menyimpulkan bahwa kelas eksperimen dibandingkan dengan kelas kontrol adalah 0,52>0,26; ini menunjukkan bahwa penggunaan teknik Minimal pair di kelas eksperimen lebih efektif daripada kelas kontrol.

Keywords: Minimal Pair, Pelafalan, suara yang sama, efektif, suara vocal

Introduction

It is widely known that one of the substantial skills in English is a pronunciation, this is very important for learning and supports the improvement of students' English skills, According to Joan Morley, he said that intelligible pronunciation is an essential component of communication competence (Susanna Modesti, 2014: 9). Furthermore, pronunciation also has an important role in the process of English learning, because most countries in the world have different pronunciation for each other, and Indonesia is one of the countries that have totaly different pronunciation characters with English.

There are many challenges in the English classes, especially in pronunciation facet. For instance, about the mother tongue that affect students in the English words, this appeared when students try to transfer first language to their target language (English). In addition, other problem faced by students is the difficulty in distinguishing the pronunciation wich have similar sounds. Students usually pronounce English directly as written.

From the explanation above, Researcher conclude that there are sesious problems that appear regarding to the students pronunciation, namely some students have difficulty in distinguishing pronunciation of words that have a similar sound.

Therefore, this problem is very prominent to solve. Hence, referring to how to solve

that problem; researcher used interesting techniques called minimal pairs.

According to Fromkim, Rodman, & Hayms (2003: 277) stated that, minimal

pair is two words which different meanings that are identical except for one sound

segment that occurs in the same place in the string. Crystal also stated in Nur Isna

(2017) that, Minimal pair carries two words which are similar to each other except

for only one sound which can be vowel or consonant.

Based on the explanation above, Researcher conclude that minimal pair is a

pair between two words that have totally different meanings but have same

pronunciation; the difference that exist between the two pronunciations only found

in one segment sound.

In this research, the researcher used minimal pair technique to look some

increasing in student's pronunciation ability to distinguish the sounds; this research

is taken in second grade student of SMA Muhammadiyah Sungguminasa.

From the preliminary observations, Researcher got information about the number

of students that were adequate, the supporting facilities, the good school

environment, and also the used of minimal pair technique that had never been done

by the teacher in the school. It is be a reasons to the researcher determine SMA

Muhammadiyah Sungguminasa as a research location.

This research is intended to find out whether or not the minimal pair

technique is effective in teaching pronunciation with the use of minimal pair

technique in teaching pronunciation at second grade student of SMA

Muhammadiyah Sungguminasa and focused on vowel sounds

(/I//e//æ//o//n//o//o//i://a://o://o://o://o.//o/only.

Materials and Method

A. Materials

As we have known that the pronunciation is the sounds we produce and use

to make meaning in a verbal communication. In short, the pronunciation is the way

the word is pronounced by human being in order to make communication.

According to oxford dictionary pronunciation (/prəˌnʌnsɪˈeɪʃ(ə)n/) is the way in

which a word is pronounced. It means that pronunciation is the way to pronounce a

word or sentences in a way that is acceptable by the listener.

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There are some factors are influenced language teaching in school especially for teaching pronunciation. teacher must select the technique which is suitable to apply in teaching English pronunciation. According to Jeremy Harmer's (2002), There have three alternatives to convey. First, whole lesson: making pronunciation the main focus of lesson does not mean that every minute of the lesson has to be spent on pronunciation work. Second, discrete slots: some teachers insert short, separate bits of pronunciation work into lesson sequences. And the last alternative is integrated phases: many teachers get students to focus on pronunciation issues as an integrated part of lesson. In this case, teacher decides what alternative chooses. By deciding the alternatives uses in teaching English pronunciation, teacher can make a strategy based on the alternative to get a maximum result. Moreover, the most important thing of the teaching and learning process is the understanding of the students about the lesson.

According to Ur (1996) said that there are three aspects of pronunciation those are: the sound of the language or phonology, stress and rhythm, and intonation.

a) Sound of the Language

Sound of language or phonology comes from a combination of two words namely phone which means sound and logos which means cience is also called sound system. However, the sounds learned in phonology are not the sounds of just any sound, but the sounds of language that can distinguish meaning in the spoken or written language by humans. According to Kridalaksana (2002) in linguistic dictionary, phonology is a field in linguistics which is focusing in the fungtion of sounds. The following is the International Phonetic Alphabet (IPA), the formally phonetic symbols (vowels and consonants) in English language.

Table 1.English vowel and consonant phonemic transcription of English

	Vowel Phon	nemes		Consonant Pho	onemes
	Single vo	wels			
01	01 /I/ P <u>i</u> t		01	/p/	<u>P</u> ull
02	02 /e/ P <u>e</u> t		02	/b/ <u>B</u> et	
03	03 /æ/ P <u>a</u> t			/t/	<u>S</u> top

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04	/၁	P <u>o</u> t	04	/d/	<u>D</u> oor
05	/^/	L <u>u</u> ck	05	/ t ʃ/	<u>Ch</u> air
06	/υ/	G <u>oo</u> d	06	/g/	<u>G</u> reen
07	/e/	<u>A</u> go	07	/f/	<u>F</u> ish
	Long vov	vels	08	/v/	<u>V</u> ote
08	/i:/	M <u>ea</u> t	09	/h/	<u>H</u> ead
09	/a:/	C <u>a</u> r	10	/d3/	<u>J</u> oke
10	/ɔ:/	D <u>oo</u> r	11	/s/	<u>S</u> it
11	/3:/	G <u>ir</u> l	12	/z/	Noi <u>se</u>
12	/u:/	T <u>oo</u>	13	/m/	<u>M</u> ay
	Diphtor	ng	14	/n/	<u>N</u> urse
13	\e_I\	Ear	15	/3/	Ca <u>s</u> ual
14	/eə/	There	16	/ð/	Bathe
15	/əʊ/	Vote	17	/ʃ/	<u>Sh</u> oe
16	/aʊ/	Out		Consonant Pho	nemes
17	/eɪ/	They	19	/r/	<u>R</u> ule
18	/aɪ/	My	20 /j/		<u>Y</u> es
19	/DI/	Joy	21 /I/		/ I /
20	/və/	Tourist	22	/w/	<u>W</u> ay
			23	/ŋ/	Si <u>ng</u>
			24	/k/	<u>C</u> up

b) Stress and Rhythm

Stress is one of the suprasegmental features that affect the expression of the meaning of the words spoken. According to Harmer (2007: 42) says that stress is the term we use to describe a point in a word or phrase in which the elongated vocal inflection and volume increases.

A stress can be indicated not only by the change of volume, force, pitch, syllable length but also by visual clue for example hand movements or facial movements. Stress is classified into word stress and sentence stress. Word stress refers to accent or emphasis given to particular syllable of a word.

c) Intonation

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Intonation is one important part of the pronunciation of expressing the meaning of the word or sentence for sentence intonation can indicate whether it is a question or information. According to Kelly (200: 86) stated that intonation is regarded as process where people play the tone of the language in communication. Intonation also shows the speaker's emotion and attitude in her or his utterances, directs, whether the speaker finish her or his speech or not yet and explain about the speaker's purpose in speaking if that is in statement or question.

Minimal Pair

In phonology, minimal pairs are pairs of words or phrases in a particular language, which differ in only one phonological element, such as a phoneme, toneme or chronemic and have distinct meanings. They are used to demonstrate that two phones constitute two separate phonemes in the language.

According to Avery and Erlic (2009: 207) said that minimal pair refers to pairs of words which have different meaning and which different in pronunciation on the basis of one sound only. Also, Ashaby and Maidment (2008: 136) said that in order to prove conclusively that a phonetic distinction is contrastive in a particular language it is necessary to find a pair of words in the language that differ in only one segment. The minimal pair was an essential tool in the discovery process, arrived at by substitution or commutation tests. Modern phonology is much less interested in such issues, and the minimal pair is consequently considered to be of little theoretical importance.

As an example, in the pair of words, very and ferry, the only distinguishing sounds are /v/ and /f/. Minimal pairs have been used for teaching pronunciation. They provide a means of differentiating between sounds with vowels and consonants. Here is the example of minimal pair in vowel sound:

Table 2.Example of minimal pair in vowel sounds

/0ʊ/ /ɔ:/	/æ/	/e/	/æ/	/^/
-----------	-----	-----	-----	-----

coat	court	b a g	beg	c al f	cough
dome	d or m	bat	bet	bass	bus
m oa n	m our n	f a st	f e st	m a st	m u st
cope	corp	m a n	m e n	cam	come
dose	doors	mantle	m e ntal	l a ck	luck

B. Method

In this research, researcher used a quantitative research approach. Whereas, the type of research was quasi experimental design research that used to look for the effect of certain treatments on others under controlled conditions whether there is a result of treatment on the subject being investigate. The form of Quasi-Experimental design used in this research is Non-Equivalent Control Group Design with experimental and control class to find out the improvement of students' ability in pronunciation by using minimal pair technique.

Table 3. Model of Quasi Experimental Design

Е	O_1	X	O_2	
C	O ₃		O ₄	

Explanation:

E : Experimental class

C : Control class

O₁ : Pre-test (in experimental class)

O₃ : Pre-test (in control class)

X : Treatment that will be given for experimental class by using *Minimal Pair Technique*

O₂ : Post-test (in experimental class)

O₄ : Post-test (in controlled class)

The population in this study was taken from all students of SMA Muhammadiyah Sungguminasa. The total population is 5 classes, they are XII IPA, XII IPS, XI IPA, XI IPS, X class; which in each class consists of 22 students, its means that the total population are 110 students of SMA Muhammadiyah Sungguminasa.

The researcher was taken two classes as sample which amounted to 44

students, which is divided into 22 students for each class and divided into two

groups, experimental class and control class. The experimental class here is XI IPA

consists of 11 male students and 11 female student, receives treatment using

minimal pair technique whiles the control class is XI IPS consists of 11 male

students and 11 female student, learning English without minimal pair technique.

Technique of Data Analysis

The data obtained were analyzed based on data analysis techniques which

included descriptive analysis, normality test, homogeneity test, sample t test (paired

sample t test and independent sample t test), and N-Gain Analysis test. The data

was analysis by using SPSS 25.

Discussion

The results of this study indicate that the students' scores on the pronunciation

test especially in the same sounds of the vowel words have improved after treatment

in the experimental class using minimal pair technique. This can be seen from the

analysis of the mean score gap in the post-test between the experimented and

controlled class ensured if the technique was effective. The mean score of the

students in experimental class was 69,77 and 53,64 for controlled class. It means

the gap of the students' score of the experimented and controll class was 16.13. The

explanation of the gap between the two classes indicates that the experimented class

showed higher score than the control class.

From the results of Paired Sample t-Test calculations using *IBM SPSS 25* it

can also be seen that the value of the t-test is 35,219 with a probability (Sig.) of

0,000. Because the probability (Sig.) Is 0,000 <0.05, this means that there is a

significant difference in the students' ability to pronounce the same words after

using the minimal pair technique in the experimental class compared to the control

class using the conventional method.

This result are in line with the results of previous research, where in previous

research such as in Hayes-Harb (2007) concluded that it was determined that the

participants' perception in acquiring second language phonemes increased using a

minimum pair; Sari (2011) also concluded in her thesis that the implementation of

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minimal pairs in improving students' pronunciation is success; similary in Nur Isna (2017) concluded that the application of a minimum pair technique was effective in teaching pronunciation at the second year students of SMAN 4 Bantimurung. It can be concluded that the results of this research are appropriate and support the results of previous studies regarding the use of minimal pair technique in learning pronunciation.

Findings

1. Descriptive Analysis Test

a) The Mean Score and Standard Deviation of Experimental Class

After doing the calculation and data processing using IBM SPSS 25, the results obtained the mean score and standard deviation of the experimental class is

Table 4. Descriptive Analysis Test Experiment Class

Statistic	Statistic Value				
Statistic	Pre-Test	Post-Test			
N	22	22			
Ideal Score	100	100			
Minimum Score	25	55			
Maximum Score	65	90			
Mean Score	39,32	69,77			
Std. Dev	11,159	11,698			

Score of the student in experimental class in Pre-Test was 39,32 with the standard deviation was 11,159, minimum score that student got was 25 and maximum score was 65. While in Post-Test, the mean score was 69,77 with the standard deviation was 11,698, minimum score that student got was 55 and maximum score was 90.

b) The Mean Score and Standard Deviation of Control Class

Table 5. Descriptive Analysis Test Experiment Class

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Statistic	Statistic Value			
Statistic	Pre-Test	Post-Test		
N	22	22		
Ideal Score	100	100		
Minimum Score	25	40		
Maximum Score	55	70		
Mean Score	37,50	53,64		
Std. Dev	8,557	8,447		

Based on the data presented in Table 1.6 above, it can be seen that the mean score of the student in experimental class in Pre-Test the mean score was 37,50 with the the standard deviation was 8,557, minimum score that student got was 25 and maximum score was 55. while in Post-Test, the mean score was 53,64 with the the standard deviation was 8,477, minimum score that student got was 40 and maximum score was 70.

2. Normality Test

According to Singgih Santoso (2012: 293) for decision making can be based on probabilities (Asymtotic Significance), namely:

- 1) If the sig. Is > 0.05 then the distribution regression model is normal.
- 2) If the sig. Is < 0.05 then the distribution regression model is not normal.

Table 6.Normality Test Result

Class	Kolmogo	orov-Sn	nirnov ^a	Shapiro-Wilk		lk
Class	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre-Test	0.151	22	0.200*	0.935	22	0.156
Experiment	0.151	22	0.200	0.733	22	0.130
Post-Test	0.158	22	0.159	0.917	22	0.066
Experiment	0.136	0.139	0.139	0.517		0.000
Pre-Test	0.129	22	0.200*	0.950	22	0.321
Control	0.128	22	0.200	0.930	22	0.321
Post-Test	0.166	22	0.118	0.929	22	0.114
Control	0.100	22	0.110	0.929	22	0.114

From table above it can be seen that all data presented are normally distributed where all the asymp sig > 0.05. it's mean that the distribution of the regression in this research is normal.

3. Homogeneity Test

If the significance level is ≥ 0.05 and if the significance level is < 0.05 then the data concluded do not have variant values that are not homogeneous.

Table 7. Homogenitas Test Result

	Test of Homogeneity of Variance											
		Levene Statistic	df1	df2	Sig.							
	Based on Mean	3.203	1	42	.081							
Students	Based on Median	2.878	1	42	.097							
Result	Based on Median and with adjusted df	2.878	1	39.24	.098							
	Based on trimmed mean	3.196	1	42	.081							

From the results of homogeneity test calculations in table 1.8. above, it is known that the significance value is 0.081. Because the value obtained from the homogeneity test is of significance level \geq 0.05, the data has the same variant value / not different (homogeneous).

4. Hypothesis test results

Table 8.Paired Sample T Test Result

			Paire	d Differen	ces				
		Mean	Std. Deviatio n	Std. Error Mean	95% Confidence Interval of the Difference Lowe		T	df	Sig. 2-tailed
					r	Upper			
Pai r 1	Pre-Test- Post-Test Experimen t	- 30.45 5	4.056	.865	32.25 3	- 28.65 6	- 35.21 9	2	.000

Pai	Pre-Test-	-			-	-	-	2	
r ai	Post-Test	16.13	4.612	.983	18.18	14.09	16.41	1	.000
r 2	Control	6			1	2	2	1	

It is known that the t-value is 35,219 with a probability (Sig.) 0,000. The decision making provisions are based on the following provisions:

Hypotesis:

H₁: There are significant differences in students' ability to pronounce the same words sound after using minimal pair's technique.

H₀: There are no significant differences of students' ability in pronouncing the same words sound after using minimal pair's technique.

Decision Criteria:

- (a) Accept H0 if the probability value (Sig.)> 0.05
- (b) Reject H0 if the probability value (Sig.) < 0.05

The t-count value is 35,219 with a probability (Sig.) 0,000. Because the probability (Sig.) 0,000 < 0.05 then Ho is rejected. This means that There are significant differences in students' ability to pronounce the same words sound after using minimal pair's technique. Based on the results of this processing, it can be concluded that, the minimal pair method gives a great influence on learning English especially in pronunciation.

5. N-Gain Analysis Test

Table 10.N-Gain Analysis Test Result

		N-Gain						
No	Category	Experi	mental	Cor	ntrol			
		Frequency	Percentage	Frequency	Percentage			
1	High	0,52	52%	0,26	26%			
2	Medium	-	-	-	-			
3	Low			-	-			

Based on the data obtained in the table above can be seen N-Gain experimental class is higher than the control class. Where the mean value of N-Gain

in the experimental class was 0.52 (52%) while in the control class was 0.26 (26%).

Then it can be concluded that the N-Gain in the experimental class is higher than

the N-Gain in the control class.

From this N-Gain value it can be concluded that the experimental class has

higher improvement compared to the control class that is 0.52> 0.26; this shows

that the used of the Minimal Pair technique in the experimental class is more

effective than the used of the speech method in control class.

Conclusion

The conclusion that the researcher can conclude after analyzing the data that

has been obtained in the research, is described as follows.

1. From the results of this study the researcher concluded that the application or

the use of the minimal pair technique in the second year students of SMA

Muhammadiyah Sungguminasa was effective in teaching English

pronunciation. this can be seen from the results of data that has been processed

using IBM SPSS 25, where there is a significant difference between the score

results in the pre-test and post-test in the experimental class and the control

class. Student scores on the pronunciation test before applying the minimal pair

technique in teaching pronunciation are still low. It is different from the ability

of students after applying the minimal pair technique in teaching pronunciation.

This can be found in students' mean scores. In the pre-test the score was 39.32

while the post-test results increased to 69.77. Obviously, it defines that the

pronunciation of second grade students at SMA Muhammadiyah

Sungguminasa has improved after treatment which is 30.45.

2. The Minimal Pairs technique is very effective in teaching English

pronunciation, especially for vowel words that are similar in sound. See from

student learning outcomes in the experimental class better than the control

class.

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