**THE USE OF TAPPING AND CLAPPING TECHNIQUE**

**TO IMPROVE STUDENTS’ ABILITY**

**TO PLACE STRESS IN ENGLISH WORDS**

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**Abstract**

*This research was conducted to find out whether the use of tapping and clapping technique can improve students’ ability to place stress in English words or not. It applied quasi-experimental with pre-test post-test non-equivalent control group design. The research population is the eighth grade students of SMP Negeri 5 Palu which consists of 107 students. The sample, that was divided into control and experimental groups, was selected by using purposive sampling technique. The data were statistically analysed in order to get the significance of students’ achievement in pre-test and post-test. The result of data analysis indicates that there is a significant difference of the test results between experimental and control groups. It can be seen by the increase of students’ mean score of pre-test and post-test in experimental group (from 25.5 to 78.2) compare to students’ mean score in control group (from 24.6 to 55). By applying 0.05 level of significance with 43 degree of freedom, the researcher found that t-counted (5.7) is higher than t-table (1.667). It proves that the hypothesis is accepted. In conclusion, the use of tapping and clapping technique can significantly improve the students’ ability to place stress in English words at SMP Negeri 5 Palu.*

*Keywords: Pronunciation; English Word Stress; Tapping and Clapping Technique*

**INTRODUCTION**

Pronunciation is the production of sounds which are used to make meaning. According to Burns and Claire (2003:5), “Pronunciation refers to the *phonology* of the language – or the meaningful perception and production of the sounds of that language and how they impact on the listener”. This definition indicates that pronunciation is vital in communication, especially in spoken language. In spoken English, pronunciation often becomes the cause of misunderstanding. If we are talking to someone whose mother tongue is different from ours, we will find it difficult to get what he or she is saying except we understand the pronunciation of his or her language. In other words, pronunciation does not only affect our speaking skill, but also our listening skill. Having problems in listening can mean we are having problems in pronunciation. We, therefore, need to have a good pronunciation in order to avoid misunderstanding in communication.

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Carmen (2010) has formulated the definition of good pronunciation. He states that a good pronunciation is one that is easy to understand by advanced users of English, and it should be easy to pronunce for one self. A good pronunciation can be achieved only by learning and practicing our pronunciation, because through practice, we make our speech productions spontanously produce a good pronunciation. Once we have a good pronunciation, people whom we speak to will understand us well. This creates the intelligibility of our conversation.

Learning pronunciation includes paying attention to the segmental features as well as the suprasegmental ones. According to Darcy, Ewert, and Lister (2012), segmental feature concerns with elements of phonemes including English consonants, vowels, and clusters. The word ‘book’, for instance, consists of two consonants: /b/ and /k/ and one vowel /ʊ/. Suprasegmental features, on the other hands, focus on the large level of sounds. In order to achieve the intelligibility of our spoken words, both features need to be combined when we are producing words. Suprasegmental features involve linking, intonation, and stress. Corcerning the importance of combining those features, some of EFL (English as a Foreign Language) teachers only focus on the segments in teaching pronunciation, whereas a good pronunciation requires us to combine all features when we are speaking. Focusing only on segmental features, nevertheless, fails to help learners control over their pronunciation while communicating in a foreign language (Keys, 2000). Therefore, suprasegmental features also need to be taught in EFL classroom. That is why this research deals with word stress.

Stress refers to the relative emphasis that a speaker gives to a particular sound. Every word is made up of syllables. Each syllable consists of one vowel sound. In an English word which has more than one syllabe (polysyllabic), there is always one syllable that is more prominent than the others. This syllable is called a stressed syllabe or a syllabe on which the stress is placed. Ladefoged and Johnson (2011:111) state, “Stressed syllable is usually produced by pushing more air out of the lungs in one syllable relative to others”. The word‘computer’, for example, is not pronunced in the same emphasis for every syllable as [com-put-er], but the second syllable is more prominent than the others as [com-PUT-er].

Word stress has an essential role in correct pronunciation of English word. Sometimes, the change of stress can change the category of word from a noun to a verb or vice versa, such as in word ‘address’. Stressing the first syllable (*'address*) makes the word categorize as a noun while stressing the second one (*add'ress*) makes it become a verb. There are some other words which get their meanings completely change if we change what syllable we are stressing, such as the word ‘object’ which means “an existing thing” or “the goal of something” if we stress on the first syllable (*'object*), or means “to disagree with something” if we stress the second syllable (*ob'ject*). Therefore, it is absolutely important to be clear on which syllable to stress for the particular meaning that we want. However, many English learners experience errors in placing the stress in English words.

Based on the researcher’s preliminary observation in SMP Negeri 5 Palu, she found that the teacher did not pay attention to the word stress when she was teaching some new words to the students. Many students failed to give the correct word stress when they were producing word, but the teacher did not correct them. It happened in every meeting that the researcher observed. The students ended up speaking incomprehensibly. Furthermore, it also affected their listening skill. They found it difficult to understand even a very simple sentence consist of words they have memorised. These phenomena had inspired the researcher to teach word stress to the learners, especially the beginner ones.

Beginners are those who are sitting at the first stage of learning English. The eighth grade students are included in this stage. The students in this stage find it easier to perceive something than that in any other stage. It is a crucial stage in which the learners form the habits of learning and keep them in their long-term memory. Success is easy to see in this stage, and if things are going well, teaching learners at this stage can be incredibly stimulating (Harmer, 2007). However, if the teachers fail and even provide a wrong model, then, it will extremely affect their next stages of learning.

Despite the importance of word stress, teaching it to the young students is not an easy job. English has complicated rules in determining word stress. According to these rules, stress can be based on three kinds of information: syntatic, morphological, and phonological (Basri, 2013). These rules are hardly understood by beginners. Moreover, English does not have adequate rule which helps us to predict all word stresses since each rule has its domain and limits on it. Kelly (2000) even suggests the rules to be seen as descriptions rather than rules for they only tell us what is true most of the time, and it is always possible to find exceptions. Therefore, the best way to learn it is through memorising the position of stress when we are learning a new word. However, many students experience difficulty to memorise the stress of each word. Undoubtedly, memorising is something that makes many students bored and frustated, except the teacher can provide an interesting way in memorising. The researcher thus offered tapping and clapping technique.

Tapping and clapping technique consists of tapping the syllable and clapping the stress. It can make the students aware of the syllables of the words and the stress as well. Celce-Murcia, Brinton, Goodwin (1996) mention tapping and clapping as the aural reinforcements in teaching word stress. According to them this can be done while holding up their own fingers of one hand to indicate visually the number of syllables, and where the strong stress falls. Furthermore, Wei (2006) points out that this technique can help the students become aware that unstressed syllables have weak beats and so their vowels need to be reduced. In teaching word stress, especially to the beginners, tapping and clapping technique is believed to be the effective way. This is because it requires students to activate their visual senses through hand movements and auditory senses through the sounds from it. Wolfe (2001:162) states “These sensory abilities are powerful components of brain functioning, and we can use them in the classroom to enhance our students' understanding and retention of information”. In short, tapping and clapping technique is expected to improve students’ ability to place word stress.

The procedures of using tapping and clapping technique to teach word stress consist of some steps. Firstly, the teacher picks up some nouns related to the topic for each meeting. Secondly, the teacher pronunces these words clearly and correctly. Thirdly, the teacher has to introduce the students about the syllables as the beats of words. Fourthly, in helping the students perceive the syllables in each word, the teacher shows them by tapping her hands on her thighs. Finally, in order to differentiate the stressed syllable and the unstressed ones, the teacher claps her hands to indicate the stressed syllable. After having the students understand this technique, the teacher lets the students to do it themselves. The teacher then lets them repeat pronuncing the words by using this technique to reinforce them the word stress. This technique, of course, will be more successful in getting students memorise the word stress through repetition. If the students practice pronuncing words by using it many times, it will help them to keep the correct word stress placement in their long-term memory.

Regarding to the statements above, the researcher formulates a research question as follows: *Can the use of tapping and clapping technique improve the students’ ability to place stress in English words at SMP Negeri 5 Palu?* Therefore, The objective of this research is to find out whether the use of tapping and clapping can improve students’ ability to place stress in English words or not. This research is limited on teaching English word stress of nouns and verbs which are mostly used by the eighth grade students by using tapping and clapping technique. In terms of stress level, primary stress becomes the researcher’s concern after considering the importance of the primary stress and the level of the students.

**METHOD**

This research applied quasi-experimental design in which there are two groups to be compared in order to prove the hypothesis of this research. The first group received treatment, so that, it is called experimental gruop, while another, named control group, did not. Both groups were given pre-test and post-test. The researcher applied a formula drawn by Best (1981:70) as folows:

 **O1 X O2**

 **O3 O4**

where:

**O1** : pre-test for experimental group

**O2** : post-test for experimental group

**O3** : pre-test for control group

**O4** : post-test for control group

**X** : treatment

The population is the eighth grade students of SMP Negeri 5 Palu. There are five classes (VIIIA, VIIIB, VIIIC, VIIID, and VIIIE) which consist of 107 students. The researcher used purposive sampling technique to choose the sample. Porpusive sampling is one of non-probability sampling techniques which gives a researcher oportunity to pick up the sample based on specific purposes. The researcher took class VIIIE as experimental group and VIIIA as control group for some reasons. Firstly, based on their English teacher’s point of view and researcher’s preliminary observation, the students in those classes faced the same problems in word stress placement. Secondly, since this research deals with pronunciation, the researcher needed to find out a fairly quite class to run the treatment smoothly. By comparing to other classes, both classes had fewer noisy students. Thirdly, after seeing the students’ scores on English mid-test, both classes had similar achievement which means that both classes had similar capabilities in English.

 In experimental design, research variables are divided into dependent and independent variables. Hatch and Lazaraton (1982:64) point out “An independent variable is a variable that the researcher suspects may relate to or influence the dependent variable”. Based on this explanation, the researcher concluded that the dependent variable of this research is the students’ ability to place the stress in English word while the independent one is the use of tapping and clapping technique.

In collecting the data, the researcher used test as the instrument. The test consists of pre-test and post-test. Pre-test was given to both experimental and control group before the treatment. The purpose of giving pre-test is to measure the students’ prior knowledge in English word stress before having the treatment. It consists of oral test with two parts. The first part consists of ten individual words while the second part consists of ten words put in five sentences. The students had to pronunce the words with correct stress. Eventhough the second part consists of sentences, the researcher only focused on the stress on the individual words. After having administered the pre-test, the experimental group received the treatment while the control group did not. The researcher taught word stress to the students in experimental group by using tapping and clapping technique. She administered the treatment for eight meetings excluding pre-test and post-test. Each meeting was running for 40 minutes by following the schedule of the school. Post-test was given after the treatment in order to measure the student’s imporevement after having treatment. This test was also administered to both experimental and control groups. The content of the test is same as the pre-test. The scoring system of pre-test and post-test is presented on table 1.

Table 1. Scoring System

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| kinds of test | number | point | rubric | maximum score |
| oral test | **TASK 1****1-10** | 1 | The student pronunces the word with correct stress placement | **20** |
| 0 | The student pronunces the word with wrong stress placement |
| **TASK 2****1-5** | 2 | The student pronunces the words with correct stress |
|  | 1 | The student pronunces only one word with correct stress |
|  | 0 | The student pronunces all words wrongly |

In analysing the data, firstly, the researcher computed the individual score in pre-test and post-test of each group. Secondly, the researcher counted the students’ mean score in pre-test and post-test of each group. Thirdly, she counted the individual deviation of pre-test and post-test. Fourthly, she computed the sum of squared deviation of each group. Finally, the researcher calculated the t-value and compare it to the t-table.

**FINDINGS**

 In the process of gathering the data, the researcher gave pre-test to the research subjects in both experimental and control groups. The pre-test was administered before the treatment. As stated in the previous explanation, the purpose of this test is to check the prior knowledge of the students. It consisted of oral test which is broken into two parts and had 20 for the total score. The first part consists of individual words and the second one consists of sentences. In order to measure whether the use of tapping and clapping technique can improve the students’ ability to place stress in English words, the researcher gave the post-test to the students after finishing the treatment. The post-test was administered in both experimental and control groups. By comparing the results of pre-test and post-test, it can help the researcher to find out whether there is significant difference of students’ ability to place word stress between experimental and control groups or not. Table 2 and 3 show the results of the test of both groups.

Table 2. The Result of Pre-Test and Post-Test of Experimental Group

|  |  |  |  |
| --- | --- | --- | --- |
| **no** | **initial name** | **pre-test score** | **post-test score** |
| 1 | ADY | 20 | 75 |
| 2 | CTL | 30 | 85 |
| 3 | IH | 30 | 80 |
| 4 | MA | 10 | 50 |
| 5 | MR | 0 | 50 |
| 6 | MS | 20 | 65 |
| 7 | RZ | 35 | 90 |
| 8 | RI | 30 | 85 |
| 9 | YY | 40 | 75 |
| 10 | ANG | 30 | 70 |
| 11 | AZ | 40 | 75 |
| 12 | BT | 20 | 80 |
| 13 | GG | 30 | 80 |
| 14 | NA | 10 | 70 |
| 15 | NVA | 30 | 85 |
| 16 | RW | 25 | 90 |
| 17 | SM | 30 | 90 |
| 18 | SH | 30 | 100 |
| 19 | SR | 35 | 90 |
| 20 | TAN | 25 | 85 |
| 21 | TM | 30 | 85 |
| 22 | YU | 10 | 65 |
| **total** | **560** | **1720** |

Table 3. The Result of Pre-Test and Post-Test of Control Group

|  |  |  |  |
| --- | --- | --- | --- |
| **no** | **initial name** | **pre-test score** | **post-test score** |
| 1 | AHN | 25 | 50 |
| 2 | AR | 25 | 35 |
| 3 | BP | 25 | 45 |
| 4 | ES | 25 | 40 |
| 5 | ESB | 25 | 40 |
| 6 | GA | 30 | 45 |
| 7 | MF | 20 | 50 |
| 8 | MK | 40 | 50 |
| 9 | MS | 35 | 35 |
| 10 | SG | 45 | 55 |
| 11 | SAP | 20 | 55 |
| 12 | DE | 25 | 70 |
| 13 | DNK | 25 | 65 |
| 14 | DO | 25 | 75 |
| 15 | FN | 25 | 60 |
| 16 | FT | 30 | 85 |
| 17 | HM | 20 | 55 |
| 18 | KA | 25 | 55 |
| 19 | NA | 20 | 60 |
| 20 | NAN | 5 | 45 |
| 21 | TJ | 10 | 70 |
| 22 | MA | 25 | 70 |
| 23 | MNF | 15 | 55 |
| **total** | **565** | **1265** |

Based on the data in table 2, the researcher concludes that all of the students did not pass the pre-test since the standard score of English subject at SMP Negeri 5 Palu is 70. The lowest score of the students is 0 and the highest one is 40. After computing the students’ scores, the researcher calculated the students’ mean score on pre-test in experimental group. The result of the formula shows that the mean score of pre-test in experimental group is 25.5.

After receiving the treatment, the students scores are dramatically increased. The data in table 2 indicates that most of the students in experimental group passed the post-test with the highest score is 100. There were only four students who did not pass the test with the lowest score is 50. In addition, based on the data on table 2, we can see that all of the students in experimental group experienced the significant improvement in their scores on post-test. Regarding to the data above, the researcher calculated the mean score of post-test in experimental group. It was found that the mean score of post-test in experimental group is 78.2.

The data presented on table 3 shows that all of the students in control group also did not pass the test. The highest score is 45 while the lowest one is 5. The mean score of pre-test in control group is 24.6.

In contrast to experimental group, as presented on table 3, most of the students in control group did not pass post-test eventhough most of the students’ scores are increased. There were only five students who passed it. The highest score in this group is 85 and the lowest score is 35. The mean score of post-test in control group is 55.

 The finding of mean score in experimental and control groups indicates that the students’ scores in both groups are increased. However, the increase of the students’ scores in experimental group is more significant than that in control group. In experimental group, the mean score is significantly increased from 24.6 to 78.2 while in control group, it is from 25.5 to 55.

After computing the mean score between pre-test and post-test in each group, the researcher continued to get the difference between the result of pre-test and post-test. Firstly, the researcher, counted the deviation and square deviation of pre-test and post-test in experimental and control groups. The mean score of the deviation of experimental group is 52.7 while the deviation of control group is $26.5$. The sum of square deviation of experimental group is 1736.3 while the sum of square deviation of control group is 8271.7. Finally, in order to get the difference between the result of the test in experimental and control group, the researcher needed to find the value of t-counted. The t-counted of this research is 5.7.

 To prove whether the use of tapping and clapping technique can improve the students’ ability to place the stress in English words or not, the researcher needed to test the hypothesis based on the result of data analysis. Before deciding whether the research hypothesis was accepted or rejected, the researcher had to find the df (degree of freedom) of the sample. The result shows that the df is 43. However, degree of freedom of the data is not stated on the t-table. Therefore, the researcher applied interpolation formula proposed by Damodar (1995) and found that the critical t-value of df 43 is 1.667.

 After having obtained the critical t-value of df 43, the researcher found that the t-counted (5.7) is higher than t-table (1.667) by applying 0.05 level of significance. It means that the hypothesis is accepted. In conclusion, the use of tapping and clapping technique can improve the students’ ability to place the stress in English words.

**DISCUSSION**

Based on the researcher’s preliminary observation at SMP Negeri 5 Palu, she found that many students failed to give the correct word stress when they were producing word. It was because the teacher did not pay attention to the word stress when she or he was teaching some new words to the students. Therefore, this research focuses on teaching word stress.

In the process of conducting the research, firstly, the researcher gave pre-test to the students in both experimental and control groups in order to measure their prior knowledge of word stress. The result of this test indicates that both groups had equal capability to place word stress. There is no student who passed the test in both groups. It happened because the students had never been taught about the word stress. By analyzing the errors’ of the students, the researcher draws some conslusions. Firstly, most of the students could not break some words into the correct syllables. For example, they pronunced *celebrate* as *ce.le.bra.te, transportation* as *trans.por.ta.ti.on*, *village* as *vil.la.ge,* and *increase* as *in.crea.se*. Secondly, the students varied in placing the stress in some words, especially polysillabic words, such as *pollution* (po.'llu.tion). Some students stressed the ultimate syllable *'po.llu.tion,* andsome others said *po.llu.'tion*. Thirdly, most of the students tended to give no stress to the words which have two syllables, such as *enjoy* (en.'joy)*, visit* ('vi.sit)*, affect* (af.'fect)*, village* ('vi.llage). Fourthly, most of the students experienced the same errors to some words such as *holliday* ('ho.li.day)*, photograph* ('pho.to.graph)*,* and *photographer* (pho.'to.gra.pher). Most of them placed stress on the ultimate syllable for the word *holiday* (ho.li.'day) and *photograph* (pho.to.'graph)*,* and stressed on the penultimate syllable for the word *photographer* (pho.to.'gra.pher). Lastly, all of the students could not distinguish the words which have the same spelling, such as *address, present,* and *project* as verbs or nouns. They stressed those words in the same positions. Some students stressed the penultimate syllables both in nouns and verbs, some of them stressed the penultimate syllables, and some others did not stress any syllable.

After getting the first data on pre-test, the researcher gave treatment to experimental group in order to overcome their problems in placing word stress. In the treatment process, the researcher aplied tapping and clapping technique. As stated in the previous explanation, this technique requires the teacher, followed by the students, to tap their hands on their thighs to indicate the syllables and clap them to stress particular syllable. This treatment was conducted in eight meetings and each meeting was running for 40 minutes. In every meeting, the researcher picked up some words related to the scheduled topics to teach to the students. She used tapping and clapping to make the students aware of the syllables within the words as well as the stress positions. After getting them understand how to use the technique, the researcher let the students practice it themselves to remember the syllables and stress position in the words. At the end of a meeting, the researcher evaluated their abilities by asking them to place the stress in correct position to the words and pronunce them correctly. During the treatments, the students showed their interest in learning and memorizing word stress by using tapping and clapping. So, the researcher could see their significant progress in each meeting.

On the other hands, the researcher also taught word stress to the students in control group as a comparison to the experimental group. However, the researcher did not use the technique to the students. The researcher only told directly the stress positions of the words and pronunced them in front of the students. The researcher decided to teach the control gruop herself rather than letting the English teacher teach them in order to make this research more accurate since the English teacher undoubtedly has different quality from the researcher. By teaching both groups, the researcher could prove whether the technique used in experimental group was effective or not.

Having conduted the treatment to the students, the reseacher finally administered the post-test in experimental and control groups. This test was used to measure the students’ progress in both groups. The items of this test are same as that of pre-test. Based on the result of this test, both groups showed an improvement of their abilities to place stress. However, experimental group experienced much more significant improvement than control group. It is affirmed by seeing the percentage of students who passed the test. In experimental group, it is about 80% of the students passed the test and the mean score is dramatically increased from 25.5 to 78.2 while in control group, it is only 21% of students who passed the test and the mean score is unsignificantly increased from 24.6 to 55.

By seeing these facts, the researcher comes to the conclusion that the students in experimental group understand and memorize the word stress much better than the students in control group. It indicates that the treatment provided by the researcher gave a very positive effect to the development of students’ ability. It could happen because during the treatment, the students showed their enthusiasm in learning word stress. Like most young learners in every school, they really like to try a new way in learning, and the treatment provided it to them. The students were very interested in using tapping and clapping technique since it greatly reduced their boredom and difficulties in teaching learning process, especially in memorizing the stress position within the words, by getting them visualize the weak and strong syllables with their hand movements. Consequently, this technique does not only encourage the students to learn word stress but also makes them quickly remember the position of word stress. In other words, the use of tapping and clapping technique can successfully improve the students ability to place stress in English words and can be considered as one of the effective techniques in teaching word stress.

**CONCLUSION AND SUGGESTION**

Based on the data analysis of this research, the researcher found that there is a significant progress of the students’ ability to place word stress after receiving the treatment. It can be seen by the increase of students’ mean score of pre-test and post-test in experimental group (from 25.5 to 78.2) compare to students’ mean score in control group (from 24.5 to 55). Moreover, it is proved by the t-counted value (5.7) which is higher than t-table (1.667). It means that the research hypothesis was accepted. In conclusion, the use of tapping and clapping technique can significantly improve the students’ ability to place stress in English words at SMP Negeri 5 Palu.

After having conducted this research, the researcher would like to share some beneficial ideas and suggestions. Hopefully, they can be taken as a positive contribution for teaching and learning process as well as conducting the similar research. Firstly, it is suggested for English teachers to make the students aware of word stress when teaching them a new English word, especially for the young learners. Activating their physical and auditory senses is an effective way of memorising the word stress, and the use of tapping and clapping technique provide it for the students. Therefore, it is a good idea for the teacher to apply it in the classroom. Secondly, it is important for the students to have a great motivation in learning English, because motivation is actually the main factor to get them actively participate in every teaching learning activity and easily understand every lesson taught to them. Thirdly, in conducting similar research, it is better for a researcher to anticipate the weakness of his or her research. In this research, the weakness is related to the treatment. The treatment process requires students to be quite when the researcher is delivering the materials as well as administering the tests since the students have to pay attention to the teacher’s pronunciation and the teacher also have to listen and assess their pronunciation. So, it is better for other researchers who are interested in applying the same technique to choose the suitable class to run the treatment smoothly. If it is difficult to find a quite class, the researchers have to provide an effective classroom management to get the noisy students’ attention or to make the class quite when the teacher is explaining the materials as well as giving the tests to the students.

**REFERENCES**

Basri, H. (2013). *English Phonology*. Universitas Tadulako: unpublished.

Best, J.W. (1981). *Research in Education*. New Jersey: Enflewood Cliffs.

Burns, A., Claire, S. (2003). *Clearly Speaking: Pronunciation in Action for Teachers*. Sidney: NCELTR.

Carmen, R. (2010). *Spoken English: Florish Your Language.* Chandigargh: Abhishek Publications.

Celce-Murcia, M., Brinton, D.M., Goodwin, J.M. (1996). *Teaching Pronunciation: A Reference for Teachers of English to Speakers of Other Languages*. New York: Cambridge University Press.

Damodar, N. (1995). *Basic Econometrics.* New York: McGraw-Hill.

Darcy, I.; Ewert, D; & Lidster, R. (2012). Bringing Pronunciation Instruction Back into the Classroom: An ESL Teachers’ Pronunciation “Toolbox”. In. J. Levis & K. LeVelle (Eds.). *Proceedings of the 3rd Pronunciation in Second Language Learning and Teaching Conference*, Sept. 2011. (pp. 93-108). Ames, IA: Iowa State University.

Harmer, J. (2007). *How to Teach English.* New York: Pearson Education.

Hatch and Lazaraton. (1991). *The Research Manual: Design and Statistics for Applied Linguistics*. New York: Newbury House Publishers.

Kelly, G. (2000). *How to Teach Pronunciation.* Harlow: Pearson.

Keys, K.J.. (2000). Discourse Level Phonolog in the Language Curriculum: A Review of Current Thinking in Teaching Pronunciation in EFL courses. *Linguagem & Ensino 3. 1, 89\_105.*

Ladefoged, P., Johnson, K. (2011). *A Course in Phonetics 6th Ed.* Boston: Wadsworth.

Wei, M. (2006). A Literature Review on Strategies for Teaching Pronunciation*.* *Eric Document Reproduction Service No. ED 491566*

Wolfe, P. (2001). *Brain Matters Translating Research Into Classroom Practice*. Virginia: Association for Supervision & Curriculum Development.