USING PHONETIC TRANSCRIPTION TO IMPROVE STUDENTS’ PRONUNCIATION SKILLS

Bambang Irawan¹, Muhammad Ahsan Tampubolon²
¹English Letters Department, Faculty of Letters, Pamulang University, South Tangerang, Banten, Indonesia
dosen01218@unpam.ac.id

²English Letters Department, Faculty of Letters, Pamulang University, South Tangerang, Banten, Indonesia
dosen01687@unpam.ac.id

ABSTRACT

For EFL students especially the students of English Letters Department at Pamulang University, mastering English is something challenging. One of the most crucial problems is pronunciation. Hence, appropriate teaching methods such as using phonetic transcription are needed to help the students to improve their pronunciation. This research implemented Classroom Action Research and focused on using phonetic transcriptions to improve the pronunciation skills of the fourth semester students of English Letters Department of Pamulang University. It was aimed to reveal if the utilization of phonetic transcription was able to improve the students’ pronunciation and to figure out how phonetic transcription improved the students’ pronunciation. The results showed that the average of the students’ score in the pre-cycle and cycle 1 were 59.86 and 66.07 which were still lower than 75 as the target. In the cycle 2, the average of the students’ score was 75.56 which was higher than 75. Based on the results of the study, it can be concluded that phonetic transcription was able to improve the students’ pronunciation. Phonetic transcription had role in improving both segmental and supra segmental features of the students’ pronunciation.

Keywords: classroom action research; phonetic transcription; pronunciation.

In some countries in which English is considered as a foreign language, it is a bit difficult for students to master English well. One of the problems faced by the students is pronunciation. It happens because English is different from their languages. In English, there is no relationship between the spelling of the word and the way it must be pronounced. As (Khansir & Tajeri, 2015) mentions that in English there are many words which are pronounced differently from the way they are spelt.

The problem related to the inconsistent relationship between spelling and pronunciation in English language is faced by English learners over the world including in Indonesia particularly at Pamulang University. Based on the pre-observation which was conducted in the Department of Letters, Pamulang University, it was found that many students were not able to pronounce the words correctly. Some of them were actually able to pronounce the words correctly but they were not able to use the correct word stress. In their utterances,
the students still needed the guidance how to use correct intonation based on the ideas that they intend to convey.

Pronunciation can be described as the production and the perception of sounds which are meaningful and have impacts on the listener. Based on the statements above, it is concluded that pronunciation is the way language is spoken in order to achieve the meaning in contexts of use (Burns & Claire, 2003). Pronunciation involves features at segmental level which consists of consonants and vowels and supra segmental level which consists of word stress, sentence stress, intonation, etc. (Burns & Claire, 2003).

There are actually a lot of methods or techniques to teach pronunciation. One of them is by using phonetic transcription. Phonetic transcription is a system used for the written notation of spoken language (Hadumod, 2004). Phonetic transcription is a method of writing down speech sounds in a systematic and consistent way—also known as a ‘notation’ or ‘script’ (Major & Crystal, 1992). The statements above clearly show that phonetic transcription relate to written notation and spoken language. It means that written notation can be used to help learners how to speak the language correctly.

Phonetic transcription can be used in teaching English pronunciation because it shows the students how a given word or phrase should be pronounced because they learn all sounds in English. They can consult their own dictionary to know how to pronounce the word correctly because a dictionary commonly provides phonetic transcription of each word as (Harmer, 1991) states that dictionary usually gives the pronunciation of their words in phonemic symbols. If the students can read these symbols, they can know how the word is said even without having to hear that. Besides, the students can often better understand their errors in pronunciation if they see them lay out in static visual form. Students can compare transcription of their own speech to the phonetic transcription as the model of speech and see and correct their mistake.

There are some studies that had been conducted to analyse the use of phonetic transcriptions in teaching English. One of them was done by (Pelttari, 2015) entitled “Use of phonemic transcription as a teaching method in Finnish school”. Pelttari did his research to solve the problem that he found in Finnish schools. The problem was found in every level of school in Finland, such as primary school, lower secondary school and upper secondary school. The problem was the students were not able to pronounce English words correctly. As the result of his research, he found out that the use of phonemic transcription as a teaching method was able to improve students’ pronunciation. He also focused on teaching General Accent (GA) to avoid confusion in learning English pronunciation.

Another study was conducted by (Basri & Hasyim, n.d.) entitled “The effect of using phonetic transcription of word as footnotes on Iranian EFL learners’ pronunciation improvement”. They conducted a research quantitatively to find out the effect of using phonetic transcription in teaching English. They assigned 30 upper-intermediate learners which were put in two different groups, an experimental group and a control group which were measured before and after the treatment. However, only the experimental group was exposed to the treatment by providing footnote phonemic transcriptions of new and unknown vocabularies by each page of their book. The results of the research confirmed the significant effect of phonetic transcription as footnotes on the experimental group learners’ pronunciation improvement.
One more study was conducted by Kuuti (2009) entitled “The use of phonemic transcriptions as a teaching method and its effect on language learning outcomes. In her research, Kuuti (2009) divided students into two groups with different treatment. One group was taught by using phonetic transcriptions while the other group was not. The result of the research showed that the group which was taught by using phonetic transcriptions showed better learning outcomes than the group which was not taught by using phonetic transcription. So based on Kuuti’s (2009) research, phonetic transcription is effective in teaching pronunciation.

Based on the background of the study and the identification of the problems, the writers focused on how phonetic transcription can improve English pronunciation of the fourth semester students of English Literature Department of Pamulang University in academic year of 2019/2020

RESEARCH METHODOLOGY

This study was conducted through action research. Action research has several definitions. It is related to the ideas of ‘reflective practice’ and the teacher as writers. It involves taking a self-reflective, critical and systemic approach to exploring your own teaching contexts (Burns, 2009). McTaggart (1994: 317) states:

“Action research involves participant in planning action (on the basis of reflection); in implementing these plans in their own action; in observing systematically this process; and in evaluating their action in the light of evidence as a basis for further planning and action, and so on through a self-reflection spiral.”

In line with MacTaggart (1994), (Vaccarino et al., 2006) also argues that action research is known as self-reflective practice as it involves individual or practitioners reflecting on their own work.

Based on the statements of the experts above, it can be concluded that action research is a research based on the problem in the classroom which is mainly done by teacher or lecturer to improve the teaching learning process on his or her own classroom context. It means that teachers or lecturers find out the solution of the problem which is found in their classroom. Then, teachers or lecturers as the writers formulate their planning action, implement it in their own action, observe the process and evaluate their action. So, classroom action research was chosen to solve the pronunciation problem faced by the students by utilizing phonetic transcriptions.

This study used action research that consists of two cycles of which consisted of several stages proposed by Kennis and Mc Taggart in (Burns, 2009) which were planning, action, observation and reflection, as shown in the following diagram.

Figure 1: Diagram of Classroom Action Research (Kennis and Mc Taggart in Burns, 2010)
The subjects of this study were the forth semester students of English Letters Department of Pamulang University. The subjects were the students in 04SIGE005 class. There were 28 students in the class. This research was conducted at English Letter Department of Pamulang University. This department is located in Victor campus of Pamulang University. This study was conducted in the third floor because the class which was chosen as the subject of the study is located there. 04SIGE005 was located in room V.325.

In this research, the writers used field notes which were used to record the teaching learning process in the classroom. Besides, the pre-test and the post-test were also used to measure the students’ pronunciation skill before and after treatment by using phonetic transcription. Pre-test were given in the pre cycle while post-test were given in the end of the cycle. Interview was also be used in this research. The interview questions were designed based on the theory of Castillo and Montoya (2016). According to (Castillo-Montoya, 2016), the interview questions must align to the research questions. The utility of interview questions in the research process (confirming their purpose), while ensuring their necessity for the study (eliminating unnecessary ones) can be increased by the alignment between the interview questions and research questions.

The instruments of the research which were used in every cycle were validated by using judgement expert. The experts who validated the instruments were the lecturers in linguistics of Pamulang University.

The writers used both qualitative and quantitative data in the study. To analyse the qualitative data, stages of data analysis that consists of assembling the data, coding the data, comparing the data, building interpretation, and reporting the outcomes.

The quantitative data were analysed by comparing the mean score of the pre-test and post-test to know the difference before and after the cycle. The improvement was seen from the score in post-test which must be higher than the score of pre-test. The mean score of pre-test and post-test were calculated with the following formula.

\[
\frac{\sum X}{N} = \overline{X}
\]

\[
X \text{ Bar} = \text{Mean}
\]
\[
\Sigma X = \text{Total Score}
\]
\[
N = \text{Number of Students}
\]

Classroom action research could be considered successful if it could exceed the criteria that have been determined that was when 75 % of students were able to achieve the target score. It means during the research, the students had to achieve the target score which was 70. So, if the research could not exceed the criteria, it could be considered fail and had to be done in the next cycle. To calculate the percentage of the students who achieved target score, the writers used the following formula.

\[
P = \frac{F \times 100}{N}
\]

\[
P = \text{the class percentage}
\]
\[
F = \text{total percentage score}
\]
\[
N = \text{number of students}
\]

Based on the statements above, it could be concluded that there were three criteria that determine whether this research was successful or not. The first criterion was the mean of the students’ score had to be 70. The second one was the percentage of the students who passed the target score had to
be 75% and the target score was 70. The last criterion was the mean of post-test had to be higher than the mean of pre-test. This research was successful if it fulfilled all the criteria above.

**FINDINGS**

After implementing phonetic transcription in teaching pronunciation, the writers got the data from each cycle. Then, the data were analyzed to find out whether there was improvement in every cycle. The results were as follows:

**Analysis of Pre-cycle**

The pre-cycle was conducted on February 29th, 2020. The writers gave the test to the students before they were given treatment by using phonetic transcription. Besides, the result of the pre-test was used as the basis of the research. The results of pre-test are provided in the following table which is put on the next page.

| No | Students’ Names | Consonant | Vowel | Word Stress | Sentence Stress | Intonation | Total |
|----|-----------------|-----------|-------|-------------|----------------|------------|-------|
| 1  | 181010600898    | 3         | 3     | 3           | 3              | 3          | 15    | 60   |
| 2  | 181010600892    | 3         | 4     | 3           | 3              | 2          | 15    | 60   |
| 3  | 181010600782    | 3         | 3     | 3           | 3              | 4          | 16    | 64   |
| 4  | 181010600352    | 3         | 3     | 3           | 2              | 3          | 14    | 56   |
| 5  | 181010600384    | 3         | 3     | 4           | 4              | 3          | 18    | 72   |
| 6  | 181010600405    | 2         | 2     | 4           | 3              | 3          | 14    | 56   |
| 7  | 181010600392    | 3         | 3     | 3           | 3              | 4          | 16    | 64   |
| 8  | 181010600808    | 3         | 4     | 4           | 3              | 4          | 18    | 72   |
| 9  | 20101060139      | 0         | 0     | 0           | 0              | 0          | 0     | 0    |
| 10 | 181010600395    | 4         | 3     | 3           | 3              | 3          | 16    | 64   |
| 11 | 181010600899    | 4         | 4     | 4           | 4              | 3          | 19    | 76   |
| 12 | 181010600891    | 2         | 2     | 2           | 2              | 3          | 11    | 44   |
| 13 | 181010600388    | 3         | 3     | 3           | 3              | 2          | 14    | 56   |
| 14 | 181010600374    | 3         | 3     | 2           | 2              | 3          | 13    | 52   |
| 15 | 181010600896    | 3         | 3     | 4           | 4              | 4          | 18    | 72   |
| 16 | 181010600345    | 3         | 3     | 4           | 4              | 3          | 17    | 68   |
| 17 | 181010600902    | 3         | 3     | 4           | 4              | 4          | 18    | 72   |
| 18 | 181010600365    | 2         | 2     | 3           | 3              | 2          | 12    | 48   |
| 19 | 181010600866    | 2         | 2     | 3           | 2              | 2          | 11    | 44   |
| 20 | 181010600875    | 4         | 4     | 3           | 3              | 2          | 16    | 64   |
| 21 | 181010600334    | 2         | 2     | 2           | 2              | 3          | 11    | 44   |
| 22 | 181010600387    | 3         | 3     | 3           | 2              | 2          | 13    | 52   |
| 23 | 181010600400    | 3         | 3     | 3           | 3              | 4          | 16    | 64   |
| 24 | 181010600848    | 2         | 2     | 3           | 3              | 3          | 13    | 52   |
| 25 | 181010600578    | 2         | 2     | 3           | 3              | 2          | 12    | 48   |
| 26 | 181010600394    | 3         | 3     | 3           | 3              | 3          | 15    | 60   |
| 27 | 181010600336    | 3         | 3     | 4           | 4              | 4          | 18    | 72   |
| 28 | 181010600401    | 3         | 3     | 3           | 3              | 3          | 15    | 60   |
|    | Total           |           |       |             |                |            | 404   | 1616 |
Based on the table above, it shows that the total score of the students was 1616. Then, the writers calculated the mean of the students’ scores by using the formula.
The result of the calculation was:
\[
\text{Mean} = \frac{1616}{27} = 59.86
\]
After calculating the mean of the students’ scores, the writer calculated the percentage of the students who passed the target score. As mentioned before, the target score was 70. To calculate the percentage of the students who passed the exam, the writers used the formula.
The result of the calculation was:
\[
\text{P} = \frac{6 \times 100\%}{27} = 22.22\%
\]
Based on the result of the calculation above, it showed that the average of the students’ scores was 59.86. It meant that the result was lower than the target which was 75. Besides, the number of the students who passed the target score was 22.22%. It was also lower that the target which was 75% of students had to passed the target score. So, to improve the students’ pronunciation skill, the writers implemented phonetic transcription in teaching pronunciation.

Analysis of Cycle 1
Cycle 1 was done from February 29th, 2020 until March 6th, 2020. As stated before that the third meeting of each cycle was for test. The results of the test are provided in the following table.

| No | Students’ Names | Scores | Score=Total x 4 |
|----|----------------|--------|----------------|
| 1  | 181010600898   | 4      | 4              |
| 2  | 181010600892   | 3      | 3              |
| 3  | 181010600782   | 4      | 4              |
| 4  | 181010600352   | 3      | 3              |
| 5  | 181010600384   | 4      | 4              |
| 6  | 181010600405   | 3      | 3              |
| 7  | 181010600392   | 4      | 4              |
| 8  | 181010600808   | 4      | 4              |
| 9  | 2015060139     | 0      | 0              |
| 10 | 181010600395   | 4      | 4              |
| 11 | 181010600899   | 4      | 3              |
| 12 | 181010600891   | 3      | 3              |
| 13 | 181010600388   | 3      | 3              |
| 14 | 181010600374   | 3      | 3              |
| 15 | 181010600896   | 4      | 4              |
| 16 | 181010600345   | 4      | 4              |
| 17 | 181010600902   | 4      | 4              |
| 18 | 181010600365   | 3      | 3              |
| 19 | 181010600866   | 3      | 3              |
| 20 | 181010600875   | 4      | 3              |
Using Phonetic Transcription to Improve Students’ Pronunciation Skills

From the data above, the writers analyzed the mean and the percentage of the students who passed the target score. The mean of the students scores was analyzed by using the same formula which was used in pre-cycle. The result was:

$$\text{Mean} = \frac{1784}{27} = 66.07$$

The percentage of the students who passed the target score was also analyzed by using the same formula which was used in the pre-cycle. In the table, the white rows showed the students who passed the target score. The result was:

$$\text{P} = \frac{10 \times 100}{27} = 37.04\%$$

Based on the results of the calculation above, the writer got the data that the mean of the students’ score was 66.07. The mean of the students’ score in test 1 was higher than the mean in the pre-test. There was improvement from the pre-cycle until cycle 1 although it was not significant.

Besides, the mean of the test 1 did not meet the target yet which was 75.

The writers also got the data about the percentage of the students who passed the target score. The result was 37.04% of the students passed the target score. It also showed that there was improvement from the pre-cycle until cycle 1. However, the result was not significant and it also had not met the target yet which was 75% of the students had to pass the target score.

Analysis of Cycle 2

Cycle 2 was done on March 7th, 2020 until March 14th, 2020. As the writers did in the previous cycle, the writers gave the test to the students in the third meeting of cycle 2 after giving them the material and exercise in the first and second meeting. The results of the students in the cycle 2 are provided in the following table:

| No | Students’ Names     | Scores          | Total x 4 |
|----|---------------------|-----------------|-----------|
|    |                     | Consonant | Vowel | Word Stress | Sentence Stress | Intonation | Total |
| 1  | 181010600898        | 4        | 5     | 4           | 4               | 4          | 21     | 84    |
| 2  | 181010600892        | 4        | 5     | 4           | 3               | 3          | 19     | 76    |
| 3  | 181010600782        | 4        | 5     | 4           | 3               | 3          | 19     | 76    |
| 4  | 181010600352        | 4        | 4     | 4           | 4               | 3          | 19     | 76    |
| 5  | 181010600384        | 4        | 4     | 5           | 4               | 3          | 20     | 80    |
| 6  | 181010600405        | 4        | 4     | 4           | 4               | 3          | 19     | 76    |
| 7  | 181010600392        | 4        | 4     | 4           | 4               | 4          | 20     | 80    |
| 8  | 181010600808        | 4        | 4     | 4           | 4               | 4          | 20     | 80    |

Using Phonetic Transcription to Improve Students’ Pronunciation Skills
| No | Students’ Names | Scores | Score= Total x 4 |
|----|------------------|--------|-----------------|
|    |                  | Consonant | Vowel | Word Stress | Sentence Stress | Intonation | Total |
| 9  | 2015061039       | 0       | 0     | 0           | 0              | 0          | 0     |
| 10 | 1810106095       | 4       | 5     | 4           | 4              | 4          | 21    | 84   |
| 11 | 18101060899      | 4       | 4     | 4           | 4              | 4          | 20    | 80   |
| 12 | 18101060891      | 3       | 4     | 4           | 4              | 3          | 18    | 72   |
| 13 | 18101060388      | 4       | 4     | 4           | 3              | 2          | 17    | 68   |
| 14 | 18101060374      | 4       | 4     | 4           | 3              | 3          | 18    | 72   |
| 15 | 18101060896      | 4       | 4     | 4           | 4              | 3          | 19    | 76   |
| 16 | 18101060345      | 4       | 4     | 4           | 4              | 4          | 20    | 80   |
| 17 | 18101060902      | 4       | 4     | 4           | 4              | 3          | 19    | 76   |
| 18 | 18101060365      | 3       | 3     | 4           | 4              | 2          | 16    | 64   |
| 19 | 18101060866      | 4       | 4     | 3           | 3              | 2          | 16    | 64   |
| 20 | 18101060875      | 4       | 5     | 4           | 4              | 3          | 20    | 80   |
| 21 | 18101060334      | 4       | 4     | 3           | 3              | 3          | 17    | 68   |
| 22 | 18101060387      | 4       | 4     | 4           | 4              | 3          | 19    | 76   |
| 23 | 18101060400      | 4       | 5     | 4           | 3              | 3          | 19    | 76   |
| 24 | 18101060848      | 4       | 4     | 4           | 3              | 3          | 18    | 72   |
| 25 | 18101060578      | 3       | 4     | 4           | 4              | 3          | 18    | 72   |
| 26 | 18101060394      | 4       | 4     | 4           | 3              | 3          | 18    | 72   |
| 27 | 18101060336      | 4       | 5     | 4           | 4              | 4          | 21    | 84   |
| 28 | 18101060401      | 4       | 4     | 4           | 4              | 3          | 19    | 76   |
|    |                  |         |       |             |                |            | Total 510 | 2040 |

Based on the table, the writers analyzed the data to find out the mean and the percentage of the students who passed the target score. To get the mean of the mean of the students’ score in the cycle 2, the writers also used the same formulas which was used in the previous cycle. The result of mean was:

\[
\text{Mean} = \frac{2043}{27} = 75.56
\]

While the result of the percentage of the students who passed the target score was:

\[
\text{P} = \frac{23 \times 100\%}{27} = 81.48\%
\]

Based on the results of the calculation, the writers found out that the mean of the students’ score in the cycle 2 was 75.56. It showed that there was improvement from previous cycle since the mean of the students’ scores in cycle 1 was 66.07. Besides, the calculation also showed the percentage of the students who passed the target score was 81.48%. It was higher than the target which was 75% of the students had to passed the target score. It meant that it had met the target of the research. Thus, the writers ended the treatment.

**DISCUSSION**

In this sub chapter, the writers would like to answer the questions in the formulation of the problems by using the research findings above. The details were explained as follows:

**Is phonetic transcription able to improve students’ pronunciation?**

The writers used the result of the tests from pre-test until post-test to answer this question. Based on table 4, the mean of the students’ scores from pre-test until post-test was improved. In the post-test 2, the mean of the students’ scores was 75.56 and it was
higher than the target of the research which was 75.

In the pre-test, there was only 22.22% of the students who passed the target score. The percentage was improved significantly after the students were treated by using phonetic transcription. It could be seen from the table that showed the percentage of the students who passed the target score was 81.48%. The percentage of the students who passed the target score in the post-test was higher than the research target which was 75%.

The writers also compared the results of this study to the results of the previous studies. One of them was the study which was conducted by Pelttary (2015). The results of his study showed that phonetic transcription was able to improve the students’ pronunciation. Pelttary (2015 : 6) figures out that learning phonetic transcription mainly increases learners’ phonetic awareness and the accuracy of their speech. Thus, the result of this study that phonetic transcription was able to improve the students’ pronunciation was supported by the result of the previous study which was conducted by Pelttary (2015).

Based on the explanation above, it could be concluded that phonetic transcription was able to improve the students’ pronunciation skill. It was proved by the improvement of the mean of the students’ score and the percentage of the students who passed the target score from pre-test until post-test 2.

How can phonetic transcription improve students’ pronunciation?

The results of the tests from pre-test until post-test were also used by the writers to answer this question. However, the writers analyzed each aspect of assessment. From table 1 until 3, the writers found the improvement in column consonant and vowel after the students were taught about IPA symbols and phonetic transcription. It showed that the students’ segmental features of pronunciations which are consononats and vowels were improved after they learned pronunciation by using phonetic transcription. It meant that phonetic transcription was able to improve the students’ segmental features of pronunciation. Besides, mastering phonetic transcription was also able to help students to learn suprasegmental features of pronunciation. Based on the writers’ field notes, when the students forgot the rules of word stress, the consulted the dictionary to find on what syllable the apostrophe (‘) was because the apostrophe incated the word stress. Besides, when the students learned about linking, they were helped by phonetic transcription. For example, when the writers asked them if the phrase ‘big giant’ could be linked or not, they consulted the dictionary and the were able to understand that the words in the phrase could not be linked because they realized that letter ‘g’ in the word ‘big’ and the letter ‘g’ in the following word represented different sounds.

This result was supported by the result of one of the previous study which was conducted by Pelttary (2015). In his research, (Pelttari, 2015) argues that phonetic transcription can also be used to teach suprasegmental features such as linking sounds and weak and strong forms of words. (Safari et al., 2013) who conducted a research by using experimental design also found that phonetic transcription which was used to treat the experimental group was able to improve the students’ pronunciation.

After analyzing the score of the students in segmental columns, the writers analyzed the suprasegmental columns and the writers found that the students’ scores in those columns which were word stress,
sentence stress and intonation were also improved. However, the students’ scores in the intonation column did not improve significantly.

Based on the explanation above, it can be concluded that phonetic transcription was able to improve the students’ pronunciation skills by improving segmental features of pronunciation which were consonants and vowels. It also helped the students to learn suprasegmental features of pronunciation such as word stress and linking. However, it didn’t significantly improve another supra segmental feature of pronunciation which is intonation.

CONCLUSION

REFERENCES
Basri, H., & Hasyim, Z. (2018). Using Phonemic Transcription to Improve Students’ Pronunciation. ELTS. 6 (3).
Burns, A. (2009). Doing action research in english language teaching: A guide for practitioners. In Doing Action Research in English Language Teaching: A Guide for Practitioners. https://doi.org/10.4324/9780203863466
Burns, A. (2009). Doing action research in english language teaching: A guide for practitioners. In Doing Action Research in English Language Teaching: A Guide for Practitioners. https://doi.org/10.4324/9780203863466
Burns, A., & Claire, S. (2003). Clearly speaking. Sydney: National Centre for English Language Teaching and Research Macquarie University.
Castillo-Montoya, M. (2016). The Qualitative Report The Qualitative Report Preparing for Interview Research: The Interview Protocol Preparing for Interview Research: The Interview Protocol Refinement Framework Refinement Framework. How To Article, 21(5), 5–6.
Hadumod, B. (2004). Routledge dictionary of language and linguistics. London: Routledge.
Harmer, J. (1991). The Practice of English Language Teaching. London: Longman Group Ltd.
Khansir, A. A., & Tajeri, M. (2015). The Relationship between Spelling and Pronunciation in English Language. Language in India, 15(12), 57–69. http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=111797010&lang=es&site=ehost-live
Major, R. C., & Crystal, D. (1992). A Dictionary of Linguistics and Phonetics. UK: Blackwell Publishing.
Pelttari, J. (2015). Use of phonemic transcription as a teaching method in Finnish schools. 7–10.
Safari, H., Jahandar, S., & Khodabandehlou, M. (2013). The Effect of Using Phonetic Transcription of Words As Footnotes on Iranian EFL Learners’ Pronunciation Improvement. *Indian Journal of Fundamental and Applied Life Sciences*, 3(2), 2231–6345. [http://www.cibtech.org/J-LIFE-SCIENCES/PUBLICATIONS/2013/Vol_3_No_2/JLS...04-012...Hediyeh Safari...The Effect...Improvement.pdf](http://www.cibtech.org/J-LIFE-SCIENCES/PUBLICATIONS/2013/Vol_3_No_2/JLS...04-012...Hediyeh Safari...The Effect...Improvement.pdf)

Vaccarino, F., Comrie, M., Culligan, N., & Sligo, F. (2006). *Action research initiative: the Wanganui Adult Literacy and Employment Programme*. 1–67.
