



The Impact of using Place of Articulation as a Strategy to Improve the Pronunciation of /p/ and /v/ for the Second Year Students in The Department of Languages and Translation at University of Tabuk

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Abstract

This study aims at investigating the impact of using place of articulation chart as a strategy to improve the pronunciation of /p/ and /v/ for the second year in the department of languages and translation at University of Tabuk- Saudi Arabic. To achieve the aim of the study the researcher chose a random sample of 36 students from the same department in the second year, and they were provided with 22 words contain sounds such as : /p/, /v/, /f/, /b/. the used words are: Van, Velvet, Save, Violin, Very, strive, Pass, Pad, Problem, Super, Nap, Shop, Ball, Bad, Belief, Sub, Abandoned, Life, left, after, Safari, knife. The sounds were chosen because he realized that they substitute /b/ and /f/ with /p/ and /v/ because they share the same place of articulation in Arabic and English sound systems. All participants in the sample of the study have never studied any course in phonology, and they were divided into two groups experimental and control, then he used the place of articulation strategy to teach the experimental group for two days, while the control group were taught by using traditional way and in the same time. After that both groups had a post-test to pronounce the same 22 words. The results showed that there is statistical differences at the significance level ($\alpha = 0.05$) in the performance scores in the post-test of /p/ and /v/ attributed to the used teaching method and in favor of teaching pronunciation by using place of articulation. In the light of these results, the study recommended that the curriculum developers can benefit from the place of articulation as a strategy of teaching pronunciation of such sounds in addition to train teachers on using educational programs in it.

Key word: place of articulation.





1. Introduction

Every language has its own pronunciation rules by combining sounds together and spells it out. These sounds are composed of letters, and the speech sound in English is composed of two types (consonants and vowels), and each type is produced in a different way during a speech. Consonants refer to sounds that are produced with an obstruction in the airflow of the air stream. On the other hand, vowels relate to sounds that are produced with free airflow in the airstream from the lungs (Al- Saidat, 2010). In general consonants are represented by the same letter and the sound will be the same, for example consonants such / r, b, f, d, etc/ when not combined with another consonant or a vowel will be pronounced as they are / r/ as /r/ and / b/ as /b/ but the resulting sound will totally change when any consonant is combined with another consonant or a vowel, for example: combining /s/ with /h/ both are consonants but we cannot pronounce them as they are because of the effect of the second consonant on the first so the resulting sound of such a combination will be like this:

/s+/h/= /ʃ/ fricative voiceless sound as in (shore) – /ʃɔ:r/.

The same thing can be said about vowels, in which they can be pronounced as they are when they come alone, while when combined together or with another consonant the pronunciation will be different, because of they will be influenced by the other letters or influencing them. In this study, the researcher is trying to study the production of specific consonants, not combined with any other consonants or a vowel and there is no influence, so the production of these sounds alone is the essence of the problem these sounds are /f/, /v/, /p/, /b/.

These speech sounds keep developing, and starting from the age of one-year-old to eight-years-old. The intended sounds in this study starts to develop between two -three years old, while for the p/b, two and six months - four years old for the sounds/f/, and for the sound /v/ starts to develop at the age four years old till the age five and a half years (Sander, 1972). All the chosen words in this study are of the type that needs direct pronunciation because the focus is on consonants and no additional resulting sounds since there are no merging letters together. The essence of mispronunciation problem at Arab students as cited in (Ahmad , 2011), in which he mentioned that Arab students have such problem when they are exposed to another language consist of such sounds, because there are no counterpart sounds in their mother tongue. There is no counterpart in Arabic for the /p/ sound which is voiceless, bilabial, plosive, nor found any counterpart for the sound /v/ which is voiced, labio-dental, fricative. Amongst all consonants in English, the /v/, and /p/ sounds are difficult to be recognized when pronounced, and they are





substituted by their existed counterpart in Arabic /f/ and /b/ sounds. Some researchers have discussed the substitution and referred to it as the process of choosing the closest sound found in Arabic to take the place of the letter needed to be pronounced. Swan (2001) states that /p/ and /b/ are allophonic and tend to be used randomly:

I baid ten bence for a bicture of big bin* | 'aɪ baid ten 'bens fər ə bicture əv bɪg ben |*

/f/ and /v/ are also allophonic and are usually both pronounced as /f/

It's a fery nice fillage * | it's ə ferɪ naɪs fillage |*

It is all about the native language speech sound system, Arab students learning English only pronounce sounds that are familiar with their speech sound system. Arabic-speaking learners of English may tend to mispronounce words as people / pi:pl/. park / pa:k/ and pen/ pen / in that they tend to substitute the /p/ sound by their native phoneme /b/ thinking that this doesn't make a difference since it does so in their native language (Abdul Rahman, 2003).

Since Arabic does not have a /p/ phoneme, Arab learners of English will uniformly substitute the /p/ with /b/ phoneme in all positions until the divergent negative transfer has been corrected (Al-Arishi, 1992). The errors that learners of English speaking make are systematic errors and not accidental, i.e. they exist in specific situations and positions. Moosa (1972) showed that systematic errors happen when there is no existence of the sound in the mother language of the speaker of English, therefore this speaker use what is called substitution. The /v/, /p/ sounds do not exist in Arabic and the only two closest counterparts for them are /b/ and /f/ sounds. The substitution also happens when pronouncing different sounds, and the existence of the sound is not the only reason that makes the learners of English use, actually the dialect is another reason we can add to this. Arab students learning English from different Arab countries use substitution according to their dialects. As we know that Arab speakers are distributed in twenty-two countries and all these countries speak Arabic, but with different dialects, and different sounds. For example, the /θ/, /ð/ can be found in some Arab countries and not in others, in Sudan, Syria, Egypt, and many Arab countries these sounds are substituted with /z/ instead of /ð/, and /s/ instead of /θ/. Saudi speakers learning English only use substitution in /p/ and /v/ but not in others, because in Saudi dialect they have /θ/ and /ð/, and according to what is mentioned before substitution only occur when there is no counterpart sound in the mother language. Place of articulation is an essential thing for learners of English pronunciation, and it can be considered as a majical tool to be used especially with those problematic sounds mentioned above. According to Roach (2009), he described place of articulation as the spot in the mouth responsible





for producing a consonant, in which there must be obstruction to the air to make it difficult to pass through the mouth.

The idea of this research came from the author's observation of some students in the department of languages and translation in the University of Tabuk. Mispronunciation of speech sounds such as /p/ /b/ and /f/ /v/ need some practice, because students directly substitute their familiar counterparts in Arabic as /b/ and /f/.

2. Purpose of the Study

The main aim this study is to investigate the impact of using place of articulation in as a strategy of teaching to improve the pronunciation of /p/ and /v/ for the second year students in the department of languages and translation at University of Tabuk- Saudi Arabia, and generalize the results to other Arab students who have the same condition of learning and sharing the same dialect. It will also connect mispronunciation to the sound system in both Arabic and English by making Arab learners pay attention to the place of articulation, and place of articulation as two essential factors controlling pronunciation. Finally, it will provide some suggestions to curriculum designers and teachers to focus on pronunciation and to improve the process of teaching this subject.

3. Research Questions

1. Does using the place of articulation help Saudi students to improve pronunciation of /p/ and /v/ sounds?

4. Hypotheses of the study

- 1- There is no statistical difference at a level of significance ($\alpha =0.05$) in improving pronunciation skill of /v/ sound at Saudi students, attributed to teaching by using the place of articulation strategy and traditional way.
- 2- There is no statistical difference at a level of significance ($\alpha =0.05$) in developing pronunciation skill of /p/ sound at Saudi students, attributed to teaching by using the place of articulation strategy or traditional method.

5. Previous Studies

Many researchers have conducted studies on concerning this issue either by noting some cases in pronunciation problems in order to discuss problems faced by Saudi learners of English or by any EFL learner discussing the same exact pronunciation problem concerning these four





sounds /p/, /b/ and /f/ ,/v/ such as Mukattash (1983), Binturki (2008), Khan (2011), and many others. Maybe the most considerable study reviewing the main issue in this paper is done by Mukattash (1983) in which he specified two general errors made by Arab learners. First, errors including proper pronunciation, morphology, knowledge of the use of syntax, and spelling; Second, most Arab students have difficulty expressing themselves contentedly and competently either when faced with scholarly subjects or usual everyday issues.

Binturki (2008) in his study demonstrates that Saudi ESL speakers do have difficulty with the voiced inter-dental fricative /v/ and to lesser extent, with /p/ and /r/. The study also found that difficulty was closely related to certain word positions. The findings of this study are important to teachers of English as a second language especially those who deal with Saudi English speakers. Al Saidat (2010) conducted a study concerning an analysis of English phonotactics in the English of Arab learner as a foreign language to determine the type of pronunciation difficulties they encounter. This study aimed at:

1. Identifying and analyzing pronunciation errors made by Arab learners of English.
2. Finding the source of errors.
3. Suggesting some procedures that help teacher and student to overcome the areas of difficulty.

The findings of this study shows that interference of the learner L1 is the source pronunciation errors, and it concluded with the following recommendation:

1. Syllable pattern of the learner L1 must be introduced.
2. A comparison between syllable patterns of both L1 and L2 must be introduced.
3. Make a good emphasis on Foreign language syllables in order to overcome the errors in the future.

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following recommendation: 1. Syllable pattern of the learner L1 must be introduced. 2. A comparison between syllable patterns of both L1 and L2 must be introduced. 3. Make a good emphasis on foreign language syllables in order to overcome the errors in the future. Another study on the analysis of Somali pronunciation errors by Conway,(2008). Aimed at investigating why Somali students have pronunciation problems in consonants especially /p/,/b/and /f/, /v/. It also discusses the influence of Arabic language in Somali which in its turn changed some language features in Somalia Language, since it was an official language due to Islamic time which back to the pre-colonial era in Somalia. This study focused on studying the place of articulation and the vowel length in phonemes like [p, b, f, v, t, d] to find out the reason behind making Somali students misunderstood by native English speakers. Arabic language took a good place in this study and was compared to Somali in which the researcher consider the pronunciation errors made by Arab learners of English are the similar those made by Somali learners of English since the two languages do not have some phonemes in their speech sound system like [p, v]. The main question of this study: does Somali pronunciation of these sounds differ from standard English pronunciation? In order to answer this question the researcher chose eight female Somali students from a single Twin City elementary school with the exception of one girl who was born in the United States, and the participants were divided into two groups (beginners, intermediate) English Language Speakers ELLs. Word list was one of the many techniques to collect the data and these word lists consists of minimal pairs of the phonemes, and the speech samples were recorded by using MB1055 and a microphone of Sony ECM microphone. The results concerning the influence of place of articulation on the phonemes [p, b, f, v, t, d] showed that beginner group used the voiced stop /v/ sound instead of the voiceless stop /p/ sound in the word tap, while the intermediate group were using voiced and voiceless word initial and final /p/. According to the researcher this can be attributed to the place of articulation between medial and final positions within the word. The fricative voiceless /f/ sound was easy to be produced by the participants and it was correctly pronounced in all positions, and for the fricative voiced /v/ sound all participants except one in the intermediate group did not pronounce it. The researcher concluded with the following recommendations: 1. Clear intelligibility can occur when the /p/,/b/ consonants constitute minimal pairs. 2. Somali students need to lengthen the English /p/ and shorten the /b/ in order to reduce accent and increase intelligibility since /p/ is produced with more aspiration. 3. Somali English learners need to know more about the fricative /v/. Conway (2008). Khan (2011) shows the importance of applied linguistics in general and English language teaching, and tries to make an error/contrastive analysis between Arabic L1 and English L2. This study shows the learners` L1 interference with L2 has a great effect on their pronunciation as on the other aspects of language. The study shows that pronunciation should be taught well in addition to culture in order to make a good communication of language because pronunciation





build the base to make a good communication, and mispronunciation make what the researcher called (communication breakdown). The study showed the following results: 1. Pronunciation is the first aspect of the TL in which Arab learners face difficulties. 2. Saudi learners always consider the British teachers as the best option in spite the fact that they don't belong to the same culture. 3. An Arab learner of English will find difficulties in distinguishing sounds like [p, b, f, v] (Khan (2011)).

6. Methodology

To achieve the aim of the study, the researcher used the random sampling process to select 36 second year students from the department of languages and translation at the University of Tabuk , and they were provided with 22 words contain sounds such as : /p/, /v/, /f/, /b/, and they were asked to say these 22 words and their pronunciation was recorded. Each student was told to read 22 words contain sounds such as : /p/, /v/, /f/, /b/ as a pre-test. After that, the researcher received help from two teachers who are native speakers of English and asked them to listen to the students' pronunciation and write a transcription. The researcher recorded the results, then he divided students into experimental and control group, and he used the place of articulation strategy to teach the experimental group for two days while the control group was taught by using the traditional way at the same time. After that, both groups had a post-test to pronounce the same 22 words to compare the change in their pronunciation after using the place of articulation as a strategy to teach pronunciation. The researcher used statistical program SPSS to analyze the results of the two tests. Table (1) shows their responses:

Table (1)

Arithmetic means and standard deviations for students in the sample of the study in pronunciation pre-test (p/b/f/v).





group	N	Mean	Std. Deviation
Pre-test control	18	5.0000	.00000
(b) experimental	18	5.0000	.00000
Pre-test control	18	5.0000	.00000
(f) experimental	18	5.0000	.00000
Pre-test control	18	.1111	.47140
(v) experimental	18	.1111	.47140
Pre-test control	18	.0000	.00000
(p) experimental	18	.0000	.00000

Table (1) shows that all students in both control and the experimental group who had the pre-test, have pronounced all words the sounds /b/ and /f/ correctly, and they were like this: five words contain /b/ and five words for /f/. We also can see that all students in experimental and control group couldn't pronounce /p/ in six words in the pre-test, also the table shows that only two students, one in the experimental group and one in the control group pronounced the /v/ sound correctly which means the equality and validity of both groups to apply the experiment. In the light of the question of the study the following hypotheses were formed: 1- There is no statistical difference at a level of significance ($\alpha =0.05$) in improving pronunciation skill of /v/ sound at Saudi students, attributed to teaching by using place of articulation strategy and traditional way. 2- There is no statistical difference at a level of significance ($\alpha =0.05$) in developing pronunciation skills of /p/ sound at Saudi students, attributed to teaching by using place of articulation strategy or traditional method. To test the validity of the first hypothesis (t-test) for independent samples was used according to the responses of participants in both experimental and control groups in the pronunciation test for those words consist of /v/ sounds which were composed of 6 words, and table (2) indicates the results:

Table (2)

Results of (t-test) for two independent samples, to show the differences between experimental and control groups, in the pronunciation of /v/ as a pre-test.





	group	N	Mean	Std. Deviation	t	Sig.
Post-test (v/p)	control	18	.5556	1.50381	15.360	0.000
	experimental	18	6.0000	.00000		

According to table (2) the average performance of the control group participants in the pronunciation of /v/ in the post-test was (0.5556), with a standard deviation (1.05381), while the average performance of the control group was (6.00), with a standard deviation (0.000). To show the arithmetic means, the value of (T) reached (15.316) with statistical level (0.000) which is lower than the significance level ($\alpha = 0.05$) in favor of the experimental group which means the effectiveness of using place of articulation strategy in improving the pronunciation skill of /v/ sound at Saudi students. The researcher believes that using place of articulation strategy has provided students with the necessary knowledge to realize their pronunciation mistake when pronouncing /v/ sound and be aware of substitution of /v/ with /f/, because the way of pronunciation depends on the student's awareness of the place of articulation and the place responsible of producing this sound, and this explains the previous results, and the following example shows this necessary knowledge: /v/ is labio-dental voiced. To test the second hypothesis (t-test) for independent samples was used according to the responses of both experimental and control group in the post test for /p/ sound in 6 words, and table (3) shows the results:

Table (3)

The results of (t-test) for independent samples to show the differences between experimental and control groups in the post-test of /p/ pronunciation.

	group	N	Mean	Std. Deviation	t	Sig.
Post-test (v/p)	control	18	.6667	1.37199	3.554	0.001
	experimental	18	2.5556	1.78958		

According to table (3) the average score of both experimental and control group in the post-test in the pronunciation of /p/ was (0.6667) with a standard deviation (1.37199) which is less than the level of experimental group performance which was (2.5556) with a standard deviation (1.78958).





To show the statistical significances of these differences (t-test) was used and the value of (t) was (3.554) with a level of statistical significance (0.001) which was less than ($\alpha = 0.05$) which means that there was statistical differences attributed to the teaching method and in favor of the participants of experimental group who studied the pronunciation by using place of articulation. The researcher again believes that teaching pronunciation by using place of articulation as a strategy for Saudi students who make mistakes by substituting /p/ sound with /b/ when pronouncing it, has provided them with the necessary knowledge to realize this mistake, because controlling the process of producing this sound depends on the knowledge of the speaker in the place of articulation, for example, each student must realize that /p/ is bilabial, stop, oral.

If all students realize the way of producing sounds such as /v/ and /p/, they will control the motion and the shape of the mouth and the tongue till they become able to produce these sounds easily in the future. This will also enable them to realize the difference between /b/ and /p/ or /f/ and /v/ and any other sound produced from the same place of articulation but in a different manner.

7. Conclusion

The use of place of articulation must be accompanied with place of articulation, since the sounds used in this study is produced in the same place of articulation, then Arab students who attempt to pronounce /p/ and /v/ will automatically substitute them with /b/ and /f/ instead, because the latter are familiar sounds and do exist in their sound system. As a result, the process of using manner and place of articulation charts will help those students to be aware of any pronunciation mistake when they pronounce these sounds once they understand the difference between them. Using place of articulation strategy can be used with all Arab students making the same pronunciation or any speakers of other languages who do not have these sounds in their sound system. Finally, there must be more studies in the future discuss the mispronunciation at Saudi students in particular and other Arab students in general.

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