



ISSN: 1994-4217 (Print) 2518-5586(online)

Journal of College of Education

Available online at: <https://eduj.uowasit.edu.iq>

Dalal Munther Faraj

University of Mosul.  
College of Education  
for Humanities,**Email:**

dalalmunther.f@uomosul.edu.iq

**Keywords:**Phonological Activities,  
Phonemic Activities,  
Sound Awareness**Article info****Article history:**

Received 10.AUG.2023

Accepted 25.SEP.2023

Published 20.NOV.2023



## The Role of Explicit Teaching Activities in EFL University Students' Distinction between the Sounds /p/ and /b/

### A B S T R A C T

Every language has its own phonetic inventory. Hence, learning the pronunciation of any new language, in our case English as a Foreign language, can be a challenging task as there are some sounds that are difficult to pronounce and are almost completely unrelated to any sounds that learners already familiar with. Also, the application of incorrect phonological patterns when speaking or reading results in quite unnatural sounds. Such a problematic has to be attended to from the beginning of learners' learning to ease the learning process and minimize the challenges that may be encountered throughout this process.

The current research aims to help the students overcome the difficulty of not distinguishing between the sounds /p/ and /b/ which may result in changing the meaning of the words. It hypothesizes that such a difficulty can be overcome by developing students' phonological and phonemic awareness by teaching them explicitly some activities that may positively lessens the problem of wrong pronunciation and achieve better performance.

Accordingly, and to apply the preceding problematic issue to the sound /p/ which does not exist in Arabic language, 400 number of first year students, English Department, College of Education for Humanities, University of Mosul, were tested by listening to individual and contrasted words, reading a text containing words with the sounds /p/ and /b/, and then, as a group, telling a story with the use of the suggested words. 40 students were found out to have the problem of replacing the sound /p/ by the sound /b/ in the initial, medial or final positions of the words. On this basis, the students were divided into two groups, control and experimental and were differently taught. The findings indicate the experimental group achieved better than the control group as it was taught according to the explicit method by Schmitt (2010) that has been adopted as a model in the current study

© 2022 EDUJ, College of Education for Human Science, Wasit University

DOI: <https://doi.org/10.31185/eduj.Vol53.Iss1.3644>

## دور الأنشطة التعليمية الواضحة في تمييز طلاب الجامعة بين الصوتين /p/ و /b/

م. دلال منذر فرج

جامعة الموصل / كلية التربية للعلوم الانسانية

### الملخص

كل لغة لها مخزونها الصوتي الخاص. ومن ثم فإن تعلم نطق أي لغة جديدة، كحالنا الانكليزية كلغة أجنبية، يمكن أن يكون مهمة صعبة نظرا لوجود بعض الأصوات التي يصعب نطقها ولا علاقة لها تماما بأي أصوات مألوفة لدى المتعلمين بالفعل. كما أن تطبيق الأنماط الصوتية غير الصحيحة عند التحدث أو القراءة يؤدي إلى أصوات غير طبيعية تماما. يجب معالجة مثل هذه المشكلة منذ بداية تعلم المتعلمين لتسهيل عملية التعلم وتقليل التحديات التي قد تتم مواجهتها خلال هذه العملية.

يهدف البحث الحالي إلى مساعدة الطلاب على التغلب على صعوبة عدم التمييز بين الصوتين /p/ و /b/ والتي قد تؤدي إلى تغيير معنى الكلمات. ويفترض انه يمكن التغلب على هذه الصعوبة من خلال تنمية الوعي الصوتي والفونيمي لدى الطلاب من خلال تعليمهم بشكل واضح بعض الأنشطة التي قد تقلل بشكل ايجابي من مشكلة النطق الخاطى وتحقق أداء أفضل.

وعليه، ولتطبيق الإشكالية السابقة للصوت / p / الذي غير موجود في اللغة العربية، تم اختبار ٤٠٠ طالب من طلاب السنة الأولى، قسم اللغة الإنجليزية، كلية التربية للعلوم الإنسانية ، جامعة الموصل، من خلال الاستماع إلى كلمات فردية ومتباينة ، وقراءة نص يحتوي على كلمات بالأصوات / p / و / b / ومن ثم كمجموعة يروون قصة باستخدام الكلمات المقترحة. تبين أن ٤٠ طالبا يواجهون مشكلة استبدال الصوت /p/ بالصوت /b/ في المواضع الأولية للكلمة، الوسطى أو النهائية. وعلى هذا الأساس تم تقسيم الطلاب إلى مجموعتين ضابطة وتجريبية وتم تدريسهم بشكل مختلف. وتشير النتائج إلى أن المجموعة التجريبية حققت نتائج أفضل من المجموعة الضابطة حيث تم تدريسها وفق الطريقة الواضحة من قبل شमित (٢٠١٠) والتي تم اعتمادها كنموذج في الدراسة الحالية.

**الكلمات المفتاحية:** الأنشطة الصوتية ، الأنشطة الفونيمية ، الوعي الصوتي

### 1. Introduction

In the process of learning a new language, in our case English as a foreign language (EFL), some sounds may be difficult for learners to pronounce especially when they are unrelated to, i.e. do not exist in, the learner's native language. A good and common example are the sounds /p/ and /b/ which represent the source of a variety of pronunciation problems for Arab learners. Though the learners may have a good mastery of English in terms of understand and speak it, they may still have trouble with /p/ and /b/ as all words containing these two sounds may sound alike to them. Learners can only tell the meaning of such words when in context, otherwise they fail to do so since in Arabic, the sounds /p/ and /b/ are variants of the same sound.

To overcome the problem of not differentiating between the pronunciation of /p/ and /b/ sounds, learners have to approach such problematic sounds from different angles. They can start with auditory information, i.e. letting the ear hear the sound by constant listening based on the repetition of the words and sentences that contain the problematic sound(s). Yet, such a procedure may not be enough for learners to deduce how the sound is pronounced. Learners have to shift to visual information, i.e. how a person's face or mouth looks like in terms of the jaw position, presence or absence of lip rounding, position of the tongue (if visible), when the sound is pronounced. Additionally, the learner can be involved and engaged in a number of activities to practice the use of the problematic sounds in larger context, i.e. combination of words or sentences, before practicing them individually since sounds (particularly consonants) are rarely expressed in isolation in any language; instead they exist in relation to other sounds.

### **1.2 Problem of the Study**

A number of students tend to replace the sound /p/ with /b/ in such a way that makes different words sound the same. Applying incorrect phonetic patterns when speaking or reading results in quite unnatural words that fall on the listener's ear and creates difficulty in understanding because the change in the meanings of meaning of the words.

### **1.3 The Aim of the Study**

The study aims at providing EFL students with the required strategies and techniques to overcome the problem of not distinguishing between the sounds /p/ and /b/ as they are engaged in speaking or reading English..

### **1.4 Hypothesis**

The use of explicit phonological and phonemic activities inside the classroom can help EFL students overcome the difficulty of not distinguishing between the sounds /p/ and /b/ while speaking or reading English.

### **1.5 The Rationale of the Study**

The choice of this topic reflects meeting EFL students' needs in distinguishing between the sounds /p/ and /b/ while speaking or reading English. Rather than mimicking the teacher, the students are engaged in a number of autonomous-learning activities so as to overcome the problem already referred to.

### **1.6 Research Questions**

The research is based on two questions:

1. Do phonological activities positively impact EFL students' ability to distinguish between the sounds /p/ and /b/?
2. Do the phonemic activities help EFL students distinguish between the sounds /p/ and /b/?

## **2 Theoretical Background**

Articulating the consonant sounds correctly has to be ensured before initiating instruction (Moats, 2023: 19). Phonetically, the sounds /p/ and /b/ are consonants that are produced and received as acoustic and physiological events. Phonologically, they are units that function at the margins of syllables, either singly or in clusters (Crystal, 2008: 103;) (Schmitt, 2010: 207).

Under the title "Theoretical Background", light is shed on the production of the sounds /p/ and /b/, their positions and phonetic environments. Also, a number of previous studies on teaching the difference between /p/ and /b/ are mentioned.

## **2.1 Sound Production (Sound Articulation)**

The production of consonant sounds involves three main factors, namely the place of articulation, the manner of articulation, and voicing. There is a further factor represented by the force of articulation that clearly describes the individual consonant phonemes and distinguishes them from each other (Roach, 2001: 20;) (Celce-Murcia et al., 2010: 56). The air that is used in the production of the sound comes originally from the lungs, travels through the larynx, where the vocal cords are located, and finally forms specific sounds in the vocal tract (the area where sounds are produced). On sound production, the articulators of the lower surface in the vocal tract move toward the articulators of the upper surface. The soft palate is a movable organ that permits the opening and closing of the velopharyngeal passageway (Yavas, 2011: 4). In the following section, reference will be made to the three factors already referred to.

### **2.1.1 Place of Articulation**

The place of articulation means which speech organs are in which positions in order for a particular consonant sound to be produced (Celce-Murcia et al., 2010: 57). It describes where the consonantal obstruction by the tongue or lip configuration placement can occur in the vocal tract; the point at which the air stream is obstructed in the vocal tract (Yavas, 2011: 6).

The sounds /p/ and /b/ are studied together as a pair as they are both produced in the same part of the mouth (Manuela, 2023: 1), where the airflow is modified by forming a contraction between the lower lip and the upper lip (the outer end of the vocal tract) that are pressed together to completely stop the airflow. As such, they are referred to as 'bilabial' sounds (Roach, 2001: 21, 112;) (Carr, 2013: 2). When two parts of the vocal tract move close enough together and the soft palate is raised to obstruct the air stream, consonants are produced (Lane, 2010: 118). (Kelly, 2000: 48). After the pressure has been built up, the closure is released abruptly (Yavas, 2011: 57), and air passes through the oral cavity (mouth) (Celce-Murcia et al., 2010: 56).

### **2.1.2 Manner of Articulation**

The airflow is obstructed in the vocal tract (Roach, 2009: 25). The interaction between the articulators and the airstream, as the sound is produced, is referred to as the manner of articulation; i.e. the way in which the air stream is obstructed (Kelly, 2000: 47;) (Roach, 2001: 110). Generally speaking, to identify the manner in which a sound is articulated, three different degrees of constriction can be mentioned, viz. complete closure, close approximant and open approximation, to form three different categories of consonant, namely stops, fricatives and approximants respectively.

As for the sounds /p/ and /b/, they are stop consonants, because the articulators form a stricture of complete closure with the lower and upper lips and completely block the flow of air from the lungs with the soft palate raised to allow no air to escape (Carr, 2013: 5-6) (see also Lane, 2010: 120). This closure is made at some point, air is compressed behind and increases to be released explosively (Kelly, 2000: 6). The escape of compressed air produces

a noise that is loud enough to be heard. This noise is called plosion; i.e. a short burst of noise produced by the escape of compressed air when the closure of a plosive consonant is released (Roach, 2009: 26;) (Crystal, 2008: 372) (see Celce-Murcia et al., 2010: 58-64). It is usually referred to as aspiration that is produced just when a stressed vowel follows as with 'peal' and 'repeal' and is symbolized by a small superscript [h] following the consonant (Roach, 2001: 108;) (Carr, 2013: 12).

If learners do not pronounce /p/ with enough aspiration before stressed vowels, 'pig' for example may sound as 'big'. Unaspiration is produced with unstressed syllables as 'polite', before a syllabic consonant as 'pickle', in /s/ cluster as 'spot', and in final position as 'cup' where no audible release can be heard (Celce-Murcia et al., 2010: 78-79;) (Lane, 2010: 247, 259;) (Yavas, 2011: 58-59). The difference between /p/ and /b/ can be felt by putting the back of the hand or a small slip of paper in front of your mouth, where more air hitting your hand or the paper is noticed with /p/ than /b/ due to the fact that the release of the puff of air from the mouth, which does not do any aspiration when the sound /b/ is produced (Manuela, 2023: 2) (see also Crystal, 2008: 39;) (Lane, 2010: 151).

### 2.1.3 Voicing

The larynx is on the top of the trachea. It is composed of a cartilage that is held together by ligaments and contains the vocal cords that lie horizontally behind the Adam's apple. By the space between the vocal cords, the glottis, different configurations for sounds, namely 'voiced' and 'voiceless', can be assumed. If the cords are open or apart, the air coming from the lungs passes freely through the glottis, where 'voiceless' sounds such as /p/ are produced. Contrariwise, if the cords are brought together, the air coming from the lungs passing through the vocal cords causes vibration, the result will be 'voiced' sounds such as /b/ (Esther, 2022: 1). The cord vibration is not a muscular action. (Yavas, 2011: 5-6).

Voicing can be tested by placing one's fingertips alongside the vocal cords (the Adam's apple) and pressing gently while alternating between /b/ and /p/ until a vibration for the voiced sound only is felt (Kelly, 2000: 48; Underhill, 2012: 2). Also, if the ears are closed with the fingers and then /p/ and /b/ are produced, the vibration can be felt the head with /b/ but not with /p/ (Manuela, 2023: 1) (see also Hurst, 2021: 1;) (Sabin, 2022: 1).

### 2.1.4 Force of Articulation

With force of articulation, fortis (strong) and lenis (weak) terms are used, for sounds that have articulation in the same way. Some phoneticians claim that /p/ is produced with greater force than /b/, where higher air pressure is in the vocal tract for it requires a more forcefully expelled airstream than lenis sound. Holding a small slip of paper in front of your mouth and producing /p/ and /b/, the paper will flap for /p/ and hardly move for /b/ (Kelly, 2000: 5, 47; Roach, 2009: 28-29). The fortis stop /p/ is pronounced with more muscular energy, higher intra-oral pressure, and a stronger breath effort than its lenis counterpart /b/ (Yavas, 2011: 57-58). With /p/ there is more breath force accumulated behind the lips before it is released, but less with /b/. Also, the lip muscles with /p/ are softer and stretchy, so the air can be accumulated and eventually set the lips apart. On the contrary, the buildup of pressure with /b/ is behind the vocal cords instead of the lips, thus the lips need not be as flexible, they do not pop and they do not blow the sheet of paper (Underhill, 2012: 2-3;) (Victorhugor, 2018: 1).

## 2.2 Sound Position

Articulation of the consonant sounds /p/ and /b/ varies according to where they occur. They can occur at the beginning of a word (initial position), between other sounds in a word (medial position) or at the end of a word (final position). The difference between /p/ and /b/ at the beginning of a word is the feature of aspiration. Other effects of positional variation include vowel lengthening, and released versus unreleased stop consonants (Roach, 2009: 26;) (Celce-Murcia et al., 2010: 85).

### 2.2.1 Initial Position

In the initial position, the difference between /p/ and /b/ is represented by the feature of aspiration for the voiceless sounds. The release of /p/ is followed by a burst of noise, i.e. audible plosion. After the release, there is a period during which the air escapes through the vocal folds, making a sound like /h/. This is called aspiration. The release of /b/ is followed by a weak plosion. In initial position, /p/ can be preceded by /s/ and in this case it will be unaspirated. As such, English speakers will receive it as /b/, as in 'speed', 'spread' and 'splash'. /b/ cannot be preceded by any consonant (Lane, 2010: 151;) (Victorhugor, 2018: 2).

### 2.2.2 Medial position

In medial position, the difference in pronunciation between /p/ and /b/ is the same as with the initial position, the aspiration. It depends on whether the syllables preceding and following the plosive are stressed or not; hence determining which medial voiceless stop is aspirated and which is not (Roach, 2009: 27-28). For example, in the case of the word 'apartment', if a strip of paper is held in front of the mouth and moves as the second syllable is pronounced, the voiceless stop at the beginning of a stressed syllable is aspirated in the same way as an initial voiceless consonant. But with the word 'bumper', the strip of paper held in front of the mouth should not flutter for the medial voiceless consonant falls at the beginning of an unstressed syllable. The sound /b/ is unaspirated in both cases (Celce-Murcia et al., 2010: 86-87).

### 2.2.3 Final position

In final position, the difference between /p/ and /b/ is that the vowel preceding /p/ is shorter than with /b/. The effect of /p/ is mostly observed when the vowel is one of the diphthongs or long vowels (Roach, 2009: 28). The words 'rip' and 'rib' are discriminated on the basis of vowel length, where /p/ in final position is preceded by a shorter vowel sound than its voiced counterpart /b/, besides the non-release for the voiceless stop i.e. the process of articulation is not completed. This allophonic variation is indicated by the diacritic mark [ ° ], [p°]. Similarly with [b°], air is not released subsequently (Celce-Murcia et al., 2010: 79-80, 91-93) (see also Lane, 2010: 153-156). Pronouncing /p/ as /b/ after a long vowel means (p) is used incorrectly (Kelly, 2000: 23).

## 2.3 Phonemic Distribution(Phonemic Environment)

Phonemic analysis deals with the distributional function of sounds. Two or more phonetically similar sounds (share place of articulation, manner of articulation features, or voicing) as /p/ and /b/ may have a different phonemic functional status that is determined by their distribution in a given sound system. Sounds are of two different types of distribution. If they are able to occur in the same environment, they are said to be in an overlapping

distribution, whether in word-initial, medial or final position, e.g. 'rap' and 'rab'. When they are in overlapping distribution, the substitution of one for the other can change the meaning of the word, thus they are said to be in contrastive distribution (difference in phonemic), and they are regarded as different phonemes which are enclosed between slanted lines // (Yavas, 2011: 31-32, 37, 39, 51).

Every phoneme has its own allophones. The phoneme /p/ has three allophones, namely [p] the unaspirated, [p<sup>o</sup>] the unreleased and [p<sup>h</sup>] the aspirated, depending on where it occurs in a given word. These allophones share phonetic features. They have fixed distribution and are enclosed in square brackets. Though they are perceptibly different, they do not distinguish words (Celce-Murcia et al., 2010: 5;) (Yavas, 2011: 34, 40). They usually appear in complementary distribution; i.e. a given allophone appears in one predictable environment, but the other allophones never appear in that environment (Anderson, 2021: 1). Examples are the realization of /p/ in the word 'put' which is aspirated (before stressed vowels), while in the word 'slip', the realization of /p/ is unaspirated (Roach, 2009: 33;) (Yavas, 2011: 43). In other words, they are not contrastive; they do not lead to any change in meaning change (Schmitt, 2010: 207;) (Anderson, 2021: 1). Allophones of the same phoneme can also be found in free variation (i.e. it is random which variant appears in any environment, though most allophones are entirely predictable and phonetically conditioned) and do not contrast or make any change in meaning change, yet indicate a nonnative pronunciation. (Yavas, 2011: 45).

## **2.4 Previous Studies**

The particular contrast between /p/ and /b/ has been an important area of investigation in phonetics and phonology over the last decades. In the fields of second language (L2) and foreign language (FL) speech learning or reading, different studies have been carried out by a lot of researchers investigating earners' pronunciation miss-distinction between the sounds /p/ and /b/ in English, as the phoneme /p/ does not exist in the phonemic inventory of Arabic, and is replaced with the available sound /b/.

### **2.4.1 Khalil (1981)**

Khalil (1981) in his study entitled "Areas of Difficulty for Arab Learners of English" states that the need is for an 'analysis of errors' rather than a 'prediction of errors', which helps syllabus designers to weigh what is more and what is less difficult in the target language. The phonetic features of particular sounds in L1 are likely to be transferred to L2. As for [p] and [b], they are regarded as variants of the same phoneme /b/ in Arabic and the phoneme /b/ is frequently substituted for /p/. There are rules students have to follow: the difference is determined by the positions they occupy in the syllable or word; in initial position, aspiration rather than voicing makes the distinction between the two phonemes, e.g. [p<sup>h</sup>ɪn]-[bɪn], while in final position, voicing is irrelevant; what brings out the opposition is the length of the preceding vowel, e.g. /kæp/ /kæb/, the /a/ sound in the former is shorter than in the latter. But these rules are not found to be effective for students in their use of the sound /p/ during communication.

### **2.4.2 Jenkins (2009)**

Jenkins (2009) in his study entitled "/p/ versus /b/. A Helpful Tip for Teachers of Arab Learners" indicates that some Arab learners face difficulty in pronouncing and hearing the difference between /p/ and /b/ phonemes since Arabic has no /p/ sound. In this case, the

teacher should help in correcting students' pronunciation by repeating the correct form until he thinks the student hears the difference. Besides, visualizing may provide a more tangible assistance by a teacher who is holding up a piece of paper as he writes the letters /b/ and /p/ on the board. He can instruct the students to look at the letter /b/ and say it and asks if anything appears to the paper. The students do not comment since the pronunciation of /b/ does not produce an explosion of air from the mouth. While with /p/ sound, the students respond that the paper moved when the teacher said the letter (p). This is so because in pronouncing the letter (p), there must be an explosion of air coming out of the mouth. If that does not happen, students should realize that they are not pronouncing the letter correctly. This can act as a self-assessment tool for students. But it does not work enough as a solving tool for all students which may bring boredom for them.

#### **2.4.3 Alfehaid (2015)**

Alfehaid (2015) in his study entitled "Pronunciation Problems Arab Speakers Encounter While Learning English" claims that Arab learners find it difficult to distinguish between sounds /p/ and /b/, as they cannot properly pronounce /p/ due to the fact that they do not have a good sense of how this sound is produced. /p/ is a voiceless and produced by lips; hence a speaker should push the air stronger outside the mouth. As the sound /b/ exists in Arabic, they can pronounce it successfully. In English, pronouncing the sound /b/ instead of /p/ changes the meaning of the words and leads to a risk of misunderstanding. For example, the word 'beat' has a meaning different from that of from 'peat'. Learners should be more aware of the difference in meaning first and then try to pronounce them together and compare.

#### **2.4.4 Hilmi et al. (2020)**

Hilmi et al. (2020) in their study entitled "The Production of the English Stop Voicing Contrast by Arab L2 Speakers of English" point out that as the English voiceless stop /p/ is absent in the consonant inventory of Arabic, they have empirically explored the English stop voicing contrast as produced by Arab native speakers by focusing on Voice Onset Time (VOT) as an acoustic parameter that marks the differences between the two languages, English and Arabic. They examined the extent to which Arab L2 speakers of English maintain the English stop voicing contrast for /p-b/, and whether the L2 VOT continuum by Arab L2 speakers follows or deviates from the L1 VOT continuum in English. The acoustic phonetic experiment involved elicited materials of /p-b/ from four male native speakers of Arabic. The tokens were recorded in isolation and in a carrier sentence. The data were then acoustically analyzed following standard segmentation, annotation and measurement criteria. The results reveal that Arab L2 speakers can maintain the English stop voicing contrast across all places of articulation, with voiced stops usually being produced with "normal" negative VOT (prevoicing) and voiceless stops usually being produced with "normal" positive VOT (devoicing) and also accompanied with aspiration in the long-lag region. There were also exceptional cases of "abnormal" negative VOT (prevoicing) for voiceless stops and "abnormal" positive VOT (devoicing) for voiced stops, with an extremely larger number of devoiced tokens for voiced stops in comparison to prevoiced tokens for voiceless stops.

#### **2.4.5 Swaid (2023)**

Swaid (2023) in his study entitled "There's no letter 'p' in Arabic, so How do they Pronounce it?" maintains that growing up in a world that lacks the sound 'p', it would be difficult to get it

later. Some learners cannot distinguish the sound when they hear it unless it is exaggerated. Thus, Arab learners turn every 'p' to 'b' as they cannot hear the difference and do not know when to say 'p' or 'b'. They do it subconsciously to get the message across. Though they are exposed in number of ways to the use of the sound /p/, but they get no benefit at the end.

### **3 The Experimental Design**

Curriculum studies should be an umbrella term that covers both theoretical and practical issues (Medgyes and Nikolov, 2010: 264). As some Arab students' problem is represented by their non-distinction between the sounds /p/ and /b/ in their speech and reading, though the teacher may understand what the students want to say, the pronunciation is still odd to make him turn it over and over in his head, to miss whatever the student says next. Learner have to approach the problem from multiple angles (Lampariello, 2023: 2). In this research, besides the theoretical information about the production of the sounds, activities are used as well by means of active teaching which can bring the workbook to life (Payne, 2020: 1). Some of the activities are phonological, while others are phonemic, and both are introduced explicitly.

#### **3.1 Explicit Teaching**

Explicit teaching involves explanation, practice, and directing student attention toward specific learning in a highly structured environment. Effective classroom interaction leads to successful learning when it is explicit; it enables students to know what is useful and relevant to take to the new learning situations. With explicit teaching, teachers must be well aware of what students are capable of doing so as to respond honestly and explicitly to students' related learning needs. They, i.e. teachers, should direct teaching toward assisting students to achieve the desired outcomes, and ensure that what the students are hearing and speaking has a clear bearing on their learning objectives (McLean, 2018: 1-2).

The teacher is supposed to think out loud when working on problems and demonstrating processes for students. Explicit instruction is a purposeful way of overtly teaching students, where teachers talk directly to their students about what they should do, provide them with practical explanations in combination with sharing new knowledge, focus on learning from smaller steps, monitor for understanding and achieve active and meaningful participation by all students.

It is a series of instructional behaviors that increase students achievement and elevate their practice by providing them with opportunities to respond through guided and independent practice (Archer and Hughes, 2020: 1). Thus, explicit instruction is a way to teach in a direct and structured way that guides students to know how to start and succeed on a task besides getting feedback. When a new subject is learned without explicit instructions, there may be unclear directions (Greene, 2023: 1).

Besides informing students about the learning path, explicit instruction allows them to develop meta-cognitive strategies for learning. By providing students with a nearly overview of the new learning, explicit instruction makes the purpose and objectives of the assessment and learning clear. In addition, students' learning is assessed throughout the lesson by monitoring their talk. Explicit instruction is a means of responding to students' contributions in the lessons, hence providing them with the opportunities to improve their ideas, skills and knowledge as well as develop an understanding at all levels of learning so that they can make

genuine connections with what they learn. It builds on and asks students to build on each others' responses, and allows time at the end of the lesson for students to share their learning with talking that summarizes, reviews or reflects on the main learning points of the lesson (McLean, 2018: 3-4).

Many learners welcome overt explanation and analysis as it gives them autonomy and enables them to develop the strategies for working on their own by applying correction techniques such as repetition, paraphrasing or feedback as these techniques will allow them, i.e. learners, to continue learning and deal with incomprehensibility (Schmitt, 2010: 211) (see also Moats, 2023: 20).

### **3.2 Activities Promoting the Distinction between /p/ and /b/**

Pronunciation plays a crucial role in getting the intended meaning across. For actual sounds that are produced to contribute in communication, the focus must be on the smaller units (individual sounds) rather than larger ones which make up utterances, besides checking how they are articulated (Ibid: 206-207). Individual sounds are important. Learners' pronunciation errors can inhibit successful communication. When a learner, for example, says 'buy' in a restaurant where they should have say 'pie', there will be misunderstanding. So, these difficulties are of a very real nature and deserve investigation and remedial action in the classroom (Kelly, 2000: 11-12).

Pronunciation learning is affected by the amount of exposure learners have to the new language and the extent to which they use it (Lane, 2010: 5). Learners have not to just mimic what they hear, they have to train their vocal apparatus to express the authentic sound in an authentic way. There are more ways that can help to handle a difficult sound. Learners have to start from sounds they know. This will help them learn the sounds they do not slowly by making the necessary changes such as a step-by-step adjustment (Lampariello, 2023: 5) (see also Underhill, 2012: 3). They need training tools to quickly and easily change their English pronunciation and accent (Esther, 2022: 1). Using activities can increase learners' confidence, besides the interest in learning English as they approach learning with a more positive attitude (Rogers, 2017: 2). These activities involve learners' interaction by doing some tasks that will reflect enjoyable effect (Talbot, 2020: 6). Activities are important in raising learners' awareness of how the problem can be dealt with by themselves with their teachers' assistance.

As perception precedes production and achievability, facilitating learning opportunities based on activities that give specific guidance and input by gradually withdrawing support, highlights the role of teachers (Schmitt, 2010: 207). The teacher makes students practice with focus on distinguishing the targeted sound from similar sounds. At the end of each teaching period, the teacher should allocate some time for correction, repeat a lesson and perform further pronunciation, if necessary (Kelly, 2000: 24).

Activities are used for practicing a pronunciation point that has been investigated and explained in a lesson (Kelly, 2000: 58). The type of activities that is used in this research is phonological and phonemic awareness which focuses on the sounds orally and auditory (Calista, 2022: 3). Most students acquire phonological and phonemic awareness through exposure to print, games, songs, stories, rhymes, poems, written texts and interactions with others (Orpi, 2023: 1-2). Phonological awareness activities and phonemic ones are used

simultaneously and maybe interchangeably (Payne, 2020: 1). They usually come before the phonemic ones, for it is much easier to hear the bigger units of language versus the individual sounds in a word (Bottari, 2020: 6, 16).

### **3.2.1 Phonological Activities**

Phonological awareness activities refer to the ability to auditory and orally identify and manipulate sounds in spoken language\_ within words, phrases, sentences, and longer chunks\_ and understand the different ways in which oral language is divided into small parts that are used for teaching students how to hear individual sounds and develop awareness of the phonemes. This includes segmenting sentences into words and words into syllables, onset and rime, and individual phonemes, besides identifying words that rhyme and recognizing alliteration (Talbot, 2020: 2;) (Calista, 2022: 1). Thus, props such as colored cards or pictures can be used to make abstract sounds more concrete (Chard and Dickson, 1999: 264-265).

#### **1. Communicative Practice and Feedback**

Phonological activities can include real-world listening and speaking tasks, where the teacher instructs students to pay attention to their use of a particular feature of pronunciation (Lane, 2010: 12). With communicative competence, the focus on the text and discourse helps students recognize and analyze the authentic and appropriate uses of language due to consciousness-raising. Discourse activities allow students to expand their vocabulary and more effectively prepare for communication in the target language outside the classroom, rather than following 'recipe' type models in a slavish fashion (Schmitt, 2010: 208). The teacher identifies students' problems and finds contexts with many natural occurrences of the problem sounds to develop activities for analysis and listening that will assist students in understanding and recognizing the target sounds (Celce-Murcia et al., 2010: 74).

- **Reading Aloud**

Reading aloud activities provide appropriate means to bring language elements to students' attention. They establish the type of the text to be used, followed by a few additional details when the text is read again, regarding pronunciation work (Kelly, 2000: 22) (see also Rogers, 2017: 1).

- **Organizing a Party**

The teacher will create the context for planning a party by providing students with an invitation, getting ideas on what people might be taking with them to the party, by eliciting the sentence 'I'll bring x, where x can be any food or drink in the picture that carries the targeted phoneme such as 'pizza', 'pie', 'beef', 'pop corn', 'pepsi' (e.g. I'll bring some Pizza). During the drilling stage, a student may mispronounce, e.g. Pepsi as bebsi. The teacher is encouraging the student to make a second attempt, by saying 'I'll bring some.....', leaving the sentence open in order that they may correct themselves. If it is repeated again as bebsi, the teacher is calling on other students to provide a correction. If they cannot provide the correct pronunciation, the teacher works on that word again at class level (Kelly, 2000: 25-26).

- **Story Telling**

Students are given a context and words with the targeted sounds /p/ and /b/ contrast. They are divided into groups of four students, where each group creates a story by selecting favorite words from the given list of words (see the figure below).

Task: as a group, choose six words from the following list in any order, then create your own story.	
/p/	/b/
polite	book
pilot	buy
airplane	obey
people	library
pie	abandon
peacefully	bear
park	boy
April	brother
participate	box
popular	bin

**Figure1: A Group story**

Each of the groups tells its own story while the other group will listen to check the words that are used from the list, besides checking if the words are pronounced correctly or if they make sense within the context of the story. As a follow-up activity, a different group may try retelling the story with the use of words that are checked as a guide. Students can perform role plays (Celce-Murcia et al., 2010: 70).

## 2. Contextualized Discrimination

At the sentence-level, it is easy to diagnose and assess proficiency in specific aspects of pronunciation (Cook, 1989: 4) cited in (Schmitt, 2010: 208). Students need to practice distinguishing the contrasts of the sound in contexts. In a classroom of Arab learners, the teacher focuses the lesson on a specific pair of the problematic sounds as /p/ and /b/ (Lane, 2010: 125). Contextualized discrimination exercises with minimal pairs (pair of words that are distinguished by a single phoneme in the same position) can work well both as a diagnostic tool and as a listening practice. Then, a controlled production exercise can be used to follow this type of listening discrimination practice, where students produce these types of minimal-pair sentences in pairs and monitor each other's production (Celce-Murcia et al., 2010: 67). Minimal pairs can be embedded in sentences, i.e. contrast within a sentence (syntagmatic drill) such as 'This pie is not for buy/' 'This pin is not for bin'./ 'Don't push him into the bush./ 'He tried to pull the bull out of the pen.' or across two sentences (paradigmatic drills) (Ibid: 5;) (see also Schmitt, 2010: 210;) (Esther, 2022: 1;) (Manuela, 2023: 2) such as:

'Take the rope off the ground./ Take the robe off the ground.'

'They pray in the room./ They bray in the room.'

'They are parking./ They are barking.'

'He's gone to get a cap./ He's gone to get a cab.'

After this, students are asked to do the following activities:

- **Particular Consonant Sounds**

The teacher introduces a game by having students guess the consonant that is held in common between words within a stylized sentence introduced by the teacher as 'I've got a , and I'm going to the party'. Students insert into the gap a word that includes a target phoneme. They have to approve what this phoneme is as the game progresses. The student starts the game with choosing a targeted phoneme (/p/) which can be indicated to him/her by the teacher, saying for example, 'I've got a picture /pɪktʃə/, and I'm going to the party. The other students try to guess what the target phoneme is. If they wrongly assume the targeted phoneme, the first student will inform them. The game progresses until everyone guesses the target phoneme, and includes it in their sentence. Teachers may also interfere to do some suggestions, to keep the game moving (Kelly, 2000: 59-60).

- **Advising Slogans: Particular Consonant Sounds**

The teacher shows students some popular advertisements from, e.g., newspapers, magazines, or videotaped that may include an interesting slogan for advertising a particular product. After that, s/he asks students to suggest their own words, in a short time, for a product with a targeted phoneme and include it as many times as possible. Students' suggestions are written on the board. The teacher may also adopt a different procedure to direct students' attention to the contrast between the two sounds that cause difficulty as /p/ and /b/:

Peter's Broad Party
---------------------

To make the activity more difficult, students are asked to give a short 'sales talk' about their product by including as many examples of the target phoneme(s) as possible (Ibid: 61-62).

- **Rhyming**

Students are asked to identify and produce sentences with words that rhyme, i.e. have the same ending. For example, looking at the picture cards and finding the words which rhyme in sentences as a poem of four lines that have to be rhyme with /p/.

- **Alliteration**

Students are also asked to do alliteration by identifying and producing words from picture cards that begin with the same sound, and making silly sentences like: 'Peter is picking peach' (Talbot, 2020: 9).

### 3. Word Level

At the word level, the teacher asks students to segment, blend and manipulate compound words, An example is the word 'postage'. Then, the unit of language can be narrowed to syllables, as blend syllables to word, segment a word into syllables or substitute a syllable to

have a new word, such as 'pending'. The teacher can also narrow down the unit of language to onset-rime, where the onset is all the sounds that come before the vowel in a syllable, while the rime is the vowel and all the sounds that follow. Onset-Rime is the last level of phonological awareness (Bottari, 2020: 7-9) where readers are required to see the sound and begin to isolate it. New words can be created by moving the onset to a different rime or the rime to a different onset (Orpi, 2023: 6). All these can be done with the use of coloring cards. After students learn segmenting and the manipulation of words, they are asked to do the following activities:

- **Fill the Grid**

The teacher presents a grid and asks students, who are divided into two teams, to fill it with /p/ or /b/. To form a word, students take it in turns to suggest one phoneme at a time by nominating a square which is either across or down (or other directions). For example, the first student might say 'A3, /p/' and pronounce the word, and the teacher or the student can put the phoneme in the relevant square. The next student might put a /b/ in B7, while the other can put /p/ in C8 and so on until an agreed target number of points has been accumulated by one of the teams, or the agreed time limit has expired (Kelly, 2000: 63-64). In the following figure, there are the following twenty words: 'ambassador, rabid, picture, depend, appoint, picnic, police, polite, apple, epic, absolute, professor, party, cap, lab, baker, labour, bad, pack, back'

	A	B	C	D	E	F	G	H	I	J
1	a	m	b	A	s	s	a	d	o	r
2	p	i	c	N	i	c	p	e	p	a
3	p	o	l	I	c	e	p	p	I	b
4	l	a	b	O	u	r	o	e	c	i
5	e	p	o	L	i	t	i	n	T	d
6	p	a	c	K	n	d	n	d	u	p
7	i	b	a	C	k	a	t	o	r	a
8	c	a	p	L	a	b	a	k	e	r
9	a	b	s	O	l	u	t	e	a	t
10	p	r	o	F	e	s	s	o	r	y

**Figure2: Fill the Grid with /p/ or /b/**

- **Phoneme and Vocabulary Exerciser**

The teacher chooses a sound he wants students to concentrate on. Then he chooses various categories (see the figure below). Each student has to give at least one word which starts with the targeted phoneme /p/per category. The teacher can vary the instructions (for example, the words might include the targeted sound rather than start with it), and the activity can be done individually, as a class, or in teams (Kelly, 2000: 64).

Food	Place	Part of Body	Animal	Colour	Verb
Peas	Poland	Pupil	Pig	Purple	Press

**Figure3: Categories with the target phoneme**

The tasks can then progress to more advanced phonemic awareness activities such as phoneme deletion, substitution and so on (Orpi, 2023: 4).

### 3.2.2 Phonemic Activities

Phonemic awareness activity is a subset of phonological awareness activities. It involves identifying and manipulating individual phonemes in spoken words. With phonemic awareness, students can recognize that spoken words are composed of individual sounds which can be changed by manipulating, segmenting, blending and identifying the beginning and ending sounds within words (Chard and Dickson, 1999: 263;) (Bottari, 2020: 3;) (Bernard, 2022: 1). Phonemic awareness skills can be developed without any written word (Talbot, 2020: 6). They are important for students who cannot hear and manipulate the phonemes of spoken words and regard words as whole units that need to be visually memorized (Payne, 2020: 3;) (Bottari, 2020: 4-5). Teachers usually focus on individual sounds as a response to a communicative difficulty which arises (Kelly, 2000: 54). There are numerous ways to retain focus on sounds by the learner's active involvement:

#### 1. Sound Recognition (Sound Discrimination)

The best way to teach a problematic sound is to contrast it with its counterpart. The sound /b/ is used in every activity that deals with the use of the sound /p/ (Lane, 2010: 157). A minimal pair technique is derived to contrast two words. It is used for both listening practice and guided oral production (Celce-Murcia et al., 2010: 65). The teacher first has students practice listening. He says either of the following list of words and asks students to refer to the corresponding box on the chart (Underhill, 2012: 3):

A: pie, lamp, pair, lap, rapid, pay, park, pit, peat, pride, pears, cap, push.

B: buy, lamb, bear, lab, rabbit, bay, bark, bit, beat, bride, bears, cab, bush.

This listening discrimination practice is followed by a guided oral-production practice. By following the teacher as a model, students practice reading lists A and B in isolation, then across columns A and B, e.g. pin-bin, pie-buy, lamp-lamb, pair-bear, lap-lab, rope-robe, rapid-rabbit. Finally, as a guided oral production, the teacher asks individual students to read the lists without a model (Celce-Murcia et al., 2010: 4-5) (see also Lane, 2010: 152;)(Schmitt, 2010: 210).

As an activity, students might be asked to listen to a succession of words read by the teacher, and decide which words start with the same sound /p/ as in: "pepper, paper, better, bet, pen, pain, book, pile, park, pink, bad, boil"; or they are asked to listen to the odd sound out among a list of words. Such activities are useful for focusing on just the targeted sound. Students are also asked to complete the words with (p) or (b) according to their recognition of the words read by the teacher, as in:

a. can you hel me aint the edroom Wardro e ? \_

b. Brian's lond, and he's got a ig eard. \_

c. We're going to the ub.It's my rother's irthday.\_

d. Where did I ut my lack oots?\_

e. We asked the waiter to ring the ill, and it was dou le what we expected! (Kelly, 2000: 19-20) (see also Talbot, 2020: 7;) (Orpi, 2023: 3).

## 2. Segmenting (Segmenting Words into Sounds)

Segmenting involves auditory and orally identifying the initial sound or the individual sounds in a word said by the teacher. It is better to be taught with direct and explicit instruction and then reinforced with educational activities such as 'Segmenting Word Boxes' and 'Segmenting Sort'. In segmenting individual sounds, the teacher may ask students what sounds can they hear in the word 'slip'?. The students answer '/s/-l/-i/-p/' (Moats, 2023: 25) (see also Roach, 2009: 31;) (Talbat, 2020: 5). This can be reinforced by the following activity:

### Segmenting Word Boxes

This involves having targeted words in pictures with boxes below them to count the number of phonemes in each word while pronouncing the word.

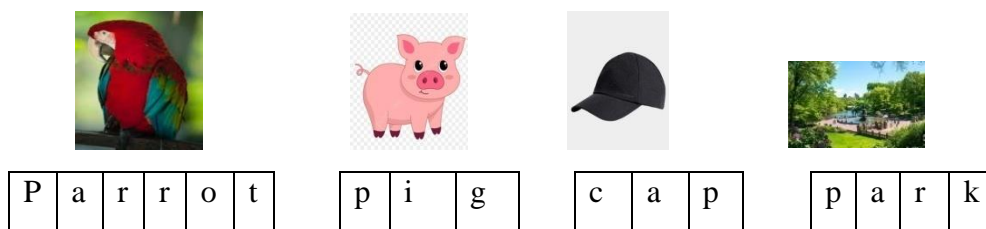


Figure4: Segmenting Word Boxes

On segmenting the initial sound, students must identify the first sound in a word, An example is /p/ in pie. This can be reinforced by the following game:

### Segmenting Sort

Word columns that are used with segmenting sort are with initial target phoneme. Students are asked to select picture cards from a pile based on segmenting the initial phoneme then say the word aloud and place it with its column. There can also be a work on the middle of the word and the end. If students put the words in wrong position, it will be regarded a wrong choice:

Initial p	Initial b	Medial p	Medial b	Final p	Final b
Pig	Book	Apple	Abroad	Lap	Lab

Figure5: Position of Targeted Phoneme

## 3. Blending (Blending Sounds into Words)

Blending sounds (phonemes) are used to identify a word (Ibid: 27). They occur orally, where students focus on the sounds they hear. For example, the teacher says what are the phonemes in order for students to blend them to a whole word as with 'p-i-g'\_ pig. As an activity, the teacher says "Can you touch your p-e-n-c-i-l?" and the student touches their pencil (Talbot, 2020: 5).

#### 4. Manipulating Sounds

Manipulation of sounds is learned by adding, substituting or deleting a phoneme in spoken words.

**a. Adding a phoneme:** The teacher announces adding a sound to the beginning or end of the word. e.g. Add initial sounds to form new words: in adding /s/ to /peak/ the word will be 'speak' (Bottari, 2020: 12;) (Moats, 2023: 29-30) (see also Talbot, 2020: 4;) (Bernard, 2022: 2).

**b. Phoneme substitution:** The teacher pronounces selected word(s) from picture cards to be used for phoneme substitution. He asks students to mentally manipulate the spoken word by substituting a certain sound with another and then say the new word. Putting one sound in the place of others will change the meaning of a word (Roach, 2009: 31). For example, the initial substitution of b with p in the word 'pet' will get a different word 'bet' (Kelly, 2000: 17). The new word might not always be a real word. Students can practice substituting words' initial, middle, and final sounds.

**c. Deleting a phoneme:** The group of students can be led through two examples: once deleting the first sound and once deleting the last sound in a word to form a new word. The teacher says the word on the cards to be identified by students. On deleting the first sound from the word, e.g. 'pill' with no /p/, the left will be, /-ill/, while in changing 'slap' to 'sla' the sound removed is /p/. The task is done mentally. As an activity, the teacher instructs students to point at the sound that will be removed (Moats, 2023: 33-34). Then the students have to do the same. This is done to attract students' attention to the sound that is omitted (Chard and Dickson, 1999: 266;) (Orpi, 2023: 4, 9).

peach	perfume	paper	pen	beach	Peter	cup
piano	shampoo	book	pink	parrot	Pick	rabbit
pie	bicycle	apple	bat	banana	Cab	pilot
pencil	jumping	Potato	lab	bat	Cap	sheep
lamp	park	pin	lamb	pig	pepper	pet

Figure6: A Pile of Word Picture Cards

#### 3.3. Methodology

Before starting teaching, 400 first-year students, Department of English Department, College of Education for Humanities, University of Mosul were given a pre-test, prepared by the researcher, on 1<sup>st</sup> March, 2023, to check their recognition and production variables of the targeted consonant sound /p/ (see Appendix 1). The test total mark was 54 and consisted of four questions, two questions to test students' recognition and were out of 28 marks as a mark was given for each word with /p/. The other two questions tested students' production and were out of 26 marks; a mark was given for each word with /p/. Almost 40 students were found out to pronounce the sound /p/ as /b/ for most of the words with /p/. After more investigation, these students were found to be from Al-Qayarah, a sub-district that is located to the south of Mosul. Their mispronunciation of the words with /p/ sound was interpreted to be due to their unawareness of the sound and the influence of their first language, Arabic

which has no p in its phonetic inventory. Experts in the field of applied linguistics and phonology approved the validity of the test in terms of the validity of its contents and objectives; i.e. the test had measured what it was meant to measure. The test was also proved to be reliable as it was administered by the researcher to the same sample of students on two occasions with a time interval of 2 weeks. After getting both validity and reliability, the test was ready for administration.

Before giving the instructions, the 40 students were randomly divided into two groups, control and experimental. Both groups were equal in number, study stage and gender. As the sound /p/ form a problematic area for the sample, the researcher taught the control group according to the traditional method, i.e. giving the articulation of the sound and asking students to repeat the pronunciation of the words with initial, medial or final /p/ and /b/ after her again and again. This is on one hand. On the other hand, the phonological and phonemic awareness activities were applied in the teaching of the experimental group who, according to Schmitt (2010), were taught explicitly so as to help, step by step, to overcome the problem of mispronouncing the sound /p/ later in communication.

Phonological and phonemic awareness activities were taught and applied orally by using picture cards or texts to be read with no need to the use of boards. Some students developed the phonemic awareness incidentally, by picking it up through phonological activities, while others were in need of explicit teaching. Since, phonemic awareness instruction did not need to take long, the researcher created lessons of not more than 15 minutes for students to practice and repeat to arrive at phoneme proficiency.

The researcher chose first year students in her study for, according to Lampariello (2023: 2), every pronunciation problem has to be dealt with from the very beginning of learning, otherwise the students will eventually have great difficulty in overcoming mistakes. Spending years of practicing incorrect pronunciation will become incredibly difficult to fix down the line result in suffering from years of repeated mistakes. She not only provided students with opportunities to practice, but monitored their understanding and use of activities in addition to their progress during the lessons. This close monitoring allowed the researcher to provide feedback, during the activity, to students about how well they were doing. And if students misused the sound, at the end of the activity, she re-taught the content or provided another round of examples. Thus, students were not directly corrected, the way that impeded participation for most students, because of feeling frustrated of doing mistakes. Such a style of teaching gave students the fun in getting knowledge and in solving the problem to acquire the targeted sound. Feedback, according to Archer and Hughes (2020: 13) is a very effective way to increase student's positive benefits from the lessons.

The lessons during the research work were well organized and sequenced so as to make good use of the instructional time. The researcher was designing the lessons depending on the lesson's goals and her expectations. She explicitly told the students what they needed to learn and why that was important. Students would achieve better if they understood the instructional goals and the expected outcomes. The researcher first reviewed the skills and knowledge before beginning instruction by thinking aloud as she performed the skill, to show the students a model of proficiency performance. To promote initial success and build confidence, she regulated the difficulty of practice opportunities during the lesson, and

provided students with guidance in skill performance. When students demonstrated success, she gradually increased the task difficulty and decreased the level of guidance. The lessons were delivered at a desired pace which was neither so slow that students got bored nor so quick that they could not keep up.

### 3.4. Results and Discussion

Students' assessments were done by listening to their responses that were recorded to be analyzed and checked. The sample of this research, the control and experimental groups, were given a pre-test, which provided the basis for pronunciation work, before giving them any instructions by the researcher. No difference could be found between the two groups, where both were mispronouncing the sound /p/ as /b/ in most cases whether in words, sentences or discourse which was interpreted to be probably due to their unawareness of the sound and the influence of their first language. It was found out that the T-calculated value was lower than the T-tabulated value as it is shown in table (1) below at the significance level 0.05:

**Table (1): The Unpaired T-test of Pre-test Mean Scores in the Pronunciation Achievement Test**

Group	N	Mean	SD	T_cal.	T_tab.
Experimental	20	29.8500	4.04286	0.968	2.025
Control	20	28.5000	4.75173		

(0.05)(38)

After the instructions that lasted a month in the second semester, the researcher tested the sample again with the use of the same form of the test used before the instructions, and a difference in performance between the two groups was found. Students of experimental group were found to get progress over the control one, where they mostly overcame the problem of mispronouncing p as b, whereas students of the control group were found getting little or no progress. This was due to the use of explicit phonological and phonemic awareness activities that helped in concerning and activating students' mind to the targeted sound. The T-calculated value was greater than the T-tabulated value as it is shown in table (2) below at the significance level 0.05:

**Table (2): The Unpaired T-test of Post-test Mean Scores in the Production, Recognition and Total Pronunciation Achievement Test**

Sort test	Group	N	Mean	SD	T_cal.	T_tab.
Recognition	experimental	20	23.7000	1.80933	10.335	2.025
	Control	20	15.5000	3.05218		
Production	experimental	20	22.3500	1.63111	14.895	2.025
	Control	20	14.5000	1.70139		
Total	experimental	20	46.0500	2.70429	17.044	2.025
	Control	20	30.0000	3.22817		

(0.05)(38)

The impact of explicit phonological and phonemic awareness activities was further checked in terms of the development of the experimental group over the control one in their mostly overcoming the problem of mispronouncing /p/ as /b/, the only independent variable in the experiment. An unpaired T-test was administered to compare the statistical significance difference of the two groups concerning each variable, namely production and recognition. On the total test collectively, the following results were obtained. The results show the value of the T-calculated was greater than the T-tabulated one at the significance level 0.05 as demonstrated in table (3) below:

**Table (3): The Unpaired T-test of the Difference Between Pre-Test and Post-Test Mean Scores of the Experimental and Control Groups in the Production, Recognition and Total Pronunciation Achievement Test**

Sort test	Group	N	Mean	SD	T_ cal.	T_ tab.
Recognition	experimental	20	7.8000	3.27028	6.682	2.025
	Control	20	0.7500	3.40085		
Production	experimental	20	8.4000	2.66359	9.536	2.025
	Control	20	0.7500	2.40340		
Total	experimental	20	16.2000	4.53756	11.716	2.025
	Control	20	1.5000	3.30072		

(0.05)(38)

A paired T-test, the pre-test and post-test, was administered to the experimental group to check the statistical significant difference at the significance level 0.05 to identify their progress in recognition and production and in the total test collectively. The T-calculated value was found to be greater than the T-tabulated value as it is shown in table (4) below:

**Table (4): The Paired T-test of the Difference Between Pre-test and Post-test Mean Scores of the Experimental Group in the Production, Recognition and Total Pronunciation Achievement Test**

Sort test	test	N	Mean	SD	T_ cal.	T_ tab.
Recognition	Pre.	20	15.9000	2.26878	10.667	2.093
	Post.		23.7000	1.80933		
Production	Pre.	20	13.9500	2.76205	14.103	2.093
	Post.		22.3500	1.63111		
Total	Pre.	20	29.8500	4.04286	15.966	2.093
	Post.		46.0500	2.70429		

(0.05)(19)

As the sound /p/ is not found in the Arabic phonetic inventory, it causes a problem of mispronouncing for most Arab first year students. Some of the previous studies treated the problem by emphasizing the articulation of the sound and getting students repeat the pronunciation of words after the teacher with the use of acoustic parameters to record and

analyze students' responses. All these methods did not help in raising students' awareness to self modulate the mispronouncing of the sound /p/with /b/ as it is the case with the present study as the researcher has attempted to treat the problem in words, sentences and discourse explicitly and in an active way which reflects and/or come out with a good effect on students' outcomes as the T-test proved. This is attributable to the positive changes in learners' attitudes and learning motivation that is affected by the progress in curriculum design, instruction methods and teacher competence, yet with the control group the use of the traditional method proved to be of no impact on students' performance.

#### **4. Conclusion**

Teaching pronunciation is usually carried out as a response to minimize errors committed by the students in the classroom. The difference between the sounds /p/ and /b/ forms a problematic area for number of 1<sup>st</sup> year students in both reading and speaking. Previously, the difference between these two sounds was limited to explanation through articulation. Now, in the current study, besides the preceding remedial procedure, the use of explicit phonological and phonemic awareness activities has played an explicit role in students' overcoming the problem of not distinguishing between the two sounds in terms of recognition and production. Pronunciation work, with focus on this problematic feature, has to be planned for explicitly so as to provide students with a full image and guidelines on how to benefit from the available chances of practicing and communicating successfully.

## References

- Alfehaid, M. (2015). *Pronunciation Problems Arab Speakers Encounter While Learning English*. International Journal of Scientific & Engineering Research, Vol. 6, Issue 10, ISSN, 2229-5518, Pp.581-582. IJSER
- Anderson, C. (2021). *Speech Sounds in the Mind*. Pressbooks Supports Open Publishing Practices. <https://pressbooks.pub> Retrieved 9/5/2023
- Archer, A. and Hughes, Ch. (2020). *What is Explicit Instruction? Special Education Resource Project*. Vanderbilt University. <https://my.vanderbilt.edu> Retrieved 20/4/2023
- Bernard, M. (2022). *Phonemic Awareness*. Orton Gillingham. <https://ortongillinghamonlinetutor.com>
- Bottari, M. (2020). *What are Phonological Awareness and Phonemic Awareness?* Heggerty. <https://heggerty.org> Retrieved 8/4/2023
- Calista (2022). *Phonological and Phonemic Awareness*. Reading Rockets. <https://readingrockets.org> Retrieved 8/4/2023
- Carr, Ph. (2013). *English Phonetics and Phonology. An Introduction*. Wiley-Blackwell. A John Wiley & Sons, Ltd, Publication. Second Edition
- Celce-Murcia, M., Brinton, D. & Goodwin, J. (2010). *Teaching Pronunciation. A Course Book and Reference Guide*. Second Edition. New York: Cambridge University Press.
- Chard, D. J. and Dickson, Sh. V. (1999). *Phonological Awareness: Instructional and Assessment Guidelines*. Reading Rockets: Launching Young Readers. Pro-Ed, Inc. Vol. 34. No. 5. Pp. 261-270 <https://readingrockets.org> Retrieved 8/4/2023
- Crystal, D. (2008). *A Dictionary of Linguistics and Phonetics*. Sixth Edition. Blackwell Publishing.
- Esther (2022). */p/ VS. /b/ English Consonants Video*. <https://speakmoreclearly.com> Retrieved 5/5/2023
- Greene, K. (2023). *What is Explicit Instruction? Understood for all inc*. New York. <https://understood.org> Retrieved 7/5/2023
- Hurst, G. (2021). *What is the Difference between [p] and [b] in terms of Distinctive Features?* Quora. <https://quora.com> Retrieved 10/4/2023
- Jenkins, S. (2009). */p/ Versus /b/: A Helpful Tip for Teachers of Arab Learners*. International House Journal of Education and Development
- Kelly, G. (2000). *How to Teach Pronunciation*. Pearson Longman.
- Khalil, A. (1981). *Areas of Difficulty for Arab Learners of English*. PJ Pluto Journals. Vol.1, No.1 Pp. 23-29 JSTOR
- Lampariello, L. (2023). *How to Learn the Pronunciation of Difficult Sounds in any Language*. Smart Language Learning. Smart Language Learning Academy S.R.L.S, Partita IVA <https://lucalampariello.com> Retrieved 13/4/2023
- Lane, L. (2010). *Tips for Teaching Pronunciation. A Practical Approach*. Series Editor: H. Douglas Brown. PEARSON Longman
- Manuela, B. (2023). *English Pronunciation, Lesson 18 P and B Sounds*. <https://www.really-learn-english.com> Retrieved 19/4/2023
- McLean, M. (2018). *What is Explicit Teaching*. Kerrimuirps. <https://kerrimuirps.vic.edu.au> Retrieved 25/4/2023
- Medgyes, P. and Nikolov, M. (2010). *Curriculum Development in Foreign Language Education: The Interface between Political and Professional Decisions*. The Oxford Handbook of Applied Linguistics. Second Edition. Pp. 263-274
- Moats, L. (2023). *Reading 101: A Guide to Teaching Reading and Writing. Phonological and Phonemic Awareness: In Practice*. Reading Rockets. <https://readingrockets.org> Retrieved 2/5/2023

- Orpi, D. (2023). *Phonological and Phonemic Awareness Strategies & Activities for Struggling Readers*. THRIVE. Literacy Corner. <https://thriveedservices.com>
- Payne, L. (2020). *Teaching Tips. 5 Phonological & Phonemic Awareness Activities*. Learning Without Tears. <https://lwtears.com> Retrieved 17/5/2023
- Roach, P. (2001). *Oxford Introductions to Language Study*. Series Editor H.G. Widdowson. Phonetics. Oxford University Press
- (2009). *English Phonetics and Phonology. A Practical Course*. Fourth Edition. Cambridge University Press
- Rogers, P. (2017). *The Importance of Teaching Pronunciation*. LINCS. Community for Adult Educators. <https://community.lincs.ed.gov> Retrieved 4/6/2023
- Sabin, T. (2022). *What is the Difference between b and p?* <https://quora.com> Retrieved 19/6/2023
- Schmitt, N. (2010). *Introduction to Applied Linguistics*. Second Edition. Hodder Education. An Hachette UK Company.
- Swaid, T. (2023). *There's no letter "p" in Arabic, so How do they Pronounce it?* Quora
- Talbot, C. (2020). *The Importance of Phonemic Awareness: Teaching Stragies*. High Speed Training. <https://highspeedtraining.co.uk>
- Underhill, A. (2012). *Working with the Confusion between /p/ and /b/*. Powered by TCE. <https://adrianunderhill.com> Retrieved 19/6/2023
- Victorhugor (2018). *The English Language Education Classroom. Resources and Ideas for EFL School Teachers and Trainers*. ELECLASSROOM. 11Thoughts on When /p/ becomes /b/. <https://eleclassroom.wordpress.com> Retrieved 15/4/2023
- Yavas, M. (2011). *Applied English Phonology*. Second Edition. Wiley-Blackwell

#### Appendix 1

#### The Test

#### 1. Recognition

- a. Listen to the audio-video and write the words that contain the sound /p/: pen, happen, wasp, pleasure, beige, police, top, powerful, spell, politician, airplane, plan, perspective, experience, picnic, respect, property, pronounce, priority, lamb.
- b. Listen and mention, if there is, any difference between each of the following pairs: pay-bay, pie-buy, cap-cab, lap-lab, rapid-rabbit, nap-nab, pack-back, hop-hob, park-bark, rope-robe.

#### 2. Production

- a. Read the following text:

I'm really happy that a lot of you happened to approve my answer. Somebody even wants to publish a scientific paper pretty amazing. But what I don't comprehend. A lot of you people laughed. Some even pissed in their pants. Are you making fun of me? I'm a proud Arab. Whoever makes fun of us will be punished.

- b. In a group, tell a story with the use of the following words as: parents, problem, important, picture, patience, polite, possible, album, behind, post, speak, capable, people, public, pride, park.

## Appendix 2

**Students' Two Group Scores in Pre- and Post-Test**

No.	experimental						Control					
	recognition		production		total		recognition		production		total	
	Pre.	Post.	Pre.	Post.	Pre.	Post.	Pre.	Post.	Pre.	Post.	Pre.	Post.
1	18	24	13	23	31	47	13	15	11	12	24	27
2	14	20	11	20	25	40	18	20	12	14	30	34
3	17	22	13	24	30	46	20	17	16	15	36	32
4	18	25	19	26	37	51	12	22	19	12	31	34
5	14	24	12	22	26	46	12	13	15	14	27	27
6	16	24	20	23	36	47	13	15	16	18	29	33
7	18	23	11	22	29	45	12	14	11	15	23	29
8	18	24	11	24	29	48	14	15	13	16	27	31
9	16	22	13	21	29	43	16	16	18	17	34	33
10	13	25	15	23	28	48	16	15	16	14	32	29
11	20	24	18	23	38	47	21	13	15	17	36	30
12	18	20	15	21	33	41	14	12	13	16	27	28
13	16	23	17	24	33	47	22	19	14	14	36	33
14	15	23	14	23	29	46	10	10	12	14	22	24
15	16	24	12	22	28	46	15	18	12	14	27	32
16	16	27	11	21	27	48	12	14	11	12	23	26
17	15	26	15	21	30	47	18	20	15	15	33	35
18	17	23	14	20	31	43	13	15	11	13	24	28
19	11	26	11	24	22	50	11	12	12	13	23	25
20	12	25	14	20	26	45	13	15	13	15	26	30