PRONUNCIATION ERRORS IN MINIMAL PAIRS /p/-/b/, /t/-/d/, /tʃ/-/dʒ/: A CASE OF JUNIOR HIGH SCHOOL STUDENTS AT VICTORY SCHOOL

LỖI PHÁT ÂM CÁC CẶP ÂM ĐỐI LẬP ĐỒNG VỊ /p/-/b/, /t/-/d/, /tʃ/-/dʒ/: TRƯỜNG HỢP HỌC SINH THCS TRƯỜNG VICTORY

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Abstract - Pronouncing the particular sounds in minimal pairs is a challenging task for Vietnamse students. This article investigates the errors in producing the pairs /p/-/b/, /t/-/d/, /tʃ/-/dʒ/ of students (JHS) in grade 7 at Victory school. Data was mainly collected from questionnaires and diagnostic test from 60 students at school by qualitative and quantitative methods. Besides, the voices of 12 students were recorded with the software Audacity - win 2.3.3 used to record and edit sounds. The result shows most of the students make errors when performing these sounds of phonemes, for example, they often pronounce /b/ like /p/ and /tʃ/ like /dʒ/ at initial positions and forget to release the sound /p/, /b/, /t/, /d, /tʃ/, /dʒ/ at final positions of the words. One of main causes of these errors is students cannot distinguish English sounds. The article proposes the measures to help students overcome the errors when performing these sounds to gradually improve their pronunciation ability.

Key words - Phonemes; minimal pairs; pronunciation; pronunciation errors; junior high school students.

Tóm tắt - Việc phát âm một số âm trong các cặp âm đối lập đồng vị gây khó khăn cho học sinh Việt Nam. Bài báo khảo sát các lỗi phát âm các cặp âm /p/-/b/, /t/-/d/, /tʃ/-/dʒ/ của học sinh lớp 7 Trường Victory. Dữ liệu được thu thập bằng bản câu hỏi và bài kiểm tra phân tích âm qua phương pháp định tính và định lượng từ 60 em lớp 7 Trường Victory. Bên cạnh đó, âm của 12 em được ghi lại bằng phần mềm Audacity - win 2.3.3, phần mềm ghi và chỉnh sửa âm thanh. Kết quả là, hầu hết học sinh mắc lỗi khi phát âm các cặp âm đối lập đồng vị, các em thường đọc âm /b/ như /p/ và âm /tʃ/ như /dʒ/ ở đầu từ và thường quên không phát âm các âm /p/, /b/, /t/, /d/, /tʃ/, /dʒ/ ở cuối từ. Một trong những nguyên nhân chính là học sinh không phân biệt được các âm tiếng Anh. Bài báo đề xuất các giải pháp giúp học sinh khắc phục được các lỗi khi thực hiện các cặp âm này để dần cải thiện khả năng phát âm của mình.

Từ khóa - Âm vị; cặp âm tối thiểu; phát âm; lỗi phát âm; học sinh THCS.

1. Introduction

Pronunciation has an important role in both English teaching and learning. With good English pronunciation, students can understand what people express. In other words, pronunciation is necessary to develop English skills, particularly for speaking. In fact, you "cannot communicate with anything at all unless you can say the words in a way which the hearer can understand" [1]. According to Pastry and Spada, a child learns a new language mainly by their imitation, practice and innate capacities without focusing on the knowledge of phonetics [2]. In all the aspects of the English language, phonetics plays a significant role in learning and teaching this language. As Pastry points out, "the manner in which speech sounds, especially connected sequences are articulated by individual speakers or by speakers generally" [2 : 291]. Phonetics allow teachers to examine the differences between the sound of the mother tongue and the foreign languages and explain this difference to learners. It also enables learners to better understand and speak the language they are learning with accuracy.

Therefore, it is very important for learners to learn pronunciation which can help students have good communication skills in terms of accuracy in pronunciation. With poor pronunciation, it might be difficult to make themselves understood no matter how good their vocabulary and grammar are. Furthermore, pronouncing correctly also enables students to perceive information to avoid misunderstanding in communication.

Practically, all of schools in Vietnam, especially junior high schools (JHS) ask their students to learn English as one of the major subjects, especially for the seventh grade.

Thanks to this, most of these students get a relatively good base of English skills in pronunciation, vocabulary, and grammar. However, junior high school students (JHSS) in general and students in grade 7 at Victory school in particular find it difficult to distinguish the difference between English sounds, especially minimal pairs /p/-/b/, /t/-/d/, /tʃ/-/dʒ/. Therefore, pronunciation errors they make might happen whenever pronouncing these minimal pairs of phonemes. What are their pronunciation errors? Which solutions should be provided to the problem? The article refers to pronunciation errors in minimal pairs /p/-/b/, /t/- /d/, /tʃ/-/dʒ/: A case of students in grade 7 at Victory School. Simultaneously, the article proposes measures to improve pronunciation ability for JHSS at Victory School in particular and JHSS in general effectively.

2. Contents

2.1. Main tenets of English minimal pairs

2.1.1. Definition

Minimal pairs are any two words which have only one different sound in the same position. E.g: *pin /pin/* and *bin /bin/*, or *bet /bet/* and *bed /bed/* [3].

2.1.2. Description

For /b/ and /p/ in which /b/ is voiced pronounced with less air released, whereas /p/ is voiceless, and "this can sometimes be a more useful distinction as it is difficult to feel the vocal cords vibrating when making the /b/ sound" [4].

For the minimal pair /t/ and /d/, to pronounce them, "the mouth and tongue positions are very similar, but for /t/ we do not use the vocal cords but instead release much more air, at times making it almost like spitting" [5]. The initial

positions of /t/ and /d/ are recognised much more easily than the final one.

For the minimal pair /dʒ/ and /tʃ/, the first sound is explosive and like "a voiced version of /tʃ/ and therefore almost like a sneeze and so it is impossible to extend the sound for very long" [6].

We can consider the total description in Table 1 below:

Table 1. Description of Minimal pairs

Sounds	Descriptions	Positions	Examples
/p/	voiceless bilabial stop	initial medial final	- pete, pool, pig, pen, pie - sponge, sponsor, sponsorship - group, mop, pimp
/b/	voiceless bilabial stop		- belief, bell, belly, belong - abort, abolish, abode - bomb, dumb, lamb
/t/	voiceless bilabial stop		- table, tackle, tip - tortoise, torture, totter - twist, tyrant, twilight
/d/	voiced alveolar stop		- doctor, document, dogfish - dedicate, deduce, deduction - deed, card
/tʃ/	voiceless palato-alveolar affricate		- charge, church, cheese, cheat - Richard, butcher - beach, rich, perch
/dʒ/	voiced palato-alveolar affricate		- just, junk, justify - apologize, dangerous, engineer - heritage, village

2.2. The difference of consonants in English and in Vietnamese

In this study, we focus on pronunciation errors of Vietnamese JHSS of Victory School. Therefore, clarifying the difference of consonants in English and Vietnamese is necessary. We consider the summarized content cited from [7], [8] and [9] in the following table.

Table 2. The difference of consonants in English and Vietnamese

in English	in Vietnamese
Final stops don't have either a release burst or have a nasal	Final stops neither have a release burst nor have a nasal
Stops are divided in different positions in words	Vietnamese does not have a voiceless stop [p] in the initial position.
- /p/, /t/, /k/ have the phonetic variants [pʰ], [tʰ], [kʰ] in the initial position. - /p/, /t/, and /k/ appear at the end of words without releasing,	- [p], [t] and [k] are realized as /p/, /t/ and /k/ morphemes - [pʰ], [tʰ] and [kʰ] are recognized as /pʰ/, /tʰ/ and /kʰ/ morphemes.

2.3. Methodology

2.3.1. Methods

The descriptive design is used to depict phonetics features of consonants as well as the minimal pairs /b/-/p/, /t/-/d/, /tʃ/-/dʒ/.

The qualitative method is applied to gain an understanding of how students in grade 7 at Victory pronounce the mininal pairs of phonemes and to get the reliable information from the respondents. However, it cannot be used to draw samples from large-scale data sets.

The quantitative method is concerned with the gathering of data in a numerical form. The researchers can use statistics to summarise the data. Nevertheless, they do not allow participants to explain their choices or the meaning of the questions.

2.3.2. Data Collection

The subject involved in the investigation was the 7th grade students at Victory school and the head teachers of three classes 7A5, 7A6, 7A7 who helped deliver the questionnaires to every student as well as record the students' voices when visiting each student' house during coronavirus pandemic leave.

The population from which the sample was drawn was the 7th grade students of Victory school. The investigation was conducted based on stratification. It meant the target groups with the same characteristics were selected to carry out the investigation. 3 classes 7A5, 7A6, 7A7 in the school year 2019-2020 consisted of 60 students in total. These classes had the same learning ability especially in English, so they were chosen to provide the information.

The data of the study was obtained by using 2 measurement instruments: Survey with questionnaires and diagnostic test. The questionnaires were distributed to the population of 60 students at Victory school. The diagnostic test was designed to test both of the students' perceptive skill and production skill. The diagnostic test was distributed to 12 students randomly chosen from the population. It was comprised of 4 stages:

Stage 1: The students were asked to pronounce the minimal pairs in the word list after having 2 minutes to read through it.

Stage 2: The students were told to listen to a list of word pairs and circle the word that they heard.

Stage 3: The students were required to listen to a list of sentences containing the minimal pairs mentioned in the study and choose the words they heard in each sentence.

Stage 4: The students were asked to choose a topic to make a presentation. They had 5 minutes to prepare, then talk about that topic.

In the diagnostic test, the native speakers' voice was taken from the text to speech website which was developed to read the text of the users by using American or British voice. Besides, the voices of 12 students were recorded with the software Audacity - win 2.3.3 which is the multilingual audio editor and recorder software used to record and edit sounds. Audacity is used to perform a number of audio editing and recording tasks such as making ringtones, mixing stero tracks, transferring tapes and records to computer or CD, splitting recordings into separate tracks and more. The recording would transcribe the students' performances. After that, the transcription was compared with the version produced by the native speaker's performance as the baseline data.

2.4. Findings and Discussion

2.4.1. The actual situation of teaching and learning English at Victory School

From the questionnaire, we can get a general description of the practice of teaching and learning at Victory school. The overview about the practice and learning English at Victory primary, secondary, and high school is presented and analyzed in the table below.

Table 3. *Actual situation of teaching and learning English at Victory School*

Information		Participants	Percentage
Language skills teacher pays much attention to teach	Listening	5	8.3
	Reading	15	25
	Speaking	7	11.7
	Writing	5	8.3
	Pronunciation	3	5
	Grammar	25	41.7
The role of pronunciation in speaking skill	Very important	27	45
	Important	20	33.3
	Not very important	10	16.6
	Not important	3	5.1
Frequency of using English to communicate with other people	Very often	3	5
	Often	5	8.3
	Sometimes	25	41.7
	Rarely	17	28.3
	Never	10	16.7

Regarding to the question of the most important language skill to Vietnamese teachers, the majority of students (41.7%) said that teacher often focused on teaching grammar in every English lesson. Reading came next (25%) and speaking followed with 11.7%. Writing and listening account for 8.3%. Only 3 students (5%) confirmed that teacher paid a lot of attention to the pronunciation skill in each lesson. It means that Vietnamese teachers often emphasize grammar and reading in every English period while other skills like listening, speaking, writing and pronunciation are often ignored. Moreover, as revealed from the questionnaires, most of the students (78.3%) regarded pronunciation as an important skill in English. 16.6% of the students thought that it was not very important to learn pronunciation to be able to communicate well and only 3 students (5.1%) admitted that in their opinion, pronunciation was not important at all in the process of learning English. Clearly seen from Table 3, 41.7% of the students sometimes used English to communicate with other people. Besides, 28.3% of the students rarely communicated with other people in English and 10 students (16.7%) never applied English to their daily communication. In contrast, only 8.3% of the students confessed that they often had conversations with other people in which English was used as the main language tool. Finally, only 3 students (5%) always found themselves in using English to talk. It can be drawn that most of the students (78.3%) realized that pronunciation played an important role in English communication, but very few of them practised pronunciation by frequently communicating with their partners in English (13.3%). In order to explain why this happened, it is necessary to look into students' knowledge about English minimal pairs.

2.4.2. Students' difficulties in practicing English pronunciation

Based on the data in Table 4, the most significant point to notice is that 40% of the students do not have enough time to practise pronunciation at home by themselves. After that, 31.7% of the students claimed that they did not have a lot of chances to practise English with other people as well as foreigners. Concerning about materials, 11.7% of the students stated that finding the right coursebooks to practice pronunciation was also their problems. A small number of the students (8.3%) declared that their teacher had unsuitable teaching methods, which resulted in their problems in pronunciation practice. Next, 5% of the students argued that they were not equipped with modern facilities such as computers or learning software to practise English sounds. Last but not least, 2 students had other ideas. One student revealed that his/her teacher had wrong pronunciation, so he/she did not pronounce the words correctly at the young age and it was hard to correct the mistakes when he/ she got older. The other one stated that although he/she grasped the theories of pronunciation such as the features of aspiration to distinguish p - b at the initial position; Characteristic stretching vowels in closed syllable by voiced or voiced consonants, he/she could not produce the sounds correctly. It is significant to investigate the students' comprehension of minimal pairs in English in order to make clear the circumstances of learning phonetics of the students in grade 7 at Victory school and have some solutions.

Table 4. *Students' difficulties in practicing English pronunciation*

Information	Participants	Percentage
Little time to self-study	24	40
Unsuitable teaching methods	5	8.3
Lack of suitable facilities (computer, learning software)	3	5
Unsuitable materials to practise	7	11.7
Few chances to practise English with other people	19	31.7
Others	2	3.3

2.4.3. Pronunciation errors of JHSS at Victory School

From data collected from the diagnostic test, the researcher noticed numerous mistakes of the students. Many JHSS at Victory School could not tell the difference between minimal pairs /p/ and /b/; /t/ and /d/; /tʃ/ and /dʒ/.

Firstly, in terms of the minimal pairs /b/-/p/, they often pronounced /p/ like /b/ at the initial position.
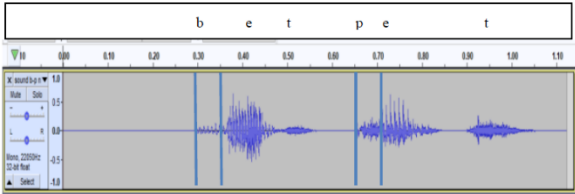
Eg: bet - pet

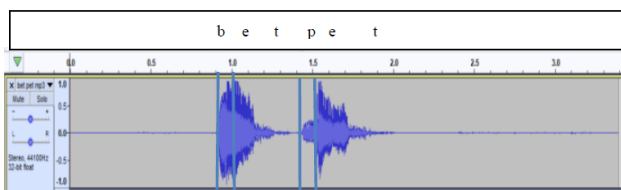**Figure 1.** *Native speaker's performance in "bet - pet"*

Figure 2. Student's performance in "bet - pet"

Secondly, most of the students did not produce /p/ and /b/ at the ending place, only a few students remembered to utter the /p/ and /b/ sound at the final position of the word.
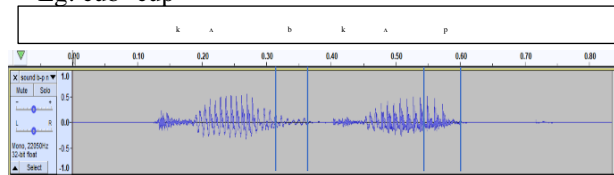
Eg: cub- cup

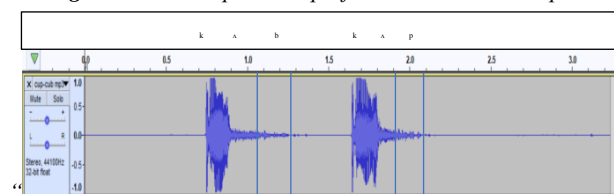*Figure 3. Native speaker's performance in "cub- cup"*

Figure 4. Student's performance in "cub- cup"

Thirdly, with regard to the sound /t/-/d/, students did not seem to produce /t/-/d/ at the end of the words. They unaspirated /t/ at the initial position either. Some of them even made errors when pronouncing /d/;

E.g. down /daʊn/= /jaʊn/.

Fourthly, in the case of the pair /tʃ/-/dʒ/, most of the students thought of this pair as the most difficult minimal pair of phonemes. Students could not distinguish them either at the initial or at the final position. Therefore, they often pronounced /tʃ/ like /dʒ/;

E.g. they produced /tʃ/ and /dʒ/ in jest- chest in a similar way: jest = chest = /tʃest/.

Fifthly, many students pronounced /g/ instead of /dʒ/ and /ʒ/ instead of /tʃ/;

E.g. jest /dʒest / = /gest/, chest / tʃest/ = /ʒest/.

Sometimes, they also forgot to release /tʃ/-/dʒ/ at final position.

2.4.4. Solutions to the pronunciation errors in the minimal pairs

In order to help these students with the problems when understanding and uttering the minimal pairs of phonemes /b/-/p/, /t/-/d/, /tʃ/-/dʒ/, we propose some measures as follows.

Firstly, teachers should apply various flexible activities as well as design fun games so that students can feel interested and have a lot of motivations to practise their pronunciation skill. This is an example of an activity to motivate students in grade 7 when learning pronunciation. For example:

Activity: Stand up, sit down

braise - praise

meant - mend

cheering - jeering

- **Time assigned**: 10 minutes

- **Teaching materials**: a board

- **Preparation**: a list of words previously recorded in the tape recorder

Procedure:

1. Teacher puts the table with the minimal pairs on the board.

2. Teacher assigns each sound an action. For example, the sound /b/, /t/, /tʃ/ could be "stand up", and the sound /p/, /d/, / dʒ/ could be "sit down".

3. Teacher calls out the words, and the students should perform the action. The last student to do the correct action becomes 'caller' and calls out the next word.

Secondly, teachers should set goals in each lesson for the students, and help their students to set the goals in improving pronunciation for themselves. These goals should cover a range of levels from goals for beginners' pronunciation to the advanced levels of pronunciation. This will encourage as well as provide students with the motivation and concern for improving their pronunciation from the early stages of their learning English to the advanced levels.

Thirdly, teacher should integrate pronunciation part in their language teaching by choosing suitable classroom activities for students at all levels and from different backgrounds and help students focus on the language they are producing. Teacher can make every lesson a pronunciation lesson by letting learners listen to English or try to speak themselves. Through this activity, students are doing pronunciation work. Furthermore, every time the teacher speaks, he or she is presenting a spoken model. As a result, pronunciation lessons become more comfortable and less stressful for both the students and teachers, which will raise the students' awareness of the importance and role of pronunciation in language communication.

Fourthly, teachers should give feedback after every activity. This will help to focus learners' attention on the importance of correction and lead to more positive experiences. Moreover, this will make the learning and teaching activity more effective and useful.

Fifthly, students have to try to learn by themselves as well. They ought to learn English at home frequently by listening to the tape and practising pronunciation through the imitation of the native speaker's pronunciation using cassette, radio, or the Internet... Students should listen to the native speaker and repeat the words many times until they pronounce the words correctly.

Sixthly, students should give feedback after every activity. This will help to focus learners' attention on the importance of correction and lead to more positive experiences.

Lastly, students should correct errors by themselves. By correcting errors by themselves, the students create positive classroom atmosphere. It means that the learners make mistakes when attending classroom activities, but sooner or later they will realise their mistakes and try to correct them.

In short, both teachers and students need to perform the above ways in teaching and learning pronunciation, the pronunciation errors in minimal pairs will be overcome smoothly.

3. Conclusion

There are a lot of reasons why students met a lot of difficulties in understanding and producing the minimal pairs of phonemes. They may not have enough time to practise pronunciation on their own at home. Besides, these causes of the problems may be the lack of suitable teaching methods and materials to practise or lack of modern facilities such as computers or learning softwares. Some students also revealed that they did not have a lot of chances to practise English with other people. The habit of wrong pronunciation at the young age and the limited ability of producing the sounds also made students face a lot of problems. The study was conducted to pinpoint the pronunciation errors of JHSS at Victory School when pronouncing the minimal pairs /b/-/p/, /t/-/d/, /tʃ/-/dʒ/ as well as the causes of the problems and suggest some effective solutions to the problems. At the same time, it is significant to raise the awareness of all the people about English language learning and teaching pronunciation in JHS in general and in Victory School in particular.

REFERENCES

[1] Kenworthy, J., *Teaching English Pronunciation*, Longman Group UK Limited, 1993.

[2] Patsy, M. L., Spada N, *How languages are learned,* Oxford University Press, 1996.

[3] Carr, P., *English Phonetics and Phonology – An Introduction*, Blackwell Publishers, 1999.

[4] Charles, H. E., *The Big Book of Beastly Mispronunciations:* The Complete Opinionated Guide for the Careful Speaker, 1999.

[5] Hạo C. X, *Tiếng Việt - Mấy vấn đề: ngữ âm, ngữ pháp, ngữ nghĩa*, Nhà xuất bản Giáo dục, 1998.

[6] Thuan, Đ T, *Ngữ âm tiếng Việt*, Nhà xuất bản Đại học Quốc gia Hà Nội, 1980.

[7] Nhi, P. H., *An investiagation into the difficulties in perceiving and producing the minimal pairs of phonemes /b/-/p/, /t/-/d/, /k/-/g/, /s/-/z/, /tʃ/-/dʒ/ experienced by the second-year students at college of foreign languages- Da Nang university problems and solutions*, M.A thesis, Da Nang University, 2010.

[8] https://www.englishclub.com/pronunciation/minimal-pairs-b-p.htm: 10/3/2020.

[9] https://www.englishclub.com/pronunciation/minimal-pairs-t-d-initial.htm: 10/3/2020.

[10] https://www.englishclub.com/pronunciation/minimal-pairs-dj-/tʃ/.