

AUDIO-ARTICULATION METHOD AS A
DEFOSSILIZATION TECHNIQUE IN THE ENGLISH
PRONUNCIATION OF BANGLADESHI LEARNERS OF
ENGLISH AS A FOREIGN LANGUAGE (EFL)

BY

MOHAMMAD NASHIR UDDIN

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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ABSTRACT

The occurrence of phonological fossilization in the English pronunciation of speakers who speak Bengali as their first language is a common phenomenon due to differences in the phonological features of both languages. This leads to defective pronunciation in English that consequently brings negative impact on the intelligibility between speakers. Despite the issue is common and well-documented, there is still lack of attention given on the strategies to minimize or defossilize phonological fossilization in pronunciation classroom. The current study is conducted to focus on three objectives; to explore the pronunciation issues perceived by the Bangladeshi speakers of English language as well as their awareness on phonological fossilization in their speech, understand the challenges of English teachers to carry out phonological de-fossilization in the pronunciation classroom and finally, test the efficiency of the Audio-Articulation Method (AAM) as a rehabilitative technique and pedagogical tool in pronunciation classroom. Both qualitative and quantitative research methods have been used in the present research where they are evident in the data source, instruments and analysis techniques. A total of 15 students and 4 teachers from the English department at two university colleges in Dhaka, Bangladesh were recruited as the participants through purposive sampling technique. Data were collected through semi-structured interview to elicit their opinions while pre-test and post-test was carried out to evaluate the effects of AAM. Interview data have been transcribed orthographically and later thematically analysed. On the other hand, phonemic transcription of the informants' speech production in the pre-test and post-test was employed. Qualitative findings showed the participants to report low awareness of phonological fossilization despite being English language major students and other issues such as low English language environment and curriculum that does not help them to improve. On the other hand, teachers have informed that pronunciation class is difficult to be carried out because it is not clearly addressed in the language syllabus and lack of knowledge of the teachers on pronunciation teaching strategies. Next, the quantitative analysis that intends to test the efficiency of AAM has shown the method indeed has positive impacts evident in the increase of awareness on phonological fossilization and clear technique to conduct pronunciation lesson. Both teachers and students also reported that the method is engaging and facilitates the learners to some degrees. Findings contribute to identifying one strategy to teach pronunciation in the context of Bangladesh and can benefit language syllabus designers and pronunciation trainers.

Keywords: English as a foreign language, Phonological fossilization, English pronunciation teaching, Audio-Articulation Method, Bengali sounds.

ملخص البحث

إن حدوث التحجر الصوتي في النطق الإنجليزي للمتحدثين باللغة البنغالية كلغة أولى هو ظاهرة شائعة بسبب الاختلافات في السمات الصوتية للغة البنغالية والإنجليزية. وهذا يؤدي إلى نطق معيب في اللغة الإنجليزية مما يؤدي بالتالي إلى تأثير سلبي على قابلية الفهم بين المتحدثين. على الرغم من أن هذه القضية شائعة وموثقة جيدًا، إلا أنه لا يزال هناك نقص في الاهتمام بالاستراتيجيات لتقليل أو إزالة التحجر الصوتي في فصول النطق. أجريت الدراسة الحالية للتركيز على ثلاثة أهداف؛ لاستكشاف قضايا النطق التي يدركها المتحدثون باللغة الإنجليزية في بنغلاديش بالإضافة إلى وعيهم بالتحجر الصوتي في كلامهم، وفهم التحديات التي يواجهها مدرسو اللغة الإنجليزية في تنفيذ التحجر الصوتي في فصل النطق وأخيرًا، اختبار كفاءة طريقة النطق الصوتي (إي إي إم) كتقنية تأهيلية وأداة تربوية في فصل النطق. تم استخدام كل من طرق البحث النوعية والكمية في البحث الحالي حيث كانت واضحة في مصدر البيانات والأدوات وتقنيات التحليل. تم تجنيد إجمالي 15 طالبًا و4 مدرسين من قسم اللغة الإنجليزية في كليتين جامعتين في دكا، بنغلاديش كمشاركين من خلال تقنية أخذ العينات الهادفة. تم جمع البيانات من خلال مقابلة شبه منظمة لاستنباط آرائهم بينما تم إجراء اختبار ما قبل وبعد لتقييم آثار طريقة النطق الصوتي. تم نسخ بيانات المقابلة إملائيًا وتحليلها موضوعيًا لاحقًا. من ناحية أخرى، تم استخدام النسخ الصوتي لإنتاج كلام المخبرين في الاختبار المسبق والاختبار اللاحق. أظهرت النتائج النوعية أن المشاركين أفادوا بوعي منخفض بالتحجر الصوتي على الرغم من كونهم طلابًا متخصصين في اللغة الإنجليزية وقضايا أخرى مثل بيئة اللغة الإنجليزية المنخفضة والمناهج الدراسية التي لا تساعدهم على التحسن. من ناحية أخرى، أبلغ المعلمون أن فصل النطق يصعب تنفيذه لأنه لم يتم تناوله بوضوح في منهج اللغة ونقص معرفة المعلمين باستراتيجيات تدريس النطق. بعد ذلك، أظهر التحليل الكمي الذي يهدف إلى اختبار كفاءة إي إي إم أن الطريقة لها بالفعل تأثيرات إيجابية واضحة في زيادة الوعي بالتحجر الصوتي والتقنية الواضحة لإجراء درس النطق. كما أفاد كل من المعلمين والطلاب أن الطريقة جذابة وتسهل على المتعلمين إلى حد ما. تساهم النتائج في تحديد استراتيجية واحدة لتدريس النطق في سياق بنغلاديش ويمكن أن تفيد مصممي المناهج اللغوية ومدربي النطق. الكلمات المفتاحية: اللغة الإنجليزية كلغة أجنبية، التحجر الصوتي، تعليم نطق اللغة الإنجليزية، طريقة النطق الصوتي، الأصوات البنغالية.

APPROVAL PAGE

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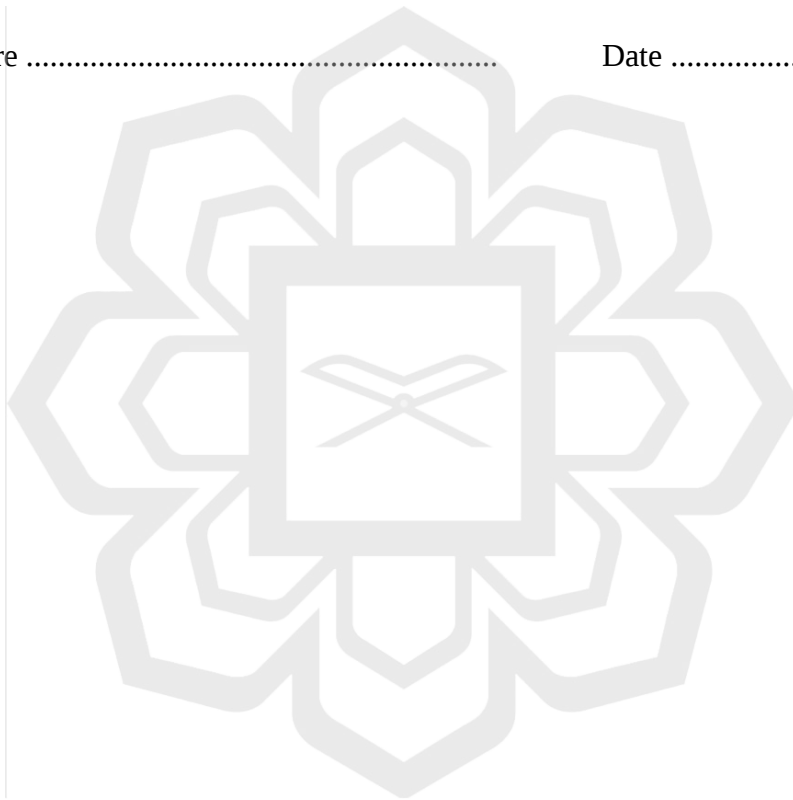
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I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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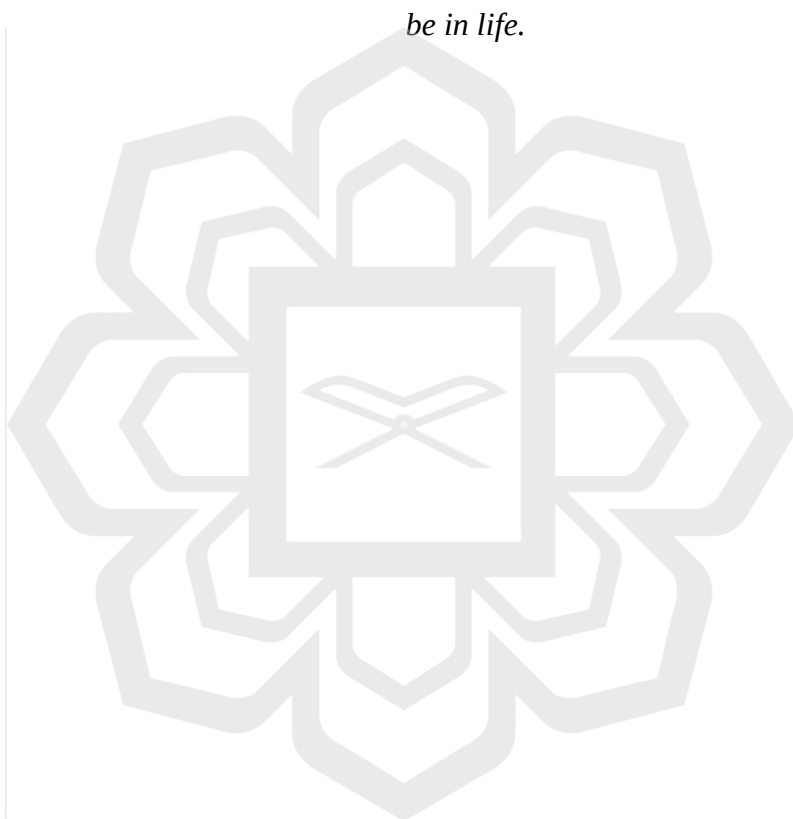
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*This thesis is dedicated to my late father for laying the foundation of what I turned out to
be in life.*



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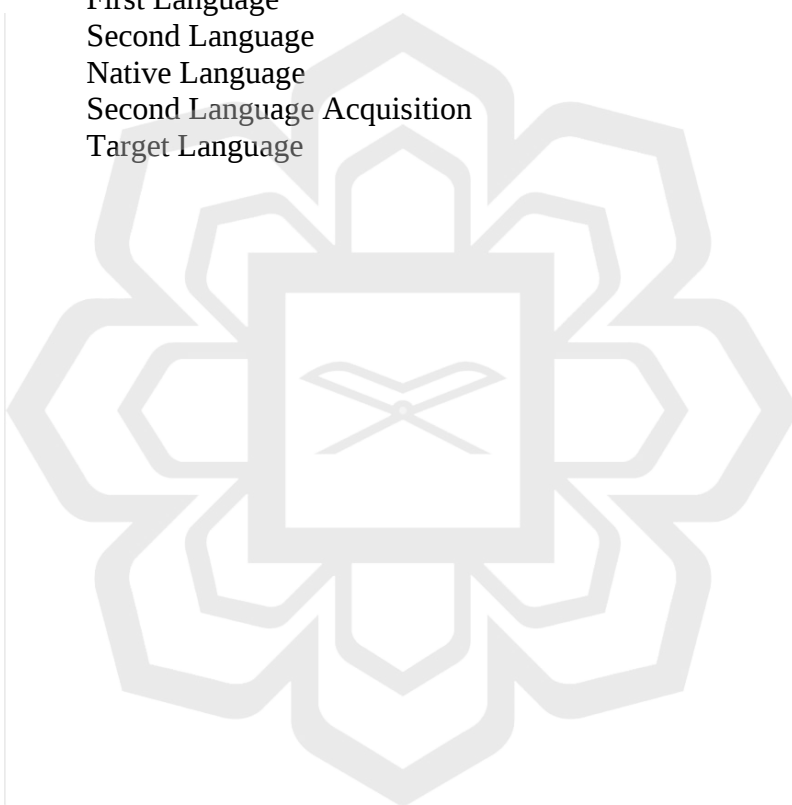
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LIST OF ABBREVIATIONS

AAM	Audio-Articulation Method
CLT	Communicative Language Teaching
CLTA	Communicative Language Teaching Approach
EFL	English as a Foreign Language
ELL	English Language Learning
ESL	English as a Second Language
FL	Foreign Language
IL	Interlanguage
IPA	International Phonetic Alphabet
L1	First Language
L2	Second Language
NL	Native Language
SLA	Second Language Acquisition
TL	Target Language



CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

Pronunciation is generally understood as the production of sounds that people use to produce meaningful unit in language (Prashant, 2018). Pronunciation that is close or according to the standard helps interlocutors to be intelligible to one another. Hence, intelligible pronunciation is necessary for successful communication as it will guarantee understanding. However, cases such as speaking in second or foreign language can give negative impact to the intelligible pronunciation. Especially in the case when the sound system of the second language is different to that of the first language, the learners can easily find difficulty to produce intelligible pronunciation (Qader, 2020). For example, the Arabic language which has no /p/ sound will logically result in the speakers to replace the sound with the closest sound in their native language which is /b/ when they speak in English (Elwahab, 2020). Hence, it is common for the speakers to pronounce words like “park” as /ba:rk/. Their habit in pronouncing the sounds of their first language (L1) can also make it more difficult for them to pronounce the sounds of the new language that are not available in their first language or that are used in a different way (Yoshida, 2016). This will result in unintelligible pronunciation and if not addressed, after some time, the mispronunciation becomes permanent or what is known as phonological fossilization.

Issues on unintelligibility due to phonological fossilization among non-native speakers have been investigated quite widely. For instance, in the Thai contexts, some studies explore unintelligibility and found that Thai EFL learners possess many problems both in segmentals and suprasegmentals in pronunciation (e.g. Wei and Zhou, 2002; Kanokpermpoom, 2007; Khamkhien, 2010 and Thep-Ackrapong, 2010, as in Singhanuwananon, 2019). First language interference is one of the factors for this unintelligibility. When the first language sounds intervene in the speakers years after years, these sounds become established in the cognitive domain of the users. This establishment of first language sound is called fossilization of these sounds.

Unintelligibility issue in English pronunciation among the Bengali speakers is increasing when English has lost the status of second language. In the Indian subcontinent from British rule till 1971, English, in this Bangla speaking area, had much priority. At that time, English was widely used in administration, education, judiciary in Bangladesh (Moniruzzaman, 1979 as in Ara, 2020). English, during this time, enjoyed the status of the second language. During the post-colonial era, in Bangladesh, the position of English changed. According to Farooqui (2007, as in Ara, 2020) now, English is a foreign language in Bangladesh. Shalahuddin, Khan and Rahman (2013) in their study mentioned that although in many aspects English works like a second language in Bangladesh, this does not make Bangladesh an ESL country. In Bangladesh, there is a growing need for English in job markets, and employees working in the business, industrial, and governmental sectors are expected to have proficiency in English (Erling, 2017; Farooqui, 2007 as in Hasan, 2022). In addition, the improvement of the students' language skills will help them have "access to better economic and social opportunities" and provide them with "a route into work and out of poverty" (Erling, 2017; p. 389, as in Hasan, 2022). But unintelligibility due to phonological fossilization in English pronunciation greatly hampers in these opportunities.

Fossilization in linguistics is thought to be the most discrete feature of adult second language acquisition and an inevitable phenomenon in second language acquisition (SLA) process (AL-Shormani, 2013). It is produced across geographical boundaries and involves speakers with any first language (L1) background. Selinker (1972, as in Wei, 2008) first put forwarded the notion of fossilization in his paper on interlanguage. Wei (2008) defined fossilization as a permanent cessation of IL learning before the learner has acquired the target language forms at all levels of linguistic structure. But Lei et al. (2018) believed that almost all errors in pronunciation which are easily fossilized can be de-fossilized. One of the reasons why second language learners make fossilized errors in their pronunciation is that they employ the phonological rules of their mother tongue to those of the target language (Hismanoglu, 2007; Demirezen & Topal, 2015). Besides phonological fossilization, there may be morphological, syntactic, semantic, and pragmatic fossilization in the learners (Wei, 2008). Fossilization is demonstrated at all levels of language study but

research proved evidence of constant occurrences at the phonological level (Selinker, 1972 as in Onwuta, 2022).

The phonological and orthographic system of the learners' first language has a great influence on phonological fossilization (Senowarsito & Ardini, 2019). Brown (2000, as in Senowarsito & Ardini, 2019) described the notion as permanent error and Wei (2008) described as the repetition of phonological errors that are responsible for learner's foreign language incompetence. Specifically, it refers to wrongly pronounced sounds which have become a habit of speech in a second or foreign language learner (Senowarsito & Ardini, 2019).

Previous studies (Kahraman, 2012; Smaoui & Rahal, 2015; Rahal, 2016 as cited in Rahal, 2018) have shown that L2 learners' interlanguage (IL) patterns often become fossilized and L2 learning process is hindered and makes no further progress toward the target language (TL). According to Han (2009, P.137, as in Nushi, 2016) "L1 serves as the source language that provides the initial building materials to be gradually blended with materials taken from the target language (English)". Generally, fossilized pronunciation errors may occur for some particular reasons and these include phonemic and phonetic divergence of L1 and TL, or absence of features of L1 (Brown, 2000; Andi-Pallawa, 2013; Luo, 2014; Yuliati, 2014 & Chaira, 2015), the fusion of characteristic of the L1 into the knowledge system of the TL (Ellis, 1994 & Chaira, 2015), various consonant clusters of L1 and TL (Yuliati, 2014), the cognitive experiences of the L1 (Brown, 2000 & Chaira, 2015), the habit on mother tongue phoneme system pronunciation (Littlewood, 2002 & Chaira, 2015) and the dissimilarities of the orthographic systems of L1 and TL (Chaira, 2015, as cited in Senowarsito & Ardini, 2019).

Senowarsito and Ardini (2019) observed that the Javanese adult learners have difficulties in pronouncing the word <the>. They usually pronounce [(n) dæ] for the word <the> with the phoneme /n/ that precedes [dæ], in lieu of [dæ] alone. Such mispronunciation is occurred due to their cognitive dependence on L1 (Javanese) since they are used to pre-nasalize consonant [d] in initial Javanese words, such as <delok> [ndə.lək] 'see' or <demok>[ndə.mək] 'touch'.

The speakers of any L1 have some problems in learning foreign language; specifically in learning sound systems as first language has its own sound systems that are diverge from foreign language (Andi-Pallawa, 2013 as in Senowarsito & Ardini, 2019). Yuliati (2014) found that Indonesian learners of English may face some problems in pronouncing distinct English types of consonant clusters, such as <squeeze>, <structure>, <screw>. English language has usually three consonants which function as a syllable onset like /s/, can be followed by one of the voiceless stop consonants /p/, /t/, or /k/ and one of the approximants /l/, /r/, /w/, or /j/. Bahasa Indonesia allows /s/ in the onset position, but it is not an element of a consonant cluster unless the next consonant after it is a liquid one. Indonesian speakers add or insert a vowel sound between two consonants or epenthetic sound, as in the word ‘stamp’ may be pronounced [səətəmp] instead of [stəmp]. There are some English sounds that are not available in Bahasa Indonesia like /p^h/, /t^h/, /θ/, /d/, /i:/, /o/, /u:/, /æ/, and /e/. Yosta and puslit (2008) found that the Indonesian learners pronounce them with sounds that are available in Bahasa Indonesia and they are pronounced approximately to their L1.

In another study, Turkish students of English are found to use the Turkish pronunciation rule and articulate English vowel phoneme /æ/ as /e/ which are demonstrated as a fossilized pronunciation error for Turks (Demirezen, 2008). In case of consonant, the difficulties that Turkish EFL learners face while pronouncing /d/ is that in particular situations, in final consonants, they usually pronounce it as /t/. For example, the minimal pairs ‘bad’ and ‘bat’ and ‘bed’ and ‘bet’ will be totally unintelligible if the final /d/ is articulated like /t/. According to Khalilzadeh (2014, as in Mahzoun & Han, 2019), the two phonemes /t/ and /d/ are alveolar in English but dental in Turkish language. So the variation in the place of articulation is one of the reasons of wrong pronunciation (Mahzoun & Han, 2019).

Ercan (2018) explored the pronunciation problems of Turkish EFL learners in state schools in Girne, TRNC. The findings showed that the learners had problem pronouncing consonants like /ð/, /w/, /v/ as well as distinct vowels and diphthongs, such as /i/, /a/. The origin of the shortcoming was found to be the mother tongue interference, followed by lack of exposure to the English as a foreign language and proper training of the learners. Similar studies were conducted on speakers of other

languages. For example, Alqunayeer (2016) found Saudi Arabian university learners' problematic areas in pronouncing the letter /g/. The students were generally weak in articulating soft /g/ when it was trailed by the vowel /e/ and /y/; almost half of the learners articulated /g/ before /e/ wrongly and again half of the learner mispronounced /g/ when it was trailed by /y/. Besides, majority of the learners mispronounced hard /g/ before the vowel /a/.

In the context of Bengali language, literature has documented the phonetic differences between Bengali and English language. As a result, native speakers of Bengali language have the tendency to replace specific phonemes of English with those in Bengali (Baker, 2006; Mostafa, 2010 as in Taher, 2019). For example, English has [i:] and [æ] but in the case of producing these sounds by the Bengali speakers, it creates a problem in them as there is no [æ] phoneme in Bengali language. The Bengali speakers often replace [æ] with /a/ or /e/ (Taher, 2019). In back vowels, such as [u:], the tongue is positioned towards the back of the mouth. In English, [u:], [ɑ:] and in Bengali [উ], [আ] is considered as back vowel but there is no long vowel in Bengali language; all Bengali vowels are short vowels. The Bengali speakers replace [u:], [ɑ:] by [u-উ], [ɑ-আ] which are responsible for their unintelligibility in English pronunciation. These wrongly pronounced sounds/phonemes gradually become permanent or fossilized in their English speaking.

Tamzida and Siddiqui (2013) stated that native Bengali EFL learners encounter problems in pronunciation mainly for the lack of knowledge about the distinction between the sounds and features of Bengali and English phonology. They fail to pronounce those English sounds or features successfully which they are not ever accustomed to. As a result, they make some English sounds identical with some Bengali sounds leading to mispronunciation. It is also reported in studies that most of the Bengali speakers always pronounce /e/ instead of /ei/ in the words like 'able', 'ape' and /u/ instead of /u:/ in the words like 'fool' and 'pool' (Maniruzzaman, 2006). This replacement of phonemes by the Bengali speakers in English certainly results in much confusion and misunderstanding (Maniruzzaman, 2010). According to Kelly (2002, as in Gilakjani & Sabouri, 2016), students who always mispronounce a series of phonemes create much problem to the listeners. Tennant (2007, as in Gilakjani &

Sabouri, 2016) has found that many Bengali adult speakers struggle to pronounce correct English sound when they fail to avoid the habits of their Bengali pronunciation. In this way, the Bengali phonemes and phonology have become fossilized in them (Gilakjani & Sabouri, 2016). Consequently, the speech production of the Bengali speakers of English is subjected to inaccuracy and is incomprehensible.

For this problem, the role of pronunciation teaching in Bangladeshi EFL classroom has come into focus. Teaching of English pronunciation in the classroom was never into the focus in “grammar translation era” in Bangladesh and as a result, speaking and listening were not designed in the curriculum (Howlader, 2011, as in Tahereen, 2015). Speaking, listening and pronunciation skills are considered as the “Marginalized English Language Skills” and this is why, these skills are always being neglected and overlooked in the language education policy of Bangladesh (Haque & Baki, 2012, as in Osmany, 2017). Though grammar-translation method focuses on reading as the primary goal of language learning, this method is still widely used in the academic education and is severely criticized by some educationists on different grounds. It certainly improves accuracy in language form but it usually fails to develop fluency in its users (Klapper, 2006).

Students who have become competent in learning language via this method find themselves at a complete loss when exposed to situations in which native English language is the only means of communication. In 1960, when Communicative Language Teaching Approach (CLTA) comes into focus, speaking and listening were given importance in the curriculum and syllabus design, but practically or in daily usage these were identified neither in the classroom activities nor in the assessments (Tahereen, 2015). In spite of pronunciation being the most important element of oral communication and communicative competence, this sub-skill of English language has always been overlooked in Bangladesh (Maniruzzaman, 2008; Hoque, 2010; Tahereen, 2015 as in Osmany, 2017). The Bengali speaking EFL learners frequently encounter difficulties in speech production and speech perception and sometimes make the speech unintelligible to some extent (Uddin & Monjur, 2015). Therefore, the necessity of integrating speaking, listening and pronunciation with oral communication in the syllabus is high (Maniruzzaman, 2008).

This integration is essential for producing intelligible sounds of English by the students of tertiary level in Bangladesh because many of the students of tertiary level have problem in producing intelligible sounds (Howlader, 2011, as in Tahereen, 2015). Notwithstanding, being the students of university level in Bangladesh, most of them are afraid and hesitate to speak in English let alone correct pronunciation because of their lack of knowledge and unawareness of the syllabic or phonological difference of English and Bengali words, interference of Bengali sounds and negative transfer (Begum & Hoque, 2016). That is why, the learners sometimes become confused with the basic sounds of English and Bengali language (Osmany, 2017).

To make the students master in pronunciation skill, different ways can be adopted by the teachers to teach pronunciation in the classroom. The method combines the audio-visual technique, the articulatory gestures, and the interaction technique into one model by including sound recognition and production activities such as listening, imitating, phonetic training, minimal pairs, minimal sentences, visual aids, tongue twisters and reading aloud (Isarankura, 2015). Finally, both teachers and students must have the same goal and expectations for teaching and learning English pronunciation in the classroom (Albiladi, 2019).

Isarankura (2015) examined variants of the English /v/ sound among Thai EFL learners and tested the effectiveness of the Audio-Articulation Method (AAM) in improving the learners' pronunciation of the /v/ sound in word-initial, medial, and final positions. The results reveal that the /v/ sound was produced in five variants: [v], [w], [b], [f], and [Ø]. The high group used [v] most frequently in all positions during the pre-test while the low group used [w] and [b] most often in word-initial and word-final positions, respectively. After exposure to the AAM, the use of the target [v] increased significantly in both groups.

This study attempts to investigate the pronunciation issues like phonological fossilization and unintelligibility in English pronunciation of Bangladeshi learners, the challenges of English teachers and the efficiency of Audio-Articulation Method. It is important to address the issues as English pronunciation among the Bengali speakers has always been subjected to certain unintelligibility and not to mention, poor comprehensibility level to the listeners. In addition, this study also has tried to

implement possible technique that can be applied in the classroom by pronunciation or language pedagogy in treating the problem. Albiladi (2019) paradoxically mentioned that pronunciation is one of the most important skills to develop, but at the same time, it is also a difficult aspect to learn and teach.

1.2 PROBLEM STATEMENT

This study has been conducted to focus on several issues pertaining English pronunciation among the Bengali speakers of English. Research on pronunciation has shown that pronunciation deviation is a major issue in loss of intelligibility (Levis, 2018). Pronunciation must be intelligible and comprehensible for establishing effective verbal communication. But this intelligibility and comprehensibility is hampered due to the fossilized sound of L1 in the speaker's pronunciation. Phonological fossilization in English pronunciation by the university level students is in fact a prevailing phenomenon in Bangladesh (Uddin, 2021). The distinct fossilized sounds of Bengali language frequently intervene in their English speaking (ibid). Hence, it can lead to many other greater issues such as getting prestigious position.

Firstly, this study formulated the pronunciation issues that lead to unintelligibility in English pronunciation of the Bangladeshi adult learners of English. The environment in which the learners grow up is not favorable for them to practice English. That is why, they are not aware of their errors in English pronunciation (Chand, 2021). The unintelligibility evident in various forms of errors is due to differences in the phonetic and phonological system of Bengali and English language. Gradually, these errors become permanent or fossilized.

Awareness on fossilized errors is essential for intelligible sound production and perception by the students of second/foreign language specifically, when their first language is fossilized. But due to their environment and lack of motivation from the teachers, they remain unaware about their mistakes (Chand, 2021). Fossilization of the certain sound is caused by the first language interference and the unawareness of fossilized sounds/phonemes (Demerizen, 2010). Phonological awareness is the phonological processing ability most strongly related to literacy. It involves phoneme

awareness, the ability to employ individual sounds (phonemes) inwards, and elementary phonological skills, such as judging whether two words rhyme or not. Generally, learners who have problems identifying or using sounds in words must struggle in learning listening and speaking (Anthony & Francis, 2019). Many language students have difficulties in pronouncing distinct English sounds correctly. Most of the Bangladeshi adult learners make mistakes in pronouncing certain English phonemes as they are unaware of the sonic differences between Bengali and English language (Albiladi, 2019).

It is a fact that many English sounds are not available in other languages and vice versa. Due to this unavailability, non-native speakers of English mispronounce many English words. So teachers need to help them to be aware of the differences between particular sounds in English and their mother tongue (Albiladi, 2019). Because of the unawareness of the adult Bengali learners, phonological fossilization of Bengali sounds frequently occurs in their English speech. The issues of this intervention are first language interference, transfer to native language, the incompatibility of English vowels and limited scope to practice or alien to L2 environment, lack of corrective feedback, and lack of knowledge of the production of English sounds (Rahal & Smaoui, 2020).

Secondly, there are challenges that the English teachers face in defossilizing the problem causing Bengali sounds in English pronunciation in the classroom (Anis, 2021). Among the challenges, L1 interference, limited time in teaching pronunciation, lack of motivation, and inconsistency between written and oral competence are mentionable (Yuniartiningsih, 2020). Tahereen (2015) found that teaching pronunciation to the students of university level in Bangladesh is a challenge as no course was designed for the students in the previous classes. Most of the pronunciation and language instructors in Bangladesh neglect and feel boring to teach pronunciation in the classroom (Anis, 2021). Lack of resources, materials, teaching aids and facilities like computer technologies, multi-media classroom and above all modern amenities for teaching pronunciation prevented teachers from teaching speaking, listening or pronunciation (Gilakjani & Sabouri, 2016). Another challenge of teaching pronunciation is that the learners indicate that many teachers in the previous levels did not know how to pronounce words correctly and so how it is

possible for them to teach the learners intelligible pronunciation (Asante-Nimako, 2018). Maniruzaman (2008) said that in Bangladesh almost all the EFL teachers are not familiar with the useful and effective methods or techniques for teaching pronunciation and as they do not know what techniques are appropriate when they face a specific issue, they simply avoid pronunciation teaching in the classroom as they are not well trained and infrastructure of the institutions is not favorable. So, the technique or method of teaching pronunciation is not employed in the classroom due to teachers' ignorance and students' disinterest in English pronunciation (Gilakjani & Sabouri, 2016).

For these reasons, the learners' communicative competence in English language is very poor in Bangladesh Majumder et al. (2017). Gilbert (2008) observed that as class hour in Bangladesh is fixed and limited, the pronunciation or language teachers do not get sufficient time in their classes and the learners cannot improve their understandability due to the psychological barrier in them. Gilakjani and Sabouri (2016) stated, many EFL or ESL trainers and trainees believe that it is useless and foolish act to spend time on pronunciation because it would be very difficult for students to identify the differences between ship and sheep. It seems that to stick to this principle, the public and private universities in Bangladesh run courses on phonetics and phonology and one or two courses are designed on speaking and listening (Sultana, 2013, as in Osmany, 2017). But teaching pronunciation is fully avoided in the syllabus by the curriculum designers. Again, Yuniartiningsih (2020) in a research found that most of the ESL or EFL teachers think that teaching pronunciation is an essential aspect in the context of non-native countries but all of them state that at first, they have to take initiative to correct the learners' errors in pronunciation in order to improve their pronunciation competence and prevent them from fossilization.

Thirdly, the implication of Audio-Articulation Method in teaching intelligible pronunciation in the classroom may vary from learners to learners and country to country. Audio-Articulation Method propounded by Demirezen (2003, 2004) has been applied in Turkish EFL/ESL classroom. The implication of this method and related exercises were practically employed to experimental groups for 14 weeks by Murat Hismanoglu (2004) and it was found that it can be used in correcting the

pronunciation errors of non-native English language teachers and learners in Turkey. But the core sounds of English that are usually replaced by the Turkish and Bengali speakers are different. The Turkish pronunciation trainers and trainees recorded the core consonant sounds like /θ, ð, ŋ, w/ and vowel sounds of English like /æ, ʌ, ɔ, ə, a/ continuously become an issue of fossilized mistakes. Because of the absence of some English sounds or phonemes and some of them do not exist as same value in Turkish vowel and consonant inventory, the Turkish learners frequently make phonological fossilization in their English speech. Thus, L1 interference becomes unavoidable and troubles in pronouncing intelligible English sounds by the Turkish teachers and learners (Demirezen, 2005). For example, the pronunciation of /w/, which is a voiced bilabial semi-vowel, is always mispronounced as /v/ by Turkish teacher trainees and the teachers-on-the-job since /w/ does not exist in the inventory of the modern standard Turkish. According to Demirezen (2003, 2004), Audio-Articulation Method can be used to rehabilitate these errors to a great extent. But this study documented the core sounds of English language such vowels like /ə/ei--->e/এ/, u:--->u/উ/ and consonants like z--->s/স/, ʒ--->ʃ/শ/, g--->gh/ঘ/ (Bashiruddin, 2016) which are mainly responsible for the fossilized errors in Bangladeshi teachers and learners. There arises the necessity of testing AAM in Bangladeshi EFL classroom. Thus, this study explores the pronunciation issues perceived by the Bangladeshi speakers of the English language, the challenges of English teachers to defossilize Bengali sounds in English pronunciation, the efficiency of Audio-Articulation Method in Bangladeshi EFL classroom and the teachers' and learners' assessment on the use of Audio-Articulation Method in Bangladeshi EFL classroom.

1.3 RESEARCH OBJECTIVES

This study is guided by the following research objectives:

- a) To identify the pronunciation issues perceived by the Bangladeshi speakers of the English language.
- b) To explore the English teachers' challenges in defossilizing the English pronunciation of Bangladeshi adult learners.

- c) To test the efficiency of the Audio-Articulation Method to defossilize the problem causing sounds in the Bangladeshi adult learners of English.
- d) To explore the teachers' and students' opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom?

1.4 RESEARCH QUESTIONS

Following the research objectives, this study attempted to answer four research questions:

- a) What are the pronunciation issues perceived by the Bangladeshi speakers of the English language?
- b) Why do the English teachers face challenges in defossilizing the English pronunciation of Bangladeshi adult learners?
- c) Is the Audio-Articulation Method efficient to defossilize the problem causing sounds in the Bangladeshi adult learners of English?
- d) What are the teachers' and students' opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom?

1.5 SCOPE OF THE STUDY

This study highlights on the pronunciation issues encountered by the Bangladeshi speakers of English. The pronunciation issues of English language occur for different reasons. First language interference, lack of exposure to English language, environmental and social influence, disinterest of the learners, long time habit of learners in their mother tongue, teachers' negligence in teaching pronunciation and lack of proper strategy in teaching pronunciation are the factors that are responsible for pronunciation problems of Bangladeshi learners of English. This study also explores the English teachers' challenges in teaching pronunciation in Bangladeshi EFL classroom and defossilizing the problem causing sounds in English pronunciation

of Bangladeshi adult learners of English. This research specifically investigates the efficiency of AAM as a defossilization technique in the English pronunciation of Bangladeshi EFL learners and the teacher's and students' opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom. The Bengali speaking adult learners who are selected as the participants are directly involved in the phenomenon and provide rich data to fulfill the objectives of this research. Selection of research site is also significant in this study. The two university colleges are situated in the central part of Bangladesh and they exactly represent other institutions as the students of different regions of the country come to study here. In this study, two types of data; a) interview data and b) phonetic and phonological data have been collected from the sites.

1.6 SIGNIFICANCE OF THE STUDY

The importance of this study can be observed when the teachers, learners, educators, and researchers in Bangladesh will be conscious about the phonological fossilization of Bengali sounds in English pronunciation and take measure to defossilize those sounds for intelligible pronunciation.

This study will expand the existing literature on the issues of English pronunciation of the Bangladeshi adult learners of English. The most prominent issue which this study explores is the phonological fossilization and suggests the ways to defossilize the fossilized sounds in their English pronunciation. This thesis is designed to study in the field of pronunciation with its attention on the phonological fossilization in Bangladeshi EFL learners and it will be used as a model or method for those who are involved in teaching and learning English pronunciation with fossilized errors in the class.

In addition, identifying the major issues in pronouncing English sounds by the adult learners in Bangladesh, it has also highlighted on teaching/ learning activities in the classroom. So, the teachers and students will get a chance to analyze their errors in the classroom practices. By choosing Bengali speakers of English as participants, this

research can easily differentiate between fossilized Bengali sounds and comprehensible or intelligible English sounds.

Intelligible English pronunciation is a glaring need in this digitalized and globalized world. To produce intelligible pronunciation, it is must to learn exact articulation of English sounds. Without correct articulation of these sounds, the English speech of the Bengali speakers will not be understandable to the listeners. According to the China sage, Confucius “if language is not correct then what is said is not what is meant. If what is said is not what is meant, then what ought to be done remains undone”.

Pronunciation is always neglected and rarely receives due importance in teaching and learning English at any levels in academic system in Bangladesh (Maniruzzaman, 2008). As the problems of the learners have been identified through this study, both the trainers and trainees will be interested and feel relaxed to teach and learn English pronunciation, which was once a subject of complication for them, and by learning correct pronunciation, the students will be able to attain prestigious grade in their speaking and listening assessment. This study will be a guideline for teachers and students to diagnose the fossilized form of distinct Bengali sounds and help them to produce English sounds smoothly.

1.7 DEFINITION OF KEY TERMS

English as a Foreign Language (EFL)

English as a Foreign Language (EFL) is the term which denotes the environment where it is learnt and used by the people in non-official purposes. It is not the dominant language of that community and not used as a second language. Sometimes, people confuse with English as a Foreign Language with English as a Second Language. Although ESL (English as Second Language) and EFL (English as Foreign Language) are often used interchangeably, there are clear distinctions between the two aspects. ESL refers to the countries where the medium of instruction in education and government is in English, although English is not the first language. On the contrary,

EFL refers to the countries where English is not used as the medium of instruction, but English is taught in schools, colleges and universities. Bangladesh was once an ESL country but now the status of English here is a foreign language. The methods, techniques and approaches of teaching and learning English as a second language and foreign language are far difference (Fernandez, 2012).

Teaching of Pronunciation

Teaching pronunciation is the most complicated, yet one of the most significant aspects of ESL or EFL teaching (Gelvanovsky, 2002). Pronunciation plays a vital role in successful communication. In this respect, correct pronunciation is essential. Unintelligible pronunciation of English will certainly make people misunderstand the speaker, whereas intelligible pronunciation will encourage them to listen to the speaker. Nunan (1991) stated that teaching of pronunciation can be focused from different points of view because first language interference is a common and crucial phenomenon in case of teaching and learning any second or foreign language. Very few learners can acquire the competency in pronunciation of a foreign or second language, though they start learning their target language after adolescence. Every language has a number of plausible sounds. Such as, English has forty-four different sounds, while, the number of alphabets in English is twenty-six. Alphabets that means the graphemes are not enough to show the difference between the sounds like 's' in cats and dogs and 'th' in that and thank. International Phonetic Alphabets (IPA) can be applied in case of pronouncing these sounds and to avoid these problems. Teaching pronunciation is an essential part of second/foreign language learning since it greatly influences on learner's communicative competence and performance (Gilakjani, 2012).

Phonological Fossilization

Phonological fossilization means the occurrence of phonological errors which emerge from wrong acquisition of sounds of L2 generally influenced by L1 (Wei, 2008). For example, the Chinese students say “*Thank [snk] you*” instead of “*Thank [θæŋk] you*” as there is no /θ/ sound in China language. They are habituated in pronouncing /s/ instead of /θ/ and it has been permanent in their speech. This study has documented distinct Bengali sounds which are responsible for phonological fossilization in the learners’ English speech. When such errors in pronunciation frequently created and eventually stay stable in the wrong manner, phonological fossilization occurs (ibid). Consonants like [dʒ, ʒ, t, s, ð, k, ʃ, tʃ, g/] and vowels like [ə/ɛi, e, u, ɑ:, i:, ɔ, æ, ɔ:] of English are problem causing “core sounds” for Bangladeshi teachers and students.

Bengali Speakers

Bengali speakers are those who speak Bengali as their first or second language. Bengali speakers mainly live in Bangladesh and west Bengal in India. But this study mainly focus on the Bengali speakers in Bangladesh. The number of Bengali speakers is about more than 230 million today, making Bengali the seventh language after English, Chinese, Hindi-Urdu, Arabic, Spanish and Portuguese (Banglapedia - National Encyclopedia of Bangladesh, 2012).

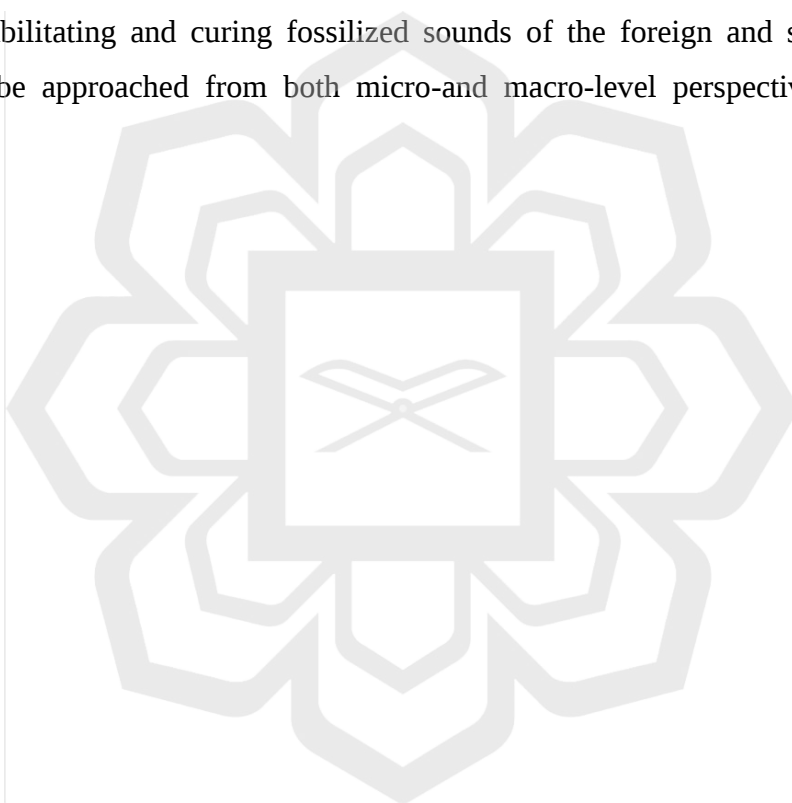
Intelligibility in Pronunciation

Intelligibility is the focus on words and refers to listener comprehension of an utterance. Intelligibility includes pronunciation, stress, intonation, and vowel and consonant sounds (Reinbold, 2017). Derwing and Munro define it as “the extent to which a listener understands a speaker’s message” (as cited in Grant p. 10). It is a two-way process because it involves both speakers’ language production and listeners’ comprehension ability. A listener’s previous exposure to L2 speech or familiarity with

the topic of discussion can affect the understanding of L2 speakers (Kennedy & Trofimovich, 2008).

Audio-Articulation Method

The Audio-Articulation Method is a strategy for teaching, learning and rehabilitating fossilized sounds in the pronunciation of non-native speakers of English, usually making the learners aware of phonological errors in pronunciation of target language and teaching the students with oral practices and exhortation. Teaching pronunciation for rehabilitating and curing fossilized sounds of the foreign and second language should be approached from both micro-and macro-level perspectives (Demirezen, 2010).



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents the critical review of literature related to pronunciation, pronunciation problem, importance of teaching comprehensible pronunciation, challenges in teaching L2 or FL pronunciation, teacher's perception, fossilization in pronunciation, phonological problem, phonological fossilization around the world, Bengali language, phonological features, phonological differences between Bengali and English language. This chapter also expands its discussion on phonological fossilization among Bengali speakers, studies on phonological fossilization in Bangladesh, phonological awareness, the role of attention and awareness, level of awareness on fossilized sound in Bengali speakers. Methods for teaching pronunciation, strategies for defossilization, Audio-Articulation Method, pedagogical implication of Audio-Articulation Method are discussed as well.

2.2 PRONUNCIATION

Pronunciation is the production of sound which is used to make the meaning of a language (Gilakjani, 2016). It is widely acknowledged that pronunciation is a significant skill the language learners need to attain (Nguyen & Luu, 2021). Gilakjani (2012) claimed that pronunciation is an indispensable part of foreign language learning as it greatly influences on the learners' communicative competence and performance. Poor pronunciation competence can degrade learners' self-confidence, restrict social interactions, and negatively influence on the planning of the speaker's capability and abilities (ibid).

Al-Azzawi and Barany (2015) stated that pronunciation is a must for the fulfillment of not only oral language improvement but also for the skills of reading, writing and listening. Learners with correct or intelligible pronunciation are supposed

to be understood clearly even if their knowledge of grammar or vocabulary is poor. On the other hand, learners with incorrect pronunciation will be criticized and misunderstood, even if they are competent in grammar or vocabulary (Farser, 2000, as in Kochaksaraie & Makiabadi, 2018). Munghate (2019) claimed that proper pronunciation is an inevitable matter of any language rightly fusing correct articulation of sounds, proper rhythm, correct intonation patterns, right accentuation and other finer distinction

Prashant (2018) said that pronunciation plays a significant role in English speaking to deliver the thought, feelings and idea. The ability of speaking English embodies the correctness of pronunciation and directly affects the appropriate communication in conversation (Yowani, 2021). Many speakers of the English language attract the audiences' attention with their eloquent speech of English (Schreiber, 2013). In many cases, unintelligible pronunciation of words or improper intonation is the cause of misunderstanding in communication. For example, if the speaker pronounces the words *big* and *pig*, *sea* and *she* with apparently no differences, it will lead to a misunderstanding of the listeners (Kobilova, 2022).

Intelligibility and comprehensibility is a must for successful verbal communication. Intelligibility is described as the listeners' proper understanding of L2 speech (Munro & Derwing, 1999, as in Kochaksaraie & Makiabadi, 2018). Intelligibility is the speaker's awareness of a variety or accent of English: the greater the familiarity, the more likely the user will understand, and be understood by, speakers' speech will be more intelligible of that variety (Smith, 1992, as in Khatib & Monfared, 2017). It shows the listeners' ability to perceive L2 speech in a broad sense (Kochaksaraie & Makiabadi, 2018).

According to (Bansal 1969 and Tiffen 1974 as in Atechi, 2004), non-native varieties of English are deficient, substandard, incorrect, and unintelligible and thus needed remediation at all costs. Standard pronunciation is the pronunciation controlled by the orthoepic norm. It is the pronunciation of the literate classes. It is used by radio and television, and is regionally neutral. The social standard within Britain is the so-called Received Pronunciation or RP. It is the teaching norm at schools and higher learning establishments. In the United States of America the most wide-spread type is

General American. As RP in Great Britain, GA in America is the public standard: it is regionally impartial, it is used by radio and TV, in scientific and business discourse, and it is spoken by erudite Americans (Hayotxon, 2021). On the other hand non-standard English refers to the informal and regional varieties of the language that may deviate from the standard norms. These varieties are often associate with specific social groups, regions or dialects. For example, colloquialism and slang. A widely accepted goal of pronunciation teaching is to help the learners attain a competency of intelligible pronunciation rather than a native-like accent for effective communication (Levis & LeVelle, 2011).

At present, the goal of L2 pronunciation learning has shifted to “intelligible” pronunciation that can greatly assist in fruitful L2 communication. In lieu of acquiring native-like pronunciation, educationists and researchers have now emphasized on the pronunciation features that are greatly helpful for intelligible and comprehensible TL pronunciation (Chen, 2016). Abdul and Mahmood (2021) urged that students should practice functional communicability and intelligibility, increase self-learning, the speech modification abilities and speech monitoring techniques. Intelligibility does not associate with accentedness (as counted by Inner Circle speakers), suggesting that English learners from Japan or other countries need not to mimic Inner Circle pronunciation to be understood by native speakers from the united states (US) or the united kingdom (UK) but they must be intelligible.

Kachru (1985) introduced a model with the term “World Englishes” opening the door for new ways of understanding the spread of the English language throughout the world. Kachru (1985) described the distribution of English in relation to three concentric circles: the Inner Circle, the Outer Circle, and the Expanding Circle. These circles signify “the type of spread, the pattern of acquisition, and the functional domains in which English language is used across cultures and languages” (Kachru 1985:p12). During British rule, Bangladesh was a country of Outer Circle but now Bangladesh is a country of Expanding Circle. So the Bengali speakers need to be intelligible, not to mimic Inner Circle pronunciation. Actually, intelligibility builds a comprehensible discourse in the speakers within a selected communicative situation (Derwing & Munro, 1997, as in Khatib & Monfared, 2017).

2.2.1 Problems in L2 Pronunciation

The major difficulty of acquiring English pronunciation is to construct a new set of boxes (in the mind) about the sounds of English and to break down the organization of the boxes where the habits of mother tongue have been established (O'Connor, 2008, as in Deogirkar, 2013). Broughton et al. (2003) stated that in order to listen to the new language correctly enough to imitate it, the new learners have to construct a whole new sound system. The capability to acquire a language is an innate skill. Children are born with a language acquisition tool which Chomsky entitled it as a language acquisition device (Chomsky, 1960, as in Aljoundi, 2014). But it is not always easy for the adults to hear a sound correctly and he is prevented not only by his lacking in the new sound system but by his lack of knowledge in the target language (Broughton et al., 2003).

Hismanoglu (2019) mentioned that the five main reasons of sound and spelling incongruity in English are; Firstly, EFL students should know that the same letter does not always produce the same sound (e.g. the letter c is pronounced as /k/ as in cap [kæp] and /s/ as in ceiling [si:liŋ]). Secondly, they should know that the same sound is not always produced by the same letter (e.g. the voiceless labio-dental fricative /f/ is spelled as f as in fat [fæt], ph as in photo [fotəʊ] and gh as in cough [ka:f]. Thirdly, they should know about the silent letters in the words in the English language (e.g. the letter k is silent as in knee [ni:]). Fourthly, they should know about employing a sound where there is no sound. Pronunciation of /j/ sound before u as in university [ju:nəvɜ:səti] and cue [kju:] is the issue for producing intelligible pronunciation by non-native EFL students. Fifthly, the pronunciation of the plurality (e.g. /s/: hats [hæts], /z/: bags [bægz], /əz/: buses [bʌsəz]), third person singularity (e.g. /s/: takes [teɪks], /z/: turns [tɜ:rnz], /əz/: matches [mætʃəz]), the possessivity (e.g. /s/: Kate's [keɪts], /z/: Ted's [tedz], /əz/: George's [dʒɔ:rdʒəz], and the past tense (e.g. /t/: kissed [kɪst], /d/: begged [begd], /əd/: planted [plæntəd]) morphemes are problem causing for non-native EFL students (Hismanoglu, 2004; Umera-Okeke, 2008; Hismanoglu, 2019). Munghate (2019) mentioned that although phonemic presentation of the past tense morpheme *ed* in the words like, *jumped*, *faded*, and *robbed* are all different, most of the students are not aware of such differences because graphically they seem alike.

The main issue of the non-native speakers of English is the replacement of sounds i.e. they substitute the sounds which are available in their mother tongue, with other sounds that are near to them in the place of articulation e.g. they substitute /p/ with /b/, /θ/ with /s/. (O'Connor, 2008). Widyalkara (2014, p.100) tested the association of L1 dominance with the rate of occurrence of selected deviations from the SSLE (standard Sri Lankan English) pronunciation and mentioned that “the bias towards L1 during language selection in functional domains and the lack of willingness to communicate in L2 result in L1 dominance in bilinguals.”

Hassan (2014) observed that the mispronunciation of the Sudanese learners of English is due to lack of knowledge about the problem causing sounds in Arabic. The sound pattern affects many English words, so incorrect pronunciation of these sounds obviously occurs. Many (SLE) face difficulties in the production of the voiceless bilabial /p/ and the voiced bilabial /b/. According to the findings, many SLEs replace /p/ with /b/ in words such as ‘pen’ ‘map’, ‘happy’ and rarely replace /b/ with /p/. Other consonant phoneme contrasts which SLEs mispronounce are the dental fricative /θ/ and the alveolar fricative /s/, so in words such as ‘think’, ‘math’, ‘mathematics’ the SLEs replace /θ/ with /s/. SLEs also have difficulties in pronouncing the voiced dental fricatives /ð/ and voiced alveolar fricative /z/, so many of the SLEs pronounce /θ/ in the place of /z/ for example in words like ‘then’, ‘weather’ more consonant contrast sounds like /f/ and /v/, /ʃ/ and /tʃ/ are mispronounced by most of the SLEs, e.g., in words like ‘van’, ‘seven’, ‘have’, they produce /f/ instead of /v/. Also the replacement of /ʃ/ and /tʃ/ is remarkable in the pronunciation of many SLEs in words such as ‘much’, ‘furniture’, ‘teacher’. The soft ‘C’ /s/ and hard ‘C’ /k/ are also sound issue pronounced by Sudanese learners of English. In some words like ‘concern’ some SLEs pronounce /k/ instead of /s/.

2.2.2 Importance of Teaching Comprehensible Pronunciation

The ultimate goal of teaching pronunciation is to help learners to attain the quality for fruitful communication and also to help improving those L2 linguistic features that affect the learner’s ability to communicate successfully. Little attention was paid on pronunciation teaching until the last decade as language teaching was mainly focused

on the mastery of grammar and vocabulary (Morley,1991). Pronunciation was something almost ‘casual’, devoted mainly to the pronunciation teaching of isolated words, if it happened. Teaching of pronunciation in the ESL or EFL classroom has witnessed periods of dramatic change over the past 50 years (Nunan, 2003, p. 112-114, as in Al-Azzawi & Barany, 2015). Three primary orientations are found;

- a) First orientation: 1940s-1950s – “The listeners listen carefully and repeat what the speaker says.”
- b) Second orientation: 1960s-1970s –“The listeners analyze these sounds closely to figure out how to pronounce them more clearly.”
- c) Third orientation: 1980s and beyond (communicative and task-based language teaching) – “The listeners start using these sound in activities as soon as they can while the speaker provides cues and feedback on how well they’re doing.”

Kissova (2019, p. 02) introduced the following “goals for learners to develop their pronunciation and better-spoken English in second language acquisition:

- a) Functional intelligibility
- b) Developing spoken English that is easy to understand for listeners;
- c) Functional communicability
- d) Developing spoken language that serves communicative needs effectively; increased self-confidence
- e) Developing a positive self-image;
- f) Speech-monitoring abilities and speech-modification strategies will allow students to develop intelligibility, communicability and confidence outside the classroom.”

The purpose of teaching English pronunciation to non-native English students focuses on communicative competence, considering the student’s proficiency in using English to take part in English speakers’ society. Celce-Murcia (2007, as in

Senowarsito & Ardini, 2019) pointed that the main skill in communicative competence is discourse competence. Discourse competence is attained by not only socio-cultural competence, strategic competence, formulaic competence and interactional competence but also linguistic competence. Linguistic competence means to understand and be master in using a language form, structure and other aspects like pronunciation, spelling, and organizing words into phrases, phrases into clause, and clauses into paragraph in the target language. The linguistic competence has great value as a factor for the speakers to deliver their ideas, thought, and feeling when they communicate in English (Senowarsito & Ardini, 2019). Learning English as a foreign language refers that the learners must interact with others using some aspects of English language. Pronunciation must be considered the same as other aspects in English skill, like; vocabulary, grammar, reading, listening, writing, and speaking and their speech production would be more intelligible (ibid).

At present, Communicative Language Teaching (CLT) and Task-based Approaches is considered the best technique of pronunciation teaching for being sensitive to students' actual situation demand (Yaqobi, 2022). For a long time, it is documented from the literature, pronunciation teachers were using traditional method for teaching English pronunciation based on drills and automatic practices. The result of these disclosures is that many students remain in their previous deviant phonological forms that lead to highly detrimental to effective communication in English (Luchini, 2005, as in Eng, 2005). Traditional approaches to pronunciation teaching emphasize on the learning of phonemes of a language and their phonological and meaningful contrasts, along with the structurally based focus on stress, rhythm, and intonation. From teaching and learning perspective, instruction on pronunciation teaching was mainly consisted in articulatory discussion, imitations and memorization of phonetic patterns through drills and set rules, with overall focus to correction. According to notional-functional technique, the focus was given mainly on meaning and not on form, to prepare students to use the language in communication (Al-Azzawi & Barany, 2015).

Teaching of pronunciation, conventionally, emphasized on the competency of particular sounds. With the introduction of CLT, this tendency has shifted to fluency rather than accuracy. However, the EFL instructors have acknowledged that an

emphasis on meaning and communicative intent alone is not enough to attain grammatical correctness; pronunciation has been free from the debate of segmental/supra-segmental to a more balanced view (Goodwin, 2001, p. 117). Again, the more teachers advance to control the sounds that the learners produce, the more students are likely to be concerned with form rather than meaning (Willis & Willis, 2007, p. 14). Nowadays there is a total agreement among English language teachers that pronunciation teaching is relevant if they want learners to achieve a successful command of the language (Barros, 2013). The introductory level of pronunciation in English such that if a chosen non-native speaker's pronunciation goes below this level, he or she will not be able to communicate in English no matter how good his or her command over grammar and vocabulary might be (Celce-Murcia, 1987:5, as in Barros, 2013).

Jenkins (2002, as in Vancova, 2019) mentioned that teaching pronunciation makes the most compromises when compared to the teaching of other language aspects and stated that the connection between accent and identity on the one hand and accent and articulatory motor skills on the other are, it seems, so fixed that the conventional English pronunciation teaching is supposed to fail for all but a small minority of L2 students. The condition of pronunciation teaching has not been the same over the different periods of English language training. While the early techniques of language teaching (the direct method or grammar translation) either ignored pronunciation or taught it through drills or repetition to attain native like pronunciation, the Audio-lingual or Oral approach suggested pronunciation instruction as a significant part of non-native language learning (Ketabi & Saeb, 2015). Now, pronunciation teaching emphasizes on those aspects of English pronunciation that build and carry meaning and aim to allow the natural accent of English students (Vancova, 2019).

Levis (2020) contrasted two principles – nativeness principle and intelligibility principle. Nativeness refers to the native-like pronunciation that competes with biological limitation of learners, thus suggesting unrealistic goals to both, teacher and the student. Intelligibility principle that promotes developing those characteristics that make the speaker understood, even if the students repeat some features of the L1 accents, as not all characteristics carry an equal amount of significance for

understanding between two parts of communication. Al-Azzawi and Barany (2015) claimed that psychologists and linguists have realized that language practice is more effective and motivating for students. Examination of categories like (1) establishing and maintaining social relations, (2) expressing one's reactions, (3) hiding one's intentions, (4) seeking and giving information, (5) teaching others to do or make something, proves that oral practice is the most fruitful and satisfactory approach in the teaching of English pronunciation to the adults. These categories have close connection with spoken language or more broadly communicating.

Developing pronunciation can improve students' confidence and motivation. Adult learners try to develop their fluency and comprehension levels and learn to self-monitor and self-correct to develop their pronunciation (Thompson & Gaddes, 2005, p. 1). Both sound and meaning are important to be handled in the pursuit of the linguistic goals of students (Thompson & Gaddes, 2005, p. 2). By teaching phonological rules, teachers can help students become better equipped to listen to their own speech and catch their own mistakes (Thompson & Gaddes, 2005, p. 6). People generally use English for social, educational and professional purposes, at home and abroad. So, it is crucial for them to achieve a high level of intelligibility to communicate (Cahyalita, 2013) as intelligibility in pronunciation is an important aspect of communicative competence that can be attained by practicing regularly in real life situation.

Toro, et al. (2019) argued that as the primary goal of language learning is communication, using language to communicate should be the central focus in all language classroom instruction. It will make the students enthusiastic and add something new to pronunciation teaching. He again stated that students are very unlikely to achieve a native-like accent, but their intelligibility can be greatly developed by updated and motivating pronunciation teaching. Their pronunciation skill can be developed much more through the gradual intuitive changes brought about by effective interaction with native speakers. Baker (2011) stated that learners should show interest and pay attention to pronunciation from the threshold level to avoid the errors which are being practiced and repeated for years. Morley (1991, p. 263) said that "the question is not whether pronunciation should be taught but instead what should be taught in a pronunciation class and how it should be taught".

Al-Azzawi and Barany (2015) advocated that the purpose of pronunciation teaching should be changed from the achievement of “perfect” pronunciation to the more realistic aims of improving functional intelligibility, development of speech modification abilities, and speech monitoring strategies for use outside the classroom. The overall purpose of these goals is for the students to develop awareness and monitoring skills that will create learning chance beyond the classroom environment. In teaching pronunciation, the goal is threefold: to enable learners to understand and be understood, to develop their confidence when engaged in communicative situation, and to enable them to monitor and modify their speech based on input from the environment (Goodwin, 2001, p. 117).

Goodwin (2001) stated that to gain confidence in speaking communicative skills, teachers must develop and design their materials considering the situations students will actually face, more carefully from controlled to free production in their pronunciation practice and provide effective targeted feedback. By teaching students to pay attentions to their own speaking and that of others, pronunciation instructors should help them make better use of the input they receive. Speech monitoring and modifying activities highlight student’s attention to features in their own subjects and other things beyond them.

2.3 CHALLENGES OF TEACHING PRONUNCIATION IN EFL CLASSROOM

Al-Azzawi and Barany (2015) mentioned that pronunciation teaching of a second or foreign language is a challenging matter but it can also be a rewarding and enjoyable experience. Researchers like Zepeda & Guadalupe (2010) pointed out that there are two major issues of teaching pronunciation. Firstly, it is neglected, and secondly, when it is not neglected, it tends to be reactive to a specific problem that has been created in the classroom rather than being planned. Correct pronunciation is not automatically acquired only by hearing a foreign language or target language (Krashen, 2002). Students of second or foreign language encounter many problems in identifying particular sounds and become confused that they do not know how to recognize it properly. Greenwood (2002, as in Gilakjani & Sabouri, 2016)

pointed out that teaching of pronunciation should be a significant part in EFL classroom and in English language teacher training session.

Bhowmik (2015) stated that now, English is taught and spoken all over the world and it is primarily used in interaction by speakers of other language. So, the challenge is in the acceptability of native speech (NS) model, a monolingual and mono-cultural norm, as an ideal model in the field of English language teaching (ELT). Thus, standard norm and varieties of English, globalization across the globe are in fact the complicated issues in present time (Rohmah, 2005). One of the most challenging issues in the field of English as an international language (EIL) is the teaching and learning of pronunciation in EFL context. Khatib and Monfared (2017) emphasized on teaching and learning of pronunciation in EFL countries. Near native like pronunciation is a model, it is probably essential for intelligibility in non-bilingual EIL contexts as regards core sounds; nuclear stress, and relevant articulatory setting, local non-native norms are likely to be both acceptable and intelligible in many other phonological areas (Jenkins, 1998). The importance of pronunciation can be considered from two main points of view, first, building intelligibility which denotes creating a comprehensible discourse among users within a communicative situation. Second, it should be considered that the main role of pronunciation in EIL and the way it develops learners' awareness towards their socio-cultural norms (Khatib & Monfared, 2017).

Albiladi (2019) noted that pronunciation in English is a challenging issue. Kochaksaraie and Makiabadi (2018) stated that pronunciation seems to be the most challenging aspect, especially for adult students, as it involves complex coordination of a set of cognitive and physiological skills. That is why; teaching of pronunciation has not always been favorite or acceptable to language instructors and language teaching theorists (Jahara & Abdelrady, 2021).

Many language teachers are not aware of the significance of teaching pronunciation. They emphasize and pay much attention to grammar and vocabulary in case of teaching English. Thus, they help learners become skillful in only listening and reading (Gilakjani, 2016). Again, the majority of teachers think that teaching pronunciation is very difficult and monotonous for the students (Harmer, 2001 as in

Gilakjani, 2016). According to Chand (2021), the lack of multi-media classroom, suitable teaching and learning materials and the limited time to practice pronunciation are the major reasons that cause teachers not to pay much attention to English pronunciation. Language teachers think that they have too much to do with and teaching pronunciation only waste their time. Some of the language instructors believe that the students can learn intelligible pronunciation without pronunciation teaching in the classroom. More importantly, another crucial problem found was the poor foundation at the basic level of education of the learners. So, the teachers should in-turn have a better understanding and strong command over English pronunciation to teach the students (Nimako, 2018).

Albiladi (2019) explained that one of the most striking hurdles English language learners face during language learning journey is learning of pronunciation. Not only language trainees but also language trainers can have problems in pronunciation. That is because pronunciation difficulties vary according to the mother tongue of the learners. According to Gilakjani (2012), students with intelligible English pronunciation are likely to be clearly understood even if they have lacking in other areas, while students with incorrect pronunciation will not be understood, even if their vocabulary and grammar is perfect.

The main problem of learning English in non-native context is that the learners have no scope to get adequate exposure to the language from the native speakers. Consequently, they might have problems in understanding and learning all other aspects of the language properly. Attaining effective and intelligible English pronunciation can be a complicated task for learners who learn English as a foreign language (Rajab, 2013). That is because every language is different from English in many cases, especially in its phonemes or sounds. Therefore, non-native English learners usually have problems in pronunciation when they try to speak in English (Albiladi, 2019). Nimako (2018) described that hindrance from mates, following of peers, environmental issues, lack of reading on the part of learners, pronunciation is not designed in course outlines, lack of equipment, poor foundation at the basic level, influence of L1 on L2 learners of English, less opportunity for students to improve basic English, less opportunity for learners to have their errors in pronunciation corrected, mode of correcting learners' errors, how often other subject teachers

correct the learners' errors in pronunciation, poor example from some instructors are issues associated with pronunciation teaching.

Yuniartiningsih (2020) pointed that investigating the teachers' perception towards teaching intelligible pronunciation is important and useful as it indicates what to develop and what to overcome. According to Shah, Othman and Senom (2017), classroom activities are mostly influenced by the teachers' perception toward the teaching and learning processes in the class. Again, teaching students how to correct their English pronunciation requires the proper tools, adequate teacher training, and continuous practice in the classroom and beyond the classroom. English Language students (ELS) do not get enough, exact and effective pronunciation instruction to defossilize their fossilized pronunciation errors. At present, the EFL and ESL teachers do not have the effective tools and training in how to teach intelligible pronunciation (Dolan, 2020). Not only the students must focus and work hard; their teachers also must focus and work hard to find the best ways to teach pronunciation fruitfully in the class. EFL or ESL instructors have to be more conscious about ways they can help improve the students' competence in pronunciation by applying more effective and successful teaching techniques (Otlowski, 1998 & Albiladi, 2019).

In a study, Yuniartiningsih (2020) claimed that four out of five teachers advocated teaching pronunciation in the class as a significant lesson to be taught, but all of them stated that they must correct the learners' errors in pronunciation in order to develop their learners' pronunciation skill and prevent them from making phonological fossilization in their speech. There are also many challenges that the teachers face in conducting pronunciation class, such as L1 interference, fixed and limited time in the class, lack of learners' motivation from previous level and imbalance focus between writing skill and speaking skill. Therefore, besides their endeavors in personal improvement, they also need some guidelines from the stakeholders so that they can develop their teaching and learning activities to become more effective and successful in the class.

2.4 FOSSILIZATION IN PRONUNCIATION

Gift and Benson (2016) stated that the term ‘fossilization’ first used by Selinker (1972) who defined it as the long-term persistence of non-target-like sounds and structures in the inter language of the non-native speakers. According to Selinker (1992, as in Al-Shormani, 2013), the notion of fossilization was introduced long ago by the scholars. Among them Weinreich (1953) focused on Permanent Grammatical Influence and Nemser (1971) focused on Permanent Intermediate Systems and Subsystems. Selinker (1996, as cited in Han, 2004) defined fossilization as a procedure whereby the students create an interruption of inter language learning, thus halting the inter language from improving. Chen and Zhao (2013) also clarified the term fossilization, asserting that fossilizable linguistic occurrences are linguistic items, rules, and subsystems that learners of a particular first language tend to keep in their inter language (IL) relative to a particular TL, no matter what the student’s age or how much teaching the learner gets in the foreign or target language. Moreover, Al-Shormani (2013) defined fossilization as a situation that emerges in case of L2 learning. It denotes to the deviation from native-speaker sounds and the established cessation of student’s linguistic system. Fossilization occurs at phonological, morphological, syntax, semantic and pragmatic levels of English but research proves evidence of recurrent occurrences at the phonological level (Wei, 2008).

Brigham (2018) stated that in spite of the vast literature on fossilization, there has not been detailed explanation as to why distinct linguistic features are prone to fossilization than others. If the student cannot identify the error between his output and the intelligible target sounds, his pronunciation will not be improved (Whinney, 1992). Second or foreign language learners should be encouraged to identify the difference between their output and the input of intelligible target sounds (ibid). Many L2 learners face a number of problems in case of acquiring pronunciation due to a wide range of reasons. While the factors like age, ear perception, aptitude, personality, attitude, motivation, identity, individual efforts and goal setting were accepted as internal factors, the factors like the L2 learner’s native language, exposure to the target language and educational factors were accepted as external factors (Zhang, 2009).

The primary cause of foreign accents which render unintelligible sound is inadequate phonetic input, insufficient motivation, psychological reasons for wanting to retain a foreign accent, or the establishment of incorrect habits in early stages of L2 learning (Flege, 1995). Reyes (2019) further explained that the external causal factors of fossilization are due to the lack of corrective feedback, lack of input, reinforcement from L2 speakers and linguistic environment, lack of instruction, lack of interaction, lack of written input, quality of input and instruction.

Wysocka (2007) explained that there are a number of sources of fossilization. Depending on the techniques and categories, they can be described as five major factors leading to fossilization. Selinker (1974, as in Wysocka, 2007) encapsulated the external and internal factors of fossilization in the umbrella shape. Ellis (1995, as in Han, 2004) demonstrated that cognitive, neuro-biological, psychological, socio-affective, and environmental factors contribute to fossilization. In the analysis of issues that are responsible for producing fossilization, Selinker (1974:37, as in Wysocka, 2007) accentuated the formerly mentioned central processes. These include language transfer, transfer of training, strategies of second language learning, strategies of second language communication and overgeneralization of TL linguistic material. Wysocka (2007) showed the issues, description and reference of fossilization in Table 2.1.

Table 2.1 Causes of fossilization (Wysocka, 2007)

Factors	Description	Reference
Internal		
1. Age	When learners reach a critical age, their brains lose plasticity, with the result that certain linguistic features cannot be mastered.	Scovel, 1988
2. Lack of desire to acculturate	As a result of various social and psychological factors, learners make no efforts to adopt TL cultural norms.	Schumann, 1978
External		
1. Communicative pressure	Persistent pressure to communicate ideas that require the use of language that exceeds the learner's linguistic competence leads to fossilization	Higgs and Clifford, 1982
2. Lack of learning opportunity	Learners lack opportunities for receiving input and also for using the L2	Bickerton, 1975

2.4.1 Phonological Problem

There is growing interest in phonological problem, perception and production from linguistic, social and cognitive perspectives and there is also emphasis on second language pronunciation (Jahara & Abdelrady, 2021). Of the phonological problems, first language interference in case of L2 acquisition is the most thwarting one. Most of ESL or EFL learners think it difficult to pronounce particular consonants and vowels specifically, the diphthongs. The accurate ‘place of articulation’ and ‘manner of articulation’ is fully unknown to them. They are also ignorant about how the ‘lip positions’ to be assumed, the ‘tongue heights’ to be affected, the ‘part of the tongue’ to be used during pronouncing of certain consonant and vowel sounds (Munghate, 2019). The lack of knowledge about phonemes and lack of training ruin the probability of attaining intelligible pronunciation in English (ibid).

Bird (2002) stated that there is no fixed number of sounds that can be pronounced by the human speech organs. However, this infinite number of sounds is harnessed by human languages into sound systems consisting of a few dozen language-specific categories, or phonemes. An example of an English phoneme is /t/. English has a variety of /t/-like sounds, such as the aspirated /t^h/ of ‘ten’ the unreleased /t/ of ‘net’, and the flapped /ɾ/ of ‘water’ (in some dialects). In English, these differences are not used to differentiate words, and so the learners do not find pairs of words in English which are identical but for their use of /th/ versus /t/. By comparison, in some other languages, such as Icelandic and Bengali, aspiration is contrastive. Since these phonemes (or phones or segments) are phonetically similar, and since they happen in complementary situation (i.e. disjoint contexts) and cannot differentiate words in English, they are all said to be allophones of the English phoneme /t/. Certainly, producing a few allophonic variants for each of a finite set of sounds does not account for the infinite variety of phonemes mentioned above. If one speaker were to achieve multiple sounds of the same utterance, many small variations could be identified in loudness, pitch, rate, vowel quality, and so on. These variations occur because speech is a motor activity involving coordination of many independent speech organs and exact repetition of any sentence is simply impossible. Similar variations arise between different speakers, since one person’s vocal apparatus is different to another (and this is how we can distinguish people’s voices). So 10 people pronouncing ten 10 times each will produce 100 different acoustic sounds for the /t/ phoneme. This diversity of sounds associated with a single type is often identified as free variation.

2.4.2 Studies on Phonological Fossilization around the World

Phonological Fossilization occurs for the incorrect learning or acquisition of second or foreign language pronunciation. For example, the consonant /θ/ creates a problem for Chinese learners since it is not available in their mother tongue (Rahal, 2018). According to Hismanoglu (2007), phonological fossilization in pronunciation is chronic articulation errors made by language learners in case of learning the phonological system of the target or second language which continue for a long period of time and cannot be easily defossilized. Selinker (1972, as in Jiang, 2022)

defined fossilization as a condition of language learners' established learning cessation. The term 'fossilization' has been used to focus a permanent end state of learners' inter language indicating that learners never overcome this end state of inter language (Han, 2004).

In Japan, the distinction between the Japanese and English languages are complex and numerous (Takaoka, 2023). Even a novice will quickly observe those features, for instance, the word order and the many grammatical rules and function; such as Japanese language has no articles (Kumar, 2014), the English equivalents of 'a, an, or the' are not available in Japanese and it is a problem and struggle for the Japanese learners of English. Kumar (2014) observed that most of the participants made fossilized errors in case of using article and preposition in English. Phonological fossilization is also evident in their speech. One of the participants produced 'pirate' instead of 'pilot' and his pronunciation of the /l/ sound was almost unrecognizable throughout interview. They sometimes could not create or separate certain phonemes within their own speech and that it eventually had a ripple impact on how they hear words, especially with the English /l/ and /r/ (Kumar, 2014).

In Japan, EFL teaching and learning is increasingly being dependent on the representation of English pronunciation via the Japanese system of syllabic writing, or syllabary, known as '*katakana*' designed to represent phonemes and features of the Japanese language, this syllable is often ill-suited or inadequate for representing English phones. As a result, English words are frequently rendered in Japanese approximations of the correct pronunciation. Hence, *alphabet* becomes *arufabetto*, *elevator* becomes *erebeta*, *dilemma* becomes *jirenma* (Beasom, 2011). The Japanese learners pronounce approximants, or over generalized sounds, or probably they are simply being presented as such since /q/, /ɔɪ/ and /æ/ are not available in Japanese. The word '*very*' and '*who'll*' are the example of native language transfer in that the English phone /v/ is being transferred to a more manageable /b/ sound and /huw/, which is not available in Japanese, is being changed to the Japanese syllable /fuw/ (ibid).

Feng Li (2016) observed that the phoneme /v/ is not available in Chinese language as well, which is often substituted for by the phoneme /w/ in Chinese statement. For example, /'veri/ (very) is mispronounced as /'wəri/, and /vet/ as /wet/, which certainly contributes to misunderstanding in communication with English speakers. Interestingly, even though some English vowel sounds are found in Chinese, due to little and subtle differences among them, some Chinese L1 students find it difficult to distinguish between them in speech production, such as difference between /ε/ and /æ/ in “bet” and “bat”, “bed” and “bad”, “lend” and “land”, “dead” and “dad”, “merry” and “marry” are common, particularly when they appear in the same sentence, or even in the same discourse, which will certainly create an effect of tongue twisters.

Jahara and Abdelrady (2021) found that the people of Saudi Arabia often mispronounce many English sounds due to the lack of use of English in their daily life. The EFL learners in Saudi Arabia encounter problem in six phonetic and phonological aspects such as multi-syllabic words, vowels, novel sounds, initial consonant cluster, ending consonant cluster, and voiced or voiceless phonemes (Al-Rubaat & Alshammari, 2020). Jahara & Abdelrady (2021) told that some learners have confusion in differentiating between the voiceless bilabial plosive /p/ with voiced bilabial plosive /b/ phoneme. It was found that only /b/ phoneme is available in the Arabic language, and /p/ sound does not exist, which is a significant problem for the Arab students to differentiate between the voiced and voiceless bilabial /b/ and /p/ sounds. Fricatives also cause a problem for some of the students. The voiced dental fricative /ð/ and voiceless dental fricative /θ/ phonemes were found to be problematic as the learners were confused with the production of /θ, ð/ and these phonemes were substituted by /t, d/ phonemes. At the same way, the voiced palato alveolar fricative /ʒ/ was substituted by /dʒ/ phoneme and the voiceless palato alveolar fricative /ʃ/ was substituted by /s/ and /dʒ/ phonemes. Voiced labio-dental fricative /v/ was substituted by /w/ phoneme. Some informants were confused with voiced two letters in English can have one sound; many Arab students do not know how to pronounce and differentiate among phonemes such as, /ch/, /sh/, /ph/, /gh/ and so on.

Flege et al. (2004) statement which was grounded on the perception of English vowels: /i/, I/, /eI/, /ε/, /æ/, /u/ and /ər/ indicates the cases that the Italian university learners who had stayed in Canada for three months were not capable of differentiating /α/-/ə/, /ε/-/æ/ and /i/-/I/ phonemes as they assimilated both phonemes of each kind into one Italian vowel. In some Bantu languages, the tense or aspect of verbal suffix -ile/-ili demonstrate an irregular morphophonemic structure when it is linked to verb stems of distinct morphological specifications. It merges with the verb base; the verb base loses its final consonant conditioning other phonological changes;

Root/Base → Underlying form → Surface form

a. iman-a ‘stand’ /iman-ile/ im-eene
 sangalal-a ‘rejoice’ /sangalal-ile/ sangal-eele
 sambakan-a ‘meet’ /sambakan-ile/ sambak-eene
 songol-a ‘marry’ /songol-ile/ songw-eele (Kawasha, 2021).

Dolezelova (2009) analyzed phonological fossilization in pronunciation of advanced Czech speakers of English and tried to uncover those fossilized errors that hinders Czech bilinguals from pronouncing intelligible sounds and observed that though there are still phonological fossilization in pronunciation in advanced Czech bilinguals, they are limited to a few consonants, what proved to be a major error was the devoicing of final /z/ in plural and third person singular in present simple of verbs as well as avoidance of vowels in unstressed syllables. Dolezelova’s study confirmed the existence of phonological fossilization in pronunciation in Czech bilinguals like the contrast of /s/ and /z/ and the neutralization of lenis/fortis differences in final lenis consonant.

In another study by Onwuta et al. (2016), the English vowel and consonant sounds “cup” /ʌ/ and “thought” /θ/ are significant pronunciation problems for Igbo teachers and students in Nigeria. They pronounce /ʌ/ as /ɔ/ or /ɔ:/. The English labio-dental fricative /θ/ is pronounced as /t/. This type of pronunciation problems not only ruin communication skill of Igbo-English bilinguals, teachers, and learners but also lead to misinterpretation of conversation and interaction discourse especially when it

includes users of other languages or cultures (Onwuta et al., 2016). Jalali & Sojaei (2012) found Persian EFL learners' improvement versus fossilized errors and recorded that out of the fifteen prepositional mistakes types identified in the subjects' compositions, two were found as developmental and thirteen as fossilized errors, evidence shows that fossilization occurs in foreign language learning and demands serious attention for students to overcome the problems.

According to Zavyalova et al. (2016), the Russian-English speech format is viewed as an accent remaining speech habit that is improved because of the influence of the mother tongue of its speakers. She showed the phonological distinction causing the difficulties for Russian speakers of English. Besides, the number of English vowels is about three times higher than in Russian (twenty versus six). Again, the Russian language does not allow vowel length and openness contrasts and monophthong-diphthong opposition. She suggested that this distinction in the phonological pattern of two languages certainly affect vowel pronunciation of Russian English speakers. Zavyalova et al. (2016) also pointed out that, for the chosen vowels there is a failure to identify the following phonological contrasts: Λ/α : 'come' and 'calm,' 'hut' and 'heart', $\text{ɪ}/\text{i}$: 'fit' and 'feet,' 'sin' and 'seen', and lastly, $\text{ʊ}/\text{u}$: 'full' and 'fool,' 'pull' and 'pool' (Galkina, 2019).

Similarly, Rochet (1995, as in Premarathne, 2018) studied on the pronunciation of the French vowel /y/ by native users of Canadian English and Brazilian and Portuguese speakers as the mother tongues of these two groups constitute only the two high vowels /i/ and /u/, not the French vowel /y/. It was observed that the English group pronounced the French /y/ as /u/ or an [u]-like vowel whereas the Portuguese learners produce it as /i/ or an [i] like vowel. Rochet (1995, as in Premarathne, 2018) observed that the French vowel /y/ was pronounced akin to /u/ by English speakers whereas it was pronounced similar to /i/ by the Portuguese speakers. Rochet's study exemplified that once a L2 phoneme is assimilated to a L1 sound, it is pronounced according to the established phonetic rules of the L1.

Flege et al. (1997) conducted a study on the influence of English language exposure on adult learners' pronunciation of L2 vowels including a group of native speakers of German, Spanish, Mandarin, and Korean. They were divided into

“experienced” or “inexperienced” sub groups on the basis of the length of staying in the U.S. The study found that the exposure to L2 learning is a point that contributes to pronouncing certain vowels more accurately. For instance, the pronunciation of the vowel /I/ of the experienced group was more intelligible than that of the inexperienced group for each language, although the sound /I/ is not available in Spanish, Mandarin, and Korean languages. In contrast, no such crucial influence was observed regarding other three vowels /i/, /ε/, and/æ/. The performance of the experienced group as found by Flege et al. (1997) was not fully where two languages contact commonly in social discourse has led to ‘nativization’ of some phonological features which show more affinity to Sinhala phonology culminating in building deviated forms from the SSLE (Sri Lankan second language learners of English).

The Post-Colonial Identity of Sri Lankan English is that the High Prestige Dialect of Sri Lankan English is used by the Sri Lankan aristocrats who have mastered the English language from birth and use English in their educational, professional and social domain (Gunasekara, 2005). On the contrary, she mentioned that the Lower Prestige Dialect (LPD) which is introduced as “Not pot English” is spoken by the general mass of Sri Lanka and they have no access or very limited access to English from birth and hardly use English in their educational, professional or social spheres. Gunasekera (2005) stated that the SSLE considers two /o/ sounds: the low back vowel /ɔ/ and the mid back vowel /o/. The low back vowel is not available in Sinhala and the inconsistency between the two vowels has hindered the second language learners from pronouncing the new vowel category/o/. That is why, Sri Lankan L2 students often substitute /ɔ/ for /o/. The second language learners of English in Sri Lanka have fossilized particular sounds in the code repertoire of English. The graphemic representation ‘ඔ’ is used in Sinhala print media or by bilingual speakers. For instance, the word “office /ɔfIs/” is written or pronounced in Sinhala as ‘ඔෆිස්’ due to the short of a graphemic presentation (Kelly, 2000, as in Premarathne, 2018).

In another study, Chawla (2021) found that L1 influences on Indian English (IE) used by Hindi and Telugu speakers as second language. They focused on acoustic similarities and dissimilarities between Indian English used by Hindi (L1) speakers and Telugu (L1) speakers. Some segmental and supra-segmental features were

selected for analysis, having vowel quality, appropriate use of retro-flexion for /ɖ/ and /ɟ/, the expansion of aspiration for voiceless stops. The results showed that there was impact of L1 on Indian English in vowel production, pronunciation of /s/ and on final lengthening. The study also focused that Hindi speaker produced language sounds with a lower average frequency in Hindi-English than Telugu speakers. Thus, the literature for Indian English supports the concept that speakers from different L1 backgrounds in India create a similar IE variety, though some native language dependent variation is also documented.

Hayes-Harb et al. (2017) scrutinized the influence of orthographic presentation on English native acquisition of German last devoicing. To highlight the research purpose, a speaker's artificial words were applied. The results of the research confirmed the strong influence of orthographic input on the improvement of second language word and phonology. In another study on Spanish L2 learners of English, Dean and Kroff (2017) focused on eye tracking and visual world paradigm to explore how speaking competency is influenced by words and phonemes. It is found in the eye-tracking experiment that for English dominant speakers, competition had no impact in any of the trials whereas for Spanish-dominant speakers, presence of a word or phoneme distracter lowered target pronunciation (Mahzoun & Han, 2019). At the same way, Fachun and Pengpeng (2009) also explored the pronunciation problems of English students in China. Chinese students of English fossilized many features in the place of the target sounds. For instance, the sounds /r/ and /ʃ/ are fully different from the Chinese /sh/ and /r/. Rahal and Smaoui (2020) stated that some learners fossilized /ð/ in the word 'then' as /z/, some learners fossilized /v/ in the word 'never' as /w/, and some learners produced /θ/ in the word thirteen as /s/.

In Chinese, almost every feature corresponds to a single syllable (Li, 2016) which may have an onset of consonant(s) initially in the syllable and a nucleus having a vowel or two vowels or, in a few cases, a vowel plus a final nasal consonant(s). For instance, /la/, /lai/ and /lan/ are syllables with one consonant initially, while /sha/, /shai/ and /shang/ are ones with two-consonant initially. However, the absence of consonant onset is allowed in Chinese syllables as well: e.g., /a/, /e/, and /ai/ are common pronunciation feature of China language. For the phonemes, that Chinese has, which have similar phonemes in English, Chinese first language learners when

learning English can attain competency easily, such as /b/, /p/, /d/, /t/, /g/ and /k/. But the phonemes /ð/, /θ/ and /v/ do not exist in Chinese, and Chinese L1 learners find them quite difficult to pronounce. Particularly, in the case of /ð/ and /θ/, to speak with one's tongue exposed seems very fun or even humiliating in the Chinese speaker. However, the two sounds often occur in English pronunciation such as 'I think', 'this', 'that.' If the Chinese L1 learners do not practice these sounds, they tend to pronounce them into /z/ and /s/. So, it is very common to hear Chinese L1 learners say, "I sink" instead of "I think" in interaction in English, and some Chinese L1 learners say "my mouse" when they actually want to say "my mouth".

In the case of Arabic speakers, learners of Algeria are found to pronounce fossilized sound of the voiceless dental fricative, and the voiced dental fricative in their speech and they often use the /t/ and /d/ sounds instead of /θ/ and /ð/ (Yakout & Amel, 2019). Native language and the lack of proper instruction are responsible for fossilization. In the Tunisian context, some learners are found to fossilize /e/, /ɔ:/ and /a:/ sounds instead of the schwa sound (Rahal, 2014).

2.5 BENGALI LANGUAGE

Bengali is an Indo-European language and of similar linguistic lineage as English and other Indo-European languages though of a different branch (the Indo-Iranian) of the family (Dimock, Bhattacharji & Chatterjee, 1964). Although there is confusion about the approximate origins of Bengali language, it may originate directly from 'an Eastern variety of an Indic language which is closely related to Sanskrit' (Dimock, Bhattacharji & Chatterjee, 1964). More than 220 million people speak in Bengali as their mother tongue. Bengali is one of the widely spoken languages in the globe. Its rank is the seventh based on the number of speakers (Huda, Siddique & Alam, 2019) and it has enriched literary history and heritage (Mostafa, 2013).

2.5.1 Phonological Features of Bengali

In Bengali language, fifty three phonemes including both vowels and consonants are considered in which the phones, শ (/s/) and স (/s/) and ঞ (/n/) and ন (/n/) contain approximately same spectrum (Huda et al., 2019). In terms of the manner of articulation, Bengali consonants can be divided in the following classes: stops, nasals, laterals, flaps, and spirants (fricatives) (Mostafa, 2013).

On the basis of the place and manner of articulation, Bengali consonants can be shown in Table 2.2:

Table 2.2 Bengali consonants [Adapted from: Dimock, Bhattacharji & Chatterjee, 1964]

		Labial		Dental		Palatal		Retroflex		Velar	Glottal
		Un	As	Un	Asp	Un	Asp	Un	Asp	Un	Asp
Stops	Voiceless	P	p^h	T	t^h	C	c^h	T	t^h	K	k^h
	Voiced	B	b^h	D	d^h	J	j^h	Ḍ	ḍ^h	G	g^h
Nasals		M		N						Ṇ	
Laterals				L							
Flaps				R				ṛ			
Fricative				S		Ṣ					H

[Note: Un: Unaspirated As: Aspirated]

It is observed in Table 2.2 that aspiration is a distinctive feature in Bengali language, as aspirated and unaspirated sounds have contrastive distribution. This aspect of Bengali is in contrast to English, as English has aspiration as an allophonic variation of the voiceless stops /p/, /t/, /k/ which is aspirated only when they appear at the onset of a stressed syllable. In English, as opposed to in Bengali language, aspiration is not a phonemic feature because the production of aspirated or unaspirated sounds does not make any difference in meaning. The Bengali stop phonemes are

classified below according to their places of articulation with minimal pairs that indicate contrasts between the phonemes:

Labial: /p/, /b/, /ph /, and /bh / are labial stops.

Minimal pairs: [paṭa] (stone slab)	[phata] (to crack)
[baṭa] (to smash)	[bhaṭa] (ebb) Mostafa (2013).

Dental: /t/, /d/, /th /, and /dh / are dental stops (tongue-tip is pressed against the upper teeth). Minimal pairs:

[tan] (musical note)	[than] (bolt of cloth)
[dan] (gift)	[dhan](rice /paddy) (Mostafa, 2013).

Palatal: /c/, /ɟ/, /ch /, and /jh / are palatal stops.

Minimal pairs: [cal] (custom/fashion)	[chal] (skin/hide)
[jal] (net)	[jhal] (spicy) Mostafa (2013).

Retroflex /ʈ/, /ɖ/, /ʈh /, /ɖh / are retroflex stops. Example words: (Mostafa, 2013).

[ʈɔk] (sour)	[ʈ hɔk] (cheat)
[ɖɔk] (dock)	[ɖhɔk] (a sound)

Velar /k/, /g/, /kh / and /gh / are velar stops. Example words:

[kal] (yesterday/tomorrow)	[khal] (canal)
[gal] (abuse)	[ghal] (injury) (Mostafa, 2013).

Minimal pairs of the two voiced flaps: /ɾ/ and /ɽ/:

[pɔra] (to wear)	[pɔɽa] (to read) (Dimock, Bhattacharji & Chatterjee, 1964).
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It is also observed in the table above, Bengali language has only three fricatives /s/, /ʃ/, and /h/ which are voiceless. Hence, unlike English, Bengali has no voiced

fricative. In case of vowel sound, the Bengali has three front, three back and one central vowel. Table 2.3 shows the position of Bengali vowels.

Table 2.3 Bengali vowels [Mostafa, 2013]

	Front	Central	Back
High	I		U
Mid	E		O
Lower-mid	Æ		ɔ
Low		ə	

Each of the oral vowels mentioned above has its corresponding nasalized form: /ĩ/, /ẽ/, /æ̃/, /ẽ̃/, /õ̃/, /õ̃/, /ũ/ (Dimock, Bhattacharji & Chatterjee 1964). In Bengali language, nasalization of sound is a phonemic feature, as oral and nasal vowels are in contrastive distribution (Dimock, Bhattacharji & Chatterjee 1964; Kostic & Das, 1972). For instance,

/ɐ,ẽ/ [kɐɐ] (wash)	[kẽɐ] (young)
/o,õ/ [phoʈa] (to bloom)	[phõʈa] (mark on forehead)

Though the vowels of Bengali language can be short or long, the sound length of vowels does not make meaning difference; hence, sound variation in vowel length is not considered to be phonemic in Bengali (Rahman, 2020). This feature of Bengali vowel pattern contrasts with that in English, as vowel length is a phonemic feature in English; for example,

[ʃɪp] (a kind of vessel)	[ʃi:p] (a kind of mammal).
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2.5.2 Phonological Differences between Bengali and English

Phonological differences between Bengali and English, though, have been discussed briefly in the previous section will be highlighted in details here. There are certain points of distinction between their phonological pattern - differences in the vowel and consonant sounds, syllable structures, and stress patterns. These distinctions can certainly pose challenges for native Bengali speakers of English (Mostafa, 2013). Bengali vowels [i u e o æ ɔ a] are nasalized and short while English vowels [i i: e æ u u: ʌ a: ə ə: ɔ ɔ:] are reduced, long and short (Barman, 2009).

Tamzida and Siddiqui (2013) stated that in English, there is no nasalized vowel sound. Vowels sound before and after nasalized consonant phonemes is somewhat pronounced in nasalized forms, such as, [man] and [sing]. In Bengali, nasalization is a phonemic feature, as oral and nasal vowels are in contrastive distribution (Mostafa, 2013). For instance, the word ‘chand’ in Bengali (moon in English) is articulated as /চাঁদ/ /tʃʌ (ŋ) d/ where the /ʌ/ sound is nasalized. In English, [p_n] and [p^h_n] are the transcription of the same word, and [p] and [p^h] are allophones of the same phoneme /p/ but in Bengali language, they are two separate phonemes. For instance, [pul] meaning ‘bridge’ and [p^hul] meaning ‘flower’ are two separate words and [p] and [p^h] are two different phonemes (Maniruzzaman, 2014, p. 104).

In case of consonants, /p/, /b/ in English is plosives, so are in Bengali language. But with respect to /p/ sound there is distinction between English and Bengali language as aspirated and unaspirated. In English /p/ sound can be aspirated whereas / p / in Bengali is always unaspirated. /b/ sound is not problematic as it shares the same characteristics as /b/ both in Bengali and English Islam (2017). There are also differences between Bengali and English in case of /θ/, /ð/ sounds. In English /θ/, /ð/ are dental fricative but they are dental plosive in Bengali language. Bengali speakers of English often mispronounce these two English phonemes. In English /m/ and in Bengali /ম/ (m) both are bilabial nasals, so the Bangladeshi learners face no problem in pronouncing it (ibid). In English /f/ or /v/ is labio-dental fricative but the nearest Bengali sounds are the bilabial plosive sounds /p^h/ and /b^h/ (Mostafa, 2013). The syllable and structure of English language are different from those in Bengali. Another aspect of pronunciation in English which poses difficulties to Bengali

speakers is the consonant cluster. Hassan (2014) stated that there are onset, “from” /frəm/, medial “salted” /so:ltid/ and coda consonant clusters “ask” /a:sk/ in English but consonant cluster is hardly seen in Bengali language. Maximum three consonants cluster in a syllable onset and maximum four consonants cluster in a syllable-coda are obviously found in English syllable structure (Roach, 2000). But such kind of complicated clusters in syllable onsets and codas are not available in Bengali. The contrast and comparison between English and Bengali consonants can be summarized in Table 2.4 (Islam, 2017).

Table 2.4 Summary of comparison and contrast between English and Bengali consonants

English Consonants	Bengali equivalents	Aspects of difference	Remarks
Plosive /p/ (1) * /t/ (2)* /k/ (3)*	(p) /প/ (1) (t) /ট/ (2) (k) /ক/ (3)	The English sounds are different aspiration-wise	The Bengali sounds (1-3) are not aspirated; their English equivalents are aspirated in syllable-initial positions. Comprehension difficulty may occur because of lack of aspiration.
Fricative /f/ (4)* /v/ (5) * /θ/ (6)* / ð / (7)* / s / (8)* / z / (9)*	(f ^h) /ফ/ (4) (b ^h) /ভ/ (5) (t ^h) /থ/ (6) (d) /দ/ (7) (s) /স/ (8) (ʃ) /ষ/, (ʒ) /জ/ (9) (ʃ) /শ/, (ʒ)	The English sounds 4,5 are different Place and manner wise. The sounds 6,7 are different manner wise. Sound 8 is different place-wise. Sound 9 is unavailable in Bengali.	The English sounds 4,5 are labio-dental fricative whereas the Bengali equivalents are bilabial plosive sounds. English phonemes 6,7 are dental fricatives but the Bengali counterparts are dental plosive. The English Phoneme number 8 is an alveolar fricative but Bengali phoneme number 8 is dental. The English phoneme number 9 is not available in Bengali, so it is perceived as any of the Bengali

/ʃ/ (10)	(ʃ) /ষ/ (10) (ʃ) /ষ/,	For number 10: No difference Sound	phonemes at number 9. The English phoneme number 10 corresponds to the Bengali phonemes at number 10.
/ʒ/ (11)*	(ʒ) /জ/, (11)	11 is unavailable in Bengali.	The English phoneme number 11 is not available in Bengali but perceived as any of the corresponding Bengali phonemes at number 11, i.e., they are perceived as a single phoneme which means two similar phonemes are mapped onto one L1 phoneme (a single category pattern).
/h/ (12)	(h) /হ/ (12)	For number 12: No difference	The English sound 12 and the Bengali counterpart are the same sound.
Affricate /tʃ/ (13)* /dʒ/ (14)*	(c) /চ/ (13) (ʃ) /জ/, (ʃ) /ষ/ (14)	Sounds 13 and 14 are different place- and manner-wise.	The English sounds 13 and 14 are palato-alveolar affricates whereas their Bengali counterparts are palatal plosives.
Nasal /m/ (15) /n/ (16)* /ɳ/ (17)	(m) /ম/ (15) (n) /ন/ (16) /ɳ/ (16 A) (ɳ)) /ং/ (17)	Number 15 is the same as Bengali 15: No difficulty. Sound 16 is different place-wise. Sound 17 is same as its Bengali counterpart.	The English phoneme 15 is same as the corresponding Bengali phoneme. The English phoneme 16 is alveolar but the corresponding Bengali phoneme 16 is dental. The Bengali phoneme 16A, however, corresponds to the English equivalent (number 16) But this sound is practically of no use in Bengali; the result – The English sound in question is mispronounced as a dental sound. The English sound 17 is the same as the Bengali equivalent
Lateral /l/ (18)*	(l) /ল/ (18)	The English sound is different Place-wise	This English sound (18) is alveolar but its Bengali counterpart is dental
Approximant			

/ɪ / (19)*	(ɪ) /ঐ/ (19A) (ɪ) /ঐ/ (19B) (ɪ) /ঐ/ (19C)	Sound 19 is different Place and manner wise	The English sound 19 is a palato-alveolar approximant but the Bengali equivalents (19A, 19B, and 19C) are flaps.
/w / (20) /j / (21)	(20) /ঊ/ (21) /ঊ/	The English sounds 20 and 21 are different in quality	Sounds 20 and 21 in English are semivowels which correspond to the Bengali sounds 20 and 21 which are actually vowels; they do not have the characteristics of the English semivowels.

Maddieson (2008) defined a semi-vowel as “a voiced gliding sound in which the speech organs start by pronouncing a vowel of comparatively small prominence and immediately change to more prominent vowel” (p. 4). Two semi-vowels /j/, /w/ have been recorded in English. But there are different opinions about the numbering of semi-vowels in Bengali language. Tamzida and Siddiqui (2013) granted two semi-vowels --/w/, /y/ in Bengali language while four semi-vowels/i e o u/ are available in Bengali language according to Sharker & Boshu (1998, as in Tamzida & Siddiqui, 2019). The position of the tongue is assumed in front back to produce these four semi-vowels [i] [u] [e] [o]. Table 2.5 shows the semi-vowels.

Table 2.5 Bengali semi-vowels

Position of the tongue	
Front	Back
ঐ [i]	ঊ [u]
ঐ [e]	ঊ [o]

There are eight diphthongs in English language. Among them, three (3) are called centering diphthong and five are called closing diphthong. Among the five closing diphthongs, two diphthongs are narrow and three (3) are wide. But in case of the number of Bengali diphthong, there are different opinions among the linguists. It ranges from 17 to 31. Hai (1994, as in Tamzida and Siddiqui, 2013) told that phonetically 31 diphthongs are there in Bengali language. Among those diphthongs, nineteen (19) are regular and twelve (12) are irregular (p. 36). But the diphthongs granted by Pobitro Sharker are mostly acceptable. On the contrary, seventeen (17) diphthongs are found in Samsad Bangla Uchyaron Ovidan (2003). Ali (2001, as in Alam et al., 2008) along with many other linguists and educationists in Bengali language accepted this number of diphthongs (p. 86). Tamzida and Siddiqui (2013) show the Bengali diphthong in Table 2.6.

Table 2.6 Bengali diphthong

Serial number	Diphthongs		Example
	Bengali alphabet	IPA	
1	ইই	[ii]	dii (I give)
2	ইউ	[iu]	biubhol (upset)
3	এই	[ei]	nei (I take)
4	এউ	[eu]	dheu (wave)
5	এ্যও	[æo]	naeo (you take)
6	এ্যএ	[æe]	
7	আই	[ai]	
8	আও	[ao]	
9	আউ	[au]	
10	আএ	[ae]	
11	অও	[ço]	
12	অএ	[çe]	
13	ওও	[oo]	
14	ওউ	[ou]	
15	ওই	[oi]	
16	ওএ	[oe]	
17	উই	[ui]	dhui (I wash)

Though, in some cases, the place and manner of articulation of phonemes between these two languages are different and in some cases they are same, the Bangladeshi learners of English mispronounce distinct English phonemes for the intervention of Bengali sounds in their English speech and thus, they become fossilized in them. This study has documented five distinct sounds (mentioned in the next section) which are frequently fossilized by the Bengali speakers of English. The English /ei/ phoneme, which is a closing and falling, unrounded diphthong, is often replaced by /e-ঐ/ sound which is described as half-close, high-mid-unrounded vowel (Rajimwale, 1999) by the Bengali speakers. The phoneme /u:/ is long, back, high rounded vowel which is replaced by the phoneme /u-উ/ which is a short, back, high rounded vowel (ibid). Though /ʒ/ and /ʒ-জ/ both are palate-alveolar fricative, the Bengali speakers pronounce /ʒ-জ/ in case of /ʒ/ sound, for example, in the word ‘television’. The same issue occurs in case of /s/ and /z/ sound. The /g/ sound is a velar stop which is replaced by aspirated /gh-ঘ/ by the Bengali speakers.

Table 2.7 shows the phonological differences between the targeted Bengali and English sounds (Islam, 2021).

Table 2.7 The phonological differences between the targeted Bengali and English sounds

English phonemes	Bengali sounds	Aspect of difference	Remark	Reference
1./ei/	/e-এ/	The English phoneme 1 is different place of articulation wise.	English phoneme is closing and falling, unrounded diphthong while Bengali sound is half-close, high-mid-unrounded vowel	Tahreen's (2015)
2./u:/	/u-উ/	The English phoneme 2 is different place of articulation wise.	English phoneme is long, back, high rounded vowel while Bengali sound is short, back, high rounded vowel	(Haque, 1990 as in Islam, 2021)
3./ʒ/	/ʃ-শ/	The place and manner of articulation of both the sounds are same.	Both the sounds are palate-alveolar fricative.	Islam (2021)
4./z/	/s-স/	The place and manner of articulation of both the sounds are same.	Both the sounds are palate-alveolar fricative.	Islam (2021)
5./g/	/gh-ঘ/	The English phoneme 5 is different aspiration wise.	The English phoneme is a velar stop while the Bengali sound is aspirated velar stop.	Islam (2021)

2.5.3 Position of Target Sounds in the Words

In the present study, there are 5 target sounds which are frequently fossilized by the Bangladeshi adult speakers of English. These sounds have different positions in phonological environment of the words. In this study, there are 10 middle and 7 final /u/ sounds and no initial sound, 1 initial, 13 middle and 1 final /ei/ sounds, 10 middle /ʒ/ sounds and no initial and final sound, 10 final /z/ sounds and no initial and middle sounds and 7 initial /g/ sounds and no middle and final sound. Table 2.8 shows them.

Table 2.8 Phonological environment of the target sounds

	/u:/sound	/ei/ sound	/ʒ/sound	/z/ sound	/g/sound
Initial	00	01	00	00	07
Medial	10	13	10	00	00
Final	07	01	00	10	00

2.5.4 Phonological Fossilization among Bengali Speakers

Phonological fossilization in English pronunciation and incorrect intonation are the major problems in English speech of the Bangladeshi teachers and learners Demirezen (2010). Fossilized errors in pronunciation occur for the influence of core sounds (the mother-tongue association in case of learning the phonemes of second or foreign language are called the core sounds) such as vowels like $\text{ei} \rightarrow \text{æ/এ/}$, $\text{ə} \rightarrow \text{æ/এ/}$, $\text{ɑ} \rightarrow \text{ʌ/আ/}$, $\text{i} \rightarrow \text{æ/এ/}$, $\text{ə} \rightarrow \text{ɔ/অ/}$, $\text{ɑ} \rightarrow \text{æ/এ/}$, $\text{ɔ} \rightarrow \text{au/আউ/}$, $\text{æ} \rightarrow \text{ʌ/আ/}$, $\text{i} \rightarrow \text{e/এ/}$ and consonant like $\text{ʒ} \rightarrow \text{ʃ/শ/}$, $\text{t} \rightarrow \text{tʃ/চ/}$, $\text{ð} \rightarrow \text{θ/থ/}$, $\text{s} \rightarrow \text{z/য/}$, $\text{s} \rightarrow \text{k/ক/}$, $\text{t} \rightarrow \text{θ/থ/}$, $\text{f} \rightarrow \text{tʃ/চ/}$, $\text{f} \rightarrow \text{s/স/}$, $\text{tʃ} \rightarrow \text{s/স/}$, $\text{t} \rightarrow \text{d/ড/}$, $\text{g} \rightarrow \text{g}^h/\ঘ/$, $\text{dʒ} \rightarrow \text{g/গ/}$, $\text{f} \rightarrow \text{k/ক/}$, $\text{dʒ} \rightarrow \text{d/ড/}$, $\text{g} \rightarrow \text{k/ক/}$, $\text{k} \rightarrow \text{s/স/}$, $\text{f} \rightarrow \text{z/য/}$ (Bashiruddin, 2016) in their speech production of English Demirezen (2008). These “core sounds” of English are often mixed and confused with the Bengali phonemes of the students and therefore mother tongue interference or native reaction get to be inseparable for the Bangladeshi teachers and learners of English. Amanullah (2009) found that the English /ei/ sound in the words *age*, *Asia*, *April* is the commonest problem-causing core sound for all Bangladeshi students of English and they pronounce it as /e/ which appears as a fossilized pronunciation error for almost all Bengali learners of English. Banglicization of English sound is also responsible for phonological fossilization. Like naturalization it occurs at the phoneme level. Both the loan-word and loan-translation are influenced by Banglicization. In loan-words, an English word is taken into Bengali and then undergoes Banglicization in case of spelling and pronunciation. The English word ‘table’ is pronounced as /tebil/ by the Bangladeshi learners of English. By contrast, the idea rather than the word itself is borrowed in a loan-translation (Akan, 2018). Another vivid example of Banglicization of the English

word is ‘chair’ which is known as a Bengali word to almost all the people in Bangladesh.

Long and short vowel difference is not a phonemic characteristic in Bengali language but, in English it is a phonemic feature. Begum and Hague (2016) mentioned that some long vowels turn to short ones: /i:/ ~ /i/, /u:/ ~ /u/, /ɔ:/ ~ /ɔ/, /ɜ:/ ~ /ʌ/, /ɑ:/ ~ /ɑ/. Some short vowels undergo interchange between them: /ɪ/ turns to /e/, /e/ turns to /æ/, /ə/ (close front vowel) turns to /æ/ (front vowel), /ʊ/ (central vowel) turns to /ʊ/ (back vowel), and /ɑ/ (back vowel) turns to /ʌ/ (central vowel). Some diphthongs turn to short vowels: /eɪ/ (closing diphthong) ~ /e/ (front vowel), /ʊə/ (centering diphthong) ~ /ʊʊ/, /ɪə/ (centering diphthong) ~ /eə/ (another centering diphthong). Some triphthongs become diphthong or other vowels: /eɪə/ ~ /eə/ (centering diphthong), /əʊə/ ~ /o:ʌ/. In case of consonant sounds, bilabial plosive /p/ turns to labio dental fricative /f/. Labio dental fricative /f/ and /v/ also turns to bilabial aspirated plosive /p^h/ and /b^h/. Palato alveolar affricate consonants /tʃ/ and /dʒ/ turn to alveolar consonant /s/ and /z/. Alveolar consonant /d/ is produced as aspirated alveolar consonant /d^h/ (ঢ). Inter dental fricative /θ/ turns to alveolar consonant /t/ (ত) and gradually they become fossilized.

2.5.5 Studies on Phonological Fossilization in Bangladesh

Studies on fossilization or phonological fossilization of Bengali sound in English pronunciation of Bangladeshi learners of English are rare in Bangladesh. It has not yet been investigated by the researchers in Bangladesh but there are studies on L1 interference, contrastive analysis and pronunciation problem of the students of tertiary level in Bangladesh. Teaching intelligible English pronunciation is always neglected or overlooked in Bangladeshi EFL classroom. It was found that the students encounter difficulties in case of producing English sound due to the absence of certain phonemes in Bengali (Mostafa, 2013).

Tahereen (2015) found that the main problem that the Bangladeshi learners encounter is to articulate and differentiate between /ə/ and /ɜ:/. The Bangladeshi learners of English have the tendency to articulate them as /a/ or /ɔ/. For instance, they produce ‘bird’ (/bɜ: d/) as /bard/ and ‘occur’ /əkə/ as /ɔkar/. In case of consonants, the aspirated plosives in Bengali are /k^h/ /g^h/ /c^h/ j^h/ /t^h/ d^h/ and they are phonemic, whereas in English aspirated plosives are not phonemic (Azizul, 2011).

Islam (2017) has divided the English sounds according to their range of difficulty for the Bangladeshi learners on the basis of their manner and place of articulation. For example, /h/, /m/, /n/, /d/, /b/, /g/, /ʃ/ cause no problem, /n/, /s/, /w/, /j/ are supposed to be less problematic, /p^h/, /t^h/, /k^h/ are sounds which are somewhat problematic, /l/ is a real problematic sound, /ə/ and /ɔ/ are much problematic, among the phonemes /r/, /f/, /v/, /tʃ/, /dʒ/, the sound /v/ is the most problematic and /z/, /ʒ/ are also the most problematic of all the sounds listed here. The /ʒ/ sound is not available in Bengali language. Thus, the Bangladeshi learners of English articulate and mispronounce it as /s/ (Tahereen, 2015).

Mostafa (2013) focused on the complicated consonant clusters in onsets and codas in English language. On the other hand, onset consonant clusters are rarely used, and coda consonant clusters are nonexistent in Bengali Language Ferguson and Chowdhury (1960). Thus, the English words “flux” [flʌks] and “abrupt” [əbrʌpt] that are structured with consonant clusters pose much difficulty for the Bangladeshi learners of English. When some English sounds seem difficult to produce or articulate to the Bangladeshi learners, they obviously follow the easier way and they frequently replace the English sounds by approximate Bengali sounds. This intervention of Bengali sounds in their English pronunciation is due to their unconsciousness of different accents all over the world (Tahereen, 2015). Therefore, phonological fossilization becomes inevitable. Islam (2021), in his study, found the similarities and differences between Bengali and English vowel and consonant sound. His findings are given in the table 2.9 and 2.10 for the reference and justification of the target sounds. The highlighted columns show the differences.

Table 2.9 Difference between Bengali and English vowel sounds (Islam, 2021)

Phonetic symbol	English	Bengali	Key words
i:	T	X	Feel
i	X	T	chil (eagle)
i	T	X	Fill
e	T	T	Bed
æ	T	T	Cat
a	X	T	bhat (rice)
a:	T	X	Part
ɒ	T	T	Hot
o	X	T	gol (round)
ʊ	T	X	Full
u:	T	X	Fool
u	X	T	chul (hair)
ʌ	T	X	But
ɜ:	T	X	Third
ə	T	X	Above
o:/ ɔ:	T	X	Saw
ei	T	T	make

T: Present; X: not present

Table 2.10 Difference between Bengali and English Consonants (Islam (2021)).

Sounds	Place of articulation	English	Bengali	Key words
/f/	Labio-dental	T	X	fine
/v/	Labio-dental	T	X	vine
/θ/	Inter dental	T	X	think
/z/	alveolar	T	X	zero
/ʒ/	Post alveolar	T	X	measure
/w/	bilabial	T	X	war
/j/	palatal	T	X	yes
/kh/	Velar	X	T	‘Khaua’ - eat
/gh/	Velar	X	T	‘Gham’ - sweat
/jh/	Alveo- palatal (plosive)	X	T	‘Jhanu’ - expert
/t/	dental	X	T	‘Tala’ - lock
/th/	dental	X	T	‘Thala’ - plate
/dh/	dental	X	T	‘Dhoni’ - rich
/ph/	bilabial	X	T	‘Phol’ - fruit
/bh/	bilabial	X	T	‘Bhalo’ - good
T:Present;X:notpresent.				

2.6 PHONOLOGICAL AWARENESS

Phonological awareness means consciousness about phonemes or sounds of a particular language. In a broad sense, it denotes the ability or capability to understand and use the sound system of a language free of meaning (Goswami & Bryant, 1990). The phonemes which are the basic unit and the rhymes and syllables which are the larger units of a language are included in phonological awareness. At the same way, Cassady, Smith and Huber (2005, as in Kochaksaraie & Makiabadi, 2018) delineated

the term as a speaker's consciousness and sensitivity to the phonological system of a language, including syllable structure, sounds, phonemes and phonotactics of the language. Phonological awareness is considered by how accurately the users of a language can highlight on the pattern and structure of the first and second language system (Venkatagiri & Levis, 2007).

Peltier (2019) focuses on the phonological awareness in the Figure 2.1.

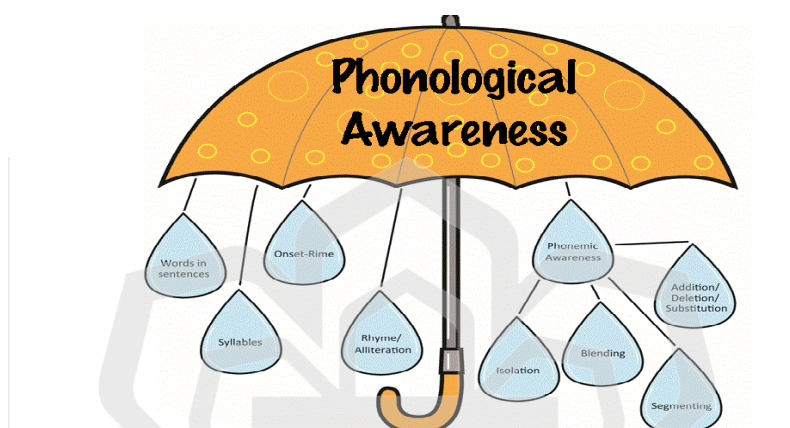


Figure 2.1 Phonological awareness (Peltier, 2019)

Note: Figure 2.1 begins with the point “words in sentences” and ends in, addition, deletion/substitution and phonemic awareness in the middle.

Phonological awareness of English is the ability and capability of the learners to differentiate, analyze and synthesize the sounds of the English language. This is the bigger umbrella term over phonemic awareness. It includes rhyming, word awareness (separating words in sentences), syllable awareness, onset-rime awareness (str-ing, spl-ash, b-ig), and phonemic awareness skills. Phonemic awareness is the ability to distinguish, synthesize, and manipulate the smallest unit of sounds (or phonemes) in words that make a difference in the word’s meaning. There are 4 phonemes in the words *clap* (/k/, /l/, /ă/, /p/), *shapes* (/sh/, /ā/, /p/, /s/), *box* (/b/, /ŏ/, /k/, /s/), and *quick* (/k/, /w/, /ī/, /k/) even though each of those words has a different number of letters. Phonemic awareness includes;

- Isolation: to identify the last sound of the word “fix”?

- Blending: to make the word from this robot voice: /k/ /y/ /oo/ /t/
- Segmentation: to break down the sounds in the word “swished”
- Addition: to add sound to the word. Suppose-the word “white” – we can add /k/ to the beginning.
- Deletion: to delete sound, suppose the word “quip” – we can take off the /k/
- Substitution: to substitute a sound, suppose, “Click” – We can change /l/ to /w/

Djiguimkoudre (2021) stated that phonemic awareness has been preliminarily employed in case of L1 acquisition to evaluate children speech improvement and its relation to their reading skill for comprehension and production. Some educationists and linguists have found the relationship between phonemic awareness and language competency and stated that to increase children earlier speech improvement, it is needed to increase their reading comprehensive ability. For instance, ‘cat’ is formed by blending /k/, /æ/ and /t/. Similarly, the word ‘cat’ can be segmented into /k/, /æ/ and /t/. Students should also be able to know that meaning has been different when the /k/ in ‘cat’ is replaced with /m/ and a new word, ‘mat’, is built. It is also supported by William and Lovatt (2003) as they argue that phonological awareness is a critical precursor, correlate and predictor of reading skill.

However, another research depicted that phonological awareness (PA) does not develop one’s reading comprehension skills (Dellicarpini, 2011). As phonological awareness helps the learners to L1 acquisition; it has also been employed to acquire L2. Many studies have found the importance of phonological awareness in case of attaining foreign or second language competency. Saito (2013) investigated on the role of explicit phonetic teaching to Japanese speaking ESL learners for acquiring distinct English phonemes like /æ/, /f/, /v/, /θ/, /ð/, /w/, /l/, /ô/. Moreover, this research evaluates the influence of explicit phonetic teaching to teach the pronunciation of distinct English phonemes using two important measurements such as; “accentedness and comprehensibility” (p.45). It is found that explicit phonetic instruction can develop students’ comprehensibility in reading sentence level and picture-description level (p.54). Becker and Sylvan (2021) in a study focused on the influence of an

intervention targeting pronunciation and phonemic awareness provided jointly to pre-school children to increase spontaneous literacy competence with the long-term goal to protect them from reading difficulties in their later life.

2.6.1 The Role of Attention and Awareness

The role of attention and awareness in second or foreign language learning has been a crucial aspect amongst researchers, scholars and learners alike, for a particular period of time (Schmidt et al., 2010). Schmidt (2010) propounded the noticing hypothesis and stated that a language learner should be aware and thus consciously observe linguistic features in the second or foreign language so that these features can be internalized. It is argued that attention and awareness are essential for learning a language, hence visualizing the objects or persons and together with students' external and internal skills is crucial to learn a second or foreign language successfully. So, noticing the language segments and input can be more effective when learning a second or foreign language and at the same way, it can minimize the factors of fossilization in language learning (Franca, 2017). Second or foreign language instructors also must be aware of the influence of students' L1 phonemes on the L2 pronunciation. The awareness can, in turn, assist them and their learners to raise their consciousness about phonological variation between first language and second language (Kochaksaraie & Makiabadi, 2018). On the other hand, children who have lacking in phonemic awareness competency cannot: group words with similar and dissimilar phonemes (mat, mug, sun) blend and split syllables (f oot) blend sounds into words (m_a_n) segment a word as a sequence of sounds (e.g., fish is made up of three phonemes, /f/, /i/, /sh/) detect and manipulate sounds within words (change r in run to s) (Kame'enui et al., 1997).

2.6.2 Level of Awareness on Fossilized Sound in Bengali Speakers

In Bangladesh, only grammar and vocabulary of English are focused in the classroom; in other words, sufficient attention is paid to teach grammar, translation and vocabulary. Though their reading and writing skill is somewhat developed, they

remain in the dark in case of speaking, listening and pronunciation skill. Pronunciation, in spite of being another major sub-skill to be acquired when learning English, it is often overlooked or neglected in teaching and learning activities in Bangladeshi EFL classroom. The faulty education system, faulty syllabus and curriculum design, teachers' lacking in pronunciation skill, and the learners' disinterest and unawareness on pronunciation are responsible for this negligence. The phonetic and phonological pattern of English is not known to a number of learners who are not aware of the importance of pronunciation (Alam & Uddin, 2019). As a result, pronunciation teaching cannot draw much attention of the teachers in Bangladesh (Maniruzzaman, 2008). For this reason, defossilization of Bengali sound for intelligible pronunciation in the students has become challenging. The Bangladeshi adult learners of English are not conscious enough to pronounce certain intelligible English sounds. Mujaffar (1999, as in Begum and Hoque, 2016) observes that Bangladeshi speakers pronounce the voiced palatal plosive /z/ and the voiced palato alveolar affricate /dʒ/ as allophones of same phoneme. The speakers read the letter 'z' as /dʒ/ and the letter 'j' as /z/.

2.7 METHODS FOR TEACHING PRONUNCIATION

Different methods and techniques are used to teach pronunciation in the classroom (Morley, 1991). Intuitive-imitative technique and analytical-linguistic technique are two of them (Roohani, 2013). An intuitive-imitative technique depends on the student's ability to imitate and to listen to the rhythm and sounds of the second and foreign language without the intervention of any outer sound (Sharma, 2020). An analytic-linguistic technique, on the contrary, employs information and tools such as a phonetic alphabet, articulatory sounds, vocal cord, and contrastive sound and other aids and materials to complement listening, production and imitation (Demirezen, 2010).

Pronunciation was not taught through grammar-translation method in the classroom (Nair, 2006). However, in Audio-Lingual Method (1960s), pronunciation became the center of teaching and learning activities and main focus in the class (Gilakjani, 2011). This method emphasizes on classroom practices like minimal pair,

drilling and imitation. On the contrary, direct method that emphasizes on speediness rather accuracy helps the students to acquire native like fluency (Morley, 1991). But communicative language teaching emphasizes on intelligible pronunciation (Osmany, 2017).

In case of teaching of any language skills, the teachers must decide what to teach and when to teach the pronunciation in the class. Harmer (2010) stated that there are many alternative ways to be used in the classroom for teaching pronunciation. They are the whole, the distinct slots, integrated steps and opportunistic teaching. However, the pronunciation teaching still seems to be avoided and neglected in many ESL or EFL countries (Osmany, 2015). Hismanoglu and Hismanoglu (2010) mentioned that there are a number of methods or techniques used in pronunciation teaching in different periods. Table 2.11 shows the techniques and methods.

Table 2.11 Approaches to Teaching Pronunciation

Years	Approach	Definition
The late 1800s and early 1900s	Direct Method	Language instructors provided learners with a model for native like pronunciation. By listening and then imitating the modeler, students developed their pronunciation.
(1940s- 1950s)	Audiolingual Method in USA	Pronunciation was taught explicitly from the beginning. Students repeated or imitated after their instructors or teachers or a recording model. Teachers employed a visual transcription system or articulation chart. Technique: minimal pair drills.
(1960s)	Cognitive Approach	Teaching grammar and vocabulary was emphasized because (a) it was considered that native like pronunciation was an unwise thinking and could not be attained and (b) time would be better spent on teaching more learnable items, such as grammatical structures and words.

(1970s)	Silent Way	The students highlight on the sound pattern without learning a phonetic alphabet or explicit linguistic information. The accuracy of sounds and structure of the target language was given priority from the very beginning. Tools: sound-color chart, the Fidel charts, word charts, and color rods.
Mid-late 1970s	Community Language Learning	The pronunciation syllabus was primarily student centered and designed according to the need of learners. Students decided what they wanted to practice and used the teacher as a resource. The approach was intuitive and imitative.
(1980s-today)	Communicative Approach	Communication between the persons was the ultimate goal of this method. Teaching pronunciation was urgent and intelligible pronunciation was considered as necessary in oral communication. The techniques used to teach pronunciation were: listening and imitating, phonetic training, minimal pair drills, contextualized minimal pairs, visual aids, tongue twisters, developmental approximation drills, practice of vowel shifts and stress shifts related by affixation, reading aloud/recitation, recordings of learners' production.
20th century More recent	Grammar-translation and reading based approaches	Oral communication was not the primary goal of language teaching and learning. Therefore, speaking skill was given less importance, and pronunciation competency was given no importance.
	Total Physical Response	Students generally begin to speak when they were ready. They may make errors in the initial stage and teachers will be tolerant to them.
	Natural Approach	The primary focus was on listening without pressure to speak gave the

		learners the chance to internalize the target sound system.
Today	New directions	New thoughts from other fields of subjects, such as drama, psychology, and speech pathology. Techniques: the use of fluency-building activities, accuracy oriented exercises, appeals to multisensory modes of learning, adaptation of authentic materials, and use of instructional technology in the teaching of pronunciation.

Ambitious attitude to be competent in pronunciation like the native speakers was a faulty notion among the learners. Though, different period highlighted different techniques for teaching and learning English language, audio lingual method, direct method, and communicative approach emphasized on learning and teaching pronunciation. Silent way, community language learning, total physical response, natural approach and new directions also highlighted on pronunciation teaching. On the other hand, cognitive approach, grammar-translation and reading based approaches did not focus on teaching pronunciation. Grammar-translation method is still used in some EFL countries like Bangladesh. Thus teaching intelligible pronunciation is a challenge in Bangladesh though, now, intelligibility in pronunciation is a buzz word in case of teaching and learning English pronunciation.

2.7.1 Strategies for Defossilization

Fossilization, though unpredictable and sometimes difficult to eradicate, is changeable (Creo (1990). Lei et al. (2018) presented that the phonological fossilization and the sound elements which seem to be fossilized can certainly be de-fossilized. It is generally believed that learners with proper motivation, sufficient exposure to rich second language environment, and ample opportunities for output will surely help the students to defossilize wrong sounds in second language acquisition (Chen, 2009). Teaching learners how to defossilize the fossilized pronunciation errors requires the

exact method, sufficient teacher training, and continuous practice in and outside of the classroom (Dolan, 2020). Literature has documented various techniques and approaches that can be followed by learners and language instructors with a view to prevent phonological fossilization. Mostafa (2013) focused activities like enjoying English movies, listening English news and watching other programs in various channels or 'YouTube' can play a vital role to defossilize the fossilized sounds in English speaking. If possible, students can be given the chance to interact with the people whose mother tongue is English (Geckinli, 2022). In fact, due to teachers' indifference and ignorance toward learners' errors in pronunciation, the learners continue to make the mistakes without ever knowing that their pronunciation is incorrect and full of phonological fossilization (Yuniartiningsih, 2020).

Raising awareness is very important for correcting fossilized sounds in English pronunciation of the students Demirezen (2010). Students can learn the communicative competence through some techniques, such as retrieval techniques, rehearsal techniques and cover techniques (Maniruzzaman, 2008). Then, they will be asked to present their oral speech as a feedback on their own speech production and pronunciation they learnt in the class. In that feedback, they can identify both their improvement and shortcomings and they themselves provide corrections. In this way, they can build self-awareness of their speech production. Awareness about connected speech is also necessary for intelligible pronunciation, specifically for the students of Bangladesh as it is not the feature of Bengali language (Tahereen, 2015).

According to Dabaghi (2008), there are different techniques and ways to correct the errors in learners' pronunciation. Firstly, the technique they can follow is the immediate explicit correction. In this correction type, the instructors will immediately correct the pronunciation mistakes or errors by providing the correct form as well as explanation of the rule related to the form. Secondly, it is the delayed explicit correction. When the learners produce a wrong sound, mispronounce a word, the teacher will wait until the speech is finished and will not directly interrupt and correct the students in the middle of the speech. Lastly, it is the immediate implicit correction. Implicit correction indicates the act of correcting the learners' mispronunciation by using indirect forms of feedback right after the mistake or error is produced. Usually, the instructors will reconstruct the students' utterance into

correct one and attempt to make the learners repeat what the instructor has said immediately (Yuniartiningsih, 2020).

The key technique for avoiding phonological fossilization is to provide an accurate and appropriate teaching in early levels of instruction (Acton, 1984; Valette, 1991, as in Al-Shormani, 2013). This teaching is of three kinds: 1) teacher input, 2) recorded input and 3) student input. Firstly, the teachers should be conscious and step to prevent fossilization, viz. only the teachers who have a good command over pronunciation and the target language and who have intelligibility in pronunciation should be employed for teaching English pronunciation in the classroom. Secondly, pertaining recorded input means to keep the recording of correct pronunciation from the speakers and the best of this type of input is video-recording. Thirdly, when communicating with their mates and partners, the learners should highlight on the aspects that he learnt in the class and acquire the sounds they hear.

Besides, Acton (1984, p. 71, as in Al-Shormani, 2013) has propounded a method for rehabilitating phonological fossilization in pronunciation. He again stated that students must produce fossilized sounds in their pronunciation when they have grown up to a certain age which indicates that they become functionally bilingual. The method proposed by Acton consists of seven steps:

- a) Conversation control in which learners have to be relaxed and feel not threatened in conversation.
- b) Monitoring strategies.
- c) Non-verbal correlates of pronunciation
- d) Dictionary use in which the learners have to focus on “the relationship between pronunciation and orthography” for which dictionary use is emphasized for checking especially the pronunciation of vowels many of which the learners are not aware of.
- e) Oral reading in which learners are advised to prepare 200 to 300 word texts for revising their pronunciation.

- f) Informant use, here, each student solicits the assistance of an informant, a clear speaker of English for improving pronunciation and
- g) Integration which is a phase that entails using, in an “on-the-job conversation”, i.e. what learners have ‘corrected’ in isolation, in formal exercises and oral readings they have gone through previously (Acton, op.cit. p. 76-78 as in Al-Shormani, 2019).

Chen and Zhao (2013) on the contrary, propounded five steps which can be followed for teaching and learning intelligible pronunciation. They are; adopting appropriate learning strategies, formulating appropriate teaching strategies, guiding students’ communicative strategies, arousing students’ intrinsic learning motivation, improving teachers’ quality. Pennington (1996, as in Jahara & Abdelrady, 2021) emphasized that the above mentioned steps and strategies to minimize fossilization are personally and professionally needed because unintelligible pronunciation hampers understandability. Demirezen (2010) strongly believes that the Audio- Articulation Method (AAM) is a rehabilitating technique for minimizing phonological fossilization and can certainly correct fossilized errors and enhance the pronunciation potentials of non-native English trainers and trainees. The next sub-sections have focused on some techniques and methods that have been propounded to treat fossilized errors in pronunciation.

Brown (1994) claimed that almost all the pronunciation features of a foreign and second language can be learned by imitating of the aspects of target language by students of any age or any first language background. He also mentioned that for learning the pronunciation of a second or foreign language, the learner’s ability and aptitude for mimicry, the plasticity of their brain, and their willingness to forget the habits of their mother tongue sounds is essential.

In the classroom, there are a number of variations that can be both educative and entertaining. For this, ‘You Tube’ videos from sitcoms can be played in the class room. Again a scene from the television show *King of Queens* showing correct sounds of the words is needed when giving a telephone number provides helpful materials (Derwing & Munro, 2014). Albiladi (2019) Propounded 8 techniques or strategies that

EFL teachers can employ in the class to help learners to avoid phonological fossilization. They are;

- increasing student awareness
- listening to improve pronunciation
- teaching English rhythm and stress
- authentic and context rich activities
- using a variety of classroom activities
- minimal Pairs
- visual Aids and
- Tongue twisters.

At present, the learners can learn and practice pronunciation at any time, regardless of where they are. Web-based programs and mobile apps that are widely accessible can be used to develop students' pronunciation competency and they are also inexpensive. But some of the commercially available apps and products are often neither pedagogically sound nor granted by the researchers (O'Brien & Levis, 2017). So these programs and apps can be employed for teaching and learning intelligible pronunciation in the classroom. While direct method, audio lingual method and communicative approach and other methods emphasized only on learning pronunciation, the Audio-Articulation Method invented by Demirezen (2005) is mainly concerned for defossilizing the fossilized sounds in English pronunciation which ultimately leads to intelligible pronunciation.

2.7.2 The Audio-Articulation Method

Audio-Articulation Method (AAM) invented by Demirezen (2010) is a defossilization technique of fossilized errors in the classroom and it is also supported by Hismanoglu (2007) and many other researchers. Audio-Articulation Method is a positive cognitive

feedback approach for teaching and learning intelligible pronunciation in the classroom and to minimize fossilization avoiding old pronunciation habits of native language of the learners. The method links the audio-visual technique, the interaction technique into one model by including sound recognition, the articulatory gestures, and production activities such as imitating, listening, minimal pairs, phonetic training, visual aids, minimal sentences, reading aloud and tongue twisters (Isarankura, 2015). Basically, the principles of the AAM focus on micro-listening and speaking (ibid). Achieving better pronunciation habits is not possible without proper professional training and practice since incorrect pronunciation do not miraculously vanish (Tejeda1& Santos, 2014). To defossilize, developing proper tongue twisters, proverbs, idioms, mottoes, or cliché expressions in chunks can be applied in pronunciation practice in the classroom (Demirezen, 2010). If the phonological fossilization is not corrected, they pave the way to the establishment of wrong sound in the learners (Demirezen & Topal, 2015). According to Demirezen (2008), the rehabilitation of fossilized pronunciation issues can be minimized through the Audio-Articulation Method. Contrary to Fromkin et al. (2003, as in Valdes & Pantoja, 2015) who stated that phonological fossilization is so permanent that it cannot be eradicated, Demirezen (2005) claimed that fossilized pronunciation errors can be defossilized through proper technique and approach. Hismanoglu (2007) also speculated that it is possible to correct the chronic pronunciation errors of Turkish learners of English through using contextual sentences, minimal sentences and problem-concentrated exercises practice in a communicative situation. The points below represent the applicability of the method in five basic steps as propounded by (Demirezen, 2005, 2010).

- a) Identify the problematic sound of the target language using a diagnostic test;
- b) Prepare a corpus of at least 50 words;
- c) Single out minimal pairs from the corpus for practice;
- d) Develop proper tongue twisters, idioms, and mottos in chunks for practice;

- e) Stimulate further awareness and experiential practices within a suitable methodology (Isarankura, 2015).

Kayaoglu and Caylak (2013) conducted a study to test the efficiency of Audio-Articulation Method as a technique for defossilizing the fossilized sounds in English pronunciation of adult EFL learners. They did the research on the acquisition of interdental fricatives /θ/ and /ð/ by the students of a university vocational school. The study found a crucial variation in the students' pre-test and post-test scores. At the same way, significant findings were also noticed in the pre-test and delayed post-test scores, showing a positive impact of Audio-Articulation Method on the students. It is interesting that almost all the students were seen to improve their pronunciation habits of /θ/ and /ð/ after employing Audio-Articulation Method.

2.7.3 Pedagogical Implication of AAM in EFL Classroom

The Audio-Articulation Method can be employed in the classroom for teaching the students intelligible pronunciation. To make the teaching and learning activities fruitful and effective in the classroom, this method can play a vital role for correcting and curing the fossilized errors in pronunciation of the non-native teachers and students of English moving from raising awareness of the phonological fossilization in speaking to speech perception (Demirezen, 2010). Defossilization of the core sounds of the foreign and second language can be treated from both micro-and macro-level perspectives (Morley, 1991, p. 497). From micro level perspective consonants like /dʒ, ʒ, t, s, ð, k, ʃ, tʃ, g/ and vowels like /ə/əi, e, u, ɑ:, i:, ɔ, æ, ɔ:, / of English are problem causing “core sounds” for Bangladeshi teachers and students. Every sound can be treated in the class through the drillings and exercises of the AAM (Demirezen, 2010). For instance, teachers can use visual illustrations to show the students the differences in pronunciation between /f/ and /p^h/, /v/ and /b^h/, /θ/ and /t^h/, /d/ and /d^h/, /z/ and /dʒ/ and pronounce them in the class correctly (Mostafa, 2013).

Such “explicit instruction” of the pronunciation of non-native sounds could help the learners as they had to spend their time and effort to learn those sounds (Bradlow, 2008, p. 287, as in Kissling, 2014). Minimal pair recognition and

comparison in the sounds of the foreign and second language like English are always helpful for the non-native students' awareness (Jamieson & Morosan, 1986, as in Hall, 2004). In this regard, the minimal pair contrasts like 'Rues [ruz], Rouge [ruʒ], [z=ʒ] in consonant and still [stɪl] Steel [sti:l], [I = I:] in vowels will be beneficial for the Bangladeshi students to defossilize in English pronunciation (Mostafa, 2013). Every minimal pair can be selected and treated by AAM to correct the pronunciation mistakes in a class hour period in discussing them in neuro-muscularly oriented imitation, repetition and exhortation wise experiential practices to control pronunciation (Demirezen, 2010).

Maniruzzaman (2008) mentioned the "modeling and individual correction" (p. 20) as a fruitful technique where the instructors give comments and feedback on the activities of the learners' self-correction and analysis. Isarankura (2015) conducted a research on the implication of the Audio-Articulation Method to develop EFL student's pronunciation of the English /v/ Sound. It is found that the /v/ phoneme was pronounced in five variants: [v], [w], [b], [f], and [Ø]. The high group used [v] most frequently in all positions during the pre-test while the low group used [w] and [b] most often in word-initial and word-final positions respectively. After employing AAM, the proper use of the target [v] increased significantly in both groups. The rates for [w] and [b] reduced at a statistically significant level. Conversely, the use of [f] increased in all positions, indicating that the students were trying to use the right point of pronunciation in order to approximate the target [v]. The results of the study show that the Audio-Articulation Method had a positive effect in developing the learners' pronunciation of the English /v/ sound.

The pedagogical implication of Audio-Articulation Method is that it is an easy and congenial method which is also motivating and engaging, facilitates the learners and is a problem curing technique for teaching English pronunciation in the classroom. The pedagogical implication of AAM has been tested by many researchers like Hismanoglu (2007), Isarankura (2015), (Demirezen, 2010), Sasmita et al. (2017) who found that AAM has a positive effect on English pronunciation teaching/learning activities in the class and plays a vital role to defossilize the problem causing sounds in English pronunciation. According to Demirezen (2005), the students are taught intelligible pronunciation through different kinds of drills without boring them.

Sometimes through visual aids and using fun and entertainment, the teachers endeavor to teach the students in the classroom. Thus the students become motivated and engaged in learning activities and their problem sounds are easily defossilized by this method. In this way, the learners become aware of their fossilized sounds and take steps to defossilize them.

2.8 SUMMARY

Exploring phonological fossilization among the Bangladeshi learners of English has not received much attention even though the issue or problem is quite apparent. Hence, many issues related to intelligible pronunciation are not fully understood or left untreated in the available scientific materials.

It can be summarized that teaching of pronunciation in order to minimize fossilized errors among Bengali speakers of English is very challenging. Further research and studies are needed to identify the pronunciation issues perceived by the Bangladeshi speakers of the English language. In addition, knowing the exact teaching methods and materials and effective pedagogical instructions should also be the main focus of teachers in correcting fossilized mistakes in pronunciation.

The present study is motivated by this subject matter. Generally, it intends to fill in the gap of understanding the awareness of Bengali speakers on the fossilized sounds when speaking in the English language as well as to know the efficiency of the Audio-Articulation Method to defossilize fossilized sounds in the context of Bengali speakers. The next chapter provides information on the conceptual framework, research design, data collection technique and data analysis procedures of this study.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter presents the methodological approaches that have been employed to conduct the study. The chapter begins with focusing on conceptual framework that has been chosen to regulate analytical procedure. Then, information on research site, participants, sampling strategy, method, data collection technique, instrument, data analysis, transcription of interview data, coding, categories and themes, phonemic transcription of pre-test and post-test are explicated. This chapter also expands its explanation on reliability and validity and trustworthiness. It ends with information on research ethics.

3.2 CONCEPTUAL FRAMEWORKS

This study has integrated three conceptual frameworks that serve as primary guides in the data analysis. These three conceptual frameworks are categorized according to research questions 1, 2 and 4 that have been formulated earlier namely; (i) pronunciation issues perceived by the Bangladeshi speakers (ii) challenges of English teachers to defossilize in English pronunciation and (iii) the teacher's and students' opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom. This study has documented four research questions. The first, second and fourth research questions follow the conceptual framework but the third one 'implication of Audio-Articulation Method in Bangladeshi EFL classroom' is a method test and the framework for one part of research question number four students' opinion in Bangladesh to implement Audio-Articulation Method' is not available in the literature. Figure 3.1 shows the relation of each framework to the research questions.

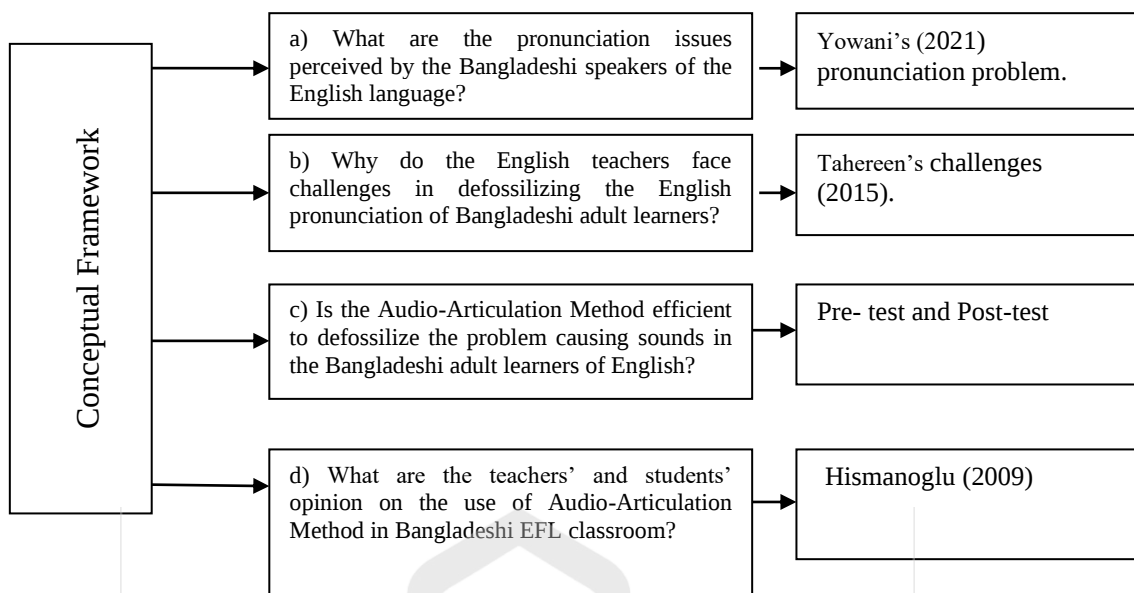


Figure 3.1 Conceptual Framework

3.2.1 Yowani's (2021) Pronunciation Problem

The first question that this study aims to answer concerns the pronunciation issues perceived by the Bangladeshi speakers of the English language. Analysis has been based on that coding on the pronunciation issues that are derived from the presentation in Yowani's sources of discussion on pronunciation problems. She conducted a study on 'Common Pronunciation Problems of Learners of English'. Her study, therefore, aims at exploring the causes and factors affecting English pronunciation problems of students. Table 3.1 shows the factors;

Table 3.1 Causes and factors affecting English pronunciation problems of students

1. Native Language	Kenworthy (1987, as in Yowani, 2021) stated that the native language is the most influential factor in accounting for students' pronunciation, especially foreign accents.
2. Prior English Pronunciation Learning	Prior experiences with pronunciation instruction may influence learners' success with current efforts. Learners at higher language proficiency levels may have developed habitual, systematic pronunciation errors that must be identified. As we know, the first impression is very important in every occasion. Some students failed to pronounce some words correctly from the beginning. As they become accustomed to their own version of pronunciation, they would be more likely to miscomprehend when these words are not correctly pronounced.
3. Phonetic Ability	According to Brown (1992), phonetic ability is often called phonetic coding ability. Kanoksilapatham (1992) suggested that many elements of learning are a matter of awareness of the learners' pronunciation. Besides students' pronunciation ability can be developed with much endeavor and concentrating on particular phonemes (as in Yowani, 2021).
4. Learner's Age	Children are likely to pick up accents very easily and quickly; and the ability to grasp anything is deteriorated with age and the knowledge of their mother tongue to a large scale acts as annoying interference while they endeavor to learn foreign or second language.
5. Learner's Attitude and Psychological Factors	Attitude towards the target language learning can influence achievement in pronunciation. It is not common to find that quite a few students resist coordination with teachers in phonetics classes. Sometimes some other students pronounced separate phoneme uncorrected, these students laughed at them. That needs a correct attitude to learn English pronunciation. Attitude for learning can either support or hinder pronunciation skills development. Similarly, the way an individual pronunciation has much to do with his or her personality and psychological or emotional state at a given time.
6. Intonation Factor in the Target Language	Intonation, the rises and falls in tone that make the 'tune' of an statement, is a crucial aspect of pronunciation of English, often making a difference to meaning or implication (Chen, 1983, as in Yowani, 2021). Intonation patterns in English sentences primarily indicate the degree of certainty of an utterance, i.e. whether is a statement, questions, or

	suggestion. Most questions in rising intonation, however, Wh- questions (who, what, where, when, why, and how) end with falling intonation.
7. Motivation	The learner's motivation for learning the language indicates whether he will develop native-like pronunciation or intelligibility. Adults can become highly proficient, even native-like speakers of second languages, if they are given due motivation.
8. Instruction	Language instruction generally highlights on four skills of that language: reading, writing, listening and speaking. Generally, foreign language syllabus and curricula include pronunciation in the first year of study as it introduces the target language's alphabets and sound system. However, pronunciation instruction rarely continues this focus in the higher level.

3.2.2 Tahereen's (2015) Challenges in Teaching Pronunciation

The challenges, the English teachers face all over the world vary from person to person and country to country. Among many problems, some unique difficulties must be treated. Table 3.2 shows the challenges that were documented by Tahereen (2015).

Table 3.2 The challenges of teaching pronunciation

1. Interference of Native Language	Though there are some similar sounds in Bangla and English, a lot of delicate differences exist between them which create problem for Bangla speakers to learn English pronunciation. The main difficulty that Bangla speakers face is to pronounce and differentiate between /ə/ and /ɜ:/. They just pronounce them as /a/ or /ɔ/. For example, they pronounce 'bird' (/bɜ:d/) as /bard/, 'occur' /əkə/ as /ɔkar/.
2. Little Exposure to English	In Bangladesh, Bangladeshi students of English have limited or in some case no exposure to the target language, English. Though 'Communicative Language Teaching Approach' (CLTA) has been introduced long before, the practical application of CLTA is hardly seen in Bangladesh.
3. English Spelling System	Unlike some other alphabetic languages, there are some letters in English which have more than one sound value. This feature is termed as GPC (Grapheme Phoneme

	Correspondence). Some letters have more than two values. For example, /c/ can be sounded as /s/ and /k/. So, there are ‘single valued’ and ‘multi valued’ words. These multi valued characters create problems and confusion among Bangladeshi learners. They find it difficult to pronounce unfamiliar words and even some familiar words as well. Words, such as ‘enjoy’ (/ɪnˈdʒɔɪ/) and ‘enough’ (/ɪˈnʌf/), are pronounced as /enˈdʒɔɪ/ and /eˈnʌf/, and learners continue their speaking with such biased pronunciation for a long time. Equally, they have difficulties with understanding those words when they are pronounced properly.
4. Lack of Concern and Awareness for Pronunciation	As pronunciation teaching has never been included in lesson plans in case of conducting the class and there is no assessment and classroom practices on pronunciation, students in Bangladesh cannot improve any concern and awareness for pronunciation.
5. Influence of Local Accent	In Bangladesh, there are a number of local dialects having different accents which really make confusion among the learners and collide with English pronunciation. This difference and interference is really challenging for many learners who struggle to attain intelligible pronunciation. Some of their sounds and accents are so complicated that even the teachers themselves cannot grasp the meaning of the words.

3.2.3 Pre-Test and Post-Test

Third objective of this study is to test the efficiency of Audio-Articulation Method as a defossilization technique in the Bangladeshi context. To test the method, pre-test and post-test design has been employed.

3.2.4 Hismanoglu’s (2009)

Fourth objective of this research is to know the opinion of the teacher and students who gave and received treatment in the classroom. Analysis has been based on that coding on the opinions that are derived from professor Hismanoglu on the use of Audio-Articulation Method. He conducted a study on the application of AAM in Turkish EFL classroom and saw that this method contributes to beautifying the

articulations of non-native speakers of English by providing them with a lively, colorful and motivating pronunciation lesson. Based on his observation, he opines that the students benefited from Audio-Articulation Method in the class. They were very active and cooperative during the application of AAM in the classroom. He also cites that psychological factors like anxiety and excitement influenced the students' articulation of the inter-dental sounds. No framework on the students' opinion is found in the available literature. This study is the first to investigate and find different opinions of the students on the use of AAM in Bangladeshi EFL classroom.

3.3 RESEARCH SITE

This study was conducted in two university colleges under national university namely, Matuail Hazi Abdul Latif Bhuiyan College and Dhaka Imperial College which are located in Dhaka, the capital of Bangladesh. The two colleges are in the metropolitan area and the students and teachers at these colleges are more advanced than those of rural area. These two colleges were selected for data collection due to easy access to the site and meeting with the participants and the availability of English department that offers courses on English literature and linguistics designed by national university, Bangladesh.

These particular colleges were selected as the research site for different reasons. Firstly, these colleges are in the capital city, Dhaka and the teachers and students at these colleges get more opportunity to interact with others in English than those who are in the colleges in rural areas. They often get chance to interact with the people of different professions. So the possibility to be intelligible and fluent for them is higher than other teachers and students in the institutions in remote area.

Secondly, since, these colleges are located in the central part of Bangladesh, students from different parts of the country with different social and dialectical variation get admission in these colleges. Before getting admission, they have passed their SSC and HSC from different schools and colleges having different local accent of Bangladesh. That means the teachers' quality; infrastructure and even the syllabus

vary in their previous institutions. So the students and teachers at these colleges rightly represent the students and teachers of Bangladesh.

Finally, these colleges have English departments that offer program on English language at undergraduate level. The question arises why the students of English department were chosen as the participants. Generally, it is supposed that the students of English department should have the competence in pronouncing intelligible sounds but the scenario is different in Bangladesh.

3.4 PARTICIPANTS

The teachers and students who are selected as the participants of this study are involved in English language and literature classes. They are members at tertiary level from the selected university colleges in Bangladesh. There were four teachers and fifteen students who participated in different phases of the study. The students were selected from different academic year for getting actual and verified data. Whether the participants are the students of 1st, 2nd or 3rd year is not a matter of consideration because in case of pronunciation skill in Bangladesh, the students of 1st, 2nd or 3rd year do not vary much. In some cases, the students of 1st year pronounce much better than those of 2nd or 3rd year. Five students were interviewed for research question one, three teachers were interviewed for the research question two, and one teacher and three students were interviewed for research question four. For research question three, ten students in two groups; five for controlled group and five for experimental group participate in classroom activities. Table 3.3 shows the number of teachers and students participated in the study.

Table 3.3 Number of participants

Research Questions	Group	Teachers	Students	Total
RQ1	-	-	5	5
RQ2	-	3	-	3
RQ3	Controlled	1	5	6
	Experimental	1	5	6
RQ4	-	1	3	04

Total participant of this study is nineteen but the teacher who conducted the classes to give treatment to experimental group and three students who participated in the classes were interviewed to know about their opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom and the teacher who conducted the classes of controlled group also participated in the interview session during data collection for RQ2.

Three to six participants “can be reasonable for a student project” (Smith et al., 2009, p.51) and the sample sizes are considered best if they range between four and ten. The number of participants including both teachers and students of this study is as determined by saturation, they are able to provide rich data. The criterion for selecting them; they are the members of English disciplines and they use and speak Bengali as their native language. All the participants are adult, aged between 18 to 21 years for students and aged between 30 to 50 years for teachers. Tables 3.4 to 3.7 show the demographic profile of the participants.

Table 3.4 Demographic information of participants from Matual Hazi Abdul Latif Bhuiyan College (students 1 to v are interviewees and xiv to xviii are the participants of controlled group)

Participant	Designation/ Position	Class/year	Qualification	Gender	Department
Participant i	Student	(Hons)1st year	HSC pass(English compulsory)	Male	English
Participant ii	Student	(Hons)1st year	HSC pass (English compulsory)	Male	English
Participant iii	Student	(Hons)1st year	HSC pass (English compulsory)	Female	English
Participant iv	Student	(Hons)1st year	HSC pass (English compulsory)	Female	English
Participant v	Student	(Hons)1st year	HSC pass (English compulsory)	Male	English
Participant xiv	Student	(Hons)3 rd year	HSC pass (English compulsory)	Male	English
Participant xv	Student	(Hons)3 rd year	HSC pass (English compulsory)	Female	English
Participant xvi	Student	(Hons)3 rd year	HSC pass (English compulsory)	Male	English
Participant xvii	Student	(Hons)3 rd year	HSC pass (English compulsory)	Male	English
Participant xviii	Student	(Hons)3 rd year	HSC pass (English compulsory)	Male	English

This study has two research sites. From research site 1, ten students were selected as the participants. Among them five students were from honors 1st year and five from honors 3rd year. They were chosen from different years to get the rich and varied data. Among the participants seven were male and three were female students,

all of whom were from English department and English had compulsory subject in their SSC and HSC level.

Table 3.5 Demographic information of participants from Matual Hazi Abdul Latif Bhuiyan College (teachers)

Participants	Designation	Experience	Qualification	Gender	Department
Participant A	Lecturer	13 years	B.A.(hons) M.A. in English literature, M.A. in applied linguistic and ELT	Male	English
Participant B	Lecturer	7years 6 months	B.A.(hons) M.A. in English	Female	English
Participant C	Associate professor	18 years	B.A.(hons) M.A. in English, M.A. in education	Male	English

Three teachers were selected as participants from research site 1. Among them two were male and one was female and all of them were B.A. (hons), M.A. in English. They have more than 7 years experience in teaching English as a foreign language.

Table 3.6 Demographic information of participants from Dhaka Implerial College (teacher)

Participants	Designation	Experience	Qualification	Gender	Department
Participant D	Assistant professor	14 years	B.A. (hons) M.A. in English. LLB	Male	English

From research site 2, one male English teacher was selected as participant. He is also a B.A. (hons), M.A. in English and he has 14 years experience in teaching English as a foreign language. He conducted the class of experimental group.

Table 3.7 Demographic information of participants from Dhaka Imperial College
(Students of Experimental group)

Participants	Designation/ position	Class/year	Qualification	Gender	Department
Participant vi	Student	(Hons)2 nd year	HSC (English compulsory)	Female	English
Participant vii	Student	(Hons)2 nd year	HSC (English compulsory)	Female	English
Participant ix	Student	(Hons)1 st year	HSC (English compulsory)	Female	English
Participant xi	Student	(Hons)1 st year	HSC (English compulsory)	Male	English
Participant xii	Student	(Hons)2 nd year	HSC (English compulsory)	Female	English

Five students were selected from research site 2 as the participants. Among the participants, two were from honors 1st year and three were from honors 3rd year in English department. One was male and four were female students who had English as compulsory subject in their SSC and HSC level.

3.4.1 Sampling Strategy

Data has been collected for this study using purposive sampling technique. Purposeful sampling has been chosen based on the researcher's judgment and the purpose of the study (Babbie, 1995; Greig & Taylor, 1999; Schwandt, 1997, as in Groenewald, 2004), looking for those who "have had experiences relating to the phenomenon to be researched" (Kruger, 1988, p. 150, as in Groenewald, 2004). The researcher visits the sites many times and consults with the principals and recruits the participants initially. He narrates the nature and purpose of the research to the principals clearly. The principals then, permitted to recruit the potential participants and the participants were successfully finally recruited. The participants were then, informed of the study briefly including objectives, time, recording. The table 3.8 shows the participants' position, designation and other details.

Table 3.8 Criteria of sampling (Matuail Haji Abdul Latif Bhuyan University college, Dhaka and Dhaka Imperial college).

Studies on defossilization using AAM					
Research problem	Methods	Population Sampled	Sample	Analyses	Age
Pronunciation issues	Interview	Students of English department	5 students	Adult Bengali speakers	18-21
Teacher's challenges	Interview	Teachers of English department	3 English Teacher	Adult Bengali speakers	30-50
Test of efficiency of AAM	Pre-test Post-test	Students of English department	10 students	Adult Bengali speakers	18-21
Exploring Teacher's and students' opinion	Interview	Teacher and student of English department	1 teacher 3 students	Adult Bengali speakers	30-50 18-21

3.5 RESEARCH DESIGN

Mixed methods research design was employed to conduct the research. Both qualitative and quantitative research method was used to collect and analyze data. It highlights on collecting both quantitative and qualitative data, analysis them and findings from both the sources in a single study (Creswell & Clark, 2007, p. 5, as in Haq, 2018).

Semi-structured interview was conducted to collect data for the objective number one, two and four. This research is an attempt to comprehend an environment which is abounds in rich data (DeJonckheere & Vaughn, 2019). Moreover, the phenomenological design followed by this study aims to investigate the perspective of a phenomenon which involves those who have experienced of the phenomenon (Neubauer et al., 2019).

Quantitative research method in the form of quasi-experimental combination (both group pre-test, post-test) design has also been applied in this study for objective number 3. In this design, there are two groups: a) controlled and b) experimental. Both the groups were given pre-test and then, treatment but in different way. The experimental group was given treatment through eight lesson plans prepared according to Audio-Articulation Method and the controlled group was also given treatment through eight lesson plans prepared according to traditional method. Then statistical analysis has been done to see the improvement and to find the efficiency of AAM. As interview data and pre-test and post-test data has been collected and analyzed in this study, it may be categorized as “mixed methods research design” (Nassaji, 2015, p.131). The integration of both qualitative and quantitative method (e.g., experimental research integrated with qualitative research) is an exact use in this study to get the result or collection of qualitative and quantitative data from different sources, such as quantitative test data along with qualitative interview data to find out if findings from the two sources converge (Creswell, 2015; Springer, 2010, as in Nassaji, 2015). This research definitely includes both qualitative and quantitative elements or focuses on some of the criteria of mixed methods. Mixed methods provide more comprehensive insights of a given social phenomenon than either quantitative or qualitative research methods offer. Mixing methods allow putting findings in context and adding richer detail to the conclusion. Using qualitative data to illustrate quantitative findings can help “put meat on the bones” of the analysis (George, 2022, p. 2). In this study, mixed method helps to gain a more accurate result than a standalone quantitative or qualitative study, as it integrates benefits of both the methods (ibid). Because of the mixed-method approach of this study, the researcher indicated different ways to analyze both numerical and textual data by combining both quantitative and qualitative analysis methods.

3.6 INSTRUMENTS

The instruments of this study are eight semi-structured interview questions for research question one (Appendix I), eleven semi-structured interview questions for research question two (Appendix II) and twelve semi-structured interview questions

for research question four (Appendix III). Both English and Bengali (participants' native language) were used during the interview session to gain true insights from the interviewees. The instruments for research question three are different from those of other three research questions. Sixteen innovative and well organized lesson plans (see Appendix IV-XIX); eight for controlled group and other eight for experimental group were used to teach the participants in the classroom. The lesson plans for controlled group are prepared following the traditional method for teaching pronunciation of the targeted sounds and the lesson plans for experimental group are prepared following the Audio-Articulation Method for teaching pronunciation of the same targeted sounds. Fifty nine targeted words having targeted sounds were used in the pre-test and post-test to identify the improvement in the participants and to see the efficiency of Audio-Articulation Method. These words are taken from five selected texts (4 dialogues and 1 paragraph) chosen by the researcher according to the need of this current study. The positions of the sounds in the words have been discussed in chapter 2. Table 3.9 shows the target words with target sounds. Different kinds of drills such as; substitution drills, chain drills, repetition drills, replacement drills, inflection drills, completion drills, restatement drills, and language games are of great help in this respect. In addition, listen and imitate technique with mirroring, interaction drills, corpus, minimal pairs, tongue twisters, cliché words, recognition drills, independent learning, visual aids, rhyme, contextual clues, are highlighted in the lesson plans and are used to teach pronunciation in the classroom. All these drills are practiced, repeated in form of exhortations without boring the learners (Demirezen, 2005).

Each research question has more than five semi-structured interview questions. The interview questions were selected on the basis of literature review. The interview questions for RQ1 focused on the pronunciation issues, the interview question for RQ2 focused on the challenges of defossilization and the interview question for RQ4 focused on the opinion of teacher and students on using AAM in Bangladeshi EFL classroom. Some of the instruments are adopted and rest of them are invented by the researcher on the basis of literature review.

Table 3.9 shows the target words with target sounds.

Target words	Transcription with target sounds	Target words	Transcription with target sounds
1. School	/sku:l/	31. Play	/plei/
2. Luke	/lu:k/	32. Praiseworthy	/'preɪz, wɜ:(r)ði/
3. Afternoon	/,ɑ:ftə(r)'nu:n/	33. situation	/,sɪtu'eɪʃ(ə)n/
4. Two	/tu:/	34. change	/tʃeɪndʒ/
5. Stupid	/'stju:pɪd/	35. concentrate	/'kɒn.sən.treɪt/
6. Sue	/su:/	36. Leisure	/'leɪʒə/
7. Fool	/fu:l/	37. television	/təli'vɪʒ(ə)n/
8. Excuse	/ɪk'skju:z/	38. usually	/'ju:ʒuəli/
9. Chewing	/'fju:ɪŋ/	39. Visual	/'vɪʒ(j)ʊəl/
10. Shoe	/ʃu:/	40. pleasure	/'pleɪʒə/
11. Who	/hu:/	41. envision	/en'vɪʒ(ə)n/
12. Threw	/θru:/	42. treasure	/'treɪʒə/
13. June	[dʒu:n]	43. decision	/dɪ'sɪʒ(ə)n/
14. You	['ju:]	44. occasion	/ə'keɪʒ(ə)n/
15. Rude	[ru:d]	45. confusion	/kən'fju:ʒ(ə)n/
16. Prue	/pru:/	46. These	(ði:z/
17. Pool	/pu:l/	47. Bags	(bægz/
18. campaign	/kam'peɪn/	48. sometimes	/'sʌmtaɪmz/
19. participate	/pɑ:'tɪsəpeɪt/	49. Dogs	/dogz/
20. newspaper	/'nju:s,peɪpə/	50. accompanies	/ə'kʌmp(ə)ni/
21. arranged	/ə'reɪndʒ/	51. Stage	/steɪdʒ/
22. Make	/meɪk/	52. Things	['θɪŋz]
23. danger	/'deɪndʒə(r)/	53. animals	/ænɪmlz/
24. Agency	/'eɪdʒ(ə)nsi/	54. Bees	/bi:z/
25. administration	/əd,mɪnɪ'streɪʃ(ə)n/	55. supplies	/səplaɪz/,
26. ghost	/gəʊst/	56. boys	/bɔɪz/
27. taking	/'teɪkɪŋ/	57. ghat	/gɑ:t/

28. ghee	/gi:/	58. Ghazi	/'gɑ:zi/
29. ghostly	/'gəʊs(t)li/	59. gherkin	/'gə:kin/
30. Ghorial	/'gɑ:riɑ:l/		

3.7 DATA COLLECTION TECHNIQUES

This study was conducted at three main phases. First and third phases integrate interview method and the second phase integrates quasi-experimental method. Interview method was applied to collect data for the research objective number 1, 2 and 4. Pre-test and post-test (quasi-experimental) method was applied to collect data for objective number 3. Figure 3.2 shows the data collection techniques.



Figure 3.2 Data collection techniques

Phase 1

This study follows only one interview protocol and that is ‘responding to personal interview questions’. Participants (students) were interviewed with semi-structured interview questions to know the pronunciation issues perceived by the Bengali speakers of English and the interview was recorded for data analysis. Participants (teachers) were interviewed with semi-structured interview questions to get idea about their opinion and challenges in case of defossilizing English pronunciation and the interview was recorded for data analysis.

Phase 2

In this phase speech protocol is used to collect data. The most formal speech protocol is that the participants read the 5 text (4 dialogues and 1 paragraph) containing 59 targeted words having 59 targeted sounds. Students were divided into two groups; controlled group and experimental group. One group was formed from research site-1 and another group, from research site-2. Both the groups were set to pre-test with the same question paper (see appendix-XX) having target words containing target sounds. They were requested to read the text loudly and their speech was recorded for data analysis. After pre-test, both the groups were given treatment in different methods. Controlled group was given treatment on pronunciation using conventional method in eight classes with eight lesson plans for two months. Experimental group was given treatment using techniques suggested by the Audio-Articulation Method in eight classes with eight lesson plans for two months. Table 3.10 illustrates the treatment given to experimental and controlled group in treatment section. After treatment, at the end of the session, both the groups were set to post-test with the same question paper having target words containing target sounds. They were also requested to read the text loudly and their speech was recorded for comparison with that of pre-test during data analysis to identify the changes or improvement. It is hypothesized that Audio-Articulation Method can be employed in Bangladeshi EFL classroom to defossilize the problem causing sounds in English pronunciation of Bangladeshi adult learners.

Phase 3

The teacher who conducted the classes of experimental group and the students who attended the classes following Audio-Articulation Method were interviewed with semi-structured interview questions to know about the efficiency of AAM in the teaching and learning of intelligible English pronunciation. Their interview was also recorded for data analysis.

The interviews began with open-ended questions about the participants' (students) pronunciation issues such as, unintelligibility in English pronunciation, level of awareness on their mistake, specifically on the phonological fossilization and the participants' (teachers) perception on the challenges of defossilizing English pronunciation and lastly teacher's and students' opinion in implementing Audio-Articulation Method in Bangladeshi EFL classroom. More intensive questions followed, with the intent to gather data with more depth information. The interview ended with more open-ended questions, framed to invite more depth information regarding pronunciation issues and perception. Interview took place between the researcher and the participants when both the parties were physically present at the time of interview. The interviews were electronically recorded by Xiaomi Poco M3 Android 10, planned upgrade to Android 11 (MIUI 12) mobile having loud speaker (dual speakers), 24-bit/192KHz audio. No interview was conducted without confirming the written and verbal informed consent of the participants (see appendix-XXIV). Each participant's interview was arranged in a single interview session.

Data has been collected for different phases of the study for about a year. The first interview of participant A took place on February 12, 2022 and the last interview of participant IX took place on January 10, 2023. In between the period, interview with other participants, pre-test, treatment session and then post-test were held. Meeting with the participants and explanation of the objectives and procedures were accomplished before the first interview of the participant A (see appendix-XXIII). They confirmed their participation in this study by signing the "Certificate of Consent" (see appendix-XXIV) form which ensured their involvement in this study. Then the researcher stepped to interview, give pre-test, treatment and post-test and record the data. Next step of this procedure is the transferring of data into laptop and naming the files accordingly to proceed to data analysis.

3.7.1 Treatment

In this study, to teach intelligible pronunciation, specifically to defossilize the distinct vowel and consonant sounds (mentioned above) in English pronunciation of

Bangladeshi adult learners of English, the researcher followed the steps from the basic stages in applying AAM by Demirezen (2007, as in Sasmita, 2017) as follow:

- a) Firstly, teacher gave warm-up and motivation. The teacher greeted students to get them ready for the lesson.
- b) Secondly, the teacher helped the students to remember the previous lesson by making a recapitulation of the phoneme which was taught in the previous lesson.
- c) Thirdly, the teacher presented a new topic and attracted the students' attention to the topic.
- d) Fourthly, the teacher prepared a corpus with vocabulary which is commonly misarticulated and problematic for the non-native students.
- e) Fifthly, the students were asked to focus their attention on the topic and on the rule for pronouncing the sounds.
- f) Sixthly, the teacher continued the material by giving drillings and exercises. The teacher gave the minimal pair as the main technique in order to explain to the students about how meaning can change due to incorrect pronunciation
- g) Seventhly, the teacher summarized the lesson in effective way for an easily recall. Questions also were directed to the students in order to check whether or not they had understood the rule.
- h) In the last minute of the teaching and learning process, the students were given homework for the forth coming week.

Table 3.10 Treatment details given to experimental and controlled group

Weeks	Lesson plan	Target sounds	Class duration	Group	
1 st	1	/u:/ and /u/	1 hour	Experimental	Controlled
2 nd	2	/u:/ and /u/	1 hour	Experimental	Controlled
3 rd	3	/u:/ and /u/	1 hour	Experimental	Controlled
4 th	4	/e/ and /ei/	1 hour	Experimental	-
5 th	5	/e/ and /ei/	1 hour	Experimental	-
6 th	6	/ʒ/ and /ʒ/	1 hour	Experimental	Controlled
7 th	7	/s/ and /z/	1 hour	Experimental	Controlled
8 th	8	/g/ and / gh/	1 hour	Experimental	Controlled
4 th	4	/ei/	1 hour		Controlled
5 th	5	/e/	1 hour		Controlled

3.8 ANALYSIS OF DATA

Data has been analyzed in the following way;

3.8.1 Interview Data

The interview data was orthographically transcribed and then coding was done. The interview data collected for objective one has been coded according to Yowani's (2021) pronunciation problem, the interview data collected for objective two has been coded according to Tahereen's (2015) challenges in teaching pronunciation and the interview data collected for one part of the objective four has been coded according to Hismanoglu's (2009) opinion. The interview data collected for another part of the objective four has been coded following the steps of thematic analysis and the codings were validated by the inter-raters. Then categories and themes were developed from the coding. Figure 3.3 shows the procedures.

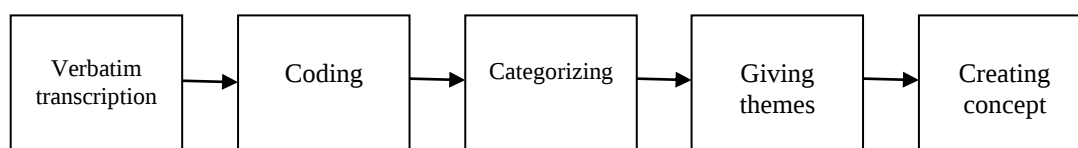


Figure 3.3 Step-by-step data analysis procedures

3.8.2 Pre-Test and Post-Test Data

Phonemic transcription of the pre-test and post-test data was employed and then the verbal sounds have been transferred into numerical figure for statistical analysis of the data. Only the targeted sounds which are fossilized and not fossilized by the participants in the pre-test and post-test have been considered at the time of transferring them into numerical figure. Inferential statistics of the pre-test and post-test data has been done to see the variation. Their speech production was analyzed to see the improvement of intelligible sounds in word-initial, word-medial and word-final position of the target sounds. Then the mean of change or improvement in experimental group has been compared to that of controlled group (that was taught according to traditional method) to find the efficiency of Audio-Articulation Method in teaching intelligible pronunciation in Bangladeshi EFL classroom. Figure 3.4 illustrates the step by step data analysis procedure in phase-2.

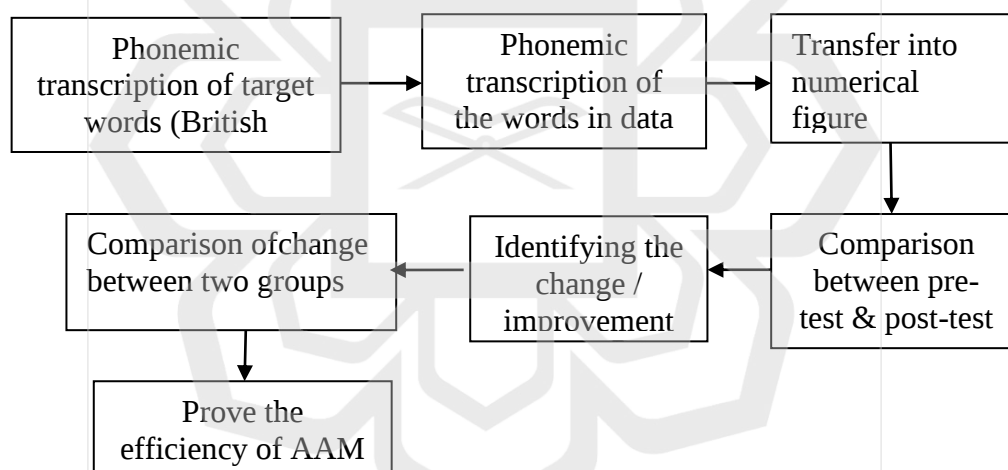


Figure 3.4 Step-by-step data analysis procedure

Ten students of English department from two university colleges named Matuail Haji Abdul Latif Bhuayan University College and Dhaka imperial college of Bangladesh, classified into experimental and controlled groups were purposively selected as participants of this study. Teddlie and Yu (2007:81, as in Turumi, 2016) stated, “Purposive sampling techniques is aimed at generating representative cases”.

This study was conducted to defossilize the fossilized sounds in the learners in classroom practice based on the researcher's observation.

Quasi-experimental research design where participants were not randomly assigned to conditions or orders of conditions, was applied by the researcher where the two groups were given pre-test and post-test. The two variables of this study are the implication of AAM, the independent variable (x) and the students' improvement in pronunciation, the dependent variable (y). Experimental group was given treatment on the basis of Audio-Articulation Method and controlled group was not given treatment with the same method but with the traditional method to find the improvement and compare AAM with the conventional method. To collect data, both the groups were given pre-test and post-test. Their voice and sounds of the reading text having target words with the target sounds have been digitally recorded before and after the integration of the AAM. Phonemic transcription has been applied to the data of pre-test and post-test of both the group (controlled and experimental). The data from pre-test and post-test was statistically analyzed employing quantitative method in the form of quasi-experimental research design, specifically non-equivalent control group design.

Badmus, Okonkwo and Okoh (2012:59, as in Turumi, 2016) argued, "A quasi-experiment is similar to a true experiment that has subjects, treatment, but uses non randomized groups". Quasi-experimental design is used when randomization is impossible to be applied. It is typically easier to set up than true experimental designs. The research design (Cohen, Manion & Morrison, 2005:214 as in Turumi et al., 2016) is illustrated below;

Experimental group = O1 X O2

Control group = O3 O4

Where: O1 and O3 = pre-test

O2 and O4 = post-test

X = treatment

After employing phonemic transcription of the data, the researcher calculated the data by using statistical procedure of Purwanto (1987:102, as in Adhiyatma B et al., 2015). Following is the procedure,

$$NP = \frac{R}{SM} \times 100$$

Where:

NP = standard score

R = obtained score

SM = maximum score

100 = constant number

The researcher followed Nurgiyantoro's, (1995, as in Olson & Krysiak, 2021) rubric scale in case of categorizing the individual student's ability according to the percentage level. They are as follow,

Table 3.11 Shows the Scale of Percentage and Categories

Levels	Categories
85%-100%	Very Good
75%-84%	Good
60%-74%	Fair
40%-59%	Bad
0%-39%	Fail

(Nurgiyantoro, 1995: 399)

Discussing the classical students' ability in pronunciation, the researcher highlighted the students' scores applying the formula by Hatch and Farhady (1982, as in Olson & Krysiak, 2021).

1. The classical students' ability of experimental group

$$X = \frac{\sum X}{N}$$

Where:

X = the classical students' ability

$\sum x_2$ = the amount of students' score

N = the number of students

2. The classical students' ability of controlled group

$$X = \frac{\sum Y}{N}$$

Where:

X = the classical students' ability

$\sum y_2$ = the amount of students' score

N = the number of students

Then, the researcher measured the mean of deviation of the experimental group and the controlled group. After calculating the mean score of the pre-test and post-test, the researcher used the mean score of deviation following Arikunto's (2006, as in Muzna et al., 2015) design. This is;

1. The structure used for the experimental group is:

$$MX = \frac{\sum X}{N}$$

2. The structure used for controlled group is:

$$MX = \frac{\sum Y}{N}$$

Where:

Mx = mean score of deviation of experimental group

My = mean score of deviation of controlled group

$\sum x$ = sum Scores of experimental group

$\sum y$ = sum Scores of controlled group

N = number of students in each group

Next, the researcher used square deviation following the design of Arikunto (2006, as in Muzna et al., 2015).

1. The structure for the experimental group is:

$$\Sigma x^2 = \Sigma X^2 - \frac{(\Sigma x)^2}{N}$$

2. The structure for the controlled group is:

$$\Sigma y^2 = \Sigma Y^2 - \frac{(\Sigma y)^2}{N}$$

Where:

Σx^2 = the square deviation sum of experimental group

Σy^2 = the square deviation sum of controlled group

Σx = the score sum of experimental group

Σy = the score sum of controlled group

N = the total number of students

The researcher then applied them into t-test technique to find out whether the Audio-Articulation Method has positive effect on defossilizing Bengali sounds in English pronunciation of Bangladeshi adult learners. The t-test technique used by Arikunto (2006, as in Muzna et al., 2015) is as follow:

$$t = \frac{MX - MY}{\sqrt{\left[\frac{\Sigma x^2 + \Sigma y^2}{n_x + n_y - 2} \right] \left[\frac{1}{n_x} + \frac{1}{n_y} \right]}}$$

Where:

Mx = mean of experimental group

My = mean of controlled group

Σx = sum of scores on experimental group

Σy = sum of scores on controlled group

n_x = number of participants in experimental group

n_y = number of participants in controlled group

3.8.3 Transcription of interview data

The researcher attentively listens to the voice recording of the interview of the participants and minutely observes the tone and repetition in the voices and transcribes the recording as it is an important first step in qualitative data analysis (Bailey, 2008). Only the verbal responses are recorded and considered at the time of data collection from the field and the non-verbal expression has not been counted in the process of data collection. So there is no question of transcription of visual data. Orthographic transcription of the recorded voice was done to find the themes. This transcription process is necessary for it provides researcher with easy and simple format of data that can ease data analysis later (Liddicoat, 2007, as in Stuckey, 2016). This study specifically adopts transcription convention proposed by Lapadat (2000). Transcription is seen as unproblematic – the orthographic transcription is a one-to-one match with the spoken word or sentence and that spoken word is the noticeable event and the job of the transcriber is to present the spoken word fully and correctly. The transcription of this current study is just a manual task, and it gave details to capture features of talk which have been essential for interpreting data (Bailey, 2008). The transcription of this study focused only on emphasis and pauses to generate the theme.

The transcription of interview data of this research has been presented simply as a direct conversion of recorded voice to text (McMullin, 2021). In this research, the researcher transcribes recordings himself, so the coherence between the research method and approach to transcription has been established, and the researcher is confident that the written transcript is an accurate presentation of the event or interview that took place between the researcher and the participants (McMullin, 2021). The transcription has been accomplished and organized in a text-based document such as Microsoft Word (Brady, 2021, as in Wood, 2021). As some of the data were in Bengali language, the researcher has first transcribed them into Bengali and then translated into English.

3.8.4 Phonemic transcription of pre-test and post-test data

Pre-test and post-test design is used to evaluate participant's development in pronouncing the target sounds and the implication of Audio-Articulation Method was identified. It can be assumed that an increase in knowledge or positive attitude that is evident in better scoring on a post-test compared to a pre-test implies better knowledge or perception relative to an intervention applied after the pre-test (Stratton, 2019). After giving pre-test and post-test to both the groups (controlled and experimental), the T-test data has been recorded. The recorded data has been transcribed phonemically following British standard pronunciation as British English is still mostly used in Bangladesh and syllabus and curriculum are also designed on British English. The researcher heard the recording several times and by using his own judgment and experience, he transcribed the targeted words from the data. Only the targeted words having targeted sounds have been focused in the transcription. The change or improvement in the participants has been primarily identified in the table containing transcription. It is found that experimental group has developed much more than the controlled group if we observe the transcription of pre-test and post-test recording of both the groups. The findings and discussion have been elaborately presented in the consecutive chapter. Table 3.12 shows the fossilized and not fossilized sounds in the pre-test and post-test of both the groups (controlled and experimental). Other tables of phonemic transcription are in the appendix XXI.

Table 3.12 Phonemic transcription. Experimental group; Participant VI

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
skul/,/luk/,/ɑ:ftə(r)'nun /,/'fʊŋ/,/fu/,/hu/,/θru/,/d ʒun/,/'stjupɪd/,/su/,/ful/,/ rud/,/tu/,/pul/,/kæmpen/, /pɑ:'tisipet/,/'nju:z,pepə (r)/,/ə'rendʒd/,/mek/,/te kiŋ/,/'edʒənsi/,/əd'mɪni'	/ɪk'skju:z/,/pru: /,/'ju:/,/'deɪndʒ ə(r)/,/'leɪʒə(r)/, /ju:ʒʊəli/,/'vɪʒ ʊəl/,/plɛʒə(r)/, /trɛʒə(r)/,/boɪz/ /bi:z/	skul/,/luk/,/ɑ:f tə(r)'nun/,/θru/, /,/'fʊŋ/,/fu:/,/hu:/,/dʒu:n/,/su:/,/'j u:/,/'fu:l/,/pɑ:'tisipeit/,/'d eɪndʒə(r)/,/'teɪkiŋ/,/pleɪ/,/ tʃeɪndʒ/,/'leɪʒə(r)/,/'in'vɪʒn /,/'trɛʒə(r)/,/'ə'keɪʒn/,/kə n'fju:ʒn/,/telɪ'vɪʒn/,/'ju:ʒ	

st ref(ə)n/,/stedʒ/,/ple/,/'pr ez,wɜ:(r)ði/,/sɪfʊ'ɛf(ə) n/,/tʃendʒ/,/'kɒnsntɪet/,/ /telɪ'vɪʃn/,/in'vɪʃn/,/dɪ's ɪʃn/,/ə'keɪʃn/,/kən'fju:ʃn /,/ði:s/,/bægs/,/'sʌmtaɪm s/,/əkʌmpəni/,/dɒgs/,/' θɪŋs/,/ænimls/,/səplaɪs/,/ ghəʊst/,/ghi:/,/ghɑ:t/,/'g həʊstli/,/'ghɑ:ɪ:l/,/'ghɑ :zi/,/'ghə:kin/		nsi/,/əd,mɪnɪ'st ref(ə)n/,/stedʒ/, /'prez,wɜ:(r)ði/ /,/sɪfʊ'ɛf(ə)n/,/ /'kɒnsntɪet/,/dɪ' sɪʃn/,/'sʌmtaɪm s/,/dɒgs/,/ænim ls/	ʊəli/,/'vɪʒʊəl/,/pleʒə(r)/ ,(ði:z/(bægz/,/əkʌmpəni z/,/'θɪŋz/,/bi:z/,/səplaɪz/, /bɔɪz/,/gəʊst/,/gi:/,/gɑ:t/,/ gəʊstli/,/'ghɑ:ɪ:l/, /'gɑ:zi/,/'gə:kin/
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3.8.5 Coding

After completing transcription, coding from the transcription has been done. Coding is the second step of qualitative data analysis. In this research, coding was done manually only and no computer assisted qualitative data analysis software was used. Coding of this research helped to prevent the researcher from over emphasizing the importance of any one aspect early in the study and helped to ensure a thorough analysis of the entire interview (Charmaz, 2006; Stake, 2010, as in Brewton, 2020). Coding terminology used for this study was adopted from Hahn (2007) who termed the four levels of coding, level-1, level-2, level-3 and level-4. Figure 3.5 illustrates the phases.

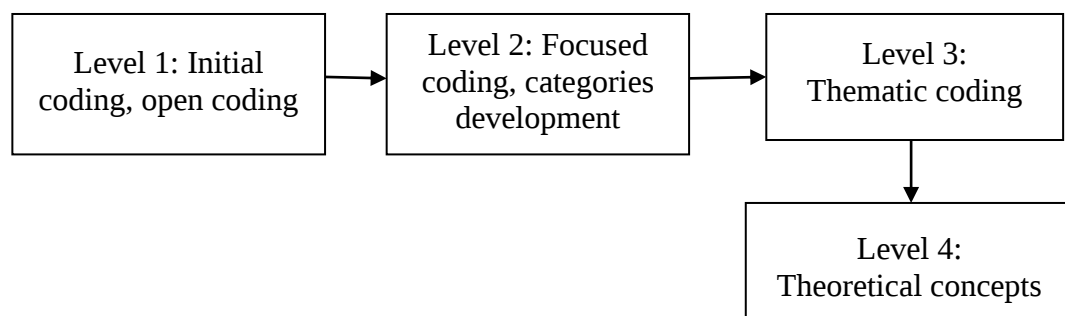


Figure 3.5 Phases of coding

In this research, coding of transcripts was done in the sequence of the interviews conducted, one to one interview at a time, allowing the researcher to reflect and edit the interview questions as themes began to emerge from the data through categories. Coding was applied to assist the researcher in understanding the perspectives of the participants and in analyzing their combined experiences in the phenomenon. Codes were also produced during the research process, based on the data, for the purposes of analyzing the data (Urquhart, 2013, as in Wyatt, 2013). Coding of the data collected for research question one, two four has been done on the basis of the concepts emerged from the work of Yowani's (2021) discussion on pronunciation problem, Tahereen's challenges on teaching pronunciation (2015) and Hismanoglu's (2009) opinion on the use of AAM. Yowani's, Tahereen's and Hismanoglu's frameworks were employed in the level-2, 3 that means in category development and thematic coding of Hahn. Though Hahn's (2007) coding templates illustrates from initial coding to theories (level-1 to level-4), in this study, the researcher didn't find it necessary to develop a theory from the themes or categories rather he was happy to experience the phenomenon of finding the themes related to research questions. Figure 3.6 shows Hahn's (2007) illustration of coding level.

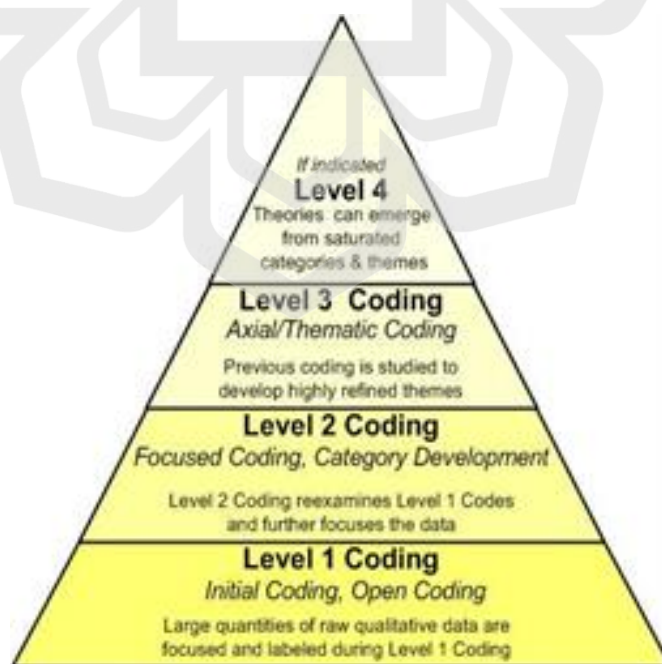


Figure 3.6 Hahn's Illustration of coding level

In the present study, there are three primary steps that have been taken in order to accomplish coding. The three steps are; coding for identification of the pronunciation issues perceived by the Bangladeshi speakers of the English language, coding to explore the teacher's challenges in defossilizing English pronunciation and coding to discover teacher's and students' opinion on the use of Audio-Articulation Method. The coding follows the assigned frameworks for research question one, two and four. Research question three does not follow the framework. Once, pronunciation issues were identified from the answer of the participants, coding for each turn within the sequence is made. Coding for pronunciation issues primarily follows Yowani's (2021) discussion on pronunciation problem. Table 3.13 shows the coding scheme. At the same way, coding for the sources of teacher's challenges follows Tahereen's focus on challenges (2015) and coding for the sources of teacher's opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom follows Hismanoglu's (2009) opinion on the use of AAM and coding for the sources of students' opinion has been done by the researcher on the basis of his concepts following the steps of thematic analysis.

Table 3.13 Coding template

Interview question 1	Super ordinate	Subordinate	Elaboration	Occurrence	Frequency of Occurrence	Order of Discourse Unit
Have you ever thought that your pronunciation when you speak English to others is understandable/ correct or not?	Key words of the question	Main points from conversation not a summary	Example from verbal to support the subordinate	Main idea transferred as key word(s) based on the summery of the subordinate fact(s)	Frequency of Main idea- one main idea as one frequency	

Informant 1						
	Speech, understandable / Not	No, sir. When I speak in English to others, then they cannot understand our pronunciation properly. That is why, they cannot understand the main meaning properly due to the inability to understand when, what I am saying. Here we have some problems that we can solve by trying a little.	Yes, sir. I think, I have the problems. If we can pronounce properly, for example, I pronounce /dəbliə/ instead of /dəbliu/, /ee/ instead of /e/. If we solve these problems that are occurring, Our pronunciation will be correct and good.	Unintelligible Pronunciation		09 -12
Informant 2						
		No. Because, I make mistake in meaning of my different English words and they cannot understand.	In our country, we always speak in Bangla. If anybody speaks other, he or she does not speak much. For this reason, if anyone speaks in English with them, they cannot	Unintelligible Pronunciation		7-12,22

			understand their speech properly. I myself have also different problems. For this reason, there are much problem in speaking English.			
Informant 3						
		No, sir. They understand something and something they do not understand.	Many times, when we go to speak in English, the Bengali sounds automatically come in us.	Unintelligible Pronunciation		9-16
Informant 4						
		No, it is not fully correct. There is little problem too.	It is English. The more we can learn English word, the more we can speak in English with others properly. So I have a little bit problems in word meaning.	Unintelligible Pronunciation		9-12,20
Informant 5						
		When I speak/discuss in	 my speaking problem is	Unintelligible Pronunciation		8-13

		English with others then I speak in such a way that the listeners can understand somewhat even though they don't understand fully.	vocabulary and writing, reading... listening, speaking, I can so so but the problem is that I have poor vocabulary.	on		
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Coding is the crucial aspect in qualitative research as it squeezes the huge data into a limited way. Coding helps to organize the data set in such a way that clearly refers to categories and themes. The categories and themes of this study have been emerged from the data set through coding. In this coding scheme, at first, code has been used to sort the key words of the interview question. In the subordinate column, coding has been done to highlight the main points from conversation not a summary. Then coding has been done to support the subordinate. Then, coding helps the researcher to find out the key word(s) from main idea based on the summery of the subordinate fact(s). Discourse unit in this coding scheme refers to the listing of data set in the transcription.

3.8.6 Categories and Themes

The step, after open or initial coding, comes focused coding or category development and then, axial or thematic coding (Hahn, 2007). In this study, initial coding was accomplished from a huge number of raw data collected from the field on the basis of the concepts of the researcher as mentioned in the previous section to answer the research questions. Level-2 coding, that means focused coding or category development reexamines the initial code and further focuses on the data to generate some points that are represented by selected words, phrases and clauses used by the researcher. Though axial or thematic coding is on the 3rd level of coding in the coding template of Hahn (2007), it is the last level of coding in this study as in this stage,

themes, which are the target of the researcher, have been generated. In this level, previous coding is minutely studied by the researcher to develop highly refined themes. Table 3.14 shows the themes generated from coding through categories.

Table 3.14 Generating theme from coding through categories

Theme	Categories	Key idea
Unintelligible Pronunciation	Produced incorrect sound	Cannot understand the pronunciation and meaning Make mistake in meaning of different words Understand something Understand somewhat
Influence of Bengali	Dominance of L1	The Bengali sounds automatically come in us. In our country, we always speak in Bengali. Sometimes the influence of Bengali language occurs.
Lack of English-speaking environment	No scope for practice	We cannot communicate in English with each other. Those with whom I shall speak in English, they may have lacking in understanding. I can't get any one to speak in English. Even I do not listen to English speech
Lack of motivation/ instruction	Teacher's negligence	Sometimes, the teachers correct them. Sometimes do. Teachers do not frequently correct them No they do not.(teachers do not correct the pronunciation)
Non-standard	Student's negligence	No, sir Not Sometimes standard Not-standard Un-standard
Poor skill	Weakness in English pronunciation	When we speak in English, there remain some problems in speaking. No, I can't speak English properly. I do not practice English No, my skill is not so good Medium

3.9 RELIABILITY AND VALIDITY

Research instruments (interview question and instruments for pre-test and post-test), phonemic transcription, interview transcription and coding on the pronunciation issues, level of awareness on fossilized errors, teachers' challenges to defossilize English pronunciation and teacher's and students' opinion in using AAM in Bangladeshi EFL classroom are the aspects of this study that need validation. Two faculty members who have experience in phonetic transcription and both qualitative and quantitative research especially in thematic and statistical analysis were appointed as inter-raters of this study (see Appendix XXV) and they agreed with the first rater. Thus, the reliability and validity of this research have been ensured.

3.10 TRUSTWORTHINESS

In order to ensure ethical aspect of this research, the researcher informed the participants about the objectives and procedures of data collection for this study (Holloway, 1997; Kvale, 1996, as in Groenewald, 2004). Bailey (1996, as in Groenewald, 2004) cautioned that deception may be counter-productive. However, not asking the leading (Kvale, 1996, as in Groenewald, 2004) central research question (given under the next heading) is not regarded as deception. Based on Bailey's (1996, p. 11, as in Groenewald, 2004) recommended items, the researcher developed a specific informed consent "agreement", in order to gain the informed consent from participants, namely:

- a) That they are participating in research.
- b) The purpose of the research (without stating the central research question).
- c) The procedures of the research.
- d) The risk and benefits of the research.
- e) The voluntary nature of research participation.
- f) The procedures used to protect confidentiality (Groenewald, 2004).

3.11 RESEARCH ETHICS

Selection and recruitment of the participants (students and teachers) in this research was permitted with approval by the principals of the two university colleges. Once participants (teachers and students) agreed to take part in the study, they were supplied with information sheet (Appendix-XXIII). This information sheet explains the objectives, nature and procedures of this research and includes researcher's contact details. The sheet was prepared only in English language as all of the participants, being teachers and students of English department, understand English. First meeting was held with each student and teacher to explain the study's objectives in detail and how data would be collected. In this meeting, the researcher also explained their rights throughout the study and their participation was only confirmed when they signed certificate of consent form (Appendix-XXIV). Each item in the consent form was explained by the researcher. Specific attentions were given on parts that explained objectives of the study, data collection procedure, its duration, their confidentiality and right to withdraw whenever they want. Once they agreed and satisfied with answers to questions they have had, the forms were signed by both parties (the researcher and the participants). Another most important aspect is to consider is the anonymity of the participants. The participants were assured that their actual names will not be mentioned in the study. Their name and other personal details have not been highlighted and used in this study and any other publications. Hence, each primary participant was assigned with suitable pseudonym while a code or symbol such as participant I, II, III...and participant A, B, C was used at the time of data analysis. Moreover, the figures, the images and the diagrams that are used in this study do not reveal the identity or activities of the participants or even any individual to readers.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents the findings of the study. The first section reports the pronunciation issues perceived by the Bangladeshi speakers of the English language. The second section discusses teachers' challenges and perception and the third section presents the result of implication of Audio-Articulation Method. The fourth section reports the teacher's and students' opinion on using AAM in teaching and learning English pronunciation in Bangladeshi EFL classroom. Besides, the result is considered from the perspective of mistakes or errors and pronunciation issues, causes of language failure and exposure of AAM to the learners to input to minimize the pronunciation errors or phonological fossilization.

4.2 PERCEIVED PRONUNCIATION ISSUES

The first objective of this study is to identify the pronunciation issues perceived by the Bangladeshi adult learners of English. Coding has been done on the basis of Yowani's (2021) discussion on pronunciation issues which has documented eight factors. All the issues except learner's age, learner's attitude and intonation factor have been found in the data set. The findings mentioned in the table 4.1 are elaborately discussed in the subsequent paragraph. Table 4.1 shows the process of generating theme from data set.

Table 4.1 Generating theme from coding through categories

Theme	Categories	Key idea
Poor skill	Weakness in English pronunciation	When we speak in English, there remain some problems in speaking. No, I can't speak English properly. I do not practice English No, my skill is not so good Medium
Influence of Bengali	Dominance of L1(first language)	The Bengali sounds automatically come in us. In our country, we always speak in Bengali. Sometimes the influence of Bengali language occurs.
Lack of English-speaking environment	No scope for practice	We cannot communicate in English with each other. Those with whom I shall speak in English, they may have lacking in understanding. I can't get any one to speak in English. Even I do not listen to English speech
Lack of motivation/ instruction	Teacher's negligence	Sometimes, the teachers correct them. Sometimes do. Teachers do not frequently correct them No they do not.(teachers do not correct the pronunciation)
Non-standard	Student's negligence	No, sir Not Sometimes standard Not-standard Un-standard
Unintelligible Pronunciation	Produced incorrect sound	Cannot understand the pronunciation and meaning Make mistake in meaning of different words Understand something Understand somewhat

It is found from the table that the study has documented a number of categories that showed the pronunciation issues perceived by the Bangladeshi adult learners of English. Pronunciation issue (PI) is very apparent in the data provided by the participants as the key ideas support to create categories which help to generate theme. The themes generated from the data set through categories are sources enough to prove the pronunciation issues perceived by the learners.

4.2.1 Poor Skill

English pronunciation is one of the most complex aspects to learn and students must spend lots of time to develop their pronunciation (Gilakjani, 2016). Wysocka (2007) mentioned that the long-term goals in learning and using a foreign language (FL) or second language (SL) take on the form of the following list of learner's ability to:

- distinguish between sounds of a given language,
- produce these sounds,
- tell the difference between different kinds of word and sentence stress,
- use different kinds of stress,
- discriminate between the rhythm and intonation patterns,
- be aware of the difference in meaning they cause,
- produce correct rhythm and intonation patterns,
- change meaning by using them in a variety of ways,
- understand individual lexical items (passive vocabulary),
- use the words properly (active vocabulary),
- know grammar rules, which make it possible to create and understand correct sentences in a given language,

- use four language skills,
- produce open and flow conversation,
- vary the speech according to the context, and
- know socio-cultural norms governing communication.

As regard the poor skill which is one of the pronunciation issues supported by the learners' attitude when they confronted the interrogation like "Do you think your English speaking skill is good?" they revealed their attitude saying, "No, sir", "Not very good, I try my best", "No, I can't speak English properly", "This is. I shall not say that I am good. I have, of course, problem" and "so so". Among the 5 segments of reply, 4 segments contains the adverb "No or not" and one segment contains "so, so". It means that as their speaking skill is not good how it is possible for them to pronounce the English sound without fossilized errors. Their poor level of speaking skill has been confirmed when they are again asked with the question like "why do you think so?" then they replied Pi- I have to develop my speaking skill more, Piii- I can't get any one to speak in English. Even I do not listen to English speech. As we are habituated in speaking Bengali, we express everything in Bengali. These evidences clearly show their aptitude and link the concept of pronunciation issue to the phenomenon. Thus, undoubtedly, their pronunciation skill is very low. Extract 1 is the evidence of the phenomenon.

Extract: 1 Poor Skill (Researcher-Participants)

Pi *No, sir*

Pi *কারণখনআমরাইংরেজিতে speaking করি তখন speaking এর মাধ্যমে কিছু সমস্যা থেকে ইয়ায়।
When we speak in English, there remain some problems in speaking.*

Pii *Not very good, I try my best*

Piii *No, English ভাল বলতে পারিনা। No, I can't speak English properly.*

Piii *কারণইংলিশ আমার চর্চা করা হয়না।
ইংলিশে কথা বলার জন্যে তেমন কাউকে পাইওনা। ইংলিশে তেমন শুনাই হয়না। যেহেতু আমরা বাংলা বলে অভ্যস্ত, বাংলা জিনিসগুলোই বেশি প্রকাশ করা হয়।
Because, I do not practice English. Even I can't get any one to speak in English. Even I do not listen to English speech. As we are habituated in speaking Bengali, we express everything in Bengali.*

Piv

এটোতোআমি, আমি বলব না যে আমি গুড/আমার অবশ্য সমস্যা আছে/না, আমারটা অত বেশি ভাল না/ This is. I, I shall not say that I am good. I have, of course, problem. No, my skill is not so good.
--

Pv

মোটামুটি/So, so

Pv *Medium.*

It is found from the data analysis, the English speaking skill of all the participants is very poor and they confirmed their weakness in English speaking while they were interviewed for data collection. Participants I and IV said that their English speaking skill is not good and participant III answered that she cannot practice in English speaking. Participant V responded that he can communicate in English in a moderate way. All these responses prove their lacking in English speaking skill which is one of the most prominent pronunciation issues perceived by the Bengali speakers of English.

4.2.2 Influence of Bengali

The influence of mother tongue (L1) on the acquisition of a foreign, second or additional language has been a long-debated issue in the field of second or foreign language acquisition from early constructivist approaches to current cognitive perspectives (Alonso, 2016). In the early approach of contrastive analysis, the influence of the first language was considered to be the cause of most of the problems that learners face when they are acquiring a L2 (ibid). While learning the foreign language, the learner usually faces different linguistic problems that evidently handicap and hamper his or her learning process and eventually negatively affect his or her overall competency in pronunciation (Maniruzzaman, 2010).

This study concerns about phonological fossilization of Bengali sound in English pronunciation of Bangladeshi learners and phonological fossilization mainly occurs due to the interference of L1 sounds (Bengali sounds). In this sense, L1 (Bengali) interference is a prominent issue in the teaching and learning of English pronunciation in the tertiary level classroom and it is the pivotal issue in the

pronunciation issue which is the first objective of this study. Though L1 interference is in the second position of the hierarchy of the pronunciation issue in this study, it is the fundamental issue from which many other issues have been emerged. From the data analysis, it is found that the Bangladeshi speakers face more difficulty to produce the clear articulated and audible discourses of English language due to the hindrance from mother tongue, the Bengali language which is greatly responsible for unintelligible English pronunciation produced by the Bengali speakers. Extract 2 is the evidence of the hindrance which is the great factor for PI.

Extract 2: Influence of Bengali (Researcher-Participants)

Pi	জি, স্যার, অবশ্যই আসে।/ Yes, sir. Of course, come.
Pi	Yes, sir. ধরেন, example, present now, যখন আমি একটা sentence make করতে চাই তখন আগে ইংলিশটার আগে বাংলাটা ভেবে নেই, বাংলাটা কি হবে। যেমন, আমি ভাত খাই। eat rice. Yes, sir. Suppose, example, present now, when I want to make a sentence then I think about the Bangla before English, what will be the Bengali sentence. For example, I eat rice.
PI	Yes, sir.
PI	যখন English টা translate করার আগে বাংলাটা ভেবে নেই তারপর English টা translate করি। When we translate the English, we think the Bengali words or sentences before translating, then we translate the English.
Pi	Yes. yes, sir. the Bengali has a strong influence on English pronunciation,
Piii	Yes, sir, I have problem
PIII	আমরা অনেক সময় কথা বলতে গেলে বাংলা উচ্চারণটা চলে আসে। Many times, when we go to speak in English, the Bengali sounds automatically come in us.
PIV	বাংলাশব্দ English এ চলে আসে।/ Yes, Bengali sounds come in English.
PV	English এ যখন আমরা কথা বলতে যায় তখন সব সময় যদি মাতৃভাষা use করি মোটামুটি, মাঝে মাঝে বাংলা ভাষার প্রভাব চলে আসে। When we go to speak in English, then if we use mother tongue always, approximately, sometimes the influence of Bengali language occurs.

Pv

এটা English কথা বলতে গেলে যদি English এর মধ্যে বাংলা চলে আসে তাহলে এটা un, un, মনে হয় standard মনে হয় না।
At the time of speaking in English if the Bengali sounds come then it does not seem standard.

4.2.3 Lack of English-Speaking Environment

Foreign or second language learning or acquisition happens in the formal situation of a classroom and the students have rarely any access to the target language outside the classroom (Brown, 1994). The way a student perceives his or her available educational environment may shape the learning paths and foreign or second language (FL or SL) learning outcomes. Specifically, if a language student is exposed to such factors, for instance, as an appropriate model of a language, clear instructions and effective error correction, and if these factors are compatible with the learners' expectations, the learning processes may improve. However, the opposite situation may occur if a learning context does not fulfill the expected or anticipated standards. Therefore, it is essential to attend to students' cognitions regarding their learning environment in order to establish the best possible conditions for learning (Szyszka, 2018). It is the fact that the environment, the participants of this study live and grow up is an environment of Bengali language. They do not get the opportunity to speak in English with others as there is rarely any one to listen to him and talk to him in English. Even sometimes the people laugh and criticize if he/she (participant) speaks in English with them. So the surroundings they abode are not suitable for practicing English.

When the participants confronted the question like whether they are understood by the listeners when they speak in English with them, in answer Participant II condemned the weakness of the listeners in English. He said that they cannot understand his English and participant III responded that he could not practice English with others. So, the environmental issue is a great factor for producing unintelligible pronunciation. In this study, environment indicates the two types of environments; a) environment of educational institution b) environment of the family and society. Both the environments are responsible for their mispronunciation in English. In Bangladesh, the students do not get sufficient scope to practice English

speaking as the family members, neighbors and society people and class mates, staffs, even most of the teachers neither use English in their daily activities nor do in the institution. Thus their awareness level and progressive status in learning English pronunciation remains stable as low as in their childhood. As their level of awareness is low, their attention to intelligible pronunciation is very poor and so the phonological fossilization in their English speaking is obvious. Extract 3 is the vivid example of environmental issue that leads to pronunciation issues among the Bengali speakers of English.

Extract 3: Lack of English-Speaking Environment (Researcher-Participants)

P1	যেহেতু আমরা বাংলাই কথা বলি ছোট থেকে মায়ের ভাষা, মাতৃ ভাষা থেকেই বাঙ্গলা টা শিখে আসছি, English টা অতটা ততটাভাবে চর্চা হয় নাযার কারণে English speaking skill টা কিছুটা দুর্বল। <i>As we speak only in Bengali, we have been learning the mother tongue, Bangla from our childhood. English is not mainly practiced, that is why, our English speaking skill is poor.</i>
PI	যাদের সাথে আমি English এ কথা বলব, তাদের একটু বোঝার অক্ষমতা থাকতে পারে। Those with whom I shall speak in English, they may have a little bit lacking in understanding. পুরোপুরিভাবে English সম্পর্কে বলা যায় না। communicate করা যায় না একে অপরের সাথে। <i>we cannot speak in English properly. We can not communicate in English with each other.</i>
Pii	যখন English টা translate, translate করার আগে বাংলাটা ভেবে নেই, তারপর English টা translate করি। <i>When we translate the English, we think the Bengali words or sentences before translating, then we translate the English.</i>
Piii	আমাদের দেশে সব সময় বাংলাই কথা বলা হয়। English এ সবার সাথে সবাই কথা বললে বেশি একটা বলে না। সেই কারণে আগে তাদের সাথে English এ কথা বললে তারা ভাল একটা বুঝতেও পারে না। আমারও নিজেরও বিভিন্ন problem আছে যেই কারণে তারা English এ কথা বলতে অনেক সমস্যা হয়। <i>In our country, we always speak in Bengali. If anybody speaks in English with other, he or she does not speak much. For this reason, if anyone speaks in English with them, they cannot understand their speech properly. I myself have also different problems. For this reason, there is much problem in speaking English.</i>
Piii	ভালবলতে পারিনা। No, I can't speak English properly.

Piii

কারণ আমার ইংলিশ টা চর্চা করা হয় না। Because, my English is not practiced.
ইংলিশে কথা বলার জন্য তেমন কাউকে পাইও না। ইংলিশ তেমন শুনাও হয় না। যেহেতু আমরা বাংলা বলে অভ্যস্ত, বাংলা জিনিস গুলোই বেশি প্রকাশ করা হয়।
I can't get any one to speak in English. Even I do not listen to English speech. As we are habituated in speaking Bengali, we express everything in Bengali.

Piv

এটা দেখা যাচ্ছে মানে আমাদের যে মাধ্যমের প্রতিষ্ঠান যেখানে বাংলা বলা হয় সেখানে তো অবশ্যই বাংলা বলতে হবে। এখন এমন একটা জায়গা গেলাম সেখানে সবাই ইংলিশে কথা বলিতেছে অবশ্যই সেখানে আমাকে বলতে হবে। অন্যরা যেটা বলে আমি যদি সেটা না জানি তাহলে সে বিষয়ে আমি সেটা জানলাম না এবং বুঝলাম না ওখানে কি হচ্ছে বা কি হতে যাচ্ছে। অবশ্যই আমাকে ইংলিশ টা আগে জানতে হবে।

It is being observed that our educational institution is Bengali medium, so we must speak in Bengali there. Now suppose, I went to a place where everybody is speaking in English, then I must speak in English there. What the others say, if I do not know that aspects remain unknown to me and do not understand what is happening there or what is going to be happened? Of course, I have to learn the English before.

Pv

এই সব ভুল গুলো, আমরা সাধারণত ছোট বেনা থেকেই ভুল করে আসছি তার কারণে এটা অভ্যাসে পরিণত হয়ে গেছে।

These mistakes. We usually have been doing mistake from our childhood. For this reason, it has been habitual fact

4.2.4 Lack of Motivation and Instruction

Many EFL or ESL teachers disregard teaching English pronunciation to their learners in even English departments in our country due to lack of phonological knowledge, time constraints, lack of beneficial teaching materials. Since intelligible pronunciation is the key to establishing effective communication with others within or beyond classroom context, it is important that language instructors should emphasize on teaching second or foreign language pronunciation, more specifically L2 phonology to their learners (Hismanoglu, 2012). Almost all the English teachers in Bangladesh often avoid the most important aspect of language teaching and that is teaching of intelligible pronunciation in the class due to the lack of sufficient knowledge in phonetics or phonology, pronunciation, lack of training, lack of updated materials. The reluctance among teachers to teach pronunciation is also a reason for the negligence of the students to learn pronunciation (Tahereen, 2015). At the same way, as the students are not enthusiastic and conscious about learning pronunciation, the teachers do not feel interest in teaching pronunciation in the class.

Maniruzzaman (2008) claimed that many teachers do not have knowledge in useful methods or way of teaching English pronunciation; that is why, when they encounter a specific problem, they simply avoid pronunciation teaching in the classroom by employing shrewd tricks. Analysis of data has proved the teachers' unconsciousness and insincerity in teaching pronunciation. When the students are asked how often their teachers correct them if they make mistake in the class. Participant i responded that they sometimes do it, Pii, sometimes do, Piii, no remark, Piv, always and Pv, no they do not. Among the five participants, one participant remarks positively, another one, fully negatively, another one, no comment and next two participants remark slightly positively. These are the strong evidence about the teachers' unawareness and insincerity about teaching pronunciation in the class let alone intelligible pronunciation. Undoubtedly, the students must be unaware and indifferent to learning pronunciation and so their level of awareness on intelligible pronunciation is very low and it hampers in their communication. Extract 4 shows the lack of motivation and instruction

Extract 4: Lack of Motivation and Instruction (Researcher-Participants)

Pi	মাঝেমাঝে করে/ Sometimes, he does it.
Pii	মাঝেমাঝে করে/ Sometimes do.
Piii	No remark
Piv	সবসময়/ Always.
PV	No they do not.

4.2.5 Non-Standard

The problem of pronunciation of a given language is a talked topic and pronunciation standard is certainly the most interesting and important one now (Jovanović, 2014).). Intelligible pronunciation of English words requires the learners to have clear idea of the different sounds of spoken English (Prashant, 2018). Sources of non-standard pronunciation are available in the data when the participants are asked whether their pronunciation is near to standard pronunciation. The response of this question are

respectively pi- No, sir, Pii-Not, Piii- sometimes standard, Piv- I try to make it standard, Pv- nonstandard. Among the five participants, fully negative indication is available in the response of four participants; half negative indication is available in one participant.

Different kinds of elements of non-standard pronunciation among the speakers came to light when the participants are confronted the interrogation like, do you think standard pronunciation is needed or essential? Participant i replied that to cope with the present world they need standard pronunciation, moreover, not only in Bangladesh but also all over the world, English is used much than any other language. To communicate with the foreigners and to get a good job, standard pronunciation is essential- participant ii and iii opined. Participant iii extends his response that to go any high level, English is needed. The response of participant iv proved that without knowing standard English, he cannot interact with others where English is mostly used. So, in any competition or in any case, the importance of standard English is vast. Participant v also mentioned that the importance of English is much. Extract 5 is the example of the non-standard speech from the learners.

Extract 5: Non-Standard (Researcher-Participants)

P i

No, sir.

Pi

English is an international language.
সেহেতু আমাদের বর্তমান বিশ্বের সাথে তাল মিলিয়ে চলার জন্য English skill টা speaking skill টা আর একটু develop করতে হবে, যেহেতু সারা বাংলাদেশ, আ... সারা পৃথিবীতেই আ... English টা, সব ক্ষেত্রে English এর প্রয়োগটা একটু বেশি।
That is why, to cope with the present world, we have to develop English skill, speaking skill. As all over Bangladesh, all over the world, the use of English is much more than any other language.

Pii

Not

Pii

কারণ এখন আমরা বিভিন্ন দেশ, বাইরে যাব, দেশের বাইরে তখন তো আমাদের standard pronunciation দরকার। তখন তো আর আমরা যদি বিভিন্ন
There are various problem in our success in many job, getting job, there many problems. Because when we shall go different countries, go abroad, go outside then we need standard pronunciation.

Piii

ও... মাঝে মাঝে standard হয় মাঝে মাঝে unstandard. Sometimes, it becomes standard and sometimes, it becomes unstandard.

Piii

হাঁ অনেক আমাদের প্রয়োজন। Yes, we earnestly need

Piii

যেহেতু এখন digital যুগ, সব জায়গাতেই English
চালাগে। চাকরির ক্ষেত্রে হউক বা যে কোন জায়গায় যেতে হলে বা যে কোন একটা উচ্চ লেভেলের পর্যায়
যেতে হলে আমাদের ইংলিশটা প্রয়োজন।

As now it is digital era, everywhere English is needed. Either in job market or
if we want to go anywhere or to go any high level, English is needed

Piv

Not Standard.

Piv

অবশ্যই প্রয়োজন। এটা দেখা যাচ্ছে মানে আমাদের যে মাধ্যমের প্রতিষ্ঠান যেখানে বাংলা বলা
হয় সেখানে তো অবশ্যই বাংলা বলতে হবে। এখন এমন একটা জায়গা গেলাম সেখানে সবাই
ইংলিশে কথা বলিতেছে অবশ্যই সেখানে আমাকে বলতে হবে। অন্যরা যেটা বলে আমি যদি
সেটা না জানি তাহলে সে বিষয়ে আমি সেটা জানলাম না এবং বুঝলাম না ওখানে কি হচ্ছে বা কি
হতে যাচ্ছে। অবশ্যই আমাকে ইংলিশটা আগে জানতে হবে।

Of course, necessary It is being seen that our educational institution are
Bangla medium, so we must speak in Bengali there. Now suppose, I went to a
place where everybody is speaking in English, then I must speak in English
there.

Pv

Unstandard.

Pv

যেকোন প্রতিযোগিতা বা যে কোন ক্ষেত্রে ইংলিশ এর গুরুত্ব অপরিহার্য। যার জন্য ইংলিশ এর গুরুত্ব বেশি।

So, in any competition or in any case, the importance of English is vast. For
this reason, the importance of English is much.

It is found from the data analysis that almost all the participants responded that their English pronunciation is not standard and at the same time, they agreed that standard pronunciation is essential to communicate with the people of other countries when they go abroad or even stay in Bangladesh. Participant V mentioned that if they want to take part in any international competition or sometimes in national competition, they need standard form of English pronunciation. Participant IV emphasized on learning standard pronunciation. When they become involved in any English environment, they can share their thoughts, ideas and feelings with others if they have command over standard pronunciation. Participant III has given the most important information that the present world is a digitalized world and in this world,

to get a good job or to go any higher level, they need standard pronunciation of English. Their responses indicate that their English is not standard.

4.2.6 Unintelligible Pronunciation

Unintelligibility in pronunciation is in the centre of all pronunciation issues investigated by this study. Unintelligible sounds indicate the incomprehensible part in the user's utterance (Saad, 2019). Unintelligibility occurs due to incorrect pronunciation of any language segment or phoneme or fast delivery of anyone's speech and unconscious delivery of speech that ultimately creates confusion to the listeners to understand clearly of what has been expressed. In this study, the participants mentioned that unintelligibility occurs due to the lack of opportunity to use English in the environment where the students live and work, dominance of Bengali language and poor vocabulary in the learners. Unintelligibility factors have been confirmed when the participants replied to the question of the interviewer. All the participants responded that they have unintelligibility in their English speech when they are involved in interaction with others. Unintelligibility issue has been identified when participants-I and II speak to others in English, the listeners cannot guess their English speech and pronunciation and when participant-III speaks in English, the listeners guess little meaning and understand something in the speech. Participant-IV affirmed that his English speech is not fully intelligible, that means there are elements of unintelligible segments in his speaking. Similarly, participant-V produced unintelligible sounds as he confirmed in his response to the question of the interviewer. So, unintelligible speech is obvious in their interaction in English. Extract 6 is an example of the situation where the participants proved themselves as speakers of Unintelligible Pronunciation which leads to the finding of PI of the participants.

Extract 6: Unintelligible Pronunciation (Researcher-Participants)

Pi

না স্যার। আমি যখন অন্যের সাথে ইংলিশ এ কথাবলি, তখন তারা আমাদের উচ্চারণে, উচ্চারণটা সঠিকভাবে বুঝতে পারে না, যার কারণে কখন কি বলছি তারাসঠিকভাবে বুঝতে না পারার কারণে তারা পরে main যে অর্থটা পরিপূর্ণভাবে বুঝতে পারে না।

No, sir When I speak in English to others, then they cannot understand our pronunciation properly. That is why, they cannot understand the main meaning properly due to the inability to understand when, what I am saying.

Pii না/No.

Pii কারণ English এর বিভিন্ন word সম্পর্কে ধারণা নেয়।
Because, we have not idea about the different words of English.

Pii Then, আমাদের দেশে সব সময় বাংলাই কথা বলা হয়। English এ
সবার সাথে সবাই কথা বললে বেশি একটা বলেনা। সেই কারণে আগে তাদের সাথে English এ
কথা বললে তারা ভাল একটা বুঝতেও পারেনা। আমার ও নিজের ও বিভিন্ন problem আছে যেহেতু তারা
English এ কথা বলতে অনেক সমস্যা হয়।
In our country, we always speak in Bangla. If anybody speaks in English with
other, he or she does not speak much. For this reason, if anyone speaks in English
with them, they cannot understand their speech properly. I myself have also
different problems. For this reason, there is much problem in speaking English.

Piii No, sir. কিছু কিছু জিনিস আছে যেটা বোঝে আর যেটা আছে বোঝেনা।
No, sir. They understand something and something they do not understand.

Piii আমরা অনেক সময় কথা বলতে গেলে বাংলা উচ্চারণটা চলে আসে।
Many times, when we go to speak in English, the Bengali sounds automatically
come in us.

Piv নাপুরোপুরি correct না একটু তো সমস্যা আছে।
No, it is not fully correct. There is a little problem too.

Piv ওয়ার্ড মিনিং এ কিছু সমস্যা আছে।
I have a little bit problems in word meaning.

pV মোটা মুঠি বোঝে। Understand approximately.

P V A...my speaking problem is vocabulary and writing, reading..... listening,
speaking মুটা মুঠি পারি কিন্তু problem হচ্ছে যে vocabulary কম জানা আছে।
A....my speaking problem is vocabulary and writing, reading... listening, speaking, I can
so so but the problem is that I have poor vocabulary.

Unintelligibility in pronunciation occurs due to the lack of competence in English language specifically in English pronunciation of both the parties; speakers and listeners. From the analysis, it is found that not only the speakers but also the listeners should have competence in English pronunciation for demonstrating effective interaction. From the data set, it is observed that the reverse circumstances and L1 barrier are responsible for unintelligibility issue in English pronunciation of the Bangladeshi adult learners of English.

4.3 CHALLENGES OF DEFOSSILIZATION

Pronunciation teaching is still under emphasized in many countries and in many language programs and in teacher-training curricula in spite of significant development in other areas. Three barriers are account for this resistance and for the difficulty of making pronunciation teaching an inseparable part of language instruction: the time obstacle, the methodology obstacle, and the curricular obstacle (Darcy, 2018). The second objective of this study is to explore the English teacher's issues in defossilizing English pronunciation of Bangladeshi adult learners. This study pursues Tahereen's focus on the challenges (2015) of teaching pronunciation to guide the coding on teacher's challenges in defossilizing the problem causing sounds in English pronunciation. The framework has documented five challenges that the teachers often encounter in case of teaching pronunciation in the classroom which are interference of mother tongue, little exposure to English, English spelling system, lack of concern and awareness of pronunciation and influence of local accent. All these issues except English spelling system and influence of local accent have been highlighted in the coding. There are also other new issues that this study finds save Tahereen's sources of challenges (2015). Table 4.2 shows the themes emerged from coding through categories.

Table 4.2 Generating Themes from Coding through Categories

Theme	Categories	Key idea
Established errors	Permanent errors habituated	Error has been permanent in their mind. It has a long effect in their pronunciation. They do not know the rules of pronunciation Yes, of course, they have many permanent errors Making mistake repeatedly from learners to learners Continuously permanent error in language fossilization
Lack of awareness on fossilized sounds	Indifferent to Errors	They cannot find out what is wrong and what is right. Most of them are not conscious about their problems. No, they are not conscious.

		The educated people even pronounce wrong sounds. So, the actual sound becomes wrong to them.
Phonological fossilization is a barrier	Obstacle for learning pronunciation	I think it is a barrier. They frequently pronounce phonetic and phonological fossilization in the class room. It is fossilized for a long time or it has been created or this problem has been created time after time. Yes, definitely. There are so much phonological fossilization.
Pronunciation is not in the syllabus	Pronunciation is not taught from childhood Pronunciation class needed Faulty syllabus	If the students were taught when they were children, they would not do such mistakes. Pronunciation should be taught from the very beginning If they would get opportunity to learn at the childhood it would become more beneficial to them. There is actually no fine syllabus for pronunciation in intermediate or primary level. There was not actually very well designed, planned syllabus.
Challenges to teach pronunciation	No primary knowledge in pronunciation Poor basic knowledge	Cannot understand what they want to say. Don't have basic idea. Students don't have primary knowledge. Their basic is not good. They cannot realize the method or the rules.
Uninterested learners	Indifferent to pronunciation	They are not inclined to learn it. The students are not much interested in pronunciation as their test is only written. The students are not least interested to know about it. They do not open their mouth before us. They are not willing to overcome the problem. They laugh at when the actual pronunciation is delivered to them.
Pre-dominance of L1	Influence of Bengali	They pronounce the English words at the same way they Write them in Bengali. It has been habitual fact in them. Here, it is being seen that English is not their mother tongue. Only Bengali is their mother tongue.
Inadequate infrastructure/ environment	Unsuitable classroom setting	No multi-media class room. No Audio set. Unable to make group.

	No scope for practicing pronunciation	Lack of teaching materials. No audio visual aids. They did not get an environment to speak, to articulate. In any cases or in any institution or in their family they do not get guidelines. In Bangladesh, we don't have very necessity of actual pronunciation. This is a big problem.
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It is seen from the data that as the learners do not have basic idea and pre knowledge about pronunciation, they should be taught pronunciation from their childhood. The most important and the remarkable source for teachers' challenges (TC) is highlighted when the participant C said that the students do not know what is pronunciation and how to pronounce a sound due to the faulty English syllabus and curriculum in Bangladesh. In fact, the participant's response may seem exaggeration but in many cases it is true which relates to the phenomenon. The learners should make use of the vocabulary appropriately when they speak in English (Afzal, 2019). Participant A claimed that when the students learn pronunciation in their childhood, they write the pronunciation in Bengali grapheme. So in case of writing English alphabet with Bengali alphabet, the Bengali alphabet has been fossilized in them. Later, when they go to learn the pronunciation of English, they make mistakes as there are differences of pronunciation between Bengali letter and English letter, they make mistake.

4.3.1 Established Errors

Established error in pronunciation which is termed as phonological fossilization by Selinker (1972) is the pivotal theme of all themes and sub-themes in this study. After establishing and confirming phonological fossilization from the responses of the students, this section is going to highlight the sources of PF in the learners from the teachers' responses (PA, PB and PC). It is phonological fossilization which is the matter of concern for most of the teachers and students in Bangladesh. As teaching pronunciation is always neglected in the classroom, the discussion on phonological fossilization and the way of correcting fossilized sounds have been remained

untouched in the context of Bangladeshi EFL classroom. That is why, most of the EFL students do not have the proper sense of intelligible pronunciation (Ali, 2019).

Pronunciation is hardly given little or no room in the syllabi and curricula even in Bangladesh (Ali, 2019). As a result, the learners are growing with incorrect sounds of English due to the lack of opportunity to practice, and hence problems have been permanent in them. There is a great affinity between the sources of PF from data set and the phonological fossilization in the literature. When the participants confront the question like- “do the students produce fossilized sounds in their English speech?”. The responses of the participants are, PA-Yes, Yes they have, PB-Yes, of course and PC-Yes, yes, yes, definitely. The word ‘yes’ has been repeatedly repeated by the participants. This repeated use of ‘yes’ indicate that phonological fossilization is very much common among the learners in Bangladesh. Extract 7 is the evidence of established errors or phonological fossilization.

Extract 7: Established Errors (Researcher-Participants):

PA Yes, Yes they have phonological fossilization?

PA Yes, Yes, I think that's there are continuously permanent error in language fossilization in our country. Suppose that error has been permanent in their mind. That is why, they always habitually say this mistake.

PB Yes, of course, they have many permanent errors but they have it is as usual and they want to come out from this problems or lacking but in different phases or different stages they can't do this.

PB Many things are responsible for this. For their family condition, for their environment, for their surroundings, environment of their institution, everything are responsible for their lacking.

PC Yes. Yes, yes, definitely. There are so much phonological fossilization because they actually, so to say, don't know what is pronunciation, how to pronounce a word, what are the technique or what are the rules of pronunciation because in our academic system, in our education system and syllabus, there is not actually very well

designed, planned syllabus to teach them. There is much problem still prevailing in Bangladeshi English language system.

PC *The problem is that there is the scarcity of learned teachers, there is the scarcity of quality book on grammar and pronunciation, there is the social pronunciation. Even the highly educated person in Bangladesh pronounce wrong sounds. So, the actual or the real sound becomes wrong to them.*

It is found from the extract that the teachers (participants) of this study have confirmed the students' established errors in their English pronunciation. Participant A confirmed that the errors have been a habitual fact for the Bangladeshi learners of English. Participant B stated that they have no scope for practicing English pronunciation either in their institution or in the family and surroundings. Participant C stated that the Bangladeshi learners of English do not know what pronunciation is and how to pronounce an English sound. He also condemned the scarcity of learned teacher and quality book on grammar and pronunciation which are greatly responsible for the students' errors in pronunciation and phonological fossilization in their speaking. So errors in pronunciation or phonological fossilization are obvious in their English speech. Figure 4.1 shows the causes of the severity of established errors or phonological fossilization in the learners.

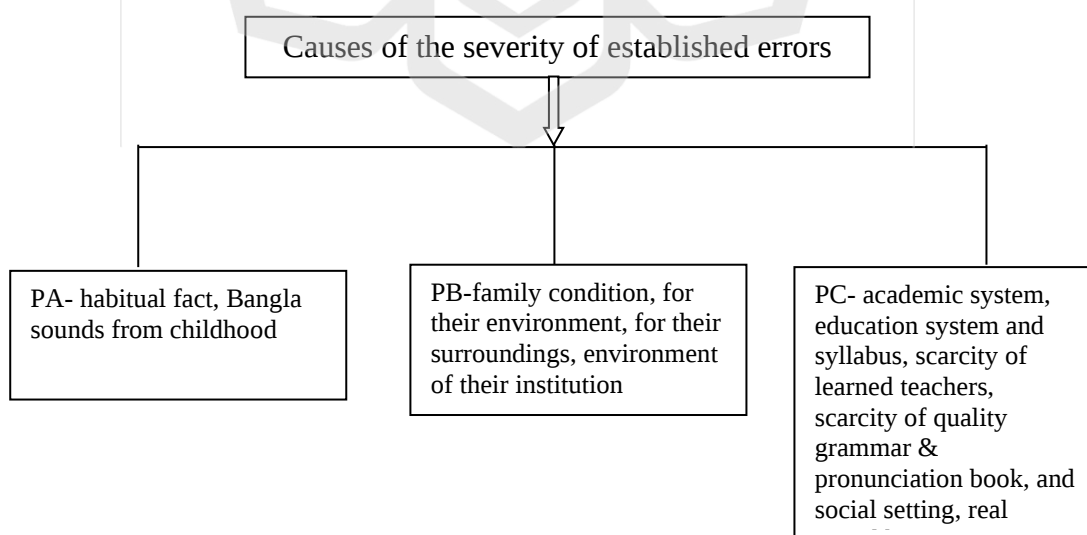


Figure 4.1 Causes of the severity of established errors

4.3.2 Lack of Awareness on Fossilized Sounds

Lack of awareness on errors or mistakes in pronunciation greatly hampers in communication process of the learners. Phonological awareness is the capability to analyze and use the sounds of the English language in different circumstances. The awareness on sounds in second/foreign language learning has been a major concern for the linguists and pedagogues nowadays. Demirezen and many other researchers have given emphasize on the awareness in case of producing intelligible sounds by the non-native speakers of English. Demirezen (2003, 2004) stated that the Audio-Articulation Method is a fossilized pronunciation mistake breaker, moving raising awareness of a fossilized mistake to perception via listening to oral practice. Most of the fossilized errors are produced due to the unawareness of the learners about their mistakes. It has been established when all the participants of this study are agreed that the learners are not conscious about their fossilized sounds in their English speaking. The response of PA is the great evidence of their unawareness when he says- “They themselves are frequently making these mistakes but they themselves do not know that they are saying wrong”. This evidence has been strong when PA again says that due to unawareness of the learners, they say /pripəzi/n/ instead of /prepəzi/n/. When the question like “how do you identify their consciousness?” is presented before the participants, PB says, “I can say them to read any topic or any parts of their text”. PC says, “I have identified their awareness through different types of tests.” Extract 8 abounds in great source of lack of awareness on fossilized sounds which helps the readers to know about the real phenomenon about fossilized errors or phonological fossilization in English speech production of Bangladeshi adult speakers of English.

Extract 8: Lack of Awareness on Fossilized Sounds (Researcher-Participants)

PA *No, they are not conscious about that they are making mistake. They themselves are frequently making these mistakes but they themselves do not know that they are saying wrong. It is because they have been habituated pronouncing mother tongue. They want to make us understand that way and we want to be understood that way from them.*

PA *Sometimes, if they express before us, not behind, we try to correct their errors.. For example, most, all of the students and people they say /pri/. When we say that it is*

not /pri/ it will be /pre/ then they do not want to accept it. They say that they have been pronouncing this way from their childhood.

PB *Most of them are not conscious about their problems.*

PB *If I ask them to read any topic or any parts of their text, I get what situation, they are remaining in their pronunciation, I can know this from their articulation from their meaning.*

PC *No, they are not conscious.*

PC *Yes, several times I have taken different types of tests. Sometimes, I test their level of pronunciation, level of knowledge in pronunciation through viva, sometimes group discussion, sometimes in written format like multiple choice question, one word question. These various types of tests, I have executed but in one of the formats, I found that there is serious problem in pronunciation.*

Awareness on pronunciation mainly creates in the learners from their family, their environment, their surroundings and their institutions. Due to the lacking of facilities from these sources, the students' level of awareness on fossilized sounds is very low. It is found from the data that if the students make fossilized errors before the teachers, they can correct their mistakes but they stay in the institution for a certain period of time and most of the time they stay outside of the classroom or institution. Their unawareness on phonological fossilization is confirmed by the responses of the participants when the participant B said that she asked the students to read a text and identify their mistakes and the participant C said that he tested the student's awareness by giving them different kind of tests and became confirmed about their unawareness.

4.3.3 Phonological Fossilization is Barrier

Jahara and Abdelrady (2021) said many EFL students may find that incorrect pronunciation of words is a barrier to effective communication. Brown (2000) as in Senowarsito and Ardini (2019) claimed that the interference of the first language system on the second language system can be a barrier to second language acquisition. Generally barrier means to prevent something or someone to occur or to go ahead. But

in language acquisition or learning, barrier means the flaw that hinders the learners from producing intelligible pronunciation. In Bangladeshi context this barrier is frequent and prevailing in the learners speech as confirmed when all the participants argued about this barrier in case of teaching pronunciation in Bangladeshi EFL classroom.

A significant source of challenges for defossilization has emerged when PA responses that fossilized errors have been going on generation after generation. That means the young learners obviously interact with the senior ones and are influenced by their pronunciation and learn with those mistakes that the seniors already have. PB said that they are taught the English letter and the pronunciation of these letters when they are adult. As they are adult, they have already phonological fossilization in pronunciation which prevents them from producing intelligible sounds. PC said, due to fossilization in pronunciation, the learners cannot differentiate between right and wrong and so their learning process is interrupted. Extract 9 shows the evidence of the phenomenon.

Extract 9: Phonological Fossilization is Barrier (Researcher-Participants)

PA Of course,

PA Phonological barrier is a permanent barrier in the context of Bangladesh or in the class. What has already been said before that in this way, making mistake repeatedly and afterwards when the new learners learn from them, they learn with those mistakes and these mistakes are being permanent in them.

PB I think it is a barrier.

PB If we would be able to remove from this fossilization or from these problems, may be our pronunciation, our speaking will be comparatively more fluent, more spontaneous.

PB I have tried my best to find out it and to come out from these problems gradually and from the articulation of ABCD or the basic letter or letters. I think If they can try to pronounce basic letters a. And they want or try to remove the problems or the errors from articulating this letters then gradually their words, their sentence all things would become better.

PC Really it is a problem. Because, if someone does not have the real knowledge about anything that can not be learned. So, they actually can not find out what is wrong and what is right. So, it hinders their learning.

Figure 4.2 highlights the barrier obtained from the data set.

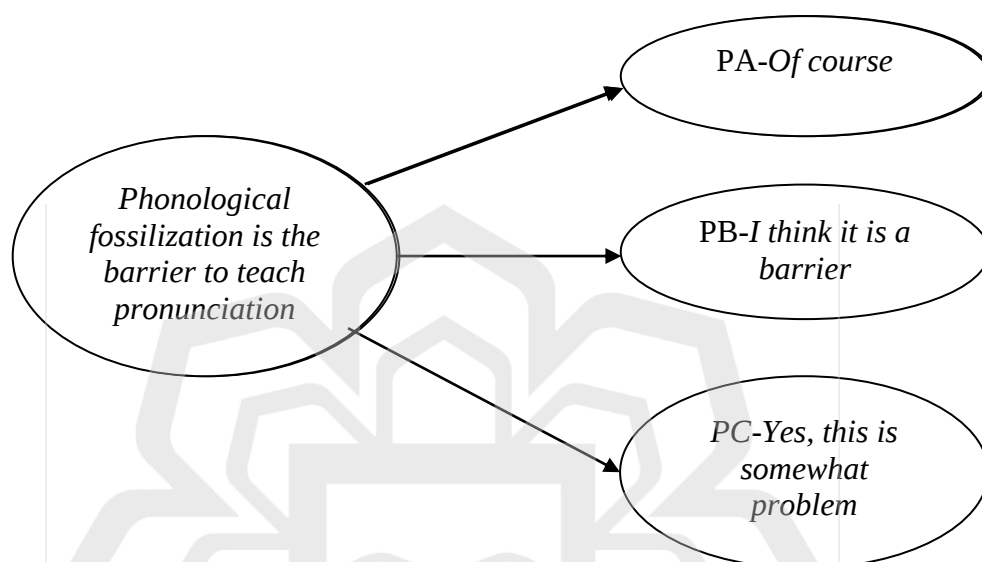


Figure 4.2 Example of fossilization is a barrier for intelligible pronunciation

4.3.4 Pronunciation is not in the Syllabus

Richards (2001, p. 2, as in Alghazo, 2015) defined ‘curriculum design’ as the process of deciding on what students learn in a program in terms of “knowledge, skills, and values” as well as how this learning should take place in terms of planning, measuring and evaluating. The role of curriculum design and teaching materials in the development of English pronunciation in EFL contexts is very significant (Alghazo, 2015). At the tertiary level in both public and private Universities in Bangladesh, the English departments offer courses in English language, ELT (English Language Teaching), English literature, discourse analysis, media studies, business English, and so on. Amongst the courses, a course in English Phonetics and Phonology including some theoretical aspects of segmental and supra-segmental phonemes is offered. Besides, one or two courses in English speaking and listening are taught. But English pronunciation practice appears very rare and to have inadequate attention in both

teaching and learning (Maniruzzaman, 2008). As there is no course on pronunciation from SSC to tertiary level, learning pronunciation in the classroom or outside of the classroom remains untouched and even alien to many students. It is found from the data analysis that standard or intelligible pronunciation is very essential for the students of Bangladesh. So syllabus and curriculum should be updated and pronunciation should be included in the curriculum. Due to the faulty syllabus and curriculum, students' competence in pronunciation is very low.

The target of analysis is to highlight the challenges to teach the pronunciation in EFL classroom where students have the habit of producing Bengali sounds or phonological fossilization and the challenge to defossilize the problem causing sounds which ultimately proves evidence for the necessity of pronunciation class. It is clear from the extract that in Bangladeshi context, pronunciation class is very much necessary for the adult students as all the participants emphasized on pronunciation class. The words or phrases of emphasize- "very much needed", "of course, necessary", "very important" definitely give the message that there is a huge gap in teaching and learning pronunciation in Bangladeshi EFL classroom. It is a matter of regret that most of the school level learners in Bangladesh are not taught English pronunciation and, hence, it is overlooked. A good number of teachers in Bangladesh are not aware of the significance of teaching pronunciation and its impact on effective communication Anis (2021). Again, all the participants agreed that pronunciation should be taught from the very beginning of childhood, not in adult or adolescent. Notwithstanding, pronunciation hardly receives sufficient importance in teaching as well as learning English at any level in Bangladesh (Maniruzzaman, 2008). As a consequence, students get little opportunity to practice English pronunciation, and hence, have problems with it Ali (2019). Extract 10 clearly shows the sources of PINIS.

Extract 10: Pronunciation is not in the Syllabus (Researcher-Participants)

PA *Yes, I think that the pronunciation class is very much needed in our country*

PA *If the students were taught when they were children, they would not do such mistakes. It is seen that the mistakes that have been permanent in them when they were children, we cannot solve this problem now as they are adult.*

PA *The parents also want their result not their learning. We also always try to make them prepared how to make good result as the guardians and the college authority only want result. So we only emphasize on how to present a good result than teaching pronunciation.*

PB *Yes, of course. It is necessary for them.*

PB *I think if they would get opportunity to learn at the childhood it would become more beneficial to them.*

PB *In this adulthood we are trying to teach them the basic methods or materials. It is not suitable, I think, for them, for a student. If they want to learn more and the syllabus, the curriculum should be designed from the primary level.*

PB *Yes, it is a bad luck for them.*

PC *Definitely, I think that this is very important. Because, if the students are not able to understand the pronunciation, they will not be ultimately able to understand English lectures.*

PC *A student becomes habituated in speaking or pronouncing any language from the very childhood. So if they are habituated in a style, that style becomes very tough to be changed in middle age or in grown up age. So, it should be studied from childhood level or primary education level.*

PC *There is some syllabus but so called syllabus. There is syllabus like syllabus. There is some syllabus but not very scientific. So syllabus should be developed, I think.*

4.3.5 Challenges to Teach Pronunciation

The challenges to teach pronunciation are also the challenges of defossilization in English pronunciation of Bangladeshi adult learners of English. The previous section presents the necessity for teaching pronunciation in Bangladeshi EFL classroom. This section deals with the challenges for teaching pronunciation to the non-native speakers

of English. The teachers of English to foreigners are to be aware of the context in which they are working and of how his teaching fits into the scheme of things. However, for most teachers, the primary focus of attention is the classroom, what actually happens there, what kinds of personal encounter occur there and teaching is very much a matter of personal encounter and especially what part teachers themselves play there in facilitating the learning of the language (Broughton et al., 2003). This source directly adopts Tahereen's (2015) challenges for teaching pronunciation. Pronunciation has become one of the most challenging areas in the context of English language teaching and learning, and it is often found that learners' proficiency in pronunciation has not been properly achieved in spite of the introduction of pronunciation courses at tertiary level education in Bangladesh Yasmin (2022). It is found from the data set that the students' fundamental knowledge in English is very poor and it has been established when the participants (teachers) are asked about the issues they frequently face to teach pronunciation in the classroom. Extract 11 shows the challenges that the teachers frequently face in case of teaching pronunciation.

Extract 11: Challenges to Teach Pronunciation (Researcher-Participants)

PA We face many problems. Suppose, many words they say, they make mistake in many pronunciation. We often identify them (mistakes) and have to correct them.

PB I think, they... their basic is not good, they did not get an environment to speak, to articulate. So they don't have the basic ideas.

PB When I want to teach them, it takes time for them to realize the things, the topic which I can, which I want to express to them exclusively, so instantly they cannot realize the method or realize the rules.

PC Yes, I feel some problems. That is when I try to teach them pronunciation, sometimes, it seems to be unnecessary because, to pronounce like the British or American, this is something tough and they sometimes mean that it is important only just to understanding what the speaker wants to say. So, they are not inclined to learn it. Another problem is that the actual pronunciation differs seriously in a serious

degree from what is in practicing in Bangladesh. So they laugh at when the actual pronunciation is delivered to them.

The challenges of defossilization have been established when the participants responds that they face much challenges to teach pronunciation in the class having the students with poor basic knowledge in English. PA responds that the students make mistake in many words, PB, their basic is not good, they did not get an environment to speak, to articulate. So they don't have the basic ideas and the responses of PC is very informative as he said, the students of Bangladesh think, to learn English pronunciation is unnecessary and they are satisfied if they only understand the British or American speech. The English, they are practicing is totally different from the British or American standard. When someone speaks to them in correct English, they criticize or sometimes laugh at. While it is the phenomenon, it is easily understandable how challenging to teach English pronunciation in Bangladeshi EFL classroom. Figure 4.3 clearly shows the phenomenon of challenges to teach pronunciation in Bangladeshi EFL classroom.

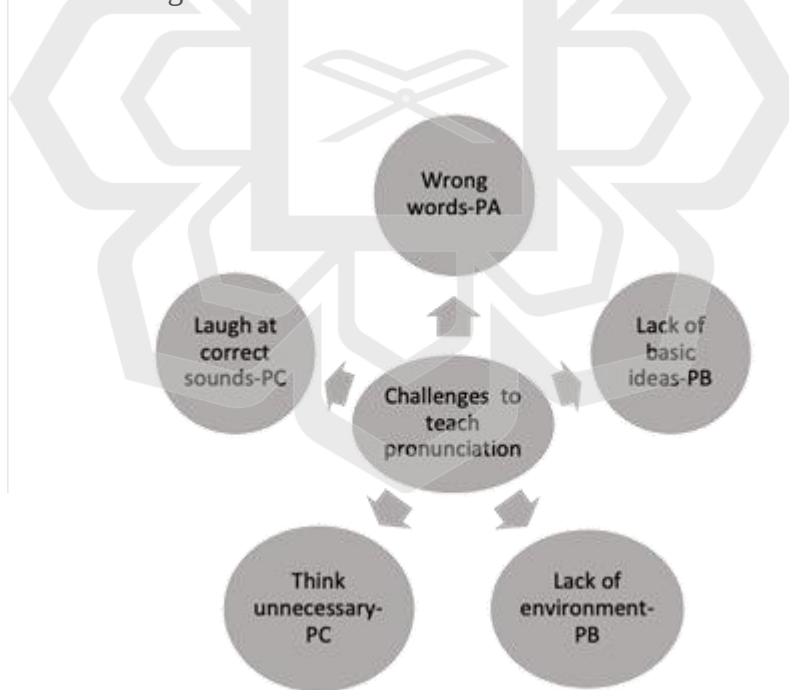


Figure 4.3 Challenges to teach pronunciation or challenges of defossilization

It is found from the diagram that the data has documented five challenges for teaching correct pronunciation or defossilization of Bengali sounds in English pronunciation of Bangladeshi adult learners of English. Other challenges have been highlighted in preceding and successive chapters.

4.3.6 Uninterested Learners

Though it is too difficult or somewhat impossible to change pronunciation once a certain age of pronunciation has been reached, it is not totally impossible of defossilization Kahraman (2012). Many researchers believe that the learners' inter language is the key to where fossilization occurs (Celce-Murcia et al., 2010, as in Dolan, 2020). In Bangladeshi context, there are many problems for defossilization. The problems that the teachers frequently face in case of correcting the fossilized errors in the adult learners of English greatly hamper for teaching intelligible pronunciation in the classroom. Extract 14 abounds in the information of uninterested learners and it is the rich source for challenges of defossilization in English pronunciation of Bangladeshi adult learners of English. Disinterest is understood among the learners when the participants are asked whether defossilization is essential to teach and learn correct pronunciation, PA responds that it is very much essential and they try their best to make the students conscious about this important aspect of English language but no fruitful response comes from the learners. According to participant A, as their study is exam related and there is no board exam or final exam on pronunciation, they give little attention to learn pronunciation and thus become uninterested in learning or practicing English pronunciation.

Their disinterest has been further proved when participant C stated that the students are not habituated in studying pronunciation. They think that learning pronunciation is not necessary in Bangladeshi context as everything, like studying in the educational institutions, getting certificate even of higher education, getting job with better salary is possible without knowing the correct form of English pronunciation. According to him, another problem is the books they find on English pronunciation are written in English. They can't find out the Bengali meaning of these books due to their inability to translate them into Bengali. As they can't translate those

books in Bengali, they cannot find the meaning and they become disinterested not only to study those books but also to learn English pronunciation. Participant B responds that as they have been practicing wrong sound for long time, this problem (phonological fossilization) has been created in them time after time from their childhood. Thus, it is obvious for the adult learners in Bangladesh to become uninterested in learning English pronunciation. Extract 12 is the evidence of the uninterested learners.

Extract 12: Uninterested Learners (Researcher-Participants)

PA *Yes, I think that correct pronunciation is very much essential but our class time is limited and though we want to teach the students, we cannot get least response from them. It has no impact on their exam and most the students are exam oriented, result oriented in the class room.*

PA *The students are not much interested in pronunciation as their test is only written test. So, there is no need of correct pronunciation.*

PB *And it is fossilized for a long time or this problem has been created time after time and so in the primary stage or in the preliminary stage.*

PC *Yes, I face some issues that the most, the big problem I face that is they are not habituated in studying in pronunciation. They think what they have to learn and what the reason to learn is. In Bangladesh, they don't have very necessity of actual pronunciation. There is a, this a big problem. Another problem is the pronunciation, the books what they find are written in English. So, they can't find out the meaning in Bengali language. As they can't find the meaning, they become disinterested to study those books.*

4.3.7 Pre-dominance of L1

Pre-dominance of first language sound in the process of second or foreign language teaching and learning is a common and well established matter for every teacher, learner and educator. None can avoid this interference at the time of learning the pronunciation of L2 or FL. This interference of L1 sounds is acute in Bangladeshi

adult learners of English. When they go to produce any English sound, the Bengali sounds frequently intervene in their speaking. This phenomenon has been proved by the response of the participants. When the participant A is asked the question like, “What do you think, what are the causes behind the phonological fossilization in them?” Participant A response when the learners start to learn English pronunciation in their childhood, they learn through Bengali language and sometimes write the pronunciation of English word in Bengali alphabet. For this reason, when they go to pronounce any English sound, they make mistake as there are differences of pronunciation between Bengali letter and English letter.

Participant A is again asked the question like, “Are the students conscious about the fossilized errors in their English pronunciation?” He stated that they are not conscious about their mistakes. They frequently make mistakes but they do not know that they are doing the mistakes as they have been habituated in pronouncing their mother tongue from their boyhood. At the same way, when the participant B and C are asked the question like, “do you think English speech of Bangladeshi learners contains phonological fossilization?” They responds that “yes, of course” and “yes, yes, yes, definitely” respectively. Phonological fossilization of Bengali sounds in English pronunciation is the vivid example of pre-dominance L1 (Bengali language) in their English Speech. Extract 13 is the example of the phenomenon.

Extract 13 Pre-dominance L1 (Researcher and participant)

PA *when they learn pronunciation in their childhood, they write the pronunciation in Bengali. So in case of witting English alphabet by Bengali language, Bengali Alphabet, that... there are differences of pronunciation between Bengali letter and English letter. There they make mistake. They pronounce the English words at the same way they write them in Bengali.*

PA *they are not conscious about that they are making mistake. They themselves are frequently making these mistakes but they themselves do not know that they are saying wrong. It is because they have been habituated pronouncing mother tongue.*

PB *Yes, of course,*

PC *Yes. Yes, yes, definitely.*

4.3.8 Inadequate Infrastructure or Environment

Environment has a great impact on learning pronunciation of a second or foreign language. Environment, either in the institutions or in the society or in the family plays a vital role for the learners to grow up with the target language that they are going to learn and to be intelligible. The environment of Bangladesh is not favorable to learn intelligible pronunciation in English. So it is common for them to produce incorrect sounds of English and definitely, they grow up with phonological fossilization of Bengali sounds in their English pronunciation. When the participants are asked, what are the issues they frequently face in the class to correct the fossilized sounds in the learners. Participant A condemns the class room setting and emphasizes on group discussion. In Bangladesh, as the classes are bench system, it is not possible for group discussion; round table system is needed for this. So the students cannot get the opportunity to share their speech to others and correct themselves if there is any mistake in their pronunciation. Moreover, PA also added that the class hour is so limited for him to discuss the errors of the students and to correct them in a short time. He further stated that the environment of the classroom is not suitable for teaching/ learning intelligible pronunciation as almost of the schools, colleges and even universities in Bangladesh have no multi-media classroom. So the students are deprived from learning intelligible pronunciation through audio-visual method.

The environment of the institution is responsible for incorrect pronunciation of the Bangladeshi adult learners of English, stated by participant B when she confronted the question like “What do you think is the severity of phonological fossilization, established errors? What is responsible for established errors in the learners?” She also illustrated that due to the lack of practice in English pronunciation in the family, society and surroundings, the students cannot avoid incorrect pronunciation and phonological fossilization occurs in their English speech. Participant C stated that if the students have primary knowledge in pronunciation and the institution has sufficient teaching aids, two classes in a week are enough for teaching comprehensible pronunciation when he confronted the question like two classes are enough for

teaching comprehensible pronunciation. Extract 14 is the evidence of the phenomenon.

Extract 14: Inadequate Infra-structure/Environment (Researcher and Participants)

PA Problems that is here if we correct in this way, we need to make group.. But it is not possible in our class as it is bench system class and this bench system class cannot be changed into group system easily. This is a problem.

PA There is no audio set from where they can hear. There is no such system, audio classroom here. Speaker, the class is not multi-media class room.

PB Many things are responsible for this. From their family condition, for their environment, for their surroundings, environment of their institution, every things is responsible for their lacking.

PC We don't have any audio visual aids. The students don't have the primary knowledge about pronunciation. I think normally if the students are, if the students have pre knowledge about pronunciation, in that case two classes are enough but in the practical situation of Bangladesh two classes are not enough.

It is found from the analysis that teaching aids and materials in the classroom and overall infra-structure of the institution are essential for teaching and learning intelligible pronunciation as the participants emphasize on classroom environment and environment outside the classroom.

4.4 USE OF AUDIO-ARTICULATION METHOD (PRE-TEST OR POST-TEST)

This section examines whether or not the use of Audio-Articulation Method (AAM) can improve the ability of the tertiary level students of English department in Bangladesh to pronounce the closing and falling, unrounded diphthong, long, back, high rounded vowel, palate-alveolar fricative and velar stop. It also tests the effectiveness of the Audio-Articulation Method (AAM) to defossilize the distinct

vowel and consonant sound of English such as vowel like /e/→*এ*/, u:→*উ*/, consonants like, z→*স*/, ʒ→*জ*/, g→*গ*/ in the learners' pronunciation in word-initial, medial, and final positions.

4.4.1 Findings from the Statistical Analysis

Pre-test was given on Monday, 29 Aug 2022 to the experimental group and on Sunday, 4 Sep 2022 to the control group. Eight classes were conducted to give treatment by using Audio-Articulation Method for the experimental group while the control group was taught by the teacher by using the conventional method that the teacher usually use in teaching. The post-test was given on Monday, 12 Dec 2022 to experimental group and on Tuesday, 8 Nov 2022 and Tuesday, 29 Nov 2022 to control group. The researcher presents the data collected from pre-test and post-test of both the groups in table 4.3 and 4.4 to find out the competence of the learners. Full score of experimental group in pre-test is 65 and in post-test is 205. Full score of controlled group in pre-test is 61 and in post-test is 65. The students' ability is shown in the following table.

Table 4.3 The Students' Score and Deviation of Pre-test and Post-test of Experimental Group

No	Participants	Pre-test	Post-test	Deviation	Square deviation
1	P VI	11	37	26	676
2	P VII	19	51	32	1024
3	P IX	15	51	36	1296
4	P XI	11	27	16	256
5	P XIII	09	39	30	900
Total		13	41	140	4152

The students' ability in the pre-test and post-test of the experimental group has been calculated in the following way.

1. Experimental Group (pre-test)

$$X = \frac{\Sigma X}{N} = \frac{13}{5} = 2.6$$

2. Experimental Group (post-test)

$$X = \frac{\Sigma x_2}{N} = \frac{41}{5} = 8.2$$

Table 4.4 The Students' Score and Deviation in Pre-test and Post-test of Controlled Group

No	Participants	Pre-test	Post-test	Deviation	Square deviation
1	P XIV	18	17	-01	00
2	P XV	11	15	4	16
3	P XVI	12	12	00	00
4	P XVII	07	04	-03	00
5	P XVIII	13	17	4	16
Total		12.2	13	08	32

The students' ability in the pre-test and post-test of the controlled group has been calculated in the following way.

1. Controlled Group (pre-test)

$$X = \frac{\Sigma y}{N} = \frac{12.2}{5} = 2.44$$

2. Controlled Group (post-test)

$$X = \frac{\Sigma y_2}{N} = \frac{13}{5} = 2.6$$

The students' score in the pre-test of the experimental group was 2.6 and controlled group was 2.44. It is found that the students' competence in intelligible pronunciation of the experimental group and the controlled group was not only low but also almost same before giving the treatment. After that the researcher conducted eight classes for giving the treatment to both the groups but in different way, the researcher gave post-test to both the experimental and the controlled group. The score of the experimental group and controlled group in post-test is respectively 8.2 and 2.6.

Based on the table above, the researcher computed the students' mean score of the deviation of the pre-test and the post-test of the experimental group using the formula as follows:

$$MX = \frac{\Sigma x}{N} = \frac{140}{5} = 28$$

The mean score of the deviation of pre-test and post-test of the experimental group is 28.

Based on the table above, the researcher computed the mean score of the deviation of the pre-test and post-test of controlled group as follows:

$$My = \frac{\Sigma y}{N} = \frac{08}{5} = 1.6$$

The mean score of the deviation of pre-test and post-test of the controlled group is 1.6.

The sum of square deviation is calculated as follows:

1. The sum of square deviation of the experimental group

$$(\Sigma x)^2$$
$$(140)^2$$

$$\Sigma x^2 = \Sigma x^2 - \frac{(\Sigma x)^2}{N} = 4152 - \frac{4152}{5}$$

$$4152 - 3920 = 232$$

2. The sum of square deviation of the controlled group

$$\Sigma y^2 = \Sigma y^2 - \frac{(\Sigma y)^2}{N} = 32 - \frac{(8)^2}{5}$$

$$32 - 12.8 = 19.2$$

To find out the difference between the experimental group and controlled group, the researcher used t-counted formula by Arikunto (2006, as in Muzna et al., 2015) as follows:

$$t = \frac{MX - MY}{\sqrt{\left[\frac{\Sigma x^2 - \Sigma y^2}{n_x + n_y - 2} \right] \left[\frac{1}{5} + \frac{1}{5} \right]}}$$

$$t = \frac{28 - 1.6}{\sqrt{\left[\frac{232 - 19.2}{5 + 5 - 2} \right] \left[\frac{1}{5} + \frac{1}{5} \right]}}$$

$$t = \frac{26.4}{\sqrt{\left[\frac{212.8}{8} \right] \left[\frac{2}{5} \right]}}$$

$$t = \frac{26.4}{\sqrt{[26.6] [0.4]}}$$

$$t = \frac{26.4}{\sqrt{10.64}}$$

$$t = \frac{26.4}{3.26}$$

$$t = 8.09$$

The t-counted of this research is 8.09.

In order to know that the hypothesis is accepted or rejected, the researcher used t-counted formula. If the t-counted is higher than t-table, it means that the hypothesis of the research is accepted, while if the t-counted is lower than the t-table, it means the hypothesis of the research is rejected. Based on the research, the researcher found that the t-counted 8.09 is higher than the t-table 1.6 by applying the degree of freedom (DF) = N-1 = 5-1 = 4 with the level of significant 0.05. In conclusion, the hypothesis of the research that the application of Audio-Articulation Method can play a vital role in defossilizing the problem causing sounds in English pronunciation of Bangladeshi adult learners of English is accepted.

The result reveals that the experimental group totally pronounced 65 sounds correctly in the pre-test; PVI-11, PVII-19, PIX-15, PXI-11 and PXII-09 out of 295 sounds. It means PVI made fossilized errors of 48 sounds; PVII fossilized 40 sounds, PIX, 44 sounds, PXI, 48 sounds and PXII, 50 sounds. In the pre-test, the percentage of the correct sounds (not fossilized) of the members of experimental group is respectively, 18.64%, 32.20%, 25.42%, 18.64% and 15.25%. After exposure to the AAM, the number and percentage of correct sounds (not fossilized) has greatly been improved. In the post-test, it is found that the experimental group totally pronounced 205 sounds correctly (not fossilized); PVI-37, PVII-51, PIX-51, PXI-27 and PXII-39 out of 295 sounds. The percentage of correct sounds in the post-test is respectively, 62.71%, 86.44%, 86.44%, 45.76% and 66.10%. The percentage of their improvement is respectively, PVI-44.07%, PVII-54.24%, PIX- 61.02%, PXI- 27.12% and PXII-50.85%. It is mentionable that the highest percentage of improvement is found in case

of PIX and that is 61.02% and the lowest percentage is found in case of PXI and that is 27.12%. Though there is variation in case of improvement, all the participants have improved after the treatment given through Audio-Articulation Method. Thus, it proves that AAM is efficient in defossilizing the problem causing sounds in the learners. Table 4.5 shows the percentage of improvement.

Table 4.5 Percentage of improvement (experimental group)

No	Participants	Pre-test (NF)	Post-test (NF)	Percentage of improvement
1	P VI	18.64%	62.71%	44.07%
2	P VII	32.20%	86.44%	54.24%
3	P IX	25.42%	86.44%	61.02%
4	P XI	18.64%	45.76%	27.12%
5	P XII	15.25%	66.10%	50.85%

Note: NF= Not fossilized.

On the other hand, the controlled group totally produced 61 sounds correctly in the pre-test; PXIV-18, PXV-11, PXVI-12, PXVII-07 and PXVIII-13 out of 295 sounds. It means that PXIV fossilized 41 sounds, PXV fossilized 48 sounds, PXVI fossilized 47 sounds, PXVII, 52 sounds and PXVIII, 46 sounds. In the pre-test, the percentage of the correct sounds (not fossilized) of the members of controlled group is respectively, 30.50%, 18.64%, 20.23%, 11.86% and 22.03%. After giving treatment through traditional method (grammar translation), the members of controlled group totally pronounced 65 sounds correctly and it is found that only the participants XV and XVIII have improved a little bit and participant XVI has remained the same. In case of controlled group, it is mentionable that the percentage of XIV and XVII has been decreased. The percentage of correct sounds of controlled group in the post-test is respectively, 28.81%, 25.42%, 20.33%, 06.77% and 28.81%. The percentage of improvement is respectively, -1.69%, 6.78%, 00%, -5.09% and 6.8%. It is seen from the chart that two participants have minus, one participant has zero improvement and another two participants have a little improvement. Table 4.6 shows Percentage of improvement (controlled group).

Table 4.6 Percentage of improvement (controlled group)

No	Participants	Pre-test (NF)	Post-test (NF)	Percentage of improvement
1	P XIV	30.50%	28.81%	-1.69%
2	P XV	18.64%	25.42%	6.78%
3	P XVI	20.33%	20.33%	00%
4	P XVII	11.86%	6.77%	-5.09%
5	P XVIII	22.03%	28.81%	6.78%

Note: NF= Not fossilized.

4.4.2 Position of Target Sounds in the Words

A noticeable change has been occurred in the participants of experimental group. From the analysis it is seen that their improvement varies in case of the position of the sounds in the words. In case of pronouncing /u/ sound, all the participants have developed much more than that of other sounds in the data set. As there is no initial /u/ sound in this study, the change has been documented in case of middle and final position. The post-test result of middle and final /u/ sound shows that the participants have developed their pronunciation from pre-test to post-test significantly. Participant VI produced 1 middle and 2 final /u/ sound correctly in the pre-test but she developed in pronouncing the /u/ sound after the treatment and the development is seen in the post-test where she pronounced 4 middle /u/ and 5 final /u/ sounds correctly. Participant VII pronounced 1 middle /u/ and 4 final /u/ sounds correctly in the pre-test but she pronounced 8 middle /u/ and 6 final /u/ sounds correctly in the post-test.

Participant IX though pronounced only 1 middle and 1 final /u/ sound correctly in the pre-test, after treatment, her pronunciation developed to 10 middle and 4 final /u/ sounds. It is mentionable that participant XI produced only 1 final sound correctly but after treatment; he corrected 4 middle and 4 final /u/ sounds in post-test. It is also mentionable that the participant XII did not produce any correct sound in the pre-test but after taking treatment through AAM; she corrected 5 middle and 6 final /u/ sounds in the post-test.

In case of /ei/ sound, though the participant VI produced only 1 corrected /ei/ sound in the pre-test, she corrected 4 middle /ei/ sounds and 1 final /ei/ in post-test. In case of /ei/ sound, participant VII and IX have developed much more than other three participants in experimental group. Though PVII produced 1 middle sound and 1 final /ei/ sound correctly in the pre-test, she produced 1 initial /ei/, 11 middle /ei/ and 1 final /ei/ sound correctly in the post-test. PIX did not correct any /u/ sound in the pre-test but she made the same improvement like PVII. On the other hand, participant XI and XII did not correct any /ei/ sound in the pre-test but they corrected 2 middle /ei/ sounds and 4 middle /ei/ sounds in the post-test respectively.

In this study, there is no initial or final position of /z/ sound in the words. All the sounds are in middle position and their improvement is also noticeable. Though participant VI, VII, IX and XII have developed much from pre-test to post-test respectively from 5 to 9, 7 to 10, 9 to 10 and 4 to 10, participant XI remained the same both in the pre-test and post-test. As initial and middle /z/ sound is absent in this study, improvement has been considered in case of only final /z/ sound. All the participants (PVI, PVII, PIX, PXI, PXII) have developed from pre-test to post-test respectively 2 to 7, 4 to 7, 4 to 7, 4 to 5 and 4 to 8. Middle and final /g/sound is also absent in this study and so all /g/sounds are in initial position. Though the participants VI, IX and XI did not produce any correct /g/sound in the pre-test, they corrected /g/ sound in the post-test much. PVI produced 7 initial /g/sounds, PIX, 7 and PXI, 6 /g/ sounds correctly in the post-test. Participant VII and XII produced only 1 initial /g/ sound correctly in the pre-test but they produced 7 initial /g/sounds and 6 initial /g/ sounds correctly in the post-test. Table 4.7 clearly shows the improvement in different position of target sound in the words.

Table 4.7 Improvement according to different positions of the target sounds in the words: Experimental group: Improvement from pre-test to post-test.

PVI						PVII						PIX						PXI						PXII					
Pre-test			Post-test			Pre-test			Post-test			Pre-test			Post-test			Pre-test			Post-test			Pre-test			Post-test		
/u-u:/																													
I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F
	1	2		4	5		1	4		8	6		1	1		1	0	4		1		4	4					5	6
/e-ei/																													
	1			4	1		1	1	1		1	1			1	1					2							4	
/ʃ-ʒ/																													
	5			9			7			1			9			1	0		6		6			4				1	0
/s-z/																													
		2			7			4			7			4			7			4			5			4			8
/gh- g/																													
				7			1			7						7				6				1			6		

Note: I=initial, M=medial, F=final.

In this study, there is also controlled group and they were given treatment through traditional method. It is found that there is a little bit development in some participants and no development in some participants following traditional method in teaching pronunciation to the students of this group. The improvement also varies according to the position of the sound in the words. Participant XIV produced 1 middle /u/ sound and 3 final /u/ sounds correctly in pre-test and there is little development in him. That means he produced 2 middle and 4 final /u/ sounds correctly in post test. PXV produced 2 final /u/ sounds correctly in pre-test but unfortunately he did not develop in post-test rather she demoted. She produced 1 middle sound in post-test. The same case has also occurred to PXVI. He produced 1

middle /u/ sound and 2 final /u/ sounds in pre-test but in post-test he corrected only 1 middle /u/ sound.

Participant XVII did not produce any correct sound in both the pre-test and post-test. Participant XVIII produced 3 middle /u/ sounds and 2 final /u/ sounds correctly in pre-test but he produced 1 middle and 2 final /u/ sounds correctly in post-test. Though there is a little bit improvement in the participants in case of /u/ sound, all the participants have fossilized in case of /ei/ sound in both pre-test and post-test except participant XIV as he corrected 2 middle /ei/ sounds in pre-test. So no improvement occurred. In case of /z/ sound, though the participant XV and XVI developed a little, Participant XIV and XVIII remained the same and participant XVII has been demoted as he produced 3 middle /z/ sounds correctly in pre-test but produced 2 middle /z/ sounds correctly in post-test.

Improvement is also seen in producing /z/ sound by the participants XV and XVI but no improvement was occurred in participants XIV and XVIII and participant XVII has fossilized in both pre-test and post-test. In Bangladesh /gh/ sound is pronounced as aspirated /g/ by most of the learners and teachers let alone general people but the correct pronunciation is unaspirated /g/. Participant XIV produced 6 initial /g/ sounds correctly in pre-test but unfortunately, he produced 4 initial /g/ sounds correctly in post-test, he wrongly pronounced 2 sounds. So no development is found rather demoted. The participant XV, though, did not produce any sound correctly in pre-test; she produced 2 initial /g/ sounds correctly in post-test. Participant XVI remained the same in both the test. Participant XVII has demoted from 4 to 2 (pre-test to post-test). Participant XVIII fossilized /g/ sound in all the position in pre-test but he developed remarkably and produced 6 initial /g/ sounds correctly in post-test. Table 4.8 clearly shows the improvement in different position of target sound in the words.

Table 4.8 Improvement according to different positions of the target sounds in the words: Controlled group: Improvement from pre-test to post-test

PXIV			PXV			PXVI			PXVII			PXVIII		
Pre-test		Post-test	Pre-test		Post-test	Pre-test		Post-test	Pre-test		Post-test	Pre-test		Post-test
/u-u:/														
I	M	F	I	M	F	I	M	F	I	M	F	I	M	F
	1	3		2	4		2	1		1	2		1	
/e-ei/														
	2													
/ʃ-z/														
	5		5		5		6		6		7		3	
/s-z/														
		3		2		3		7		1		2		
/gh-g/														
6		4				2		2		2		4		2

From the study, it is found that most of the tertiary level students in Bangladesh make errors in case of pronouncing some English sounds, specifically, the distinct vowel and consonant sounds recorded in this study. It was because; emphasis on correct or intelligible pronunciation is not given by the teacher in primary and secondary level in Bangladesh. The teachers mainly focus on the syllabus and there is no listening, speaking or pronunciation course in the syllabus in these levels. Even very few universities and colleges in Bangladesh run courses on listening, speaking and pronunciation. The pre-test result of the students shows that most of the students mispronounced the words having target sounds in the test. It indicates that almost all the students could not pronounce intelligible English sounds.

The researcher had eight classes conducted by the English teacher in two months to give the participants treatment on correct pronunciation. In each class, the objectives of the lesson are explained to the participants by the teacher. The teacher explained to them about the Audio-Articulation Method and the distinct sounds that are frequently fossilized. The teacher who conducted the classes applied AAM for practicing /ei/, /u:/, /z/, /3/ and /g/ sound through different kinds of drills directed by the researcher. The students were asked to consider the words that contained those sounds and practice them. The researcher found that most of the participants improved in intelligible pronunciation even though several students in control group still cannot pronounce the words on their own. Some students could pronounce the words if the teacher asked the students to pronounce with him together or pronounce with the help of their partner.

Moreover, the post-test was given after the treatment and the percentage of correct sounds in the post-test of experimental group is higher than the percentage of correct sounds in the post-test of the control group. The mean score of the experimental group increases from 13 to 41. The t-counted result (8.09) is higher than the t-table (1.6). From these findings, the researcher ensures that Audio-Articulation Method can improve the students' intelligible pronunciation from their fossilized errors.

Referring to the findings of this study, the researcher relates them to the previous studies conducted by Hismanoglu (2009), Lei et al. (2018), (Isarankura, 2015) and (Kayaoglu & Caylak, 2013). Hismanoglu (2009) conducted a study on the inter-dental consonant phonemes like /θ/ and /Δ/ which have always created pronunciation problems for Turkish learners of English and these two sounds are non-existent as phonemes or sounds in the sound system of the Turkish language. The aim of the study was to rehabilitate the pronunciation mistakes caused by [θ] and [Δ] sounds of English to Turkish learners of English by making use of a pronunciation teaching method called the Audio-Articulation Method developed by Demirezen (2004) as a fossilized pronunciation mistake breaker. The result of the study indicated that the Audio-Articulation Method helps Turkish students of English overcome their inter dentalization problem in the target language. The results of the study show a statistically significant difference in the students' pre-test and post-test scores. Similar

significant results were also observed in the pre-test and post-test scores in the current study, indicating a positive effect from the Audio-Articulation Method. Yet, interestingly, nearly all students were observed to return to the same pronunciation habits of the distinct sounds in routine classroom instruction after exposure of the Audio-Articulation Method. Thus, it can simultaneously be concluded with Chen (2009) that it is generally believed that learners with strong motivation, ample exposure to rich second language (L2) input, and plentiful opportunities for output will likely help the learners to defossilize sounds in SLA.

4.5 TEACHER'S AND STUDENTS' OPINION ON USING AAM

The fourth objective of this study is to discover teacher's and students' opinion on the use of Audio-Articulation Method (Demirezen, 2003, 2004) in teaching and learning English pronunciation in the classroom. This section highlights on the English teacher's and students' perception who are involved in teaching and learning activities and how they think and feel in case of using AAM in teaching/learning intelligible pronunciation in the class. To prove the teacher's and students' opinion, this section discusses on the points; updated and interesting, implementing AAM, students' attitude, defossilization is possible, implemented in curriculum design, drilling in teaching, self consciousness and correction which are emerged from the data set collected from participants' responses. Table 4.9 presents theme from coding through categories.

Table 4.9 Theme from coding through categories

Theme	Categories	Key idea
Updated and interesting	Easy and congenial	T-It is a very significant method of English pronunciation. S-It's quite interesting and beneficial. S- I am interested in AAM
Implementing AAM	Facilitates the learners	T-This will give a lot of facilities to the students S-we have been much benefited through this course.

		S-we can identify our mistakes as well S-We can improve our pronunciation through AAM
Students' attitude	Motivated and engaged	T-The students were enthusiastic, vigorous, interested, inclined and participating, S-It is very helpful for our academic pleasure
Defossilization is possible	AAM is a problem curing technique	T-They had a great improvement, especially in the aspect of phonological fossilization S-The wrong sounds I had, are not being produced S-We say /e/ instead of /ei/. It can be improved through AAM.
Curriculum design	Included AAM in curriculum	T-If, included in syllabus, the students will be compelled to follow/do so. S- If this method comes to our country, students will do better. S-I think it's a very good idea.

4.5.1 Updated and Interesting

In Bangladesh, traditionally, language teachers use the phonetic alphabet, and activities, such as transcription practice, diagnostic passages, detailed description of the articulatory systems, recognition/discrimination tasks (Hismanoglu & Hismanoglu, 2010) but developmental approximation drills, focused production tasks (e.g., minimal pair drills, contextualized sentence practice, reading of short passages or dialogues, reading aloud/recitation), tongue twisters, and games (e.g., Pronunciation Bingo) and other trendy methods are listening and imitating, visual aids, practice of vowel shifts and stress shifts related by affixation, and recordings of learner's production are not given emphasis in Bangladeshi EFL classroom. That is why; students' pronunciation in English is not being developed. New techniques should be introduced to supplement the learning of English pronunciation. New trend in teaching and learning English pronunciation has come into force when Demirezen propounded Audio-Articulation Method in 2003, 2004 as a remedial of problem causing sounds.

The participants of this study assure that AAM is a fantastic and modern system and it is a very much congenial system for the students as there is drillings like repetition, correction and language game. In fact, both the teachers and students in Bangladesh long for such kind of method for a long time as they think the previous methods for teaching and learning pronunciation are less effective and less motivated. Even they feel boring in case of learning pronunciation in the class through the previous method. The students enthusiastically participated in the class when they were taught intelligible pronunciation through AAM in the classroom. They considered that it is an easy and effective method as there is fun and entertainment in course of teaching and learning through this method. They feel much interest to learn pronunciation as they think that this method is beneficial and helpful for them to defossilize the errors in their pronunciation and to produce intelligible English sounds. Thus both the teachers and students participated in teaching/ learning activities in the class through this method in a relaxed and jocund mood. Extract 15 is the vivid example of their relaxed and jocund mood which is source enough to establish the positive effect of using AAM in the classroom.

Extract 15: Updated and Interesting

***PD** It's a very fantastic system and the modern system. It's a very much congenial system for the students of the department of English in Bangladesh and I do believe that not only in Bangladesh, in the countries those English is learnt as the second language. So it is a very significant method of English pronunciation.*

***PVI** Yes, I do, it's quite interesting and it's beneficial.*

***PIX** Yes, sure, It is a new method which I got to know and it is very helpful for our academic pleasure, sir.*

***PXII** I am interested in Audio Articulation Method*

4.5.2 Implementing AAM in Bangladesh

This study focuses on implementation of Audio-Articulation Method in teaching/learning English pronunciation in Bangladeshi EFL classroom and to defossilize the fossilized Bengali sounds in English Pronunciation of Bangladeshi adult learners of English. The instructional materials, the teacher's and student's performance are essential to implement a new technique or method in the classroom as both of them are role player in the class (Rizqi, 2018). Audio-Articulation Method is conducive to teach Bangladeshi learners English pronunciation and to defossilize the problem causing sounds in their English speech. The three stages, the warm up, main activities and closing are the teaching and learning processes in AAM. It introduces all these three stages to teach the students without boring them. The students really enjoy the learning process with this new method in the classroom. Even the students are more excited to correct the errors in their pronunciation by this new method. Moreover, the students follow the practice on operating the Audio-Articulation Method and they also look active and enthusiastic when the teaching/learning activities go on.

The participants also responded that the tertiary level students should produce accurate sounds and in this case, AAM can play a vital role. Through learning this method they will be able to understand the speech of other speakers and will be able to communicate successfully with the people of other countries. Participant VI said that if this method is introduced in Bangladesh, not only we but also the learners and general people who have problem in English pronunciation will be much benefited. Participant IX stated that AAM helps the learners to diagnose their mistakes in pronunciation. To diagnose the disease or problem in anybody is essential before giving the treatment. According to him, as AAM highlights the errors in pronunciation first, it becomes easy for the learners to focus on the specific sounds and then correct them. So AAM can be used in the classroom. Participant XII also praised of using AAM and she is agreed to implement it in teaching/learning activities in Bangladeshi EFL classroom. Extract 16 is the supporting idea from the data for implementing AAM in the classroom.

Extract 16: Implementing AAM in Bangladesh

PD Yes, it must be used in tertiary level of English department. A student should have a very fantastic and nice and very accurate pronunciation and this will give the students a lot of facilities to understand the people of the other countries.

PVI

আমাদের এই কোর্সটার মাধ্যমে আমরা যেহেতু অনেক উপকৃত হয়েছি, সেক্ষেত্রে আমি আশা করছি এটা যদি ইমপ্লিমেন্ট করা হয়, বা এই Method টা যদি আমাদের দেশে আসে তাহলে আমরা অনেক, আমরা ছাড়াও আরও যারা আছে, যাদের problem আছে pronunciation এ তাদের অনেক ভাল হবে, তারা better করবে।
We have been much benefited through this course, I hope if it is implemented or if this method comes to our country, not only we but also those who have problem in pronunciation will be much benefited, they will do better.

PIX

Yes, it's actually needed and it can help with our pronunciation and also we can identify our mistakes as well through this process.

PXII

Audio Articulation's Method এর মাধ্যমে আমরা আমাদের pronunciation কে improve করতে পারব। আমরাঠিকভাবে উচ্চারণটা করতে পারব। আমি একমত Audio-Articulation's Method এর সম্পর্কে।
We can improve our pronunciation through Audio-Articulation Method. We will be able to pronounce correctly. I am agreed about Audio-Articulation Method

4.5.3 Students' Attitude

Attitude towards learning is an important factor on the learners' levels of goal setting, problem solving abilities, their beliefs towards learning, their inner and external motivations in the process of learning and all the academic performances they perform. The attitude of tertiary level students towards learning are evaluated from the points of four sub-dimensions (the nature of learning, anxiety, expectation, and openness), their gender and academic achievements (Sen, 2013). Student engagement is the level of effort, interest and attention that students invest in the learning process (Klem & Connell, 2004). However, meaningful engagement is deeper than simple participation and involvement (Mebert, 2020). The participants of this study engaged in the class very attentively and interestingly. Their attitude and engagement is proved when the teacher was asked how he found the students in his class and he responded

that he found a lot of enthusiasm, vigorousness and eagerness in them. At the same way, when the students are asked about AAM, their interest and motivated attitude have been ensured through their responses; PVI said that it's quite interesting and it's beneficial, PIX said, it is a new method which I got to know and it is very helpful for our academic pleasure and PXII said, I am interested in Audio- Articulation Method. Getting pleasure in case of learning anything is a pivotal point for fruitful teaching/learning activities in the classroom. Participating in the class with AAM, the students are not only pleased but also interested, motivated and enthusiastic. All these statements proved their positive attitude to use Audio-Articulation Method in the classroom. Their attitude can be presented in the figure 4.4.

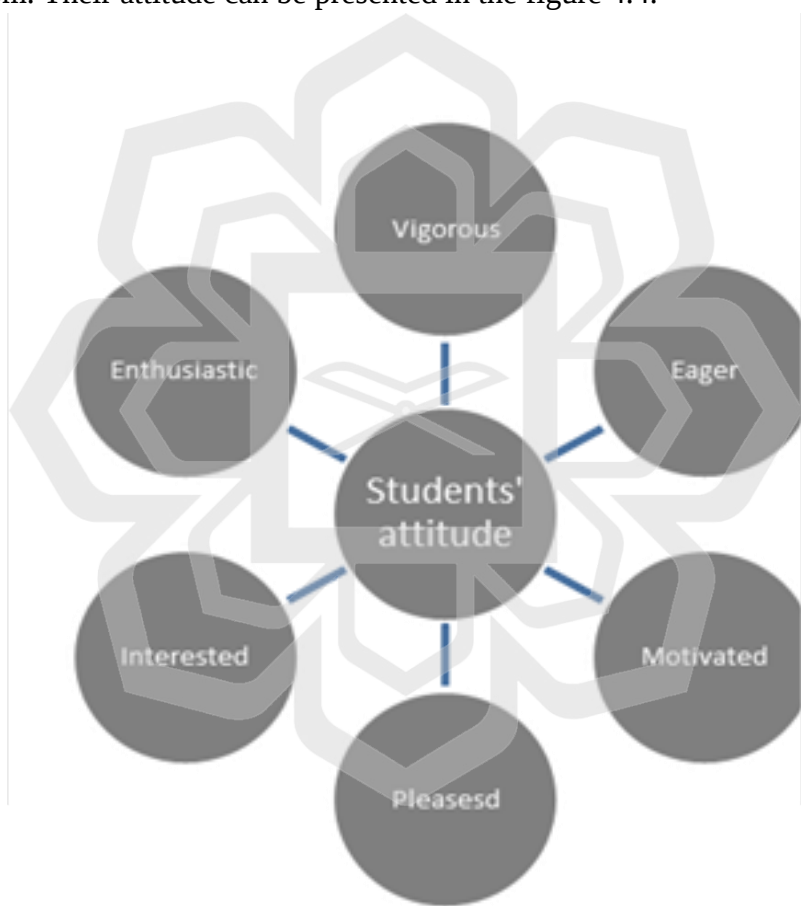


Figure 4.4 Students' attitude

Extract 17 also shows the students' attitude which was collected from the participants and it is the strong evidence of their support to AAM.

Extract 17 Shows the Students' Attitude.

PD *I find a lot of enthusiasm and vigorousness and eagerness of the students because, they got a new technique at this stage and they were very much interested to learn English, to pronounce the English words in a proper way. They were really participating, they were engaging and also motivated.*

PVI *Yes, I do, it's quite interesting and it's beneficial.*

PIX *Yes, sure, It is a new method which I got to know and it is very helpful for our academic pleasure, sir.*

PXII *জিস্যার/Yes, sir. I am interested in Audio-Articulation Method.*

4.5.4 Defossilization is Possible

Defossilization, though some people, even some researchers like Fromkin et al. (2003, as in Valdes & Pantoja, 2015) who stated that fossilized pronunciation errors are undoable and defossilization is impossible, it is no longer undoable and impossible. Hismanoglu (2009), Lei et al. (2018), Isarankura (2015) and Kayaoglu and Caylak (2013) have proved in their study that defossilization of fossilized sounds in English pronunciation is possible through using Audio-Articulation Method in the classroom. Demirezen's (2003, 2004) Audio-Articulation Method is the technique that can be used to defossilize the problem causing sounds in English pronunciation. Exact teaching method and proper guideline in the class are essential for defossilization. Sahatsathatsana (2017) suggested that some elements of learning are a matter of awareness of the different sounds. AAM has greatly emphasized on making the learners aware of their errors. Additionally, learners' pronunciation ability can be improved by making a greater effort and concentrating on particular sounds.

Positive feedback of using AAM in Bangladeshi EFL classroom has also come from both the teacher and students. They ensured that AAM can play a vital role in improving phonological fossilization among the Bangladeshi adult speakers of English though Yasmin (2022) stated that pronunciation has become one of the most

challenging areas in the context of English language teaching and learning, and it is often found that learners' proficiency in pronunciation has not been properly achieved in spite of the introduction of pronunciation courses at tertiary level education in Bangladesh. Yasmin's statement has been proved wrong through the use of AAM in Bangladeshi EFL classroom. The third objective of this research is to test the efficiency of AAM in Bangladeshi EFL classroom. Quasi experimental pre-test and post-test design was employed to test the efficiency. It was found that the post-test score was higher than that of pre-test of experimental group who were taught by using AAM in the class. So, it is strongly recommended that defossilization of problem causing sounds in English pronunciation of Bangladeshi adult learners can be accomplished by using Audio-Articulation Method in the classroom. Extract 18 is the evidence from the data.

Extract 18: Defossilization is Possible

PD Yes, yes, very significant and very vivid improvement, I have observed in the students. About this fossilization, students had no idea at the very opening stage but after participating with this method, they became very much interested to do, took part in the classes.

PXII

আগেএমনএকটীtimeছিলযেtimeটাতেষখনEnglishএআমিকোনকিছু করছিবাকোনকিছুবলছিতখনআমারঅনেক, একটা,a kind of sound হতবাএকটাproblemছিল।এখনএইকোর্সটাকরারপরথেকেআমারযখনআমি English একথাবলছিবাকোথাওকোনতথ্যদিচ্ছিঁতখনআমারএই sound গুলোআরহচ্ছেনা। So, আমিবলতেপারিএইকোর্সটাআমারজন্যbeneficial ছিলবাআমিউপকৃতহয়েছিএইক্ষেত্রে। Before, there was a time, I had a problem, I created a kind of sound when I pronounced a word in English or said anything. Now after doing this course, when I am speaking in English or giving any information to anyone, those sounds are not being produced. So, I can say, this course was beneficial to me or I have been benefited, in this case.	pronunciation kind of English So,
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IX Yes, sure. Actually in our country, in Bangladesh we have some fossilized pronunciation. While people use that in school as well as school and colleges and they think that that's the correct one but it's not. If we listen to the native speakers' speaking, we can understand that the pronunciation, we are doing is a fossilized one. We can say that we say /e/ but it will be /ei/. So this is needed and using Audio-Articulation Method, I think, it can be improved.

XII

Audio-Articulation method এর মাধ্যমে আমরা class এ যদি practice করিতাহলে আমাদের pronunciation টা দিন দিন উন্নতি করবে, আমরা উচ্চারণ টা ঠিকঠাক করতে পারব। So আমি একমত Audio-Articulation method মানে classroom এ Audio-Articulation method টা practice করার ক্ষেত্রে।

If we practice through Audio-Articulation method in the class, our pronunciation will be developed day by day. We will be able to pronounce perfectly. So, I am agreed to practice through Audio-Articulation method in the classroom.

4.5.5 Curriculum Design

Curriculum implementation includes the provision of organized assistance to staff (teachers) in order to ensure that the newly developed curriculum and the most powerful instructional strategies are actually delivered at the classroom level (Bediako, 2019). According to Rita & Igwebuike (2019), curriculum is a program which is made up of three components: program of studies, program of activities and program of guidance. In 1960, with the advent of Communicative Language Teaching Approach (CLTA) in Bangladesh, speaking and listening received the importance in the curriculum and in the syllabus, but practically these were observed neither in the classroom practices nor in the assessments. Most of the students are found to use the wrong pronunciation, and they are never corrected (Tahereen, 2015). Pronunciation has an indissoluble connection to communication through listening and speaking (Maniruzzaman, 2008). It is ignored in the syllabus and even in the classroom activities. That is why, students' English pronunciation in Bangladesh is very low standard.

The participants of this study (both teacher and students) vehemently recommended the inclusion of AAM in the English curriculum of Bangladesh. Participant D highly praised of this method and he stated that the students of Bangladesh mainly emphasized on their syllabus and curriculum and always think about their Exam result. According to him if this method is implemented in the curriculum, the students will be compelled to learn intelligible pronunciation thinking about their exam result. At the same way, it will be obligatory for the teachers to teach intelligible pronunciation avoiding fossilized errors in the class if this method is included in the syllabus and curriculum. Participant VI also supported the inclusion of

Audio-Articulation Method in the curriculum of Bangladesh. Extract 19 shows the necessity of curriculum design.

Extract 19 Shows the Necessity of Curriculum Design

PD. *Audio Articulation Method is a very much demandable method and this method must be implemented in our country, in the perspective of Bangladesh as a learner of tertiary level, So it must be included.- And if this system or method can be included in our syllabus, in our course, then the students will be more benefited, and they will be compelled to do so because if we cannot impose anything to the students, the students specially can not want to learn and that's why this system must be included in our curriculum activities.*

PVI *I hope if it is implemented or if this method comes to our country, not only we but also those who have problem in pronunciation will be much benefited, they will do better.*

PIX *I think it's a very good idea then because we are the students of English department, we actually needed to stand up with our career, also in our academic aspect, thank you.*

PXII *We can improve our pronunciation through Audio Articulation Method. We can pronounce correctly. I am agreed at Audio-ArticulationMethod.*

4.5.6 Drillings in Teaching

Drilling is a lingual procedure to introduce new language items to the students based on students repeating a model provided by the teacher. It is used after discussing the vocabulary, grammar points and sentence structures. Drills are usually practiced chorally (all students repeats) then individually.

Drills are used to:

- Highlight on accuracy rather than fluency.
- Develop students' pronunciation.
- Practice on difficult sounds and imitate intonation.

- Practice bunch of the language in a particular environment
- Memorize common language patterns.
- Practice on fossilized sounds

Drilling technique is the main focus of Audio-Articulation Method. Using different kinds of drills, the teacher can teach intelligible pronunciation in the classroom with entertainment without boring the students. Though Audio Lingual Method had drillings but in a limited way. In AAM there are a number of drillings propounded by Demirezen like repetition drill, substitution drill, question-answer drill, expansion drill, transformation drill. In repetition drill, the teacher pronounces the word or phrases and the students repeat it to improve pronunciation using the proper stress, intonation and rhythm where needed. For example, Teacher: I am eating a mango. Students: I am eating a mango. In chain drill, chain of conversation with question and answer related to the topic of discussion are practiced. The procedure to implement this technique is simple. Teacher greets students and asks questions to a particular student (student A), and then student A responds. After that, student A takes turn to ask another student sitting next to him. This activity will continuously work until the last turn of the last student. At the end, the last student directs greeting and asking questions back to the teacher. Chain drill gives students an opportunity to speak their idea individually (Lantu, 2017).

Another important drill is substitution drill. It is a classroom technique in which the learners are to repeat or imitate the teacher's modeling of a word, a structure or a sentence and then they change or substitute one or more key words and say the new structure. Substitution drills can be used to practice different structures or vocabulary items (JAVID, 2020). In this study, the drillings propounded by Demirezen have been used at the time of giving treatment to the experimental group through Audio-Articulation Method in the classroom. When the drills of AAM are practiced in teaching and learning intelligible pronunciation in Bangladeshi EFL classroom, both the teacher and students have been benefited. Participant D responded that the students can develop their ability and capability in producing intelligible English sounds through these drillings. Participant VI mentioned that the teachers

should always use English in the classroom so that the students can get the opportunity to listen to the English speech and their listening and speaking skill will be developed. They will get the chance to correct their English pronunciation. Participant IX proclaimed that the teacher can use audio visual aids to teach the students through fun and entertainment. They can use ABC or alphabet song and play language game in the class. AAM also highlights on alphabet song, poems and language game which can be used in the classroom practice for defossilizing the problem causing sounds in English pronunciation. Extract 20 is the opinion of the students and teacher in using different kinds of drills.

Extract 20 is the Opinion of the Students and Teacher on Drilling

PD Drilling system like, repetition, correction, language game and through these activities, the students can develop his ability and capability in pronunciation in English.

VI Ok, then every teacher should speak in English like সবারই উচিত যে always যেকোনো আমাদেৱনিছেহেতু as আমাৰা English deptment এৰই students সবসময় যদি আমাৰা English practice কৰি আমাৰা যদি কথাবলি English এ আমাদেৱত কথা আছে, যত, important lesson ছাড়াও সবসময় যদি আমাৰা normally English এই যদি বলি তাহলে think আমাদেৱ এই problem টা improve হয় যেমানে আৱশ্যত তোকু আমাৰা এই কোৰ্চটাকৰেছি অনেকখানি problem ইচলোগিয়েছে।

Ok, then every teacher should speak in English like, everybody should always speak in English, the classes they are conducting, as the students of English department, if we always practice English, if we speak in English, besides important lesson, the speech we have, if we normally always speak in English, I think, the problem will be improved. And as much as we do the course, our problem has already been solved to a great extent.

PIX The lesson can be improved through more creative learning. We can make games while doing the audio circulation. There are many kids playing songs ABCD or alphabet songs like that we can make this a little more interesting by adding some games or some creative works.

4.5.7 Self-consciousness and Correction

Self-consciousness means self-awareness that refers to a state of awareness which helps one to differentiate between right and wrong. Self awareness of the students is the pre-condition for learning intelligible pronunciation. According to Elliot (1995, as in Alam & Uddin, 2019), students who were more concerned about their

pronunciation had better pronunciation of English language. The aim and objective of AAM is to make the learners conscious about their mistake and help them to correct those mistakes by themselves. Participants of this study confirmed that before attending the class with AAM, they frequently made fossilized errors. After doing the course and learning through AAM, now they are more conscious about their mistakes and they themselves can identify their mistakes and correct them.

When the participant VI was confronted the question like “can you self-identify and correct your mistakes?” he responded that after taking treatment through AAM, now he remains conscious at the time of saying anything. Participant IX stated that AAM is a good one which teaches us to produce intelligible pronunciation that can be compared with the pronunciation of other speakers of intelligible English. Participant XII responded that before, we pronounced the sounds in different way but after doing this course, we can pronounce those sounds correctly. Thus, it is unequivocally said that AAM has made them conscious and this consciousness pave the way for intelligible pronunciation. Extract 21 is the example of participants’ self consciousness and correction.

Extract 21: Self-consciousness and Correction

PVI	Yes, of course, আমি এখন যখনই আমি কোন কিছু বলতে চাই বা বলি তখনই আমি aware থাকি বা আমি সচেতন ভাবেই বলি আমা র কথাগুলো word গুলো। Yes, of course, now when I want to say something or say anything then I remain aware or say consciously those speeches, those words. I, myself, do the correction and again can say.
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PIX Yes, certainly, it’s actually a good one because if we speak ourselves, we listen to and if we can listen to a speaker of intelligible sounds, we can easily make a comparison between us and we can see that if our pronunciation is a fossilized one which we are doing or we have the correct one.

PXII	জিস্যার। আগে যেটা আমরা অন্য ভাবে উচ্চারণ করত প্যারতাম এখন সেটা আমরা ঠিক ঠাক ভাবে উচ্চারণ করতে পারছি এটার মাধ্যমে, Yes, sir. Before, the word we pronounced in different way, now we are being able to pronounce them properly through this method.
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4.6 SUMMARY

This study attempts to explore the pronunciation issues like fossilized errors, unawareness, unintelligibility, L1 interference perceived by the Bangladeshi adult speakers of English, teachers challenges to defossilize the problem causing sounds, test the efficiency of Audio-Articulation Method and discover the teacher's and students' opinion in using AAM in Bangladeshi EFL classroom. The findings, this study detects the issues that cause problems for intelligible pronunciation and provoke phonological fossilization are the students low level of awareness on fossilized sounds, their unintelligible sounds in English pronunciation and influence of Bengali sound in their pronunciation and teachers' challenges to teach pronunciation to the learners who have phonological fossilization of Bengali sounds in their English speech.

In general, this study has explored the issues of phonological fossilization which hinders the learners from producing intelligible sounds in Bangladeshi EFL context. Specifically, this study attempts to test the efficiency of Audio-Articulation Method in correcting fossilized sounds in Bangladeshi EFL learners. The students were divided into two groups; a) experimental group and b) controlled group. The experimental group was given treatment through AAM and the controlled group was given treatment through traditional method. It is found that the experimental group has improved in their phonological fossilization much more than the controlled group. So, the Audio-Articulation Method had a positive effect in improving the learners' pronunciation of the English vowel /ei--->e/এ/, u:---> u/উ/, consonants like, z---> s/স/, ʒ---> ʃ/শ/, g---> g^h/ঘ/ sounds. Contrastive analysis reveals that the improvement in phonological fossilization among Bangladeshi students commonly occurred in the sounds /e/, /u/ and /ʃ/ that are in the middle position except / g^h/ and /s/ sounds as /g^h/ has only initial position and /s/ has only in final position. It is hoped that the AAM will greatly help to correct the fossilized errors among the students and enhance the pronunciation potentials of teachers and learners in Bangladesh.

The next section is going to discuss the findings in details to make them relevant to existing literature. The discussion highlights on the common pronunciation problems of the learners due to phonological fossilization of Bengali sounds and the

common problems of the English teachers in teaching pronunciation to defossilize the problem causing sounds in the classroom and the prospect of applying AAM in Bangladeshi EFL classroom. Next chapter also concludes the study.

4.7 DISCUSSION

The result is focused from the perspective of pronunciation issues, degree of English language failure, phonological fossilization, challenges of defossilization and implication of Audio-Articulation Method in the classroom to reduce phonological fossilization. This study connects the previous study by Tharpe (2010, as in Al-Zayed, 2017) who investigates the significant challenges for L2 that learners of each language including Arabic may encounter. AL-Dilaimy (2012 as in Al-Zayed, 2017) discusses some Phonetic and Phonological problems as reflected in the perception, identification and production of various English speech sounds. Children are able to reproduce a wide range of sounds. However, it seems that this ability is lost by becoming adults (cf. Harmer 2015, 280, as in Martin, 2019). This study finds that the adult Bengali speakers of English has such kind of problems in case of English pronunciation. As their speech organs have been habituated in their mother tongue sounds, it is difficult for them to pronounce English sounds.

Unintelligibility issue in English pronunciation is a common phenomenon of the Bangladeshi adult learners of English. Though there are many causes of unintelligibility issue in pronunciation, this study mainly concerns for the unintelligibility which occurs due to phonological fossilization of Bengali sounds in English speech of the learners. The unintelligibility in their English pronunciation is clearly felt when they come into contact with other speakers. This study finds that almost all the participants produce unintelligible sounds in their English speaking and create problem in their interaction. One of the reasons of their unintelligibility in English pronunciation is that they learn at first the orthography of English language and then, learn pronunciation as participant 'A' responses. So, it is better to learn English pronunciation in terms of phonemes rather than letters of the alphabet (Burleight and Skandera, 2005: 7 and Roach, 2009: 2, as in Muhammed, 2023). One thing is common among the participants and that is lack of vocabulary of English in

them. The participant said that many times, when they go to speak in English, the Bengali sounds automatically come in them and these sounds have been permanent or fossilized in them.

Next section reported the influence of Bengali sounds on English pronunciation of the Bengali speakers. L1 interference has been proved when Pi said that he thinks about the Bengali before making a sentence in English, what will be the Bengali sentence. For example, I eat rice. When they translate the English, they think unintentionally the Bengali words or sentences before translating. Thus their habits in mother tongue sounds prevent them to produce intelligible English sounds. PIII, PIV and PV also confirmed that the Bengali sounds have a strong influence on their English pronunciation which proves the phonological fossilization of Bengali sounds in their English speech. The phonological fossilization of Bengali sound in the Bengali speakers of English mainly occurs due to lack of awareness about phonological fossilization of both the teachers and students, lack of knowledge on phonological system of both the languages, lack of sufficient professional training of the teachers, lack of syllabus and curriculum on comprehensible pronunciation, lack of opportunity for interaction with speakers having intelligible sounds, improper classroom setting, lack of sufficient qualified teachers on pronunciation and lack of updated method for teaching pronunciation in Bangladesh.

Keysan (2020) in her study found that the young learners' awareness on phonological fossilization was low, they could not pronounce, read, and write English sounds, words, and sentences appropriately. Most of them used to pronounce and read English words as in their written forms. For instance, they pronounced and read the sounds /sh/, /ch/, or /th/ as in their written forms. Moreover, they wrote the words as they are pronounced. For instance, they wrote the word "sheep" as "şıip", "teacher" as "tiçır", or "cheese" as "çiiz". The same scenario of phonological unawareness is prevailing in the tertiary level students of Bangladesh. They pronounce /dɔgz/, /ful/, /telivɪʃn/, /mek/, /viʃn/ and /ghəust/ instead of /dɔgz/, /fu: l/, /telivɪzn/, /meik/, /vizn/, /gəust/ due to their unawareness on phoneme and grapheme of English language. They pronounce /s-শ/, /u-উ/, /ʃ-শ/, /e-এ/ and /gh-ঘ/ sounds instead of /z/, /u:/, /ʒ/, /ei/ and /g/ sounds due to the influence of Bengali sounds (mentioned with English sounds) in

their English pronunciation. Leow (1997, 2000 as in Schmidt's, 2010) found that those who exhibited a higher level of awareness (“understanding”) learned the most.

This study also finds that the environment of the learners where they were born and grown up is responsible for their unintelligibility in English pronunciation. Both formal and informal environment have the impact on the pronunciation of the learners. Culture and environment play a vital role in case of learning a particular language. Second language learning is an aspect of acculturation (the process by which a human being acquires the culture of a particular society from infancy, Merrian-Webster). According to Schumann (1986), the process of acculturation is influenced by the social and psychological factors. Schumann’s ‘cultural adaptation model’ is one of most common approaches which states that the learner’s mother language and cultural differences influence L2 learning. The degree of language development is determined by the acculturation level. First, the target language’s cultural adaptation can govern the quantity of exposure for learners; second, it represents the learner’s learning intent. According to Schumann, input that learners receive and learning objectives may completely determine second language acquisition. Functional theory (interaction theory) explains the language acquisition process by combining congenital and environmental elements (Adugna, 2022).

Generally, it is found that the role of L1 (Bengali) in the acquisition of L2 (English) depends on some similarities and differences between the two languages. If there are similarities between the sounds of Bengali language and English language, the learners face less problems in acquisition of English and fewer errors may occur in English language learning or acquisition. If there are no or little similarities of the structure of Bengali language and English language, the learners are faced with a lot of problems in English language acquisition and it is not easy for them to learn English language (Derakhshan & Karimi, 2015). But this study found that though the place and manner of articulation of the English and Bengali sounds are same, the Bengali speakers pronounce /ʃ/ instead of /ʒ/ and /s/ instead of /z/ and it has been fossilized in them. The other factors that cause interference on English pronunciation learning are background knowledge of the learners, proficiency of learners on English language and the word structures of both Bengali and English. This research shows that Bengali language has a negative or positive transfer on English language. Where

the structures of the two languages are different, generally, negative transfer happens, and where the structures of two languages are similar, the positive transfer happens and Bengali language facilitates the English language acquisition.

Environmental issue has been evident when PI and PIII said they do not get anyone to practice English in the society or community. As all the people in the society are Bengali speakers, they do not understand English speech. PIII said that he can't get any one to speak in English. Even he does not listen to English speech in his surroundings. As they are habituated in speaking Bengali, they express everything in Bengali to others in the society. PIV gave a very important information about environmental issue when he said that they were compelled to use Bengali in the institutions as the institutions are Bengali medium. PV said that they have been practicing Bengali since their childhood in Bangladesh. Thus both the environments; institutional environment and environment of the family and society play a vital role for intervening Bengali sounds in English pronunciation of the Bengali speakers.

Next, this study concerns about the challenges of English teachers to defossilize the problem causing Bengali sounds in English pronunciation of adult learners in Bangladesh. There are studies on challenges of teaching English pronunciation in Bangladeshi EFL classroom. The challenges, this study documented are established errors, lack of awareness, phonological fossilization, faulty syllabus, challenges to teach pronunciation, uninterested learners, pre-dominance of L1, inadequate infrastructure and environment.

The participants (teachers) in this study gave the potential information of the challenges for defossilization in English pronunciation. It is evident that children can learn a language faster and more easily than adults. In fact, after a certain period, around the puberty, learning a language fully is more difficult (cf. Yule 2010). Participant A stated that as the errors have been a habitual fact in the learners, it is difficult for them to change the habit. Participant B responded that as they have no opportunity to practice English speaking with others and as they are growing up with this adverse situation, it is really challenge for them to change the attitude. Participant C stated that the students are so disinterested and indifferent to pronunciation that some of them do not actually know what is correct pronunciation let alone

defossilization. According to him, lack of qualified teachers and good books on pronunciation and grammar, academic education system, syllabus and social phenomena are responsible for their errors in English pronunciation. For these reasons, the teachers face much challenge to defossilize the errors and to teach intelligible pronunciation. Another significant challenge for defossilization is that learning with fossilized errors has been going on generation after generation. That means the young learners obviously interact with the senior ones and influenced by their pronunciation and learn with those mistakes that the seniors already have.

As they are adult, they have already developed fossilization in pronunciation which prevents them from producing intelligible sounds and due to this fossilization, the learners cannot differentiate between right and wrong and so their learning process is interrupted. Besides, the students are not interested to improve their pronunciation as they are satisfied with what they have learned and sometimes they laugh and even criticize if anybody pronounces correct or intelligible sounds before them. As they are using Bengali from their childhood, they write the English sounds in Bengali alphabet and this grapheme of Bengali language influence on their correct pronunciation. The teachers also face challenges to defossilize in English pronunciation when they find that the infrastructure of the institutions is not suitable for teaching intelligible pronunciation and the teaching aids and materials are not sufficient and up to date. In these circumstances, they become confused which strategy or method will be appropriate for them to teach English pronunciation to the adult learners in Bangladesh. The challenges of defossilization in English pronunciation mentioned above are frequently faced by the English teachers in Bangladesh. The challenges of defossilization have been summarized in Figure 4.5. The Figure highlights the answers of the participants to interview question asked by the researcher. Figure 4.5 shows the problems for defossilization.

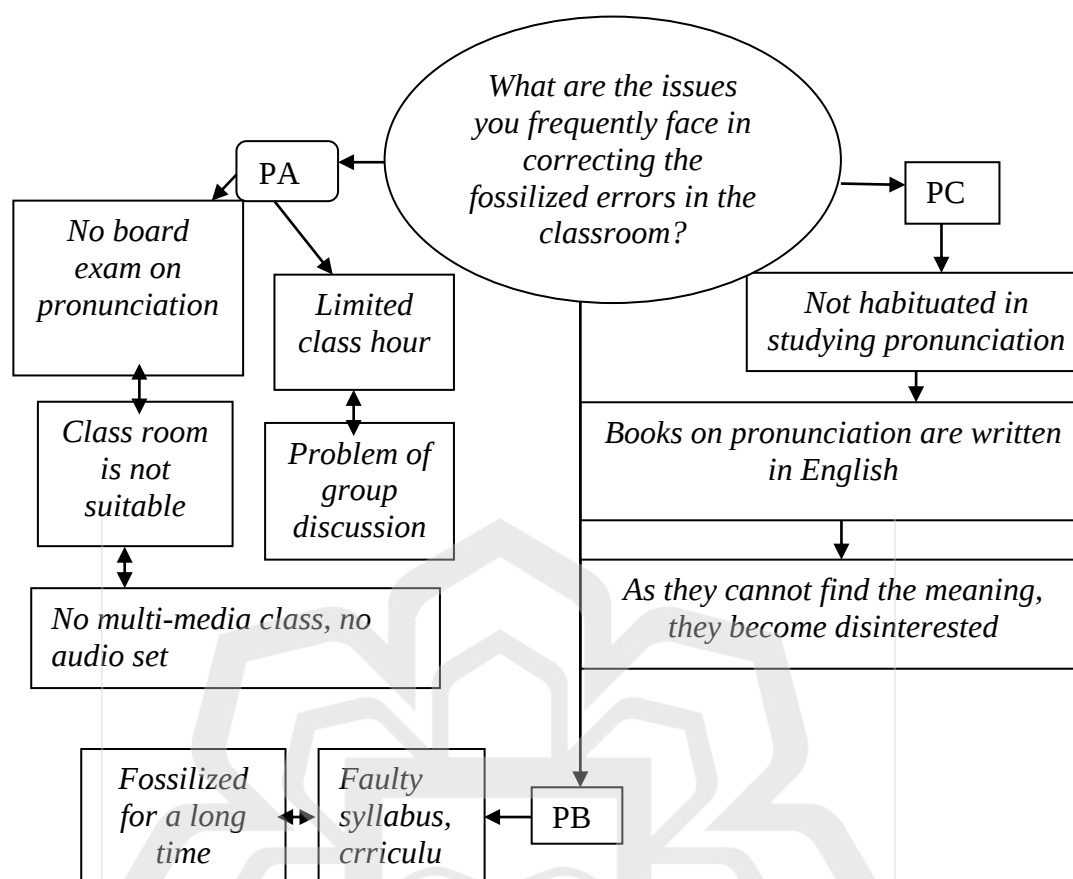


Figure 4.5 Problems for defossilization

After establishing the pronunciation issues and challenges for defossilization, this study endeavors to test the efficiency of Audio-Articulation Method to defossilize the problem causing sounds in English pronunciation in Bangladeshi EFL classroom and then, explore the teacher's and students' opinion in case of using AAM in the class. The current study links the previous studies which were conducted on the efficiency of AAM in ESL or EFL classroom. Most of the existing study on the use of AAM find the positive effect of it in teaching / learning intelligible sounds of English (i.e., Isarankura, 2015; Demirezen, 2005; Uddin, 2021; Imamesup, 2011; Sasmita, 2017; Hismanoglu, 2009; Smaoui & Rahal, 2015) and they saw the changes in the learners intelligibility level. Another assessment was employed by Chang (2006, as in Conway, 2016) who examined changes to the participants' self-ratings of their intelligibility as a result of instruction. The current study is built on these existing researches by adding an analysis of data on the use of AAM. Prator and Robinett

(1985, as in Levis & Barriuso, 2012) provide a diagnostic passage of 166 words that is designed to provide coverage of six areas related to stress and rhythm, seven related to intonation, four related to vowels, eight for consonants, and four for combinations of vowels and consonants (such as the pronunciation of allomorphs for the -s and -ed endings), as well as a section for general comments. The benefits of this kind of diagnostic reading passage are; it allows the diagnostic testing to be controlled, and multiple tokens of important vowel and consonant sounds to be included.

This study also provides diagnostic reading texts of 59 words having 59 sounds to sort out the fossilized and non-fossilized sounds. Statistical analysis shows that the experimental group that was given treatment through AAM has improved much more than the controlled group that was given treatment through traditional method. Thus, Audio-Articulation Method has a positive effect on the learners' development in producing intelligible English sounds. Thus the findings of the previous studies conducted on the efficiency of AAM and the findings of this study converge. The researcher concludes that the Audio-Articulation Method can be used in Bangladeshi EFL classroom to improve the pronunciation of distinct fossilized sounds in the learners' English speaking.

To improve the pronunciation of Bangladeshi adult learners of English, the teachers should apply the right and updated method and teaching learning activity which emphasize not only on the learners' textbook tasks but also on their practical pronunciation. The use of Audio-Articulation Method is one of the alternatives in teaching pronunciation, especially the discrete vowel and consonant sounds. Students need to train and practice their pronunciation by applying Audio-Articulation Method in the classroom. It emphasizes on learning through fun and entertainment. It makes the learners confident in expressing something in English. So, the application of AAM is one of the ways in teaching and learning intelligible pronunciation.

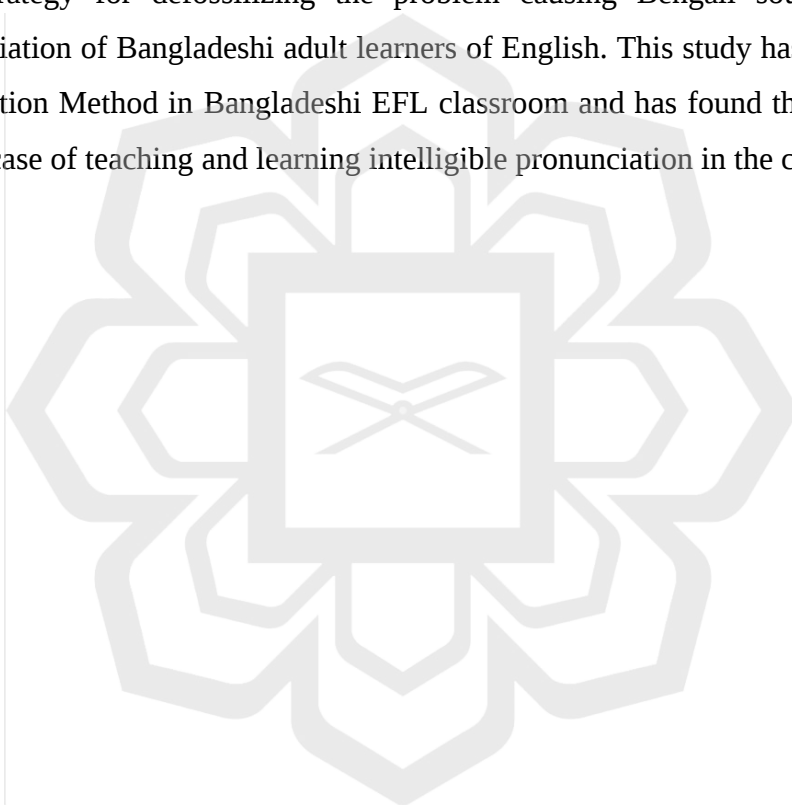
The fourth objective of this study is to know the teacher's and students' opinion on using Audio-Articulation Method in Bangladeshi EFL classroom. The participants (teacher and students) of this study speak high of applying AAM in the class as a pronunciation rehabilitation technique. Participant D who conducted the class to give treatment to experimental group using AAM stated that it is a modern,

updated, interesting and congenial system for teaching intelligible pronunciation in the classroom. He found the students engaged and motivated in the class as they longed for such kind of method for learning English pronunciation for a long time. He also found a lot of enthusiasm and vigorousness and eagerness in the students because, they got a new technique at this stage and they were very much interested to learn English, to pronounce the English words in a proper way. They were really participating and spontaneously took part in the teaching and learning session using AAM. Thus, it greatly facilitates the learners to defossilize the fossilized sounds in their pronunciation and to learn intelligible English sounds.

The participants also responded that the tertiary level students must produce intelligible sounds and in this case, AAM can play a vital role. Learning through this method they will be able to understand the English speech of the speakers and will be able to communicate successfully with the people of other countries. Participant VI said that if this method is introduced in Bangladesh, not only they but also the learners and the general people who have problem in English pronunciation will be much benefited in their daily life. Participant IX stated that AAM helps the learners to diagnose their mistakes in pronunciation. To diagnose the fault or wrong in anybody's speech is essential before giving the treatment. According to him, as AAM highlights the errors in pronunciation first, it becomes easy for the learners to focus on the specific sounds and then correct them. So AAM can be used in the classroom. Participant XII also praised of using AAM and she is agreed to implement it in teaching/learning activities in Bangladeshi EFL classroom. As AAM focuses on drillings in case of learning pronunciation, the students do not feel boring; rather they feel relaxed in learning English pronunciation in the class. Both teachers and students are so positive to AAM that they recommend this method to implicate in the syllabus and curriculum of Bangladesh.

Even in twenty first century, the issues of pronunciation specifically the issue of phonological fossilization is not a matter of concern for the teachers, students, teacher trainees, educators and researchers in Bangladesh while this issue is a major concern for the teachers and researchers in other countries of the world. Besides the researchers like Selinker (1972), Lakshmanan, Weinreich and Nemser at earlier period, a number of researchers and educators such as Zoran Vujisic in Rhodes

University, Kathleen Dolan in San Francisco, Demirezen in Turkey, Han, Wei in China, Hismanoglu in Turkey, Sinowarsito and Ardini in Indonesia, Brown, Smaoui & Rahal (2015) and many others have focused on fossilization or phonological fossilization in their study at present. The academicians of Bangladesh must take into account this crucial aspect of pronunciation, i.e., phonological fossilization in the learners and must take necessary measure to defossilize the problem causing sounds in their English pronunciation. This research will be helpful for them to defossilize the fossilized sounds in English pronunciation. Otherwise the comprehensibility level in learners' pronunciation will not be improved. Proper method or technique can be a right strategy for defossilizing the problem causing Bengali sounds in English pronunciation of Bangladeshi adult learners of English. This study has applied Audio-Articulation Method in Bangladeshi EFL classroom and has found the positive effect of it in case of teaching and learning intelligible pronunciation in the classroom.



CHAPTER FIVE

CONCLUSION

5.1 INTRODUCTION

This chapter is the final one which provides conclusion to the study. This chapter first focuses on the answers to research questions that the study has endeavored to find out. Next section gives information of the contributions of this research; specifically the implications of findings to the existing literature on pronunciation issues among Bangladeshi adult speakers of English and the teachers' challenges in defossilizing the problem causing sounds in English pronunciation and the efficiency of Audio-Articulation Method in Bangladeshi EFL classroom. Recommendations for future study are suggested next that also ends the thesis.

5.2 PRONUNCIATION ISSUES

Unintelligibility in English pronunciation of Bangladeshi adult learners occurs due to the pronunciation issues documented by this study. Establishment of first language sounds that lead to phonological fossilization in the learners is one of the most remarkable issues that hinder the learners from producing intelligible sounds. Awareness on fossilized errors is essential for correct sound production and perception by the second language learners specifically, when their first language is fossilized. The lack of awareness and lack of proper guidance are leading causes for the fossilization of erroneous forms (Premarathne, 2018). The unawareness of the participants has been confirmed when they say that the Bengali sounds automatically come in their English speaking. Native language interference is an important theme that is responsible for pronunciation problem and low level of awareness on fossilized sounds among the Bengali speakers of English. All the participants agreed that they have predominance of Bengali sounds in their English speaking. Participant I mentioned that when he goes to make an English sentence, he first think about its Bengali words and sentences and then translates it into English. Participant IV said,

Bengali word frequently comes in her English speech. In fact, influence of L1 is a common problem for every ESL or EFL learner. This study also documented lack of English-speaking environment, lack of motivation/instruction, non-standard and poor skill of the learners in English language. All the issues are responsible for the weakness in English pronunciation of the adult learners in Bangladesh.

Lack of English speaking environment is one of the themes that the study has highlighted in this section and it is responsible for the pronunciation issues and low level of awareness among the learners. The participants of this section have given important information about pronunciation issues in the learners. Participant II stated that the environment they live is not suitable for using intelligible sounds. He indicated that they certainly learn from the environment. But there is hardly anyone to understand intelligible English pronunciation in their society. Thus they have no scope to practice speaking English in their surroundings. Participant III responded that as they have permanent errors in English pronunciation that means they have phonological fossilization in their English speech, they cannot speak in intelligible English to others. Even they have no scope to listen to English speech.

Students' negligence and insincerity which this study documented as a category is also a crucial factor for pronunciation issue. If the students are not sincere and enthusiastic about learning intelligible pronunciation, their phonological errors will not be solved and they will not be able to produce intelligible sounds in their English pronunciation. Their lack of awareness and enthusiasm for learning intelligible English proves when the participant I responds that they pronounce /ee/ instead of /e/ and they are doing this years after years and thus fossilization occurs. Another important evidence for the lack of awareness and enthusiasm of the learners comes from the response of the participant III. He stated, when they speak in English, the Bengali sounds come in their speech automatically.

The next aspect is the lack of awareness and sincerity of the teachers which is also responsible for the pronunciation problems among the learners. In the simplest terms, people learn about the things that they pay attention to and do not learn much about the things they do not attend to (Schmidt's, 2010). Before trying to make the learners aware of pronunciation issues and phonological fossilization, the teachers

must be aware about it and the syllabus must be designed considering the problems in the learners' English speaking. This study has proved that the teachers are not conscious and sincere about the pronunciation issues and phonological fossilization in them let alone the students' awareness on this aspect. It is found from the data set that the teachers are not eager to teach pronunciation and correct the students' mistakes in their pronunciation class and it is proved when the participants (students) are asked whether the teachers correct their mistakes frequently or sometimes or not. Participants I and II respond that the teachers sometimes correct their mistakes and participant V responds that they do not do it. It proves that almost all the English teachers in Bangladesh are insincere and indifferent in teaching intelligible pronunciation in the class.

About their standard (British) pronunciation, when they are asked whether their pronunciation is standard or not, participant I answers that his pronunciation is not standard and participant II replies in the negative and also states that they specially need standard English pronunciation when they go abroad. In case of English pronunciation skill, Student III replies that as there is no one to speak in English and there is none from whom she can listen to English speech, her pronunciation skill is not good. These are the evidences enough to prove the pronunciation issues perceived by the Bangladeshi adult learners of English.

5.3 TEACHER'S CHALLENGES IN DEFOSSILIZING BENGALI SOUNDS

Next, the study has found the challenges of the teachers to defossilize the problem causing sounds in the English speaking of the learners. It is the second objective of this study which has been formulated from Tahereen's focuses on challenges (2015) in teaching English pronunciation to Bangladeshi adult learners of English. It is found from the analysis that the English teachers face the challenges to defossilize the fossilized Bengali sounds in the English speech of Bangladeshi adult learners of English due to the absence of pronunciation in the syllabus, establishment of Bengali sounds in the learners and the same problems for teaching pronunciation which have been recorded by Tahereen (2015) in Bangladeshi context.

Besides, the points that have been generated from the coding are unawareness on phonological fossilization, uninterested learners, pre-dominance of L1, inadequate infrastructure/environment, unsuitable classroom setting, poor basic knowledge, shyness of the learners, permanent errors habituated, no scope in the institution and family, unwilling to defossilize and local accent greatly help the researcher to find the challenges of the teachers in Bangladeshi EFL classroom. All the participants agreed that pronunciation class is needed to teach intelligible pronunciation in every level of academic education that means from primary to tertiary level in Bangladesh. They also emphasize on the teaching of pronunciation from the childhood of the students. Participant A mentioned that if the students were taught when they were children, they would not do such mistakes. It is seen that the mistakes that have been permanent in them when they were children, the teachers cannot solve this problem now as they are adult.

Participant B stated that he thinks if they would get opportunity to learn at the childhood it would become more beneficial for them and participant C highlighted that a student becomes habituated in speaking or pronouncing any language from the very childhood. So if they are habituated in a style, that style becomes very tough to be changed in middle age or in grown up age. So, it should be studied from childhood level or primary education level. It means that the errors have been permanent or fossilized (Selinker, 1972) in them and input must be given for correction. The points, challenges to teach pronunciation is almost same to the challenges to defossilize the problem causing sounds in English speaking but there is a little difference between the two. Errors in pronunciation is a common phenomenon but when the errors become permanent in the learners and L1 sounds become established or habituated by the ESL or EFL learners, it is called fossilized errors or phonological fossilization by Selinker and many others.

This study not only has confirmed Tahereen's challenges but also recorded some more issues that definitely hinder defossilization. Participant A (teacher) mentions that the students make mistake in many words when they go to produce English sound, participant B states that their basic is very poor and participant C gives the most salient feature of the phenomenon of challenges to teach pronunciation. He mentions that the students think English pronunciation is unnecessary in Bangladesh

let alone British or American or intelligible pronunciation. He also assures that as the notion of intelligible pronunciation is somewhat absent in the learners, they are not only habituated but also confident in some cases in wrong pronunciation. When they are exposed to intelligible pronunciation, they criticize and laugh at. These are the challenges for teaching pronunciation and also for defossilization in Bangladeshi EFL classroom.

In case of phonological fossilization, all the participants confirm that the students have phonological fossilization in their English speaking when they are asked about it. At the same time, they mention the causes of severity of phonological fossilization among the learners. Participant B states that many things are responsible for this PF. For their family condition, for their environment, for their surroundings, environment of their institution, everything is responsible for their lacking in intelligible pronunciation. Participant C added that there is no well planned syllabus on pronunciation and there is no quality book on pronunciation or grammar in Bangladesh. Thus, it is obvious for the teachers to face the challenges in defossilizing the problem causing sounds in the class.

This study also finds the unawareness of the learners on phonological fossilization and that is why, it has become a barrier for the teachers to teach intelligible pronunciation. Although Demirezen, Keysan and many others emphasize on phonological awareness, it is rather neglected in Bangladeshi EFL classroom. The findings also record other problems for defossilization. Participant A claims that as there is no assessment or grading system and board exam on pronunciation, the students do not show interest in learning intelligible pronunciation. Moreover, the class time is limited and within this limited time, it is difficult for them to finish the prescribed syllabus which does not contain pronunciation. The class room setting is not also suitable for defossilization as there is no multi-media projector and audio set and the students sit on the benches in the class, it is not suitable for group discussion. The problems, participant B mentions, are the faulty syllabus and established errors in the learners. Participant C claims that the students are not habituated in studying intelligible pronunciation and most of the books on pronunciation are written in English. As almost all the students cannot make the Bengali meaning of the sentences or text in the book of pronunciation, they feel disinterest. These are the findings and

the challenges that English teachers frequently face in defossilizing the problem causing Bengali sounds in Bangladeshi adult learners of English.

5.4 EFFICIENCY OF AUDIO-ARTICULATION METHOD

The finding that the study found from the test of efficiency of Audio-Articulation Method to defossilize the distinct problem causing Bengali sounds in English pronunciation of Bangladeshi adult learners of English has been focused in this section. Demirezen (2003, 2004) and Hismanoglu (2004) have tested the method in Turkish EFL classroom and found the positive effect of AAM on the learners to defossilize the problem causing sounds in English pronunciation. As the phonemic inventory of Turkish and Bengali language is not same, there arises the question of testing the efficiency of Audio-Articulation Method to defossilize the fossilized sounds in English pronunciation in Bangladeshi context. Statistical analysis shows that the experimental group that was given treatment following AAM improve much more than the controlled group that was given treatment following traditional method. So it is found that the Audio-Articulation Method has a positive effect on Bangladeshi adult learners of English to defossilize the problem causing sounds in their pronunciation.

The fourth objective of this study is to explore the teacher's and students' opinion in using Audio-Articulation Method in Bangladeshi EFL classroom. It is found that both the teacher and students have given positive feedback on AAM which confirms Isarankura's (2015) positive attitude on Audio-Articulation Method. Participant D mentions that it is a modern and significant system. Participant VI and XII responds that it is interesting and beneficial, participant IX states, it is helpful for academic pleasure. As it is an updated and congenial system, both the teacher and students propose to use this method in Bangladeshi EFL classroom. Participant D claims that a student should have a very fantastic and nice and very accurate pronunciation in English and AAM will give a lot of facilities to the students to understand the people of other countries. Participant VI mentions that if this method comes to our country, not only they but also those who have problem in pronunciation will be much benefited, they will do better. Student IX states, it's actually needed and

it can help in our pronunciation and we can also identify our mistakes as well through this process. Student XII says that we can improve our pronunciation through Audio-Articulation Method, we will be able to pronounce intelligible sounds and I am agreed to use Audio-Articulation Method in the class. A lot of enthusiasm and vigorousness and eagerness of the students were found by the teacher who taught the students of experimental group in the classroom following AAM. Though some researchers and educators think that defossilization is not possible, this study has proved that by applying AAM in teaching/learning activities in the class, it is possible.

Participant D claimed that the students had no idea about this fossilization or phonological fossilization at the very opening stage but after participating in the class through this method, they became very much interested to take step for defossilization and showed good performance in the classes. Participant VI mentioned that before they had a problem; they created a kind of sound when they pronounced a word in English or said anything. Now after doing this course, those sounds are not being produced. Participant IX said, we produced fossilized /e-এ/ sound instead of /ei/, it can be improved using AAM in the classroom. Participant XII stated, if we practice through AAM in the class, we will be able to pronounce intelligible sounds. The students also assured that now onward they will be able to identify their mistakes and correct those mistakes by themselves. Lastly, the findings record that the participants suggest AAM to include in the syllabus and curriculum in Bangladesh so that the students are compelled to learn and give importance to intelligible pronunciation.

5.5 IMPLICATIONS OF FINDINGS

Pedagogical implication is the first implication of the findings from the study, next is understanding the pronunciation issues among Bangladeshi adult learners of English, knowing the challenges of the English teachers in defossilizing problem causing Bengali sounds in English pronunciation, testing the efficiency of AAM to defossilize in English pronunciation and knowing the teacher's and students' opinion in using AAM in Bangladeshi EFL classroom. This study provides significant educational implications especially for tertiary level teachers and students of English department in Bangladesh. After knowing the pronunciation issues perceived by the learners, the

English teachers will create a learning atmosphere in which the learners can learn English pronunciation in an effective and enjoyable way. In addition, the teachers will arrange and use age-appropriate, interesting, motivating, exciting, and useful materials and activities in their classes to correct the phonological errors of the learners as suggested in AAM.

In this study, one of the problems of the adult learners is phonological fossilization in their English pronunciation. They have difficulty in producing the sounds that do not exist in Bengali language. Therefore, the differences between Bengali and English orthography should be taught by the teachers in an appropriate and congenial way. As this study proves that the students have lacking in phonological awareness skills, they must have difficulty in producing intelligible sounds of English. This problem can be solved with the help of the multiple drilling activities of AAM which focus on defossilization in English pronunciation.

5.6 LIMITATION OF STUDY

The limitations of this study are:

First, it is mentionable that the interview data has been collected from only two university colleges and so it is not large. A large amount of data could have been collected from the students and teachers of other universities or colleges. This study was conducted on the students and teachers of English department only. The students and teachers of other departments could have been selected as the participants of the study to get the rich and verified data. It is thus recommended that further study can be conducted using large amount of data collected from varied sources.

Secondly, this study followed pre-test and post-test design for research question three. The treatment period between the pre-test and post-test was only two months. A delayed post-test with long time treatment could have been conducted to get the findings. Thus further study can be conducted with delayed post-test to test the efficiency of Audio-Articulation Method to defossilize the problem causing sounds in English pronunciation of Bangladeshi adult learners of English.

Thirdly, this study investigated only the five distinct phonemes in English which are frequently mispronounced by the Bangladeshi adult learners of English. There are other phonemes that could have been explored.

Finally, In case of phonemic transcription, the researcher himself transcribed the pre-test and post-test data listening the recording again and again. In this respect, sound spectrogram software could have been used to identify the sound wave and pitch movement to identify long and short vowels or diphthong.

5.7 SUGGESTION FOR FURTHER STUDIES

Further studies are recommended to conduct with varied data collected from varied sources and a longitudinal study to test the efficiency of Audio-Articulation Method to defossilize the problem causing sounds in English pronunciation in Bangladeshi EFL classroom could have been conducted. Further studies are also intended to conduct on phonological fossilization of other sounds to make the people aware of fossilized sounds in English pronunciation and strengthen the findings of the study. Further studies are also recommended to conduct by future researchers using more innovative phonetic instructions involving speech software.

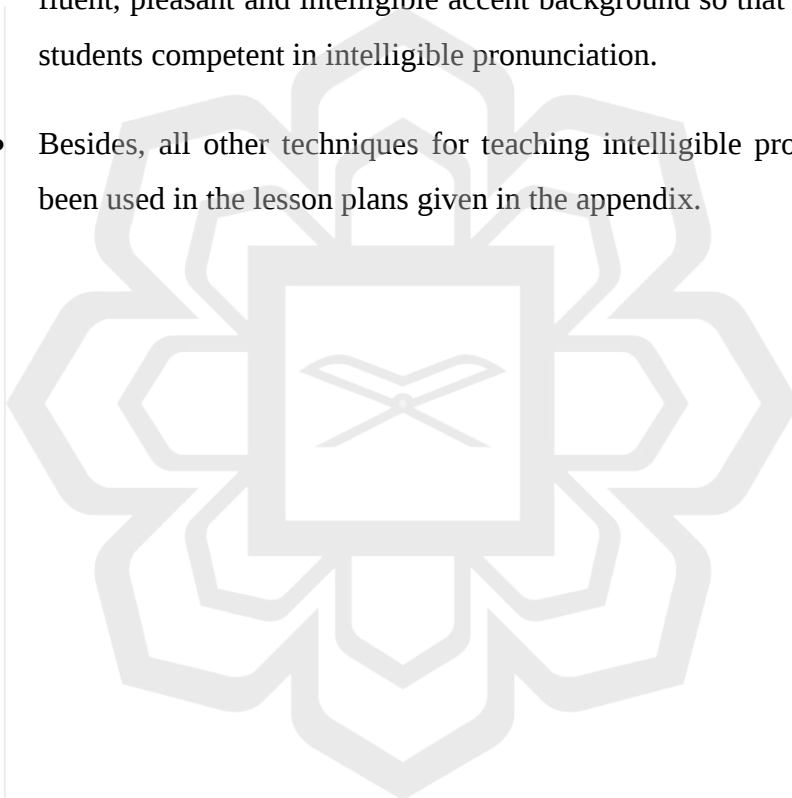
5.8 SUGGESTION FOR PRONUNCIATION TEACHING

The following techniques should be followed by the pronunciation teachers in Bangladesh to ensure effective pronunciation teaching.

- For developing listening and speaking, isolated phonemes of target language should be taught in school and college level.
- Pronunciation should be taught at every level in school, college and university.
- Fluency and accuracy should be considered simultaneously in case of teaching and learning pronunciation. The students must be equally

concerned with both. The teachers should emphasize on form and function so that the students can produce intelligible sounds.

- The teachers having the background knowledge in English phonetics and phonology should be recruited for teaching pronunciation. As they are competent in English sounds, stress, rhythm and intonation, the students will get the basic idea of segmental and supra-segmental features of English language.
- A competent teacher should have the experience in speech analysis with a fluent, pleasant and intelligible accent background so that he can make the students competent in intelligible pronunciation.
- Besides, all other techniques for teaching intelligible pronunciation have been used in the lesson plans given in the appendix.



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APPENDIX I

RESEARCH INSTRUMENT 1: SEMI-STRUCTURED INTERVIEW QUESTIONS (STUDENTS)

Research Question:		
What are the pronunciation issues perceived by the Bangladeshi speakers of the English language?		
1.	Have you ever thought that your pronunciation when you speak English to others is understandable/correct or not?	
2.	Why do you think you have the problem? Or why you think you don't have the problem?	
3.	Do you have any idea about phonological fossilization? If yes, can you give some examples?	
4.	As your L1 is Bengali, do you think your English pronunciation is subjected to fossilization?	
5.	Has your pronunciation been corrected by someone when you speak in English? Is it frequent or not?	
6.	Does it make you feel embarrassed when someone corrects your pronunciation or highlights your English is strongly influenced by Bengali sound?	
7.	Do you think your English-speaking skill is good? Or your pronunciation is near to standard pronunciation?	
8	When you go to speak in English then does the Bengali word come in your speech?	

APPENDIX II

RESEARCH INSTRUMENT 2: SEMI-STRUCTURED INTERVIEW QUESTIONS (TEACHERS)

Research Question:	
Why do the English teachers face challenges in defossilizing the English pronunciation of Bangladeshi adult learners?	
1.	Do you think pronunciation class is necessary for Bangladeshi learners of English?
2.	Will the class be more suitable to children or adult learners? Why do you think so?
3.	How many classes do you conduct on pronunciation in a week? Do you think these classes are enough for teaching comprehensible pronunciation? Please, explain?
4.	What are the issues you frequently observe in case of teaching pronunciation in the classroom?
5.	Do you think English speech of Bangladeshi learners contains phonological fossilization? How often they make mistake?
6.	What do you think is the severity of phonological fossilization among Bangladeshi learners of English? Please, explain?
7.	Are the students conscious about the fossilized errors in their English pronunciation? How do you identify their consciousness?
8.	Do you think phonological fossilization in the learners' speech is a barrier for teaching pronunciation in the context of Bangladesh? Why?
9.	Have you taken any initiative to identify phonological fossilization and to defossilize problem causing sound in their English speaking?
10.	What are the issues you frequently face in correcting the fossilized errors in the classroom?
11.	Do you think defossilization is essential to teach and learn intelligible pronunciation? Why?

APPENDIX III

RESEARCH INSTRUMENT 4: SEMI-STRUCTURED INTERVIEW QUESTIONS (TEACHER AND STUDENTS)

Research Question:		
What are the teacher's and students' opinion on the use of Audio-Articulation Method in Bangladeshi EFL classroom?		
	Teacher's opinion	
1.	What do you find teaching pronunciation following the AAM?	
2.	Is there any significant difference between previous techniques that you use and AAM ? Or do you find AAM to be more or less the same?	
3.	Do you think Audio-Articulation method (as you have taught in this method) can be used in teaching intelligible pronunciation to the tertiary level students in Bangladesh?	
4.	How do you find students in your class when you teach through AAM? Are they more participating, engaging or motivated?	
5.	Do you notice any improvement especially in the aspect of phonological fossilization among the learners?	
6.	In the context of Bangladesh, do you think that Audio-Articulation method can be included in the curriculum for teaching comprehensible pronunciation? Why?	
Students' opinion		
7.	Do you find the pronunciation class following AAM interesting?	
8.	What do you think in implementing Audio-Articulation method (as you have learnt in this method) in learning intelligible pronunciation?	
9.	What is your opinion in case of using Audio-Articulation method in the classroom to defossilize problem causing sounds in your English pronunciation? Please explain.	

10.	What are some aspects of the lesson that you think can be improved? What do you think the teachers can do in order to make pronunciation lesson more beneficial to you?
11.	After learning the pronunciation through AAM, do you think you will become more aware on your pronunciation in English?
12.	Do you think after learning pronunciation through AAM, you can self-identify your pronunciation errors after this? And correct them yourself?



APPENDIX IV

LESSON PLAN 1 (EXPERIMENTAL GROUP)

Lesson Plan 1

For

Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 1: Teaching long and short vowel, /u:/ and /u/ with interaction drill and corpus	
Level: Students of Honors 1 st & 2 nd year, English department,	
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /u/ and /u:/ sound ii. To help them to produce words with /u/ and /u:/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking	
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /u/ and /u:/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation	
Time: 45 minutes	
Interaction drill: Listen and imitate drill Teacher: Dear students read the following dialogues and give special attention to the bold faced words in the dialogues. Dialogue 1: A lost book Mr Cook: Woman! Could you tell me where you've put my book? Mrs Cook : Isn't it on the bookshelf? Mr Cook : No. The bookshelf is full of your cookery books? Mrs Cook: Then you should look in the bedroom, shouldn't you? Mr Cook : I have looked. You took that book and put it somewhere, didn't you? Mrs Cook : The living-room? Mr Cook : No, I've looked. I'm going to put all my books in a box and lock it!	

Mrs Cook : Look, Mr Cook! It's on the floor next to your foot.

Mr Cook : Oh! Good! (Baker, 1960)

Dialogue 2: In a good school

Miss Luke: Goodafternoon, girls.

Girls: Good afternoon, Miss Luke.

Miss Luke: This afternoon we're going to learn how to cook soup. Open your book at unit twenty-two.

Prue: Excuse me, Miss Luke.

Miss Luke: Yes, Prue?

Prue: There's some chewing gum on your shoe.

Miss Luke: Whothrew their chewing gum on the floor? Was it you, Prue?

Prue: No, Miss it was June.

Miss Luke: Who?

Prue: June Cook.

June: It wasn't me, stupid. It was sue.

Sue: It was you!

June : It wasn't me. You stupid fool. My mouth's full of chewing gum.

Look, Miss Luke!

Sue:Stop pulling my hair, June. It was you!

June:You!

Sue: You!

Miss Luke: Excuse me! You're being very rude. You two nuisances can stay in school this afternoon instead of going to the swimming pool (Baker, 1960).

Teacher:Dear learners, it is evident from your speaking that you have mispronounced the English /u:/ phoneme in the words of boldfaces. Of course, there are words containing /u/ sound in the dialogue. Your /u:/ sound is influenced by the Bengali /u/উ/ sound and it has been fossilized in you. We must consider this wrongly pronounced sound. So, we will study on it today. We shall follow different kinds of drills of Audio-Articulation method propounded by Mehmet Demirezen to treat this problem causing sound in the class.

Repetition drill:

Teacher: now I shall give you a corpus of 50-100 words having the [u] and [u:] sounds in the consecutive classes. These words are categorized according to four syllabic (mono, di, tri, and multi/poly) structures. The unknown words in the selected corpus should be handled first. These words will be repeated in single, pair, group, or choir after the exhortations avoiding parroting style of articulation. Now we will practice only the monosyllabic words.

Corpus:

Monosyllabic words:

Cook /kʊk/	Look /lʊk/	Soon /su:n/	Could /kʊd/
Crook /krʊk/	Shook /ʃʊk/	Tool /tu:l/	Tooth /tu:θ /
Rook /rʊk/	Took /tʊk/	Group /gru:p/	Chew /tʃu:/
Too /tu:/	Wood /wʊd/	True /tru:/	Crew /kru:/
Bull /bʊl/	Wool /wʊl/	Fruit /fru:t/	Drew /dru:/
Who /hu:,hʊ/	Choose /tʃu:z/	Moor /mʊə/	Threw /θru:/
School /sku:l/	Stool /stʊl/		
Screw /skru:/	Spoon /spu:n/		
Book /bʊk/	Cool /ku:l/	Toot /tu:t/	Soup /su:p/
Foot /fʊt/	Fool /fu:l/	Wolf /wʊlf/	Move /mu:v/
Good /gʊd/	Loose /lu:s/	Rude /ru:d/	Boom /bu:m/

Disyllabic words:

Include /inklʊd/	Bullet /'bʊlɪt/	Bosom /bʊz(ə)m/	Bedroom /bedru:m/
Brutal /'bru:t(ə)l/	Cushion /kʊʃ(ə)n/	Woman /'wʊmən/	Mushroom /mʌʃru:m/
Youth /ju:θ/	Roomy /'ru:mi, 'romi/	Duty /dju:ti/	Do-gooder /du:'gʊdə/cuc
Footstool	Pudding /pʊdɪŋ/	Guru /gʊru:/	koo
/'fʊtstu:l/	Sugar /'ʃʊgə/	Judo /dʒu:dəʊ/	/kʊku:/ Cookbook
Schoolroom /'kl	Poolroom /pu:lru:m/	Butcher /'bʊtʃə/	/'kɒkbʊk/
ɑ:sru:m/	Stupid /stju:pɪd/		

Trisyllabic word:

Absolute /absəlu:t/	Bulletproof /'bʊlɪt.pru:f/	Consumer /kən'sju:mə/
Afternoon /ɑ:ftə'nu:n/	Solution /sə'lu:ʃ(ə)n/	Pussyfoot /kən'sju:mə/
Surefooted /,sə:'fʊtɪd/		Womanhood /wʊmən'hʊd/

Influenza /ɪnflʊˈɛnzə/	Curious /ˈkjʊəriəs/ institute /ˈɪnstɪtju:t/	Instrument /ˈɪnstɹʊm(ə)nt/ multitude /ˈmʌltɪtju:d/
Multi-syllabic words:		
Illuminate /ɪˈl(j)uːmɪneɪt/ Impunity /ɪmˈpjuːnɪti/ Superduper /ˌsuːpəˈduːpə/ Prosecutor /ˈprɒsɪkjʊːtə/	Communicate /kəˈmjuːnɪkeɪt/ Reunion /riːˈjuːnɪən/ Tuberculosis /tjʊˌbæːkjʊˈləʊsɪs/	superhuman /ˌsuːpəˈhjuːmən/

Meaning and transcription of unknown words:		
Crook	/krʊk/	bad, unpleasant, or unsatisfactory. A person who is dishonest or a criminal.
Rook	/rʊk/	a gregarious Eurasian crow with black plumage and a bare face, nesting in colonies in treetops
Toot	/tu:t/	a short, sharp sound made by a horn, trumpet, or similar instrument.
Lew	/ˈlü /	now dialectal British : moderately warm : lukewarm
Brew	/bru:/	make (beer) by soaking, boiling, and fermentation
Boom	/bu:m/	a loud, deep, resonant sound
Hoodoo	/ˈhu:du:/	a run of bad luck associated with a particular person, group, or activity
Accrue	/əˈkru:/	(of a benefit or sum of money) be received by someone in regular or increasing amounts over time
Impunity	/ɪmˈpjuːnɪti/	exemption from punishment or freedom from the injurious consequences of an action
Hood	/hʊd/	a covering for the head and neck with an opening for the face, typically forming part of a coat or cloak.
Brook	/brʊk/	a small stream

Broom	/bru:m/	a long-handled brush of bristles or twigs, used for sweeping.
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Discussion:

Teacher: Dear students, it's the time for discussing the rule now, please, be careful and listen to me attentively. To pronounce /u/ sound, our lips become rounded, the back of the tongue goes fairly high and it remains tense. So it is a short vowel. To pronounce /u:/ sound, our lips also becomes round and the back(further back than /u/) of the tongue goes fully high (very high)and it remains tense. So it is a long vowel. You will be more clear about the articulation of /u/ and /u:/ sound from the following image.

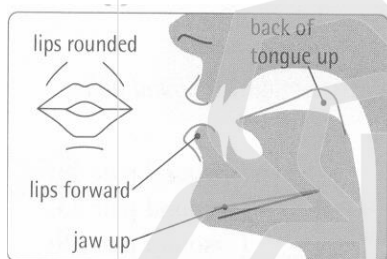


Figure 1 : Image of articulating /u/ and /u:/ sound

Assignment:

T: Dear students,

1. practice the sounds discussed in the class standing before a mirror to observe your own body position and way of articulation.
2. Write a paragraph using words having /u/ and /u:/ sounds at home.

Then the teacher turns back to his/her rule and clearly summarizes the day's topic in a simple way.

T: That is end for today. The same topic will continue in the next class.

S: Thank you very much, sir.

T: you are welcome

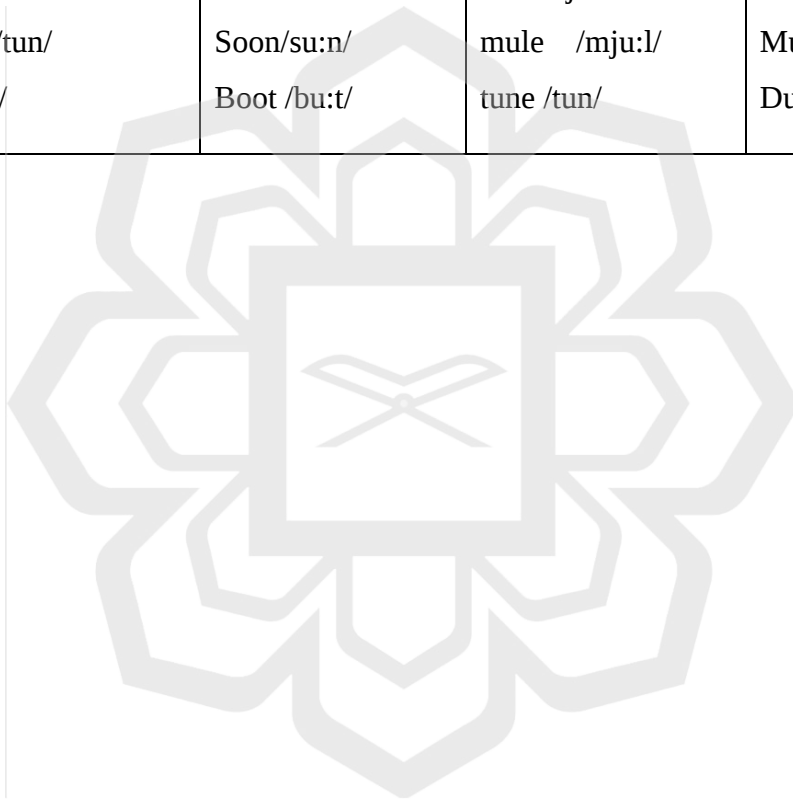
APPENDIX V

LESSON PLAN 2

Lesson Plan 2 For Pronunciation class

Title of lesson (course): English Pronunciation			
Topic 1: Teaching long and short vowel, /u:/ and /u/ with minimal pairs, tongue twisters and cliché words.			
Level: Students of Honors 1st&2 nd year, English department,			
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /u/ and /u:/ sound ii. To help them to produce words with /u/ and /u:/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking			
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /u/ and /u:/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation			
Time: 45 minutes			
Recapitulation of the previous lesson T: Students, remember that in our previous lesson we studied how to pronounce /u/ and /u:/ sound correctly showing the place and manner of articulation. Today we will continue it.			
Minimal pairs: Teacher: Now I am going to highlight the minimal pairs showing the /u/ and /u:/ differences; if there are unknown words in the minimal pairs, I shall carefully handle them first. After the exhortations, the students will have the words repeated in single, pair or choir.			
/u/	/u:/	/u/	/u:/

Full /ful/	Fool /fu:l/	Luke /lu:k/luk/	Look /lu:k/
Pull /pul/	Pool /pu:l/	Should /ʃud/	shooed /ʃu:d/
Could /kud/	Cooed /ku:d/	stood /stud/	stewed /stu:d/
would /wud/	Wooped /wu:d/	cook /kuk/	kook /ku:k/
bull /bul/	Boole /bu:l/	suit /sut/	soot /su:t/
hood /hud/	Who'd /wu:d/	wood /wud/	wooped /wu:d/
good /gud/	Gooed /gu:d/	Moon /mun/	Noon /nu:n/
soot /sut/	Suit /su:d/	flew /flu:/	blue /blu:/
kooky /kuki/	Cookie /ku:ki/	too /tu:/	zoo /zu:/
blew /blu/	Clue /klu:/	new /nju:/	Sue /su:/
toon /tun/	Soon/su:n/	mule /mju:l/	Mute /mjut/
toot /tut/	Boot /bu:t/	tune /tun/	Dune /dju:n/



Tongue twisters:

Teacher: Now I am going to use tongue twisters and cliché words in the class for practice in single, group, or Choir. It will help you to improve the audio-memory during the repetitions.

Tongue twister with /u/ and /u:/sound

He too, took two looks.

The cookbook recommended bamboo shoots.

The bloody boots were looted.

The good groom flooded the room.

The football hooligans looked gloomy.

Oops, look it's already noon.

She cooked the soot covered roots.

He stood on a spoon and looked at the moon.

The cool wood was good food.

The woodpeckers at the zoo used wool for their room.

<https://englishxp.co.uk/tongue-twisters/u-oo-tongue-twisters/>

Tongue twister with /u:/sound

A Tudor who tooted a flute

Tried to tutor two tooters to toot.

Said the two to their tutor,

"Is it harder to toot

or to tutor two tooters to toot?"(<https://languageavenue.com/teachers/teaching-ideas/english-tonguetwisters/item/long-vowel-sound-u>)

Cliché words: T: According to Demirezen, Cliché words are helpful for articulating any sound and to defossilize problem causing sound in non native speakers. Story with /u/ and /u:/ sound Jud has a Jukebox in his room. Luke likes to play with the Jukebox, but he will not pay. “My Jukebox is not free,” says Jud. “If you want tunes, you must pay.” “But I am your bud, ”says Luke. “ Must I pay to play a tune?” “Yes, you must,” says Jud. My tunes are good. If you want cool tunes, you must pay first.” “You are too rude,” says Luke. “I will listen to tunes at home.’ “Wait, Wait!” says Jud. “You can stay! The tunes are free! I don’t mean to be rude. I am just poor!	
Independent Learning: Teacher: Dear students, now you yourselves will read the sentences and specially highlight the boldfaces words in the sentences to test yourselves whether you’re pronouncing /u/ and /u:/ sound correctly or not.	
/u/ sound	/u:/ sound
Peter Pan is not afraid of Captain Hook. Bulls are very dangerous animals. There is a rabbit in the bush. I bought new cushions for the sofa. Can you pass the sugar, please? Bullet trains are very fast.	Look how big the moon is! I want to go to the zoo tomorrow. Clean your room this instant! I like going to school! I like learning English, too! Who will come to the party?

Assignment:

1. Write a paragraph of 100 word using /u/ and /u:/ sound and make the words bold which contain these two sounds.
2. Practice these sounds with anybody, anytime and anywhere if you get chance.

Teacher: That is end for today.

Students: Thank you, sir.



APPENDIX VI

LESSON PLAN 3

Lesson Plan 3 For Pronunciation class

Title of lesson (course): English Pronunciation		
Topic 1: Teaching long and short vowel, /u:/ and /u/ with chain drill, substitution drill, replacement drill, Rhyme and Recognition Drill.		
Level: Students of Honors 1st & 2 nd year, English department,		
Learning objectives: Objectives of this lesson? i. To teach the students the place and manner of articulation of /u/ and /u:/ sound ii. To help them to produce words with /u/ and /u:/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking		
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /u/ and /u:/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation		
Time: 45 minutes		
T: Dear students, today some more other drills will be practiced through exhortation and counseling.		
Chain drill: Teacher: Let us sit in a circle and begin the chain drill to articulate /u:/ sound properly. It allows some controlled communication, even though it is limited. Chain drill will be practiced in the following way: a. Student 1 asks student 2 a question. b. Student 2 answers and asks student 3 the same question. c. Student 3 answers and asks student 4 a question. d. Student 4 answers the question. In this way, the drilling will be going on in a cycling way.		

For example,

S¹ asks S²: **do** you have any **book**?

S² answers Yes I **do**” or Yes, I have a **book**. And he asks the same question to S³.

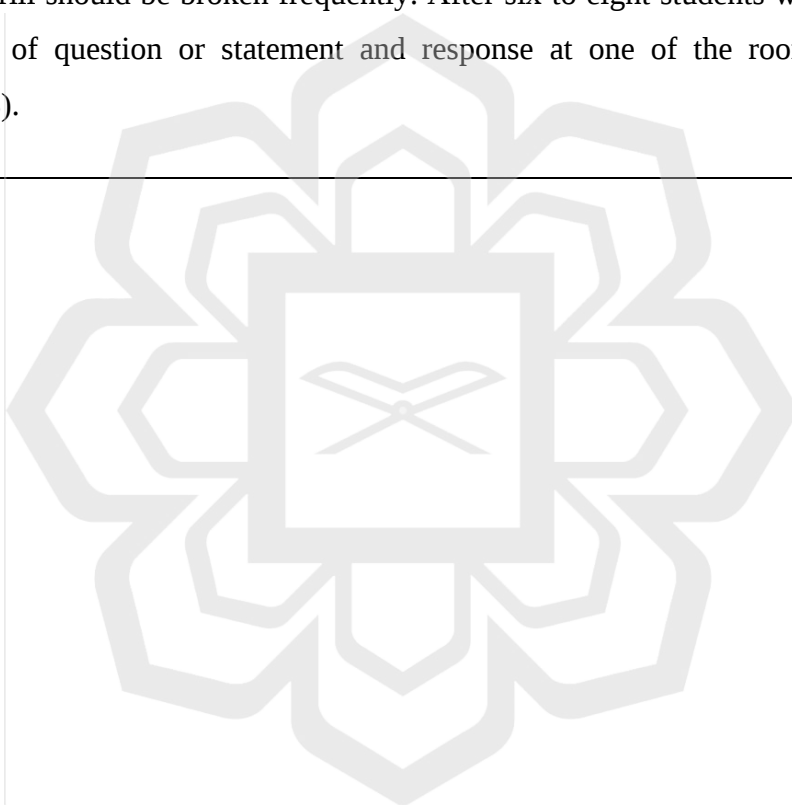
S³ answers and asks S⁴, does he (she) have his (her) **book**? referring to S².

S⁴: I am not **sure**. But he **took** a **book** from **Luther** Yesterday. Turning to S⁵, he asks him,**do** you know what type of **book** it is?

S⁵: It is a **book** for preparing **soup** with **mushroom**. Turning to S⁵,**do** you choose to eat this **soup**?

S⁶: Yes, I **do**.

Chain drill should be broken frequently. After six to eight students will participate in a chain of question or statement and response at one of the room (Finocchiario, 1969:68).



Substitution drill:

Teacher: Now we shall practice Substitution drill in the class.

a. Simple substitution/Single slot substitution

Example: the teacher said, “Mithu is a **good** boy”.

The students repeat “Mithu is a **rude** boy” and “Mithu is a **crude** boy”.

b. Substitution in different slots/Mixed slot substitution

Example, the teacher said. “he eats a **food**”.

The students repeat “he eats a **fruit** “ and “he takes **soup**”.

c. Substitution that forces a change in the structure

Example, the teacher said “she speaks the **truth**”.

The students repeat “ he speaks the **truth**” and “they speak the **truth**”.

d. Substitution that calls for a change in the cue

Example, the teacher said “He should **chew** the **chewing** gum”.

The students repeat “He should **put** the **broom.**” and “He must **shoot** the **wolf.**”

e. Multiple slot substitution

Example, the teacher said “There are many **bulls** in the **wood**”.

The students substitute “there are many **fools** in the **group**” and the second “there are many **roots** in the **bush**”.

f. Progressive slot substitution/Moving slot substitution

Example, the teacher said “He **could look** at the **bullet**”.

The students substitute “**Zulu** **could look** at the **bullet**” (Maharida, 2014).

Replacement drill:

Teacher: I will produce /u/ sound in the following words and you will replace /u/ sound by /u:/ and produce another word.

Teacher		Students	
To /tu/	Foot /fʊt/	Too /tu:/	Who /hu:/
Throw /θrəʊ/	Book /bʊk/	Through /θru:/	Rude (ru:d)
Bush /bʊʃ/	Good /gʊd/	Threw /θru:/	Food /fu:d/
Put /pʊt/	Cook /kʊk/	Move /mu:v/	Moon /mu:n/
		Group /gru:p/	Toot /tu:t/
			Cartoon /ka:tu:n/

Language Game with rhyme:

Teacher: students, come anyone of you and recite the poems before the class. Other students will listen to him carefully and try to imitate him.

With /u:/

The child swims in the pool,

He does not know the rule.

The grandfather swims too,

He is afraid of flu.

The chewing gum, the child wants to chew
is not a healthful food.

The grandfather becomes rude,

And he tells the truth.

With /ʊ/

The bag was full of wool,

He tried to pull,

He put it at my foot,

I saw they are good.

Recognition drills:

Teacher: students, find out /u/ sound from the following words.

Full, fun, fan, moan, boat, woman sugar, shampoo, butcher, balloon, football

Now to find out /u:/ sound from the following words. Chase, choose, chosen, move,
notebook, round, old, tomb, boom truth, umbrella, tourist

https://engoo.com/app/essons/vowels%CA%8A-u/O-1mTim_EeezFPtWKE-iNQ

Assignment:

Teacher: students, write a dialogue using /u/ and /u:/ sound. That is end for today.

Students: Thank you, sir.

Teacher: Welcome.

APPENDIX VII

LESSON PLAN 4

Lesson Plan 4 For Pronunciation class

Title of lesson (course): English Pronunciation Topic 2: Teaching vowel sound /e/ and /ei/
Level: Students of Honors 1 st & 2 nd year, English department,
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /e/ and /ei/ sound ii. To help them to produce words with /e/ and /ei/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /e/ and /ei/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation
Time: 45 minutes
Learning Activities: Teacher: Well. (Turning to a student) Rana , can you give the definition of the /ei/ phoneme? Student: /ei/ is a diphthong sound which means it is a combination of two vowel sounds that are pronounced within the same syllable. The /ei/ sound is a combination of /e/ and /i/ or /i:/. Like vowels the diphthongs are all made through the mouth and are voiced which means that we vibrate our vocal chords to make the sound as heard in such words like take /teɪk/, way /wei/, same /seɪm/ and case /keɪs/. (https://www.englishlanguageclub.co.uk/e%C9%AA-sound/) T: Well. (Turning to another student) Rafic , can you give the definition of the /e/ phoneme?

Rafic: Yes, sir. The /e/ phoneme of the English language is a front half-close, high-mid-unrounded vowel, (Varshney, 2000 and Rajimwale, 1999) as heard in such words like elm, enter, et, get, they and stay.

T: Right. Students, now, let us read the following dialogue. Please give special attention to the bold words.

Interaction drill:

A campaign against drug

Ben: Did you **participate** in the **campaign against** drug yesterday?

Alen: Yes, but how did you know about the **campaign**?

Ben: From the **newspaper**.

Alen: Oh, we also **arranged** a **seminar** to **make** the people aware about the **danger** of **taking** drug.

Ben: Which **agency** did **arrange** for the **campaign**?

Alen: In fact, the **administration** of local government **arranged** for it.

Ben: Did you **stage any play**?

Alen: Yes, we **staged** a **play** highlighting the **consequence** of **taking** drug.

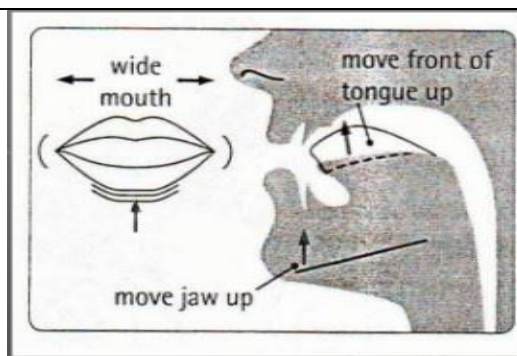
Ben: **Praiseworthy**, if the **men** like you come forward to **make** the people aware about the **danger** of **taking** drug, the **situation** would **change**.

Alen: **Certainly**, and the people would **concentrate** in productive work.

(The Teacher reads the dialogue several times in the class, and he observes that most of the Bangladeshi students can not differentiate between /e/ and /ei/ sounds and they have read the words in the boldfaces with /e/ phoneme)

T: Dear learners, it is evident from your speaking that you have mispronounced the English /ei/ diphthong in the words of boldfaces. Of course, there are words containing /e/ sound in the dialogue. Your /ei/ sound is influenced by the /e/ɔ/ phoneme, which prevent you to pronounce it as the native speakers do. It is because, there is /ɔ/ sound in Bengali language and it has been fossilized in you. We must consider this wrongly pronounced sound. So, we will study on it today.

Image of the place of articulation of vowel(diphthong) sound /ei/

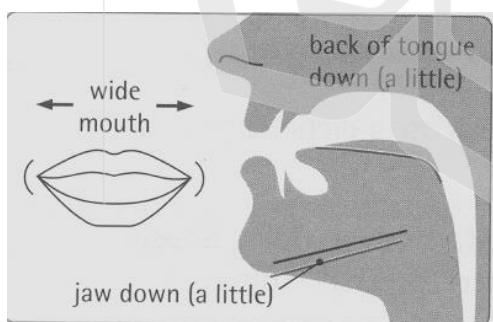


<https://www.google.com/search?q=image+of+tongue+position+for+ei+sound>

Now, we will study on the correct articulation and pronunciation of the English /ei/ phoneme, which is closing diphthong or falling diphthong. It is unrounded in the production of which our lips stretch as like as we smile but our mouth closes a little as we move to the /i:/ sound. /ei/ is found to be extensively used in places having consonant flanked by vowels on both sides e.g. /teik/ (take), /reit/ (rate). (Bashiruddin, 1993). It is also audibly heard in such words as may/mei/, way/wei/, make/meik/, say/sei/, same/seim/, day/dei/.

The confused phoneme is the /e/, which is front half-close, high-mid-unrounded vowel, as heard in such word Ed, get, med, Meg, met, peg, pep, bed. Let's now see the /ei/ and /e/ difference in detail by applying the **audio-articulation** pronunciation teaching method.

Image of the place of articulation of vowel sound /e/



<https://www.google.com/search?q=image+of+tongue+position+for+e+sound>

For pronouncing this vowel sound the front of the tongue is raised in the direction of the hard palate between high-mid and low-mid positions. The lips are drawn back, and the lower jaw is somewhat dropped. /e/ is described as high-mid-unrounded vowel (Rajimwale, 1999).

Teacher: I shall give you a **corpus** on /ei/ and /e/ contrast in words consisting of word-initial, word-medial, and word-final positions. The teacher monitors the pronunciation of the words in the corpus through counsel. Further dealings are developed by applying this corpus.

Words containing /ei/ sound consisting of word initial, word medial and word final.

Word initial:

Able, age, agency, Asia, April, aim, ancient, agent, eh, eighteenth, ace, angel, eighth, ache, acre, alien, ape, ace, ache, aid, alienate, amiable, apron, aviation, ail, acorn, aphid, apple, aim,

Word-medial:

Make, take, wage, basically, straight, sake, concentrate, phrase, ratio, chamber, evaluation, observation, plain, escape, determination, cake, variation, grateful, tail, appreciation, relate, retain, taxation, imagination, grace, investigate, indication, arrange, occupation, obligation, baker, paint, resignation, namely, federation, tale, declaration, discrimination, navy, generate, grade, naked, invasion, stake, painful.

Word Final:

May, way, say, every day, hey, gay, Clay, prey, essay, tray, doorway, highway, jay, Day, away, today, pay, play, anyway, stay, survey, holiday, railway, grey, display, bay, delay, ray, hey, gay, clay, essay, prey, pray, tray, convey, array, jay, decay, spray, obey, café, weigh, repay, dismay, midday, assay, betray, bouquet, relay, cray, nay, sway, ashtray, reggae, pe, ley, daresay, bae, tray, astray, hooray, subway.

Words containing /e/ sound

Egg, elephant, eleven, empty, enter, elevator, engine, elbow, envelop, exit, empty, elk, eggplant, enter, elves, elf

Deck, dress, helmet, hen, ten, web, men, wet, sent, bed, pen, bend, tent, fed, ten, lend, vent, led, bet, mend, went, red, get, rend, best, wed, jet, send, lest, beg, let, tend, nest, leg, met, bent, pest, peg, net, dent, rest, den, set, lent, test, hen, vet, rent, vest

T: I shall select some minimal pairs that will be sincerely and sufficiently practiced in the classroom within the class hour.

Minimal pairs:

/e/	/ei/	/e/	/ei/
Pen /pen/	Pain /pein/	Get /get/	Gate /geit/
Shed /ʃed/	Shade /ʃeid/	Fet /fet/	Fate /feit/
Tell /tel/	Tail /teil/	Bed /bed/	Bade /beid/
Wet /wet/	Wait /weit/	Bet /bet/	Bate /teit/
Test /test/	Taste /teist/	Den /den/	Dain /dein/
Pepper /peper/	Paper /peiper/	Fen /fen/	Fain /fein/
Let /let/	Late /leit/	Het /het/	Hate /heit/
Letter /leter/	Later /leiter/	Men /men/	Main /mein/
Ret /ret/	Rate /reit/	Net /net/	Nate /neit/
Jed /dʒed/	Jade /dʒeid/	Pet /pet/	pate /peit/
Tell /tel/	Tale /teil/	Ven /ven/	Vain /vein/

(Baker, 1996)

Assignment:

Teacher:

1. Dear students, You will practice these sounds in your daily conversation with others. You can also practice yourself.
2. Write a dialogue containing words with /ei/ sound.

Teacher: That is end for today.

Students: Thank you, teacher.

APPENDIX VIII

LESSON PLAN 5

Lesson Plan 5 For Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 2: Teaching vowel sound /e/ and /ei/	
Level: Students of Honors 1 st & 2 nd year, English department,	
Learning objectives:	
Objectives of this lesson?	
i. To teach the student the place and manner of articulation of /e/ and /ei/ sound	
ii. To help them to produce words with /e/ and /ei/ sound	
iii. To identify fossilized errors in their English pronunciation	
iv. To help them to defossilize the problem causing sound in their speaking	
Learning outcomes:	
After finishing the lesson, the students will be able to-	
i. pronounce the /e/ and /ei/ sound comprehensibly	
ii. identify the phonological fossilization in their English speaking	
iii. defossilize problem causing sound in their English pronunciation	
Time: 45 minutes	
Learning Activities:	
Teacher: Dear students, today we will continue discussing /e/ and /ei/ sound in the class. Now read the following tongue twisters and mind the right articulation of the sounds /ei/.	
1. The rain	2. Stay
The rain in Spain	Stay and play
The rain in Spain falls mainly	Stay and play with the baby.
on the plane.	
3. James	4. May
James paid	May baked
James paid for the apron.	May baked a cake yesterday.

5. He sailed
He sailed eighty miles away
He sailed eighty miles away
from the bay.

7. I won't stay
I won't stay unless we can
I won't stay unless we can
make him pay.

9. A grape
A grape becomes a raisin
A grape becomes a raisin in its
old age.

11. He gained
He gained his greatest fame
He gained his greatest
fame in Asia

6. The rain
The rain made
The rain made me late.

8. The favorite
The favorite went lame
The favorite went lame before the
race.

10. A player
A player laid his ace
A player laid his ace face down on
the table.

([https://studfile.net/preview/5115193/
page:5/](https://studfile.net/preview/5115193/page:5/))

**Somemore tongue twisters of /e/ &/ei/
sounds:**

Brain, trail, gait, late, lake, Less, digress,
confess, friend, fret, Enable, maintain,
unveil, address, paycheck

They set sail as the rain fell and made a wet
mess of guests who came to watch whales
and tell tales.

We weighed the hay, painted the sleigh,
played a game, and caught a train before it
rained in May

([http://thesmallguidesite.com/tonguetwister
_ei.html](http://thesmallguidesite.com/tonguetwister_ei.html))

Language game with Visual Aids:

Teacher: dear students I will provide you with charts and graphs of the following animate and inanimate things in the class and utters their names with correct pronunciation of /e/ and /ei/ sound. You will see the picture and at the same time hear the sounds and become aware of the wrongly pronounced sounds. In this way, the defossilization of /e/ sound will be easier and you will pronounce /ei/ sound correctly.

Ape, ace, apron, aviation, ail, acorn, apple. cake, tail, railway, grey, pray, tray, spray, café, weigh, dismay, bouquet, egg, elephant, eleven, elevator, engine, envelop, eggplant, helmet, hen, bed, tent, bet, jet, nest, leg, pest, net, den



Question-answer drills

Teacher: Dear students, the following dialogue contains interrogative sentences and their answers. Two of you will act as Mr. Grey and Porter. The other will follow and listen to them.

Practice with sentences in contextual clues:

At the railway station:

(Mr Grey is waiting at the railway station for a train)

Mr Grey: Hey! This train is late! I have been waiting here for ages.

Porter: Which train, sir?

Mr Grey: The 8.18 to Baker Street.

Porter: The 8.18? I am afraid you have made a mistake, sir.

Mr Grey: A mistake? My timetable says: Baker street train - 8.18.

Porter: Oh no, sir. The Baker street train leaves at 8.08

Mr Grey: At 8.08?

Porter: You see, sir, they changed the timetable at the end of April. It is the first of

May today.

Mr Grey: Changed it? May I see the new timetable? What does it say?

Porter: It says: Baker Street train -8.08.

Mr Grey: Hm! So the train is not late. I am late.

I am afraid you have made a mistake, sir (Baker, 1996).

Recognition drills:

Independent learning:

Teacher: The following sentences/phrases contain /e/ and /ei/ phonemes. There is no word with boldfaces in the sentences. You have to find out /e/ and /ei/ phoneme from the sentences.

A mistake? The eight? Today?, By plane way?, Going away? To Spain? She is eighty-eight?

It is the eighth of April.

The eighth?

It is the eighth of May.

Yes, it is Mrs Grey's birth day today.

Yes, she is eighty eight.

Yes. And she is going away for holiday.

That is right. And she is going by plane.

Well, it is a bit dangerous at her age, but she wants to go to Spain.

(Baker, 1996)

Assignment:

Teacher:

1. Dear students, You will practice these sounds outside the class with anybody, anytime and anywhere. You can also practice yourself before standing the mirror.
2. Write a paragraph using words containing /ei/ sound.

Teacher: That is end for today.

Students: Thank you, sir.

APPENDIX IX

LESSON PLAN 6

Lesson Plan 6

For

Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 3: Teaching consonant sound /ʒ/ and /ʃ/	
Level: Students of Honors 1st&2 nd year, English department,	
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /ʒ/ and /ʃ/ sound ii. To help them to produce words with /ʒ/ and /ʃ/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking	
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /ʒ/ and /ʃ/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation	
Time: 45 minutes	
Learning Activities: Interaction drill/ listen and imitate: Teacher: Dear students, read the following dialogue about leisure time loudly and I shall observe your pronunciation of the words containing /ʒ/ and /ʃ/ sound. Leisure Time Liza: How do you spend your leisure time, Tiza? Tiza: By watching television. Liza: What program do you usually watch on television?	

Tiza: As a visual learner, I get pleasure to watch adventurous film.

Liza: Can you envision an adventurous film now?

Tiza: Yes, It is treasure island.

Liza: Do you think this film will increase your Knowledge?

Tiza: Yes, It will not only increase my knowledge but also give me pleasure.

Liza: Have you taken your decision to join the occasion of Zaria's birthday?

Tiza: I have confusion whether I join or not.

Liza: Thank you.

Tiza: Welcome.

T: Dear learners, it is evident from your speaking that you have mispronounced the English consonant sound /ʒ/ in the words of boldfaces. There is also /ʒ/ **জ** and /ʃ/ **ফ** sound in Bengali Language and as the /ʃ/ sound is easier to pronounce than the /ʒ/ sound, it has been permanent or fossilized in your English speaking. In most cases, you have pronounced it as /ʃ/ sound. Now I am reading the dialogue several times and you will listen to me carefully.

Now, we will study on the correct articulation and pronunciation of the English /ʒ/ phoneme. We must consider this wrongly pronounced sound. So, we will study on it today.

The /ʒ/ is a voiced, alveo-palatal, fricative consonant. To produce this sound we have to press the middle of our tongue lightly between our alveolar ridge and our soft palate. The sides of our tongue should lightly touch our back upper teeth. Then we have to breathe out and allow air to flow past our tongue. Our vocal cords should vibrate.

The /ʃ/ sound is a voiceless alveo-palatal, fricative consonant. Production of this sound is almost the same as that of /ʒ/ sound but our vocal cords should not vibrate.

Image of the place of articulation of consonant sound /ʒ/ and /ʃ/



<https://eleclassroom.wordpress.com/2018/08/17/when-z-becomes-%CA%92/>

/z/ is a voiced consonant; its unvoiced counterpart is IPA phoneme /ʃ/.

/z/ is a fricative; its affricate counterpart is IPA phoneme /dʒ/.

Teacher: Now, I shall give you a corpus of /z/ sound in words consisting of word-initial, word-medial, and word-final positions. I shall also monitor the pronunciation of the words in the corpus through counsel. There are loan words in the corpus. If a word begins or ends with /z/ then it must be a loan word or a foreign word. Also, most words that have /z/ are enclosed in vowels.

Word initial	Word-medial		Word Final
Genre	Asia	Amnesia	Collage
Jus	Confusion	Luxurious	Garage
Gendarme	Decision	Seizure	Mirage
Jabot	Measure	Collision	Beige
Jupe	Vision	Exclusion	Rouge
J'accuse	Casual	Explosion	Prestige
Jete	Fusion	Fusion	Massage
Genocidaire	Leisure	Inclusion	Camouflage
Gîte	Usual	Lesion	Entourage
Jacques	Visual	Persuasion	Sabotage
Zhao	Version	Precision	
Zhivar	Incision	Revision	
Zhoozh	Illusion	Disclosure	
zhuzh	Treasure	Enclosure	
zubron	Conclusion	Invasion	
Georges		Television	

Meaning and transcription of unknown words:

T: Now I shall transcribe and discuss some words from the corpus in the classroom

within schedule time.

Gendarme /'ʒɒn.da:m/: a paramilitary police officer in France and other French-speaking countries

Jabot /'ʒæ.bəʊ/: an ornamental frill or ruffle on the front of a shirt or blouse, typically made of lace

Jupe /ʒu:p/ : A style of skirt. A style of short jacket, usually for a woman or child.

Vision /'vɪʒ(ə)n/: the faculty or state of being able to see

Fusion /'fju:ʒ(ə)n/: the process or result of joining two or more things together to form a single entity.

Incision /ɪn'sɪʒ(ə)n/: a surgical cut made in skin or flesh

Illusion /ɪ'lu:ʒ(ə)n/: an instance of a wrong or misinterpreted perception of a sensory experience

Amnesia /am'ni:ziə/: a partial or total loss of memory

Lesion /'li:ʒ(ə)n/: a region in an organ or tissue which has suffered damage through injury or disease, such as a wound, ulcer, abscess, or tumour

Collage /'kɒlə:ʒ,kə'lə:ʒ/: a piece of art made by sticking various different materials such as photographs and pieces of paper or fabric on to a backing

Mirage /'mɪrɑ:ʒ,mɪ'rɑ:ʒ/: an optical illusion caused by atmospheric conditions, especially the appearance of a sheet of water in a desert or on a hot road caused by the refraction of light from the sky by heated air.

Beige /beɪʒ,beɪdʒ/: a pale sandy fawn colour.

Rouge /ru:ʒ/: a red powder or cream used as a cosmetic for colouring the cheeks or lips

Massage /'masɑ:(d)ʒ,mə'sɑ:(d)ʒ/: the rubbing and kneading of muscles and joints of the body with the hands, especially to relieve tension or pain.

[Camouflage /'kaməflɑ:ʒ/: the disguising of military personnel, equipment, and installations by painting or covering them to make them blend in with their surroundings.

Entourage /'ɒntʊrɑ:ʒ,ɒntʊ(ə)'rɑ:ʒ/: a group of people attending or surrounding an important person.

Sabotage /'sabətɑ:ʒ/: deliberately destroy, damage, or obstruct (something), especially for political or military advantage.

a. Minimal pairs: T: I shall select some minimal pairs that will be sincerely and sufficiently practiced in the classroom within the class hour.			
/ʒ/	/dʒ/	/ʒ/	/ʃ/
Lesion leisure version Beige	Legion ledger virgin Badge	Allusion Allusions Confusion Confusions Measure Azure Measures Delusion Delusions Fusion Vision	Aleutian Aleutians Confucian Confucians Masher Asher Mashers Dilution Dilutions Fission. Mission
Inflection drill: The sound /ʒ/ is most common in the suffix “-sion.” This suffix transforms some verbs into nouns. If the verb ends in or, the final sound often becomes /ʒən/. Conclude + sion= Conclusion Decide + sion = Decision Invade + sion =Invasion Convert + sion =Conversion Confuse + sion = Confusion Revise + sion =Revision Explode + sion = Explosion Televi+sion= Television			
Recognition drill			

Teacher: Read the following sentences and underline the words which contain /ʒ/ sound.

1. The decision of the parents was most appropriate.
2. Soil erosion is due to deforestation.
3. The illness affected his vision.
4. The cars were all parked in the garage.
5. The division of the property among the brothers was unfair.
6. The thief stole the treasure.
7. A barrage was built on the river to control the flood water.
8. We use this spreadsheet to measure progress.
9. I have a vision of how we can make this work.
10. The collision of the two airplanes caused an explosion.

Assignment

1. Dear students, Practice /ʒ/ and /ʃ/ sound yourselves before standing the mirror.
2. Write ten sentences using minimal pairs of /ʒ/ and /ʃ/ sound.
3. Write a dialogue using words containing /ʒ/ and /ʃ/ sound.

Teacher: That is end for today.

Students: Thank you, sir

APPENDIX X

LESSON PLAN 7

Lesson Plan 7 For Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 4: Teaching consonant sound /S/ and /z/	
Level: Students of Honors 1 st & 2 nd year, English department.	
Learning objectives: Objectives of this lesson?	
i. To teach the student the place and manner of articulation of /S/ and /z/ sound ii. To help them to produce words with /S/ and /z/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking	
Learning outcomes: After finishing the lesson, the students will be able to-	
i. pronounce the /S/ and /z/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation	
Time: 45 minutes	
Learning Activities	
Interaction drill/ listen and imitate	
Teacher: Dear students read the following dialogue about activities in the weekends loudly and I shall observe your pronunciation of the words containing /S/ and /z/ sound.	
Activities in the weekends	
Sams: What will you do with thesebags ?	
Zims: I sometimes go for camping in the weekends .	
Sams: Who accompanies you?	
Zims: My pet dogs and cats .	

Sams : What **things** attract you most in the camping?

Zims: The **buzzing** sound of the **bees**.

Sams: Do you cook yourself in the **site**?

Zims: I only cook for the **animals**.

Sams: Who **supplies** food for you?

Zims: The **boys** in the **cafés** supply it.

Sams: When do you return from the **site**?

Zims: In the evening.

Sams:Thanks for your conversation.

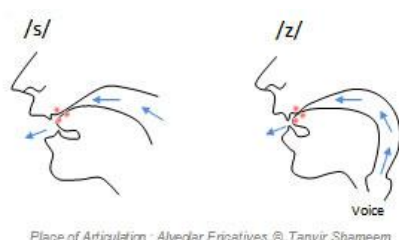
Zims: Welcome.

T: Dear learners, it is evident from your speaking that you have mispronounced the English consonant sound /z/ in the words of boldfaces. There is also/s/ sound in the dialogue. As there are both /s/স/ and /z/জ/ sound in Bengali language, you are confused in pronouncing these sound. You pronounce /s/ instead of /z/ and it has been permanent or fossilized in your English speaking. Now I am reading the dialogue several times and you will listen to me carefully.

Now, we will study on the correct articulation and pronunciation of the English /z/ phoneme. We must consider this wrongly pronounced sound. So, we will study on it today.

T: the S and Z are alveolar fricatives. /s/ is a strong unvoiced (vocal cord does not vibrate) friction consonant whereas /z/ is weak, voiced (vocal cord vibrates) friction consonant. To produce these sounds, put the tip and blade of your tongue very close to the alveolar ridge. Close the teeth together and touch the side of your teeth with the sides of your tongue (Amanullah, 2009). You will also be clear about their place of articulation from the following image.

Image of the place of articulation of consonant sound /s/ and /z/



<https://www.google.com/search?q=Image+of+the+place+of+articulation+of+consonant+sound+/s/+and+/z/>

Sibilant Sounds: Another sound which is relevant to this is the sibilant sound which is produced by forcing air out toward your teeth. It is characterized by a hissing sound (sssss), a buzzing sound (zzzzz) or the sound teachers make when they want you to be quiet (shhhh!).

Z like the sound a bee makes... zzzzzz (voiced).

S like the sound a snake makes... ssssss (unvoiced).

SH like the sound a teacher makes when they want you to be quiet... shhhhh(sibilant).

Now we know the difference between voiced, voiceless and sibilant sounds. We can look at the following rules for the correct pronunciation of /S/ at the end of words in English: The pronunciation of the final S in plural words and verbs in the third person depend on the final consonant sound before that S.

The ending is pronounced /s/ after a voiceless sound: helps /ps/ -- sits /ts/ -- looks /ks/

It is pronounced /z/ after a voiced sound: crabs /bz/ -- words /dz/ -- gloves /vz/.

It is pronounced /ɪz / or /əz/ after a sibilant sound: Asses/ɪz/--

<https://www.grammar.cl/english/pronunciation-final-s.htm> 3/6

Repetition drill:

Teacher: Now, I shall give you a **corpus** of /S/ sound /z/ sound in words consisting of word-initial, word-medial, and word-final positions. I shall also monitor the pronunciation of the words in the corpus through counsel.

Corpus of /s/ sound:			Corpus of /z/ sound:		
Initial	Medial	Final	Initial	Medial	Final

Sit	Sensible	It's	Zoo	Buzzing	Mrs.
Sam	Outside	Let's	Zip	Surprises	Smells
Sand	Seaside	Six	Zap	Amazing	Contains
Sunday	Instead	Yes	Zebra	Buzzes	These
Sailing	Just	Alice	Zinnia	Isn't	Bees
Star	Expensive	Fix	Zoom	Dozen	Is
Sleep	Exciting	Fox	Zinc	Visit	Does
Spend	Descend	Its	Zero	Hisses	Says
Swim	Muscle	Cats	Zipper	Noises	Jones
Skiing	Sister	Cross	Zimbabwe	Example	Busy
Sound	Next	Miss	Zambia	Exist	Quiz
Science		Boss	Xylophone	Roses	Buzz
Sad		This			Hers
Say					Bags

Meaning and transcription of unknown words

Sensible: /'sensɪb(ə)l/ done or chosen in accordance with wisdom or prudence; likely to be of benefit

Expensive: /ɪk'spensɪv, ɛk'spensɪv/ costing a lot of money

Descend: /dɪ'send/ move or fall downwards

Muscle: /'mʌs(ə)l/ a band or bundle of fibrous tissue in a human or animal body that has the ability to contract, producing movement in or maintaining the position of parts of the body

Scream: /skri:m/ give a long, loud, piercing cry or cries expressing extreme emotion or pain

Score: /sko:/ the number of points, goals, runs, achieved in a game or by a team or an individual.

Scare: /ske:/ cause great fear or nervousness in; frighten.

Zinnia: /'zɪniə/ an American plant of the daisy family, which is widely cultivated for its bright showy flowers

Xylophone: /'zʌɪləfəʊn/ a musical instrument played by striking a row of wooden bars of graduated length with one or more small wooden or plastic beaters

Drill with minimal pairs

T: I shall select some minimal pairs that will be sincerely and sufficiently practiced in the classroom within the class hour.

/s/		/z/	
Bus /bʌs/	Buzz /bʌz/	advice /əd'vʌs/	Advise
ice /ʌs/	eyes/ʌ/	base /beɪs/	/əd'vʌz/
once /wʌns/	ones /wʌnz/	basis /'beɪsɪs/	Bays /beɪz/
pence /pens/	pens /penz/	brass/ brɑ:s/	Bases
place /pleɪs/	plays /pleɪz/	dice /dʌs/	/'beɪsɪ:z/
price /praɪs/	prize /praɪz/	force /fɔ:s/	bras /bra:z/
hiss /hɪs/	his /hɪz/	juice /dʒu:s/	dies /daɪ:z/
piece /pi:s/	peas /pi:z/	lice /laɪs/	fours /fɔ:z/
race /reɪs/	rays /reɪz/	course /kɔ:s/	Jews /dʒu:z/
fuss /fʌs/	fuzz /fʌz/	fleece /fli:s/	Lies /laɪz/
grace /greɪs/	grays /greɪz/	curse /kɜ:s/	Cores /kɔ:z/
			Fleas /fli:z/
			Curs /kɜ:z/

<https://www.englishclub.com/pronunciation/minimal-pairs-s-z-final.php>

Restatement drill:

T: Dear students listen to me carefully and restate the following sentences.

Mind your own business.

The president will address the nation this evening.

Result The results were unexpected.

Reason There's no reason for this..

What's your favorite type of music?

My favorite season is fall.

What's your position on this?

He's so easy to get along with.

He's an amazing husband and father.

It's a thousand dollars.

We have really noisy neighbors.
He's a surprisingly good dancer.
Each color represents a different result.

<https://www.clearenglishcorner.com/blog/533/8>

Recognition drill:

Teacher: Read the following sentences and underline the words which contain /S/ and /z/ sound. 1) Is Sally his sister?

2) Sam was my son.

3) The seven dogs and cats stay inside the house.

4) He was so sad last Sunday.

5) The sun is so high in the sky.

6) Six boys and girls sat on the fence outside the store.

7) The science quiz was easy.

9) Is this house hers?

<https://www.really-learn-english.com/english-pronunciation-lesson-25-s-and-z-sounds.html> 9/11

Assignment:

1. Practice the sounds yourself before standing the mirror and with any other person as much as you can.

2. Write a paragraph using words containing /S/ and /z/ sound.

Teacher: That is end for today.

Students: Thank you, sir.

APPENDIX XI

LESSON PLAN 8

Lesson Plan 8 For Pronunciation class

Title of lesson (course): English Pronunciation Topic 5: Teaching consonant sound /g/ and / gh/	
Level: Students of Honors 1 st & 2 nd year, English department.	
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /g/ and / gh/ sound - ii.To help them to produce words with /g/ and / gh/ sound - iii.To identify fossilized errors in their English pronunciation - iv.To help them to defossilize the problem causing sound in their speaking	
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /g/ and / gh/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation	
Time: 45 minutes	
Learning Activities: Interaction drill/ listen and imitate Teacher: Dear students read the following text about “the girl and the ghost” loudly and I shall observe your pronunciation of the words containing /g/ and / gh/ sound. The girl and the ghost One day a girl of ten was going to buy some ghee from the market. It was late afternoon and the market was not very near to the village. There was a deep forest and a pool with a ghat on the way to the market. As there was no one on the way, the atmosphere was mostly ghostly . When she saw a Ghorial in the ghat of the pool, she was trembling thinking it as a ghost .At that time, a Ghazi was returning from the	

market carrying **gherkin** in his hand, saw the **girl** and talked to her. The **girl** took heart and told him everything. When the **Ghazi** knew that she wanted to return home without the **ghee**, he helped her.

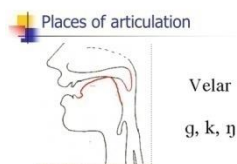
T: Dear learners, it is evident from your speaking that you have mispronounced the English consonant sound /gh/ in the words of boldfaces. There is also /g/ sound in the dialogue. As there are both /g/ গ/ and / gh/ ঘ/ sound in Bengali language, you are confused in pronouncing these sound. You pronounce /g/ গ/ instead of / gh/ ঘ/ and it has been permanent or fossilized in your English speaking. I am reading the text several times and you will listen to me carefully.

Now, we will study on the correct articulation and pronunciation of the English / gh/ phoneme. We must consider this wrongly pronounced sound. So, we will study on it today.

T: the /g/ is voiced velar plosive and a short, weak and stop consonant. To produce the sound, touch the soft palate or velar of your mouth firmly with the back of your tongue so that the airflow is trapped for a short time (Amanullah, 2009). In English ⟨ gh⟩ historically represented the voiceless velar fricative. In the dominant dialects of modern English, ⟨gh⟩ is almost always either silent or pronounced /f/ (see Ough). It is thought that before disappearing, the sound became partially or completely voiced. When gh occurs at the beginning of a word in English, it is pronounced /g/ as in "ghost", "ghastly", "ghoul", "ghetto", "ghee." Many Bengali speakers pronounce it as aspirated / g / as there is /ঘ/ gh/ sound in Bengli. 'gh' is pronounced as /f/ as in 'laugh', /g/ as in 'ghost' or is not pronounced at all as in 'plough' or 'night'.

You will also be clear about the place of articulation of /g/ and /gh/ from the following image.

Image of the place of articulation of consonant sound / g/ and / gh/



<https://www.google.com/search?q=image+of+place+of+articulation+of+/gh/+sound>

Repetition drill:

Teacher: Now, I shall give you a **corpus** of / gh/ sound that pronounces as / g/. I shall also monitor the pronunciation of the words in the corpus through counsel.

Corpus of /gh/ sound:

Ghastly, ghetto,gherao, ghoul, gharry, ghaut,ghulam,Ghana,Pittsburgh, spaghetti, yoghurt

Meaning and transcription of the words:

Ghastly /'gɑ:s(t)li/:causing great horror or fear.

Ghetto /'getəʊ/:a part of a city, especially a slum area, occupied by a minority group or groups.

Gherao /ge'raʊ/:a protest in which workers prevent employers or managers from leaving a place of work until certain demands are met.

Ghoul /gu:l/: an evil spirit or phantom, especially one supposed to rob graves and feed on dead bodies/a person morbidly interested in death or disaster

Gharry /'gɑ:ri/: (in South Asia) a horse-drawn carriage available for hire.

Ghaut / (gʌt) /: Caribbean a small cleft in a hill through which a rivulet runs down to the sea.

Ghulam (Arabic: غلام (is an Arabic word meaning **servant, assistant, boy, or youth**

Ghana [g ah-nuh, g an-uh] a republic in West Africa comprising the former colonies of the Gold Coast and Ashanti, the protectorate of the Northern Territories, and the U.N. trusteeship of British Togoland: member of the Commonwealth of Nations since 1957. 91,843 sq. mi. (237,873 sq. km). *Capital:* Accra.

Pittsburg ^[pits-burg]: a port in SW Pennsylvania, at the confluence of the Allegheny and Monongahela rivers that forms the Ohio River: steel industry.

Spaghetti/spə'geti/:pasta made in solid strings, between macaroni and vermicelli in

thickness.				
Yogurt /'jɒgət, 'jəʊgət/: a semi-solid food prepared from milk fermented by added bacteria, often sweetened and flavoured.				
Completion drill: T: Dear students, there are some words where / g / sound remains silent in English. But many of you pronounce it as /j/ as there is /গ/ sound in Bangla and it seems it has been permanent and fossilized in you. Complete the following words using English phoneme / g /. If you fail, I shall help you.				
Nat		/næt/ n.	a very small flying insect	
Nome		/noʊm/n.	a fictional being like a dwarf	
Nash		/næʃ/ v.	to grind the teeth together	
Sin		/saɪn/ n.	a symbol	
Forein		/'fʌrən/adj.	from a different place	
Campaign		/kæm'peɪn/n.	a series of actions for one goal	
Alin		/ə'laɪn / v.	to put in a line	
Resin		/resain/n.	a symbol	
T: Now follow the completed words with / g / phoneme where / g / is silent. G+nat=gnat G+nome=gnome G+nash=gnash Si+gn= sign Forei+gn= foreign Campai+gn=campaign Ali+gn=Align Resi+gn=resign Assignment:				

T: Dear students,

1. Practice the sounds discussed in the class standing before a mirror to observe your own body position and way of articulation.

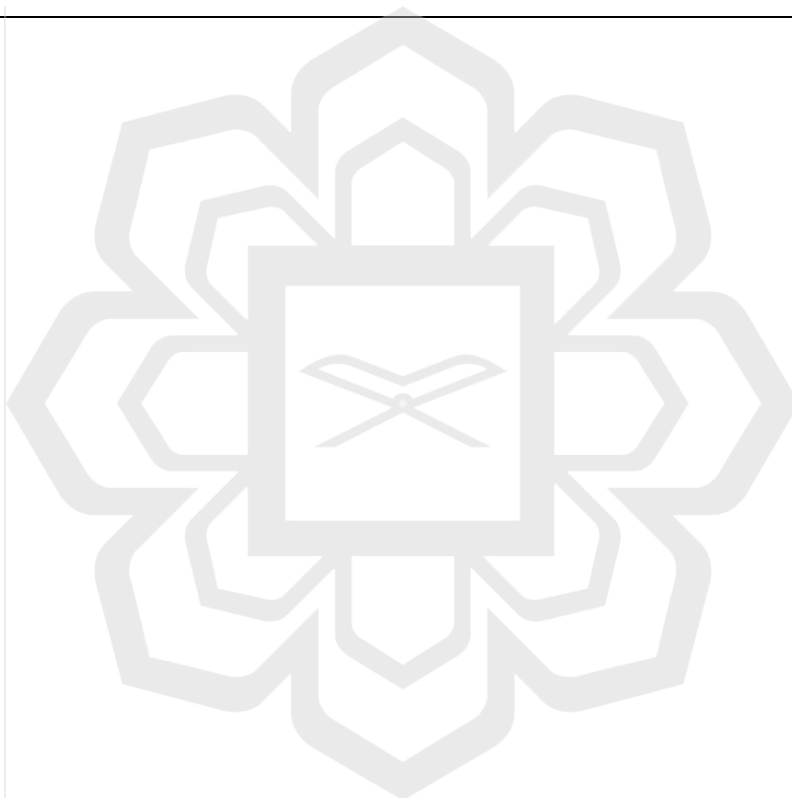
2. Write a paragraph using words having / g / and / g h/ sounds at home.

Then the teacher turns back to his/her rule and clearly summarizes the day's topic in a simple way.

T: That is end for today.

S: Thank you very much, sir.

T: you are welcome



APPENDIX XII

LESSON PLAN 1 (CONTROLLED GROUP)

Lesson Plan 1 For Pronunciation Class

Title of lesson (course): English Pronunciation		
Topic 1: Teaching Phonetics and phonology long and short vowel, /u:/ and /u/		
Level: Students of Honors 3rd year, English department,		
Learning objectives:		
Objectives of this lesson?		
i. To teach the students about phonetics and phonology.		
ii. To teach them vowel sound		
iii. To teach them phonemic transcription of the words containing /u/ and /u:/		
Learning outcomes:		
Following this lesson, the students will be able to-		
i. know about phonetics and phonology.		
ii. know vowel sound /u/ and /u:/		
iii. know the phonemic transcription of the words containing u/ and /u:/		
Time: 45 minutes		
Phonetics and phonology		
Teacher: Phonetics is the scientific study of the production, transmission and reception of human sounds. It looks at speech from three distinct but interdependent viewpoints: it studies the speech organs, which produce sounds of language; it studies waves, the physical form in which sounds are transmitted through the air from one person to another; and it studies the way in which human beings perceive sounds through the medium of the ear (Varshney, 2000).		
Phonetics is divided into three types		
A. Articulatory b. Acoustic c. Auditive		
Phonology:		

Phonology is a branch of linguistics that studies how languages or dialects systematically organize their sounds (or constituent parts of signs, in sign languages). The term also refers to the sound or sign system of any particular language variety. At one time, the study of phonology only related to the study of the systems of phonemes in spoken languages.

- Sounds can be divided into vowels and consonants.

Vowel: Vowels may be defined as voiced sounds in the production of which there occurs no obstruction either partial or complete of the air passage. In English phonetics we have 12 pure RP vowels. The English words with these symbols and phonemic transcription are given below.

These are –

IPA symbol	English words	Phonemic transcription	Tongue Position
i	Ship	/ʃɪp/	Front vowel
I:	Sheep	/ʃi:p/	Front vowel
ɔ	Shot	/ʃɔt/	Back vowel
ɔ:	Short	/ʃɔ:t/	Back vowel
ʌ	Come	/kʌm/	Central vowel
ɑ:	Calm	/kɑ:m/	Back vowel
u	Full	/ful/	Back vowel
u:	Fool	/fu:l/	Back vowel
e	Bed	/bed/	Front vowel
æ	Bad	/bæd/	Front vowel
ə	Ago	/əgəʊ/	Central vowel
ə:	Girl	/gə:l/	Central vowel

Teacher: Dear students, now we will discuss the pronunciation of the words containing /u/ sound and their phonemic transcription. To pronounce /u/ sound, our lips become rounded, the back of the tongue goes fairly high and it remains tense. So

it is a short vowel. To pronounce /u:/ sound, our lips also becomes round and the back(further back than /u/) of the tongue goes fully high (very high) and it remains tense. So it is a long vowel. You will be more clear about the articulation of /u/ and /u:/ sound from the following image.

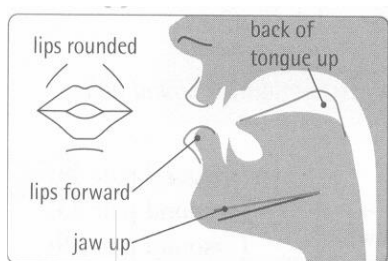


Figure 2 : Image of articulating /u/ and /u:/ sound

Phonemic transcription of the words containing /u/ and /u:/ sounds.

Monosyllabic words:			
Cook /kʊk/	Look /lʊk/	Soon /su:n/	Could /kʊd/
Crook /krʊk/	Shook /ʃʊk/	Tool /tu:l/	Tooth /tu:θ /
Rook /rʊk/	Took /tʊk/	Group /gru:p/	Chew /tʃu:/
Too /tu:/	Wood /wʊd/	True /tru:/	Crew /kru:/
Bull /bʊl/	Wool /wʊl/	Fruit /fru:t/	Drew /dru:/
Who /hu:,hʊ/	Choose /tʃu:z/	Moor /mʊə/	Threw /θru:/
Book /bʊk/	Cool /ku:l/	Toot /tu:t/	Soup /su:p/Move
Foot /fʊt/	Fool /fu:l/	Wolf /wʊlf/	/mu:v/
Good /gʊd/	Loose / lu:s/	Rude /ru:d/	Boom /bu:m/

Assignment:

T: Dear students,

1. practice the sounds discussed in the class standing before a mirror to observe your

own body position and way of articulation.

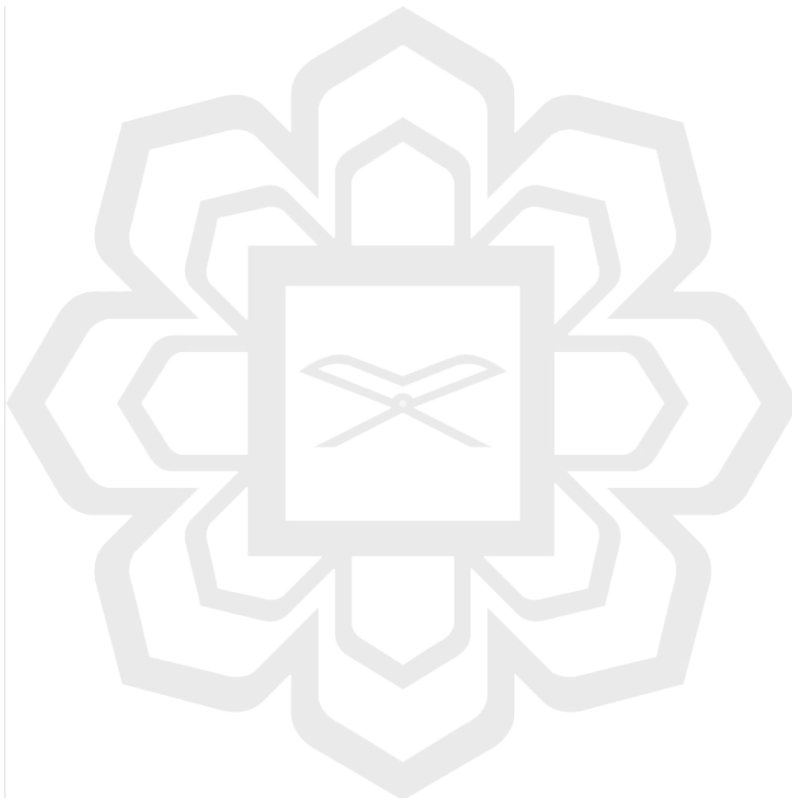
2. Write a paragraph using words having /u/ and /u:/ sounds at home.

Then the teacher turns back to his/her rule and clearly summarizes the day's topic in a simple way.

T: That is end for today. The same topic will continue in the next class.

S: Thank you very much, sir.

T: you are welcome.



APPENDIX XIII

LESSON PLAN 2

Lesson Plan 2 For Pronunciation class

Title of lesson (course): English Pronunciation			
Topic 1: Teaching of phonemic transcription of the words having /u:/ and /u/ phoneme.			
Level: Students of Honors 3rd year, English department,			
Learning objectives:			
Objectives of this lesson?			
i. To teach them phonemic transcription of the words containing /u/ and /u:/			
Learning outcomes:			
Following this lesson, the students will be able to-			
i. To know the phonemic transcription of the words containing /u/ and /u:/			
Time: 45 minutes			
Recapitulation of the previous class:			
T: Dear students, in our previous class, we discussed phonetic and phonology, vowel sound and transcription of the words containing /u/ and /u:/ sound. Today we will continue phonemic transcription of the words containing /u/ and /u:/ sound.			
Monosyllabic words:			
Full /ful/	Fool /fu:/	Luke /lu:k/luk/	Look /lu:k/
Pull /pul/	Pool /pu:l/	Should /ʃud/	shooed /ʃu:d/
Could /kud/	Cooed /ku:d/	cook /kuk/	kook /ku:k/
would /wud/	Wooped /wu:d/	suit /sut/	soot /su:t/
bull /bul/	Boole /bu:l/	wood /wud/	wooped /wu:d/
hood /hud/	Who'd /wu:d/	Moon /mun/	Noon /nu:n/
good /gud/	Gooed /gu:d/	flew /flu:/	blue /blu:/

soot /sut/	Suit /su:d/	too /tu:/	zoo /zu:/
blew /blu/	Clue /klu:/	tune /tun/	Sue /su:/
toon /tun/	Soon/su:n/	Boot /bu:t/	toot /tut/

Disyllabic words:

School /sku:l/	Bullet /'bʊlɪt/ Cushion	Bosom	Bedroom /bedrʊm/
Stool /stʊl/	/kʊʃ(ə)n/	/bʊz(ə)m/	Spoon /spuːn/
Include/inklʊd/	Roomy/'ru:mi,'rɒmi/Pudding	Woman	Mushroom/mʌʃrʊm/
Brutal/'bru:t(ə)l/	/pʊdɪŋ/	/'wʊmən/	Do-gooder/dʊ'gʊdər/
Screw	Sugar /'ʃʊgə/	Duty /dʒu:ti/	cuckoo /kʊku/
/skru:/Youth	Poolroom /pu:lru:m/	Guru /gʊru:/,	Cookbook /'kʊkbu:k/
/ju:θ/		Judo	
		/dʒu:dəʊ/Butcher	
		/'bʊtʃə/	

Assignment:

1. Write a paragraph of 100 word using /u/ and /u:/ sound and make the words bold which contain these two sounds.

2. Practice these sounds with anybody, anytime and anywhere if you get chance.

Teacher: That is end for today.

Students: Thank you, sir.

APPENDIX XIV

LESSON PLAN 3

Lesson Plan 3 For Pronunciation class

Title of lesson (course): English Pronunciation			
Topic 1: Teaching phonemic transcription and test of phonemic transcription of the words containing /u:/ and /u/			
Level: Students of Honors 3 rd year, English department,			
Learning objectives:			
Objectives of this lesson?			
i. To teach them phonemic transcription of the words containing /u/ and /u:/			
Learning outcomes:			
Following this lesson, the students will be able to-			
i. To know the phonemic transcription of the words containing /u/ and /u:/			
Time: 45 minutes			
Recapitulation of the previous class:			
T: Dear students, in our previous class, we discussed phonetic and phonology, vowel sound and transcription of the words containing /u/ and /u:/ sound. Today we will continue phonemic transcription of the words containing /u/ and /u:/ sound.			
T: Dear students, practice doing phonemic transcription of the following words.			
Monosyllabic words:			
To /tu/	Foot/fʊt/	Too /tu:/	Who /hu:/
Throw /θrəʊ/	Book /buk/	Through /θru:/	Rude (ru:d)
Bush/bʊʃ	Good /gud/	Threw/θru:/	Food /fu:d/
Put/pʊt/	Cook /kuk/	Move/mu:v/	Moon /mu:n/
		Group /gru:p/	Toot /tu:t/
			Cartoon /kɑ:tu:n/
Teacher: Now we shall discuss the following words with meaning and transcription.			

Crook	/kroʊk/	bad, unpleasant, or unsatisfactory. A person who is dishonest or a criminal.	
Rook	/roʊk/	a gregarious Eurasian crow with black plumage and a bare face, nesting in colonies in treetops	
Toot	/tu:t/	a short, sharp sound made by a horn, trumpet, or similar instrument.	
Lew	/'lü /	now dialectal British : moderately warm : lukewarm	
Brew	/bru:/	make (beer) by soaking, boiling, and fermentation	
Boom	/bu:m/	a loud, deep, resonant sound	
Hoodoo	/'hu:du:/	a run of bad luck associated with a particular person, group, or activity	
Accrue	/ə'kru:/	(of a benefit or sum of money) be received by someone in regular or increasing amounts over time	
Impunity	/im'pju:niti/	exemption from punishment or freedom from the injurious consequences of an action	
Hood	/hod/	a covering for the head and neck with an opening for the face, typically forming part of a coat or cloak.	
Brook	/brok/	a small stream	
Broom	/bru:m/	a long-handled brush of bristles or twigs, used for sweeping.	

Test of phonemic transcription:

Teacher: Dear students, Transcribe the following words and identify the words containing /u/ and /u:/ sound. There are some words without /u/ and /u:/ sound.

Full, fun, fan, moan, boat, woman sugar, shampoo, butcher, balloon, football, Chase, choose, chosen, move, notebook, round, old, tomb, boom truth, umbrella, tourist, rude, roof, boot, bull, pool, foot, mute, jute, zoo, hoop, put, cook, took, look, value, true, crew, Hebrew, threw, wool.

Teacher: When you finish your transcription, please submit the answer scripts to me. I shall examine the scripts and find out how many words you have transcribed correctly.

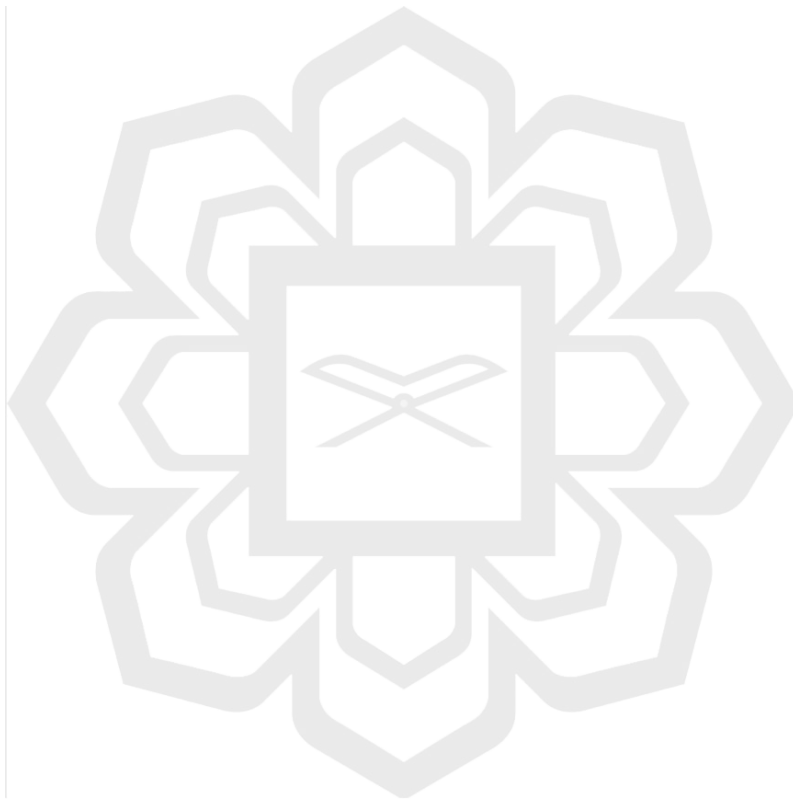
Assignment:

Teacher: students, write a dialogue using words containing /u/ and /u:/ sound.

That is end for today.

Students: Thank you, sir.

Teacher: Welcome.



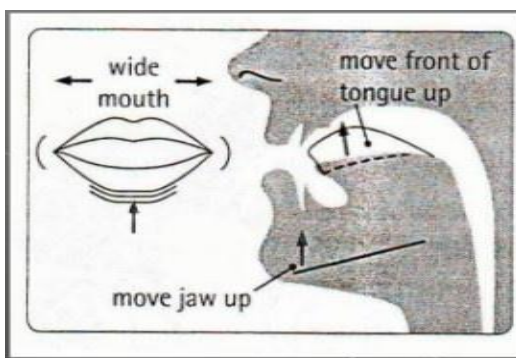
APPENDIX XV

LESSON PLAN 4

Lesson Plan 4 For Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 2: Teaching of transcription of the words containing /e/ and /ei/ sound	
Level: Students of Honors 3rd year, English department,	
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /ei/ sound ii. To teach them to produce words with /ei/ sound iii. To teach them to transcribe the words containing /ei/ sound	
Learning outcomes: After finishing the lesson, the students will be able to- i. To know the place and manner of articulation of /ei/ sound ii. To produce words with /ei/ sound iii. To transcribe the words containing /ei/ sound	
Time: 45 minutes	
Teacher: /ei/ is a closing diphthong or falling diphthong. It is unrounded in the production of which our lips stretch as like as we smile but our mouth closes a little as we move to the /i:/ sound. /ei/ is found to be extensively used in places having consonant flanked by vowels on both sides e.g. /teik/ (take), /reit/ (rate). (Bashiruddin, 1993). It is also audibly heard in such words as may/mei/, way/wei/, make/meik/, say/sei/, same/seim/, day/dei/.	

Image of the place of articulation of vowel(diphthong) sound /ei/



<https://www.google.com/search?q=image+of+tongue+position+for+ei+sound>

T: Dear students, transform the following words containing /ei/ sound.

Word initial:

Words	Transcription	Words	Transcription	Words	Transcription
Able	/ˈeɪb(ə)l/	ancient	/ˈeɪnʃ(ə)nt/	ache	/eɪk/
age	/eɪdʒ/	agent	/ˈeɪdʒ(ə)nt/	acre	/ˈeɪkə/
agency	/eɪdʒ(ə)nsi/	eighteenth	/eɪˈtiːnθ/	alien	/ˈeɪliən/
Asia	/ˈeɪ.ʒə//ˈeɪpr	ace	/eɪs//ˈeɪndʒ(ə)l//e	ape	/eɪp/
April	(ɪ)l/	angel	ɪθ/	ace	/eɪs/
aim	/eɪm/	eighth	/eɪmɪəb(ə)l/	aid	/eɪd/
alienate	/ˈeɪliəneɪt/	amiable	/ˈeɪkəːn/	apron	/ˈeɪpr(ə)n/
aviation,	/eɪvɪˈeɪʃ(ə)n/	acorn		apple	/ˈap(ə)l/
ail	/eɪl/				

Word-medial:

Words	Transcription	Words	Transcription	Words	Transcription
Make	/meɪk/	ratio,	/ˈreɪʃiəʊ/	concentrate	/ˈkɒns(ə)ntreɪt/
take	/teɪk/	chamber	/tʃeɪmbə//	evaluation	/ɪˌvæljuˈeɪʃ(ə)n/
wage	/weɪdʒ/	plain	pleɪn//keɪk	observation	/əbzəˈveɪʃ(ə)n/
basically	/ˈbeɪsɪkli/	cake	/	variation	/veɪˈreɪʃ(ə)n/
straight	/streɪt/	tail	/teɪl/	grateful	/ˈɡreɪtful/

sake	/seɪk/	relate	/rɪ'leɪt/	appreciation	/ə'pri:ʃi'eɪʃ(ə)n/
phrase	/freɪz/	retain	/rɪ'leɪt//ɛ's	n	/tak'seɪʃ(ə)n/
grace	/ɡreɪs/	escape	keɪp/	taxation	/tᵻ'mædʒɪ'neɪʃ(ə)n
				imagination	/

Word Final

Words	Transcription	Words	Transcription	Words	Transcription
May	/meɪ/	hey	/heɪ/	Essay	/ˈɛseɪ/
way	/weɪ/	gay	/geɪ/	Tray	/treɪ/
say	/seɪ/	Clay	/kleɪ/	highway	/ˈhaɪweɪ/
day	/deɪ/	prey	/preɪ/	pay	/peɪ/
away	/ə'weɪ/	pay	/peɪ/	play	/pleɪ/
today	/tə'deɪ/	anyway	/ˈeniweɪ/	stay	/steɪ/
display	/dɪspleɪ/	survey	/sə'veɪ/	grey	/ɡreɪ/
ray	/reɪ/	tray	/treɪ/	bay	/beɪ/
pray	/preɪ/	delay	/dɪ'leɪ/		

Assignment:

Teacher:

1. Dear students, You will practice these sound in your daily conversation with others. You can also practice yourself.
2. Write a dialogue containing words with /ei/ sound.

Teacher: That is end for today.

Students: Thank you, teacher.

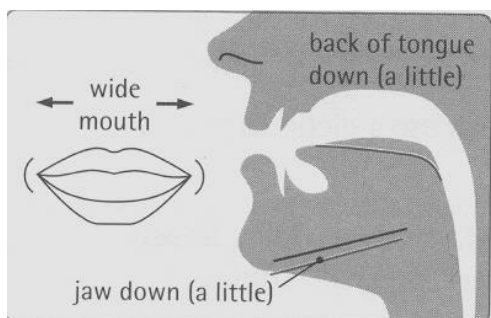
APPENDIX XVI

LESSON PLAN 5

Lesson Plan 5 For Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 2: Teaching of transcription of the words containing /e/ sound	
Level: Students of Honors 3rd year, English department,	
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /e/ sound ii. To teach them to produce words with /e/ and /ei/ sound iii. To teach them to transcribe the words containing /e/ sound	
Learning outcomes: After finishing the lesson, the students will be able to- i. To know the place and manner of articulation of /e/ sound ii. To produce words with /e/ sound iii. To transcribe the words containing /e/ sound	
Time: 45 minutes	

T: To pronounce /e/ sound, the front of the tongue is raised in the direction of the hard palate between high-mid and low-mid positions. The lips are drawn back, and the lower jaw is somewhat dropped. /e/ is described as high-mid-unrounded vowel (Rajimwale, 1999).



<https://www.google.com/search?q=image+of+tongue+position+for+e+sound>

T: Dear students, transform the following words containing /e/ sound.

Words	Transcription	Words	Transcription	Words	Transcription
Egg	/eg/	Deck	/dɛk/	bend	/bend/
elephant	/'ɛlɪf(ə)nt/	Dress	/dres/	tent	/'Tent/
enter	/'ɛntə/	Helmet	/helmet/	fed	/fed/
elevator	/'ɛlɪveɪtə/	hen,	/Hen/	lend	/lend/
envelop	/'ɛlbəʊ/	ten,	/ten/	vent	/vent/
exit	/ɛn'vɛləp/	men	/men/	led	/led/
empty	/'ɛgzɪt/	sent	/sent/	bet	/bet/
elk	/'ɛm(p)ti/	bed	/bed/	mend	/mend/
	/ɛlk/	pen	/pen/	eggplant	/'ɛgplɑ:nt/

T: Now I shall transcribe and discuss some more words from the corpus in the classroom within schedule time.

Vocabulary:

Hey/hei/: used to attract attention, to express surprise, interest, or annoyance, or to elicit agreement.

Make/Meik: form (something) by putting parts together or combining substances; creates.

Late/leit/: doing something or taking place after the expected, proper, or usual time.

Say/sei/: utter words so as to convey information, an opinion, a feeling or intention, or an instruction.

Afraid/ə'freid/: feeling fear or anxiety; frightened.

Waiting /'wertɪŋ/: the action of staying where one is or delaying action until a particular time or event.

Mr Grey/grei/: name of a person.

Train /trem/: teach (a person or animal) a particular skill or type of behavior through practice and instruction over a period of time.

Eight-eight /eit/: equivalent to the product of two and four; one more than seven or two less than ten; 8.

May /meɪ/: expressing possibility / used to ask for or to give permission.

Timetable /'tɪmtəb(ə)l/: a chart showing the departure and arrival times of trains, buses, or aircraft.

Station/'steɪʃ(ə)n/: a place on a railway line where trains regularly stop so that passengers can get on or off.

They /ðei/: used to refer to two or more people or things previously mentioned or easily identified.

Ages/eɪdʒ/: the length of time that a person has lived or a thing has existed.

Baker/'beɪkə/: a person who makes bread and cakes, especially as a trade.
an oven used for a particular purpose.

April/'eɪpr(ɪ)l/: the fourth month of the year, in the northern hemisphere usually considered the second month of spring.

Railway /'reɪlweɪ/: a track made of steel rails along which trains run(Baker, 1996).

Assignment:

Teacher:

1. Dear students, You will practice these sounds outside the class with anybody, anytime and anywhere. You can also practice yourself before standing the mirror.
2. Write a paragraph using words containing /ei/ sound.

Teacher: That is end for today.

Students: Thank you, sir.

APPENDIX XVII

LESSON PLAN 6

Lesson Plan 6

For

Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 3: Teaching consonant sound and transcription of the words containing /ʒ/ and /ʃ/	
Level: Students of Honors 3rd year, English department,	
Learning objectives: Objectives of this lesson? i. To teach the student the place and manner of articulation of /ʒ/ and /ʃ/ sound ii. To help them to produce words with /ʒ/ and /ʃ/ sound iii. To identify fossilized errors in their English pronunciation iv. To help them to defossilize the problem causing sound in their speaking	
Learning outcomes: After finishing the lesson, the students will be able to- i. pronounce the /ʒ/ and /ʃ/ sound comprehensibly ii. identify the phonological fossilization in their English speaking iii. defossilize problem causing sound in their English pronunciation	
Time: 45 minutes	
Teacher: Today I shall discuss the definition of consonant sound and the phonetic symbols of consonant with English words in the class. Consonant: The word consonant has been derived from the Greek word consonautem which means the sound produced with the help of some other sound (vowel). Both the ancient Greeks and Indians defined the consonant as a sound produced with the help of a vowel. But such a definition is faulty and incomplete. First. There are sibilant consonants such as /s, ʃ, z, dʒ/ and some laterals and nasals which can be pronounced without the help of any vowel. Secondly, there are some languages which have words without any vowel. Hence, a consonant has been defined by most modern	

phoneticians and linguists as a sound which is produced by a stoppage or a partial stoppage of the breath that is to say, in the production of consonant the movement of air from the lung is partially or fully obstructed, as a result of narrowing or a complete closure of the air passage. English has a total of 24 RP consonants of which 15 are voiced and 9 voiceless.

T: Dear students, You will get a clear idea about the IPA symbols, English words and their phonemic transcription from the following table.

IPA Symbol	English Words	Phonemic transcription	IPA Symbol	English Words	Phonemic transcription
J	Yes	/jes/	f	Five	/faiv/
ɪ	Sing	/Siŋ/	l	Live	/Laiv/
P	Pin	/Pin/	d	Din	/din/
B	book	/buk/	h	Hot	/hɒt/
N	nose	/nəʊz/	m	Month	/mʌnθ/
G	get	/get/	θ	Month	/mʌnθ/
R	run	/rʌn/	k	Come	/kʌm/
dʒ	Judge	/dʒʌ dʒ/	ð	Then	/ðen/
V	vet	/vet/	ʃ	Shop	/ʃɒp/
ʒ	division	/diviʒn/	tʃ	church	/tʃa: tʃ/
S	son	/sʌn/	z	Zoo	/zu:/
T	tin	/tin/	w	Wood	/wud/

T: Among these consonant sounds, now we shall discuss only /ʒ/ and /ʃ/ sounds. The /ʒ/ is a voiced, alveo-palatal, fricative consonant. To produce this sound we have to press the middle of our tongue lightly between our alveolar ridge and our soft palate. The sides of our tongue should lightly touch our back upper teeth. Then we have to breathe out and allow air to flow past our tongue. Our vocal cords should vibrate.

The /ʃ/ sound is a voiceless alveo-palatal, fricative consonant. Production of this sound is almost the same as that of /ʒ/ sound but our vocal cords should

not vibrate.

Image of the place of articulation of consonant sound /z/ and /ʒ/



<https://eleclassroom.wordpress.com/2018/08/17/when-z-becomes-%CA%92/>

/z/ is a voiced consonant; its unvoiced counterpart is IPA phoneme /ʃ/.

/z/ is a fricative; its affricate counterpart is IPA phoneme /dʒ/.

T: The following table contains the English words and their phonemic transcription with /z/ and /ʃ/ sound.

Words	Phonemic transcription	Words	Phonemic transcription
	/z/		/ʃ/
Allusion	/ə'lu:ʒ(ə)n/	Aleutian	/ə'lu:ʃən/
Confusion	/kən'fju:ʒ(ə)n/	Confucian	/kən'fju:ʃ(ə)n/
Measure	/'meɜʒə/	Masher	/'maʃə/
Azure	/'aʒə, 'aʒjʊə/	Asher	/æʃə /
Delusion	/di'lu:ʒ(ə)n/	Dilution	/dɪl'lu:ʃn/
Fusion	/'fju:ʒ(ə)n/	Fission.	/'fɪʃ(ə)n/
Vision	/'vɪʒ(ə)n/	Mission	/'mɪʃ(ə)n/

T: Dear students, The sound /z/ is most common in the suffix “-sion.” This suffix transforms some verbs into nouns. If the verb ends in or, the final sound often becomes /ʒən/.

Conclude + sion = Conclusion

Decide + sion = Decision

Invade + sion = Invasion

Convert + sion = Conversion

Confuse + sion = Confusion

Revise + sion =Revision

Explode + sion = Explosion

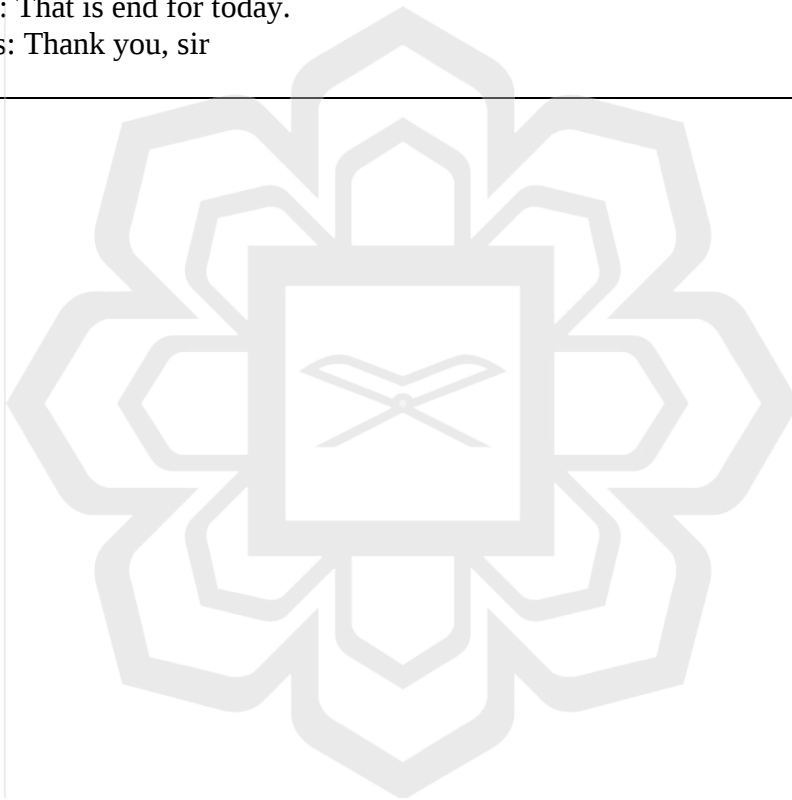
Televi+sion= Television

Assignment:

1. Dear students, Practice /ʒ/ and /ʃ/ sound yourselves before standing the mirror.
2. Write ten sentences using minimal pairs of /ʒ/ and /ʃ/ sound.
3. Write a dialogue using words containing /ʒ/and /ʃ/ sound.

Teacher: That is end for today.

Students: Thank you, sir

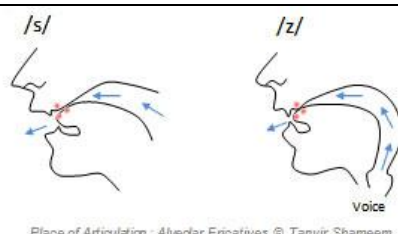


APPENDIX XVIII

LESSON PLAN 7

Lesson Plan 7 For Pronunciation class

Title of lesson (course): English Pronunciation		
Topic 4: Teaching phonemic transcription of the words containing /s/ and /z/ sound		
Level: Students of Honors 3rd year, English department.		
Learning objectives: Objectives of this lesson? i. To teach the student to transcribe the words containing /s/ and /z/ sound ii. To help them to produce words with /s/ and /z/ sound iii. To teach the students about sibilant sounds		
Learning outcomes: After finishing the lesson, the students will be able to- i. to transcribe the words containing /s/ and /z/ sound ii. to produce words with /s/ and /z/ sound iii. To know about sibilant sounds		
Time: 45 minutes		
T: the S and Z are alveolar fricatives. /s/ is a strong unvoiced (vocal cord does not vibrate) friction consonant whereas /z/ is weak, voiced (vocal cord vibrates) friction consonant. To produce these sounds, put the tip and blade of your tongue very close to the alveolar ridge. Close the teeth together and touch the side of your teeth with the sides of your tongue (Amanullah, 2009). You will also be clear about their place of articulation from the following image. Image of the place of articulation of consonant sound /s/ and /z/		



Place of Articulation : Alveolar Fricatives © Tanvir Shameem

<https://www.google.com/search?q=Image+of+the+place+of+articulation+of+consonant+sound+/s/+and+/z/>

Sibilant Sounds: Another sound which is relevant to this is the sibilant sound which is produced by forcing air out toward your teeth. It is characterized by a hissing sound (sssss), a buzzing sound (zzzzz) or the sound teachers make when they want you to be quiet (shhhh!).

Z like the sound a bee makes... zzzzzz (voiced).

S like the sound a snake makes... ssssss (unvoiced).

SH like the sound a teacher makes when they want you to be quiet... shhhh(sibilant).

Now we know the difference between voiced, voiceless and sibilant sounds. We can look at the following rules for the correct pronunciation of /S/ at the end of words in English: The pronunciation of the final S in plural words and verbs in the third person depend on the final consonant sound before that S.

The ending is pronounced /s/ after a voiceless sound: helps /ps/ -- sits /ts/ -- looks /ks/

It is pronounced /z/ after a voiced sound: crabs /bz/ -- words /dz/ -- gloves /vz/.

It is pronounced /ɪz / or /əz/ after a sibilant sound: Asses/ɪz/--

<https://www.grammar.cl/english/pronunciation-final-s.htm> 3/

T: Dear students, transcribe the following words containing /s/ and /z/ sound

/s/		/z/	
Bus /bʌs/	Buzz /bʌz/	advice /əd'vʌɪs/	Advise /əd'vʌɪz/
ice /aɪs/	eyes /aɪ/	base /beɪs/	Bays /beɪz/
once /wʌns/	ones /wʌnz/	basis /'beɪsɪs/	Bases /'beɪsɪz/
pence /pɛns/	pens /penz/	brass/ brɑ:s/	bras /bra:z/
place /pleɪs/	plays /pleɪz/	dice /daɪs/	dies /daɪz/
price /praɪs/	prize /praɪz/	force /fɔ:s/	fours /fɔ:z/
hiss /hɪs/	his /hɪz/	juice /dʒu:s/	Jews /dʒu:z/

piece /pi:s/	peas /pi:z/	lice /lais/	Lies /laiz/
race /reis/	rays /reiz/	course /kɔ:s/	Cores /kɔ:z/
fuss /fʌs/	fuzz /fʌz/	fleece /fli:s/	Fleas /fli:z/
grace /greis/	grays /greiz/	curse /kə:s/	Curs /kɜ:z/

T: Dear students, the following words contain /s/ and /z/ sound. We are going to discuss them with meaning and transcription.

Sensible: /'sensɪb(ə)l/ done or chosen in accordance with wisdom or prudence; likely to be of benefit

Expensive: /ɪk'spensɪv, ɛk'spensɪv/ costing a lot of money

Descend: /dɪ'send/ move or fall downwards

Muscle: /'mʌs(ə)l/ a band or bundle of fibrous tissue in a human or animal body that has the ability to contract, producing movement in or maintaining the position of parts of the body

Scream: /skri:m/ give a long, loud, piercing cry or cries expressing extreme emotion or pain

Score: /skɔ:/ the number of points, goals, runs, achieved in a game or by a team or an individual.

Scare: /ske:/ cause great fear or nervousness in; frighten.

Zinnia: /'zɪniə/ an American plant of the daisy family, which is widely cultivated for its bright showy flowers

Xylophone: /'zɪləfəʊn/ a musical instrument played by striking a row of wooden bars of graduated length with one or more small wooden or plastic beaters

Assignment:

1. Practice the sounds yourself before standing the mirror and with any other person as much as you can.

2. Write a paragraph using words containing /s/ and /z/ sound.

Teacher: That is end for today.

Students: Thank you, sir.

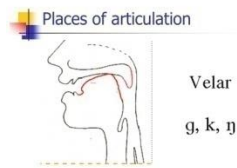
APPENDIX XIX

LESSON PLAN 8

Lesson Plan 8 For Pronunciation class

Title of lesson (course): English Pronunciation	
Topic 5: Teaching phonemic transcription of the words containing / g / and / gh/ sound	
Level: Students of Honors 3rd year, English department.	
Learning objectives: Objectives of this lesson? i. To teach the students to transcribe the words containing /g/ and / gh/ sound ii. To help them to produce words with / g/ and / gh/ sound	
Learning outcomes: After finishing the lesson, the students will be able to- i. to transcribe the words containing /g/ and / gh/ sound i. pronounce the /g/ and / gh/ sound comprehensibly	
Time: 45 minutes	
T: the /g/ is voiced velar plosive and a short, weak and stop consonant. To produce the sound, touch the soft palate or velar of your mouth firmly with the back of your tongue so that the airflow is trapped for a short time (Amanullah, 2009). In English /gh/ historically represented the voiceless velar fricative, In the dominant dialects of modern English, /gh/ is almost always either silent or pronounced /f/ (see Ough). It is thought that before disappearing, the sound became partially or completely voiced. When gh occurs at the beginning of a word in English, it is pronounced /g/ as in "ghost", "ghastly", "ghoul", "ghetto", "ghee." Many Bengali speakers pronounce it as aspirated /g/ as there is /ঘ/gh/ sound in Bangla. ‘gh’ is pronounced as /f/ as in ‘laugh’, /g/ as in ‘ghost’ or is not pronounced at all as in ‘plough’ or ‘night’. You will also be clear about the place of articulation of /g/ and /gh/ from the following image.	

Image of the place of articulation of consonant sound /g/ and /gh/



<https://www.google.com/search?q=image+of+place+of+articulation+of+/gh/+sound>

Teacher: Dear students, now we will discuss some words containing /g/ sound with their meaning and transcription.

Ghastly /'gɑ:s(t)li/: causing great horror or fear.

Ghetto /'getəʊ/: a part of a city, especially a slum area, occupied by a minority group or groups.

Gherao /ge'raʊ/: a protest in which workers prevent employers or managers from leaving a place of work until certain demands are met.

Ghoul /gu:l/: an evil spirit or phantom, especially one supposed to rob graves and feed on dead bodies/a person morbidly interested in death or disaster

Gharry /'gɑ:ri/: (in South Asia) a horse-drawn carriage available for hire.

Ghaut / (gʌt) /: Caribbean a small cleft in a hill through which a rivulet runs down to the sea.

Ghulam (Arabic: غلام) (is an Arabic word meaning **servant, assistant, boy, or youth**)

Ghana [**gah-nuh, gan-uh**] a republic in West Africa comprising the former colonies of the Gold Coast and Ashanti, the protectorate of the Northern Territories, and the U.N. trusteeship of British Togoland: member of the Commonwealth of Nations since 1957. 91,843 sq. mi. (237,873 sq. km). *Capital*: Accra.

Pittsburg ^[pits-burg]: a port in SW Pennsylvania, at the confluence of the Allegheny and Monongahela rivers that forms the Ohio River: steel industry.

Spaghetti /spə'geti/: pasta made in solid strings, between macaroni and vermicelli in thickness.

Yogurt /'jɒgət, 'jəʊgət/: a semi-solid food prepared from milk fermented by added bacteria, often sweetened and flavoured.

T: Dear students, there are some words where /g/ sound remains silent in English. But

many of you pronounce it as /j/ as there is /জ/ sound in Bangla.

Gnat	/næt/ n.	a very small flying insect
Gnome	/noʊm/n.	a fictional being like a dwarf
Gnash	/næʃ/ v.	to grind the teeth together
Sign	/saɪn/ n.	a symbol
Foreign	/'fʌrən/adj.	from a different place
Campaign	/kæm'peɪn/n.	a series of actions for one goal
Align	/ə'laɪn / v.	to put in a line
Resign	/resain/n.	a symbol

Assignment:

T: Dear students,

1. practice the sounds discussed in the class standing before a mirror to observe your own body position and way of articulation.

2. Write a paragraph using words having /g/ and /gh/ sounds at home.

Then the teacher turns back to his/her rule and clearly summarizes the day's topic in a simple way.

T: That is end for today.

S: Thank you very much, sir.

T: you are welcome

APPENDIX XX

QUESTION PAPER FOR PRE-TEST AND POST-TEST

1. Dialogue: In a good school

Miss Luke: Goodafternoon, girls.

Girls: Good afternoon, Miss Luke.

Prue: Excuse me, Miss Luke.

Miss Luke: Yes, Prue?

Prue: There's some chewing gum on your shoe.

Miss Luke: Whothrew their chewing gum on the floor? Was it you, Prue?

Prue: No, Miss it was June.

Miss Luke: Who?

Prue: June Cook.

June: It wasn't me, stupid. It was sue.

Sue: It was you!

June: It wasn't me. You stupid fool. My mouth's full of chewing gum.

Look, Miss Luke!

Sue: Stop pulling my hair, June. It was you!

June: You!

Sue: You!

Miss Luke: Excuse me! You're being very rude. You two nuisances can stay in school this afternoon instead of going to the swimming pool (Baker, 1960).

2. A campaign against drug

Ben: Did you participate in the campaign againstdrug yesterday?

Alen: Yes, but how did you know about the campaign?

Ben: From the newspaper.

Alen: Oh, we also arranged aseminarto make the people aware about the danger of taking drug.

Ben: Which agency did arrange for the campaign?

Alen: In fact, the administration of local government arranged for it.

Ben: Did you **stage any play**?

Alen: Yes, we **staged a play** highlighting the consequence of **taking** drug.

Ben: **Praiseworthy**, if the men like you come forward to **make** the people aware about the **danger** of **taking** drug, the **situation** would **change**.

Alen: **Certainly**, and the people would **concentrate** in productive work.

3. Leisure Time

Liza: How do you spend your **leisure** time, Tiza?

Tiza: By watching **television**.

Liza: What program do you **usually** watch on **television**?

Tiza: As a **visual** learner, I get **pleasure** to watch adventurous film.

Liza: Can you **envision** an adventurous film now?

Tiza: Yes, It is **treasure** island.

Liza: Do you think this film will increase your Knowledge?

Tiza: Yes, It will not only increase my knowledge but also give me **pleasure**.

Liza: Have you taken your **decision** to join the **occasion** of Zaria's birthday?

Tiza: I have **confusion** whether I join or not.

Liza: Thank you.

Tiza: Welcome.

4. Activities in the weekends

Sams: What will you do with **these bags**?

Zims: I **sometimes** go for camping in the weekends.

Sams: Who **accompanies** you?

Zims: My pet **dogs** and cats.

Sams : What **things** attract you most in the camping?

Zims: The buzzing sound of the **bees**.

Sams: Do you cook yourself in the site?

Zims: I only cook for the **animals**.

Sams: Who **supplies** food for you?

Zims: The **boys** in the **cafés** supply it.

Sams: When do you return from the site?

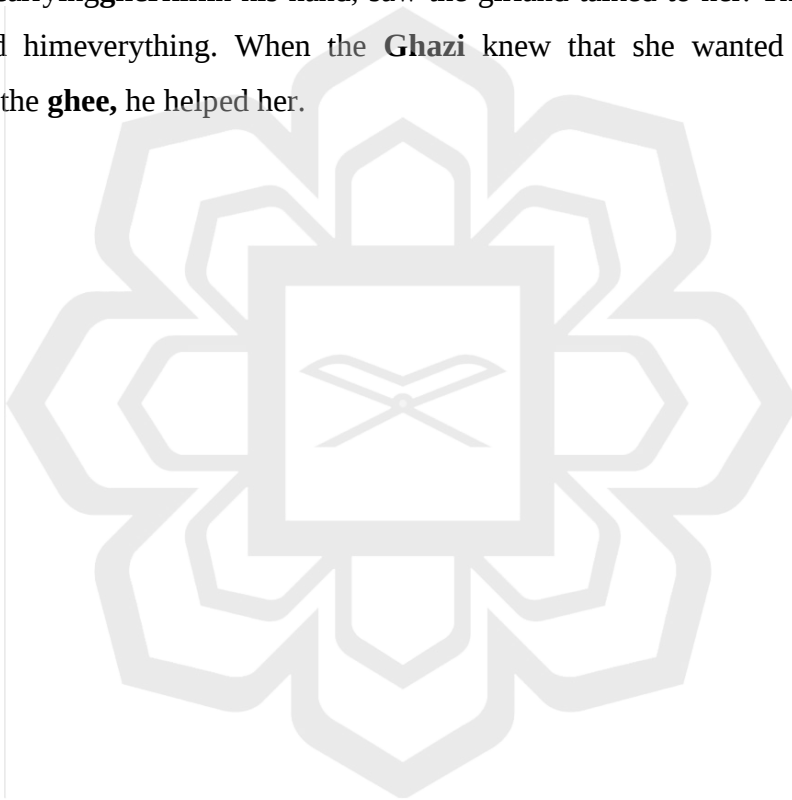
Zims: In the evening.

Sams: **Thanks** for your conversation.

Zims: Welcome.

5. The girl and the **ghost**

One day a **girl of ten** was **going** to buy some **ghee** from the market. It was late afternoon and the market was not very near to the village. There was a deep forest and a pool with a **ghat** on the way to the market. As there was no one on the way, the atmosphere was mostly **ghostly**. When she saw a **Ghorial** in the **ghat** of the pool, she began to tremble thinking it as a **ghost**. At that time, a **Ghazi** was returning from the market carrying **gherkin** in his hand, saw the girl and talked to her. The girl took heart and told him everything. When the **Ghazi** knew that she wanted to return home without the **ghee**, he helped her.



APPENDIX XXI

PHONEMIC TRANSCRIPTION

Experimental group; Participant VI

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
skul/,luk/,/ɑ:ftə(r)'nun/,/'fju:ɪŋ/,/f u/,/hu/,/θru/,/dʒun/,/'stjupɪd/,/su/, /ful/,/rud/,/tu/,/pul/,/kæmpen/,/pɑ: 'tisipet/,/'nju:z,pepə(r)/,/ə'rendʒd /,/mek/,/tekin/,/'edʒənsi/,/əd,min i'st rej(ə)n/,/stedʒ/,/ple/,/'prez,wɜ:(r) ði/, /,sɪfju'ej(ə)n/,/tʃendʒ/,/'kɒnsntɪet/ ,/telɪ'vɪʃn/,/in'vɪʃn/,/dɪ'sɪʃn/,/ə'ke ɪʃn/,/kən'fju:ʃn/,/ði:s/,/bægs/,/'sɒ mtaɪms/,/əkʌmpənɪs/,/dɒgs/,/'θɪŋ s/,/ænimls/,/səplaɪs/,/ghəʊst/,/ghi :/,/ghɑ:t/,/ghəʊstli/,/'ghɑ:ɪl/,/'g hæ:zi/,/'ghə:kɪn/	/ɪk'skju:z /,/pru:/:/'j u:/:/'dem dʒə(r)/,/'l ɛʒə(r)/,/'j u:ʒʊəli/, 'vɪʒʊəl/, /'pleʒə(r))/, /'treʒə(r)/ , /bɔɪz/ /bi:z/	skul/,luk/,/ɑ:ftə(r)'nun/,/θru/,/'stj upɪd/, /rud/,/tu/,/pul/,/k æmpen/,/'nju:z, pepə(r)/,/ə'rend ʒd/,/mek/,/'edʒə nsɪ/,/əd,minɪ'str ej(ə)n/,/stedʒ/,/' prez,wɜ:(r)ði/,/s ɪfju'ej(ə)n/,/'kɒn sntɪet/,/dɪ'sɪʃn/,/' sɒmtaɪms/,/dɒgs /,/ænimls/	/ɪk'skju:z/,/pru:/:/'fju:ɪŋ/,/fu:/:/ hu:/:/dʒu:n/,/su:/:/'ju:/:/fu:l/,/p ɑ:'tisipeɪt/,/'demdʒə(r)/,/tekin /,/pleɪ/,/tʃeɪndʒ/,/'leʒə(r)/ /in'vɪʒn/,/'treʒə(r)/, /ə'keɪʒn/,/kən'fju:ʒn/ /,telɪ'vɪʒn/,/'ju:ʒʊəli/,/'vɪʒʊəl/ /,pleʒə(r)/, (ði:z/ (bægz/,/əkʌmpənɪz/, /'θɪŋz/, /bi:z/,/səplaɪz/, /bɔɪz/,/gəʊst/,/gi:/:/gɑ:t/,/gəʊst li/,/'gɑ:ɪl/, /'gɑ:zi/,/'gə:kɪn/

Experimental group; Participant VII

Transcription of recorded data(pre-test)	Transcription of recorded data (post-test)
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Experimental group; Participant IX

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
skul/,/luk/,/ɑ:ftə(r)'nun/,/pru/,/' ʃuɪŋ/,/ʃu/,/hu/,/θru/,/dʒun/ ,'stjupɪd/,/su/,/ful/,/rud/,/tu/,/pul /,/kæmpen/,/pɑ:'tisipet/,/'nju:z, pepə(r)/,/ə'rendʒd/,/mek/,/'den dʒə(r)/,/tekiŋ/,/'edʒənsi/,/əd,mɪ nɪ'streɪf(ə)n/,/stedʒ/,/ple/,/'prez, wɜ:(r)ði/,/sɪtʃu'ej(ə)n/,/tʃendʒ/,/ 'kɒnsntuet/,/'ə'keɪʃn/,/ði:s/,/bæ gs/,/'sʌmtaɪms/,/dɒgs/,/'θɪŋs/,/ ænimls/,/ghəʊst/,/ghi:/,/ghɑ:t/,/ ghəʊstli/,/'ghɑ:ɑ:l/,/'ghɑ:zi/,/'g hə:kin/	/ɪk'skju:z/,/ 'ju:/,/'leɜə(r)/,/telɪ'vɪʒ n/,/'ju:ʒʊəli /,/'vɪʒʊəl/,/' pleɜə(r)/,/i n'vɪʒn/,/'tre ɜə(r)/,/di'sɪ ʒn/,/kən'fju :ʒn/,/əkʌm pənɪz/ /bi:z/,/səplə ɪz/,/boɪz/	/ʃu/,/hu/,/ su/, /kæmpe n/, /,sɪtʃu'ej(ə)n/, bægs/,/ /,/dɒgs/,/ ænimls/, /sku:l/,/lu:k/,/ɑ:ftə(r)'nu:n/,/ɪk'skju: z/,/pru:/,/'ʃu:ɪŋ/,/θru:/,/dʒu:n/,/'stju: pɪd/,/'ju:/,/fu:l/,/ru:d/,/tu:/,/pu:l/,/pɑ: 'tisipeɪt/,/'nju:z,peɪpə(r)/,/ə'reɪndʒ d/,/meɪk/,/'deɪndʒə(r)/,/teɪkiŋ/,/'eɪd ʒənsi/,/əd,mɪnɪ'streɪf(ə)n/,/steɪdʒ/, /pleɪ/,/'preɪz,wɜ:(r)ði/,/tʃeɪndʒ/,/'kɒ nsntueɪt/,/'leɜə(r)/,/telɪ'vɪʒn/,/'ju:ʒʊ əli/,/'vɪʒʊəl/,/'pleɜə(r)/,/ɪn'vɪʒn/,/'t reɜə(r)/,/di'sɪʒn/,/ə'keɪʒn/,/kən'fju: ʒn/,/ði:z/,/'sʌmtaɪmz/,/əkʌmpənɪz/, /'θɪŋz/,/bi:z/,/səplaɪz/,/boɪz/,/gəʊst/ /,/gi:/,/gɑ:t/,/'gəʊstli/,/'gɑ:ɑ:l/,/'gɑ:z i/,/'gə:kin/	

Experimental group; Participant XI

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/skul/,/luk/,/ɑ:ftə(r)'nun/,/ɪk'skjuz/,/pru/,/'tʃuɪŋ/,/fu/,/θru/,/dʒun/,/'stjupɪd/,/su/,/'ju/,/ful/,/rud/,/tu/,/pul/,/kæmpen/,/pɑ:'tɪsɪpet/,/'nju:z,pəpə(r)/,/'ə'rendʒd/,/mek/,/'dendʒə(r)/,/'tekiŋ/,/'edʒənsɪ/,/ə'd,mɪnɪ'streɪf(ə)n/,/stedʒ/,/ple/,/'prez,wɜ:(r)ði/,/'sɪtʃu'ej(ə)n/,/tʃe'ndʒ/,/'kɒnsntʉet/,/'in'vɪfn/,/dɪ'sɪfn/,/ə'keɪfn/,/kən'fju:fn/,/ði:s/,/bægs/,/'sɒmtaɪms/,/dɒgs/,/'θɪŋs/,/ænimls/,/ghəʊst/,/ghi:/,/'gha:t/,/'ghəʊstli/,/'ghaɪɑ:l/,/'gha:zi/,/'ghə:kɪn/	/hu:/,/'leʒə(r)/,/'telɪ'vɪʒn/,/'ju:ʒʊəli/,/'vɪʒʊəl/,/'plɛʒə(r)/,/'trɛʒə(r)/,/'ækʌmpənɪz/,/bi:z/,/səplaɪz/,/boɪz/	/skul/,/luk/,/'tʃuɪŋ/,/fu/,/h u/,/'stjupɪd/,/su/,/'rud/,/'pul/,/kæmpen/,/pɑ:'tɪsɪpet/,/'nju:z,pəpə(r)/,/'ə'rendʒd/,/mek/,/'dendʒə(r)/,/'tekiŋ/,/'edʒənsɪ/,/p le/,/'prez,wɜ:(r)ði/,/'sɪtʃu'ej(ə)n/,/tʃe'ndʒ/,/'kɒnsntʉet/,/'in'vɪfn/,/'dɪ'sɪfn/,/'ə'keɪfn/,/kən'fju:fn/,/bægs/,/'sɒmtaɪms/,/dɒgs/,/'θɪŋs/,/ænimls/,/'ghə:kɪn/	/ɑ:ftə(r)'nu:n/,/ɪk'skju:z/,/pru:/,/'θru:/,/'dʒu:n/,/'ju:/,/'fu:/,/'tu:/,/'əd,mɪnɪ'streɪf(ə)n/,/'steɪdʒ/,/'leʒə(r)/,/'telɪ'vɪʒn/,/'ju:ʒʊəli/,/'vɪʒʊəl/,/'pleʒə(r)/,/'trɛʒə(r)/,/'ði:z/,/'ækʌmpənɪz/,/'bi:z/,/'səplaɪz/,/'boɪz/,/'gəʊst/,/'gəi:/,/'ga:zi/

Experimental group; Participant XII

Transcription of recorded data (pre-test)		Transcription of recorded data(post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/skul/,/luk/,/a:ftə(r)'nun/,/ɪk'skjuz/,/pru/, /'tʃuɪŋ/,/ju/,/hu/,/θru/,/dʒun/ /,/'stjupɪd/,/su/,/'ju/,/ful/,/rud/,/tu/,/pul/,/k æmpen/,/pɑ:'tisipet/,/'nju:z,pepə(r)/,/ə'r endʒd/,/mek/,/'dendʒə(r)/,/tekin/,/'edʒə nsi/,/əd,mɪnɪ'stref(ə)n/,/stedʒ/,/ple/,/'pr ez,wɜ:(r)ði/, /,sɪtʃu'ef(ə)n/,/tʃendʒ/,/'kɒnsntuet/,/telɪ'v ɪfn/,/'ju:sʊəli/,/'/in'vɪfn/,/dɪ'sɪfn/,/ə'keɪf n/,/kən'fju:fn/,/ði:s/,/bægz/,/'sʌmtaɪms/, /dɒgz/,/'θɪŋs/,/ænimls/,/ghi:/,/ghɑ:t/,/'gh əʊstli/,/'ghɑ:tɑ:l/,/'ghɑ:zi/,/'ghə:kin/	/'lɛʒə(r) / plɛʒəʊ(r)/, /'vɪʒʊəl /,/trɛʒə(r)/,/ək^ mpənɪz / /,/bi:z/, səplaɪz/ /,/boɪz/,/ gəʊst / mtaɪms/,/θɪŋ s/,/'ghə:kin/	/skul/,/'tʃuɪŋ/, /dʒun/ /,/'stjupɪd/,/ful /,/tu/,/kæmpe n/,/ə'rendʒd/, /mek/,/'tekin/, /'edʒənsi/,/əd mɪnɪ'stref(ə) n/,/stedʒ/,/ple ə'keɪʒn/,/kən'fju:ʒn/,/ði:z/ /,/'prez,wɜ:(r) ði/, /,sɪtʃu'ef(ə)n/, /tʃendʒ/,/sʌ mtaɪms/,/θɪŋ s/,/'ghə:kin/	/lu:k/,/a:ftə(r)'nu:n/,/ɪk'sk ju:z/,/pru:/,/ju:/,/hu:/,/θru:/ /,/su:/,/'ju:/,/ru:d/,/pu:l/,pɑ: 'tisipeɪt/,/'nju:z,peɪpə(r)/, 'deɪndʒə(r)/,kɒnsntueɪt/,/'l ɛʒə(r)/,/telɪ'vɪʒn/,/'ju:ʒʊəl i/,/'vɪʒʊəl/,/'plɛʒəʊ(r)/,/in' vɪʒn/,/'trɛʒə(r)/,/dɪ'sɪʒn/,/ ə'keɪʒn/,/kən'fju:ʒn/,/ði:z/ /,/bi:z/,/ænimlɪz/,/səplaɪz/ /,/boɪz/,/gəʊst/,/gi:/,/gɑ:t/,/' gəʊstli/,/'gɑ:tɑ:l/,/'gɑ:zi/

APPENDIX XXII

CONTROLLED GROUP

Controlled group; Participant XIV

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/skul/,/luk/,/ɑ:ftə(r)'nun/,/tʃuɪŋ/,/f u/,/θru/,/dʒun/ ,/'stjupɪd/,/su/,/ful/,/rud/,/tu/,/pul /,/pa:'tisipet/,/'nju:z,pepə(r)/,/m ek/,/'dendʒə(r)/,/tekin/,/'edʒən si/,/əd,mɪnɪ'streɪ(ə)n/,/stedʒ/,/p le/,/'prez,wɜ:(r)ði/, /,sɪtʃu'ef(ə)n/,/tʃendʒ/,/'kɒnsntu et/,/telɪ'vɪʃn/,/,'in'vɪʃn/,/'dɪ'sɪʃn /,/ə'keɪʃn/,/kən'fju:ʃn/,/ði:s/,/bæ gs/,/'sʌmtaɪms/,/əkʌmpənɪs/,/d ɔgs/,/'θɪŋs/,/ænimls/,/ ɣarɪɑ:l/,/'	/ɪk'skju:z/,/pru:/,/' hu:/,/'ju:/, /,/'kæmpeɪn/,/ə'reɪnd ʒd/,/lɛʒə(r)/, /ju:ʒuəli/,/'vɪʒuəl/,/' plɛʒə(r)/,/'treʒə(r)/, ' /bi:z/,/səplaɪz/,/boɪz/ ,/gəʊst/,/gi:/,/'gɑ:t/,/' gəʊstli/,/gɑ:zi/,/'gə: kɪn/	/ɪk'skju:z/,/pru:/,/' dʒun/,/su/,/'ju/, /,/'telɪ'vɪʃn/,/' in'vɪʃn/,/' dɪ'sɪʃn/,/ə'keɪʃn/,/kə n'fju:ʃn/,/ði:s/,/bægs /,/'sʌmtaɪms/,/əkʌ mpənɪs/,/dɔgs/,/'θɪŋ s/,/ænimls/,/boɪs/,/'g həʊstli/,/'ɣarɪɑ:l/,/' ghə:kɪn/	/ɪk'skju:z/,/pru: / hu:/,/'dʒu:n/ ,/su:/,/'ju:/, lɛʒə(r)/,/' ju:ʒuəli/,/'vɪʒu əl/,/'plɛʒə(r)/,/' treʒə(r)/,/'bi:z/,/ səplaɪz/,/'gəʊst /,/'gi:/,/'gɑ:t/,/'ga :zi/

Controlled group; Participant XV

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/skul/,/luk/,/ɑ:ftə(r)'nun/,/ɪk'skjuz/,/p ru/,/'tʃuɪŋ/,/ʃu/,/θru/,/dʒun/ /,/'stjupɪd/,/su/,/ful/,/rud/,/tu/,/pul/,/kæ mpen/,/pɑ:'tɪsɪpet/,/'nju:z,pepə(r)/,/ə 'rendʒd/,/mek/,/'dendʒə(r)/,/tekiŋ/,/' edʒənsi/,/əd,mɪnɪ'stref(ə)n/,/stedʒ/,/ ple/,/'prez,wɜ:(r)ði/,/sɪtʃu'ef(ə)n/,/tʃe ndʒ/,/'kɒnsntʊet/,/'/telɪ'vɪʃn/,/'/in'vɪʃ n/,/'tɹesə(r)/,/dɪ'sɪʃn/,/kən'fju:ʃn/,/ði:s /,/bægs/,/'sʌmtaɪms/,/əkʌmpənɪs/,/d ɔgs/,/'θɪŋs/,/ænimls/,/ghəʊst/,/ghi:/, ghɑ:t/,/'ghəʊstli/,/'ghɑ:ɪl/,/'ghɑ:zi/,/ 'ghə:kɪn/	/hu:/, ju:/, /lɛʒə(r)/ /,/ju:ʒʊə li/,/'vɪʒ ʊəl/,/'pl ɛʒə(r)/ /,/ə'keɪʒ n/,/ /,/bi:z/,/ səplaɪz/ /,/boɪz/	/skul/,/luk/,/ɑ:ftə(r)'nun/,/pru/,/' tʃuɪŋ/,/ʃu/,/hu/,/θru/,/dʒun/ /,/'stjupɪd/,/su/,/'ju/,/ful/,/rud/,/tu /,/pul/,/kæmpen/,/pɑ:'tɪsɪpet/,/' nju:z,pepə(r)/,/ə'rendʒd/,/mek/ /,/'dendʒə(r)/,/tekiŋ/,/'edʒənsi/,/ əd,mɪnɪ'stref(ə)n/,/stedʒ/,/ple/, /'prez,wɜ:(r)ði/,/sɪtʃu'ef(ə)n/,/tʃ endʒ/,/'kɒnsntʊet/,/telɪ'vɪʃn/,/in' vɪʃn/,/dɪ'sɪʃn/,/kən'fju:ʃn/,/'sʌmt aɪms/,/əkʌmpənɪs/,/θɪŋs/səpl ais/,/ghi:/,/ghɑ:t/,/'ghəʊstli/,/'gh ɑ:ɪl/,/'ghə:kɪn/	/ɪk'skju:z/,/ lɛʒə(r)/, ju:ʒʊəli/,/'vɪʒ ʊəl/,/'plɛʒə(r)/,/'tɹɛʒə(r)/, /,/ə'keɪʒn/, /ði:z/,/bægz/,/ dɔgz/,/bi:z/,/ ænimlz/,/səpl aɪz/,/boɪz/,/gə ʊst/,gɑ:zi/

Controlled group; Participant XVI

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/skul/,/luk/,/ɑ:ftə(r)'nun/,/fuɪŋ/,/fu/, /hu/,/θru/,/dʒun/ /,/'stjupɪd/,/su/,/ful/,/rud/,/tu/,/pul/,/ kæmpen/,/pɑ:'tisipet/,/'nju:z,pep ə(r)/,/ə'rendʒd/,/mek/,/'dendʒə(r) /,/tekiŋ/,/'edʒənsi/,/əd,mɪnɪ'strej(ə)n/, /stedʒ/,/ple/,/'prez,wɜ:(r)ði/,/ sɪtʃu'ej(ə)n/,/tʃendʒ/,/'kɒnsntuet/,/ telɪ'vɪfn/,/'visuəl/,/in'vɪfn/,/dɪ'sɪfn/ /,/ə'keɪfn/,/ði:s/,/bægs/,/'sʌmtaɪms/ s/,/əkʌmpənɪs/,/dɒgs/,/'θɪŋs/,/ænimls/, /səplais/,/bois/,/ghi:/,/ghɑ:t/,/ /ghəʊstli/,/'gharɪɑ:l/,/'ghə:kɪn/	/ɪk'skju:z/ /,/pru:/,/'ju: :/, lɛʒə(r)/, /,/'ju:ʒuəl i/,/'vɪʒuəl /,/'pleʒə (r)/,/'trɛʒ ə(r)/ /,/kən'fju: ʒn/, /bi:z/,/ gəʊst/,/ gɑ:zi/,	/skul/,/luk/,/ɑ:ftə(r)'nun/,/pru/,/'tʃuɪŋ/, /fu/,/hu/,/θru/,/dʒun/,/'stjupɪd/, /su/,/'ju:/,/ful/,/rud/,/tu/,/pul/,/kæmpen/, /pɑ:'tisipet/,/'nju:z,pepə(r)/,/ə'rendʒd/, /mek/,/'dendʒə(r)/,/tekiŋ/,/'edʒənsi/, /əd,mɪnɪ'strej(ə)n/,/stedʒ/,/ple/,/'prez,wɜ:(r)ði/, /sɪtʃu'ej(ə)n/,/tʃendʒ/,/'kɒnsntuet/, /in'vɪfn/,/'di'sɪfn/,/ə'keɪfn/, /ði:s/,/bægs/,/'sʌmtaɪms/,/əkʌmpənɪs/, /dɒgs/,/'θɪŋs/,/ænimls/,/səplais/, /ghi:/,/ghɑ:t/,/'ghəʊstli/,/'gharɪɑ:l/, /'ghə:kɪn/	/ɪk'skju:z/, lɛʒə(r)/,/telɪ'vɪʒn/,/'ju:ʒuəl/, /'vɪʒəʊli/,/'vɪʒuəl/,/'pleʒəʊ(r)/, /trɛʒə(r)/,/kən'fju:ʒn/,/ bi:z/,/boiz/,/ gəʊst/ /gɑ:zi/,/'

Controlled group; Participant XVII

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/skul/,/luk/,/ɑ:ftə(r)'nun/,/ɪk'skjuz/, /pru/,/'tʃuɪŋ/,/fu/,/hu/,/θru/,/dʒun/ /,/'stjupɪd/,/su/,/'ju/,/ful/,/rud/,/tu/,/p ul/,/kæmpen/,/pɑ:'tisipet/,/'nju:z,p epə(r)/,/ə'rendʒd/,/mek/,/'dendʒə(r) r)/,/tekiŋ/,/'edʒənsi/,/əd'mɪnɪ'stref(ə)n/,/stedʒ/,/ple/,/'prez,wɜ:(r)ði/, /,sɪtʃu'ej(ə)n/,/tʃendʒ/,/'kɒnsntuet/,/ 'ləsə(r)/,/telɪ'vɪʃn/,/'pləsə(r)/,/in'vɪ ʃn/,/dɪ'sɪʃn/,/ə'keɪʃn/,/kən'fju:ʃn/,/ði: s/,/bægs/,/'sʌmtaɪms/,/əkʌmpənɪs /,/dɒgs/,/'θɪŋs/,/bi:s/,/ænimls/,/səpl ais/,/bois/,/ghi:/,/ghɑ:t/, 'gharɪɑ:l/	/ju:ʒʊəli/,/' vɪʒʊəl/,/tre ʒə(r) /, gəʊst/,/ gəʊstli/,/g ɑ:zi/,/'gə:k ɪn/	/skul/,/luk/,/ɑ:ftə(r)'nun/,/ɪk'skjuz/ /,/pru/,/'tʃuɪŋ/,/fu/,/hu/,/θru/,/dʒun/,/' stjupɪd/,/su/,/'ju/,/ful/,/rud/,/tu/,/pul /,/kæmpen/,/pɑ:'tisipet/,/'nju:z,pe pə(r)/,/ə'rendʒd/,/mek/,/'dendʒə(r))/,/tekiŋ/,/'edʒənsi/,/əd'mɪnɪ'stref(ə)n/,/stedʒ/,/ple/,/'prez,wɜ:(r)ði/, /,sɪtʃu'ej(ə)n/,/tʃendʒ/,/'kɒnsntuet/,/ 'ləsə(r)/,/telɪ'vɪʃn/,/'pləsə(r)/,/in'vɪ ʃn/,/'trəsə(r)/,/dɪ'sɪʃn/,/ə'keɪʃn/,/kə n'fju:ʃn/,/ði:s/,/bægs/,/'sʌmtaɪms/,/ əkʌmpənɪs/,/dɒgs/,/'θɪŋs/,/bi:s/,/æ nimls/,/səplais/,/bois/,/ ghi:/,/ghɑ:t/,/'gharɪɑ:l/,/'ghɑ:zi/,/' ghə:kɪn/	/'ju:ʒʊ əli/,/'vɪ ʒʊəl/,/ gəʊst/, '/gəʊst li/,/'

Controlled group; Participant XVIII

Transcription of recorded data (pre-test)		Transcription of recorded data (post-test)	
Fossilized	Not fossilized	Fossilized	Not fossilized
/luk/,/ɪk'skjuz/,/pru/,/'tʃuɪŋ/, /ʃu/,/θru/,/dʒun/,/'stjʊpɪd/,/su /,/rud/,/tu/,/pul/,/kæmpen/,/p ɑ:'tisipet/,/'nju:z,pepə(r)/,/ə' rendʒd/,/mek/,/'dendʒə(r)/,/t ekin/,/'edʒənsi/,/əd,mɪnɪ'str eʃ(ə)n/,/stedʒ/,/ple/,/'prez,w ɜ:(r)ði/,/sɪtʃu'eʃ(ə)n/,/tʃendʒ/ /,/'kɒnsntʊet/,/ /,/in'vɪfn/,/dɪ'sɪfn/,/ə'keɪfn/,/ kən'fju:fn/,/ði:s/,/bægs/,/'sɔ mtaɪms/,/dɒgs/,/'θɪŋs/,/æni mls/,/səplais/,/boɪs/,/ghəʊst/ /,/ghi:/,/gha:t/,/'ghəʊstli/,/'gh ɑ:tɑ:/,/gha:zi/,/'ghə:kɪn/	/sku:l/,/ɑ:ftə(r)'n /,/hu:/,/ju:/,/fu:l/,/ lɛʒə(r)/,/telɪ'vɪʒn /,/'ju:ʒuəli/,/'vɪʒ ʊəl/,/'pleʒəʊ(r)/ treʒə(r)/, /,/əkʌmpənɪz/,/bi z	skul/,/luk/,/ɑ:ftə(r)'nun/,/ ɪk'skjuz/,/pru/,/'tʃuɪŋ/,/ʃu/, /θru/,/dʒun/ /,/'stjʊpɪd/,/su/,/'ju/,/rud/,/ tu/,/kæmpen/,/pɑ:'tisipet/ /,/'nju:z,pepə(r)/,/ə'rendʒ d/,/mek/,/'dendʒə(r)/,/tek ɪŋ/,/'edʒənsi/,/əd,mɪnɪ'st reʃ(ə)n/,/stedʒ/,/ple/,/'pre z,wɜ:(r)ði/,/sɪtʃu'eʃ(ə)n/,/ tʃendʒ/,/'kɒnsntʊet /,/in'vɪfn/,/dɪ'sɪfn/,/ə'keɪf n/,/kən'fju:fn/,/ði:s/,/bæg s/,/'sɔmtaɪms/,/əkʌmpən ɪs/,/dɒgs/,/'θɪŋs/,/æniml s/,/səplais/,/ghəʊst/	/hu:/,/fu:l/,/pu:l/,/ ɛʒə(r)/,/telɪ'vɪʒn /,/'ju:ʒuəli/,/'vɪʒ ʊəl/,/'pleʒəʊ(r)/, 'treʒə(r)/,/bi:z/,b ɔɪz/,/gi:/,/ga:t/,/' gəʊstli/,/'gɑ:tɑ:/, /,/'ga:zi/,/'gə:kɪn /

APPENDIX XXIII

CONSENT FORM



Informed Consent Form to Conduct and record Interview

This informed consent form is for the teachers of Matuail Haji Abdul Latif Bhuiyan university college, Dhaka, Bangladesh, whom are invited to participate in the research entitled “Fossilized Bangla Sounds in English Pronunciation and the Implication of Audio-Articulation Method in Bangladeshi EFL Classroom.”

Name of researcher	Mohammad Nashir Uddin
Position and organization	PHD candidate, International Islamic University, Malaysia
Study area	Phonetics and phonology
Contact number:	+8801716287316, +8801748483259
Research site	Dhaka, Bangladesh

This informed consent form has two parts

- Information sheet (to share information about the study with you)
- Certificate of Consent(for signature if you choose to participate)

You will be given a copy of the full informed consent form.

Part 1: Information sheet

Introduction

This is a study on phonological fossilization in English pronunciation of Bangladeshi adult speakers of English. You are invited to be a part of this study. If you have questions, do not hesitate to ask me.

Purpose of the study

The purpose of this study is to investigate the learners' awareness on fossilized sounds and the teachers' perception on treating the problems. In addition, this study will extend its scope to include audio-articulation method and it will be tested on its efficiency to reduce the problem of phonological fossilization in English pronunciation of Bangladeshi adult speaker of English.

Type of research intervention

This research will involve your participation in an interview session that will take about 20 to 30 minutes.

Participant selection

You are being invited to take part in this research because your knowledge and experience in English pronunciation as a teacher can contribute much to understand the real phenomenon of phonological fossilization.

Voluntary participation

Your participation will be voluntary and the choice that you make will have no bearing on your professionalism or on any of your personal activity. You may change your mind later and stop participating even if you agreed earlier. You will have the right to change your decision any time according to your choice without any explanation.

Benefits:

Your participation is likely to help find out more about how to upgrade the teaching and learning of English pronunciation. In addition, you will have direct access to the findings from this study.

Confidentiality:

Information about you will not be shared with anyone outside the research area. The information gathered will be kept in confidentiality according to data collection act 2010. Nothing that you say will be shared with anybody and nothing will be attributed to you by name.

Consent of recording:

The conversation in the interview with you will be recorded and the recording will not be used in any other purposes except this study.

APPENDIX XXIV

CERTIFICATE OF CONSENT

I have been invited to participate in the research on “the use of Audio Articulation Method to defossilize Bengali sounds in English pronunciation in Bangladeshi EFL classroom.”

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I will have been asked can be answered to my satisfaction. I consent voluntarily to be a participant in this study.

Name of participant: -----

Signature of participant: -----

Date: -----

Signature of researcher taking the consent: -----

Date: -----

APPENDIX XXV

INTER-RATER FORM

Inter-Rater Reliability Form

To identify the pronunciation issues perceived by the Bangladeshi speakers of the English language.

IQ	Themes	Main ideas	Verbal support		Rater 1		Rater 2	
					Agree	Disagree	Agree	Disagree
Do you have any idea about phonological fossilization? If yes, can you give some examples?	Unaware of phonological fossilization	Bangla mostly Used	Informant 1	No, sir. I have the no idea.	Agree		Agree	
		No idea about phonological fossilization	Informant 2	No	Agree		Agree	
		No idea about phonological fossilization	Informant 3	we use the Bangla all time and everywhere. For this, when we go to speak in English, many time, the English sound does not come.	Agree		Agree	

		No idea about phonological fossilization	Informant 4	No, not at all are Bangali, Only Bangla has become permanent in us now. Bangla is not needed everywhere. In case of job or different renowned institution, we need English. This is Bangla permanent.	Agree		Agree	
		No idea about phonological fossilization	Informant 5	Remain silent	Agree		Agree	