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Articulation Of English Vowels By Bengali Native Speaker

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ABSTRACT

English is an Indo-European language, and belongs to the West Germanic group of the Germanic language spoken in earlier medieval England is now a global Lingua Franca. It is the third most common native language in the world but now English is mostly learned as a Second Language. Variations can be noticed among the accents and dialects of English used in different countries and regions in terms of Phonetics and phonology and also in terms of vocabulary, grammar and spelling. Varieties of English vary the most in pronunciation of vowels. The varieties of English can be categorized under two main streams 1. British Stream and 2. American Stream. The paper entitled 'Articulation of English Vowels by Bengali Native Speaker' is an attempt to study what happens when the students, learning english as a second language, when they are asked to pronounce certain words which focuses on the vowel articulations they deviate from the standard pronunciation. There are differences in the articulations. This study will aim to locate the spot of differences and their reasons. The paper will study the data from a group of students.

1.0 INTRODUCTION

Human beings are born with the innate capacity to learn language.

In India English is mostly learned as a Second Language or the L2. The educational need, employment and other basic purposes have the inevitable need for second Language Learning. In Indian multilingual environment the native speakers of most of the 12 languages may have to learn English as their second language in the present system of linguistic status. S/he may belong to Hindi, Bengali, Oriya, Assamese, Tamil, Santhali, Bodo etc, but in most of the cases English has become an important communicative medium. Besides the communicative need the language has an academic importance in different levels throughout the globe. The recent socio economic change through globalization has also brought a change in the global communicative content. The learning process of the states of languages is different if they are not learned simultaneously in a Bilingual Environment.

In our country English arrived historically but is mostly learned as second one after the development of efficiency in the first languages mentioned above. First language or L1 is always defined as a person's native language and societal dominant language. This is learnt through a natural process. Second Language is learnt subsequently. The learners acquire the second language through:

- Proper Trainings: Essential for L2 learning.
- Innate Capacity: their own ability to learn a language.
- Application of Prior Knowledge: The learning of second language includes the knowledge of their first language.
- Feedback and Corrections: The learners learn through the feedback process.

In our formal learning system the above points are not yet adopted systematically. It can be seen that if as students who are learning English as a second language are instructed to articulate words mainly based on meaning not necessarily considering the pattern of the movement of articulators. This provides the learner an opportunity to use the L1 practices. The variations in the articulations between the English and L1 are either overlapped or uttered differently.

This paper is a comparative study where the comparison is made between two groups of students one belongs to the English Medium School –where the students are trained in English as their L1 but their mother tongue is Bengali. The other group is the Bengali Medium School where the students are learning Bengali as their L1 and English as L2. When students belonging to these two groups were instructed to pronounce certain words (the words are based on vowel articulation) a deviation from the standard pronunciation is noted. The vowel sounds play an important part in the syllable articulation adopting the suprasegmentals. Due to this set of sound have important role on the speech. So in order to spot the differences correctly in this comparative study the vowel sounds are selected.

2.0 AIMS, OBJECTIVES AND RESEARCH QUESTIONS

2.0 AIMS

This paper aims to define the English Vowel articulation, the English articulation of Bengali Native Speaker and the differences between these two. The specific objectives are:

1. To study pronunciation of the Bengali Native Speakers.
2. To see the deviation from the standard pronunciation.
3. To study the difference of articulation.
4. Locating the possible differences
5. Probable reasons behind the difference.
6. What can be the possible solution to this problem?

2.2 THE RESEARCH QUESTIONS

1. What is the deviation from the standard pronunciation?
2. Where the changes are taking place?

3. Is there any similarity between the two pronunciations or complete difference? If there is a similarity why? If there is a difference why?
4. Factors responsible for such change.

3.0 LITERATURE REVIEW

English is used mostly as a second language in India. Not only in the global context in our national perspective is this used as lingua franca by a considerable number of people. Problems of Second language learning are general phenomena throughout the globe at the same time to resolve this people have developed different theoretical approaches. In the multilingual world the second language learning is an inevitable situation where the teaching and learning process is not organized always following particular process. Due to this reason the learner fails to adopt the primary communicative ability properly even after having the formal training.

In Indian context English is used widely but in different linguistic reasons of her diversities. The first language has great impact on it which is noted in different level of language structure, In India due to this English has different dialectal versions. The variation in pronunciation of English can be seen in the major areas. The English and the Bengali phonological system are different. Sounds present in the English Phoneme Inventory are absent in the Bengali phoneme inventory. Vowels have been the important topic of discussion for many scholars. The book entitled Articulator Phonetics by Bryan Wick, Ian Wilson and Donald Derrick has taken the vowel discussion from the traditional point of view.

This paper entitled a Articulation of English Vowels by Bengali Native speaker is an attempt to capture the differences between the two language groups one the Standard English and the other the standard Bengali. These two areas have been the topic of discussion for many scholars.

For the completion of my work the works of these scholars have been very helpful. In the book named An Outline OF English Phonetics by Daniel Jones a detailed discussion is provided about the English Vowels which forms the focus for my work. From that book the areas that have helped me are mainly the description of the vowel. The other scholarly has been the book named Bengali Phonetic Reader by Krishna Bhattacharya. From this book I have gained a complete knowledge about the Bengal Vowel system. Keeping these two books side by side a comparison between the English Vowel and the Bengali Vowel System is done

4.0 ARTICULATORY SYSTEM OF ENGLISH AND BENGALI VOWELS

Every speech sounds belongs to two one or two main classes known as vowels or consonants using the articulatory organs:

4.1 THE ORGANS OF SPEECH

During the production of vowels the organs of speech play the key role, which is unique mostly in the each language. The knowledge of the articulatory settings is obvious to produce the L2 vowels. The parts that make a major contribution to the performance of speech are the lungs, the larynx, and the vocal tract. Vocal tract comprises of the pharynx, oral cavity, tongue, lips and jaw. Other vocal strictures are the teeth the hard palate and the epiglottis. For the production of vowel sounds the organs that play the major role are the tongue, the jaw, the hard palate, the soft palate.

The tongue is the most flexible organ of speech. The body of the tongue is divided into the front, back and the centre. The root of the tongue lies opposite to the back wall of the pharynx in front of the epiglottis. The back and front of the tongue lies under the hard and the soft palate. The tongue ends in the rounded tip called the blade of the tongue.

The tongue is the most versatile organs of speech. The upper Jaw has the alveolar ridge , the hard palate and the soft palate. Behind the alveolar ridge lies the hard palate and further back of the roof of the mouth is the soft palate. The velum ends in uvula.

The epiglottis is at the base of the tongue, the vocal cords are in the larynx.

4.2 ARTICULATION OF VOWELS

A vowel (in normal speech) is defined as a voiced sound in the production of which the air issues in a continuous stream through the pharynx and the mouth, there being no obstruction such as would cause audible friction.

The term pure vowel is used to designate a vowel during which the organs of speech remain absolutely stationary. There exist many shades of pure vowel sounds in Southern English but out of these; twelve are of special importance for the foreign learners of English Represented as:

/i:/, /ɪ/, /e/, /æ/, /ɑ:/, /ɔ:/, /ɒ/, /u/, /ʊ/, /ʌ/, /ə:/, /ə/

4.3 DESCRIPTION OF ENGLISH VOWELS

All vowel sounds are described using the articulatory patterns.

A. THE TONGUE POSITION

This refers to the horizontal tongue position in the articulation of a vowel sound.

E.g. /i:/, /ɪ/, /e/, /æ/

i) FRONT VOWELS

The Front Part of the tongue is raised in the direction of the hard palate. Four English Front Vowels e.g. /i:/, /ɪ/, /e/, /æ/

/i:/ as in tree [tri:], /ɪ/ as in fit [fit], /e/ as in red [red], /æ/ as in cat [kæt]

ii) BACK VOWELS

The back part of the tongue is raised towards the direction of the soft palate. E.g. five English back vowels

/ɑ:/, /ɔ:/, /ɔ:/, /u:/, /u:/

/ɑ:/ as in far [fɑ:r], /ɔ:/ as in dog [dɔg], /ɔ:/ as in saw [sɔ:], /u/ as in put [put], /u:/ as in you [ju:]

iii) CENTRAL VOWELS

Centre of the tongue is raised towards the opposite part of the back of the hard palate and the front of the soft palate. E.g. Three English Central Vowels

/ʌ/ , /ə/ , /ə:/

/ʌ/ as in [kʌt], /ə:/ as in [bə:d] , /ə/ is [lemən]

B. THE HEIGHT OF THE TONGUE

This refers to the vertical position of the tongue relative to either the roof of the mouth.

i) CLOSE VOWELS/HIGH VOWELS

Are those in which the tongue rises to the highest position, i.e. very close to the roof of the mouth.

E.g. two English close vowels /i:/, /u:/

ii) HALF CLOSE /MID HIGH VOWELS

The tongue is between the close and open position but closer to the close position

E.g. two English half close vowels /ɪ/, /ʊ/

iii) OPEN /LOW VOWELS

The tongue is in the rest farther from the roof of the mouth

E.g. Two English Half Close Vowels /ɑ:/, /ɔ:/

iv) HALF OPEN/ MID LOW VOWELS

The tongue is between the close and open positions but closer to the open position

E.g. Two English Half Open Vowels /æ/, /ʌ/

v) BETWEEN HALF CLOSE AND HALF OPEN

The tongue position is about half way between open and close

E.g. Three English vowels /e/, /ɔ:/, /ə/

C. POSITION OF THE LIPS

1) UNROUNDED VOWELS

(When lips are not rounded)

Spread

(When lips are spread sideways)
 Position) (lips are wide apart

Neutral

(When lips are in relaxed

open

(when

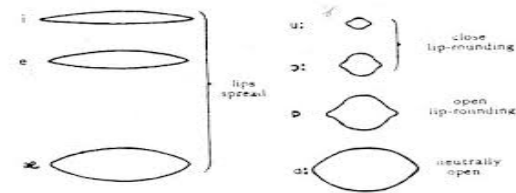


Diagram showing the position of the lips for unrounded vowels.

• ROUNDED VOWELS

(When lips are rounded)

OPEN ROUNDED

(When lips are less rounded than close rounded vowels)
 Than open rounded vowels)

CLOSE ROUNDED

(When the lips are more rounded than

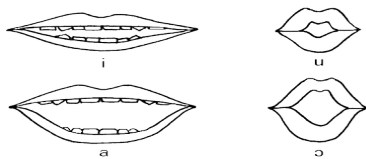


Diagram showing the position of the lips for rounded vowels.

D. OPENING BETWEEN THE JAWS

- Narrow To Wide: /ɪ/ and /i:/
- Medium: /e/, /u/
- Medium To Wide: /a:/, /ɔ:/, /æ/
- Medium To Fairly Wide: /ɔ:/
- Narrow To Medium: /u:/
- Wide: /ʌ/
- Narrow: /ə:/

TENSENESS AND LAXNESS

Vowels may be differentiated by degrees of muscular tension. It distinguishes among two classes :

- TENSE VOWELS
- LAX VOWELS

Tense vowels are those which are supposed to require considerable muscular tension on the part of the tongue.

Tense Vowels

/ɪ/ as in bit /e/ as in red, /ɛ/ as in get, /æ/ as in ash, /u/ as in put, /ʌ/ as in luck, /ɔ/ as in caught

Lax Vowels

Lax vowels are those in which is supposed to be held loosely. /ɪ:/ as in seat, /u:/ as in you, /ɔ:/ as in saw, /a:/ as in far, /ə:/ as in lemon

But it is generally advisable to apply the terms tense and lax only to the case of close vowels, it is difficult to determine in case of open vowels that whether the sensation of tenseness is present or not. There is also some difference of opinion regarding the subject.

4.4 DESCRIPTION OF BENGALI VOWELS

The Bengali sound inventory is comprised of seven vowel sounds. The sounds are described using the four articulatory patterns.

1. THE POSITION OF THE TONGUE

This refers to the horizontal tongue position in the description of the sound.

i) RAISING OF THE TONGUE

The front part of the tongue is raised in the direction of the hard palate. The vowels so formed are known as front vowels.

There are Three Bengali Front Vowels. E.g. /i/, /e/, /æ/

/i/ as in [ini], [din], [ki], /e/ as in [ekti], [ke], [p^her], /æ/ as in [æk], [k^hæla], [bæ^tha]

The back part of the tongue is raised in the direction of the soft palate. The vowels formed by this pattern are called back vowels.

Three Bengali Back Vowels: e.g. /u/, /o/, /ɔ/

/u/ as in [usɔ], [p^hul], [alu], /o/ as in [ok^hane], [boka], [baro], /ɔ/ as in [ɔpor], [ɔnek], [dɔ]

The centre of the tongue is raised towards the opposite of the hard palate and the front of the soft palate.

One Bengali Central Vowel. E.g. /a/

/a/ as in [alo], [lal], [ma]

2. THE OPENING OF THE MOUTH

This refers to the vertical position of the tongue relative to the roof of the mouth.

CLOSE VOWELS/ HIGH VOWELS

During the articulation of this vowel the tongue rises to the highest position i.e. very close to the roof of the mouth.

e.g. One Bengali Close Vowel [i]. [u]

HALF CLOSE / MID HIGH VOWELS

The tongue is between the close position and open position but closer to the close position.

e.g. One Bengali half close / mid high vowel /e/, /o/.

HALF OPEN / MID LOW VOWELS

The tongue is between the close and open position but closer to the open position. E.g. one Bengali half open / mid low vowels /æ/ /ɔ/

OPEN/ LOW VOWELS

The tongue is in the rest farther from the roof of the mouth.

e.g. One open / low vowels /a/

3. POSITION OF THE LIPS:

Like English, Bengali also has rounded vowels.

- UNROUNDED VOWELS

(When lips are not rounded)

SPREAD (When lips are spread sideways)

NEUTRAL (When lips are in relaxed)

OPEN (lips are wide apart)

- ROUNDED VOWELS

(When lips are rounded)

OPEN ROUNDED (When lips are less rounded than close rounded vowels)

CLOSE ROUNDED (When the lips are more rounded than than open rounded vowels.)

5.0 RESEARCH METHODOLOGY

In my paper entitled 'Articulation of English Vowels by Bengali Native Speaker.' the following methodologies were being adopted which are important for the field survey. The identification of region, informant, data collection, data transcribing, data analysis etc were followed. This work includes the following steps:

- Selection of vocabularies.
- A decision was taken about the target audience for the data collection.
- It was decided that the target group of audience will comprise of students of class 12 from both English and Bengali medium schools.
- A questionnaire was prepared.

- The questionnaire consists of certain words based on my research area and the students were instructed to pronounce them, each word four times so that a proper analysis can be done.
- The questionnaire also consists of certain information about the student including their name , their native place , mothers name and fathers name as all these information's were equally necessary for the successful completion of my paper.
- Since the students were asked to pronounce the words, a recording equipment was necessary, so in this modern era of technology, where technology rules, my mobile phone served as my recording equipment.
- Then these were transcribed into the written form.
- After having all the vowel carrier words a comparison was made between the Received Pronunciation with data.

6.0 DATA ANALYSIS

According to the questionnaire, as mentioned in the research methodology the data was collected from nine students, out of which six students are from Bengali medium school and three from English Medium School. Each of them was asked to produce the listed words four times. Single time utterance may be defective and may not free from noise.

The recorded data was transcribed in paper after listening which was further converted into IPA transcription. Then after making a table in respect of the Received Pronunciation which was received from the Daniel Jones the observations are prepared.

1. The vowel sound / i:/-Front High Unrounded Vowel as in [ki:]

1. Even
2. People
3. Complete
4. Immediate
5. Machine

In the following table the phonetic forms are mentioned in IPA. The first six students are from Bengali medium school and the rest three are from the English Medium.

Table 1

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Even [i:vn]	[ibhen]	[ibhen]	[ibhen]	[ibhen]	[ibhen]	[ibhen]	[ibhen]	[ibhen]	[ibhen]	9	0
People [pi:pl]	[pipl]	[pipl]	[pipl]	[pipl]	[pipl]	[pipl]	[pipl]	[pipl]	[pipl]	9	0
Complete [kəmpli:t]	[kɔmplit]	[kɔmplit]	[kɔmplit]	[kɔmplit]	[kɔmplit]	[kɔmplit]	[kɔmplit]	[kɔmplit]	[kɔmplit]	9	0
Immediate [i'mi:dʒet]	[Imidiet]	[Imidiet]	[Imidiet]	[Imidiet]	[Imidiet]	[Imidiet]	[Imidiet]	[Imidiet]	[Imidiet]	9	0
Machine [mə'fi:n]	[mefin]	[mefin]	[mefin]	[mefin]	[mefin]	[mefin]	[mefin]	[mɛfi:n]	[me fin]	9	0

Observations (Table 1)

In the above table it is noted that the English long vowel is not produced with RP by any of the two groups of students. In Bengali Phonology the long vowel is not available and this may be the reason for the absence of this sound. Other than this particular vowel several other deviations can be also noted. The absence of the /v/ in Bengali speakers is also replaced by the /b/. The use of syllabic nasal or lateral is unique to a Bengali speaker which has made most of the speakers by following the vowel insertion.

Eg. [vn]>[ven]

2. The vowel sound/ ɪ/- (Front Mid High Unrounded Vowel) as in [fit]

1. Symbol
2. Village
3. Examine
4. Except
5. Sunday

Table 2

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Symbol ['simbl]	[fimbɔl]	[fimbɔl]	[fimbl]	[fimbɔl]	[fimbl]	[fimbɔl]	[fimbɔl]	[fimbɔl]	[fimbɔl]	9	9
Village ['vilidʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	[b ^h iledʒ]	9	9
Examine [igzæmin]	[egzamin]	[egzamin]	[egzamin]	[egzamin]	[egzamin]	[egzamin]	[egzamin]	[egzamin]	[egzamin]	9	9
Except ['iksept]	[ekfept]	[ekfept]	[eksept]	[ekfept]	[ekfept]	[ekfept]	[ekfept]	[ekfept]	[ekfept]	9	0
Sunday[sʌndi]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	[ʃʌnde]	9	0

Observations (Table 2)

The above table shows that the speakers have produced the correct utterance of the vowel / i/ in some words. But in some words the vowel /i/>the front intermediate vowel /e/in both the initial position as in word 'except' , IPA ['iksept], Deviation [ekfept] , Examin IPA [igzæmin] [egzamin] , in between two consonants as in Village IPA ['vilidʒ] deviation [b^hiledʒ] and also in the word final position in Sunday IPA [sʌndi] deviation [ʃʌnde]. Some other observations in 'Examin' IPA [igzæmin] [egzamin] the front low unrounded vowel /æ/>back open unrounded vowel /ɑ/. In symbol the students insert the back open rounded vowel /ɔ/in between two consonants /b/and /l/as in 'Symbol'IPA ['simbl] deviation [fimbɔl].

According to the above description it is noted that only /i/ of this ['simbl] is maintained by 22% speaker the rest of the 78% fails to produce the Rp. In respect of the whole word none of the speaker was able to produce correctly. In the other words for e.g. in 'examin' the vowel in the initial position has changed to e by 100% of the speakers but in the same word the vowel in the second position has been retained also by 100% of the speakers. In the last two words mentioned in the table i.e. 'except' and 'Sunday' the vowel /i/ is in the initial position in 'except' and in the word final position in 'Sunday' IPA [sʌndi] changed to [ʃʌnde]. In these two words the speakers were not able to retain the RP pronunciation, the speakers fail to produce the RP.

3. The vowel sound /e/ (Front Intermediate Unrounded Vowel) as in [red]

1. Elder
2. Effort
3. Seven
4. Edition

Table 3

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Elder['eldə]	[eldar]	[eldar]	[eldar]	[eldar]	[eldar]	[eldar]	[eldar]	[elda]	[eldar]	9	9
Effort['efət]	[epʰɔrt]	[epʰɔrt]	[e pʰɔrt]	[e pʰɔrt]	[e pʰɔrt]	[e pʰɔrt]	[e pʰɔrt]	[e pʰɔrt]	[e pʰɔrt]	9	9
Seven['sevən]	[ʃeven]	[ʃeven]	[ʃeven]	[ʃeven]	[ʃeven]	[ʃeven]	[ʃeven]	[ʃeven]	[ʃeven]	9	9
Edition [ɪdɪʃən]	[edɪʃn]	[edɪʃn]	[edɪʃn]	[edɪʃn]	[edɪʃn]	[edɪʃn]	[edɪʃn]	[edɪʃn]	[edɪʃn]	9	9

Observations (Table 3)

The pronunciation asked for is the front intermediate unrounded vowel /e/. Here it is seen that in terms of the vowel 100% of the speakers have retained the pronunciation in all the first three words. But, in the last word it is seen that the speakers tend to pronounce the first vowel as /e/ i.e. [edɪʃn] instead of [i] and also some other changes have been observed as in the word 'seven' the central vowel /ə/ to the front intermediate unrounded vowel /e/. In the word 'effort' the back open unrounded vowel in /ɔ/. It is also noted that in the word 'elder' the r feature remained. In the word 'elder' IPA ['eldə] deviation ['eldar] the central vowel /ə/ has changed to back open unrounded vowel /a/. In terms of the consonantal change the labio dental fricative /f/ sound has changed to the stop aspirate consonant /pʰ/.

4. The vowel sound /æ/- (Front Low Unrounded Vowel) as in [kæt]

1. Wag
2. Alphabet

3. Academic

4. Exact

Table 4

Word with RP	S1	S2	S3	S4	S5	S6	S7	S8	S9	Devi-full word		*RP v only
										1	2	
Wag [wæg]	[wʌg]	[wæg]	[wʌg]	[wæg]	[wæg]	[wæg]	[weg]	[wæg]	[wæg]	2	1	6
Alphabet [ælfəbit]	[ælpʰabe t]	[ælpʰabet]	[ælpʰabet]	[ælpʰabet]	[ælpʰabet]	[ælpʰabet]	[ælfabet]	[ælpʰabet]	[ælfabet]			9
Academic [ækədəmik]	[ækadem ik]	[ækademi k]	[ækademi k]	[ækademik]	[ækademi k]	[ækademi k]	[ækademik]	[ækademi k]	[ækademi k]			9
Exact [ig'zækt]	[ekzækt]	[ekzækt]	[ekzækt]	[ekzækt]	[ekzækt]	[ekzækt]	[ekzækt]	[ekzækt]	[ekzækt]			9

Observations (Table 4)

The pronunciation asked for is the front low unrounded vowel /æ/, here almost 55.55% of the students have retained the standard pronunciation [wʌg]. But in this particular word three variations can be seen, some students have changed it to [wʌg] i.e. the front low unrounded vowel /æ/ > the central half open unrounded vowel /ʌ/ in between /w/ and /g/ and some students change the pronunciation as the front low unrounded vowel /æ/ > the front intermediate unrounded vowel /e/ as [weg]. In the next three words the pronunciation of the vowel asked for i.e. /æ/-(Front Low Unrounded Vowel), all the students have retained the pronunciation but some other changes are seen, as /ə/ > /a/ in both academic and alphabet. In the word exact the initial vowel sound is /i/ but the students have changed the articulation to e. In the same word the voiced velar plosive /g/ has changed to unvoiced velar plosive /k/.

5. The vowel sound /ɑ:/ (back open unrounded vowel) as in [hɑ:t]

1. Garden

2. Command

3. Example

4. Plant

Table 5

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Garden ['gɑ:dn]	[garden]	[garden]	[garden]	[garden]	[garden]	[garden]	['gɑ:dn]	[garden]	[garden]	9	0
Command [kʌmɑ:nd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	[kɔmænd]	9	0
Example [ig'za:mpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	[egzæmpl]	9	0
Plant [plɑ:nt]	[plænt]	[plænt]	[plænt]	[plænt]	[plænt]	[plænt]	[plænt]	[plænt]	[plænt]	9	0

Observations (Table 5)

From the above table it is clear that in terms of the vowel pronunciation, here 100% of the speakers were unable to recognize the long vowel so in all the four words mentioned above this vowel has undergone different changes. The vowel changes to /æ/ as in Plant IPA [plɑ:nt] deviation [plænt] in Example IPA [ig'za:mpl] deviation [eg'zæmpl] and also in Command IPA [kʌmɑ:nd] deviation [kɔmænd]. The students also fail to recognize the consonantal drops. Other observations include that the vowel /i/ in the initial position > to /e/ as in Example IPA [ig'za:mpl] deviation [eg'zæmpl] and /ʌ/ vowel in command changes to /ɔ/ IPA [kʌmɑ:nd] deviation [kɔmænd].

6. The vowel sound /ɔ/- (back open rounded vowel) as in [nɔt]

1. Cough
2. Quality
3. Often

Table 6

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Quality [kwɔliti]	[koaliti]	[koaliti]	[koaliti]	[koaliti]	[koaliti]	[koaliti]	[koaliti]	[koaliti]	[koaliti]	9	0
Cough [kɔf]	[kof]	[kof]	[kof]	[kof]	[kof]	[kof]	[kof]	[kof]	[kof]	9	0
Often [ɔfn]	[ɔfen]	[ɔfen]	[ɔfen]	[ɔfen]	[ɔfen]	[ɔfen]	[ɔfn]	[ɔfn]	[ɔfen]	7	2

Observations (Table 6)

Here also in terms of the vowel the speakers were unable to recognize the feature. In the word 'Cough' the back open rounded vowel changed to the bengali back vowel /o/ as in IPA [kɔf] > Deviation [kof]. In the word 'Quality' IPA [kwɔliti] the pronunciation has changed to [koaliti]. In the last word there is no change in the articulation of the vowel asked for but a variation seen among all

the students, the first five students tend to insert the vowel front intermediate unrounded vowel /e/ in between two consonants.

7. The vowel sound /ɔ:/-(back open rounded vowel) as in [sɔ:]

1. Water
2. Course
3. Source

Table 7

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Water[wɔ:tə]	[oyaɪ ar]	[oyaɪar]	[oyaɪar]	[oyaɪar]	[oyaɪar]	[oyaɪar]	[oyaɪar]	[oyaɪar]	[oyaɪar]		9
Course[kɔ:s]	[korɪ]	[korɪ]	[korɪ]	[korɪ]	[korɪ]	[korɪ]	[korɪ]	[korɪ]	[korɪ]		9
Source[sɔ:s]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]	[ʃorɪ]		9

Observations (Table 7)

Here also the students fail to recognize the long vowel, so they fail to produce the Received Pronunciation, so here also the deviation is 100% and the Received Pronunciation is 0. In course and water this back open rounded vowel changed to the Bengali back vowel /o/. In the word water this vowel changed to the back open unrounded vowel /a/.

8. The vowel sound [u]- (back mid high rounded vowel) as in [put]

1. Women
2. Would
3. Soot

Table 8

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Women [wʊmən]	[omæən]	[omæən]	[omæən]	[omæən]	[omæən]	[omæən]	[wʌmæən]	[wʌmæən]	[wʌmæən]		2
Would [wʊd]	[wud]	[wud]	[ud]	[wud]	[wud]	[ud]	[wud]	[wud]	[wud]		2
Soot [sut]	[ʃʊt]	[ʃʊt]	[ʃʊt]	[ʃʊt]	[ʃʊt]	[ʃʊt]	[ʃʊt]	[ʃʊt]	[ʃʊt]		

Observations (Table 8)

In the articulation of this vowel it is seen that in the word women IPA [wʊmən] 20% of the speakers have changed the pronunciation of the back mid high rounded vowel /u/ to the central half open unrounded vowel /ʌ/. But 80% of the speakers have retained at least the vowel pronunciation. The

changes in terms of the consonant were seen as in the word 'soot' the alveolar fricative /s/ has changed to /s^h/ . In the word 'would' some speakers have changed omitted the semi vowel /w like [ud].

9. The vowel sound [u:] -(Back high rounded vowel) as in [blu:]

1. Music
2. Tube
3. Few
4. Future

Table 9

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Music['mju: sik]	[miuf ik]	[miuf ik]	[miuf ik]	[miuf ik]	[miuf ik]	[miuf ik]	[miuf ik]	[miuf ik]	[miuf ik]		9
Tube'tju: b]	['tiub]	['tiub]	['tiub]	['tiub]	['tiub]	['tiub]	['tiub]	['tiub]	['tiub]	1	8
Few[fju:]	[fiu]	[fiu]	[fiu]	[fiu]	[fiu]	[fiu]	[fiu]	[fiu]	[fiu]		9
Future['fju: tʃə]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]	['p ^h iutʃar]		9

Observations (Table 9)

Like all the other long vowels the students again fail to recognize the lengthening feature of [u] this vowel. So here also in terms of the deviation the percentage is 100% and the Received Pronunciation is zero.

10. The vowel sound [ʌ]-(Central half open unrounded vowel) as in [kʌt]

1. Company
2. Onion

Table 10

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Company ['kʌmpəni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	[kɔmpæni]	9	0
Onion ['ʌnjən]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	[ɔniɔn]	9	0

Observations (Table 10)

Here also the students failed to produce the word with Rp so the deviation is 100% and the Received Pronunciation is 0.

11. The vowel sound [ə:] as in [hə:]

1. Bird
2. Sir
3. Church

Table 11

Words with RP	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	Deviation in terms of the word	*RP in terms of the vowel
Bird[bə:d]	[bard]	[bard]	[bard]	[bard]	[bard]	[bard]	[bard]	[bard]	[bard]	9	o
Sir[sə:]	[fæɹ]	[fæɹ]	[fæɹ]	[fæɹ]	[fæɹ]	[fæɹ]	[fæɹ]	[fæɹ]	[fæɹ]	9	0
Church[tʃə:tʃ]	[tʃsartʃ]	[tʃsartʃ]	[tʃsartʃ]	[tʃsartʃ]	[tʃsartʃ]	[tʃartʃ]	[tʃartʃ]	[tʃartʃ]	[tʃartʃ]	9	0

Observations (Table 11)

It is seen from the above table that the 100% of the speakers have failed to produce the correct articulation of this vowel. So the deviation in this case is 100% whereas the RP is 0. This central mediate unrounded vowel changes to the back open unrounded vowel /a/ in Church and in bird and to the front low unrounded vowel /æ/ in the word sir.

12. The vowel sound [ə] as in [lemən]

1. Salad
2. Centre
3. Alphabet
4. Academic
5. Melody

Table 12

[illegible]

Observations (Table 12)

Here in this vowel also 100% of the speaker were unable to produce the correct utterance of the vowel [ə] so the deviation remained as 100% and the RP remained 0. The changes that this vowel has undergone are in 'Melody' IPA ['melədi] Deviation ['melaudi], In salad the vowel sound has changed to 'Salad' the sound has changed to /æ/['sæləd] ['fælad]. In alphabet it has changed to 'Alphabet' it has changed to /ɑ/['ælfəbit] ['ælfabet] and same in case of academic [ækə'demik] [ækademik].

7.0 CONCLUSION

From the above table and the graph it is seen that among the two groups none were able to produce the correct articulation. There is a change in the pattern of vowel articulation. It is true that in some cases though the students were able to recognize certain articulatory features such as the short vowels for e.g. /i/ and /u/ but mostly they are failing to acquire the features, for example the difference between the long vowels the central vowel.

To develop the correct articulation among the students it is a necessity that the students must be exposed to a proper training and the training methods should include the teaching of the sound system, the movement of the articulatory organs and necessarily the correct articulation of the words. Speech comes in the history of any language, written language is only an attempt to represent using marks on paper the sounds used in spoken language, in every language a letter of the alphabet represents a particular sound. More of speaking and proper ear training will solve the problem of articulation among the students.

The movement of the organs of the speech is the most important area to the speaker as well as to the trainer. Other than the proper understanding the problems of English pronunciation will not be resolved. These should be the part of the teaching curriculum.

8.0 Bibliography

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9.0 INFORMANT DETAILS

1. Aparna Roy, Kamala Girl's School
2. Bidisha Deb, Kamala Girl's School
3. Pritam Dutta, Behala Arya Vidya Mandir
4. Devjit Bhunia, Arya Vidya Mandir
5. Kousini Sikder, Tollygunj Girls high school
6. Rishab Bhowmick, Behala high school
7. Shaoli Paul, Bidya Bharati Girl's school

8. Priyanka Maity Bidya Bharati Girls school
 9. Rodoshi Roy , Alipore girls and boys high school
- (All the students are in class 12.)