# Assessing Students' Achievements in Speech Sounds of English

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Abstract : The chief objective of the research article is to assess the students' achievements in speech sounds of English. The researcher employed a pre-experiment research method, especially one- group- pretest- posttest-design which included a pretest measure followed by a treatment and a posttest for a single group. A set of hundred multiple choice question items were allotted to the mass of 38 B.Ed. first year students of Makawanpur Multiple Campus, Hetauda, Nepal in the Academic Year 2017-2018. The simple random sampling technique was used to select 35 students out of 38 students who formed the population for the study. The paired samples t-test between the Total Pretest Mean Score (M= 43.571 and SD= 7.507) and the Total Posttest Mean Score (M=93.714 and SD= 13.151) with (observed t- value= 19.954, critical t- value= 2.032, Df: 34, and p< .05) show that there was a statistically significant difference between the Total Pretest Mean Score and the Total Posttest Mean Score in the group. It justifies that the exposition teaching strategy was effective in the group and the students' had significant achievements in speech sounds of English. This article is reckoned to be useful to those who retain keen interest in teaching and learning speech sounds of English.

Keywords: Consonant, correlation, exposition, teaching, vowel.

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# I. INTRODUCTION

English language and literature have been major subjects of teaching at schools and colleges for a long time. We normally tend to teach English stories, essays, poems, letters, dramas, novels and grammatical items to the students in general classes. English is supposed to be a difficult subject for average students of humanities and education faculties. Teaching-learning speech sounds of foreign language like English is even more difficult. Speech sounds of English and sounds related items are taught in brief to the students who study English as a major subject in the bachelor first year in the faculty of education at the colleges which are affiliated to Tribhuvan University, Kathmandu, Nepal. Speech sounds are taught to the students of master level in the faculty of education in detail. Speech sounds being difficult, strange and puzzling to learn, only a few students remain in the classroom to listen to the teachers. Even the subject teachers find it difficult to convince and motivate their students to learn and use their knowledge in their real life situations. There are numerous reasons why students consider learning speech sounds as arduous subject matters: Nepalese students are not exposed to speaking English language at home in their early stages, but they are exposed to Nepalese tongue; they are not exposed to correct pronunciation of English words even at schools and colleges with their teachers and friends; same spelling(s) may have multiple speech sounds; sound symbols are difficult to understand; students realize the inability of their mother tongue to support English language because of their dissimilar language natures and students assume that language is a means of communication. They are used to considering that if message is communicated anyway, there is no need to pronounce words correctly or speak in the way of the English native speakers; average students tend to study education; and the students are used to following the old habit of speaking and it is difficult for them to breach the old habit.

The students should be taught speech sounds of English in their early stages, not only at the bachelor level for teaching-learning accurate pronunciation. Connor (2000) opines that "by the time we are grown up the habits of our own language are so strong that they are very difficult to break" (p.2). English is a creepy language. The same letter(s) may have multiple pronunciations. The "ea" is pronounced / e / in the word "dead", and / i: / in the word "peak". The same sound / i: / is realized through different spellings such as **ee, ea, ie, ei** in the words like see, sea, field and receive. Such irregularities in pronunciation result in creating problems in the students for discerning accurate pronunciation of the words. Similarly, the spelling or letter "c" is pronounced / s / in "cell", / t / in "cello" and / k / in "cut". Different spellings tend to form the same sound, such as / k / is produced with "c" in " cat", with "ch" in " chemistry", with "ck" in "lock", with "q" in "queen", with "cc" in "accurate" and so on.

The researcher in this article has endeavored to provide the students with the basic vowel sounds and consonant sounds of English, formation of vowel sounds and consonant sounds with some spellings, classification of vowel sounds and four term description of vowel sounds and three term description of

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consonant sounds. The researcher applied the exposition strategy to teach 35 students for 30-30 periods. This article is significant because it explores that even the difficult subject matters can be taught for better examination performance of the students. Most of the students find the vowel sounds more difficult than the consonant sounds, but they can learn vowel sounds well if teachers motivate, encourage and teach well by engaging them.

### 1.1 Research Gap

Several research studies have been carried out in teaching speech sounds of English and reasons for facing problems in correct pronunciation of English. But no research has been carried out to examine the effectiveness of teaching speech sounds of English through the exposition strategy yet. This research through the pre-experiment research method, especially one- group- pretest- posttest- design fills up that gap and shows that the exposition strategy can be an impressive teaching strategy for teaching difficult subject matters like speech sounds of English.

#### **1.2** Contribution of the Study

Generally, English language and literature has been taught to the school and campus level students through the lecture or discussion teaching method in Nepal or in other developing countries. Teaching students through the exposition strategy is a bit new method. This research study was based on a pre-experimental method for examining the effectiveness of teaching. A large number of teachers and students assume that teaching speech sounds of English to non-English students by non-English teachers is a very tough task. How to pronounce individual sounds, words and words in connected speech is a matter of great concern in teaching – learning activities. This article is considered to contribute to the field of teaching any subject matter by using the exposition strategy. This article, which deals with introducing the students or interested persons to consonant sounds, classification of consonant sounds, three term description of consonant sounds, common vowel sounds and classification of vowel sound and four term description of vowel sounds, is significant to those who are interested in teaching and learning speech sounds of English.

### **1 3 Objective of the Study**

One of the objectives of the research study is to assess students' achievements in speech sounds of English.

#### 1.4 Null Hypothesis

1.4.1 There is no statistically significant difference between the Total Pretest Mean Score and the Total Posttest Mean Score of the students in speech sounds of English.

# II. REVIEW OF THE RELATED LITERATURE

Review of the related literature embraces consonant sounds, classification of consonant sounds, three term description of consonant sounds, vowel sounds, classification of vowel sound, four term descriptions of vowel sounds and the exposition strategy of teaching.

### 2.1 Organs of Speech

All the organs of the human body involved in the production of speech sounds are called the organs of speech or articulators. Major organs of speech are: alveolar ridge, upper lip, lower lip, hard palate, soft palate, teeth, different parts of the tongue and vocal cords. In the production of vowel sounds, the lip position, the parts and the height of the tongue play a significant role.



Figure 1: Organs of Speech

# 2.2 Consonant and Vowel Sounds

Crystal (2003) asserts that Consonants are "sounds made by a closure or narrowing in the vocal tract so that the airflow is either completely blocked, or so restricted that audible friction is produced" (p.103). It means consonant sounds are produced when there is an obstruction of the airflow somewhere in the vocal tract. This obstruction is the point of contact between an active articulator and a passive articulator. Articulators are the organs of speech which are involved in the production of speech sounds. The active articulator moves towards the passive articulator in the production of a speech sound. This articulator moves towards another articulators. The passive articulator is the articulator that remains motionless in the production of a speech sound. Teeth, alveolar ridge, hard palate, soft palate etc are passive articulators. Sounds are called speech sounds because they are to be produced through organs of speech. Gimson (1990) remarks that speech is "a manifestation of language and spoken language is normally a continuum of sound" (p.44). Connor (2000) views that "consonants are generally made by a definite interference of the vocal organs with the air stream, and so are easier to describe and understand" (p.24). Similar view is expressed by Verma and Krishnaswamy (1999) who consider a consonant as "a sound characterized by constriction accompanied by some measure of friction or closure followed by release" (p.35).

There are 24 consonant sounds of English. They are:  $/ P/, / b/, /t/, /d/, /k/, /g/, / t / /, / d /, / m/, / n/, / \eta/, / f/, / v/, / \theta/, / s/, / s/, / z/, / j/, / a/, / h/, / r/, / j/, / w/ and / 1/.$ 

Crystal (2003) asserts that vowels are "sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction" (p.517). It means vowel sounds are produced with a friction of the airflow in the vocal tract. Therefore, they are voiced. Gimson (1990) remarks that speech is "a manifestation of language and spoken language is normally a continuum of sound" (p.44). Connor (2000) views that "vowels are made by voiced air passing through different mouth shapes; the differences in the shape of the mouth are caused by different positions of the tongue and of the lips" (p.79). Similar view is expressed by Verma and Krishnaswamy (1999) who consider a vowel as "a sound produced by the unobstructed passage of the airstream" (p.34).

The same vowel sound can be realized through different spellings and the same spellings can form different vowel sounds. Crystal (2012) asserts that "English spelling is difficult, but it is not as chaotic as is often claimed. An explanatory perspective can make the learning of spelling easier". Hockett (1958) remarks that "all languages are constantly undergoing slight changes- in pronunciation, in grammar, in vocabulary" (p.9).

#### 2.3 Classification of Consonant and Vowel Sounds

Consonant sounds classified on the basis of the position of the soft palate, state of glottis, place of articulation and manner of articulation.

### 2.3.1 On the Basis of the Position of the Soft Palate

On the basis of the position of the soft palate, there are two types of sound: nasal and oral. There are 3 nasal sounds: /m, n,  $\eta$  / and 21 oral sounds: /p, b, t, d, k, g, t, d, d, f, v,  $\theta$ ,  $\delta$ , s, z,  $\int$ , 3, j, r, 1, w, h /.

#### 2.3.2 On the Basis of Voicing / State of Glottis

There are two types of consonant sounds on the basis of voicing or the state of glottis: voiceless and voiced. There are 9 voiceless sounds: /  $\mathbf{p}$ ,  $\mathbf{t}$ ,  $\mathbf{k}$ ,  $\mathbf{t}^{j}$ ,  $\mathbf{f}$ ,  $\boldsymbol{\theta}$ ,  $\mathbf{s}$ , j,  $\mathbf{h}$ / and 15 voiced sounds: /  $\mathbf{b}$ ,  $\mathbf{d}$ ,  $\mathbf{g}$ ,  $\mathbf{d3}$ ,  $\mathbf{v}$ ,  $\boldsymbol{\delta}$ ,  $\mathbf{z}$ ,  $\mathbf{3}$ ,  $\mathbf{m}$ ,  $\mathbf{n}$ ,  $\mathbf{\eta}$ ,  $\mathbf{j}$ ,  $\mathbf{r}$ ,  $\mathbf{l}$ ,  $\mathbf{w}$  /

### 2.3.3 On the Basis of Force of Articulation

There are two types of consonant sounds on the basis of force of articulation: fortis and lenis. There are 9 fortis sounds: / p , t, k, t  $\int$ , f,  $\theta$ , s,  $\int$ , h / and 15 lenis sounds: / b, d, g, d3, v,  $\delta$ , z, 3, m, n,  $\eta$ , j, r, l, w /

# 2.3.4 On the Basis of the Place of Articulation

On the basis of the place of articulation, there are 9 types of consonant sound. They are:

 $\begin{array}{l} Bilabial: / P, b, m, w/ , \ Labio-dental: /f, v / , \ Dental: / \theta, \delta /, \ Alveolar: / t, d, \ n, l \ , s \ , z \ /, \ Post-alveolar: / r/, \ Palato-alveolar: /t \ , d3, \ \ \int , \ 3/, \ Palatal: /j \ /, \ Velar: \ / k \ , g \ , \eta \ / \ and \ Glottal: /h \ / \end{array}$ 

### 2.3.5 On the Basis of the Manner of Articulation

There are primarily 7 types of consonant sounds on the basis of the manner of articulation. They are: **Plosive**: / **p**, **b**, **t**, **d**, **k**, **g** /, Affricate :/t], d3/ Fricative: / **f**, **v**,  $\theta$ ,  $\delta$ , **s**, **z**, 3,  $\int$ , **h** /, Nasal: / **m**, **n**, **η**/ Lateral : /l / and Frictionless continuant: / **r** / and Semi-vowels: / **w**, **j** /.

### 2.3.6 Three Term Description of Consonant Sounds

Three term description of a consonant sound involves describing the consonant sound on the basis of voicing (state of glottis), the place of articulation and the manner of articulation.

S.N.	Sound	State of glottis	Place of Articulation	Manner of Articulation
1	/p/	voiceless	bilabial	plosive
2	/b/	voiced	bilabial	plosive
3	/t/	voiceless	alveolar	plosive
4	/d/	voiced	alveolar	plosive
5	/k/	voiceless	velar	plosive
6	/g/	voiced	velar	plosive
7	/tʃ/	voiceless	palato- alveolar	affricate
8	/dʒ/	voiced	palato- alveolar	affricate
9	/m/	voiced	bilabial	nasal
10	/n/	voiced	alveolar	nasal
11	/ŋ/	voiced	velar	nasal
12	/ <b>f</b> /	voiceless	labio-dental	fricative
13	/v/	voiced	labio-dental	fricative
14	/0/	voiceless	dental	fricative
15	/ð/	voiced	dental	fricative
16	/s/	voiceless	alveolar	fricative
17	/z/	voiced	alveolar	fricative
18	/ʃ/	voiceless	palato- alveolar	fricative
19	/3/	voiced	palato- alveolar	fricative
20	/h/	voiceless	glottal	fricative
21	/r/	voiced	post alveolar	frictionless continuant
22	/j/	voiced	palatal	semi-vowel
23	/w/	voiced	bilabial	semi-vowel
24	/1/	voiced	alveolar	lateral

**Table 1: Three Term Description of Consonant Sounds** 

Vowel sounds can be classified broadly into two types: monophthongs and diphthongs. Monophthongs are pure or single vowels. A monophthong is a vowel which is produced without noticeable change in vowel quality. There are 12 monophthongs: /1, i:, e, æ,  $\Lambda$ ,  $\vartheta$ , 3:, a:, b,  $\vartheta$ ;  $\vartheta$ , u: /. Jones (1992) states "when a sound is made by gliding from one vowel position to another, it is called a diphthong" (p.22). There is a noticeable change in the quality of vowel when we pronounce them. Connor (2000) expresses similar idea and defines a diphthong as "a glide from one vowel to another, and the whole glide acts like one of the long, simple vowels" (p.84). There are 8 diphthongs in English: / eI, aI, JI,  $\partial U$ , aU,  $I\partial$ ,  $e\partial$ , U.

# 2.4. Classification of Monophthongs

Monophthongs can be classified on the basis of length, parts of the tongue, height of the tongue, position of the lip and the muscular tension of the tongue and the lips.

# 2.4.1 On the Basis of Length / Duration

There are two types of monophthongs on the basis of length: long vowels: / i:, 3:, a:,  $\sigma$ :, u: / and short vowels: /i, e, æ,  $\Lambda$ ,  $\vartheta$ ,  $\upsilon$ ,  $\upsilon$  /.

#### 2.4.2 On the Basis of the Parts of the Tongue

There are three types of vowel sound on the basis of the parts of the tongue: front : / i: , 1 , e , æ /, central vowels: / 3:,  $\vartheta$ ,  $\Lambda$  / and back vowels: / u: ,  $\upsilon$ ,  $\vartheta$ : ,  $\vartheta$ ,  $\alpha$ : /.

# 2.4.3 On the Basis of the Height of the Tongue

On the basis of the height of the tongue, monophthongs are classified into 3 types: high vowels: / i:, I, u:,  $\sigma$  /, mid vowels: / e, 3:,  $\sigma$ ,  $\sigma$ : / and low vowels in English: /æ,  $\Lambda$ ,  $\sigma$ , a: /.

Such classification is preferred by American phoneticians, but the British phoneticians prefer the following type of classification of vowel sounds: close vowels: / i:, u: /, half-close vowels: / i, 3: a,  $\sigma$  /, half-open vowels: / e,  $\mathfrak{d}$ ,  $\mathfrak{d}$ ; / and Open vowels: /æ,  $\mathfrak{d}$ ,  $\mathfrak{$ 

# 2.4.4 On the Basis of the Position of the Lips

There are primarily 2 types of vowel sound on the basis of the position of the lip: rounded vowels: /n, **5**:, **0**, **u**: / and unrounded vowels: /i, **i**:, **e**, **æ**, **A**, **9**, **3**:, **a**: /. The unrounded vowels can be classified into two types: spread vowels: /i, **i**: / and neutral vowels: / **e**, **æ**, **A**, **9**, **3**:, **a**: /.

### 2.4.5 On the Basis of the Muscular Tension

Vowels can be divided as **tense** vowels and **lax** vowels according to the muscular tension in the production of vowel sounds. All the long vowels (/i:, 3:, a:,  $\mathbf{a}$ :,  $\mathbf{a}$ :,  $\mathbf{u}$ :/) are tense vowels and all the short vowels (/i, e, æ,  $\Lambda$ ,  $\mathbf{a}$ ,  $\mathbf{v}$ ,  $\mathbf{v}$ /) are lax vowels in English.

# 2.4.6 Four Term Description of Vowel Sounds

Four term description of a vowel sound involves describing the vowel sound on the basis of length, height of the tongue, parts of the tongue and the position of the lips.

S.N.	Sound	Length	Height of	Parts of the	Position of the
		_	the Tongue	Tongue	Lips
1.	/1/	Short	High	Front	Spread
2.	/ i: /	Long	High	Front	Spread
3.	/ e /	Short	Mid	Front	Neutral
4.	/æ/	Short	Low	Low Front	
5.	/ \ /	Short	Low	Central	Neutral
6.	/ə/	Short	Mid	Central	Neutral
7.	/ 3: /	Long	Mid	Central	Neutral
8.	/ a: /	Long	Low	Back	Neutral
9.	/v /	Short	Low	Back	Rounded
10.	/ 3: /	Long	Mid	Back	Rounded
11.	/υ/	Short	High	Back	Rounded
12.	/ u: /	Long	High	Back	Rounded

 Table 2: Four Term Description of Vowel Sounds

The table demonstrates that the tongue and the lips are very vital organs for producing vowel sounds.

# **2.5 Classification of Diphthongs**

The diphthongs of English can be placed into three groups: those which end in  $/ \upsilon / \rightarrow / \vartheta \upsilon /$  and  $/ \vartheta \upsilon /$ , those which end in  $/ \iota / \rightarrow / e \iota /$ ,  $/ e \iota /$ ,  $/ a \iota / a u / \vartheta \iota /$ ; and those which end in  $/ \vartheta / \rightarrow / \iota \vartheta /$ ,  $/ e \vartheta / a u / \upsilon \vartheta /$ .

The diphthongs can be classified on the basis of the direction of the glide and the prominence of the glide.

# 2.5.1 Classification of Diphthongs on the Basis of the Direction of the Glide

There are two kinds of diphthongs on the basis of the direction of the glide: centering diphthongs: / i a, e a, v a / and closing diphthongs: / a v, e i, a i, j i /.

# 2.5.2 Classification of Diphthongs on the Basis of the Prominence of the Glide

There are two kinds of diphthongs on the basis of the prominence of the glide: rising diphthongs: /ia, va/ and falling diphthongs: /ea, av, ei, av, ei, ai, ij/.

### 2.6 Recent Studies in Teaching Learning Speech Sounds of English

It is obvious that teaching can bring a positive change in students' exam performance if a teacher teaches them honestly and students take teaching sensibly and sensitively. In spite of this, teaching and learning speech sounds of English is a difficult task. Teaching speech sounds of English primarily refers to teaching correct pronunciation. Both teachers and students generally find teaching and learning speech sounds boring, tough and tedious. There might be various reasons.

Calvo (2013) in her study with Spanish BA students asserts that the participants found the pronunciation activities monotonous (mainly listening and repeating tasks) with almost no songs, games or the use of computer programs and the internet. Melhorn (2005) mentions that one of the main problems faced by the students is the lack of class time to cover all the needs in pronunciation teaching. She suggests that individual should take part in pronunciation coaching activities as a solution. Technology mediated learning enables learners to practise and study outside the classroom at their own pace.

Nakazawa (2012) views that technology-mediated learning activities might reduce anxiety and make learners feel more comfortable when practicing their own pronunciation and intonation without being made the centre of attention in the classroom. Seferoğlu (2005) in her study about integrating accent reduction software in advanced English language classes suggests that specifically designed software programs contribute a lot by providing learners with exposure and practice opportunities in EFL settings where natural target language input is scarce. Seferoğlu (2005) and Vodopija-Krastonovic (2012) assume that good pronunciation as a desirable quality in language teachers and a lack of it can cause criticism and questioning of professional identity. Carter and Nunan (2001) and Connor (2003) noted that the errors of pronunciation that learners of English from different language backgrounds make are systematic and not accidental.

Researchers and linguists have pointed some linguistic factors such as the differences of the sound system between the (LI) and the (L2), the inconsistency of some sounds in English language, the mother tongue interference and the influence of spelling on pronunciation make pronunciation difficult and creepy. Baker and Murphy(2011); and Thomson and Derwing (2015) consider that classroom teachers, materials developers, and researchers support that pronunciation teaching is not only expanding but deepening in quality . Along with its expanding knowledge base, the need to teach pronunciation is becoming increasingly clear. As Celce-Murcia, Brinton, and Goodwin (2010) and Morley (1987, 1991, 1994) discuss, non-native English speakers in need of pronunciation assistance live both within and beyond English-dominant parts of the world. Derwing (2010) and Derwing and Munro (2015), as well as most contemporary specialists, promote intelligibility and comprehensibility as foci of pronunciation instruction because they contribute more to effective communication. Jenkins (2010), and Leitner, Hashim and Wolf(2016) state that English continues to serve as an international lingua franca in business, diplomacy, education, tourism, and entertainment worldwide, ELF interactions between nonnative speakers of different L1 backgrounds are increasing in frequency and importance . It can be concluded that correct and intelligible pronunciation is necessary for better communication in a real life situation.

#### 2.7 Exposition Strategy

Teaching strategy refers to the structure, system, methods, techniques, procedures and processes that a teacher uses during instruction. This is the strategy the teacher employs to assist student learning. Mangal and Mangal (2012) view the teaching strategy "to be more comprehensive in its scope as well as composition in comparison to the term the method of teaching" (p.301). The exposition strategy is such a strategy of teaching which involves putting the subject matter before the students in a simple, interesting and clear style to make them understand learning items easily and properly.

# III. RESEARCH METHODOLOGY

Research methodology includes the research design, population / universe, sampling, sample size, formation of the Group, variable in the study, validity and reliability of instruments and collection of data.

#### 3.1 Research Design

In order to examine the relative effectiveness of independent variable, the pre-experimental research design, especially the One Group Pretest Posttest Design was followed. The students from a campus were placed in a group. The design can be presented in the following way:

### Where,

- O<sub>1</sub> refers to an observation /measurement ( pretest scores of the Group)
- O2 refers to an observation/ measurement (Posttest scores of the Group)
- X1 represents an exposure of a group as Intervention/Treatment
- Left to right order indicates temporal sequence.

#### 3.2 Population / Universe of the Study

38 B. Ed. first year students (15 boys and 23 girls) studying English as a major subject at Makawanpur Multiple Campus, Hetauda of Nepal formed the population of the study.

#### 3.3 Sampling Design

The researcher followed the simple random sampling design, especially the lottery method to select students from Makawanpur Multiple Campus, Hetauda according to the sample size determination formula or the table of sample size by maintaining 95% confidence level and 5% margin of error.

#### 3.4 Sample Size

35 students (13 boys and 22 girls) formed the sample size of the study. This figure shows that the number of girls was higher than that of boys at this campus.

#### **3.4.1 Age Groups of the Students**

There were 13 male and 22 female students aged between 18-21 years.

### 3.4.2 Religions of the Students

21 students belonged to Hinduism, 12 students belonged to Buddhism, 1 student belonged to Christianity and 1 student belonged to Muslimism.

#### **3.5 Formation of the Group**

After getting the consent of the campus authority of the concerned campus, the researcher consulted B.Ed. first year students and told them about the purpose of his work. He selected the students through the simple random technique, especially the lottery method to form a group.

### 3.6 Variables in the Study

This research article assumed test scores of the students as dependent variables whose mean scores were to be computed.

#### 3.7 Validity of the Instruments

To measure the validity of the instruments, the researcher received opinions and judgments from subject experts and authorities.

#### **3.8 Reliability of the Instruments**

The researcher used the Split-Half model of reliability to check the reliability of the instruments. The reliability of the instruments based on the posttest scores of the students in speech sounds of English was .937. The data showed us that the instruments were very highly reliable in measuring students' achievements in learning the speech sounds of English.

#### 3.9 Collection of Data

The primary data were collected through the pretest and the posttest scores of the students. The test items involved hundred-hundred multiple choice items based on the consonant sounds and the vowel sounds of English. The researcher made use of different books, journal articles, websites and other related materials as the secondary sources of data.

# IV. ANALYSIS AND INTERPRETATION OF DATA

All the data were analyzed by using Statistical Package for Social Sciences (SPSS) 20 version. The researcher used the paired samples t- test to assess students' achievements in speech sounds of English. The researcher made use of G Power 3.1 Software to measure the power of the hypothesis test.

### 4.1 Paired Samples T- Test

The paired samples t- test was carried out to compare the means of two variables for a single group. The procedure computed the differences between values of the two variables for each case and measures whether the average differs from 0 or not. In this research study, the Total Posttest Score and the Total Pretest Score were two dependent variables whose means were to be compared for analysis. The researcher adopted the paired samples t-test to assess the students' achievements in speech sounds of English.

# 4.2 Null Hypothesis

**H0 1:** There is no statistically significant difference between the Total Pretest Mean Score and the Total Posttest Mean Score of the students in speech sounds of English.

Table 3:	Significance of	Difference	between the To	tal Posttest M	ean Score and the	e Total Pretest Mean
		Score of the	he Students in S	Speech Sounds	s of English	

				the b	tuucinto in D	pecci boun	us or Engi	
Paired	Variable	es: Total ]	Posttest Sco	re and	l Total Preto	est Score		
		-						

Exper: Group	imental	Mean	Ν	Std Deviation	Std Error Mean	Table t-Value	Observed t-Value	Df	Sig.(2 tailed)
Pair	Total Posttest Score	93.714	35	13.151	2.223	2 022	10.054	24	000
	Total Pretest Score	43.571	35	7.507	1.269	2.032	19.954	54	.000

The researcher carried out the paired samples t-test to compare the Total Pretest Mean Score and the Total Posttest Mean Score of the students in speech sounds of English.

The table of paired samples t-test which employed the Total Posttest Score and the Total Pretest Score as Paired Variables, indicated that there was a significant difference between the Total Pretest Mean Score (M= 43.571 and SD= 7.507) and the Total Posttest Mean Score (M=93.714 and SD= 13.151).

The table further shows that the probability figure marked as Sig (2-tailed) in the table was .000 which was smaller than 0.05. The Df was 34. Observed value of t was 19.954 which was greater than the table value of t (2.032) at 0.05 significance level of the test, and p < 0.05. Therefore, the null hypothesis was rejected. It implies that there was a statistically significant difference between the Total Pretest Mean Sore and the Total Posttest Mean Score of the Students. It shows that the exposition teaching strategy was effective among the students, and the students had remarkable achievements in their test performance. This can be further justified by the following statistics:

Table 4:	<b>Descriptive Statistics</b>

Total Score	Posttest	Total Pretest Score	Difference	Remarks
3280.00		1525.00	1755.00	Students' Significant Achievement

There was a noticeable difference between the Total Posttest Score and the Total Pretest Score of the students. Their achievements can be calculated by subtracting Total Pretest Score from Total Posttest Score. The table shows the students' remarkable achievement in learning speech sounds of English through the exposition strategy.

#### Table 5: Power of Hypothesis Test

T- tests	<b>T- tests -</b> Means: Difference between two dependent means (matched pairs)						
Analysi	s:	Post hoc	: Comput	te achieve	ed power		
Input:	Tail(s)	=	Two				
_	Effect si	ze dz	=	3.372910	00		
	α err pro	ob	=	0.05			
	Total sau	mple size	=	35			
Output	Noncent	rality par	ameter $\delta$	=	19.9544047		
	Critical	t=	2.032244	45			
	Df	=	34				
	Power (1	l-β err pr	ob)	=	1.0000000		
			,				

The researcher made use of G Power 3.1 Software to measure the power of the hypothesis test. The power of the hypothesis test (1- $\beta$  err prob= 1.000) involving the test scores of 35 students in the vowel and the consonant sounds of English indicates that the test was considered to be working perfectly well. It implies that there was 100 % chance of correctly rejecting the null hypothesis (H0) and accepting the alternative hypothesis (H1) with 35 students.

# V. CONCLUSION

The paired samples t-test test shows that there was statistically significant difference between the Pretest Mean Score and the Posttest Mean Score of the students in speech sounds of English. Teaching can certainly bring changes in the students' achievements in a positive direction; therefore it is recommended the concerned authority of curriculum designers, text book writers and school administration to include the speech sounds of English even at school level for better results. English teachers / lecturers should be trained for teaching the speech sounds of English accurately and fluently so that students can follow them to learn the speech sounds in a better way.

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S.N.	Student	Sex	Age	Religion	Speech	Sounds of	
	Id				English		Difference in
					Pretest	Posttest	Score
					Score	Score	
1	1	Male	19	Hindu	29.00	109.00	80.00
2	2	Female	19	Hindu	31.00	105.00	74.00
3	3	Male	19	Hindu	31.00	104.00	73.00
4	4	Female	20	Buddhist	33.00	101.00	68.00
5	5	Male	19	Hindu	34.00	90.00	56.00
6	6	Male	19	Hindu	35.00	75.00	40.00
7	7	Male	19	Hindu	34.00	70.00	36.00
8	8	Female	21	Buddhist	37.00	71.00	34.00
9	9	Male	20	Buddhist	38.00	84.00	46.00
10	10	Female	20	Hindu	39.00	83.00	44.00
11	11	Female	21	Buddhist	40.00	94.00	54.00
12	12	Female	20	Buddhist	38.00	109.00	71.00
13	13	Male	20	Christian	41.00	100.00	59.00
14	14	Female	21	Hindu	42.00	97.00	55.00
15	15	Female	19	Buddhist	43.00	82.00	39.00
16	16	Male	21	Buddhist	42.00	79.00	37.00
17	17	Female	19	Hindu	45.00	84.00	39.00
18	18	Female	18	Hindu	43.00	103.00	60.00
19	19	Male	19	Hindu	48.00	108.00	60.00
20	20	Female	19	Hindu	47.00	101.00	54.00
21	21	Female	20	Hindu	49.00	105.00	56.00
22	22	Female	19	Hindu	50.00	107.00	57.00
23	23	Female	19	Hindu	47.00	90.00	43.00
24	24	Female	20	Hindu	53.00	101.00	48.00
25	25	Male	20	Muslim	44.00	107.00	63.00
26	26	Female	19	Hindu	46.00	114.00	68.00
27	27	Male	19	Buddhist	47.00	95.00	48.00
28	28	Male	19	Hindu	49.00	86.00	37.00
29	29	Female	20	Hindu	52.00	69.00	17.00
30	30	Male	20	Hindu	52.00	76.00	24.00
31	33	Female	20	Buddhist	52.00	81.00	29.00
32	35	Female	21	Buddhist	54.00	92.00	38.00
33	36	Female	18	Hindu	51.00	89.00	38.00
34	37	Female	20	Buddhist	55.00	108.00	53.00
35	38	Female	20	Buddhist	54.00	111.00	57.00

Pretest and Posttest Sore of the Students

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