# Effectiveness of ICT Intervention on Pronunciation of Words in English at Secondary Level.

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Vocabulary and grammar are the two main pillars of any language. In English 26 letters stand for 44 sounds. Mispronunciation may lead to miscommunication. So the correct pronunciation of words with its proper stress is vital in learning the language which is to be acquired by developing the learners Listening Skill. Besides it, Listening Skill is fundamental as language learning starts with the skill. According to Routledge Encyclopedia of Language Teaching and Learning (Byron, 2000) "Listening involves processing phonetic language information and constructing a message from a stream of sounds, based on listeners' syntactic, phonetic and semantic knowledge of the language". Oral Communication Skills are transferrable as they make ease the learning of reading and writing. Related studies (Vijayan, 2015) revealed that ICT integration is effective in developing Listening skill and practicing pronunciation of words can enhance Listening skill. Hence the present study explores the effectiveness of ICT intervention on pronunciation of words in English at Secondary Level.

#### **Need and Significance of the Study**

As a practicing teacher for 15 years, the investigator could understand that correct pronunciation of words, including commonly used simple words, are not properly pronounced by the learners. This prompted the investigator to conduct the study.

#### Statement of the Problem

ICT enabled learning strategy is found more effective, more motivating, and less time consuming in English language learning in general and learning of the vocabulary in particular if it is properly planned and used. The present study is entitled as 'EFFECTIVENESS OF ICT INTERVENTION ON PRONUNCIATION OF WORDS IN ENGLISH AT SECONDARY LEVEL'.

# **Operational Definitions of Key Terms**

**ICT** - It stands for information and communication technology. In this study it is used for computer, voice recorder, digital dictionary and text reader used for pronunciation practice and voice recording.

**Secondary Level-**It refers to 8th, 9th and 10th standards. In this study the term secondary level is restricted to 8th standard only.

# **Objectives**

The study aims at exploring the effectiveness of ICT intervention on pronunciation of words in English at Secondary Level.

#### **Tools Used**

- The investigator used the recorded audio of 50 selected words categorized as Polysyllabic Words (16), Commonly Mispronounced Words (5), Disyllabic Verbs (12), Compound Words (7) and Silent Letter Words (10). to practice its pronunciation. In addition to it sample online version of a text reader called Natural Reader and Cambridge Digital Dictionary were also used for pronunciation practice.
- Post test administered at the end of the ICT intervention.

# Design

A single pre-test post-test equivalent group design was used in the study.

#### **Pre-test**

The pronunciation of 50 selected words by ten students studying in Standard 8<sup>th</sup> were recorded first and analyzed. This was the pre-test.

#### Sample

Ten students, 5 each from English and Malayalam Medium class, were used as samples in the study. The samples were from Govt. Ganapath Model Girls Higher Secondary School, Kozhikode, Kerala.

#### Variables

Since the study was designed in the form of an experimental one Independent Variable, Dependent Variable and Controlled Variables were considered. ICT enabled pronunciation practice was the Independent Variable. Development of speaking skill focusing on proper pronunciation was the Dependent Variable. Based on the achievement of the students in class test conducted by their English teachers, a homogenous group of students were used for the experimentation. Thus the level of the students were controlled.

#### **Data Collection**

In order to find whether ICT intervention can improve the pronunciation, the investigator selected 50 multi-syllabic words for experimentation.

The selected categorized as:

- Polysyllabic Words (16 words)
- Commonly Mispronounced Words (5 words)
- Disyllabic Verbs with Stress on the Second Syllable (12)
- Compound Words (7)
- Silent Letter Words (10)

The following is the list of 50 words used in the study.

# **Polysyllabic Words**

- 1. information 7. university 13. photography
- 2. situation 8. hospitality 14. philosophy
- 3. recognition 9. engineer 15. calligraphy
- 4. explanation 10. volunteer 16. autobiography
- 5. electricity 11. mountaineer
- 6. nationality 12. pioneer

# **Commonly Mispronounced Words**

- 17. bouquet 19. garage 21. reservoir
- 18. memoir 20. buffet

# **Disyllabic Verbs**

- 22. advise 26. discuss 30. expect
- 23. accept 27. divide 31. explain
- 24. approve 28. elect 32. prevent
- 25. conduct 29. enjoy 33. support

# **Compound Words**

- 34. Grandfather 37. Afternoon 39. Seashore
- 35. Newspaper
  38. Goodbye
  40. Salesman
- 36. Shopkeeper

#### **Silent Letter Words**

- 41. honour
- 42. hymn
- 43. receipt
- 44. reign

#### Procedure

Pre-test was conducted first among the selected sample. Then the students were provided opportunity to listen the audio text developed by the investigator. Cambridge Advanced Learners digital dictionary as well as Natural Reader was used for reinforcement of the

pronunciation of the selected words. After that a post-test was administered. The pronunciation of 50 words by each of the students were recorded in the post-test. Then the post-test scores were analyzed and scored. The correct pronunciation was given '1' score and the wrong one was given '0' score. Giving primary stress on the correct syllable and syllabic division were the criteria for correct pronunciation. Pre-test and Post-test scores of the pronunciation test were converted into percentage and compared

#### **Analysis**

Sample of a table used for scoring and analysis of the pronunciation test is given below:

Table 1.- Analysis of Pre-test (Pronunciation-test)
Silent Letters

	S1	S2	<b>S3</b>	<b>S4</b>	<b>S5</b>	<b>S6</b>	S7	<b>S8</b>	<b>S9</b>	S10	Total
answer	1	1	1	X	1	1	1	1	1	1	9
bridge	X	X	1	X	X	1	X	1	1	X	4
ballet	X	1	X	X	X	X	X	X	X	X	1
folk	1	X	1	X	X	X	1	1	X	X	4
honour	X	X	1	X	1	X	X	X	X	X	2
hymn	X	X	X	1	1	X	1	1	X	X	4
receipt	X	X	X	X	X	X	X	X	X	X	0
reign	X	X	X	1	X	X	X	X	1	1	3
soften	X	1	X	X	X	1	X	1	X	X	3
thumb	X	X	X	1	X	X	X	X	X	X	1
Total	2	3	4	3	3	3	3	5	3	2	31

<sup>\*</sup>S =student.

S1: Jamshida. P. M

S2: Pavithra.

S3: Dilna.K

S4: Nandana Biju. P

S5: Anamika. K

S6: Sheethal

S7: Nandana. M

S8: Anaya. T

S9: Nafiha

S10: Ziya

(S1 to S5 – Malayalam Medium Students)

(S6 to S10 – English Medium Students).

# Percentage of the scores of Silent Letter Words of 10 students was Calculated in the following way:

Number of Correct Response of 10 Students :31

Total Number of Correct Response of 10 Students 10 words X 10 students = 100

Percentage  $:31/100 \times 100 = 31\%$ 

The same method was used to find out the percentage of the scores of other categories of words such as Polly Syllabic Words, Mispronounced Words, Disyllabic Verbs and Compound Words. Then the average of all these five percentages was found. In the above method item wise pre-test (pronunciation test) and post-test (pronunciation test) scores were converted into overall percentages and compared. Details of the percentage of scores is given below in table 2.

Table 2.- Table Comparing the Percentage of the Scores of Pre-test and Post-test of Pronunciation Test

Type of words	% of pre-test scores	% of post-test scores		
Polysyllabic Words	109/160x100=68%	151/160x100=94%		
Mispronounced Words	0 (No correct response)	48/50x100=96%		
Disyllabic words	77/120x100=64%	112/120x100=93%		
Compound Words	45/70x100=64%	70/70x100=100%		
Silent Letter Words forms	31/100x100=100%	96/100x100=96%		
Average of percentages	45%	96%		

The above table revealed that the average of percentages of pre-test scores is 45% and that of post-test is 96%. So there was significant improvement in the pronunciation of the students ICT enabled practice.

# Validity and Reliability

Experts and other English teachers were consulted and their suggestions were considered in developing and using the tool.

When the same pronunciation test was conducted after two weeks, it was found that the percentage of correct pronunciation is above 90. So the audio of the text, text reader and the digital dictionary used would be considered a reliable tool.

#### **Conclusion**

The average of the percentage of scores of the pre-test was found 45% and the average of the scores of the post-test scores was 96%. So there was significant improvement in the pronunciation of the students in the selected words after the practice using an ICT enabled method.

# **Educational Implications**

In the study, conducted by the investigator, it is found that although Information and Communication Technology has made its impact on every sphere of human activity, it is not fully used in learning. A good number of teachers are seen reluctant to use it in their English class. So teachers should be given proper orientation for the optimum use of ICT materials in learning. ICT tools like standardized text readers should be developed and supplied to teachers. Listening and Speaking Skills are not properly tested in our schools now a day.

This situation is to be changed. Proper training to conduct tests on Listening and Speaking Skill should be imparted from teacher training program itself.

#### Reference

- Alexander Tillard, James Trafford. (2015). Elsevier, Language and Communication 40 (2015) 1-13.
- Atkinson-King, K. (1973). Children's Acquisition of Phonological Stress Constructs. Los Angles Working Papers in Phonetics 25, University of California. Ayoub Kafyulilo, Javed Keengwe (2014).
- Balasubramanian, T. (2004). A Textbook of English Phonetics of Indian Students. New Delhi: Macmillan India Ltd.
- Brown, H.D. (1987). Principles of Language learning and Teaching. Englewood Cliffs, NJ: Prentice
- Hall. Buch, M... B. (Ed) (1992). Fifth Survey of Research in Education, New Delhi: National Council of Educational Research and Training.
- Byron, Michael (ed.) 2000. Routledge Encyclopedia of Language Teaching and Learning. London:
- Routledge, p.373.
- Darsen Freeman Dane. (2009). Teaching and Principles in Language Teaching. Delhi: Oxford University Press.
- Vijayan, C.R (2015). Effectiveness of ICT Intervention on Developing Listening Skill and Multiple Competencies in English at Secondary Level. Doctoral Dissertation, Bharathiar University, Coimbatore.
- Xiayao. (2010). the Acquisition of English Word Stress Patterns by EFL Learners in Formal Instruction Environment. Submitted to the Department of Linguistics in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Linguistics. The Chinese University of Hong kong.