

CHAPTER – IV

ANALYSIS AND INTERPRETATION

CHAPTER 4 : ANALYSIS AND INTERPRETATION

4.1 Introduction

Analysis and Interpretation deals with the analysis of data collected by means of tools – pretest, posttest, opinionnaire and attitude scale. It is, of paramount importance to the researcher to use appropriate analysis strategy and then, to provide the meaning, thus, data analyzed to communicate the findings objectively and scientifically. In this chapter, the analysis of the data has been presented objective wise mentioned as under.

4.2 Effectiveness of the modules in terms of LSRW (Listening, Speaking Reading and Writing) skills

Objective 1 : “To develop and implement modules for primary student-teachers to enhance their English language ability”. A set of 8 modules were prepared containing a wide variety of lessons, glossary, graded grammatical items, exercises and their answer keys at the end of each module. As a supplement to these modules other activities were incorporated in the classroom situation like rhymes, action songs, dialogue, role-play, declamation, recitation, group discussion, critical appreciation, video clippings, pictures, power-point-presentation, film, audio-visual cassettes, ‘Improve Your Pronunciation’ CD by Victor W. Tucker S.J. (2009), etc. The researcher implemented the modules as mentioned in Table 3.4 in teaching four skills: Listening, Speaking, Reading and Writing to the experimental group students. This treatment was given for 26 weeks by allotting an hour a day during college hours for the control group and after the college hours for the experimental group from Monday to Friday.

Objective 2 of the present research was, “to study the effectiveness of the modules in terms of their academic achievement in LSRW (Listening, Speaking Reading and Writing) skills” which has been analyzed using Mann-Whitney U test for each skill namely Listening, Speaking, Reading and Writing separately for both the pretest and posttest data.

Table 4.1 shows Mann-Whitney Test Statistics for Pretest scores of Listening, Speaking, Reading and Writing and combined score of all above noted communications skills.

Table 4.1: Test Statistics - PreTest

	Listening _PreTest	Speaking PreTest	Reading_ Pretest	Writing_ PreTest	PreTest_ Total
Mann-Whitney U	98.500	81.500	90.000	86.500	82.000
Wilcoxon W	251.500	186.500	195.000	191.500	187.000
Z	-.916	-1.622	-1.346	-1.329	-1.494
Asymp. Sig. (2-tailed)	.360	.105	.178	.184	.135
Exact Sig. [2*(1-tailed Sig.)]	.421 ^a	.138 ^a	.262 ^a	.200 ^a	.149 ^a
a. Not corrected for ties b. Grouping Variable: Group					

Based on Table 4.1 data, the finding indicates no statistical significant difference detected between the pretest scores of listening, speaking, reading and writing and in combined score of all the four communication skills for control and experimental scores. Putting more specifically in verbatim, no statistically significant difference was found between Pretest score of listening skill for both the control and experimental scores ($U = 98.50$, $z = -0.916$, $p = 0.421$). No statistically significant difference was found between the pretest score of speaking skill for both the control and experimental scores ($U = 81.50$, $z = -1.622$, $p = 0.105$). No statistically significant difference was detected between Pretest score of writing skill for both the control and experimental scores ($U = 86.50$, $z = -1.329$, $p = 0.184$). And there was no statistically significant difference found for the pretest score of reading skill for both the control and experimental scores ($U = 90.00$, $z = -1.346$, $p = 0.178$). The sum of score of all four skills when tested using Mann-Whitney test, it was found that control and experimental group did not differ statistically ($U = 82.00$, $z = -1.494$, $p = 0.135$) so there was no significant difference between control and experimental group on sum of score in all four skills.

It means that the experimental group ($Mdn = 0.00$) did not differ significantly on pretest score on listening skill from control group ($Mdn = 0.25$) before implementation of modules, the values of $U = 98.50$, $z = -0.916$, $p = 0.421$.

Experimental group (Mdn = 2.00) did not differ significantly from control group (Mdn = 2.00) on speaking skill score before implementation of programme, $U = 81.50$, $z = -1.622$, $p = 0.105$.

Experimental group (Mdn = 2.00) did not differ significantly from control group (Mdn = 1.00) on reading skill score before implementation of programme, $U = 90.00$, $z = -1.346$, $p = 0.178$.

Experimental group (Mdn = 1.5) did not differ significantly on posttest score on writing skill score from control group (Mdn = 1.5) before implementation of programme, $U = 86.50$, $z = -1.329$, $p = 0.184$.

Experimental group (Mdn = 6.00) did not differ significantly from control group (Mdn = 5.00) on combined score of all four skills – listening, speaking, reading and writing before implementation of programme, $U = 82.00$, $z = -1.494$, $p = 0.135$.

This data indicates that the Control and Experimental Groups did not differ significantly in terms of all the 4 skills namely Listening, Speaking, Reading and Writing. This means that both Control and Experimental Groups were equivalent in terms of the 4 LSRW skills for learning English before experimentation.

Table 4.2 shows the Mann-Whitney test statistics for posttest scores of control and experimental group in terms of listening, speaking, reading and writing skills and combined posttest score of all these four skills.

Table 4.2: Test Statistics - PostTest

	Listening_ PostTest	Speaking_ PostTest	Reading_ PostTest	Writing_ PostTest	PostTest_ Total
Mann-Whitney U	.500	.000	.000	23.000	.000
Wilcoxon W	105.500	105.000	105.000	128.000	105.000
Z	-4.727	-4.792	-4.793	-3.837	-4.736
Asymp. Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
Exact Sig. [2*(1-tailed Sig.)]	0.000 ^a	0.000 ^a	0.000 ^a	0.000 ^a	0.000 ^a
a. Not corrected for ties. b. Grouping Variable: Group					

It was found that experimental group differed significantly from control group with reference to listening skill score on posttest ($U = 0.500$, $z = -4.727$, $p = 0.000$) and speaking skill score on posttest ($U = 0.000$, $z = -4.792$, $p = 0.000$). The experimental group also differed significantly from control group with reference to reading skill score on posttest ($U = 0.000$, $z = -4.793$, $p = 0.000$) and writing skill score on posttest ($U = 23.000$, $z = -3.837$, $p = 0.000$). The experimental group also differed significantly from control group on combined posttest score of all four skills namely – listening, speaking, reading and writing ($U = 0.000$, $z = -4.736$, $p = 0.000$).

It means that the experimental group ($Mdn = 7.00$) differed significantly on posttest score on listening skill from control group ($Mdn = 0.50$) after experiencing programme, $U = 0.500$, $z = -4.727$, $p = 0.000$.

Therefore, Hypothesis 1 “There will be no significant difference in the academic achievement in Listening skill of the primary student-teachers of Experimental and Control Groups” is rejected.

Experimental group ($Mdn = 6.5$) differed significantly from control group ($Mdn = 2.75$) on speaking skill score after implementation of modules, $U = 0.000$, $z = -4.792$, $p = 0.000$.

Therefore, Hypothesis 2 “There will be no significant difference in the academic achievement in Speaking skill of the primary student-teachers of Experimental and Control Groups” is rejected .

Experimental group ($Mdn = 7.00$) differed significantly from control group ($Mdn = 3.00$) on reading skill score after implementation of modules, $U = 0.000$, $z = -4.793$, $p = 0.000$.

Therefore, Hypothesis 3 “There will be no significant difference in the academic achievement in Reading skill of the primary student-teachers of Experimental and Control Groups” is rejected.

Experimental group ($Mdn = 5.50$) differed significantly on posttest score on writing skill score from control group ($Mdn = 2.50$) after experiencing programme, $U = 23.000$, $z = -3.837$, $p = 0.000$.

Therefore, Hypothesis 4 “There will be no significant difference in the academic achievement in Writing skill of the primary student-teachers of Experimental and Control Groups” is rejected.

Experimental group (Mdn = 26.00) differed significantly from control group (Mdn = 10.00) on combined score of all four skills – listening, speaking, reading and writing after implementation of modules, ($U = 0.000$, $z = -4.736$, $p = 0.000$).

Therefore, Hypothesis 5 “There will be no significant difference in the academic achievement in LSRW skills of the primary student-teachers of Experimental and Control Groups” is rejected.

These above stated findings proved that after the implementation of the modules on the Experimental Group, the English language ability graph of the Experimental Group had shot up. There was a decisive and marked change in their English language abilities with particular reference to the 4 skills of Listening, Speaking, Reading and Writing. Listening and Reading being receptive skills, various measures to make the student-teachers to listen to good English by way of listening to BBC News, Tucker’s Pronunciation CD, researcher’s demonstrative reading of the text from the modules with proper pronunciation, stress, diction, modulation of voice and intonation patterns; reading aloud from the given passages by the primary student-teachers, tongue twisters which were hilarious, silent reading practice for gaining comprehension of the text at hand, skimming and scanning texts, etc had impacted in a positive manner their listening and reading skills. Speaking and Writing being productive skills, activities for speaking like declamation, constructing a story by looking at a picture, recitation of lines by-heart, situational dialogues, role-play, etc; practice in correct grammatical usages and sentence formation, power-point presentation of grammatical items and exercises, simple essay writing, spelling-bee game, textual question-answers, et al for developing writing skills. Further, the various approaches, methods, techniques and strategies used by the researcher had borne dividends. The primary student-teachers of the Experimental Group had excelled in all the 4 LSRW skills and that was seen in their post-test results. The daily diary maintained by the researcher recorded steady progress in the primary student-teachers achievement in the English language. Their English language abilities had definitely been enhanced. This led the researcher to reject the null hypothesis: “There will be no significant difference in the academic achievement of Experimental and Control Groups in LSRW skills of the primary student-teachers”.

4.3 Opinion of the primary student-teachers

Objective 3 of the present study was, “to study the opinion of Experimental Group primary student-teachers towards the developed modules for enhancing English language abilities”.

The Opinionnaire scale was used to study the opinion of the primary student-teachers towards modules prepared and implemented. There were thirty statements which were classified into four major categories by the researcher as mentioned under:

- I. Appreciation shown towards the modules
- II. Activity-oriented teaching in language learning
- III. Use of Technology/ICT in language learning
- IV. Kinesthetic-learning aspects in modules

4.3.1 Analysis for the Component – Appreciation shown towards the modules

Table: 4.3.1

Sr No.	Statement	Agree	Cannot Decide	Disagree	Intensity Index
1.	Learning English was fun.	17 (100%)	00	00	3.00
2.	The lessons were very meaningful.	15 (88.24%)	02 (11.77%)	00	2.88
3.	The exercise at the end of each lesson was helpful.	14 (82.35%)	02 (11.77%)	01 (05.88%)	2.76
5.	Grammar lessons were taxing.	04 (23.53%)	01 (05.88%)	12 (70.59%)	2.47
20.	Reading practice at the end of each lesson was commendable.	17 (100%)	00	00	3.00
30.	On the whole, I liked the systematic presentation of the modules.	17 (100%)	00	00	3.00
TOTAL					17.12
Total Statements $6 \div 17.12 =$					2.85

Table 4.3.1 shows Percentage-wise analysis for ‘Appreciation shown towards the modules’ in the first component of opinionnaire scale.

In Statement 1 ‘Learning English was fun’ showed that all 17 primary student-teachers (Intensity Index: 3.00) agreed to it. The modules helped the primary student-teachers to enjoy learning English because of the manner it was taught by the researcher. The various activities, games, action songs, video-clippings, use of ICT in teaching, group-work, pair-work and hands-on-activities, etc. made them have fun and develop interest in learning English in a very systematic way.

Statement 2 ‘The lessons were very meaningful’ had 15 primary student-teachers agreeing to it while 2 could not decide (Intensity Index: 2.88). The primary student-teachers were able to understand the lessons in the modules by way of meanings, lucid explanation, graded grammatical items, exercise and comprehension tasks, pronunciation and reading practice, spelling-bee games, et al. making the lessons meaningful.

Statement 3 ‘The exercise at the end of each lesson was helpful’ stated that 14 primary student-teachers agreed while 2 could not decide and 1 disagreed (Intensity Index: 2.76). In order to comprehend the lesson, the exercises at the end of the lesson which were based on ‘Discrete Point-Testing’ and ‘Integrative Testing’ helped them to integrate the teaching points in the lessons.

Statement 5 ‘Grammar lessons were taxing’ showed 12 student-teachers who disagreed with the statement, 4 agreed and 1 could not decide (Intensity Index: 2.47). Learning grammar is not everybody’s cup of tea. It is tedious and dry. Surprisingly, a majority of the primary student-teachers were appreciative of the grammar lessons because it was taught through power-point-presentation with clear and simple examples.

Statement 20 ‘Reading practice at the end of each lesson was commendable’ had all the 17 primary student-teachers in agreement (Intensity Index: 3.00). This was because the researcher guided the reading practice given from the lessons in the modules. Proper stress, diction, intonation pattern and voice practice given through Tucker (2009) CD helped in enhancing their reading skills.

Statement 30 ‘On the whole, I liked the systematic presentation of the modules’ provided cent percent agreement from all the 17 primary student-teachers (Intensity Index: 3.00). The reasons

behind being so were that the modules were well-ordered, well-organized and structured and were based on an eclectic approach to teaching the English language.

Of the 6 statements, the primary student-teachers showed very high appreciation for statements 1, 2, 3, 20 & 30 but 23.53% had reservation for statement 5 ‘Grammar lessons were taxing. It is understandable that not all would enjoy grammar lessons as it is a bit taxing given the background of the primary student-teachers. It also has to be noted that the majority of them (70.59%) appreciated the grammar lessons. The overall result of all 6 statements (Intensity Index: 2.85) proves a very high rating for the first component namely ‘Appreciation shown towards the modules’.

4.3.2 Analysis for the Component – Activity-oriented teaching in language learning

Table: 4.3.2

Sr No.	Statement	Agree	Cannot Decide	Disagree	Intensity Index
6.	I liked action songs.	17 (100%)	00	00	3.00
7.	Use of ‘Flash Cards’ made learning vocabularies faster.	17 (100%)	00	00	3.00
8.	‘Spelling Bee’ game helped a lot.	16 (94.11%)	01 (05.88%)	00	2.94
9.	Singing English songs enriched me.	17 (100%)	00	00	3.00
10.	Story Charts helped me in constructing sentences correctly.	17 (100%)	00	00	3.00
11.	The technique of story-telling made me more effective.	15 (88.24%)	02 (11.77%)	00	2.88
17.	Declamation instilled in me the power of speech-making.	10 (58.82%)	01 (05.88%)	06 (35.30%)	2.24
18.	Tongue-twisters were amusing.	17 (100%)	00	00	3.00
21.	Reading from the newspapers, advertisements, articles, post-cards was constructive.	17 (100%)	00	00	3.00

* Table 4.3.2 is continued on next page

Table: 4.3.2

Sr No.	Statement	Agree	Cannot Decide	Disagree	Intensity Index
23.	Debate exercises helped speaking and listening skills and targets critical thinking skills.	15 (88.24%)	02 (11.77%)	00	2.88
24.	Describing a picture that was shown was interesting.	17 (100%)	00	00	3.00
25.	Spinning Yarns competition was hilarious.	15 (88.24%)	02	00	2.88
26.	The game of detecting miscommunication due to poor listening skills was enjoyable.	17 (100%)	00	00	3.00
Total					37.82
Total Statements 13 ÷ 37.82 =					2.91

Table 4.3.2 shows Percentage-wise analysis for ‘Activity-oriented teaching in language learning’ in the second component of opinionnaire scale.

In Statement 6 ‘I liked action songs’ showed that all 17 primary student-teachers (Intensity Index: 3.00) agreed to it. They showed great interest in doing various actions and sang vociferously. They expressed eagerness in learning the action songs with the aim of replicating it among their future students in school. Every class they wanted to learn a new one.

Statement 7 ‘Use of ‘Flash Cards’ made learning vocabularies faster’ recorded total unanimity among all the 17 primary student-teachers (Intensity Index: 3.00). The reason being that on seeing the pictures and the written vocabularies on the flash cards, the primary student-teachers could register the pictures and record the vocabularies easily in their minds; thus favouring the learning of vocabularies faster. They visualized the picture, spelled the word and memorized it making vocabulary learning easy.

Statement 8 ‘‘Spelling Bee’ game helped a lot’ as 16 primary student-teachers agreed to it while 1 could not decide (Intensity Index: 2.94). That is because they had to mentally figure out the word from the clue given which evoked critical thinking abilities. It further strengthened their spelling capacity.

Statement 9 ‘Singing English songs enriched me’ had 100% agreement (Intensity Index: 3.00). The lovely, melodious, catchy tunes and easy to follow wordings of the songs had instant liking among the primary student-teachers. They listened to the words of the song played on the tape-recorder carefully and sang with enthusiasm.

Statement 10 ‘Story Charts helped me in constructing sentences correctly’ recorded cent percent agreement (Intensity Index: 3.00). The reason behind being that the primary student-teachers on seeing the pictures on the story chart tried to construct sentences by using words to describe the pictures in it. Visual presentation helped in recounting the story in a sensible way.

Statement 11 ‘The technique of story-telling made me more effective’ to which 15 primary student-teachers agreed while 2 could not decide (Intensity Index: 2.88). Story-telling is an art and the demonstration given by the researcher in the art of story-telling had an impact on the primary student-teachers. They were taught the importance of modulating the voice, building up a rapport with the audience and sustaining their interest in the story, creating suspense, facial expression and mood change. They in turn were given outlines of stories in point-form and asked to tell a story which was liked and enjoyed by most of the primary student-teachers.

Statement 17 ‘Declamation instilled in me the power of speech-making’ had 10 primary student-teachers who agreed, 1 could not decide and 6 disagreed (Intensity Index: 2.24). Video-clippings of some Great Speeches given by prominent personalities were shown to instill in them the art of speech-making namely gradual building of intensity, choice of words, rhythm and cadence in voice production, memory-power, facial expression and generating emotions. The primary student-teachers though generally liked it, found the speeches shown to them of a high standard and had some difficulty in comprehending given the low level of English proficiency.

Statement 18 ‘Tongue-twisters were amusing’ received complete approval of all 17 primary student-teachers (Intensity Index: 3.00). The class was full of laughter and fun as they tried reading out the tongue-twisters and committed certain slip in pronunciation. The tongue-twisters helped them to pronounce the words properly and in a deliberate manner.

Statement 21 'Reading from the newspapers, advertisements, articles, post-cards was constructive' had the appreciation of all 17 primary student-teachers (Intensity Index: 3.00). Though it was a simple exercise, it helped them in the reading skill and they were able to answer questions based on it. They were able to fine tune their reading and writing skills which proved helpful and constructive.

Statement 23 'Debate exercises helped speaking and listening skills and targets critical thinking skills' to which 15 agreed while 2 could not decide (Intensity Index: 2.88). Simple topics and issues were taken and after discussing certain pros and cons points, the debate was set into motion which helped them in the skill of listening to the opponents and also developed their speaking skill as they had to respond sensibly. This sharpened their critical thinking skills.

Statement 24 'Describing a picture that was shown was interesting' evoked a 100% response from all 17 primary student-teachers (Intensity Index: 3.00). Pictures of famous Indian personalities like Mahatma Gandhi, Pandit Jawarlal Nehru, Dr. Radhakrishnan, SachinTendulkar, Amitabh Bacchhan, Saina Nehwal, Mother Teresa, etc were shown and were asked to describe about the person in a few lines. These were well-known people and so the primary student-teachers expressed themselves easily.

Statement 25 'Spinning Yarns competition was hilarious' received a positive response from 15 primary student-teachers while 2 could not decide (Intensity Index: 2.88). Some interesting topics were given like 'If I were a magician', 'Hen that laid golden eggs', 'A young boy came to meet me...', 'I saw a lion coming near me...', 'A child fell in the pond and was drowning...', 'CM Narendra Modi wanted an appointment with me...', et al. After a demonstration given by the researcher, the primary student-teachers in turns spoke on the above mentioned topics which made people laugh as they spun yarns. They enjoyed and had a lot of fun.

Statement 26 'The game of detecting miscommunication due to poor listening skills was enjoyable' for which all 17 primary student-teachers agreed (Intensity Index: 3.00). 3 volunteers chosen from the 3 groups were separated from their groups and were assigned a task to memorize a line given by the researcher and then go to their respective groups who were

standing one behind the other in a straight line and had to whisper into the ear of the first person in the line and she in turn would do the same to the person behind till it reached the last person. The last person would say aloud the sentence which would be compared with the original sentence. Because of the mismatch of the sentence due to improper listening and communication created peals of laughter. Therefore, the primary student-teachers enjoyed the game.

Of the Thirteen statements enlisted under the second component, Statements 6, 7, 9, 10, 18, 21, 24 & 26 recorded 100% agreement. Statement 17 ‘Declamation instilled in me the power of speech-making’ is bit of an eye-opener as 35.30% of the primary student-teachers expressed their disagreement with the statement. On hindsight the researcher felt that Declamation is a difficult task in speech-making as it involves memory, proper facial expressions, modulation of voice and spot-on emotions. For the first generation learners and specially those weak in English would find it extremely tough. Therefore, the result in Statement 17 is not surprising. Having recorded the result of all 13 statements (Intensity Index: 2.91), it shows excellent rating for the second component of the opinionnaire namely ‘Activity-oriented teaching in language learning’.

4.3.3 Analysis for the Component - Use of Technology/ICT in language learning

Table: 4.3.3

Sr No.	Statement	Agree	Cannot Decide	Disagree	Intensity Index
4.	Grammar teaching through PPT made learning grammar easy.	16 (94.11%)	01 (05.88%)	00	2.94
12.	Listening to BBC News helped in getting the right pronunciation.	11(64.71%)	01 (05.88%)	05 (29.41%)	2.35
13.	Fr. Tucker’s Audio CD on pronunciation practice was educative.	15 (88.24%)	02 (11.77%)	00	2.88
19.	Visual learning through the use of LCD Projector was good.	17 (100%)	00	00	3.00
27.	Video clippings, voice-mail messages, etc sharpened my listening skills.	17 (100%)	00	00	3.00
TOTAL					14.18
Total Statements 5 ÷ 14.18 =					2.84

Table 4.3.3 shows Percentage-wise analysis for ‘Use of Technology/ICT in language learning’ in the third component of opinionnaire scale.

In Statement 4 ‘Grammar teaching through PPT made learning grammar easy’ wherein 16 primary student-teachers agreed with the statement while 1 could not decide (Intensity Index: 2.94). The reason being, the systematic and step by step teaching of the grammar items, accompanied with examples and exercises.

Statement 12 ‘Listening to BBC News helped in getting the right pronunciation’ had 11 primary student-teachers who agreed with the statement, 1 could not decide and 5 disagreed (Intensity Index: 2.35). The majority of the primary student-teachers profited through listening to BBC News as the news anchors speak with proper stress on words, have correct intonation pattern and right diction. It helped them to listen to good English and get the right pronunciation.

Statement 13 ‘Fr. Tucker’s Audio CD on pronunciation practice was educative’ which showed 15 primary student-teachers who gave a positive feedback while 2 could not decide (Intensity Index: 2.88). The fact of the matter was the Audio CD on pronunciation practice had a comprehensive methodology for teaching English pronunciation. The practice given on vowel, consonant, diphthongs, fricatives, et al sounds was very effective and educative.

Statement 19 ‘Visual learning through the use of LCD Projector was good’ as the result showed all 17 primary student-teachers agreeing in unison (Intensity Index: 3.00). Through the use of the LCD projector, a number of video-clippings, pictures, news broadcast shows, power-point-presentations could be shown to the student-teachers which proved beneficial to them. Many studies have proved that visual learning accelerates learning process. The primary student-teachers have reiterated this fact and have endorsed fully through this statement that visual learning through the use of LCD Projector was good.

Statement 27 ‘Video clippings, voice-mail messages, etc sharpened my listening skills’ showed that all 17 primary student-teachers agreed to it (Intensity Index: 3.00). The video clippings of the news broadcast, declamation, and listening to the voice-mail messages, etc. helped the

primary student-teachers to assimilate the various sounds through their auditory organ attentively resulting in the sharpening of their listening skill.

Considering in totality the five statements enlisted under the third component of opinionnaire scale ‘Use of Technology/ICT in language learning’, statements 19 and 27 recorded cent percent agreement. 29.41% primary student-teachers disagreed with Statement 12 ‘Listening to BBC News helped in getting the right pronunciation’. The reason being that the news readers on BBC News channel have a different accent and so it is but natural that the first generation primary student-teachers who are listening to BBC News for the first time would find it hard to follow the British accent. But the researcher felt it important to give them a taste of the ‘Queen’s Language’. The rating of the five statements (Intensity Index: 2.84) scores high in the appreciation value under the third component ‘Use of Technology/ICT in language learning’.

4.3.4 Analysis for the Component – Kinesthetic-learning aspects in modules

Table: 4.3.4

Sr No.	Statement	Agree	Cannot Decide	Disagree	Intensity Index
14.	Various sound production exercises were useful.	15 (88.24%)	01 (05.88%)	01 (05.88%)	2.82
15.	Pair work gave me confidence in speaking.	17 (100%)	00	00	3.00
16.	Group Activities fostered co-operative learning.	14 (82.35%)	02 (11.77%)	01 (05.88%)	2.76
22.	Matching the Headlines with the Articles improved my reading skills.	17 (100%)	00	00	3.00
28.	Role-play and Dialogue practice forced me to speak.	17 (100%)	00	00	3.00
29.	Role-play activities helped to build team spirit and we got the chance of learning by doing.	17 (100%)	00	00	3.00
TOTAL					17.59
Total Statements 6 ÷ 17.59 =					2.93

Table 4.3.4 shows Percentage-wise analysis for ‘Kinesthetic-learning aspects in modules’ in the fourth component of opinionnaire scale.

In Statement 14 ‘Various sound production exercises were useful’ had 15 primary student-teachers who agreed, 1 could not decide and 1 disagreed (Intensity Index: 2.82). Various exercises to bring out the correct sound were practiced like ‘t’ and ‘d’, ‘b’ and ‘p’ ‘s’ and ‘sh’, etc. The last two sounds being difficult to differentiate, a lot of practice was given which brought about a lot of improvement in their pronunciation. Therefore, the exercises were useful and bore results.

Statement 15 ‘Pair work gave me confidence in speaking’ wherein all 17 primary student-teachers agreed to it (Intensity Index: 3.00). That is because first generation learners of English feel shy and have a sense of inhibition to speak in public for fear of making mistakes and thereby become a laughing stock in front of the peer group. The primary student-teachers felt a sense of security while working in pairs. The support they got from each other stood them in good stead and they gained confidence in speaking.

Statement 16 ‘Group Activities fostered co-operative learning’ showed that 14 primary student-teachers agreed, 2 could not decide and 1 disagreed (Intensity Index: 2.76). The majority of them felt that many minds put together and help received from one another made them learn better. They learnt by doing because hands-on-activities also increased their retention power.

Statement 22 ‘Matching the Headlines with the Articles improved my reading skills’ recorded 100% agreement (Intensity Index: 3.00). The primary student-teachers had to sift through the articles and headlines that were jumbled up. They had to read with comprehension to find the correct fit between the article and the headlines. By doing this activity they learnt not only to read but also comprehend the text.

Statement 28 ‘Role-play and Dialogue practice forced me to speak’ found favour from all the 17 primary student-teachers (Intensity Index: 3.00). They were made to participate in role-play and dialogue practice due to which they were forced to speak. The dialogues were memorized,

stylized and enacted in front of their peer group members. By participating in these activities, they were forced to speak thereby developing their speaking skill.

Statement 29 ‘Role-play activities helped to build team spirit and we got the chance of learning by doing’ had complete unanimity among all the 17 primary student-teachers (Intensity Index: 3.00). They performed the given tasks together, helped, guided, supported and bonded with one another making the task meaningful and a rich learning experience.

Of the 6 statements enlisted under the fourth component of opinionnaire scale, statements 15, 22, 28 and 29 were scored 100% by the primary student-teachers and statements 14 and 16 recorded 88.24% and 82.35% respectively in favour of the statement. It proves that Kinesthetic-learning i.e. ‘learning by doing’ the primary student-teachers fruitfully engaged in learning English by doing and participating in the given tasks. The total aggregate of all the 6 statements under ‘Kinesthetic-learning aspects in modules’ showed remarkable approval (Intensity Index: 2.93).

The over-all view of the primary student-teachers to the modules prepared by the researcher from the above mentioned data-analysis has been positive and encouraging. Language teaching has to be dynamic, flexible and inclusive. To quote Tarone and Yule (1989) the responsibility lies in the hands of the “individual teacher’s ability to choose appropriate procedures and materials according to some principle or some set of principles.” This choice will be based on the learner’s needs and not based on a ‘global theory’. It has to evolve “from an investigation of the highly localized situation of the teacher’s classroom”. The philosophy behind this approach involves “local solutions to local problems and has to remain sufficiently flexible to allow recognition of a great deal of variation in the nature of the language experience”. The modules developed and implemented by the researcher kept an ‘Eclectic mind’ while focusing on enhancing the English language abilities among the students of primary teacher education programme.

4.4 Attitude of the primary student-teachers

Objective 4 of the present study was, “*to study the change in attitude of the primary student-teachers of Experimental Group towards English language*”.

The attitude scale measured to study the attitude of the primary student-teachers towards English language has total forty statements and these forty statements have been written keeping in mind the five major categories mentioned as under:

- I. The importance of the English Language
- II. Liking towards the English Language
- III. Views of primary student-teachers on English language teaching in present context
- IV. Negativities towards English Language
- V. Lack of exposure for the learning of English

4.4.1: Statement on Attitude of Primary Student-teachers of Experimental Group on ‘The Importance of English Language’

Table: 4.4.1

No	Statement	Agree		Can't Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
3	It is necessary to learn English	16	17	1	0	0	0
4	English should be taught from Std.-I onwards	13	15	3	2	1	0
5	English should be made a compulsory subject in the H.S.C.	9	17	0	0	8	0
6	English is important for Higher studies	17	12	0	5	0	0
7	Having good knowledge of English will raise social status	17	17	0	0	0	0

* Table 4.4.1 is continued on next page.

Table: 4.4.1

No	Statement	Agree		Can't Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
8	Knowledge of English will help in business	13	17	2	0	2	0
9	English will help to go abroad	13	15	4	2	0	0
10	English is an international language	17	17	0	0	0	0
31	English opens the door to the world	17	17	0	0	0	0

The analysis of the Wilcoxon-Signed Rank Test for the first component of the attitude scale is discussed as under. Table 4.4.1 provides the output for the Wilcoxon Signed Ranks Test – Ranks for the importance of English language, first component of the attitude scale for the experimental group students.

4.4.2: Wilcoxon Signed Ranks Test – Ranks (Importance of English Language)

Table: 4.4.2

		N	Mean Rank	Sum of Ranks
ExpPOSTTEST_importance_EngLang - ExpPRETEST_importance_EngLang	Negative Ranks	3 ^a	3.50	10.50
	Positive Ranks	11 ^b	8.59	94.50
	Ties	3 ^c		
	Total	17		
a. ExpPOSTTEST_importance_EngLang < ExpPRETEST_importance_EngLang				
b. ExpPOSTTEST_importance_EngLang > ExpPRETEST_importance_EngLang				
c. ExpPOSTTEST_importance_EngLang = ExpPRETEST_importance_EngLang				

Based on table 4.4.2 data, it is apparent that 11 out of 17 have higher posttest score on the component of importance of English language on attitude scale. There were three tie scores

indicating who scored the same on the component of importance of English language on attitude scale.

4.4.3: Wilcoxon Signed Ranks Test – Test Statistics (Importance of English Language)

Table: 4.4.3	
Test Statistics^b	
	ExpPOSTTEST_importance_EngLang – ExpPRETEST_importance_EngLang
Z	-2.669 ^a
Asymp. Sig. (2-tailed)	.008
a. Based on negative ranks.	
b. Wilcoxon Signed Ranks Test	

The table 4.4.3 tells that the test statistics is based on negative ranks, $z = -2.669$ which is significant at $p = 0.008$, and therefore, it can be concluded that there was a significant difference on the component of importance of English language on attitude scale and therefore, it suggests significant increase in posttest score on the component of importance of English language on attitude scale after learning listening, speaking, reading and writing based on developed modules in English language. Further, the daily diary notations pointed out to the fact that they were realizing the importance of learning English and made serious and concerted effort to learn the language.

Therefore, Hypothesis 6 “There will be no significant difference in the attitude of Experimental Group primary student-teachers before and after experiment with regard to The importance of the English language” is rejected.

The resultant change in the attitude of the primary student-teachers with regard to the importance of English language is because they were able to crack the psychological block namely the defeatist attitude that English is a foreign language and therefore not so important to learn as they can safely manage and carry on with their daily activities in their mother tongue. They found themselves cocooned in their own regional surroundings. The modules helped them shift the goal post and look at the English language as opening up a world of possibilities; the sky being the limit.

4.4.4: Statement on Attitude of Primary Student-teachers of Experimental Group on ‘Liking towards the English Language’

Table: 4.4.4

No.	Statements	Agree		Can't Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
1	I like English	13	17	4	0	0	0
2	English is easy to learn	7	13	4	3	6	1
32	I enjoy English Prose	7	12	5	0	5	5
33	I like English Poetry	12	17	5	0	0	0
34	English rhymes and songs arouse interest	9	17	0	0	8	0
35	I like the Cricket commentary in English	3	15	0	0	14	2

Table 4.4.5 shows the ranks calculated by Wilcoxon Signed Ranks Test for the Liking of English Language, second component of attitude scale.

4.4.5: Wilcoxon Signed Ranks Test – Ranks (Liking towards English Language)

Table: 4.4.5

Ranks				
		N	Mean Rank	Sum of Ranks
ExpPOSTTEST_liking_EngLang - ExpPRETEST_liking_EngLang	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	16 ^b	8.50	136.00
	Ties	1 ^c		
	Total	17		
a. ExpPOSTTEST_liking_EngLang < ExpPRETEST_liking_EngLang				
b. ExpPOSTTEST_liking_EngLang > ExpPRETEST_liking_EngLang				
c. ExpPOSTTEST_liking_EngLang = ExpPRETEST_liking_EngLang				

It is evident from the table 4.4.5 that there was no negative rank but there were 16 out of 17 primary student-teachers who having learnt English language based on developed modules scored higher (based on tested after experimental intervention) than their respective score (tested before experimental intervention) on the second component of attitude scale – Liking towards English Language. There was one tie score indicating no change in one student's scores before and after the experimental intervention, independent variable under study.

Table 4.4.6 shows the Wilcoxon Signed Ranks Test – Test Statistics for Liking towards English Language, second component of the attitude scale.

4.4.6: Wilcoxon Signed Ranks Test – Test Statistics (Liking towards English Language)

Table: 4.4.6	
Test Statistics^b	
	ExpPOSTTEST_liking_EngL ang - ExpPRETEST_liking_EngLa ng
Z	-3.530 ^a
Asymp. Sig. (2-tailed)	.000
a. Based on negative ranks.	
b. Wilcoxon Signed Ranks Test	

The Wilcoxon Signed Ranks Test – Test Statistics for Liking towards English Language, second component of the attitude scale is based on negative ranks, $z = -3.530$ which is significant at $p = 0.000$. That clearly informs there is significant difference between tests scores measured on second component Liking towards English Language before and after experimental intervention. It can be further said that students' post scores were higher than their respective score measured before experimental intervention on the second component - Liking towards English Language. This leads to conclude experimental group students experienced positive attitudinal change after learning English language based on developed modules and they started liking English language which was not observed before.

Therefore, Hypothesis 7 “*There will be no significant difference in the attitude of Experimental Group primary student-teachers before and after experiment with regard to Liking towards the English language*” is rejected.

A lack of exposure to the English language and being taught as a second language in a cumbersome manner created a distaste towards the language. The modules following the principles of learning: from easy to difficult, known to unknown, concrete to abstract; made it easy for them to grasp. Moreover, the joyful learning experience that they had by learning English through action songs, rhymes, video clippings, role-play and other activity-oriented teaching-learning methods made them experience a real feel for the language, eager to learn more and developed a liking towards the English language.

4.4.7: Statement on Attitude of Primary Student-teachers of Experimental Group on ‘Views of primary student-teachers on English language teaching in present context’

Table: 4.4.7

No.	Statements	Agree		Can’t Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
11	Class interaction should be in English only	0	0	2	0	15	17
12	English has to be taught seriously in school	11	15	5	0	1	2
13	Spoken English must be insisted upon	4	6	4	3	9	8
14	English has to be taught in simple and interesting way	17	17	0	0	0	0

* Table 4.4.7 is continued on next page.

Table: 4.4.7

No.	Statements	Agree		Can't Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
15	Oral Exam is a better option to test proficiency in English	11	13	4	2	2	2
17	The rules of English Grammar should not be taught	7	7	5	3	5	7
18	Home work in English is not needed	11	9	1	3	5	5

Table 4.4.8 provides Wilcoxon Signed Ranks Test – Ranks for third component, Views of primary student-teachers on English language teaching in present context of attitude scale to measure attitudinal change among experimental group students towards English language.

4.4.8: Wilcoxon Signed Ranks Test – Ranks (Views of primary student-teachers on English language teaching in present context)

Table: 4.4.8

		N	Mean Rank	Sum of Ranks
ExpPOSTTEST_how_Engtobetaught - ExpPRETEST_how_Engtobetaught	Negative Ranks	7 ^a	5.86	41.00
	Positive Ranks	6 ^b	8.33	50.00
	Ties	4 ^c		
	Total	17		
a. ExpPOSTTEST_ Views_Eng- lang < ExpPRETEST_ Views_Eng- lang				
b. ExpPOSTTEST_ Views_Eng- lang > ExpPRETEST_ Views_Eng- lang				
c. ExpPOSTTEST_ Views_Eng- lang = ExpPRETEST_ Views_Eng- lang				

It is observed from table 4.4.8 that there were 7 negative ranks, 6 positive ranks and four tie scores for experimental group students when they were measured before and after experiencing experimental intervention on the third component of attitude scale - Views of primary student-teachers on English language teaching in present context. It can be said that four students had same score on the third component - Views of primary student-teachers towards teaching of English and seven students scored higher than their respective scores when measured after learning English language based on developed modules while only six out of 17 primary student-teacher's posttest scores were higher on the third component of attitude scale - Views of primary student-teachers on English language teaching in present context.

Table 4.4.9 provides Wilcoxon Signed Ranks Test – Test Statistics for the third component of attitude scale, Views of primary student-teachers on English language teaching in present context.

4.4.9: Wilcoxon Signed Ranks Test – Test Statistics (Views of primary student-teachers on English language teaching in present context)

Table: 4.4.9

Test Statistics ^b	
	ExpPOSTTEST_Views_Eng- lang ExpPRETEST_Views_Eng- lang
Z	-0.327 ^a
Asymp. Sig. (2-tailed)	.744
a. Based on negative ranks.	
b. Wilcoxon Signed Ranks Test	

Based on Table 4.4.9, it could be said that significant difference was found for the third component, Views of primary student-teachers on English language teaching in present context of attitude scale for experimental group students as the Wilcoxon Signed Ranks Test – Test Statistics for the third component, Views of primary student-teachers on English language teaching in present context of attitude scale is based on negative ranks, $z = -0.327$ and was significant at $p = 0.744$ thereby leads to conclude there was significant difference at $p = 0.05$.

Therefore, Hypothesis 8 “*There will be no significant difference in the attitude of Experimental Group primary student-teachers before and after the experiment with regard to Views of primary student-teachers on English language teaching in present context*” is accepted.

The statements in the third component of the attitude scale namely Views of primary student-teachers on English language teaching in present context is subjective in nature and given the fact that the primary student-teachers were hailing from a non-English environment and lack the aptitude in their knowledge of English, they feel at sea when English is spoken all the time. A sprinkling of bilingual method of teaching English would not be out of place in such a situation given the ‘need’ that the primary student-teachers themselves have expresses in unison. Therefore, there is a need for having a ‘Need Analysis’ to be carried out before implementing a language teaching programme. But their response to the two statements under Views of primary student-teachers towards teaching of English namely ‘English has to be taught seriously in school’, ‘English has to be taught in simple and interesting way’ is overwhelming, which implies that the teaching of English has to be done in a simple, interesting, systematic and in a serious manner.

4.4.10: Statement on Attitude of Primary Student-teachers of Experimental Group on ‘Negativities towards English Language’

Table: 4.4.10

No.	Statements	Agree		Can’t Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
16	The periods of English should be reduced	12	14	2	0	3	3
19	Marks in English should not be counted in the exam	3	3	3	0	11	14
20	Mother tongue is more useful than English	1	1	4	0	12	16

* Table 4.4.10 is continued on next page.

Table: 4.4.10

No.	Statements	Agree		Can't Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
21	English is a foreign language	9	15	0	1	8	1
22	Learning English makes us anti-nationals	17	17	0	0	0	0
23	English destroys our culture	4	17	0	0	13	0
24	Learning Sanskrit has more value than English	14	14	3	1	0	2
25	English is very boring	2	16	0	0	15	1
36	English is meant for city students	2	17	2	0	13	0
37	English language is very complicated	1	9	3	0	13	8
38	English is a very difficult subject	1	14	1	0	15	3
39	The rules of grammar in English are confusing	5	7	4	0	8	10
40	English is the language of the rich and high class people	2	17	0	0	15	0

Table 4.4.11 provides Wilcoxon Signed Ranks Test – Ranks for Negativities towards English Language, fourth component of attitude scale for the experimental group.

4.4.11: Wilcoxon Signed Ranks Test – Ranks (Negativities towards English Language)

Table: 4.4.11

		N	Mean Rank	Sum of Ranks
ExpPOSTTEST_ Negativities towardsEngLang - ExpPRETEST_ Negativities towardsEngLang	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	17 ^b	9.00	153.00
	Ties	0 ^c		
	Total	17		
a. ExpPOSTTEST_ Negativities towardsEngLang < ExpPRETEST_ Negativities towardsEngLang				
b. ExpPOSTTEST_ Negativities towardsEngLang > ExpPRETEST_ Negativities towardsEngLang				
c. ExpPOSTTEST_ Negativities towardsEngLang = ExpPRETEST_ Negativities towardsEngLang				

Based on table 4.4.11, it is apparent that there were no negative rank nor tie for the Negativities towards English Language, fourth component of attitude scale but there were 17 positive ranks for all 17 experimental group students suggesting the experimental group students achieved higher score than their respective scores on Negativities towards English Language, fourth component of attitude scale when tested before they learnt English language based on developed modules.

Table 4.4.12 provides Wilcoxon Signed Ranks Test – Test Statistics for fourth component of attitude scale - Negativities towards English Language.

4.4.12: Wilcoxon Signed Ranks Test – Test Statistics (Negativities towards English language)

Table: 4.4.12

Test Statistics ^b	
	ExpPOSTTEST_ Negativities towardsEngLang - ExpPRETEST_ Negativities towardsEngLang

* Table 4.4.12 is continued on next page.

Z	-3.630 ^a
Asymp. Sig. (2-tailed)	.000
a. Based on negative ranks.	
b. Wilcoxon Signed Ranks Test	

The Wilcoxon Signed Ranks Test – Test Statistics for fourth component - Negativities towards English Language, of attitude scale was based on negative ranks and $z = -3.630$ and $p = 0.000$ indicating significant difference existed for experimental group students for fourth component of attitude scale - Negativities towards English Language. It was, therefore, concluded that experimental group students observed attitudinal shift in their Negativities towards English language after learning English language based on researcher developed modules.

Therefore, Hypothesis 9 “*There will be no significant difference in the attitude of Experimental Group primary student-teachers before and after experiment with regard to ‘Negativities towards English language’*” is rejected.

A proper mix of approaches, methods and techniques used in teaching English to the student-teachers through the use of modules had brought about a paradigm shift in viewing the English language. Having had a discussion with the student-teachers it was found that in their schooling days they did not have a proper teacher to teach English. More often than not, the translation method was followed wherein the teacher would translate the words and sentences of the English text by using the mother tongue. They had to go through the motion of learning English without any interest. It was a boring and dull affair devoid of any teaching techniques or method of teaching. The teachers were themselves not well versed and conversant in the English language and so could not inspire their students. For the first time, these primary student-teachers got a real taste of English through the use of modules which was a judicious mix of different approaches, methods and techniques. The primary student-teachers took active part and interest in the activities, games and group assignments. They showed a keen interest to learn English and used to wait for the English classes to begin. That explains the positive attitudinal change towards the English language.

**4.4.13: Statement on Attitude of Primary Student-teachers of Experimental Group on
'Lack of Exposure for the learning of English'**

Table: 4.4.13

No.	Statements	Agree		Can't Decide		Disagree	
		Pre	Post	Pre	Post	Pre	Post
26	Only a few students take part in class interaction in English	0	1	5	0	12	16
27	No English environment at home at all	0	0	0	0	17	17
28	I do not watch or hear TV or Radio news at home	2	2	0	0	15	15
29	I go for tuition for other subjects except English	1	17	0	0	16	0
30	I spend less than 1/2 an hour for English at home everyday	17	17	0	0	0	0

Table 4.4.14 gives Wilcoxon Signed Ranks Test – Ranks for Lack of Exposure for the learning of English, the fifth component of attitude scale.

4.4.14: Wilcoxon Signed Ranks Test – Ranks (Lack of Exposure...)

Table: 4.4.14

		N	Mean Rank	Sum of Ranks
ExpPOSTTEST_lack ofExposure - ExpPRETEST_lackof Exposure	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	16 ^b	8.50	136.00
	Ties	1 ^c		
	Total	17		

* Table 4.4.14 is continued on next page.

a. ExpPOSTTEST_lackofExposure < ExpPRETEST_lackofExposure	
b. ExpPOSTTEST_lackofExposure > ExpPRETEST_lackofExposure	
c. ExpPOSTTEST_lackofExposure = ExpPRETEST_lackofExposure	

It was observed that there was no negative rank, only one tie and 16 positive ranks for 17 experimental group students for the fifth component - Lack of Exposure of attitude scale. It, therefore, lead to state that the experimental group students, on having learnt English Language had got higher scores on the fifth component of attitude scale - Lack of Exposure before they were taught by the researcher using developed modules to enhance their proficiency in English language.

Table 4.4.15 shows Wilcoxon Signed Ranks Test – Test Statistics for the fifth component of attitude scale - Lack of Exposure.

4.4.15: Wilcoxon Signed Ranks Test – Test Statistics (Lack of Exposure...)

Table: 4.4.15

Test Statistics^b	
	ExpPOSTTEST_lackofExposure - ExpPRETEST_lackofExposure
Z	-3.660 ^a
Asymp. Sig. (2- tailed)	.000
a. Based on negative ranks.	
b. Wilcoxon Signed Ranks Test	

Wilcoxon Signed Ranks Test – Test Statistics for fifth component - Lack of Exposure of attitude scale was based on negative ranks, $z = -3.660$ and $p = 0.000$ indicating significant difference existed for experimental group students for the fifth component of attitude scale – lack of exposure. It can be further stated that experimental group students underwent positive attitudinal change for component – lack of exposure of attitude scale as their posttest scores on the

component – lack of exposure was higher than their pretest scores on the same component of attitude scale.

Therefore, Hypothesis 10 “*There will be no significant difference in the attitude of Experimental Group primary student-teachers before and after experiment with regard to ‘Lack of exposure for the learning of English’*” is rejected.

Lack of Exposure in the English language is a fact of life for the primary student-teachers as they come from a rural background, no one in their family or neighbourhood who can converse in English and neither do they subscribe to any English TV channels at home or go for English tuition. These aspects remaining constant, it is left solely to the English teacher in the school/college to provide a proper and conducive environment for learning English. The researcher through the prepared modules exposed the primary student-teachers by bombarding them with a lot of English through innovative ways of teaching and a participatory-approach by way of involving them in the various activities, thereby, offsetting the lack of exposure in the English language.