Chapter 4
Analysis and Interpretation of Data

4.1 Preface

4.2 Results and Interpretation

4.3 Discussion of Findings
Chapter 4
Analysis and Interpretation of the Data

4.1 Preface:
Analysis and interpretation of the data is the important process of the research. In this chapter researcher try to give Statistical Analysis, Results, Interpretation of Data and Discussion of Findings.

4.2 Results and Interpretation:

In this study, to measure effectiveness of remedial teaching programme in English subject of the students was measured by English subject test and to measure Aptitude in English of the students was measured by Aptitude in English Questionnaire. Pre test and Post test were conducted on the subjects of XI standard group and XII standard group. The significance was examined through ‘t’ test at the level of 0.05. In this point Total number of subjects in group, Mean, Standard Deviation, Standard Error Mean, ‘t’ value and level of significance were tabulated. Results of English Subject Test are given in table. Table shows that what’s the significant difference between pre test and post test of English Subject Test in XI standard student’s group and XII standard student’s group. There were two variables tested in this study. To test the aim of this study Mean, Standard Deviation, Standard Error and ‘t’ test was calculated on base of data.
Study-1

English Subject Test of XI Standard’s Students: Pre Test and Post Test Comparison of XI Standard’s Group

Null Hypothesis:

There would be no significant difference between the average of score of English Subject Test in pre test and post test of XI Standard’s Students group.

Table-4.1

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>t-Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>34</td>
<td>28.58</td>
<td>2.41</td>
<td>0.41</td>
<td>8.319</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Post-Test</td>
<td>34</td>
<td>30.94</td>
<td>2.53</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to compare the English subject score between pre test and post test of XI Standard’s Students group, Paired t-test was applied. To determine the significant difference between means of score of pre test and post test of XI Standard’s Students group, the level of significance was 0.01.

Since the calculated ‘t’ value is 8.319 which are greater than tabulated ‘t’ value. So it was significant at 0.01 level. It may be concluded that there is significant difference on English Subject Score between pre test and post test of XI Standard’s Students group. Table 4.1 reveals that the significant difference on English Subject Score between pre test and post test of XI Standard’s Students group was 8.319 which is greater than the required value.
So the null hypothesis, “There would be no significant difference between the average of score of English Subject Test in pre test and post test of XI Standard’s Students group.” was rejected and alternative hypothesis was accepted.

The results obtained from table 4.1 are cleared from following graph.

Graph 4.1

Graph of English Subject’s Score of XI Standard’s Group
According to Pre test and Post test
Study-2

English Subject Test of XII Standard’s Students: Pre Test and Post Test Comparison of XII Standard’s Group

Null Hypothesis:

There would be no significant difference between the average of score of English Subject Test in pre test and post test of XII Standard’s Students group.

Table-4.2

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>t-Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>39</td>
<td>28.71</td>
<td>1.74</td>
<td>0.27</td>
<td>4.202</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Post-Test</td>
<td>39</td>
<td>30.07</td>
<td>2.30</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to compare the English subject score between pre test and post test of XII Standard’s Students group, Paired t-test was applied. To determine the significant difference between means of score of pre test and post test of XII Standard’s Students group, the level of significance was 0.01.

Since the calculated t value is 4.202 which are greater than tabulated t value. So it was significant at 0.01 level. It may be concluded that there is significant difference on English Subject Score between pre test and post test of XII Standard’s Students group. Table 4.2 reveals that the significant difference on English Subject Score between pre test and post test of XII Standard’s Students group was 4.202 which is greater than the required value.

So the null hypothesis, “There would be no significant difference between the average of score of English Subject Test in pre test and post test of XII Standard’s Students group.” was rejected and alternative hypothesis was accepted.

The results obtained from table 4.2 are cleared from following graph.
Graph 4.2

Graph of English Subject’s Score of XII Standard’s Group
According to Pre test and Post test
**Study-3:**

Analysis of Aptitude in English of XI Standard’s and XII Standard’s Students Group

**Null Hypothesis:**

To measure the Aptitude in English of the subjects researcher constructed Aptitude in English Questionnaire. There were 100 questions in Questionnaire. Every question was short and understandable. Every question has three options. The questionnaire was filled by total 73 students. The analysis of every question was given below.

**Question No.1: What is the educational position of your parents?**
60 students said educated and 13 students said semi-illiterate.

![Educational Position Chart]

**Question No.2: Where are you living?**
58 students said Tile-house and 15 students said Building.

![Living Location Chart]
Question No.3: Where are you born?
7 students said Interior area, 61 students said village and 5 students said Town.

Question No.4: What is your father’s occupation?
42 students said Physical Labour and 31 students said Government Employee.

Question No.5: What is monthly income of your parent(s)?
7 students said 4000 Rs., 21 students said 4000 Rs. to 6000 Rs. and 45 students said 6000 Rs. to above.
Question No.6: How many highly educated persons are there in your family?
14 students said below 2, 49 students said above/equal 2 and 10 students said none.

Question No.7: Is there any government employee in your family?
28 students said one, 11 students said two and 34 students said none.

Question No.8: What will you do usually when you go home in summer vacation?
14 students said playing, 23 students said studying and 36 students said working with parents.
Question No.9: Do you think that you are being affected by illiterate environment surrounded by you?
49 students said partially and 24 students said no.

Question No.10: Have you ever got a chance to learn English at home?
15 students said no, 38 students said yes and 20 students said partially.

Question No.11: Can your parent(S) assist in learning English at home?
21 students said yes, 36 students said partially and 16 students said no.
Question No.12: Are you interested in learning English at home/School?
The entire students said yes.

Question No.13: Do you have any separate room/accommodation to study at home?
42 students said yes and 31 students said no.

Question No.14: Does your home atmosphere trouble you if you want to study?
63 students said no and 10 students said partially.
Question No.15: Can your parents spend any money to buy any English book?
59 students said they can, 6 students said some extent and 8 students said they cannot.

![Bar chart showing the response to the question: 59 students can, 6 some extent, and 8 cannot.]

Question No.16: Do you remember what you learnt English for long book?
42 students said yes and 31 students said partially.

![Bar chart showing the response to the question: 42 students yes, 31 partially.]

Question No.17: How do you write English words/phrases?
28 students said by hearting and 45 students said by applying.

![Bar chart showing the response to the question: 28 by hearting, 45 by applying.]
Question No.18: Are you interested to speak English as well as Gujarati?
7 students said no and 66 students said yes.

Question No.19: Do you read usually Textbooks (English)/notes?
8 students said textbooks, 8 students said notes only and 57 students said A&B.

Question No.20: Do you have the habit of discuss in English words/ Phrases/ Sentences/ Grammar at any time?
7 students said some extent and 66 students said yes.
Question No.21: Do you try to speak English, whether it is right or wrong?
6 students said partially and 67 students said yes.

Question No.22: Have you ever been happened to listen to any two persons speaking English at anywhere?
69 students said yes and 4 students said some times.

Question No.23: Do you earn any money when you go home in summer?
7 students said some times and 66 students said no-never.
Question No.24: Do you have any friends/fellow students who speak English well?
67 students said a few and 6 students said more.

Question No.25: Where have you spent your life up to class-V?
56 students said at home and 17 students said at hostel.

Question No.26: What is the medium in which you have studied up to class V?
33 students said English and 40 students said Gujarati.
Question No.27: What is economical position of your family?
Entire students said middle.

![Graph showing the economical position of the family, with 73 students indicating middle.]

Question No.28: Do you watch any English Serials/English news on the T.V.?
50 students said usually many times and 23 students said very rare.

![Graph showing TV watching habits, with 50 students indicating usually and 23 indicating very rare.]

Question No.29: Do you think that you are the first generation learner?
62 students said no, 7 students said brother/sister and 4 students said yes.

![Graph showing first generation learner status, with 62 students saying no, 7 saying brother/sister, and 4 saying yes.]
Question No.30: Do you listen to Radio for English News at home any time?
14 students said no, 40 students said sometimes and 19 students said yes.

![Bar chart showing the distribution of responses to listening to Radio for English News at home.]

Question No.31: Have you any English Dictionary at your home?
Entire students said yes.

![Bar chart showing that all students have an English Dictionary.]

Question No.32: Do your village people (anybody) get English News (any) paper?
42 students said some people, 14 students said many people and 17 students said no/very rare.

![Bar chart showing the distribution of responses to getting English News in the village.]

Question No.33: Do you have any library facility or something like that at your village/Interior hamlet?
14 students said no and 59 students said yes.

Question No.34: In which class did you start learning English?
7 students said in V and 66 students said in I.

Question No.35: Can you write four types of English Alphabet perfectly?
Entire students said yes.
Question No.36: Do you know to write cursive-writing?
67 students said yes and 6 students said partially.

Question No.37: Is your handwriting systematic?
60 students said yes and 13 students said improper.

Question No.38: Have you practiced copy-writing continuously 2/3 years for learning script?
35 students said yes and 38 students said no touch.
Question No.39: If you are not reading English correctly, state reason?

Entire students said none is lower classes.

Question No.40: After your English teacher has taught the lesson in English completely, can you answer the questions in English asked by your teacher?

21 students said yes, 36 students said partially and 16 students said no.

Question No.41: Do you know how to use Dictionary (any one)?

47 students said yes, 16 students said slightly and 10 students said no.
Question No.42: Do you know to follow any English Dictionary Completely?
42 students said yes, 19 students said via media and 12 students said no.

Question No.43: What is the reason for lack of touch with anyone of the English Dictionaries at least?
21 students said no conscious, 42 students said no dictionary and 10 students said no need.

Question No.44: Do you write English without any spelling mistakes at your level?
28 students said yes, 42 students said perhaps and 3 students said no.
Question No.45: What are the reasons for committing spelling mistakes?
42 students said not learnt and 31 students said neglected.

Question No.46: Do you know the correct meanings of the many basic words in English like: Shall, Can, May, Ought, Has, Have, Had, Is, Are etc.
Entire students said yes.

Question No.47: Can you identify correctly parts of speech if you are given an English sentence?
56 students said difficult and 17 students said yes.
Question No.48: Can you know different correct functions of all parts of speech in English?
16 students said yes and 57 students said some extent.

Question No.49: Has anybody taught so far the basic chapter i.e. ‘parts of speech’?
63 students said yes and 10 students said not interested.

Question No.50: Can you speak English now?
21 students said yes and 43 students said very little and 10 students said no.
Question No.51: How many of your class-mates can speak English now?
7 students said everybody and 66 students said some pupils.

![Bar chart showing 7 students said everybody and 66 students said some pupils.]

Question No.52: Can you communicate your ideas to others in English?
36 students said some extent and 37 students said yes.

![Bar chart showing 36 students said some extent and 37 students said yes.]

Question No.53: Can you read out any poem with correct pronunciation i.e. with rhythms?
57 students said yes and 16 students said some extent.

![Bar chart showing 57 students said yes and 16 students said some extent.]

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Question No.54: When you are taking dictation you are committing so many mistakes, so what is the reason for that from the following?
63 students said un-known of spelling and 10 students said negligence.

![Chart showing reasons for mistakes in dictation]

Question No.55: You are making many mistakes in writing your English Notes?
58 students said lack of grammar and 15 students said none.

![Chart showing reasons for mistakes in writing]

Question No.56: Over-writing is occurring more often why is it so?
8 students said lack of skill, 17 students said no interest and 48 students said forgetting spelling.

![Chart showing reasons for over-writing]
Question No.57: Your hand-writing is like chain without of proper spaces, what is the reason for it?
23 students said not habituated, 8 students said lack of care and 42 students said none.

Question No.58: You are not reading correctly either a poem or Para, what is the reason for it?
21 students said lack of practice, 15 students said lack of phonetics and 37 students said both.
Question No.59: Scattering of words in your hand-writing is found in a deviated manner, what is the reason for it?
15 students said no basic skill, 16 students said no interest and 42 students said negligence.

![Graph showing the distribution of responses for Question No.59.]

Question No.60: If you do not know the meaning(s) of any word(s), can you go to dictionary?
9 students said sometimes and 64 students said yes.

![Graph showing the distribution of responses for Question No.60.]

Question No.61: You are writing many where they are unnecessary, what is reason for it from the following?
22 students said not familiar, 9 students said not interest and 42 students said habit.

![Graph showing the distribution of responses for Question No.61.]

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Question No.62: You are writing letters of words in an isolated and deviated manner, what is the reason for it?
8 students said Unfamiliar with, 24 students said no interest and 41 students said lack of good script four alphabets.

![Bar Chart](chart1.png)

Question No.63: Why are you not maintaining proper and equal spaces among words in a sentence?
49 students said lack of practice, 8 students said no interest and 16 students said unknown reason.

![Bar Chart](chart2.png)
Question No.64: Sometimes you are splitting away a word into different pieces what is the reason for it?
21 students said habit and 52 students said not good at script.

Question No.65: Cross and sometimes slant hand-writing is being done by you, what is the reason for it?
51 students said habituated, 9 students said no practice and 13 students said no interest.
Question No.66: You understand very less English from your English teacher, what is the reason for it from the following?
14 students said meaning unknown, 14 students said unknown grammar and 45 students said both.

![Bar chart showing the distribution of responses to question No.66.](chart1.png)

Question No.67: Can you describe any poem for its meaning?
8 students said no, 57 students said some extent and 8 students said yes.

![Bar chart showing the distribution of responses to question No.67.](chart2.png)

Question No.68: When read some poem/short answer do you consider it meaning?
59 students said yes and 14 students said some extent.

![Bar chart showing the distribution of responses to question No.68.](chart3.png)
Question No.69: I think you are by hearting things rather than learning them in a proper way, is it so?
8 students said yes, 12 students said sometimes and 53 students said no.

![Bar chart showing responses to Question No.69]

Question No.70: It seems that you are poor in four basic skills of English language, i.e. Listening, Speaking, Reading and Writing (LSRWs) & can you accept it?
15 students said yes, 22 students said no and 36 students said some extent.

![Bar chart showing responses to Question No.70]

Question No.71: Have you ever been learning the most important topic “Common Errors” to improve your English?
14 students said yes and 59 students said some times.

![Bar chart showing responses to Question No.71]
Question No.72: Do you have any English grammar books to learn?
36 students said a few and 37 students said yes more.

Question No.73: Are you passing your English exams concerned?
Entire student said yes.

Question No.74: Have you fully accustomed to by heart English?
44 students said no and 29 students said sometimes.
Question No.75: Have you ever read any English short story?
Entire student said yes.

<table>
<thead>
<tr>
<th>Yes</th>
<th>73</th>
</tr>
</thead>
</table>

Question No.76: Have you ever observed your English teacher’s style of English Speaking?
63 students said sometimes and 10 students said very rare.

<table>
<thead>
<tr>
<th>Sometimes</th>
<th>Very rare</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>10</td>
</tr>
</tbody>
</table>

Question No.77: Do you expect complete Gujarati meaning in your English class?
8 students said yes, 5 students said very and 60 students said no.

<table>
<thead>
<tr>
<th>Yes</th>
<th>Very</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>5</td>
<td>60</td>
</tr>
</tbody>
</table>
Question No.78: Do you expect Guajarati meaning in your English class?
28 students said yes sometimes and 45 students said no.

![Bar chart showing 28 students saying 'yes sometimes' and 45 students saying 'no'.]

Question No.79: Do you write No. of assignments in English subject?
18 students said some only and 55 students said yes.

![Bar chart showing 18 students saying 'some only' and 55 students saying 'yes'.]

Question No.80: Whatever you by heart regarding English is being forgotten after taking exams, is it so?
17 students said sometimes, 16 students said very rare and 40 students said no.

![Bar chart showing 17 students saying 'sometimes', 16 students saying 'very rare', and 40 students saying 'no'.]
Question No.81: Are you forcefully writing assignments/by hearting English?
56 students said no, 14 students said sometimes and 3 students said yes.

![Bar chart showing responses to Question No.81]

Question No.82: Have you ever found any two English teachers speaking English anywhere in the school premises?
62 students said yes and 11 students said no.

![Bar chart showing responses to Question No.82]

Question No.83: Can you prepare any required notes from your texts?
44 students said yes and 29 students said sometimes.

![Bar chart showing responses to Question No.83]
Question No.84: Are you fully depending on the notes prepared by your English teacher in your classes?
44 students said yes, 20 students said sometimes and 9 students said no.

![Bar chart showing responses to Question No.84]

Question No.85: Do you have any habit of making correspondence in English through letters/something like that?
47 students said sometimes and 26 students said very rare.

![Bar chart showing responses to Question No.85]

Question No.86: If your teacher usually questions in English, do you answer that questions in English only?
45 students said yes and 28 students said sometimes.

![Bar chart showing responses to Question No.86]
Question No.87: Have you ever made a speech before the gathering of your school children on festival occasion?
56 students said yes and 17 students said sometimes.

Question No.88: After an English lesson is taught in your class, you are not even able to understand and explain a Para from the same lesson, what is the reason for it?
13 students said no interest, 7 students said I cannot understand and 53 students said fear.
Question No.89: You are making any difference in writing ‘R’ and ‘S’ what is the reason for it?
12 students said no interest, 8 students said difference unknown and 53 students said negligence.

![Bar graph showing N.I., D.U., Negligence](image)

Question No.90: Did you by heart the poems/rhymes in the starting year itself?
35 students said yes, 28 students said sometimes and 10 students said no.

![Bar graph showing Yes, Sometimes, No](image)

Question No.91: Boys are not looking and observing the words and their sounds when their teacher is teaching English lesson, is it so?
14 students said yes, 49 students said sometimes and 10 students said always.

![Bar graph showing Yes, Sometimes, Always](image)
Question No.92: It seems that you do not follow line to line meaning or explanation when teacher is teaching, is it so?
7 students said yes, 8 students said sometimes and 58 students said no.

Question No.93: Do you individually & carefully study the lessons from the texts at any time in school/ at home?
60 students said yes and 13 students said sometimes.

Question No.94: Have you ever attempted to translate any Guajarati paragraph into English?
46 students said yes and 27 students said sometimes.
Question No.95: Are your English teacher(s) completing syllabus?
Entire student said yes.

Question No.96: Are the English teacher(s) doing revision?
Entire student said yes.

Question No.97: Do you buy any English book which helps you to improve English?
63 students said yes and 10 students said very rare.
Question No.98: Have you ever learnt English through Audio-visual aids?
61 students said yes and 12 students said very rare.

Question No.99: Have you ever discussed anything in English with your English teacher at any time?
Entire student said yes.

Question No.100: Have you ever discussed anything in English with your friend any time?
Entire student said yes.
According to the analysis of the every question result showed that the aptitude of students towards English in students was high level. So the null hypothesis was rejected and alternate hypothesis was accepted.

4.3 Discussion of Findings:

The findings of results are given below:

1. English Subject:

   In order to compare the English subject score between pre test and post test of XI Standard’s Students group, Paired t-test was applied. The calculated t value is 8.319 which is greater than tabulated t value. So it was significant at 0.01 level. It may be concluded that there is significant difference on English Subject Score between pre test and post test of XI Standard’s Students group. So the null hypothesis was rejected and alternative hypothesis was accepted.

   In order to compare the English subject score between pre test and post test of XII Standard’s Students group, Paired t-test was applied. The calculated t value is 4.202 which is greater than tabulated t value. So it was significant at 0.01 level. It may be concluded that there is significant difference on English Subject Score between pre test and post test of XII Standard’s Students group. So the null hypothesis was rejected and alternative hypothesis was accepted.

2. Aptitude:

   According to the analysis of the every question result showed that the aptitude of English in students was higher level. Most of students gave responses in favor of this.