CHAPTER: 4 DATA ANALYSIS AND INTERPRETATION

4.0 Introduction

The present chapter is devoted to the analysis and interpretation of the collected data and then discussion based on it. Data Analysis means a critical examination of the collected data for studying the characteristics of the research study under consideration. Data analysis involves analysis of the reality in different parts and establishes relationship binding the different parts together. Data interpretation means explaining the effect in terms of causes. Any strategy is of no use unless its effectiveness is tested. On the basis of effectiveness of the particular strategy, its application in real life situation can be envisaged. With this intent, the researcher tested the effectiveness of the strategy employed for the present study. To judge the effectiveness of the strategy, qualitative and quantitative analysis of the data were done employing the techniques mentioned in the following table.

Table- 02 Tools and Techniques used for Data Analysis

Sr.no.	**Tools**	**Use of the tools**	**Techniques used for data analysis**
1	Observation schedule	To study the difficulties of the students in learning English through communicative approach.	Content analysis, frequency and percentage
2	Pre-test	To test the previous knowledge of the students (prior to implementation of the task-based strategy).	Mean, Standard Deviation and 't' Value
3	Post-test	To study the effectiveness of the developed strategy in terms of achievement of the students	Mean, Standard Deviation and 't' Value
4	Reaction scale	To study reactions of the students towards task-based strategies	Chi square

4.1 Analysis and Interpretation of Data Collected Through Observation

Observation schedule was prepared by the researcher to get the factual information regarding actual classroom teaching-learning process. The researcher had observed 40 classes i.e. 20 in experimental group school and 20 in control group school.

4.1.1 Analysis and Interpretation of the Observation done in the Experimental Group School

⇒ In all the 20 classes, grammar translation method was followed though guidelines were given in preface of the textbook for teachers.

⇒ No techniques were used except reading lessons and board work by the teachers to teach particular lesson or grammar point.

⇒ Teachers were expected to use teaching aids to explain the teaching point. In 2 classes, teachers used guide, 3 classes teachers used grammar book and readymade litho, 1 class the teacher used essay book and 14 class's teachers used blackboard, English textbook and chalk sticks.

⇒ In 19 classes, no peer or group work was done while in one class group work was seen and it was in Guajarati, English was not used.

⇒ In all the 20 classes, 100% clasSr.oom transaction was done in Guajarati. Word-to word translation was done that was denied in the textbook.

⇒ In most of the classes students were silent and passive and when there was communication among the students and teacher, it was in Guajarati only.

⇒ In 19 classes students didn't speak in English, not even a single word while in 1 class, few students read the lesson as instructed by the teacher.

⇒ In all the 20 classes, grammar translation method was followed.

4.1.2. Analysis and Interpretation of the Observation done in the Control Group School

⇒ In most of the classes grammar was taught through traditional method. In 75% of classes writing tasks were done and students were copying from guide and black-board.

⇒ In 18 classes grammar translation method was followed, in a class the teacher was trying to follow communicative approach and 50% classroom transaction was in English, students were getting chance to speak in English. While in one class, the teacher was checking fair books of students and students were completing self learning books from guides.

⇒ Out of 20 classes, in 10 classes rules were dictated in mother tongue, 7 classes, students were copying from blackboard not understanding a single word, in 1 class; dramatization was done using the textbooks.

⇒ Out of 20, in 18 classes the teaching was done through chalk- talk method while in a class, quiz competition was done.

⇒ Out of 20 , in a class group work was done while all 19 classes, students were listening to the teacher and writing from the board

⇒ Out of 20 , 8 classes, teachers didn't speak in English, in 5 classes only read the story, in 5 classes teachers uttered just spellings, opposite words and some instructions, while in 2 classes teacher spoke in English most of the time i.e. 70% .

⇒ About students' response, out of 20 classes, in 6 classes students who knew grammar responded in Guajarati, in 4 classes, students were passive, in 5 classes students were attentive and replied the teachers' questions, in 2 classes students tried to understand and reply, in a class students were eager to reply during quiz competition, while in a class students responded nicely in English.

⇒ Out of 20 classes, in 14 classes communication was in Guajarati, in 6 classes the teachers were trying to communicate with students in English.

⇒ About the use of mother tongue, out of 20 in 11 classes, the whole clasSr.oom transaction was in Guajarati, not even a single word was spoken in English. In 4 classes50% of clasSr.oom transaction was in Guajarati and 50% was in English i.e. in for reading and some instructions while in 5 classes 70-90% of clasSr.oom transaction was in Guajarati.

⇒ About English spoken by students, in a class students didn't speak a single word in English, in a class there was quiz competition students spoke 60-70% in English, in 2 classes students spoke English for reading purpose, in 3 classes 30-40% of students spoke in English, in 3 classes students tried to reply some of the questions asked by teachers, while in 4 classes students repeated words as instructed by the teachers.

4.2 Analysis and Interpretation of Data Collected Through Oral Test of the Experimental Group and the Control Group

The researcher administered oral test (pre-test and post-test) to both the groups viz. control and experimental. Task-based strategies were administered on the experimental group for 100 days. The analysis and interpretation of oral test is as follow:

Table -03 Calculated T-Value of Oral Test

Sr. no	Group	N	mean	Sd	Df	Calculated T value	Tab value 0.01	Tab value 0.05
1	Experimental (task-based strategy)	38	8.27	3.54	79	6.41**	2.64	1.99
2	Control (traditional)	43	4.36	1.36				

****significant difference at o.o1 and 0.05 level**

Prior to treatment phase two groups viz. experimental group and control group were formed on the basis of cluster sampling and pre- test and post test was administered on both the groups. Experiment was conducted on a sample of 38 students of STD IX. Achievement scores were obtained on oral pre test and post test of 75 marks. The t-test was used for analysis. Results of the statistical analysis are presented in the table

The table indicated that mean gain score of experimental group was 8.27 and S.D. was 3.54. The mean gain score of control group was 4.36 and S.D. was 1.36. The t-value of difference between these two mean gain scores was 6.41, which was greater than the table t-values 2.64 at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.01 and 0.05 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference in the mean gain scores of the experimental and control groups. So, the task based strategies used to enhance oral communication skills have worked effectively as evident through the relative magnitude of the mean gain scores of experimental and control groups

4.3 Analysis and Interpretation of Data Collected Through Written Test of the Experimental Group and the Control Group

Table -04 Calculated T-Value of Written Test

Sr. no	Group	N	Mean	Sd	Df	Calculated T value	Tab value 0.01	Tab value 0.05
1	Experimental	38	20.92	9.13	79	8.84**	2.64	1.99
2	Control	43	7.84	3.33				

****significant difference at o.o1 and 0.05 level**

Achievement scores were obtained on oral pre test and post test of 75 marks from experimental group as well as control group. The t-test was used for analysis. Results of the statistical analysis are presented in the table no.

It is clear from the table that mean gain score of the experimental group on written test was 20.92 and S.D. was 9.13. The mean gain score of control group was 7.84 and S.D. was 3.33. The t-value of difference between these two mean gain scores was 8.84 which were greater than the table t-values 2.64 at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.01 and 0.05 level. The null hypothesis, "there will be no significant difference between the mean gain scores of the experimental and control group" was rejected.

Thus, there is a significant difference in the mean gain scores of the experimental and control groups. So, the task based strategies used to enhance written communication skills have worked effectively as evident through the relative magnitude of the mean gain scores of experimental and control groups

4.4 Analysis and Interpretation of Data Collected Through Oral and Written Test

Table-05 Calculated t-Value of Oral and Written Test Combined

Sr. no	Group	N	Mean	Sd	Df	Calculated T value	Tab value 0.01	Tab value 0.05
1	Experimental	38	29.19	10.57	79	9.09**	2.64	1.99
2	Control	43	12.19	4.83				

****significant difference at o.o1 and 0.05 level**

It is clear from the table that mean gain of experimental group was 29.19 and S.D. was 10.57. The mean gain score of control group was 12.19 and S.D. was 4.83. The t-value of difference between these two mean gain scores was 9.09, which was greater than the table t-values 2.64 at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.01 and 0.05 level. The null hypothesis, "there will be no

significant difference between the mean gain scores of the control group and the experimental" was rejected.

Thus, there is a significant difference in the mean gain scores of the experimental and control groups. So, the task based strategies used to enhance oral as well as written communication skills have worked effectively as evident through the relative magnitude of the mean gain scores of experimental and control groups.

4.5 Analysis and Interpretation of Data Collected Through Oral and Written Test-Strategy Wise

Oral Pre test and post test questions were based on the task –based strategies viz. auditory representation, sharing information, observation, sharing experience and imagination. Written pre test and post test questions were based on the task based strategies viz. Imagination, Vocabulary, Grammar, Sharing information, Elaboration, Completion, Inferences, Observation, Comprehension and Critical thinking.

Table -06 Strategies Employed in Oral and Written Test

Strategy				
Written test			Oral test	
Sr. no.	Question no.	Task based strategies	Question no.	Task based strategies
1	1,2,5,20,22	Imagination	1,2,3	Auditory representation
2	3,21	Vocabulary	4,7,12	Sharing Information
3	4,6,10,14,18	Grammar	5	Observation
4	5,9,16,19	Sharing information	6	Sharing experience
5	7,13	Elaboration	8,9,10,11,13	Imagination
6	8	Completion		
7	11	Inferences		
8	12	Observation		
9	17	Comprehension		
10	23	Critical thinking		

Table -07 Calculated t-Value of Oral Strategy 1

Oral Strategy 1								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**1.68**	**1.12**	**79**	**2.43***	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**1.00**	**1.42**				

***significant difference at 0.05 level**

The table indicated that mean gain of experimental group in oral strategy 1 was 1.68 and S.D. was 1.12. The mean gain score of control group was 1.00 and S.D. was 1.42. The t-value of difference between these two mean gain scores was 2.43, which was greater than the table t- value 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Oral strategy 1 used to enhance oral communication skills has worked effectively.

Table -08 Calculated t-Value of Oral Strategy 2

Oral strategy 2								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**1.39**	**0.86**	**79**	**5.16****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.15**	**1.30**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean gain score of experimental group was 1.39 and S.D. was 0.86. The mean gain score of control group was 0.15 and S.D. was 1.30. The t-value of difference between these two mean gain scores was 5.16, which was greater than the table t-values 1.99 and 2.64 at 0.05 level and 0.01 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Oral strategy 2, used to enhance oral communication skills has worked effectively.

Table -09 Calculated t-Value of Oral Strategy 3

Oral strategy 3								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**1.04**	**0.54**	**79**	**4.43****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.11**	**1.28**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean gain score of experimental group was 1.04 and S.D. was 0.54. The mean gain score of control group was 0.11 and S.D. was 1.28. The t-value of difference between these two mean gain scores was 4.43, which was greater than the table t-values 2.64 at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Oral strategy 3 used to enhance oral communication skills has worked effectively.

Table -10 Calculated t-Value of Oral Strategy 4

Oral strategy 4								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**0.73**	**0.42**	**79**	**1.27**	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.59**	**0.59**				

The table indicated that mean achievement of experimental group was 0.73 and S.D. was 0. 42. The mean gain score of control group was 0.59 and S.D. was 0.59. The t-value of difference between these two mean gain scores was 1.27, which was lesser than 2.64 at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was not significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was not rejected.

Thus, there is no significant difference between the mean gain scores of the experimental and control groups. Oral strategy 4 used to enhance oral communication skills has not worked effectively.

Table -11 Calculated t-Value of Oral Strategy 5

Oral strategy 5								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**3.43**	**2.99**	**79**	**1.70**	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**2.51**	**1.50**				

The table indicated that mean achievement of experimental group was 3.43 and S.D. was 2.99. The mean gain score of control group was 2.51 and S.D. was 1.50. The t-value of difference between these two mean gain scores was 1.07, which was lesser than 2.64 at 0.01 level and 1.99 at 0.05 level . Thus the obtained t-value was not significant at 0.01 level and 0.05 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was not rejected.

Thus, there is no significant difference between the mean gain scores of the experimental and control groups. Oral strategy 5 used to enhance oral communication skills has not worked effectively.

Table -12 Calculated t-Value of Written Strategy 1

Written strategy 1								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**3**	**1.45**	**79**	**4.60****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**1.63**	**1.20**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 3 and S.D. was 1.45. The mean gain score of control group was 1.63 and S.D. was 1.20. The t-value of difference between these two mean gain scores was 4.60, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 1 used to enhance oral communication skills has worked effectively.

Table -13 Calculated t-Value of Written Strategy 2

Written strategy 2								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**1.76**	**1.18**	**79**	**6.31****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.37**	**0.61**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 1.76 and S.D. was 1.18. The mean gain score of control group was 0.37 and S.D. was 0.61. The t-value of difference between these two mean gain scores was 6.31, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 2 used to enhance oral communication skills has worked effectively.

Table -14 Calculated t-Value of Written Strategy3

Written strategy 3								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**4.24**	**2.45**	**79**	**4.92****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**2.14**	**1.02**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 4.24 and S.D. was 2.45. The mean gain score of control group was 2.14 and S.D. was 1.02. The t-value of difference between these two mean gain scores was 4.92, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 3 used to enhance oral communication skills has worked effectively.

Table -15 Calculated t-Value of Written Strategy4

Written strategy 4								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**3.79**	**2.13**	**79**	**5.64****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**1.65**	**1.03**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 3.79 and S.D. was 2.13. The mean gain score of control group was 1.65 and S.D. was 1.03. The t-value of difference between these two mean gain scores was 5.64, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 4 used to enhance oral communication skills has worked effectively.

Table -16 Calculated t-Value of Written Strategy 5

Written strategy 5								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**2.5**	**1.55**	**79**	**5.01****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**1.05**	**0.94**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 2.5 and S.D. was 1.55. The mean gain score of control group was 1.05 and S.D. was 0.94. The t-value of difference between these two mean gain scores was 5.01, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 5 used to enhance oral communication skills has worked effectively.

Table -17 Calculated t-Value of Written Strategy 6

Written strategy 6								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**0.97**	**0.74**	**79**	**5.46****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.21**	**0.46**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 0.97 and S.D. was 0.74. The mean gain score of control group was 0.21 and S.D. was 0.46. The t-value of difference between these two mean gain scores was 5.46, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 6 used to enhance oral communication skills has worked effectively.

Table -18 Calculated t-Value of Written Strategy 7

Written strategy 7								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**0.87**	**0.83**	**79**	**5.04****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.14**	**0.35**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 0.87 and S.D. was 0.83. The mean gain score of control group was 0.14 and S.D. was 0.35. The t-value of difference between these two mean gain scores was 5.04, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 7 used to enhance oral communication skills has worked effectively.

Table -19 Calculated t-Value of Written Strategy 8

Written strategy 8								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**0.95**	**0.83**	**79**	**4.97****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.28**	**0.50**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 0.95 and S.D. was 0.83. The mean gain score of control group was 0.28 and S.D. was 0.50. The t-value of difference between these two mean gain scores was 4.97, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 8 used to enhance oral communication skills has worked effectively.

Table -20 Calculated t-Value of Written Strategy 9

Written strategy 9								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**1.29**	**1.00**	**79**	**6.58****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.16**	**0.37**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 1.29 and S.D. was 1.00. The mean gain score of control group was 0.16 and S.D. was 0.37. The t-value of difference between these two mean gain scores was 6.58, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 9, used to enhance oral communication skills has worked effectively.

Table -21 Calculated t-Value of Written Strategy 10

Written strategy 10								
Sr. no	**Group**	**N**	**mean**	**Sd**	**Df**	**Calculated T value**	**Tab value**	
							0.01	**0.05**
1	**Experimental (task-based strategy)**	**38**	**1.55**	**1.09**	**79**	**7.14****	**2.64**	**1.99**
2	**Control (traditional)**	**43**	**0.21**	**0.41**				

****significant difference at o.o1 and 0.05 level**

The table indicated that mean achievement of experimental group was 1.55 and S.D. was 1.09. The mean gain score of control group was 0.21 and S.D. was 0.41. The t-value of difference between these two mean gain scores was 7.14, which was greater than the table t-values at 0.01 level and 1.99 at 0.05 level. Thus the obtained t-value was significant at 0.05 and 0.01 level. The null hypothesis, "there will be significance difference between the mean gain scores of the experimental group and the control group" was rejected.

Thus, there is a significant difference between the mean gain scores of the experimental and control groups. Written strategy 10 used to enhance oral communication skills has worked effectively.

4.6 Analysis and Interpretation of Data Collected Through Reaction Scale

The data collected through the reaction scale were in the form of reactions of the students regarding the implemented task based strategy. The data collected through reaction scale were analyzed and interpreted as under:

Analysis and Interpretation of Data in the form of reaction scale of the students towards the Implemented task-based Strategy in terms of Percentage, Observed frequencies and Computed chi-square value for each statement. In this phase, the data obtained through five point reaction scale were analyzed through frequency distribution, percentage analysis and chi-square. For carrying out the percentage analysis, the frequency-wise perceptions of students against the particular statement were calculated and converted into percentage. The obtained data were analyzed in terms of observed frequencies and then the chi-square was computed considering the observed frequency for each statement wherein the researcher attempted to find out whether there was any significant difference between the observed frequencies and expected frequencies against equal probability hypothesis. The statistical computation of Chi-square was used in the present study for the quantitative analysis of the data which were obtained through the reaction scale was as follow:

Step: 1 fo Observed Frequencies (fo) were represented in figures in parenthesis within the different cells as per the adopted Likert's five point scale.

Step: 2 fe Expected Frequencies (fe) were represented by the figures in parentheses within the different cells.

Step: 3 fo-fe Observed Frequencies were subtracted from the Expected Frequencies.

Step: 4 $(fo-fe)^2$ The scores obtained by subtracting Observed Frequencies from the Expected Frequencies were squared.

Step: 5 The square of the scores obtained by subtracting Observed Frequencies from the Expected Frequencies were divided by Expected Frequencies.

Step: 6 All the scores obtained by administering the 5th step were computed.

Step: 7 The obtained chi-square value was compared with the Table value for degree of freedom '4' and the null hypothesis was tested.

Step: 8 The conclusions were drawn.

Table -22 Analysis of Reaction Scale

Sr. no.	Statements	Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)	Calculated Chi square value
1	Tasks were interesting.	52.63	26.32	7.89	7.89	5.26	30.68
2	Tasks were boring.	5.26	5.26	18.42	31.58	39.47	18.05
3	To learn English translation is necessary.	5.26	7.89	15.79	34.21	36.84	16.47
4	Through tasks English can be learnt easily.	57.89	23.68	7.89	7.89	2.63	38.84
5	There is no need to translate to learn English.	63.16	23.68	5.26	5.26	2.63	49.63
6	Group and pair work are helpful in communication.	60.53	23.68	7.89	5.26	2.63	44.11
7	Tasks are helpful to learn English and use it in day-to-day life.	78.95	2.63	7.89	5.26	5.26	82.79
8	Tasks are helpful in developing listening skills.	65.79	7.89	10.53	15.79	0.00	52.26
9	Tasks are helpful in developing speaking skills.	55.26	15.79	10.53	10.53	7.89	30.16
10	Tasks are helpful in	52.63	23.68	13.16	7.89	2.63	29.89

	developing reading skills.						
11	Tasks are helpful in developing writing skills.	60.53	23.68	7.89	5.26	2.63	44.11
12	Tasks made me confident to speak in English with my friends and teachers.	57.89	26.32	5.26	5.26	5.26	40.42
13	Use of dictionaries for different tasks is helpful to enrich vocabulary.	52.63	34.21	5.26	5.26	2.63	38.05
14	Now I can respond and present my views and opinions to any situations.	52.63	28.95	10.53	5.26	2.63	33.32
15	Now I can complete story and reply messages orally and written.	60.53	21.05	5.26	7.89	5.26	42.26

By observing table it is evident that the obtained Chi-square values are greater than 9.488 for significant level 0.05 and 13.277 for significant level 0.01.

4.5.1. In response to statement-1 i.e. “Tasks were interesting.”, 52.63 % of the students marked ‘strongly agree’, 26.32 % of the students marked ‘agree’, 7.89% marked undecided, 7.89% marked disagree, whereas 5.26% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 30.68. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that

there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that tasks were interesting

4.5.2. In response to statement -2 i.e. “Tasks were boring.”, 5.26 % of the students marked ‘strongly agree’ , 5.26 % of the students marked ‘agree’, 18.42% marked undecided, 31.58% marked disagree whereas 39.47% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 18.05. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies. Since a large majority of the respondents have either disagreed or strongly disagreed to the statement, it can be concluded that tasks were not boring.

4.5.3. In response to statement-3 i.e. “To learn English translation is necessary.”, 5.26 % of the students marked ‘strongly agree’ ,7.89 % of the students marked ‘agree’, 15.79% marked undecided, 34.21% marked disagree whereas 36.84% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 5.26. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies.Since a large majority of the respondents have either disagreed or strongly disagreed to the statement, it can be concluded that translation is not necessary to learn English.

4.5.4. In response to statement -4i.e. “Through tasks English can be learnt easily.”, 57.89 % of the students marked ‘strongly agree’,23.68 % of the students marked ‘agree’, 7.89% marked undecided, 7.89% marked disagree whereas 2.63% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value

is 38.84. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that through tasks English can be learnt easily

4.5.5. In response to statement -5 i.e. "There is no need to translate to learn English.", 63.16 % of the students marked 'strongly agree' ,23.68 % of the students marked 'agree', 7.89% marked undecided, 7.89% marked disagree, whereas 2.63% marked strongly disagree. The critical values for 4 df as given in the are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 49.63. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that there is no need to translate to learn English

4.5.6. In response to statement -6 i.e. "Group and pair work are helpful in communication.", 60.53 % of the students marked 'strongly agree'. 23.68 % of the students marked 'agree', 7.89% marked undecided, 7.89% marked disagree whereas 2.63% marked strongly disagree. The critical values for 4 df as given in the table are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 44.10. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that group and pair work are helpful in communication

4.5.7. In response to statement -7 i.e. “Tasks are helpful to learn English and use it in day-to-day life.”, 78.95 % of the students marked ‘strongly agree’ ,2.63 % of the students marked ‘agree’, 7.89% marked undecided, 5.26% marked disagree whereas 2.63% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 82.79. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that Tasks are helpful to learn English and use it in day-to-day life

4.5.8. In response to statement-8 i.e. “Tasks are helpful in developing listening skills.”, 65.79 % of the students marked ‘strongly agree’, 7.89 % of the students marked ‘agree’, 10.53% marked undecided whereas 15.79% marked disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 52.26. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that tasks are helpful in developing listening skills.

4.5.9. In response to statement - 9 i.e. “Tasks are helpful in developing speaking skills.”, 55.26 % of the students marked ‘strongly agree’ , 15.79% of the students marked ‘agree’, 10.53% marked undecided, 10.53% marked disagree whereas 7.89% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 30.16. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies

and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that tasks are helpful in developing speaking skills

4.5.10. In response to statement – 10 i.e. "Tasks are helpful in developing reading skills.", 52.63 % of the students marked 'strongly agree',26.68 % of the students marked 'agree', 13.16% marked undecided, 7.89% marked disagree whereas 2.63% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 29.89. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that tasks are helpful in developing reading skills

4.5.11. In response to statement – 11 i.e. "Tasks are helpful in developing writing skills.", 60.53 % of the students marked 'strongly agree' , 23.68 % of the students marked 'agree', 7.89% marked undecided, 5.26% marked disagree, whereas 2.63% marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 44.10. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that to learn English translation is necessary.

4.5.12. In response to statement -12 i.e. "Tasks made me confident to speak in English with my friends and teachers", 57.89 % of the students marked 'strongly agree' ,26.32 % of the students marked 'agree', 5.26% marked undecided, 5.26% marked disagree whereas 5.26% marked strongly disagree. The critical

values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 40.42. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that tasks made me confident to speak in English with my friends and teachers.

4.5.13. In response to statement -13 i.e. "Use of dictionaries for different tasks is helpful to enrich vocabulary.", 52.63 % of the students marked 'strongly agree' , 34.21 % of the students marked 'agree', 5.26% marked undecided, 5.26% marked disagree, 2.63 % marked strongly disagree. The critical values for 4 df are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 38.05. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that use of dictionaries for different tasks is helpful to enrich vocabulary.

4.5.14. In response to statement-14 i.e. "Now I can respond and present my views and opinions to any situations.", 52.63 % of the students marked 'strongly agree' ,28.95 % of the students marked 'agree', 10.53% marked undecided, 5.26% marked disagree whereas 2.63% marked disagree. The critical values for 4 DF are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 33.31. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant

difference between the observed frequencies and expected frequencies and it can be concluded that now they can respond and present my views and opinions to any situations

4.5.15. In response to statement – 15 i.e. "Now I can complete story and reply messages orally and written.", 60.53 % of the students marked 'strongly agree', 21.05% of the students marked 'agree', 5.26% marked undecided, 7.89% marked disagree whereas 5.26% marked disagree. The critical values for 4 DF as given in the table are 13.277 at 0.01 and 9.488 at 0.05 level of significance and the calculated chi-square value is 42.26. As the calculated chi-square value is higher than the table value at both the 0.01 and 0.05 level of significance, the null hypothesis that there will be no significant difference between the observed frequencies and expected frequencies against equal probability hypothesis is rejected. In other words, it can be said that there is a significant difference between the observed frequencies and expected frequencies and it can be concluded that now they can complete story and reply messages orally and written