

## CHAPTER 5

### SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### SUMMARY

The problem under study was to investigate the comparative effectiveness of teaching English grammar with the help of textbook (deductive method) and by using group work activities (inductive teaching model). The study also attempted to see which of these two methods had a positive effect on the academic achievement of the elementary and secondary school students in Pakistan. The main objective of the study "To find the comparative effectiveness of teaching English grammar with the help of textbook (deductive method) and by using group work activities" was split into some sub objectives which dealt with the effect of both the methods on the academic achievement of the elementary and secondary school students, their writing and speaking ability, listening and reading comprehension, the recall of the students, the use of structures and the application of the rules of grammar by them. The sub objectives also dealt with computing the proportionate amount of time given to the students of each group at both the given levels and finding the attitude of the students of the experimental groups of each level towards the group work activities. The general research hypothesis to be investigated in the study was to find the comparative effectiveness of teaching English grammar with the help of

textbook (deductive method) and by using group work activities (inductive teaching model) along with seeing which of these two methods had a positive effect on the academic achievement of the elementary and secondary school students in Pakistan. In order to investigate the various dimensions of the general research problem, the following null hypotheses were tested at both the elementary and secondary stage:

1. There is no significant difference between the mean post-test scores of the achievement test (academic achievement) of the elementary and secondary school students taught English grammar with the help of text-book (deductive method) and those taught by using group work activities (inductive teaching model).
2. There is no significant difference between the mean post-test scores of the two groups on the reading comprehension test at the elementary and secondary level.
3. There is no significant difference between the mean post-test scores of the writing ability test of the two groups at both the levels.
4. There is no significant difference between the mean post-test scores of the listening comprehension test of the two groups at the elementary as well as secondary level.
5. There is no significant difference between the mean post-test scores of the speaking ability test of the two groups at both the given levels.

6. There is no significant difference between the mean post-test scores (applying the rules of grammar) of the two groups at both the levels.
7. There is no significant difference between the mean post-test scores (recall) of the two groups at both the given levels.
8. There is no significant difference between the mean post-test scores (use of structures) of the two groups at the secondary as well as elementary school level.
9. There is no positive effect of the group work activities on the attitude of those elementary and secondary stage students who have been involved in group work activities.
10. The proportionate amount of time given to the students has no significant effect on the academic achievement of the elementary and secondary stage students.

The study was delimited to only 6th grade and 9th grade female students of Dera Ismail Khan City.

In this experimental study one school i.e. Government Girls High School No-1 Dera Ismail Khan was randomly selected out of the Six Government Girls High and Higher secondary schools of Dera Ismail Khan City. Of the four 9th grade sections, two sections were randomly selected by the process of simple random sampling using draw method technique. Similar process was adopted in the case of 6th grade students. Then of the two selected groups at each level, one group was randomly assigned as the experimental and the other as the control group. Similarly two teachers

almost similar in respect of educational qualifications, age, training, teaching experience at the secondary level, socio-economic status and their reputation at the school were selected at the secondary level. One teacher was randomly assigned to the experimental and the other to the control group. Similar procedure was adopted at the elementary level. The sample size was eighty (80) at the secondary and one hundred and twelve (112) at the elementary stage. The relevant pre-tests were administered to the students of both groups at each stage i.e. elementary and secondary to make sure that both the groups at each stage were equivalent at the time of starting the experiment. The pre-test, post-test equivalent group design was used.

The instrument at each stage consisted of:

1. Two achievement tests (pre-test and post-test) in the subject of English.
2. Different aspects of grammar relevant at the secondary and elementary stage.

a. Secondary Stage

The use of nouns, verbs, adjectives, the use of "for" and "since", the use of different tenses with the application of the relevant rules and change of narration.

b. Elementary Stage

The use of noun, pronoun, verb, time words and different tenses such as simple present, present continuous tense, and simple past tense.

3. Five lessons of A text-book of English for class IX (Book-I).
4. Six lessons of a textbook of English for class VI (Book-I).
5. Different group work activities.
6. Observation schedule for computing the proportionate amount of time taken by the "teacher", "teacher + students" and "the students".
7. Instructions for the teachers.
8. An attitude scale.

Duration of teaching was about one month with daily period of thirty-five minutes at each stage. Both the groups at each stage were exposed to essentially the same experience, except for the method of instruction. The experimental group at each stage was taught English grammar through group work activities by using the inductive teaching model whereas the control group was taught English grammar through textbook using deductive method (traditional method). At the end of the treatment period, post-tests were administered to the students of both the groups at each stage and were scored.

The data thus obtained were tabulated and analyzed. Data were analyzed on computer using computer program "statgraphics". In case of achievement tests, mean, standard deviation and variance of the pre-tests and post-test scores of the elementary and secondary stage students were obtained to analyze the data. The test of the significance of the difference between the means of the two independent groups (z-test) was applied to measure the significance of the difference between the means of the two

groups of interest at each stage. Significance was seen at .05 level as the criterion for the rejection of null hypotheses. The first eight hypotheses were tested through z-test. In the case of attitude scale, the data were analyzed by calculating the percentage of the frequency counts in respect of each category of the response i.e. "Yes" "No" and "undecided". The proportionate amount of time in respect of the elementary as well as secondary stage was calculated by finding the percentage of the time taken by the "teacher", "teacher + students" and students in each' group and at each stage.

## FINDINGS

### PART I

The following findings emerged as a result of the analysis of data:

1. There is no significant difference between the mean pre-test scores of the experimental and control group at the elementary and secondary stage.
2. Findings relating the first hypothesis

The first hypothesis, which is the major hypothesis of the study, indicates that teaching of English grammar through group work activities (inductive approach) has positive effect on the academic achievement of the elementary and secondary stage students. Thus the first null hypothesis is rejected.

3. Second hypothesis

The result of the second hypothesis indicates that the teaching of English grammar through group work activities has significantly improved the reading comprehension of the students at both the elementary and secondary stages. Thus the second null hypothesis is rejected at the elementary as well as secondary stage.

4. Third hypothesis

The third null hypothesis is rejected thus indicating that the teaching of English grammar through group work activities has significantly improved the writing ability of the elementary and secondary stage students.

5. Fourth hypothesis

Fourth hypothesis is also rejected at the elementary and secondary stage thus indicating that the teaching of English grammar through group work activities has significantly improved the listening comprehension of the elementary and secondary stage students.

6. Fifth hypothesis

The result of the fifth hypothesis is that the teaching of English grammar through group work activities has significantly improved the speaking ability of the elementary and secondary stage students. Thus the fifth null hypothesis is rejected at both the elementary and secondary stages.

7. Sixth hypothesis

The sixth null hypothesis which deals with the ability of the students to apply the rules of grammar at the elementary and secondary stage, is also rejected. This indicates that the teaching of English grammar through group work activities has significantly improved the ability of the students to apply the rules of grammar at both the elementary and secondary stages.

8. Seventh hypothesis

The seventh null hypothesis is also rejected at the elementary and secondary stage thus indicating that teaching of English grammar through group work activities has positive effect on the recall of the elementary and secondary stage students.

9. Eight hypothesis

The result of the eighth hypothesis indicates that due to teaching of English grammar through group work activities, the students can use the English structures effectively at the elementary and secondary stage. Thus the eighth null hypothesis is rejected at elementary and secondary stage.

## PART II

Findings relating the proportionate amount of time taken by the "teacher", "teacher + students" and "students" of the experimental and control group at the elementary and secondary stage.

10. At the secondary stage the time taken by the "teacher", "teacher + students" and "students" by the control and experimental group is 38.2%, 36.1%, 24.4% and 19.9%, 21.7%, 58.4% respectively. Similarly at the elementary stage, the time taken by "teacher", "teacher + students", and "students" in the control and experimental group is 26.88%, 56.88%, 16.24% and 14.86%, 33.38%, 51.82% respectively. It indicates that at the secondary stage 34% (58.4-24.4) more time is taken by the students of the experimental group as compared to the control group. Similarly in the control group 18.3 % (38.2-19.9) more time is taken by the teacher and 14.4 % (36.1-21.7) more time is taken by the "teacher and students" as compared to experimental group.

At the elementary stage 35.58 % (51.82-35.58) more time is taken by the students in the experimental group as compared to the control group. In the case of control group, 12.02% (26.88-14.86) more time is taken by the teacher and 23.50% (56.88-33.38) more time is taken by the "teacher + students" as compared to experimental group.

### PART III

Findings regarding the attitudes of the experimental group students towards group work activities.

11. 100 % of the students at elementary stage and 97.5 % of the students at secondary stage like to work in a group.
12. For 98.2 % of the students at elementary stage and 97.5 % of them at the secondary stage, it is easy to work in a group because they understand the materials in a better way.
13. 100% of the students at elementary stage and 95.92 % of them at the secondary stage have the opinion that their speed of learning gets better while working in group.
14. 100 % of the students at both the elementary and secondary stages, want to bring their group at the top position in the class.
15. 96.4% of the students at the elementary stage and 90% of students at the secondary stage think that the dull students can improve by working in a group.
16. 92.86% of the students at the elementary stage and 90.% of them at the secondary stage have the opinion that reading comprehension of the students can be improved by working in groups. Similarly 80.36% of the students at the elementary stage and about the same percentage (80%) of the students at the secondary stage think that group work can improve the writing ability of the students. In the case of listening comprehension,

the view of 53.57% of the students at the elementary stage and that of the 77.5% of the students at the secondary stage is that listening comprehension can be improved by working in group whereas, somewhat different picture is shown between the view of the students about the speaking ability at the elementary and secondary stage. i.e. 50 % of the students at the secondary stage have opinion that the group work improves the speaking ability of the students whereas no student at the elementary stage is in favour of the view that speaking ability can be improved by working in a group.

17. 14.28 % of the students at the elementary stage and 32.5% of them at the secondary stage are in favour of the view that deductive approach is the better way learning grammar. Whereas 21.48 % of the students at the elementary stage and only 2.5 % of the students at the secondary stage think that grammar can be learnt in a better way through textbook reading. Similarly, the view of the 64.28 % of the students at the elementary stage and 65 % of them at the secondary stage is that group work is the better way of learning grammar.
18. The view of 98.4 % of the students at the elementary stage and 100% of them at the secondary stage are not in favour of the statement that working in group results in the waste of time. Only 1.79% at the elementary stage think that time is wasted by

working in a group and the same percentage (1.79 %) cannot decide whether the time is wasted in a group or not.

## CONCLUSIONS

The findings of the study led to the following conclusions:

1. The experimental and control groups at both the elementary and secondary stages were equivalent at the time of starting the experiment
2. Teaching of English grammar through group work activities (inductive approach) plays a positive role in improving the academic achievement of the students studying English at the elementary as well as secondary stage.
3. The results of the research lead to the conclusions that group work activities can be used for improving the writing and speaking ability, reading and listening comprehension, recall the use of structures and the application of rules of grammar by the students studying English at both the elementary and secondary stages.
4. Based on the research findings about the attitude of the experimental groups at the elementary and secondary stages, it can be concluded that the students at both the given stages have positive attitude towards the group work activities. The reason is that majority of the students at each stage, like to work in groups and

according to them, it is easy to work in a group, speed of learning gets better by working in a group, dull students can improve by working in a group, and group work activities can improve their writing ability and reading and listening comprehension. The students at both stage have ranked the development of the skills as:

Reading	--	I
Writing	--	II
Listening	--	III

Moreover the students at secondary stage have ranked speaking at 4th position while the students at the elementary stage think that speaking ability cannot be improved by working in a group.

5. Majority of the students hold the opinion that teaching of English grammar through group work activities is better way of learning grammar as compared to the deductive approach and teaching grammar through textbook reading.
6. Almost all the students at the secondary as well as elementary stage think that not any time is wasted by working in a group.
7. On the basis of the proportionate amount of time consumed by the "teacher", "teacher + students" and students, it can be concluded that more the time given to the students, the better will be their academic achievement.

8. The development of different language skills and of the different aspects of grammar are directly proportional to the time consumed by the students.

## **RECOMMENDATIONS**

This section has further been subdivided into two parts.

1. General recommendation
2. Implications for classroom instruction.

### **General Recommendations**

1. The teachers teaching English at the elementary and secondary stage may be encouraged to use group work activities in their English language classrooms. Techniques of dividing the class into groups, providing different group work activities according to the need of the given lesson and keeping the students busy may be taught to the existing teachers of English through refresher courses.
2. The prospective teachers may be encouraged to apply the group work technique for the teaching of English and especially the grammar, during their practical skill in teaching. This practice may enable them to use this technique while they go to the field.

3. The English teachers may provide maximum time to the students for the development of speaking, reading, writing and listening skills and for learning different aspects of grammar.
4. The English teachers at the elementary as well as secondary stage may be informed of the results of the study to convince them to use group work activities for the maximum benefit of their students.
5. The bureaus of curriculum and the curriculum wing of the Ministry of Education, Islamabad may be informed of the results of the study, which may serve as guidelines for devising/ revising/ improving English language course for the elementary as well as the secondary stage.
6. The Allama Iqbal Open University may benefit from the results of the study by including a unit on group work activities in their correspondence courses of teaching of English for P.T.C, C.T and B.Ed.
7. The results of the study may be safely generalized to all elementary and secondary stage students of Urdu medium schools of Pakistan because the conditions in almost all the Urdu medium schools of Pakistan are almost similar (Sarwar 1983) i.e. the number of students varying from 60 to 100, children coming from the middle class families, most of the parents being illiterate, no home coaching or preparation or motivation, teachers using the traditional

methods of teaching English and the lack of opportunity for the students to use English language outside the classroom.

8. The study may be extended to the other classes of the elementary and secondary stage, the students of English medium schools and the different areas of the country.

### **Implications for Classroom Instructions**

1. Group work activities can be used for teaching English grammar to the elementary and secondary stage students. Along with the teaching of different aspects of grammar, and application of its rules, these may be used for improving writing and speaking ability, reading and listening comprehension recall, the use of structures, and the overall academic achievement of the students in the subject of English. Group work can be used along with the other methods of teaching English. Group work can be safely used at each stage of the lesson: preparation presentation, practice and production stage.
2. For effective teaching and to the maximum benefit of the students, the proportionate amount of time taken by the "teacher", "teacher + students" and "students at secondary stage should be 20 %, 20 % and 60 % respectively. Similarly at the elementary stage the time consumed by "teacher", "teacher + students" and students may be 15 %, 33 % and 52% because at the elementary stage the students need some more guidance of the teacher for effective functioning of

the group work.

But the teacher may vary this scheme according to the requirements of the lesson.

3. The following phases of activities may be used in group work at both the elementary and secondary stages.

1) Strategy One: Conception Formation

Phase One: Enumeration and listing

Phase Two: Grouping

Phase Three: Labeling, categorizing.

2) Strategy Two: Interpretation of data

Phase Four: Identifying critical relationships

Phase Five: Exploring relationships

Phase Six: Making inferences (conclusions)

3) Strategy Three: Application of principles (using the rules and principles).

4. Mixed ability groups may be used at the elementary and secondary stages.