CHAPTER - 6
SUMMARY, FINDINGS, IMPLICATIONS AND
RECOMMENDATIONS

6.0 Introduction
The detailed report of the present study has been given in the previous chapters. In the present chapter the summary of the report has been presented along with the outlines. It is accompanied by the findings, the educational implications and the recommendations in these areas for prospective researches.

6.1 Summary
The summary with outlines of the whole study is given under:

Selecting, defining and delimiting the problem. ‘To compare the role of computer in English language learning’ after selecting this problem, the key words have been defined, the objectives have been set, the variables have been decided, the area and type of research have been set, the hypotheses have been formulated, the significance have been worded and the delimitations of the study have been recognized.

Review of related literature. The use of computers in the classroom process, applicability of the learning principles and learning theories and the past research studies carried out in the similar areas have been studied. Critical review of the past studies as compared to the present study has also been done.

Determination of population. Computer acquainted students studying in second year P.T.C. in Gujarat State has been taken as the population.

Selection of instructional content. The Parts of Speech, which might be used in the routine activities of the students were selected as instructional content.
**Development of the CALL Package.** After developing the storyboard, graphic file and evaluation sheets PowerPoint presentations of MS Office XP has been developed keeping in view the use of multimedia facilities along with hyperlink facility. After that the presentations were edited, formatted and given the animation effects in order to make it more effective.

**Development of the tools: unit achievement tests & an opinionnaire.**
Eight written test of Parts of Speech, which included Noun (52), Adjective (48), Pronoun (70), Verb (20), Adverb (30), Preposition (30), Conjunction (20) and Interjection (16). (figure in the brackets indicate marks of the tests) were constructed by the researcher on the basis of the objectives, analysis of the content and the blue-print. In order to measure the opinions of the students towards the CALL Package, the opinionnaire developed by Ambasana (2002) was adapted.

**Development of supplement print materials: user manual, Answer key.** Separate user manuals were prepared to help a teacher to use the CALL Package in the classroom. For reliable measurement of the students’ responses on the test Answer keys was prepared.

**Filtration of the CALL Package by experts.** Technical, subject and methodological experts was given the developed Package and requested to assess the match between the content, presentation and the needs of target group. On the basis of their suggestions changes were made.

**Finalizing the CALL Packages.** On the basis of experts’ suggestions the necessary kinds of each Parts of Speech is adding to the Package. In the CALL Package it was hyperlinked with certain slides for the student whenever required. Other several changes were made in the Package and finalized forms of the CALL Package were prepared.
**Sample selection.** Total 47 students of second year P.T.C. were selected as sample.

**Design selection.** ‘Two equivalent groups only posttest design’ was selected as the design of the study. Two groups were experimental group (CALL Package group) and control group (Traditional class room teaching). The groups were made equivalent by the students’ previous achievement in English and their teachers’ rating.

**Implementation of experiment.** Keeping in mind the schedule, factors affecting internal and external validity the researcher implemented the experiment for thirty days. After completing each Parts of Speech the unit achievement test was administered as posttest on the both groups and opinionnaire was administered on the experimental group.

**Data collection, analysis and interpretation.** By administering the tools described above researcher collected the necessary data in the experiment stage. Then the collected data were analyzed by employing ANOVA, Post hoc Tuckey Test and Chi-square technique of statistics. Thereafter follows interpretations and graphical presentations.

**Findings, implications and recommendations.** are presented in this chapter.

### 6.2 Hypothesis Testing

At the outset of the study eight null hypotheses were formed. These hypotheses were tested on the basis of the data obtained during the experiment stage. After the experiment stage the testing of all the nine null hypotheses were as under:

**Hypothesis 1:** After completing the learning experience of Noun among Parts of Speech, there would be not significant difference between mean achievement scores of Noun on post test of experimental group and controlled group.
The obtain t-value was 1.847, so it was not significant at 0.01 level. Thus, the hypothesis was accepted.

**Hypothesis 2:** After completing the learning experience of Adjective among Parts of Speech, there would be not significant difference between mean achievement scores of Adjective on post test of experimental group and controlled group.

The obtain t-value was 4.328, so it was significant at 0.01 level. Thus, the hypothesis was rejected.

**Hypothesis 3:** After completing the learning experience of Pronoun among Parts of Speech, there would be not significant difference between mean achievement scores of Pronoun on post test of experimental group and controlled group.

The obtain t-value was 4.191, so it was significant at 0.01 level. Thus, the hypothesis was rejected.

**Hypothesis 4:** After completing the learning experience of Verb among Parts of Speech, there would be not significant difference between mean achievement scores of Verb on post test of experimental group and controlled group.

The obtain t-value was 4.026, so it was significant at 0.01 level. Thus, the hypothesis was rejected.

**Hypothesis 5:** After completing the learning experience of Adverb among Parts of Speech, there would be not significant difference between mean achievement scores of Adverb on post test of experimental group and controlled group.

The obtain t-value was 7.039, so it was significant at 0.01 level. Thus, the hypothesis was rejected.

**Hypothesis 6:** After completing the learning experience of Preposition among parts of speech, there would be not significant difference between mean achievement scores of Preposition on post test of experimental group and controlled group.
The obtain t-value was 1.481, so it was not significant at 0.01 level. Thus, the hypothesis was accepted.

**Hypothesis 7:** After completing the learning experience of Conjunction among Parts of Speech, there would be not significant difference between mean achievement scores of Conjunction on post test of experimental group and controlled group.

The obtain t-value was 3.290, so it was significant at 0.01 level. Thus, the hypothesis was rejected.

**Hypothesis 8:** After completing the learning experience of Interjection among Parts of Speech, there would be not significant difference between mean achievement scores of Interjection on post test of experimental group and controlled group.

The obtain t-value was 2.644, so it was significant at 0.01 level. Thus, the hypothesis was rejected.

### 6.3 Findings

At the end of the experimentation the following findings emerged out:

1. CALL Package was found effective in raising students’ achievement in unit ‘Parts of Speech’ of English grammar.

   It is true that no technology can replace a good teacher. So far as teaching English grammar is concerned, there is a shortage of good teacher especially in remote areas. The CALL Package can meet the need and the demand of a good teacher.

2. The CALL Package was effective in evoking positive reactions towards the use of them in learning English grammar especially ‘Parts of Speech’.

   They liked to learn other subjects by this method. According to them this method was easy to understand, easy to remember, more interesting, and stress less. Concentration increases, discipline is maintained and self-learning is possible through this method.]
6.4 Product Of The Research / Outcomes

The product of the research is the CALL Package and the tool i.e. teacher made achievement tests.

The CALL Programme is developed by the means of MS Office PowerPoint Presentation application tool. The slide show has some unique characteristics. It mentions instructional objectives clearly. It also tests the existing knowledge and helps to recall the pre knowledge. The content is logically divided into parts and is presented in small steps. The basic laws of learning i.e. from known to unknown, from simple to complex, from concrete to abstract etc are used while presenting the content. Inductive-deductive method is used properly. The verbal content is supported by the non verbal content i.e. pictures.

6.5 Observations

Almost all the students were eager to give answers of testing i.e. Test Your Understanding.

They were very quick in filling up the worksheet.

They remembered the sentences of examples even in order.

The girls were quite excited while watching the pictures like small baby, fruits, flowers, garden etc.

On being asked if they would like to teach the whole text this was they were overjoyed and expressed their happiness.

6.6 Educational Implication

From the findings of the present study following educational implications could be drawn.

To bring novelty and to provide visual experiences, CALL Package can be effective and useful in class-room teaching.

CALL Package is found useful to increase the students’ concentration and interest. To satisfy the need of different types of learners especially slow learners, visual learners the teacher should use this method.

The government can arrange training programmes for the teacher to develop such programmes.
The teacher should be inspired to develop and to use Computer Assisted Language Learning Programmes.

The CALL Package is very useful for self-learning, drilling, revision and diagnostic and remedial teaching in class-room.

6.7 Recommendations

Research is a continuous unending process. Every research generates new areas for further researches. Following is the list of some major areas for further researches that may be conducted in the relevant fields.

In other areas of grammar teaching at upper primary level and high-school level CALL Package may be developed and their comparative effectiveness may be examined.

Similar experiments may be conducted in the areas of grammar like tenses, vocabulary, spelling, pronunciation and four basic skills of English language.

Teaching poetry might become more interesting and funny with CALL Packages. With due insight and resourcefulness one may devise a number of varieties of such Packages.

Some lessons of prose in the relevant textbooks like stories, dialogues, descriptions of places etc. may also attract suitable Packages.

In other language teaching like Sanskrit, Hindi or even mother tongue such Packages may give rise to higher achievement on the part of the students. Similar Packages may be developed in any other subject of teaching at school level.

Such other Packages, which might be used for group learning and individualized learning, may be developed.

Future researchers may also think of developing such Packages for the fast learners and slow learners.

In combination with such Packages other variables like teaching aids, technologies and methods may be applied and their joint and individual effectiveness on either gender or in general may be found out and compared.
The present CALL Package was developed on Microsoft PowerPoint Package of MS Office. In the other techniques and languages of the computer development of such programmes should be thought out.

CALL Package can be made more effective by using multimedia effects i.e. audio, visual, motion, three dimension effects, virtual reality etc.

Thus, there are vast and ever expanding horizons of educational researches in similar areas.

6.8 Conclusion

These findings permit us to conclude that, these roles of computer in English language learning i.e. Computer Assisted English Language Learning should be heeded specially by the teachers when computers are invading our schools, our educational system, our society and our life at large.