Chapter V

Findings, discussion, Implications, Recommendations and Conclusion
CHAPTER V
FINDINGS, DISCUSSION, IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter is concerned with the discussion and summary of the findings exposed after the analysis of the data. The present study was determined to find out the effectiveness of multimedia in enhancing reading and writing accuracy of primary school students. Researches recognizing the drawbacks in traditional teaching and guidelines for developments were brought to attention through this research study.

This chapter also deals with a summary of the major findings followed by a discussion, pedagogical implications and recommendations for policy decisions, suggestions for further research and conclusion.

5.2 Findings of the Study

The following are the findings that were obtained by testing the hypotheses quantitatively.

i. Post-test scores of Malayalam medium primary school students in their reading accuracy in English in Control group (CG) and Experimental group (EG) are significantly greater than that of pre-test.

ii. Post-test scores of Malayalam medium primary school students in their writing accuracy in English in CG and EG are significantly greater than that of pre-test.

iii. Post-test scores of English medium primary school students in their reading accuracy in English in CG and EG are significantly greater than that of pre-test.
iv. Post-test scores of English medium primary school students in their writing accuracy in English in CG and EG are significantly greater than that of pre-test.

v. Male and female students of CG and EG do not differ in the post-test in their reading accuracy in Malayalam medium.

vi. Male and female students of CG and EG do not differ in the post-test in their writing accuracy in Malayalam medium.

vii. Male and female students of CG and EG do not differ in the post-test in their reading accuracy in English medium.

viii. Male and female students of CG and EG do not differ in the post-test in their writing accuracy in English medium.

ix. Pre-test and post-test scores of English medium CG and CG, EG and EG in primary school students in their reading accuracy in English are significantly greater than that of Malayalam medium.

x. Pre-test and post-test scores of English medium CG and CG, EG and EG in primary school students in their writing accuracy in English are significantly greater than that of Malayalam medium.

xi. Students of CG in Malayalam medium do differ significantly in the accuracy of their reading skill in English in the post-test from those of the pre-test with reference to the components substituting and verbs, the other components like phonemes, segmenting, vowels & consonants, prefix and suffix, nouns, prepositions, articles and SVO patterns are not significant.

xii. Students of EG in Malayalam medium do differ significantly in their reading skill with reference to the components, phonemes, segmenting, substituting, vowels and consonants, prefix and suffix, verbs, nouns, prepositions, articles and SVO patterns in the post test than that of the pre-test.

xiii. Students of CG in English medium do differ significantly in their reading skill accuracy in English in the post-test than that of the pre-test with reference to the components segmenting substituting. The
other components like phonemes, vowels and consonants, prefix and suffix, verbs, nouns, prepositions, articles and SVO patterns are not significant.

xiv. Students of EG in English medium do differ significantly in their reading skill with reference to the components, phonemes, segmenting, substituting, vowels and consonants, prefix and suffix, verbs, nouns, prepositions, articles and SVO patterns in the post-test than that of the pre-test.

xv. Students of CG in Malayalam medium do differ significantly in their writing accuracy in English in the post-test from that of the pre-test, with reference to the components segmenting, blending, vowels & consonants, prepositions, SVO patterns and degrees of comparison. The other components like phonemes, substituting, prefix and suffix, verbs, nouns and articles are not significant.

xvi. Students of EG in Malayalam medium do differ significantly in their writing skill with reference to the components phonemes, segmenting, substituting, blending, vowels and consonants, prefix and suffix, verbs, nouns, prepositions, articles, SVO patterns and degrees of comparison in the post-test from that of the pre-test.

xvii. Students of CG in English medium do differ significantly in their writing accuracy in English in the post-test from that of the pre-test with reference to the components phonemes, substituting, blending, vowels & consonants, prefix and suffix and SVO patterns. The other components like segmenting, verbs, nouns, prepositions, articles and degrees of comparison are not significant.

xviii. Students of EG in English medium do differ significantly in their writing skill with reference to the components phonemes, segmenting, substituting, blending, vowels and consonants, prefix and suffix, verbs, nouns, prepositions, articles, SVO patterns and degrees of comparison in the post-test than that of the pre-test.
5.3  **Findings of the Qualitative Analysis**

A good qualitative purpose statement contains information about the central phenomenon explored in the study (Schwandt, 2007). Qualitative observations are those in which the researcher takes field notes on the behavior and activities of individuals at the research site (Creswell, 2011) of the students. As mentioned earlier, in this chapter the researcher used intra method of observation to take extensive field note during and after the observation. Behaviour of the students was registered through photographs, audio recordings and video recordings. The findings obtained from these analyses are explained as follows:

i. Students were enthusiastic and listen carefully when the multimedia displayed on the board.

ii. Students were not interested with the traditional method of teaching

iii. Students liked the songs played as videos.

iv. Videos motivated the students.

v. Reinforcement words like Good, excellent were positively reflected in the student’s behaviour.

vi. Teaching grammar with the help of stories and songs were interesting and enjoyable for the students.

vii. Malayalam medium students had little difficulty in understanding few words.

viii. Students of both Malayalam and English Medium were motivated to talk in English.

The findings of the qualitative study corroborate the findings of the quantitative study. The findings from the quantitative and qualitative sources of data used in this study enabled the researcher to provide comprehensive analysis, which considers the language prerequisites of primary school students and the necessity of changing to the traditional method of teaching in order to develop the language skills of primary school students.
5.4 Discussion

Scarcella’s (2002) study stated that students who failed to read in the early grades could not achieve advanced literacy skills without intensive instruction to bridge the gap between their actual level of competence and their performance in academic studies. Reading and writing are important processes in teaching and learning and students need support from their teachers in order to be proficient. According to Ryan & Deci (2000) and Walid (2011) reading and writing instruction are more mutually supportive. Writing is the most neglected of the four skills (National Commission in Writing in America’s Schools and Colleges, 2003). Writing is an important skill that should not be ignored or approached with laxity (Ndukwe, 2015). Reading, according to Aliyu (2006) “is a way of building up from what has been put down in the written form”. Reading challenges our beliefs (Nadell et al., 2005) and opens new horizon (Ikonta, 2004) which is both satisfying and productive (Block & Pressley, 2001). Reading instruction can be described as a process of teaching students the strategies of reading and providing them with opportunities to read, write and converse about text to obtain meaning from written symbols (Nell & Pearson, 2002). Writing is a complex intellectual exercise (Franklin, 2008) that is organized and takes a gradual process (Oguntope & Agbana, 2000; Egbe, 2002) in order to produce a meaningful text clearly and effectively (Latilo & Beckely, 2008). According to Kellner (2002), to the ability to read and write is essential in a society because it is a necessary condition in equipping people to participate in the local, national and global economy and culture. The present study has taken account of this in the attempt to evolve a multimedia package for the teaching of the English language, to primary school students, that could be rarely taught by conventional method for improving reading and writing skills.

Mayer (2005) in research finding explained that the cognitive theory of multimedia instruction elucidates how three types of materials (pictures, spoken, and printed words) are generated within three types of memory storage
(sensory, working, and long-term memories), which characterize diverse cognitive processes in the individual information-processing method. In education, multimedia technology can provide effective results in teaching and learning. This approach is capable of transferring static information to learning patterns that are interesting, dynamic and interactive. The findings of the research study by Fletcher & Tobias (2005) showed that people learn better from text and pictures than from text alone. Low et.al (2005) asserted that whenever text and pictures are depicted together, the modality principle asserted that instruction can be further encouraged by using oral instead of written text (Low & Sweller, Carney & Levin, 2002; Ginns, 2005). A plethora of research literature (Levie & Lentz, 1982; Levin, Anglin, & Carney, 1987; Peeck, 1994; Shilpa & Sunita 2016) demonstrates that Educational technology such as multimedia plays a fundamental and crucial role in the teaching and learning process at primary level. It makes teaching and learning process more effective and successful. Suleman (2011) in his study revealed that the majority of teachers were of the opinion that education technology ensures students’ participation, enhances motivation, helps in effective teaching, holds the student’s attention, and enriches the teaching learning process. Nomass (2013) found that Multimedia programs can augment the motivation for students to increase their vocabulary and reading skills. Issa, Cox, & Killingsworth (1999) asserted that Multimedia-based instruction can be efficient and effective for the following reasons (1) it is self-paced learning: the individualized pace of the learning allows students to break down the group instructional setting, which often prohibits some people’s expected development; (2) it includes video/audio production, enhancing the learner’s interaction with the course material through less bridging effort between the learner and the information being processed. Thus, the present study used a multimedia package to enhance the reading and writing skills of primary school students. The present study found that a technology integrated multimedia package was effective in augmenting reading and writing skills of primary school students.
5.5 Pedagogical Implications of the Present Study

The major findings of the present study revealed that post-test scores of the fifth standard students in reading and writing skills are significantly greater than that of the pre-test. It was found that there was a significant difference exists between the pre-test and post-test test in the reading and writing skills with reference to the components of reading and writing, which clearly shows the positive influence of effectiveness of integration of educational technology in English language teaching in enhancing the reading and writing skills of fifth standard students.

It was also noted that there was a marked increase in the post test reading components like phonemes, segmenting, substituting, vowels and consonants, prefixes and suffixes, verbs, nouns, prepositions, articles, SVO patterns, and reading comprehension and post test writing components like phonemes, segmenting, substituting, blending, vowels and consonants, prefixes and suffixes, verbs, nouns, prepositions, articles, SVO patterns and degrees of comparison when compared to the pre-test, in both Malayalam and English medium, which claims the effectiveness of integration of educational technology in English language teaching. Hence it is suggested that the multimedia package treatment should be given to both mediums of control groups for the better achievements. On the basis of the statistical analysis and qualitative analysis of the data, the pedagogical implications have been evolved and discussed.

i. From the findings of the study it is evident that the multimedia package was effective in enhancing the reading and writing skills of fifth standard students and the same may be used for all the other primary class students.
ii. Few components of reading and writing skills were explored in this study. All the components of reading and writing skills to be explored in order to find out the contribution of each component towards reading and writing.

iii. English language teachers and educators should involve themselves in this type of research which will be useful for them while developing the curricula and assessment techniques.

iv. The government is providing ICT training for the teachers. Every teacher should utilize the opportunity and use the same in the class rooms.

v. Technology integrated English language teaching is essential in the present digital era classrooms. Teachers of English should have the sound pedagogical knowledge in order to prepare their own multimedia.

5.6 Recommendations for future policy decisions

Research in general and educational research in particular should be undertaken to contribute to recommendations for future policy decisions on the basis of the findings of the research. The present study gives rise to the following recommendations for policy decisions in enhancing the reading and writing skills of primary school students.

i. Using technology in learning a second language has become a real necessity nowadays. Hence, the orientation on the development of multimedia package may constantly be made available to the teachers at all levels as the multimedia package was proved to be effective in the present study.

ii. Proper infrastructure should be developed in the educational institutions for the development of multimedia by the teachers.

iii. As teachers’ ICT skills and knowledge of multimedia components are positively impacted by the development of multimedia package, the
concerned schools should arrange appropriate training programmes for the teachers to get mastery over the ICT skills and multimedia components.

iv. Teachers of English language at primary level should be trained to utilize the e-resources from the internet for the development of multimedia package.

v. Teachers at primary level should be trained to diagnose the reading and writing difficulties of the students in order to enhance their reading and writing skills.

vi. Language teachers play a key role in developing language skills of the students. Thus, teachers should be updated with the recent developments in language teaching and learning.

vii. The teachers are expected to provide a language rich environment in their classrooms; hence the medium of instruction can be English at primary level.

viii. The Curriculum should be framed in such a way that it should enhance the reading and writing skills of primary school students.

ix. Teachers of English at primary school need to develop strategies to engage their students with delightful experiences of studying English language.

x. Teachers should use a variety of approaches to integrate ICT into the teaching of English.

xi. English language teachers should encourage their students to use technology in order to develop their language skills.

5.7. Suggestions for further research

The shift-of-attention effect should be investigated in future studies in more detail, shedding more light on reasons (“why”), conditions (“when”) and learner characteristics (“for whom”). By doing so, future studies might also take into account the method of eye-tracking as a means of analyzing children’s division of visual attention. In order to explore the shift-of-attention effect, the
multimedia and modality principles were used as an indirect basis for assessment in the present studies, rather than taking direct measures into account, such as eye-tracking (Schmidt-Weigand, 2006).

i. Through administering a diagnostic test it was found that the students in the present study were weak in reading and writing skills. A further study may be attempted to explore the causative factors of the fragile conditions of the students at the primary level.

ii. A study can be conducted to find out the effectiveness of multimedia packages in reading and writing skill development of students at primary level from different countries through internet inquiry.

iii. The findings of the present study revealed that teaching with multimedia package could not completely enhance the reading and writing skills of the fifth standard students. Further studies can be conducted to find out various effects of e-resources to enhance the language skills.

iv. The multimedia package was found effective in enhancing the reading and writing skills of students. Different packages should be prepared for teaching listening and speaking skills.

v. Attitude towards ICT can be assessed in further studies.

5.8 Conclusion

Multimedia has become an indispensable tool in English language classrooms to find the best ways for both students to learn effectively and teachers to teach efficiently (Sharma & Pooja, 2016). Reading and writing are the important skills in learning of English and the researcher has given emphasis to both of these skills. The multimedia package made learning realistic and enjoyable. A Multimedia learning environment could maintain the learners’ motivation, increase interaction, promote achievements, create virtual scenario, integrate various kinds of media contents and technology into a single interface, and help learners to learn language (Jones, Squires, Hicks, 2008). In the light of the above research findings, it is felt that the present piece of
research may contribute to alleviate the difficulties in reading and writing and enhance the reading and writing accuracy of English language among students with the creative strategy. It is hoped that suitable multimedia instruction in reading and writing skills may be given for disadvantaged students for a better framework in enhancing reading and writing accuracy of primary school English learners. Sharma (2013) recommends that interactive multimedia is more appropriate than the traditional direct method of teaching English in relation to students’ achievement and retention. Satyaprakasha & Sudhanshu (2014) founds that Multimedia significantly promote knowledge, understanding, application and also achievement. The findings of the study revealed that students were motivated and interested when engaged in technology integrated teaching and learning. Hence it is clear that technology integrated teaching will enhance the interest and the outcome as well.