

## **EFFECTIVENESS OF INFORMATION COMMUNICATION TECHNOLOGY IN TEACHING READING COMPREHENSION WITH COMMUNICATIVE LANGUAGE APPROACH ON THE ACADEMIC ACHIEVEMENT OF STUDENTS AT SECONDARY SCHOOL LEVEL IN PAKISTAN**

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### **ABSTRACT**

Information communication technologies have abounded classrooms with a celestial range of new communication potentials. The present research aim was to determine the effectiveness of Information and Communication Technology (ICT) in teaching reading comprehension through communicative approach at secondary school level in Pakistani situation. In Pakistan various teaching methods have been used for making the English teaching process more effective but seldom have practiced using information communication technologies to help students in acquiring language skills along with its accurate recognition, understanding and pronunciation of new vocabulary. It enables the learner to recognize the difficult things in a very simple way presented through simulations when it is added to real situations. . The objectives of the study were : ( a) to find the effectiveness of teaching English reading comprehension to class IX through communicative language approach on academic achievement of students (b) to explore the effectiveness of teaching English reading comprehension to class ix through communicative language approach on academic achievement of students with the use of Information Communication Technology(ICT), (c) to find out the difference on academic achievement of students in teaching English reading comprehension to class IX through Communicative Language Approach (CLT) with and without the use of Information Communication Technology (ICT) and (d) to determine the effectiveness of ICT on the academic achievement of students in English language at secondary school level. To conduct the research, the population considered was all male and female students studying English at secondary level from Fauji Foundation Model schools affiliated with the Federal Board of Intermediate and Secondary Education (FBI&SE). .A sample of 100 students were taken from fauji foundation Model School Haripur, academic year 2016-2017. Two groups were made on the basis of 1st quarter examination results of students in English. Stratified random sampling technique was used to select the required sample. The sample was divided into two equal groups, i.e. experimental group and control group. Every group contained fifty students, which were further divided into equal numbers of male and female

students. The students of the experimental group were taught through ICT, whereas the students of control group were taught English without using ICT. Achievement post test was administered at the completion of experiment after twenty four week. All tests were scored by English teacher (researcher) using ICT. The topics taught to both the groups were exactly the same which were mainly from the text book and comprehension exercises from grammar and composition for secondary classes. Reading included lessons from the text book and comprehension exercises from High School English Grammar and Composition by Wren and Martin. For statistical analysis, t-test and Analysis of Variance (ANOVA) were applied. Having compiled the results of students on post-test the implementation of ICT was found effective in teaching English as compared to teach English without the use of ICT for male and female students at secondary school level. On the basis of the findings of this study, various recommendations were made: (i) ICT might be introduced as a separate discipline in the curriculum of Pakistan from the primary level. (ii) For students to become more familiar with the use of ICT, the libraries in the educational institutions might be converted to on-line libraries. (iii) To educate students in the field of technology, the vital role of teachers might become more effective by giving them in-service and before-service training for using technology.

**Keywords:** Information communication technology, communicative language approach, effectiveness, achievement. Comprehension, curriculum.

## INTRODUCTION

Effective English teaching and learning is based on the use of modern information communication technology and its modern gadgets which empowers English language teachers to incorporate a variety of modern texts (Smithson, 2005). Examples of such available resources include a language exercise program, comprehension questions, intimate tests, vocabulary-based tests and so on.

Implementation of some methodology is required in any teaching-learning environment in order to ease the learning process. In the language teaching context, communicative language teaching (CLT) remained a dominant methodology. Lindsay and Knight (2006) suggest that the communicative language teaching (CLT) is having significant effects on language based teaching practices all over the world. Vast varieties of skills can be developed among the learners with the aid of vast range of activities. These activities include communication in oral and written comprehension, along with the expression in oral and written form. The combination of this approach along with Information communication technologies brings improvement in student's learning of English language and specially in recognition of new vocabulary and main idea of any piece of writing.

## STATEMENT OF THE PROBLEM

The study was designed to bring improvement in methods of teaching English reading comprehension at secondary level by comparing the present level of academic achievement with the academic achievements of students taught through information communication technology (ICT). An experiment was conducted to see the effects of ICT on the academic achievements of

students as compared to present method of teaching reading comprehension in the subject of English at secondary level.

## OBJECTIVES OF THE STUDY

- i. To find out the effectiveness of teaching English reading comprehension with CLT on the academic achievement of students at secondary school level.
- ii. To determine the effectiveness of teaching reading comprehension in English with information communication technology on the academic achievement of students at secondary school level.
- iii. To compare the effectiveness of using ICT in teaching reading comprehension with traditional method of teaching on the academic approach of students at secondary school level.
- iv. To incorporate some suggestions by using ICT that decrease the problem in teaching and learning reading comprehension in English at secondary level. .

## NULL HYPOTHESES OF RESEARCH STUDY

The following hypotheses were tested to achieve the objective of research study:

H<sub>01</sub> There is no significant difference between academic achievements of female students taught text with ICT and without ICT on pre test.

H<sub>02</sub> There is no significant difference between academic achievements of female students taught comprehension passages with ICT, and without ICT on pre test.

H<sub>03</sub> There is no significant difference between academic achievements of female students taught text lessons with ICT and without ICT on posttest.

H<sub>04</sub> There is no significant difference between academic achievements of female students taught comprehension passages with ICT, and without ICT on posttest.

H<sub>05</sub> There is no significant difference between academic achievement of male students taught text with and without ICT on pre test.

H<sub>06</sub> There is no significant difference between academic achievement of male students taught comprehension passage with and without ICT on pre test

H<sub>07</sub> There is no significant difference between academic achievements of male students taught text with ICT and without ICT on posttest.

H<sub>08</sub> There is no significant difference between academic achievements of male students taught comprehension passages with ICT, and without ICT on posttest.

## SIGNIFICANCE

This study is significant for both teachers and students in teaching learning of reading comprehension in English with ICT. English is not our native language and it is not easy to know about the meanings, main idea of foreign language. The use of ICT help the teacher to prepare, produce, store and get back their materials easily and swiftly. The availability of different texts, different topics, quizzes, exercises help in saving the teacher time. It is also significant for students to help them in writing and editing their work in order to produce a well published work. The induction of ICT into English curriculum may help to arouse interest, promote understanding, and built confidence in utilization of new vocabulary with understanding in their daily routine.

Knowing the main idea of any written passage , lesson or topic in learning English language is essential and the use of ICT in teaching comprehension may also help the students to enhance their learning and to meet the demands of the fast moving world of modern technology.

## **DELIMITATIONS OF THE STUDY**

This study was delimited to  
Text book lessons  
Comprehension passages  
Computer , multimedia and USB  
Fauji foundation school in Haripur City.  
Students of class ix only.

## **LITERATURE REVIEW**

In the existing scenario the use of technology has entered dramatically into the field of teaching and learning process (Okoro & Ekpo, 2016). Teaching and learning is the ability to share and grow knowledge. When learning a second language, such as English, the presence of a teacher in the classroom is very important. Learning a second and another language does not reflect the same learning experience for learners because others have difficulty trying to master the language, which is why they are so strange, frightening and flawed. Corder (1990: 111) suggests that 'learning' can only be done in the right place and it is common for teachers to create a good learning environment. "Brown (2001) argues that a good teacher must have good language teaching qualities that include four elements: technical knowledge, reading skills, interpersonal skills, and personal qualities. Similarly, Lindsay and Knight (2006) suggest that for a teacher to be responsible, he must understand the needs of learners' language and responds directly and name lessons that reflect the needs of the students.

Reading is an acceptable language process. In reading , there is interaction Flurshing Creativity and Literacy between language and thought as the author sets thought as language and the reader determines language as thought. In view of this, Nwaiwu (2007) has chosen that reading is a form of communication where the collector (reader) attempts to interpret the mind of the translator (writer). By reading, the reader sees, hears, and interviews a writer whose mayor may be unfamiliar. Reading is a different process There is a certain understanding of reading, such as fluency and word recognition, which can be learned over time.

In history, most of the time, cognitive comprehension studies are more focused on learning such as the use of separated skills, for example, identifying words, determining their main ideas, identifying relationship and outcome, making comparisons or separations, and sequencing. Therefore, the use of these skills is based largely on the understanding of learning to read. Based on the traditional system, the theory of understanding follows what steed is called to explain, practice, and the process of assessment. Under this program, the facilitator calculates a specific skill that the student needs to use, practice by reading workbooks and, finally, an assessment of

that particular skill. Therefore, teaching has not been done sufficiently to enable students to learn how and when to use those skills, or to develop an understanding based on these skill.

Comprehension techniques are based on a comprehensible program or set of complementary steps that the educator uses to gain comprehension of the text he or she is reading. Therefore, cognitive strategies enable students to participate in learning and to better manage their learning process. Therefore the understanding of learning is based on the various skills promoted through the various learning strategies that make the communication healthy between the learner and the teacher.

There are various methods, approaches and techniques that can be used by teachers in conducting teaching-learning of English (ESL or EFL) in the classroom viz: the Grammar Translation Method, the Audio-lingual Method, the Total Physical Response Method, the Communicative Language Teaching (CLT) Method, the Teaching Productive Skills and Communicative Activities Method and so on. Some classroom action research studies have been done related to the improvement of reading skills. Using CLT is an effective way to improve students' reading skills. (2) The effectiveness of the teacher and the performance of the learner has improved significantly during the learning-learning processes in the classroom. ... The CLT approach has transformed the atmosphere of a learning class for the better. Learning is a very important skill for students in English as a Foreign Language (EFL) concept, and the understanding of foreign language learning is an integrated and complex process influenced by language and understanding factors, social and cultural factors, as well as positive and motivating factors (Lu 1989, Xu 1999). Strengthened reading skills enable EFL students to make greater progress and achieve greater progress in all fields of study (Anderson, 1999). Although it is very important to attach the learning of teachers and students to our environment and it is said that reading as a skill is developed in the CLT but weakness were still there so ICT was applied along with CLT for improving the reading comprehension.

The assimilation of ICT is particularly playing constructive role for the students who are learning English as a second language. (Davis (2000). Learning English language has now become the fundamental part of education in today's world, and beside this, the progress in technology has very high impact towards the development of education, especially in English language teaching and learning procedure. As English is not the native language in our country so its teaching is one of the difficult task and teachers are busy to create interactive teaching and learning to develop student's interest in acquiring the language.

ICT also plays a key role in helping students access resources from original sources. By receiving articles from overseas magazines, readers can find it by sitting in front of computers connected to the Internet. ICT facilitates the teaching and learning process by providing access to a variety of sources and essays. During this ICT education, student-centered approach is developed as students can access and learn these technologies at their own pace, thus improving student independence (Maduabuchi, 2007). On the other hand, it provides the basis for learning a variety of subjects. Whatever aspect of life one needs, one finds that the ability to read well enhances one's ability to

function properly. It is one of the skills of English as a second language. Mduabuchi (2007) argues that reading is a connection between the reader and the resulting text. It is read in a certain way. ICT is a very important tool for improving teaching and learning (Stockwell, 2016). In any case the understanding of a forgiving language needs encouragement, so for educators, ICT is a practical resource: a way to be brought into the classroom, a source of relevant and relevant literary genres that can easily create student interest. And in addition it provides opportunities for learners to communicate effectively and to develop reading skills effectively. ICT is an important tool for research, design and response, viewing and representation in English.

## RESEARCH METHODOLOGY

### Population

The population of the study was all male and female students studying English language in Fauji foundation schools at secondary level affiliated with Federal Board of Intermediate and secondary education.

### Sample of the Study

Fauji foundation Model school was selected through random sampling to conduct the experiment. There were two sections one girls and other boys of class IX. Total sample was 100 of students. Fifty students were in experimental group and taught English with ICT and fifty students were in control group and taught English without ICT.

### Research Instruments

A teacher made test of 100 items were used as a pretest and posttest. Pre test and posttest was research instruments. The syllabus was based on text book and English Grammar and Composition for secondary classes.. twelve lessons from text book and twenty four passages for teaching reading comprehension by utilizing ICT approach were prepared. Other lessons were also prepared with the same ratio by using the CLT approach. All topics were selected after detailed consultation with the experts.

### Treatment

After formation of two groups based on their 1<sup>st</sup> quarter examination, pre test was conducted from both the groups the result of which indicated that both the groups were equal. For conducting the research experiment, two equal groups were made named as experimental group and control group. Experimental group was taught English reading comprehension with the help of using ICT. On the other hand, to the 'control group', English reading comprehension was taught in communicative language teaching approach without using the ICT.

### Time for the study

The timings of the study was based on twenty four weeks (24) starting from August 2015 to Feb 2016) in classrooms and in computer lab of the Fauji Foundation Model School Haripur.

**DATA COLLECTION** For data collection, two times data based on pretest and the posttest were used. In pretest, data was collected on academic achievement for all students including male and

the female. For posttest, we administered the academic achievement after the group received the treatment.

## DATA ANALYSIS

The data analysis is based on tabulation, mean, and t-test. The t-tests were used to calculate difference between the two at 0.05 levels. For analysis purpose, Statistical package for social science (SPSS) version 16 was used. Research objectives were achieved by statistical analysis by applying t-test and Factorial design (2x2), Analysis of Variance (ANOVA) on the scores of post-test attained by the students of experimental and control groups.

## ABBREVIATIONS

ICT Information communication Technology  
CLT Communicative Language Teaching  
FFMS Fauji Foundation Model School  
ELT English Language Teaching  
SPSS Statistical package for social sciences.

## DELIMITATIONS OF THE STUDY

This study was delimited to  
English Grammar  
Computer , multimedia and USB  
Fauji foundation school in Haripur City.  
Students of class ix only.

## RESULTS

**Table 1: Significance of difference between mean pretest score of experimental and control group's girls on academic achievement**

Sr	Topics	Groups	N	Mean	SD	t-value
1	Text book lessons Reading	Exp	25	11.08	1.44	.474
		Con	25	11.28	1.54	
2	Reading passages from Grammar book	Exp	25	16.60	2.81	.589
		Con	25	16.12	2.94	

Value of t at 0.05=1.96

df=48

1 Result of above table indicates that The mean score of academic achievement in terms of comprehension for girls in control group was ( $M=11.28$ ); while the mean score of academic achievement in terms of comprehension for girls in experiment group was ( $M=11.08$ ). The calculated t-value is less than the tabulated value ( $t=.474 > 1.96$ ) which shows that the differences between the mean score of both groups were statistically insignificant at 0.05 significance level. The results indicate that there was similar score between both groups with respect to academic achievement before the beginning of the treatment.

2 The mean score of academic achievement in reading comprehension passages for girls in control group was ( $M=16.12$ ); while the mean score of academic achievement in comprehension passages reading of girls in the experimental group was ( $M=16.60$ ). The calculated t-value is less than the tabulated value ( $t=0.589 < 1.96$ ) which shows that the differences between the mean score of both groups are statistically insignificant at 0.05 significance level. The results indicate similarity in scores for both groups before the beginning of the treatment.

**Table 2: Significance of difference between mean posttest score of experimental and control group's girls on academic achievement.**

Sr	Topics	Groups	N	Mean	SD	t-value
1	Text book lessons Reading	Exp	25	14.64	2.34	5.07
		Con	25	11.60	1.87	
2	Reading passages from Grammar book	Exp	25	19.92	2.79	4.05
		Con	25	16.76	2.71	

Value of t at 0.05=1.96

df=48

1 The mean score of academic achievement in reading lessons from text book for girls in control group was ( $M=11.60$ ); while the mean score of academic achievement in terms of reading for girls in experiment group was ( $M=14.64$ ). The calculated t-value is greater than the tabulated value ( $t=5.07 > 1.96$ ) which shows that the differences between the mean score of both groups are statistically significant at 0.05 significance level. The results are related to the hypothesis number  $H_3$  where the null hypothesis was that there is no significant difference between academic achievements of female students taught comprehension with ICT and without ICT. Based on the t-statistics, we reject the null hypothesis and accept the alternative hypothesis. The findings indicate that girls in experiment group performed better than the girls in control group. The findings also

indicate that students who received treatment under experimental group using the ICT treatment performed better than the students who received treatment under control group without using the ICT.

The mean score of academic achievement in teaching comprehension passages for girls in the experimental group was ( $M=19.92$ ); while the mean score of academic achievement in terms of tenses for girls in control group was ( $M=16.76$ ). The calculated t-value is greater than the tabulated value ( $t=4.05 > 1.96$ ) which shows that the differences between the mean score of both groups are statistically significant at 0.05 significance level. The results are related to the hypothesis number  $H_4$  where the hypothesis was that there is no significant differences between the academic achievement of female students taught reading passages with ICT and without ICT. Based on the t-value, we reject the hypothesis and accept the alternative hypothesis. Thus, we conclude that girls in experimental groups perform better than girls in control group in the academic achievement on the post-test in reading comprehension from grammar book at the secondary level. The findings also support the notion that students who have received ICT treatment perform better than students who did not receive the ICT based treatment.

**Table 3: Comparison of mean scores of experimental and control group boys on pre-test of academic achievement (N=25)**

sr	Topics	Groups	N	Mean	SD	t-value
1	Text book lessons Reading	Exp	25	11.08	1.44	.795
		Con	25	11.22	1.74	
2	Reading passages from Grammar book	Exp	25	19.40	2.90	.049
		Con	25	19.36	2.84	

Value of t at 0.05=1.96

df=48

1 Result from the above table shows that mean score of reading comprehension from the text book lessons for boys in experimental groups ( $M=11.08$ ); and mean score for comprehension for boys in control group ( $M=11.22$ ). The t-value calculated is less than the tabulated value at 0.05 significance level which shows that the difference between both means score of comprehension on a pre-test of academic achievement is insignificant ( $t=.795 < 1.96$ ).

2 Results given in table above shows that the mean score in comprehension for boys in the experimental group ( $M=19.40$ ) and the boys in control group ( $M=19.36$ ). The t-value calculated is less than the tabulated value at 0.05 significance level which shows that the difference between both means score in comprehension on the pre-test of academic achievement is insignificant ( $t=0.049 < 1.96$ ). So the hypothesis  $H_1$  is accepted

**Table 4: Comparison of mean scores of experimental and control group boys on post-test of academic achievement. ( $N=25$ )**

sr	Topics	Groups	N	Mean	SD	t-value
1	Text book lessons Reading	Exp	25	13.20	1.11	5.81
		Con	25	11.72	1.82	
2	Reading passages from Grammar book	Exp	25	18.08	2.97	3.85
		Con	25	16.84	2.61	

Value of t at 0.05=1.96

df=48

- 1 Mean score of experimental group boys ( $M=13.92$ ) is greater than the mean score of control group boys ( $M=11.72$ ) in comprehension ability and the calculated value of t is (5.81) is greater than the table value of t (1.96) at 0.05 level ( $6.81 > 1.96$ ). Thus Null hypothesis  $H_{07}$  (There is no significant difference between the academic achievement of male student taught comprehension with ICT and without ICT) is rejected. It concluded that student of experimental group boys scored better than the student of control group boys in the academic achievement on the post-test in comprehension at the secondary level. This supports the finding that the students of the experimental group under ICT treatment scored significantly higher than the students of the control group who are taught comprehension without the use of ICT.
- 2 In learning tenses of experimental group boys ( $M=18.08$ ) is greater than the mean score of control group boys ( $M=16.84$ ) and the calculated value of t is (3.85) is greater than the table value of t (1.96) at 0.05 level ( $3.85 > 1.96$ ). Thus Null hypothesis  $H_{08}$  (There is no significant difference between the academic achievement of male student taught comprehension passages with ICT and without ICT) is rejected. It concluded that student of experimental group boys scored better than the student of control group boys in the academic achievement on the post-test in learning tenses at the secondary level. This supports the finding that the students of the experimental group under ICT treatment scored significantly higher than the students of the control group who are taught tenses without the use of ICT.

## CONCLUSION

The research study shows that the students who were taught English with the use of ICT develops more positive attitude towards language learning as compared to those who were taught English without using ICT. It was concluded that ICT was more effective on the academic achievement of students in teaching /learning grammar at secondary level. It was found that ICT is very effective in benefiting students' learning in quality learning activities. From findings, it was concluded that Teaching English with the use of ICT improves English language skills such as reading comprehension, understanding of cohesion of sentences and new vocabulary. The result shows that teaching of English reading comprehension with the use of ICT was more effective on the academic achievement of students. So the use of ICT in understanding of any piece of writing which is in English language is recommended in future to make the students more vigilant and confident.

## DISCUSSION

The paper has explored how multimedia technology, power presentations, USB and websites can be used in the teaching of various aspects of reading skills. Research, however, has shown that information communication technology encompasses a number of devices that a teacher can effectively use in a lesson to facilitate delivery, learning activities and assessment.

In short, ICT itself cannot solve the educational problems on its own. Whenever used wisely, ICT will allow to create countries to expand access and promote the type of training. The current need is the integration of ICT into English language teaching. Commitment learning can be developed to equip students to learn things faster and more effectively.

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