

EFFECTIVENESS OF ICT MEDIATED COLLABORATIVE LEARNING APPROACH ON DEVELOPMENT OF LANGUAGE COMPETENCY IN ENGLISH

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Abstract

This present study is significant for two reasons. First, it proposes a new model of teaching within second language learning by integrating ICT and collaborative learning technique for developing the communicative competence of the learners in English language as well as their achievement in the same subject. By conducting this experimental study researcher tried to develop the language competency among the learners of English at elementary level (class VIII). As it seemed collaborative approach of language learning along with ICT will give ample opportunity to students to learn the communication aspect of language. The findings of the study revealed that ICT mediated collaborative learning is capable of enhancing students performances in English. As the Collaborative learning approach of Teaching English makes the learners acquire a fluent command of the linguistic system, the learners are capable of producing language which is acceptable. The results showed that Collaborative learning approach and ICT together was beneficial for the development of language competency among the learners of class VIII. Moreover, the learners are encouraged to take into account of the social context in which interaction takes place and thereby they are trained in social interaction activities.

Key Words: Collaborative Learning, Language Competency, Information and Communication Technology (ICT), Teaching of English, Zone of Proximal Development (ZPD).

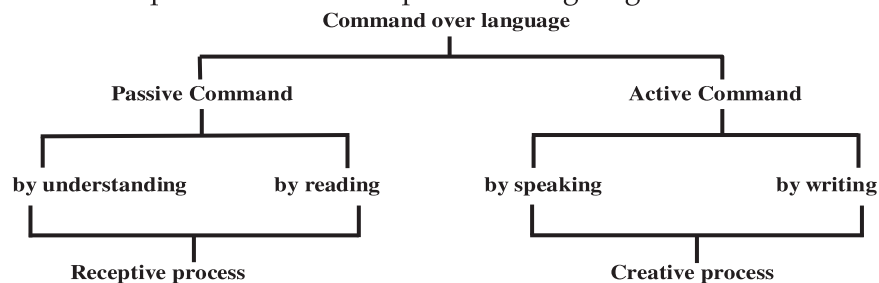
INTRODUCTION

It is a widely known fact that majority of our students are unable to communicate in English fluently and confidently, despite the fact that English is taught to them from an early stage of childhood. A number of factors that account for this lack of L2 fluency in the students includes unsuccessful language policies, unproductive

curriculum, untrained teachers, traditional teaching techniques, over-crowded classrooms, lack of motivation, teacher-centered activities and so on (Malik, 1996, Ahmed, 2004). But when we look at the teaching system from the perspective of English language teaching, one factor appears to be more responsible for this deficiency of communicative skills in our learners that is the lack of concentration on teaching English for communicative purpose. The methodology widely used in our classrooms is teacher centered where teachers are the only active participants during the whole teaching process, they explain, dictate and inform the learners about what to do and what not to do without giving any opportunity to the learners to actively engage themselves in the learning process (Ahmad & Rao, 2013). The National Curriculum Framework-2005 (NCF 2005) lays stress on the use of child's mother-tongue as a medium of learning at the primary level. At the same time Teaching of English in an appropriate manner to enable the child to acquire sufficient proficiency in the language has also been given due importance in the NCF-2005.

Language competence or communicative competence is a term which was coined by DELL HYMES in 1966 in reaction to Noam Chomsky's (1965) notion of "linguistic competence". It is the intuitive functional knowledge of that particular language, and having clear perception and the capability to utilize that understood language to explicate and introduce meaningful texts applicable to the environment and situation in which they are used.

It can be explained with the help of following diagram.



Source - Role of English language in Present scenario in India, Manish Kumar JASRAL, 16 (4), Mar, (2019).

Collaborative learning has been widely applied in education since 1980s for its positive effects such as enhancing motivation and critical thinking skills as well as improving academic performance and long-term retention (Brown, 2008; Dillenbourg, Baker, Blaye, & O'malley, 1996). During the collaborative learning process where social interdependence and interaction take place (Salomon & Globerson, 1989), interpersonal skills, positive attitudes towards group work, and social relationships are also developed. On the other hand, technology, whose applications have been widely used in language education, was found to increase learning motivation and interest, develop positive attitudes towards learning, results in higher-order thinking and better recall, as well as improve language skills (Stepp-Greany, 2002). The advancement of technology has triggered its combination with collaborative learning and application in language classroom. It was assumed that this combination can bring about benefits from both sides. A number of studies advocating technology in support of collaborative learning revealed that the integration of computers into classrooms helps to increase collaborative behavior and social interaction among learners. Learning collaboratively in a technology-based environment was found to generate better learning effects than learning individually. Communication technologies, such as mobile phones and the Internet, are means of bringing people together. The marriage between the computer and collaborative learning has resulted in a new paradigm of learning.

RATIONALE OF THE STUDY

In recent years, the implementation of collaborative language learning in second language teaching has been gaining momentum (Gibbons, 2002). This approach makes second language learning a shared process in which learners work collaboratively towards achieving certain goals and tasks. This concept of collaborative language learning and teaching is based on Lev Vygotsky's sociocultural theory which "combines social environment and cognition" arguing that children learn through social interactions which lead to step-by step changes in children's thought and behavior. Collaborative learning has become not only an essential

concept in the field of education (Kohonen, 1992; Nunan, 1992) but also a well-known and widespread activity in most English as a Foreign Language (EFL) and English as a Second Language (ESL). The findings of research conducted into the use of CL in second language learning have been positive (e.g., Storch, 2002, 2003, 2005; Swain & Lapkin, 1998; DiCamilla & Anton, 1997). The results indicate that CL has a positive effect not only on accuracy in grammar but also on communicative competence. The use of computers and the Internet have changed traditional methods of teaching and learning (Buzzi, Buzzi, Leporini, & Mori, 2012). Fillion, Koffi and Booto Ekionea (2012) ask the best pedagogy to use in teaching. Khaled Beshar Albeshar (2012) and Ismat Jabeen (2013) also conducted his study on English language teaching: implementing collaborative language learning approach and found collaborative language learning paradigm can effectively facilitate the learners to enhance their communicative skills as a great deal, if implemented carefully and systematically.

OBJECTIVES OF THE STUDY

- I) To study the effectiveness of ICT Mediated Collaborative learning Approach on development of English language competency of class VIII students.
- ii) To study the effectiveness of ICT mediated collaborative learning approach on development of language competency in prose and poetry.
- iii) To study the effectiveness of ICT mediated collaborative learning approach on development of language competency of class VIII students in relation to gender.

HYPOTHESES OF THE STUDY

- i) There is significant effect of ICT Mediated Collaborative learning Approach on development of language competency of VIII students in English.
- ii) There is no significant difference between the mean test score of class VIII student in prose and poetry taught through ICT mediated collaborative learning approach.

- iii) There is no significant difference between the mean score of boys and girls of class VIII students taught through ICT Mediated Collaborative learning approach.

DESIGN OF THE STUDY

This study uses experimental design which is the two group Pretest-Post test equivalent Group Design. In this present study the control group were not received any treatment where else the experimental group had received treatment in the form of teaching through ICT and collaborative learning approach.

SAMPLE

In the present study, 180 students from two CBSE Schools studying in two sections (A and B) of class VIII were taken as a sample for the study. In which 90 students were treated as experimental group and the rest 90 students were treated as control group. These students were separated into two groups of experimental and control group on the basis of their intelligence test, each student of experimental group was equated with the corresponding student in the control group.

TOOLS

A unit wise lesson plans based on ICT mediated collaborative learning Approach was prepared and used as instructional tool. An achievement test was constructed and standardized. The achievement test on English consisted of 100 marks developed on the basis of giving weight age to- Objectives like- Knowledge, Understanding, Application, and Skills. The test was divided into two parts of 100 items each. First part belonged to listening and reading comprehension and second part related to speaking and writing ability. Listening and Reading comprehension further divided into literal level of comprehension and evaluative level of listening and reading comprehension which comprised 40 and 60 items respectively. Content like the elements of language (vocabulary, structure, grammar), subject matter in literature i.e.

from prose and poetry, were there. Questions like- essay type, short answer type, objective type etc. were included in the text.

EXPERIMENTAL PERIOD

The researcher, herself conducted the experimentation and provided the students with the required assistance and help to enhance their targeted skills within the collaborative teaching-learning framework. The whole teaching-learning process was carefully monitored and observed. The ICT mediated collaborative training in the experimental CL group consisted of putting the students in sub-groups of five members in total six groups, and making them tackle the task collaboratively. After the completion of three month experimentation, a post-test was conducted to assess the performance of the students. Collaborative approach is applied in one section (Experimental group) and another section (Control group) is taught by the traditional method.

ANALYSIS AND INTERPRETATION OF DATA

The purpose of the study was to discover whether applying a collaborative learning strategy in classrooms could improve and develop the students' Language skills. The major objective of the study was to test the effectiveness of the ICT mediated collaborative learning on development of language competency of students in English

The major objective of the study was to test the effectiveness of the ICT mediated collaborative learning on development of language competency of students in English. The analysis is done according to the formulated hypotheses which are as follows:

- i) There is significant effect of ICT Mediated Collaborative learning Approach on development of language competency of VIII students in English.
- ii) There is no significant difference between the mean test score of class VIII student in prose and poetry taught through ICT mediated collaborative learning approach.

- iii) There is no significant difference between the mean score of boys and girls of class VIII students taught through ICT Mediated Collaborative learning approach.

The analysis of data in the light of above hypotheses has been presented as below.

Test of Hypothesis 1 : The first hypothesis was for studying the effectiveness of ICT Mediated Collaborative learning Approach on development of English language competency of class VIII students. For this a pre test and post test was administered before and after the treatment on both groups and data were collected and analyzed as follows:

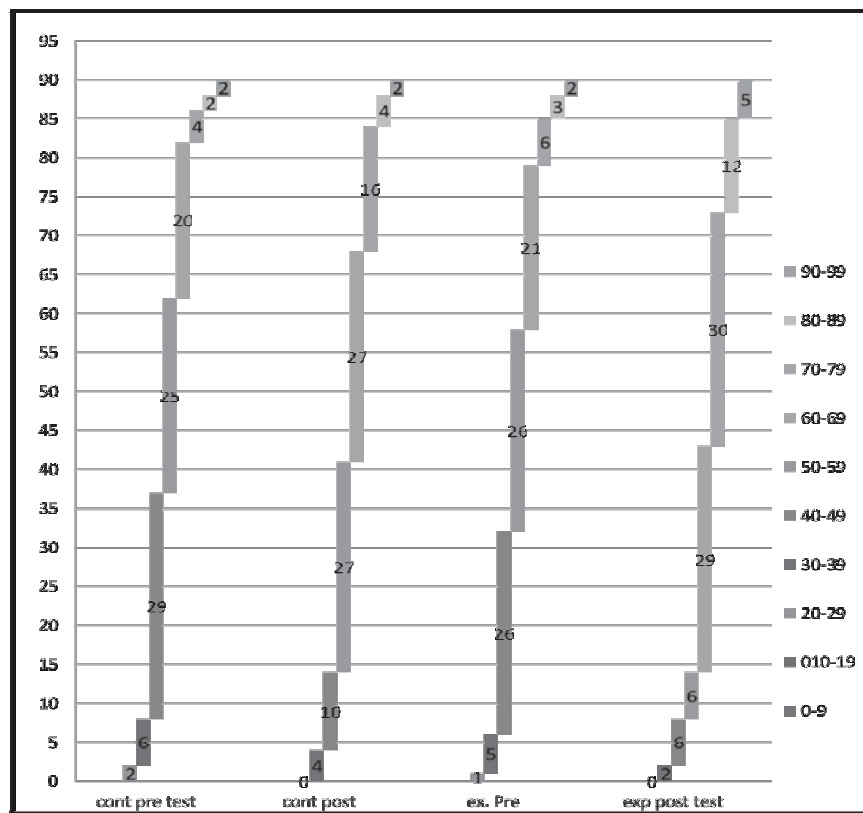


Fig 1 Comparison of distribution of frequency scores of Experimental and Control groups

Table 1 Test of significance between gain scores of experimental and Control groups

Group	N	M	SD	df	CV	TV	Result
Experimental Group	90	15.4	13.71	178	4.41	1.96at .05 level	Significant
Control Group	90	7.92	6.7			2.64 at .01 level	Significant

The above table 1 reveals that calculated value 4.41 is greater than tabular value at .05 and .01 level; hence there is significant difference between the gain scores of experimental group and control group. Therefore the framed hypothesis is accepted and it can be concluded that there is a significant effect of technology mediated collaborative learning on the development of language competency of the class VIII learners. The comparison of means and standard deviation of experimental and control group is shown in following figure 2.

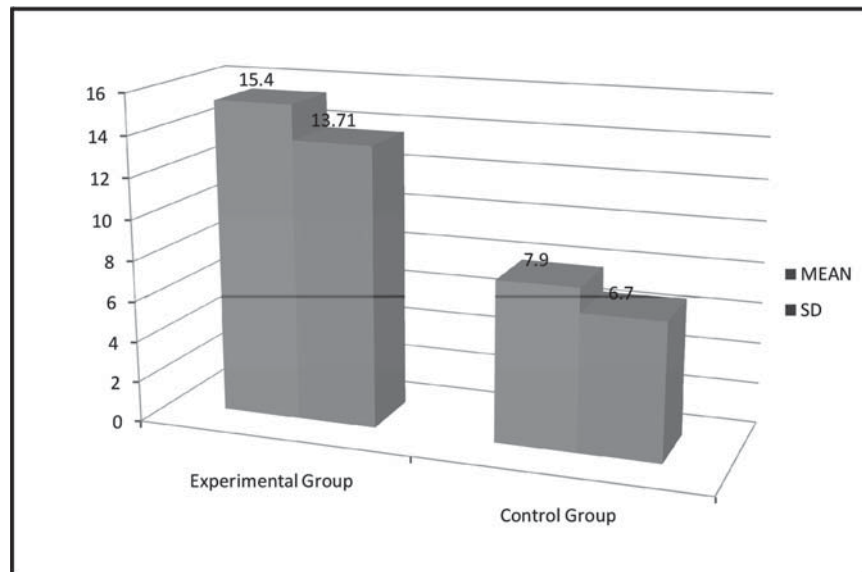


FIG: 2 Comparison of mean gain scores of experimental and Control groups

The analysis and interpretation of the collected data reveals that students taught through ICT mediated Collaborative Learning performed significantly better than the students taught through traditional method. Thus the students taught through ICT mediated Collaborative Learning Approach gains significantly higher score as compared to their counterparts taught through traditional method. The major findings of Gokhale & Young (2003) also strengthen this finding. The present study also support the findings of the previous study that constructivist approach of teaching enhances student actions and group conversation, and provide empirically grounded support to learning teams and thus enhances their learning ability. The above finding is also supported by the findings of Thadphoothon (2005) & Pikki (2011), they also found ICT mediated collaborative learning enhances the achievement of learners in language learning.

Test of hypothesis 2 : The second hypothesis was to test the effectiveness of ICT mediated collaborative learning approach on development of language competency in prose and poetry among class VIII students. To analyses this hypothesis gain scores of prose and poetry in relation to experimental group was calculated and test of significance was done between the net mean gain scores of prose and poetry. The analysis of this has been presented below.

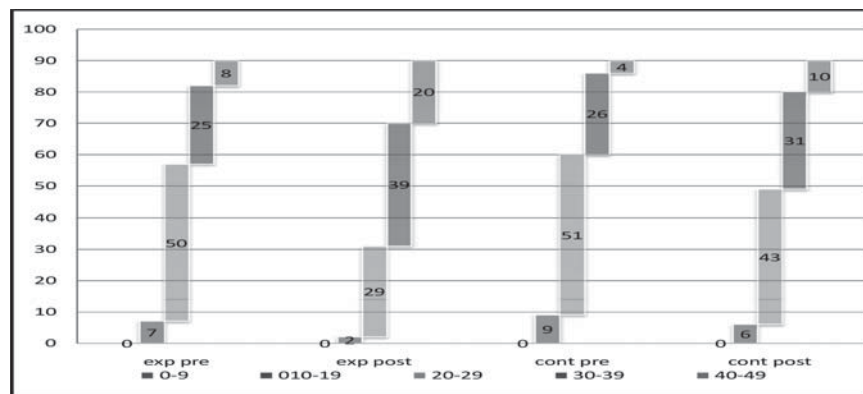


Fig 3 Comparison of frequency of scores of Experimental and Control groups in relation to prose

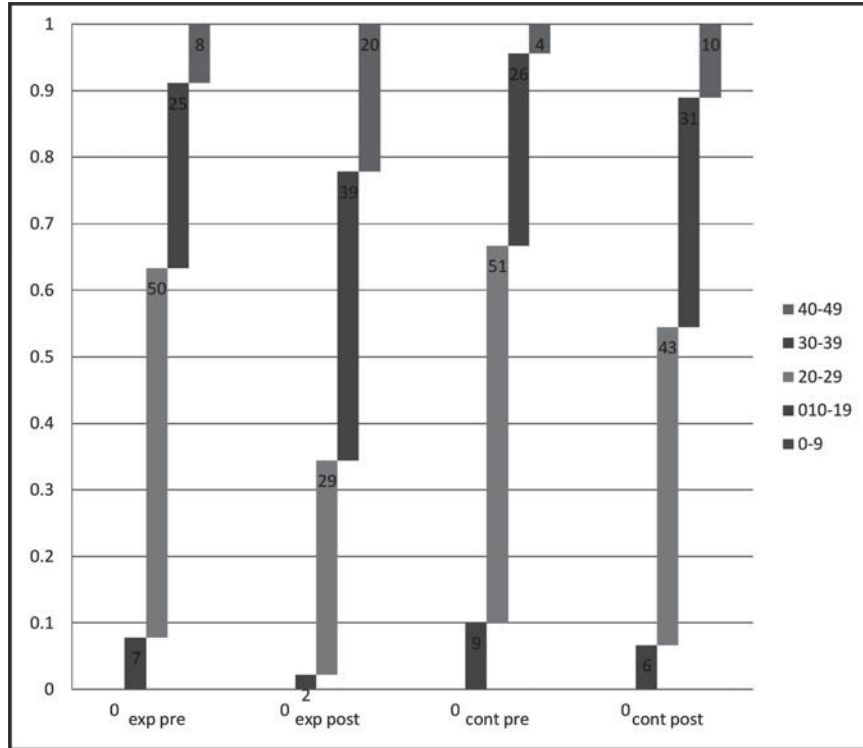


Fig 4 Comparison of frequency of scores of Experimental and Control groups in relation to poetry

Table: 2 Comparison of gain scores of prose and poetry in the experimental group

Group	N	M	SD	df	CV	TV	Results
Prose	90	4	11.3	178	.64	1.96at .05 level	Not significant
Poetry	90	3.03	8.03			2.64 at .01 level	Not significant

The above table 2 reveals that calculated value .64 is less than tabular value at .05 and .01 level; hence null hypothesis is accepted and it can be concluded that no significant difference was found between the gain scores of prose and poetry. Therefore it can be interpreted that

the technology mediated collaborative learning is equally applicable for the teaching of prose and poetry. And the comparison of means and standard deviation of prose and poetry is shown in following figure 5:

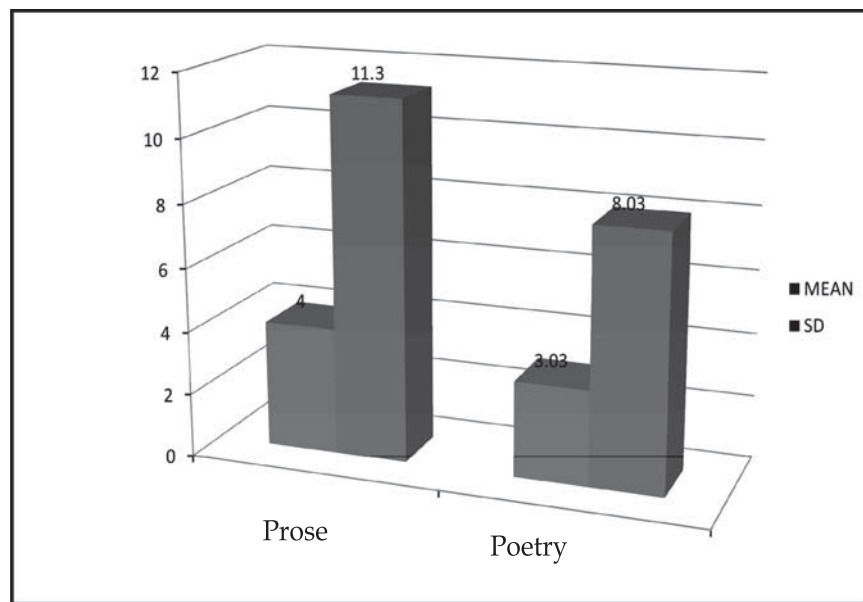


Fig: 5 Comparison of gain scores of Prose and Poetry

Test of hypothesis 3 : The third hypothesis of the study was that the mean achievement score in English language of class VIII boys taught through ICT mediated collaborative learning approach will not differ significantly from that of their girl counterpart. To test this hypothesis gain scores of boys and girls in relation to experimental group was calculated and test of significance was done between the net mean gain scores of boys and girls which has been presented in table 3. For this the frequency scores of prose and poetry were also calculated, and is shown in the figure 6 and 7.

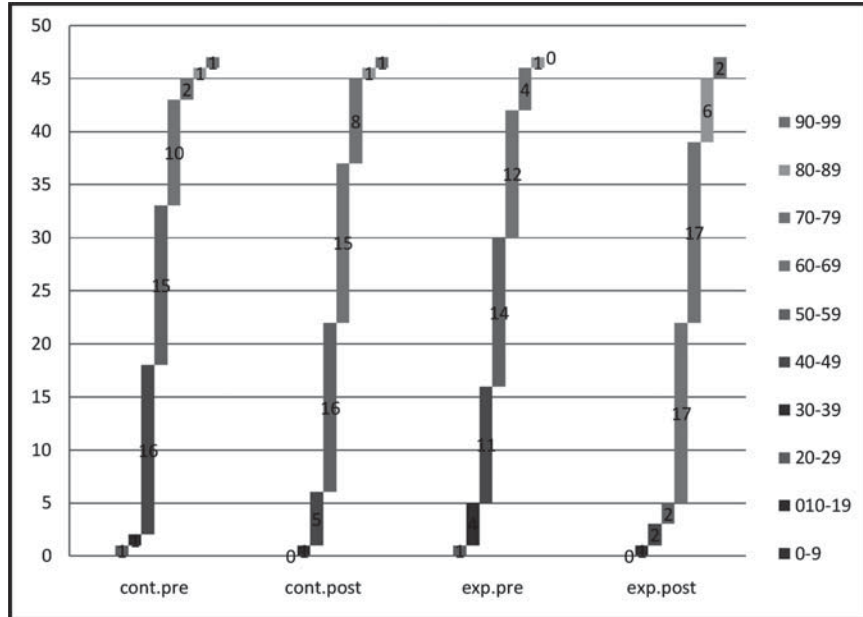


Fig 6 Comparison of frequency of scores of Experimental and Control groups in relation to boys

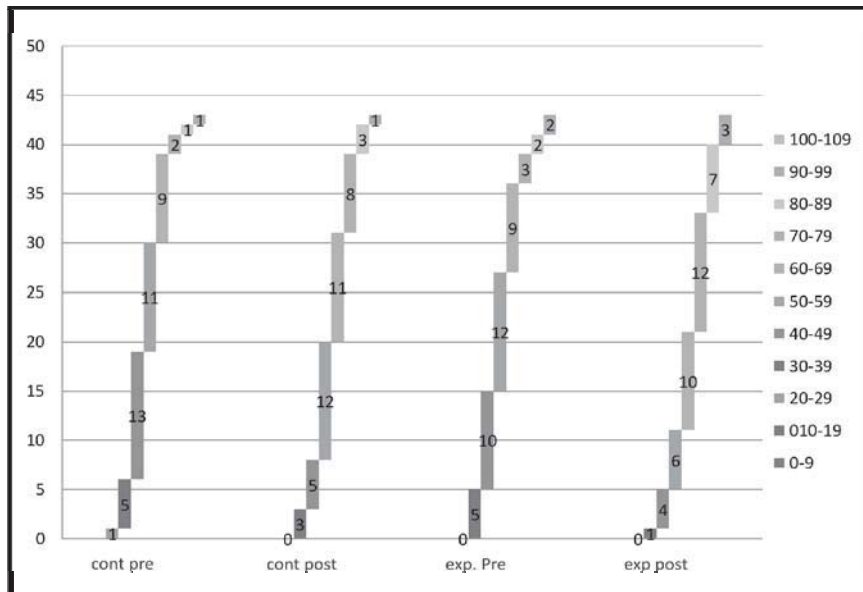


Fig 7 Comparison of frequency of scores of Experimental and Control group in relation to girls

Table: 3 Comparison of gain scores of boys and girls in the experimental group .

Gender	N	M	SD	df	CV	TV	Result
Boys	47	8.3	17.6	88	0.52	2.01 at 0.5 level	Not significant
Girls	43	6.3	17.5			2.5 at .01 level	Not significant

The above table 3 reveals that calculated value 0.52 is less than tabular value at .05 and .01 level; hence null hypothesis is accepted and it can be concluded that no significant difference was found between the gain scores of boys and girls. Therefore it can be interpreted that the technology mediated collaborative learning is gender independent. The above finding is also supported by the findings of, Badiyani(2008), Ya-Chi Chein (2011), Xianghu LIU(2013).

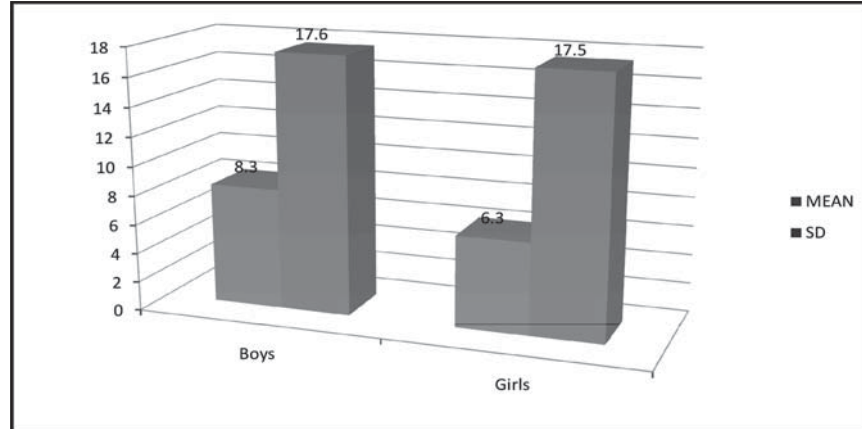


FIG: 8 Comparison of gain scores of boys and girls in the experimental group.

CONCLUSION:

To sum up, this research is one of the first studies to have investigated the impact of using ICT mediated collaborative

learning as a strategy to improve the English communicative competence (listening, speaking, reading and writing skills) of ESL students. This study adopted as a theoretical basis of Vygotsky's theory of the ZPD, which emphasizes the role of experts in developing the skills of less advanced individuals through collaboration. The Collaborative learning approach of Teaching English makes the learners acquire a fluent command of the linguistic system. The learners are capable of producing language which is acceptable and the results showed that Collaborative learning approach and ICT together were beneficial for the development of language competency among the learners of class VIII. Thus, teaching learning strategy based on ICT mediated Collaborative learning Approach facilitates and creates a great interest in exploring different aspect of language and give them a chance to collaborate, discuss and create knowledge. It was developed by the teaching of both prose and poetry. Moreover, the learners are encouraged to take into account of the social context in which interaction takes place and thereby they are trained in social interaction activities.

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