

Computer Assisted Language Learning: An Instrument of Change for Boosting Motivation Level among the Students of Graduation in Pakistan

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Language in India www.languageinindia.com **ISSN 1930-2940 Vol. 13:7 July 2013**
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Abstract

The study defines the role of CALL in boosting motivation level of the learners of Graduation class in Pakistan. This study was an attempt to measure the effect of Computer Based Materials (CBMs) on learning capacity and motivation level of the students.

It was a mixed research where the research questions were: (01) Does the use of CALL tools enhance the motivation level of the learners towards English language learning? (02) Whether the use of CALL tools help in decreasing the fear of English language prevalent among the students?

Two groups of students, one dozen each, were selected after a pre-test. CALL Materials were developed. One group was taught with CALL tools while the other was taught using whiteboard lecturing method. After experimental teaching session of one month data was collected in two ways. The attendance sheets of the students and secondly the questionnaire answers. The data was statistically analyzed and the results favored CALL. It was concluded that CALL tools enhance marks gaining capacity of the learners in reading and writing test. They also boost the motivation level of the students.

Introduction

Second Language Learners of English in Pakistan show reluctance towards the learning of English. It is proved by the overall passing ratios of the results of Graduation exams throughout the country. The latest result announced by The University of Punjab of B.A./B.Sc. on August 17, 2010 settled the passing ratio at merely 28.75 percent. BZU Multan on July 31, 2010 announced the result of B.A./B.Sc. examination recording overall pass percentage of 43.04. Many recent developments in second language acquisition research and theory suggest that computer assisted language learning (CALL), and more specifically, CMC, may be ideal for classroom language instruction, in that it enables language teachers to move such to what is usually quite difficult to stimulate in the average language classroom a naturalistic environment for language use (Belcher, 1999, p.254). This study targets the achievement of the same naturalistic environment through the use of CALL materials in order to stimulate the motivation of the students towards English language learning.

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For this study, it was hypothesized that the application of CALL environment with the help of CALL tools imparts motivation to the students, makes them friends of English, makes the students proficient in language skills and hence in gaining marks. CALL makes the acquisition of English language possible and enhances the speed of learning due to the higher motivation and autonomy imparted to the learner.

The term Computer Based Materials (CBMs) is collectively used to identify the materials used for language learning whether belonging to internet or played through CD/DVD Rom. CALL is a relatively new but rapidly evolving academic field which explores the role of Information and communication technologies in language learning and teaching. It is a tool which helps the teachers to facilitate language learning process.

2. Theories on CALL

i. Development and Implementation of CALL Materials / Courseware

With advancements in information technology, there has been a growing interest in the use of computer networks for second language acquisition (Yamada 2009: 820). All the energies of CALL researchers in last few years have been directed towards achieving environment most similar to mother language acquisition for the second language learning through the use of technology-enhanced language learning. Recently, studies of the influence of technology-enhanced instruction on language learning have appeared in growing numbers (Jamieson & Chapelle, 2010; Felps, Bortfeld & Osuna, 2009; Dettori & Lupi, 2010; Ana, De-Siqueira & Macario 2009).

In this age of Integrative CALL, CMC tools are being widely used in language teaching and learning. These tools include internet as the most influential one. The inexpensive and effective communication has been made possible by the internet. CALL has started using it as language learning and teaching device. Richard (1998) was of the view that the advent of computer networks is beginning to radically change the way in which computers are used in foreign language teaching. Since the dawn of 21st century, many language research centers around the globe have developed systems on computers and internet to facilitate language learning. It was a great idea to use this platform for English language teaching. In this regard the most important launch was the Information and Communication Technology for Language Teaching (ICT4LT). This is the most modern shape of CALL. The accuracy of many such systems has been researched out after implementation. These systems include Ville and DEAL (Wik and Hjalmarsson, 2009), CALLJ (Wang et al., 2009), CSIEC (Jia, 2009), Neclle (Ogata et al. 2001), CoCoA (Ogata et al. 2000), AJET and TELL (Yang and Chin, 2007) etc.

Recent developments have started using computer games for language teaching purpose. It is highly motivated and interesting for the student. The user has to choose what to do and input the result as text, speech (speech recognition software), or by clicking on options. Based on the input the program branches to resulting situations / gives feed-back (online).

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Kabata et. al. (2005) developed and implemented multimedia courseware for a Japanese Language Program. An evaluation was conducted at the initial implementation stage to measure the success of the project. The results of the evaluation indicated that students and instructors were positive towards the curriculum reform through the implementation of CALL technologies. Many Japanese teachers have been implementing CALL in their individual courses and have experienced success in improving their course materials (Kabata and Yang, 2002; Nagata, 2002). Ting and Tai (2004) designed a multimedia material for English language learners and implemented it in the classroom. Evaluation results proved the success of the program. Breen (2005) developed two successful coursewares to teach English in Dublin and successfully implemented them in the classroom. Evaluation results proved the effectiveness of CALL. Chang (2007) developed a 14 weeks courseware, implemented it in the classroom and then compared the results of the pre-test and post-test. The comparison of results was in favour of CALL methodology. Dodigovic (2000) developed her first CALL package, PASSIV. The investigation proved that certain aspects of the software package were beneficial to the learners. Jeng, et. al. (2009) developed their own dynamic video retrieval system (DVRS) which enables students to find real life examples of grammar and vocabulary in use.

ii. CALL in Pakistan

In Pakistan, though the computers are being used at many levels for language learning especially at primary level but no research has been conducted until now to check the efficacy of CALL Materials. Therefore the researcher was unable to find any study questioning the effectiveness of CALL materials. It is a point worth notable that Higher Education Commission of Pakistan since 2004 has formulated a CALL subcommittee under English Language Teaching Reforms (ELTR) Project.

Feeling the need, Government of Pakistan through the platform of Higher Education Commission planned to launch a reform program. Higher Education Commission (HEC) of Pakistan launched a project on English Language Teaching Reforms (ELTR) for bringing qualitative improvement in English Language Teaching and for building capacity for effective and sustainable development of English language teachers in higher education in the country in July 2004 (Khattak et. al.2010,p.3)

HEC report (2005-07) shows that CALL subcommittee has trained 107 language teachers from public/private sector institutions of higher education from 12 cities and trained 13 master trainers in Integrative CALL.

But it is to conclude regretfully that this program (ELTR) could not do miracles due to the lack of funds in 2009. In a preliminary survey from teachers the researcher found that there was a lack of basic knowledge of CALL among the teachers. The number of teachers to be trained should be increased so that a general awareness about CALL is approached.

3. Research Context and Research Methodology

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Larsen-Freeman and Long (1991) have described twofold methodology. They say that either “Longitudinal” or “cross-sectional” approaches can be adopted. Longitudinal way follows qualitative analysis and collects data from participants over a period of time. While on the other hand, “cross-sectional” approach towards research studies evaluates data quantitatively and the data is collected at a given time. It is true that the positive approach (quantitative approach) with its goal of discerning the statistical regularities of behavior is oriented toward counting the occurrences and measuring the extent of the behaviors being studied. By contrast, the interpretive (qualitative) approach, with its goal of understanding the social world from the viewpoint of the actors within it, is oriented toward detailed description of the actors’ cognitive and symbolic actions, that is, the meaning associated with observable behaviors (Wildemuth 1993: 451). We do not advocate slavish adherence to a single methodology in research; indeed combining methodologies may be appropriate for the research in hand (Cohen et. al. 2007: 165).

It is basically a mixed research with both quantitative and qualitative data entry. But due to higher proportion of Quantitative data, the study may be referred as Mixed Quantitative Research. Data were collected through pre and post research questionnaires and duly maintained class attendance sheets from a restricted number of population of students of graduation class.

This study was a search for better motivational ways for the teachings of English at Graduation level in Pakistan. Govt. Post Graduate College Kot Adu was selected as research site and its graduation class of 3rd year was selected as research population. The class contained more than hundred students. Twenty four students were randomly taken to build up a research class. This research class was further bisected into two groups. This bisection was fair and based on equilibrium maintained by a pre-research test. The two groups were as follows:

Serial No.	Group Name	Total strength
1	Experimental Group	12
2	Controlled Group	12

Student population was bisected into controlled and experimental groups. A coaching session of 24 days was held. Respondents filled a pre research questionnaire before the commencement of the session. Experimental group was taught with the help of CBMs and CALL tools. The Controlled group studied in Non CALL whiteboard lecturing environment. After the coaching session a post research questionnaire was answered by the students. Differences appearing were marked through the comparative data analysis of pre and post research questionnaires. Further, during the session, student attendance sheets of both the groups were duly maintained. The quantitative analysis of these attendance sheets proved that CBMs boost the motivation level of the students and help in erasing the fear of English prevalent among the students.

4. Data Analysis

In this segment, comparison between two different frames of mind will be highlighted; One before the implementation of CALL Materials and the other after the implementation.

4.1. Analysis of the Students' attitudes towards English language learning before the implementation of CBMs

Pre-research questionnaire was an attempt to know the level of interest of the students towards English language learning. The questionnaire contained 16 questions. All the items included were close-ended and the respondents were to check/tick one of the appropriate option. The questionnaire consisted of three sets of questions where each carried its own point of inquisitiveness. Four key questions have been given hence after:

Q. 1 Do you think that current language teaching whiteboard lecturing method is making you proficient in four skills?	Yes	No	To some extent	
	38%	49%	13%	
Q 2 As per the college record, the average attendance of your class is 56%. What the reason you highlight for this low attendance ratio?	Lack of Motivation	Fear of English	Personal Problems	Both (a) and (b)
	17%	49%	4%	33%
Q 3. Do you think, these four skills can be learnt more speedily and accurately by studying course materials through CALL environment?	Yes	No	To some extent	
	54%	21%	25%	
Q 4. Do you think that CALL environment will increase the motivation level of students towards English language learning?	Yes	No	Not Sure	
	63%	8%	29%	
Q 5 If you were given a choice, which class you would have chosen to sit?	CALL	Non CALL		
	71%	29%		

The analysis of pre research questionnaire marked that students accused two main factors for their low attendance and hence low performance. These two factors are given below:

- i. Fear of English

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ii. Low Level of Interest

4.2. Analysis of the Students’ attitudes towards English language learning after the implementation of CBMs

In post research questionnaire students of both the groups were again asked whether they still feel any fear of English. A clear difference of opinion was observed. Half of the population of experimental group stated that their minds were then free from the fear of English. It largely happened due to so many factors provided by the CALL environment. The post-research feedback questionnaire, containing 16 questions for Experimental group and 17 questions for Controlled group, was developed. Few important questions addressing the research questions have been selected, analyzed and debated on. For ease of analysis, following important aspects in the data have been interpreted.

(Section A)

For Experimental Group

Q. 1 Did this learning of course books through CALL environment appeal you?	Yes	No	To some extent	
	75%	08%	17%	
Q 2 After the coaching session, do you think these four skills can be learnt more speedily and accurately by studying course materials through CALL environment?	Yes	No	To some extent	
	75%	08%	17%	
Q 3. How did you find the CALL approach towards English language learning; an easy way or difficult?	Easy	Bit Difficult	Very Difficult	
	69%	33%	00%	
Q 4. Do you think that CALL environment boosted your level of interest in English learning?	Yes	No	Not Sure	
	75%	08%	17%	
Q 5 Have you still any fear of English in your minds that you mentioned in your pre-research questionnaire?	Yes	No	To some extent	Not at all
	33%	42%	17%	08%

Q 6 If you are given a choice for future learning, which class you will choose to sit?	CALL	Non CALL
	83%	17%

(Section B)

For Controlled Group

The population in this section was taken from the group which was taught for 23 days with the help of traditional tools (white/black board lecturing). In this study this group has been referred as Controlled Group. Following is the set of questions which has been selected by the researcher for thorough analysis in order to answer the research questions.

Q. 1 Do you think that the reason for your low attendance in the coaching session was due to one of the following?	Incompetent teacher	Fear of English	Personal Problems	Lack of Interest
	08%	33%	17%	42%
Q 2 Have you still any fear of English in your minds that you mentioned in your pre-research questionnaire?	Yes	No	To some extent	Not at all
	58%	17%	17%	08%
Q 3 Did you feel yourself motivated in the environment that was provided to you by your teacher through whiteboard lecturing method?	Yes	No	To some extent	Not at all
	25%	25%	17%	17%
Q 6 If you are given a choice for future learning, which class you will choose to sit?	CALL		Non CALL	
	83%		17%	

4.3 Analyzing Daily Attendance Sheet of the Students (Comparison between attendance percentages of Experimental group and Controlled group)

It was quantitatively measured whether Experimental group shows more inclination towards English language learning or Controlled group. In simple words, the CBMs were tested for their capacity of enhancing motivation and interest among students for English language learning. Total research population which comprised of twenty four students with same setting of

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two different environments was again the focal point in answering this question. During the coaching session, despite continuous teaching, the researcher concurrently marked daily attendance of both groups. This attendance sheet provided the data whose analysis answered the concerned research question. Suggesting no cushion for biasness, this typical question was measured quantitatively. Table 5.4.1 arranges the attendance percentages of the students of Experimental group.

STUDENT'S ATTENDANCE REPORT							
Monday, 02 May 2011 to Tuesday, May 24th, 2011							
Experimental Group(CALL)						Lecture Timings: 8:30 am to 9:15 am	
Sr. No.	NAME	Roll No.	Total Lectures	Attended	Attended %	Average % attendance of the class	
1	Mujeeb ur Rehman	9001	18	12	67%	83%	
2	Mahboob Hassan	9002	18	14	78%	83%	
3	Muhammad Imran	9003	18	14	78%	83%	
4	Muhammad Ramzan	9004	18	17	94%	83%	
5	Muhammad Asif	9005	18	15	83%	83%	
6	Ghulam Abbas	9006	18	11	61%	83%	
7	Aamir Masood	9007	18	17	94%	83%	
8	Azhar Hussain	9008	18	15	83%	83%	
9	Muhammad Irfan	9009	18	18	100%	83%	
10	Tanveer Abbas	9010	18	16	89%	83%	
11	Muhammad Tariq	9011	18	14	78%	83%	
12	Imtiaz Aziz	9012	18	16	89%	83%	

Table 4.3.1

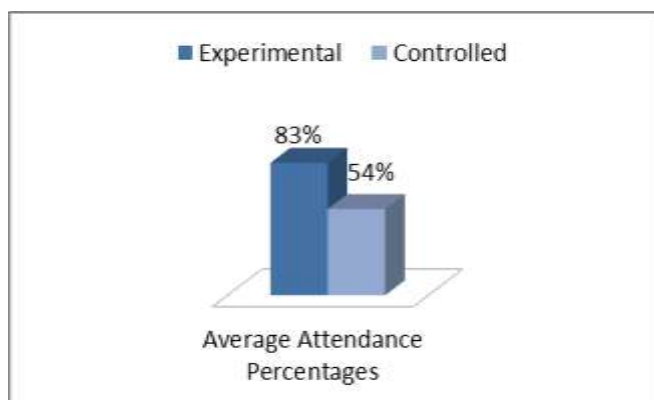
STUDENT'S ATTENDANCE REPORT							
Monday 2nd May 2011 to Tuesday, May 24th, 2011							
Controlled Group (Non CALL)						Lecture Timings: 10:00 am to 10:45 am	
Sr. No.	NAME	Roll No.	Total Lectures	Attended	Attended %	Average % attendance of the class	
1	Muhammad Sultan	1001	19	12	63%	54%	
2	Ghulam Abbas	1002	19	13	68%	54%	
3	Muhammad Naeem	1003	19	11	58%	54%	
4	Fiaz Ahmed	1004	19	9	47%	54%	
5	Muhammad Arif	1005	19	7	37%	54%	
6	Mazhar Iqbal	1006	19	7	37%	54%	
7	M. Irfan Arshad	1007	19	13	68%	54%	
8	Abdul Hafeez	1008	19	7	37%	54%	
9	M. Amjad Rasheed	1009	19	9	47%	54%	
10	Sabir Hussain	1010	19	15	79%	54%	
11	Muhammad Mahboob	1011	19	10	53%	54%	
12	Muhammad Irfan	1012	19	11	58%	54%	

Table 4.3.2

The involvement, interest and motivation of the students can surely be judged by mapping their number of appearances in the class. To know the motivation level of the two groups, the researcher separately managed the daily attendance sheets of the both groups during

the coaching session. Finally the data analysis proved that CALL environment greatly enhanced the motivation level of the students towards English language learning.

Fig 4.3.1: Comparison between attendance percentages of Experimental group and Controlled group



6. Discussion

It was observed that CALL methodology not only assists the learner in improving marks but it also solves problems of attitude. Psychological distance between the target language and the learner was eradicated by the use of CALL environment. This experimental study had won the applause of the students as it made them confident and autonomous in their learning. Students and even College administration appreciated multiple modes of learning in CALL environment. One more reason for its appreciation by the students was the adoption of Learner Centered Approach (LCA) in Computer Assisted Language Learning. It was observed that the majority of students were feeling comfortable and due to this convenience they wanted to adopt it in their routine studies. In response to a question, most of the students wished for CALL methodology to be implemented in their class room for future. Students mentioned lack of equipment especially unavailability of personal computer at homes as a big hurdle in making them autonomous learner so the students of graduation recommended CALL tools to be used on permanent basis.

Furthermore, they admitted that CALL environment provides a simultaneous improvement in all the four skills including Listening and Speaking. They found Computer Assisted Language Learning environment friendly and were inclined to participate consciously. The fear shown by the students in pre research questionnaire was overcome by the replacement of dry, boring and dull setting with more lively, interactive and active participative learning fundamentals brought into play by the CALL.

Finally in validation to the hypothesis, it can be stated that CALL methodology can reduce the number of failures in English at Graduation level in Pakistan. It is attractive enough to bring many less motivated students back to studies.

6. Conclusion

The study remained successful in answering all the research questions modernized in the start. It successfully marked the efficacy of CALL materials at Graduation level in Pakistan. Among the population of the research both, the students and teachers were included. The research remained fruitful in mapping the increase in motivation in the students of graduation towards their study of English. It also highlighted the impact of CALL environment on general ability of the students to gain marks in a reading and writing test. Further this research spotlights the general overview of the attitudes of the students and the teachers towards CALL methodology. The attitudes were found to be more inclined towards the need of the application of CALL tools.

Due to the multiple modes of learning in CALL environment, the motivation and interest among the students was high. The effect of the dramatized videos of the lessons can not be negated in boosting up the interest in English language learning. CALL environment covertly made the class punctual and regular. Due to this effect, experimental group came up with flying colors. It was observed that gradually as the coaching session entered in the second week, students voluntarily started managing CALL environment e. g installing equipments etc. It simply concludes that CALL is more effective methodology to teach English at graduation level.

Learner Centered Approach (LCA) is characterized as an essential need of the day. Interactive learning is another concept which demands an active learner. Computer Assisted Language Learning fulfils the basic need of both the concepts. It was endorsed in same letter and spirit in this study. It has been mentioned earlier that in order to complete all the credentials of CBMs required, to manufacture a high profile CALL environment, the general approach which was adopted was Student Centered Approach. SCA imparts autonomy in learning to the students. Due to this, the students warmly valued CALL methodology. Another reason which made the students to love this methodology was a new feeling of liveliness where they have been assigned a role. Then the boring, dry and dull environment was changed into interactive, participatory and excited one. The students had the opportunities for the self-study not only in the class but also outside class which created confidence and autonomy among learners.

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Language in India www.languageinindia.com ISSN 1930-2940 13:7 July 2013

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