

Integration of CALL with Traditional Classroom Pedagogy in Teaching English as a Second Language to the students of the University of Jaffna

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Abstract

The purpose of the study was to examine the effectiveness of the integration of CALL with traditional classroom pedagogy to promote the level of ESL to undergraduates of the University of Jaffna. The present day students of the University of Jaffna find the traditional methods of teaching English boring. So they lack basic language skills, in particular, vocabulary, speaking skills and usage of grammar. As a result, they are unable to excel in their academic activities and to satisfy the interviewers in job interviews. So, there is a need to develop their language through the most scientific methods of teaching especially through the newly advanced methods of using the multimedia and the Web.

The study involved qualitative methods of data collection which involved pilot testing which is used in the development of quantitative survey items. Survey items are piloted on study participants to test the reliability and validity of the items and to assess the learning process of the third year students of Arts Faculty in the University of Jaffna when using technology and traditional classroom pedagogy without technology.

The data collected from the subjects' responses were analyzed and the findings were derived. The findings will be beneficial for material development and ESL teaching and learning process in future. A better understanding of the difficulties of students in learning ESL and the problems faced by the language teachers would help to incorporate new strategies and latest technology in language teaching popularly known as CALL.

Key Words: - scientific methods, visual – aids, English proficiency, individual differences, Computer Assisted Language Learning (CALL), language skills.

Introduction

No change can be brought without a change in the teaching strategies and approaches. Presently, our teachers seem to have exhausted with the methods and techniques of traditional teaching. They want a new methodology that is modern and effective. The emergence of new technology and research about how people think is changing the classroom. New generations of educational technology are moving towards models and theories that are expected to provide the insights necessary to advance educational technology research in promising new directions (Samaras, Giouvanakis, Bousiou, & Tarabanis, 2006). New tools are thought to empower educators to change the way teaching and learning occurs. Considering these demands, the only way out seems to be the computer. This new field is called Computer Assisted Language Learning. The researcher himself went through many articles in these areas. And at this point, he feels that language ought to be taught with the help of the computer. Already a variety of ideas and pictures are represented through the computer for those who use them. The internet is an effective source of ideas and picture display. Thus the hypothesis that language can be taught through the computers is put forward here.

This study discusses the nature of interaction and the definition of CALL and its applications. The researcher highlights the method of promoting qualitative interaction amongst students, teachers and computer software. This project evidences the fact that computer pair work enhances interaction. -D.Healy says,

“The complexity of teaching and learning – is a systematic research .The technical details of the mouse are simple but the teaching principles are complicated; for that reason we need to consider the effectiveness of learning through multimedia” (*An extract from:Computer Assisted Language Learning (CALL)–www. Monografias.com*)

Definition of CALL and its implications

Computer Assisted Language Learning (CALL) is a new approach which focuses on using computer technology in learning and teaching a second language or foreign language to students in the classrooms. It has significant impact on education and has been more and more integrated into classroom for promoting effective learning and teaching processes in the field of education. It is the new approach which can be used in the language classes along with the traditional classroom pedagogy or with the substitution of traditional classroom pedagogy in teaching second or foreign languages to the students and it shows how language can be taught and learned very effectively through the interactional process between the students, teachers and computers; the students can share, learn or work with each other. However, the success and achievement of methodological and pedagogical goals depend on teachers' preparation to incorporate computers into classrooms. If the goal of teaching with computer technology is to transform the teaching and learning processes, this must be foundation in teacher preparation programmes. Teachers need time and guidance while using technology in general; however, while the computer technology is integrated, teachers need to develop a particular philosophy about how to use CALL to support their instruction.

The main role of CALL is to enable learners to achieve education goals first. Language learning and teaching has been impacted by growing social requirements and the need of knowledge. Although still traditional methods are used in teaching a second or foreign language in the classroom, CALL stresses how to develop thinking skills in learners when being out of the classroom. Both children and adult learners are expected to develop and follow individual, effective thinking that results in processing of the language information. Such development should also bring autonomy and independence in students' learning. So the role of computers in

the language classroom is to support traditional methods of teaching and trying to fulfill individual needs. A learner becomes more and more aware of learning strategies and is able to use them to achieve effective communication.

Computer Technology in ESL Education

The advent of technology has found a welcome home in foreign language education. Language instruction that combines technology has become popular and has had a tremendous impact on language education. Numerous ESL research studies suggest that integration of technology can improve academic performance, enhance motivation, and promote learning. To examine how technology supports ESL teaching and learning, a similar research studies done by Chatel (2002) and Lasagabaster and Sierra (2003) revealed that the students had a positive attitude toward learning language with computers. Results from some research studies also suggest the value of incorporating technology into ESL teaching and found a shift in research focus.

Current research was centered on how to integrate technology to make teaching and learning more effective. It increases the participation when it is used in classroom environment (Sullivan and Pratt, 1996; Warschauer, 1996). For instance, it was found that the ESL learners produce more sentences when it compared to the situation in classroom environment. It also useful not only for the quantity but also the quality of language: Learners have a great variety of speech discourse (Sullivan and Pratt, 1996) and use more complex language (Warschauer, 1996).

Pedagogical Benefits of CALL Language Learning and Teaching

Interest and Motivation

It is often necessary, in a language learning classroom, to provide repeated practice to meet important objectives. Because this can be boring, painful, and frustrating, many students lose interest and motivation to learn foreign languages. CALL programmes present the learner with a novelty. They teach the language in different and more interesting, attractive ways and present language through games, animated graphics and problem-solving techniques. As a result even tedious drills become more interesting. In fact, CALL motivates the students to go beyond the point of initial mastery and practice activity until they become automatic.

Individualization

Many students need additional time and individualized practice to meet learning objectives. The computer offers students self-instructional tasks that let them master prerequisite skills and course objectives at a speed and level dictated by their own needs. Besides, additional programmes can be made available for students who master objectives quickly. These additional programmes can provide more intense study of the same objectives, proceed to higher objectives, or integrate the objectives covered in the unit with other objectives. In this manner, a computer gives individual attention to the learner and replies immediately to questions or commands. It acts as a tutor and guides the learner towards the correct answer while adapting the material to his performance.

A Compatible Learning Style

Students differ in their preferred styles of learning. Many students seem to learn much more effectively when they are able to use a compatible learning style than when they are forced to employ an incompatible one. Serious conflicts may arise when a teacher employs a style that is incompatible with a student's. In this regard, the computer can be used for adapting instruction to the unique styles of individual students. To cite an instance, the computer can provide an exciting rapid-fire drill for one student and a calm, slow-paced mode of presentation for another.

Optimal Use of Learning Time

By using the computer, students are often able to use their Academic Learning Time (ALT) more fruitfully. Academic Learning Time (ALT) is the amount of time a student spends attending to relevant academic tasks while performing those tasks with a high rate of success. For example, not all the time officially scheduled for studying a foreign language is likely to be allocated to it. If an hour is assigned to working on a topic, but the teacher devotes five minutes at the beginning of the session to returning papers and five minutes at the end to reading announcements, then only fifty minutes have been allocated to working on the topic. Therefore, even when they are actively engaged in studying the foreign language, students learn effectively only when they are performing at a high rate of success. Computers enhance second and foreign language academic learning time by permitting learners to acquire specific information and practice specific skills and by helping students develop basic tools of learning which they can apply in a wide variety of settings. Traditional instruction holds time constant and allows achievement to vary within a group. Computer-assisted learning reverses this relationship by holding achievement constant and letting the time students spend in pursuit of the objectives vary.

Immediate Feedback

Learners receive maximum benefit from feedback only when it is supplied immediately. Their interest and receptivity decline when the information on their performance is delayed. Yet, for various reasons, classroom feedback is often delayed and at times denied. A deferment of positive feedback, though important to act as encouragement and reinforcement, may not harm the progress of the learners.

Nonetheless, any delay in offering negative feedback, the knowledge that one is wrong, will become crucial. A blissfully ignorant student may continue mispronouncing a word or applying a misconception before discovering the nature of this error. In such case, the computer can give instantaneous feedback and help the learner ward off his misconception at the initial stage itself. In addition to this, the computer can look for certain types of errors and give specific feedback.

Error Analysis

Computer database can be used by the instructor to classify and differentiate the type of general errors as well as errors committed by learners on account of the influence of the first language. And thus determine the most common errors cross-linguistically and more specifically, the particular form of a particular error type within a particular language group. One such study conducted reveals interesting findings, for example, that in subject-verb agreement errors the base form of verb was over generalized incorrectly more often than the -s form by all speakers. Also, students typically omitted the articles a/an more often. A computer can thus analyze the specific mistakes the student has made and can react in a different way from the usual teacher--this leads the student not only to self-correction, but also to understanding the principles behind the correct solution.

Guided and Free Writing

A word-processor in the computer can be very effective in teaching guided and free writing activities. The ability to create and manipulate text easily is the principle on which the word-processor programmes are founded. In this manner, the word-processor encourages practice in guided or free writing activities together with a number of sub-skills which comprise the writing process. Aspects of paragraphing, register, style, cohesion, rhetorical structure, lexical choice and expression can all receive attention without requiring the user to learn different programmes. The advantage is that the teacher can direct the student's writing without exerting total and rigid control, allowing for freedom of expression within certain bounds. Insights into grammar, vocabulary and punctuation, can also be developed.

Review of Literature

There has been a significant value on computer technology in the field of education. Because of technology's pervasive impact, many teachers have been under substantial pressure to increase computer use in the classroom activities. Education moved slowly to integrate technology and would benefit from guidance regarding how to provide seamless movement between technology and traditional classroom pedagogy in the classrooms. Researchers have identified a broad range of factors necessary to facilitate technology integration in the instructional processes.

Dillon-Marble and Valentine (2006) indicated that computers significantly improved certain aspects of instruction. His findings of the study took the form of four classroom characteristics which defined the integration of computer technology use in the classrooms. The characteristics included; seamless computer use, computer use appropriate to the learner, computer use that was facilitated and computer use that empowered the learner.

Maninger (2006) conducted a study that explored the impact of technology integration in the English language class. He pointed out that the successful technology integration study revealed a connection between computer use and the passing rates of the students in the high school English class.

Berger (2005) explored what teachers perceived was the impact of adopting technology into classroom. The results of his study indicated teachers perceived three broad areas of impact of adopting the internet into classroom; student empowerment, collaborative classroom and a shift in the teachers' role.

Statement of the problem

While there has been little debate on the instructional function of resources such as books, study guides or lectures, no such consensus has been established for interactive learning materials. There appears to be no common set of standards for the learner-computer interface, the strategies for presentation of interactive material is variable and the influx of newer technologies (such as multimedia and web-based resources) have only added to the complexity of developing effective interactive learning materials. Given this situation, it is important to assess the assumptions which are inherent in both research analyses and courseware applications to determine their reliability and validity for educational technology in language learning situations.

Methodology

This study was undertaken using qualitative method of data collection which involved pilot testing which is used in the development of quantitative survey items. Survey items are piloted on study participants to test the reliability and validity of the items and to assess the learning process of the third year students of Arts, faculty in the University.

Research Questions

1. Is there a significant difference in learning ESL among the students who receive CALL instruction, with the comparison of students who receive traditional instruction alone?

The researcher established the following null hypothesis, to examine the research question:

2. There is no statistically significant difference in learning ESL among students who receive CALL instruction, with the comparison of students who receive traditional instruction alone?

Research Design

This study involved a control group and an experimental group which contained sixty students with similar English proficiency in writing. The duration of treatment in this study was one semester, three hours a week, for both groups. The students in the control group were taught by the researcher in a traditional classroom, while those in the experimental group were taught in a computer lab, with one computer per student. The content of the language teaching covered word order, articles, pronouns, tenses, adjectives, adverbs, prepositions, coordination, and subordination. In addition to grammar explanation, exercises were provided as well. Exercises in the control group were done by paper and pencil, whereas exercises in the experimental group were practiced via the computer tutorial with immediate feedback on students' answers. Finally, the students of both control and experimental groups were given a picture (printed picture for control group and picture displayed using multi media for experimental group) in order to assess their writing.

Results

The data collected from the pretest and posttest by the researcher during the instruction made in both control and experimental groups were analyzed.

	N	M	SD
With technology	30	26.47	8.15
Without technology	29	28.14	6.36

Df = 57 t score= 0.8761 Probability > 0.3847

Table 1. t-Test for pretest scores comparing students in classes with technology and classes without technology

The pretest scores of each classroom were compared. Table 1 indicates that there was no statistical significance between the two groups of classrooms. The students in each classroom were found to have similar proficiency in English at the beginning of the study.

	N	M	SD
Pretest	30	26.86	7.99
posttest	30	31.13	7.08

Df = 57 t score= 2.1738 Probability > 0.0339

Table 2. t-Test comparing pretest and posttest scores for significant progress in class without technology

After comparing the students pretest and post scores, table 2 indicates that there was greater than expected growth in the students' progress when technology was not used in the classroom.

	N	M	SD
Pretest	30	27.80	6.52
posttest	30	44.93	6.73

Df = 57 t score= 9.9318 Probability < 0.0001

Table 3.t-Test comparing pretest and posttest scores for significant progress in class with technology.

After comparing the students pretest and post scores, table 3 indicates that there was greater than expected growth in the students' progress when using technology in the classroom.

	N	M	SD
With technology	29	44.93	6.73
Without technology	30	31.13	7.08

Df = 57 t score= 7.6653 Probability < 0.0001

Table 4t-Test comparing posttest scores for significant progress in class with technology and class without technology

The posttest scores of each classroom were compared. Table 4 indicates that there was considerable statistical significance found between the two groups. The students in class with technology were found to have achieved higher proficiency level in English at the end of the study measured by posttest.

The study reveals the significant difference between the control and experimental groups who were taught employing traditional and computer technology respectively. The experimental group has been found very enthusiastic in learning English and showed considerable progress in the assessment made by the researcher when comparing with the control group. So the study validated the effect of CALL in second language teaching. The researcher believes that computers can be used to make classes more effective. There are two ways to use them. One way is for the teacher to present pictures, videos and written text with or without sound. The presentation can be programmed in advance or handled manually. The other way to use computers is to have students use the computers themselves. The researchers find the second method of using computers which lead the students a better understanding of computers as well as language learning. In this method, the students work individually on their own interest. The computer provides materials to study and students can interact with the computer as if they are doing with a tutor or a library. The students here are encouraged to do the work either in groups or in pairs, so that they can get a spirit of cooperation and confidence in finding the answers. Interaction among the students is as important as that with a computer in learning. The researcher suggests that students work at a computer during the class, can do assignments drills, tutorials, games, simulations and even reviewing and preparing for the class. Using computers gives way to their knowledge and promotes the nature of independence. The researcher is of the view that the

computer education is a beneficial one for both the slow learners and the advanced learners, as it encourages to work at their own pace. Slower learners can catch up, and advanced learners can do extra assignments.

Discussion

An ideal CALL courseware remains not an alternative but a complementary tool in reinforcing classroom activities. Apart from relying on the ability of educators to create suitable CALL courseware, the effectiveness of CALL depends on the teacher's readiness to adopt new attitudes and approaches toward language teaching. The teacher should avoid being skeptical about the use of computer in language teaching and begin to re-evaluate his methods in the light of computer's tremendous teaching potential and boldly address to the challenges offered. The computer can best assist teachers if it is seen not as a replacement for their work but as a supplement to it. By the way, the computer, will not replace the language teachers, but, used creatively, it will relieve them of tedious tasks and will enable students to receive individualized attention from both teachers and machines to a degree that has hitherto been impossible.

The advantages of CALL can be outlined as providing motivation and autonomy for learner, compatible and time flexible learning, immediate and detailed feedback, error analysis, and a process syllabus. Some considerations must be given to the disadvantages of CALL, such as less handy equipment, high cost of education, lack of trained teachers and of CALL programs of perfect quality, and limited capacity of computers to handle unexpected situations.

CALL has certain advantages and disadvantages and teachers should know the strengths and weaknesses in applying CALL in ESL classrooms. It is agreeable that technological advancement and development has enabled the application of CALL programs in language learning and instruction, and it has become a new trend recently. Even so, computer technology still has its limitation and weaknesses. Therefore, we must first realize the advantages and disadvantages of current CALL programs before applying them to improve our teaching or to help student learning. In the end, we can avoid the mistake in employing CALL program and get the maximum benefit for our ESL teaching and learning.

To make a student be more self-reliant, the typical classroom situation in which students very often learn second language does not seem to be adequate. All the more it is a very important task of a teacher to help the students develop and improve their learner strategies. In order to improve second language learning and make it more effective, he or she should prepare the students both practically and psychologically. The practical preparation is the teaching itself, for example of grammar rules or vocabulary. Besides that, it is practical knowledge like how to use a dictionary or where to find information like an appropriate grammar rule. The psychological preparation, however, includes also learner training.

Learner training is a classroom process which is organized by the teacher and which helps the students to become a better, self-directed learner. It includes the improvement of classroom learning, but also of self-access learning and independent learning at home. Facilities for self-access learning are for example CALL (Computer Assisted Language Learning), tapes, written texts and articles, the library, the radio and the TV, games, exam material, grammar banks or the language lab. By providing or explaining them, the teacher can take away the fear of the students to use them.

Besides that, the teacher should constantly encourage the students to monitor their learning and check its progress. This can be achieved for example through group work or talks in pairs in which the students consciously have to speak about their learning.

Conclusion

Presently, many students are tired of traditional English classes and are interested in a new style of learning. The researcher rightly accepts the suggestions made by Kitao (1995),

“Students think materials are new and fresh, if they are presented on computers, and they are often interested even in routine tasks such as learning to type. They seem to be willing to spend more hours and do more exercises on a computer than by hand”.(*An extract from:Computer Assisted Language Learning (CALL)–www. Monografias.com*)

Learning can be individualized using computers. Students can study materials related to their individual goals and interests, with the appropriate difficulty level and at their own pace.

“Computers can analyze the problems of each student and the teacher can help individual students with their problems based on the analysis”

The role of interaction in second language curriculum has grown since its beginning. Interactivity in learning is "a necessary and fundamental mechanism for knowledge acquisition and the development of both cognitive and physical skills" (Barker, 1994). Today, computer technology helps the communicative approach of learning that is concerned with the interaction between the teacher and learner, and in which the teaching strategy is dependent upon students' learning needs and learning styles.

Due to the significant changes in second language teaching and learning (the role of the teacher, the role of the learner, the role of multimedia, and the way the learning process has to occur in the language laboratory settings), interaction has become an increasingly important and relevant area of study in the field of second language acquisition since it reflects what goes on in formal learning and teaching processes.

The role of interaction in the foreign language curriculum is increasing with influential works like the one done by Warschauer, M., & Healey, D. (1998) about software-related research in CALL such as the amount and type of interaction at the computer and attitudes toward computers and CALL. Interaction is intrinsic to success, effective instructional practice as well as individual discovery. The implementation of interactivity can be perceived as an art (Sims 1997) because it requires a comprehensive range of skills, including an understanding of the learner, an appreciation of software engineering capabilities, the importance of rigorous instructional design and the application of appropriate graphical interfaces.

The increased quality interaction is directly translated into increased performance. This expectancy theory of the value of interaction states that a learner's performance is based upon a quality interaction between the learner's and a qualitative input. The source of qualitative input ranges from pair, teacher and multimedia. The introduction of multimedia technology into the education process in higher education not only provides an opportunity to reconsider teaching strategies to be adopted but also requires reconsideration. This reconsideration should address the opportunities for promoting the efficiency and effectiveness of learning through the use of this new technology.

A language teacher may not know the definitions and descriptions of technical terms and the processes related to Technology. The teacher is expected to be familiar with those matters, before the teacher enters into the class. As the blooming generation is efficient in gathering new ideas on science and facts, they try to cross-check the teacher, whether the teacher knows about the latest technology. So, the language teacher in the institution needs to be efficient and confident while responding to the students. At this point, the researcher concludes that students tend to enjoy using computers and the teachers need much more work, to identify the factors involved in using software efficiently, for language teaching.

Researches on Computer-Assisted Language Learning (CALL) propose that the integration of CALL into ESL/EFL learning can provide learners with more authentic input and more opportunities to participate in the target sociocultural contexts; both linguistic and pragmatic knowledge can be promoted. Moreover, motivation, learner autonomy, social equality, and identity can also be encouraged through the use of CALL inside and outside of the classroom.

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