



# **Research Article**

# Advance in Environmental Waste Management & Recycling

# The Effectiveness of Integrating CALL into EFL Contexts

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Submitted: 05 Jan 2022; Accepted: 17 Jan 2022; Published: 31 Jan 2022

Citation: Peyman Abbasi, (2022). The Effectiveness of Integrating CALL into EFL Contexts. Adn Envi Was Mana Rec, 5 (1), 13-18.

#### **Abstract**

This study tries to investigate impacts of integrating CALL in classroom enhancing EFL learning gaps. This study also tries to provide local voice and insight of implementing CALL into Iranian EFL contexts as well as global perspectives in CALL. There is no qualm that CALL mediated is adhered as technology development to convey and paving paths which we are interacting with each one of community members specially in EFL context users; tutors or pupils. So, primary goal of this research is to find how information and communicative technology and its methodology can be effectively utilized to ameliorate cumbersome and prohibitive EFL teaching-learning obstacles. Based on findings it can be predicted that CALL helps to learn FL skills. Recent research has focused to go over status of CALL and non-CALL settings to investigate what students do while to use CALL technology in EFL contexts for their language learning activities. While a lot of studies have carried out research in a laboratory context or through structure observation, this study explores learners' interactions and challenges within CALL. The results indicate significant changes in participants' scores after to use CALL to learn EFL skills in contrast to non-CALL environments. It examines strategies in which persuade students' challenges for their developing CALL professionals and brief overview of three stages of CALL history, teachers' jobs about computer assisted language learning in classroom for language learning purposes, Web. 2 applications and a purview to CALL components.

**Keywords:** Call, EFL context, CALL developments, CALL components, CMC, Web. 2 applications.

# Introduction

We can ask ourselves these questions: the meaning of technology? Technology is means of World Wide Web? It means computers or innovation? Does it mean the use of technological use? Technology today has gotten a meaning beyond the traditional definitions like: audio tape, blackboards, audio recorders, overhead projectors, etc. Essentially, now technology concept has got a new meaning and applications like: PC computer, laptop, web, etc. Technology is not so new anymore but modes of communication process in today's societies have been completely changed. Furthermore, communities are machine-dominated. The ways of human being communications by contrast with the past 50 years ago meaningfully have been changed. Millions of people every day can communicate to each other without any face-to-face meetings, but they can communicate very easily just only by sending text messages or to write post mails via internet programs such: Skype, personal blogs, Facebook, twitter, etc. All of these changes in human communications have led to a revolution in language teaching and learning. Students can use of internet to do their daily exercises, to write their essays and teachers can check and correct their students' online performances. It is a globally revolution in EFL learning domains in contrast with 50 years ago. However, learners need to continue their learning and understanding and also, they must be taught how to handle and work to CALL learning about all of their lessons particularly EFL learning. In other words, parents, teachers, school staffs, etc; must be known about how to use the utilities of new technology (CALL). There are lots of modern technologies which can be handled in class context for teacher, student, tutor or tutee to apply for EFL teaching and learning. Research Present significant strategies about technology applicability for teaching and learning purposes especially how to use CALL for EFL learning aims in order for juxtaposing and implementing language learning vacuums and to enhance learning activities. Whole of this research is concerns about to use appositely new technology (CALL) which teacher and student configure and complement it into classroom improving and to enhance their EFL teaching and learning gaps.

This research sets out to scrutinize following questions:

- Q 1: Is CALL convenient for all learners?
- Q 2: What are learners' motivations for using CALL?
- Q 3: What are emerging activities of CALL learners?

#### **Review of Literature**

CALL technology is shifting everyone's life and also people learning strategies. It recognized as one of important innovations that impacted teaching and learning in EFL class. Scholars understood there was still a lot of problems in computer teaching and learning, which referring to technical learning, digital content progressing, curriculum design, education for teacher and learner, IP protection, and availabilities of networks. To complete a real "anytime" and "anywhere" computer learning, it demands many efforts and collaborations. This present research is about advocacy for EFL learning and teaching changes. As title indicates, it advocates changing language education through new technology like CALL. Technology in language learning and teaching is not new. Indeed, technology has been around in EFL contexts for decades. One might argue for centuries, if we consider black and whiteboards as technological tools. To use tape recorders, language laboratories, and video history has referred since 1960s and 1970s, and are still used in classrooms through the world. Computer-based materials for language teaching, often referred to as CALL (Computer Assisted Language Learning), revealed in early 1980s. The primary CALL programs typically required learners to reply to stimuli on computer screen and to carry out tasks such as filling in gapped texts, matching sentence halves and doing multiple-choice activities Probably one of best-known early CALL activities is that of text reconstruction, where an entire text is blanked out and learner recreates it by typing in words. Focus on these activities computer next provides learner feedback, ranging from easily grading out whether answer is right or wrong to purvey more sophisticated feedback such as displaying why the learner is mistaken and offering compensatory drills.

CALL approach is one that is still found on many published CD-ROMs for language teaching. As access to Information and Communications Technology (ICT) has become more vogues, therefore CALL has moved beyond using of computer softwares comprising to use of Internet and web-based tools. The term TELL (Technology Enhanced Language Learning) revealed in 1990s, in response to developing possibilities offered by Internet and communications technology. Although the use of ICT by language teachers is still not prevalence, the use of technology in classroom is becoming incredibly important, and it will become an unusual part of ELT practice in coming years. There are many reasons for this:

- To access internet either in private homes or at Internet cafes
  is becoming increasingly accessible to learners.
- 2. Younger learners are growing up with technology, and it is a natural and integrated part of their lives. For these learners to use technology is a way to bring him outside world into class and some of these younger learners will in turn become teachers themselves.
- 3. English, as an international language, is being used in technologically mediated contexts.

- 4. Technology, especially Internet, presents us with new opportunities for authentic tasks and materials, as well as access to a wealth of ready-made ELT materials.
- Internet offers excellent opportunities for collaboration and communication between learners who are geographically dispersed.
- 6. Technology is offered with published materials such as course books and resource books for teachers.
- 7. Learners increasingly expect language schools to integrate technology into teaching.
- 8. Technology offers new ways for practicing language and assessing performance.
- Technology is becoming increasingly mobile. It can be used not only in classroom, lecture hall, computer room or self-access centre; it can also be used at home, on the way to school and in Internet cafés.
- 10. Using a range of ICT tools can give learners exposure to and practice in language skills like speaking, listening, writing and reading. Implications and role of technology. The word technology is used in diverse contexts and can be commented in different ways depending on the area of knowledge. In this sense, technology communicates enhancement of content, knowledge, new tool productions and data processing, i.e., use of information and knowledge area to teach language. Changes in communication have led to a revolution in language teaching. Traditional teaching methods or approaches (i.e., Translation method, the silent way, Suggestopedia, etc.) are seldom used and schools and universities provide platforms for teachers and students to implement content-based instruction and communicative approach. Among terms and acronyms that have been used to refer to use computer technology to language learning and teaching, CALL is most widely and significance accepted term. It involves use all types of computers and other digital devices for assisting language teaching and learning. It can be considered as an overreaching term "encompassing an ever-growing range of applications" (Son & Windeatt, 2017, p. 3). Shenoy Veena, Sheetal Mahendra & Navita Vijay (2020) explained technology has prominent and vital role in educating future generations. Dewi (2019) also stated in her journal that Information and Communication Technology (ICT) can be applied in teaching and learning languages. Cakrawati (2017) explained language learning should not only occur in classroom, technological devices can be used with teachers and students to facilitate language learning. Online technology also ensures valuable sources as asynchronous for language learners while practicing foreign language (Celikbas 2018.p.133).

#### **CALL Developments**

Since 1960s, Computer assisted language learning has been progressed with attention to areas of ELT and EFL collateral with pedagogical and technological developments.

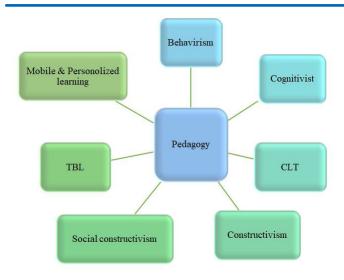


Figure 1: Pedagogical Developments of CALL

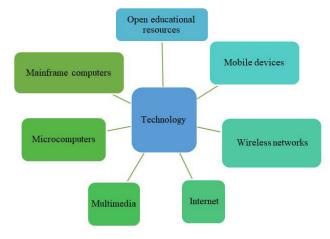


Figure 2: Technological Developments of CALL

Above Figures, show a simplified exhibition about most largely effective practical tools and theoretical concepts to glance at history of CALL from past years to present time and up come future. In terms of pedagogy, we have seen development and adaptation of behaviorism, cognitivist, communicative language teaching, constructivism, social constructivism, task-based learning, and mobile and personalized learning. In terms of technology, at same time, we have also seen development and use of mainframe computers, microcomputers, multimedia, Internet, wireless networks, mobile devices and open educational resources. Recently, both pedagogical aspects of mobile learning and personalized learning and technological aspects of mobile devices and open educational resources (cf. massive open online courses (MOOCs)) have generated significant interest among CALL researchers and practitioners (e.g., Burston, 2013, 2014a, 2014b, 2015; Godwin-Jones, 2011, 2014, 2017; Son, 2016, 2018).

As CALL is evolving further, we will face more pedagogical approaches and technological innovations that will expand scope of

CALL wider and deeper than before. Regularly and by the time a great expands of research papers involved with CALL have been or are being generally published. Following categorization system is containing 25 topics and themes that are studied and discussed fields of CALL innovation.

- Overview (history, overall trends)
- Theory (concepts)
- Research (approaches, methods)
- Pedagogy (teaching methodology, implementation, instruction, practice,
- activities, tasks, blended learning, feedback, integration, interaction)
- Technology (hardware, software, tools, systems, platforms, e-portfolios, databases, blogs, wikis, digital tools)
- Learners (students, attitudes, perceptions, learning styles, learner training)
- Teachers (lecturers, attitudes, perceptions, teaching styles, teacher training, teacher education, professional development)
- Design (software design, website design, app creation, activity design)
- Evaluation (software evaluation, website evaluation, app evaluation)
- Reading
- Listening
- Writing
- Speaking
- Vocabulary (dictionaries, glosses)
- Grammar
- Pronunciation
- Culture
- Testing (assessment)
- Concordance (corpora, concordancers)
- Gaming (games)
- Computer-mediated communication (CMC, Telecollaboration, videoconferencing)
- Web-based language learning (WBLL) (websites)
- Mobile-assisted language learning (MALL) (mobile apps)
- Robot-assisted language learning (RALL) (robots)
- Intelligent computer-assisted language learning (ICALL)

To study these topics and themes computer-mediated communication (CMC), web-based language learning (WBLL) and mobile-assisted language learning (MALL) can be considered as three popular sub-areas (or expanded areas) of CALL as many recent CALL publications tend to have links to them (Son, 2018). CMC refers to interpersonal communication that happens synchronously or asynchronously via networked computers or other electronically devices (Son, 2002a); WBLL is language learning conducted on the web using web materials and resources (Son, 2007); and MALL is language learning using mobile devices such as smartphones and tablets (Son, 2016).

## **Components of CALL**

According with Son (2000) there are three components of CALL:

- 1: Teacher
- 2: Student
- 3: Computer

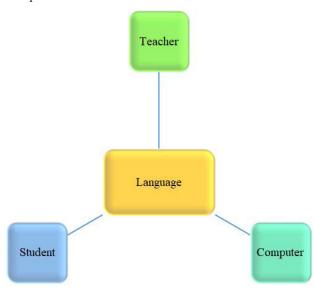


Figure 3: Components of CALL

#### **CALL & its Evaluation**

Central focus of CALL technology is impacts of internet. Indeed, it has a significant role in today's FL classroom and in line with students' lives in 1960s on mainframe computers within a Skinnerian behaviourist framework earliest applications of computer technology in field of FL teaching were implemented where learning a language meant memorizing a body of well-choreographed responses that included frequent vocabulary items, clichés, and phrases used at appropriate moments in a conversation. At Stanford University, Dartmouth College, and University of Essex first computer language programs developed by which exclusively dealt with Russian language instruction (Beatty 2003, 17-18). These mainframe programs were linear in nature and patterned after activities typically found in language workbooks. These approaches referred to as computer assisted language instruction (CALI, or language CAI), in contrast to computer-assisted language learning (CALL), where latter term implies an approach more equal with notions of communicative competence and negotiation of meaning in a non-behaviourist framework. Computer-Assisted Language Instruction Consortium (CALICO), the name of main professional organization dedicated to studying technology and language, still bears original CALI acronym.

#### Stages of CALL history

	1960s -1970s	1980s -1990s	Twenty First Century
Stage	Structural CALL	Communicative CALL	Integrated CALL
Technology	Mainframe	PCs	Multimedia & Internet
Teaching Paradigm	GTM & ALM	CLT	Content-Based instruction
View of language	Structural	Cognitive	Sociocognitive
Principle uses of computer	Drill & Practice	Communicative Exercises	Authentic Discourse
Principle objective	Accuracy	Fluency	Agency

# **Computer Mediate Communication or CMC**

Following actively to provide real opportunities for students to challenge interactive and collaborative activity is significant roles of talent and experienced teachers. Indeed, they can create same chance to interact within environment of CMC or computer-mediated communication whether in actual time (synchronous, SCMC) or deferred time (asynchronous, ACMC). To apply communicative strategies as e-mail, discussion forums or electronic bulletin boards, blogs, wikis, and chatting with or without sound/video in function of language learning as network-based language teaching (NBLT). Potential benefits of collaborative exchanges, whether set in classroom or administered online, belong more on voice pedagogical design of tasks participants are asked completing than on real locus of learning incident.

#### Web 2.0 Applications

These tools include variety of social media sites, such as Facebook

and Twitter, as well as blogs. For L2 learners, these sites provide unprecedented opportunities to experiment with their language in settings where their language appears before and communicates with real audiences rather than being confined to communication for practice within language classroom. The use of language for communication, rather than for practice alone, is a core goal of most language instruction. Beyond opportunities for communication, Web 2.0 applications like Google Docs provide tools for collaborative writing.

# Methodology

The purpose of present study is to examine implementing CALL in EFL contexts to bridge language learning gaps. This research applied mixed method strategy to collect qualitative and quantitative data together and also employed descriptive style. As Creswell states "mixed method facilitates power and flexibility of qualitative and quantitative research data collection and analysis".

He also identified "qualitative research as an investigative method for understanding a phenomenon based on separate methodological traditions of inquiry that elicit human conditions or social problem". Research domain encompasses all published qualitative and quantitative primary research investigating role of CALL for language learning. Search for empirical studies was carried out in several stages. We searched following electronic databases: SCOPUS, ERIC, Academic Search Premier, and Google Scholar to locate all possible primary studies aimed at investigating role of using new technology which are integrated in second /foreign language learning as supplementary purpose.

# **Participants**

Totally active participant numbers there were 35 native and non-native Iranian high school students that randomly selected and recruited in non-English departments, all of them are male learners and their ages is between 15–18 years old their native language is Persian and they just speak English in FL class.

#### **Instruments**

To collect and obtaining qualitative and quantitative data researcher has designed and employed several data gathering instruments and data analysis strategies like: Likert questionnaire items, some statistical programs, semi-interview session, etc.

#### **Procedure and Design**

Prior to data collection, participants were informed about aims and usefulness of study, protection of anonymity and confidentiality, and the steps involved. Then, to determine and appraisal their online pre-used english language levels of proficiencies and prior scores, their preferences to use online or live language learning strategies, qualities of CALL Technology by which was being used in EFL learning environments (Computers). At second phase (next session), subjects took general english language test and its administration took place approximately 120 minutes (40 minutes for reading comprehension, 30 minutes for assessing listening comprehension levels of proficiency, 20 minutes for grammar and structure knowledge and 30 minutes for writing and composition skills) all of test materials were catered by researcher own professional experiences but according to standard-based and proficiency tests like: SAT and IELTS, etc. Statistical Package for Social Sciences (SPSS) was employed for statistical analysis of data. Research design for current study is survey which was conducted online because of recent status in Iran and the tools applied to collect information is self-administered questionnaire which has known as an effective instrument of research which encompasses a sequence of questions for gathering specific information researcher piloted them before distributing according to cognitive principles. A simple random sampler technique has determined a subdivide of participants (samples) which is taken from a big set of population. In random sampling strategy every respondent is taken randomly and everybody has an equal chance of being chosen while this sampling process. All questionnaire contents were being piloted before distributing accordingly; to essential of research requirements and some international standards of questionnaire writing for research.

# **Data Analysis and Findings**

In this part analysis of collected information has been discussed. Research results were analyzed to purpose of determining participants' perspectives about using CALL Technology in FL class. To obtain data, there is using Likert questionnaire. Analyzing data results of students' responses are described into following figures and tables and they formulated according standard-base statistics. Furthermore, accordingly with Likert questionnaire investigated some data such as: learner percent of applying CALL in class for their EFL learning aims, CALL qualifications, student's preferences using of CALL, etc. Finally, researcher designed a table of information about total participants per/post test results that include language skills which have been analyzed according to simple descriptive statistics items like: Mean, SE, Median, Mode, SD and Variance.

Table 1: Participants' pre-use test results

Mean	SE	Median	Mode	SD	Variance	Total	No
22.7	0.39	24	24	2.3	5.4	795	35

Table one results show participants' scores for pre-use of CALL Technology in classroom. Indeed, these data have achieved according to general High school and standard-based tests.

Table 2: Participants' post-use test results

Mean	SE	Median	Mode	SD	Variance	Total	No
25.1	0.25	25	26	1.5	2.28	897	35

Table two results indicate participants' post-use scores. Infact above test results told us to use of CALL Technology in classroom for EFL purpose is effective for students and it can be considered a positive factor for EFL learning activities in contrast to non-CALL environment.

Table 3: Participants' feedbacks about integrating CALL in EFL contexts

Strong agree	ly Agr	ee Neutr	al Disagree	Strongly Disagree
41%	459	% 4 %	10 %	0 %

Table 3 results indicate respondents' feedbacks about implementing CALL Technology into EFL contexts. In fact, it shows that approximately half of participants are inclining to use this technology for their language learning purpose.

Table 4: Respondents' assertions about CALL qualifications

Excellent	Somewhat	Poor
% 11	% 67	% 2

Table 4 results show that participant' opinions about CALL feature EFL learning in class. Indeed, based on findings it can predict if CALL be integrated with EFL contexts could help students to juxtaposing their learning gaps.

#### **Conclusion**

This research previewed that remedial panacea to promote students' EFL learning needs by integrating CALL technology into class. Equally, it will be affected that some Learning tools like CALL. Furthermore, CALL is a learning tool which is useful facilitator to break EFL learning restrictions. Urgently, CALL is available technology for world education instructions. Nohow, they must concentrate their talents exactly to solve possible challenges about EFL learning requisites. This study may have implications that technology -integrated EFL student learning can pinpoint and bridging the existing gaps between current, upcoming and learning situations regarding the use of CALL in Iranian contexts also help students considering themselves as confident and component users of technology for the future. The course was intended to guide educational instructions to understand benefits of how to integrate CALL into their English classroom to compensate EFL learning deficiencies. The research has commenced a mysterious voyage beyond comparison of CLL versus non-CALL environments to find what happened for EFL learning conditions with CALL activities. One of CALL utilities is providing students opportunities to modify input. Subsequently, it can be anticipated that to integrate CALL technology in EFL contexts especially equal to E-learning could be used as a reliable shield to decline paper and ink consuming, help to protect environment, saving nature and decrease educational costs in schools. Due to time allotments for EFL learning contexts every teacher is able to apply CALL technology to perform language skills without any solicitude about teaching-leaning limitations. It is meaningful that teaching language skills in today learning atmosphere and learners' features is convenient to use of new learning applications like computers and other language teaching-learning tools and software. In one sentence; foreign language teaching/ learning activities without CLL technology is meaningless and purposelessness contexts.

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