

**The Effectiveness of Integrating CALL Into Iranian EFL Contexts  
Challenges and Opportunities**

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**Abstract**

*Computer and its software-programs are educational instruments that succor and facilitate instructors, teachers, and students to perform conveniently and achieve their predetermined EFL/ESL teaching and learning goals and tasks in contrast to traditional methods. This study attempts to investigate impacts of integrating CALL in Iranian EFL contexts. Researcher to collect qualitative and quantitative data, has employed mixed method strategy, and also descriptive style. As Creswell states, mixed method is the best way for research fulfillment. Total participants are 87 Iranian high school students that were dived into two separate groups. Control group (35) students that have been traditionally taught or teacher-based strategy, and experimental group (52) students that have been educated just via CALL. Subsequently, observations and findings predict and reveal that computer is useful for teacher and learner groups to teach and learn receptive and productive L2 skills like listening, speaking, reading, and writing.*

**Keywords:** *CALL Technology, EFL context, Hypermedia, Multimedia, Telecollaboration*

**INTRODUCTION**

English as an international language, are used by education instructors through universe, including notably those in Iran region. Indeed, recently how to optimize meeting requires for teaching and learning immensely has explored in Iranian high schools, especially private departments. Although, big population of English learners, learning on-goings to follow an in-class-only strategy, with only opportunities purveying learners to apply language outside of classroom's boundaries. This explains a demand for practical engagement of learner-centered method providing contextualized language acquisition. Assisting address, restricted chances for real materials to enhance language skills, and in perspective for developments in technology update class is increasingly to utilize digital resources. In higher education environment, modern digital technology like CALL is playing a prominent job in forming teaching and learning domains. In language teaching and learning arenas ubiquitous presentation of technology (CAL) has become generally increased. Technological progressing is quickly increased time to time one of developed technology which used in different activities in web connection. This research sets out to scrutinize and autopsying following research questions:

- Q 1. Is CALL convenient for all learners in EFL contexts?
- Q 2. What are learners' motivations for using CALL in EFL contexts?
- Q 3. What are emerging activities of CALL learners?
- Q 4. What is complementary function of CALL technology in EFL contexts?

## Conceptualizing CALL In EFL Contexts

Everyone's life, and also people learning strategies is shifting with CALL technology. It found that computer technology as fundamental innovation that impacted teaching and learning for EFL class. Scholars understood, still there were a lot of problems in computer and mobile teaching and learning, which refer learning technically, for progressing digital content, designing educational curriculum, for teacher and learner, IP protection, and availabilities of networks. Completing real anytime or anywhere computer learning, requires much more efforts and collaborations. This present proposal is about advocacy for learning and teaching changes. As title indicates, it advocates changing language education through new technology like CALL in EFL contexts. Technology in learning and teaching arenas is not so new. For decades technology has been around in EFL contexts. One might discuss for centuries, if we consider black and whiteboards as technological tools. Applying tape recorders, language laboratories, and video history has referred since 1960s and 1970s, and are still used in classrooms through world. CALL or Computer Assisted Language Learning often refers Computer-Based contents for language teaching, and that revealed in early 1980s. Primary CALL programs typically requires learners to reply stimuli on computer screen, and to carry out tasks such as gap filling texts, to match two halves of sentences and doing multiple-choice items probably one of early best-known CALL activities is text reconstruction, where an entire text is removed and learner recreates it again by typing in words. To focus on these activities, computer next provides learner feedback, ranging from easily grading out whether answer is right or incorrectly to purvey much more sophisticated feedback such as displaying why learner is mistaken, and for offering compensatory practices. CALL is an approach that founds still on many published CD-ROMs for language teaching. As access to Information and Communications Technology (ICT) has become much more vogue, therefore CALL has moved beyond using software including to use internet and web-based tools. By 1990s TELL or Technology Enhanced Language Learning was revealed in response for developing the possibilities that have been offered by internet and communication technology. Although using ICT by language teachers still not prevalence, to use technology in classroom is becoming incredibly essential, and it will become an unusual part of ELT practice for future period. To implement technology like computer- assisted language learning requires considerable efforts by instructor, teacher, learner, etc. CALL involves using technology in form of computers. Hence, CALL should be perceived as an interdisciplinary issue (Levy, 1997) entailing strategies to manage shift alongside knowledge to use computers for learning destinations, and targets for teaching. Despite developing interest from CALL scholars, it can be anticipated that there is a vacuum between computer and technology literacy for teaching-learning purposes and experience of pragmatic implementation process for EFL areas. Hampel & Stickler (2005) current context of computer-assisted language learning (CALL) has urged needs for innovative teaching approaches and strategies that are quite different from those utilized traditional face-to-face in class. CALL-integrated language teaching resources and activities will encourage students to communicate with real world while providing them by more authentic and meaningful learning materials. Gunter (2001), a reliable language learning material for using ICT would be used for scaffolding learners' learning process, therefore learners can focus on how actually is used English Language. Experimental researches into CALL contexts practice would help researchers to find environmental aspects of CALL activities, particularly components of CALL classroom. Today, intelligence learners need to be provided more educational opportunities for learning which have been presented by modern technological inventions. Technology benefits for foreign language learners is computer that provides pronunciations and definitions always without becoming futile, or to make negative judgments about skills for students. CALL describes instructions that to benefit computer and software which do not require human faculty and interactions directly. It includes several tools and

devices such as desktops, laptops, tablets, and mobile phones. CALL carries deferent types of software for teaching learning methodology, and also it can be used for a wide range of subjects from language learning to Math. Additionally, that technology can be applied across education levels, K-12, higher education, and adult courses. Peterson (2010), primary works on CALL taking an explanatory approach for instance for identifying gaming prototypes, also how they are incorporated into classroom. Ranalli (2008) & Coleman (2002), amongst diversity types of presented computerized games simulation gaming and virtual reality (VR) have received a great attention that becoming in field major trends from today's CALL. Jones (1982), Simulation gaming and VR primarily are useful due to carry motivational aspects of language learning and they facilitate interactive practices, also they are learner-centered paradigms particularly simulation and gaming in which instructionally motivate and for more engaging learners. CALL experts for your program, will help other teachers and administrators with CALL implementations. Because of CALL professionals consulting on external projects, doing software reviews for journals, making to present conference, papers composing, interpreting and applying CALL research, and / or providing for a field the major inputs. Primary reason for doing CALL is to promote teaching or learning process.

#### CALL Developments

CALL history looks back on a long time for some serious and widely interdisciplinary works. Levy (1997), reports inter alia on Plato or programed logic for automatic teaching operations. Project is related to University of Illinois that has begun since 1960, TICCIT (Time Shared Interactive Computer – Control Television) Brigham Young University commenced by 1971. Both of previous programs are sophisticated featuring talk facilities for exchanging typed messages exercises for reading, writing, and listening and speaking. Also provides opportunities for instructors to modify material, and self-paced material organization. To evaluate them, early work predicted that whenever students' performance was acceptable retention rate for them was not acceptable. Systems were not popular for students, and this remains a caution to resent work (Hamilton 1998). In 1983 Athena language project (ALP), began at MIT that involved artificial intelligence, tutoring techniques, and Multimedia to prepare educations in five languages of Europe. Besides earlier projects, ALP concentrates more about communicative strategy as opposed for grammar, and it includes puzzle and games (Murray, 1995 & Felshin, 1995). CALL has been progressed since 1960s for areas of ELT and EFL, collateral with pedagogical and technological developments. Computer role in class as part of lesson development has been known few different stages for development and has nowadays become an integrative part of language learning usage.

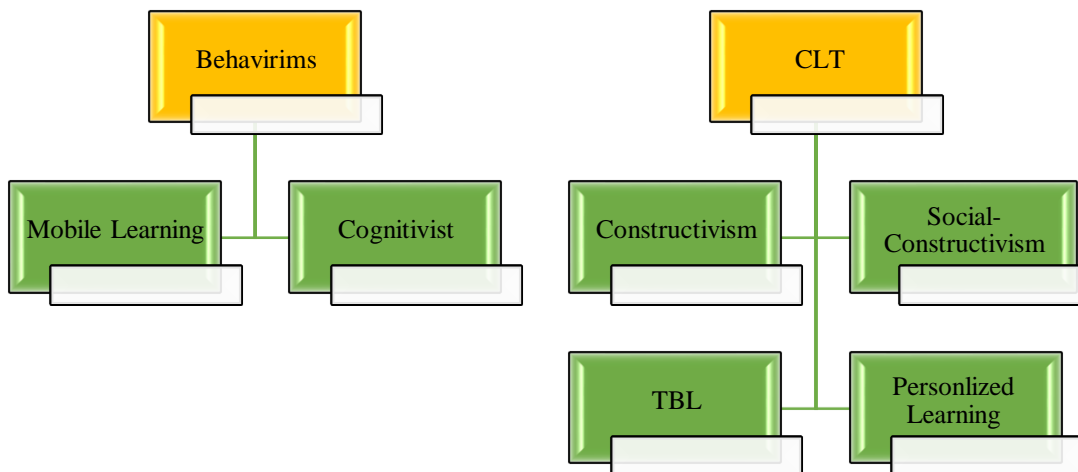


Figure 1. Pedagogical developments of CALL

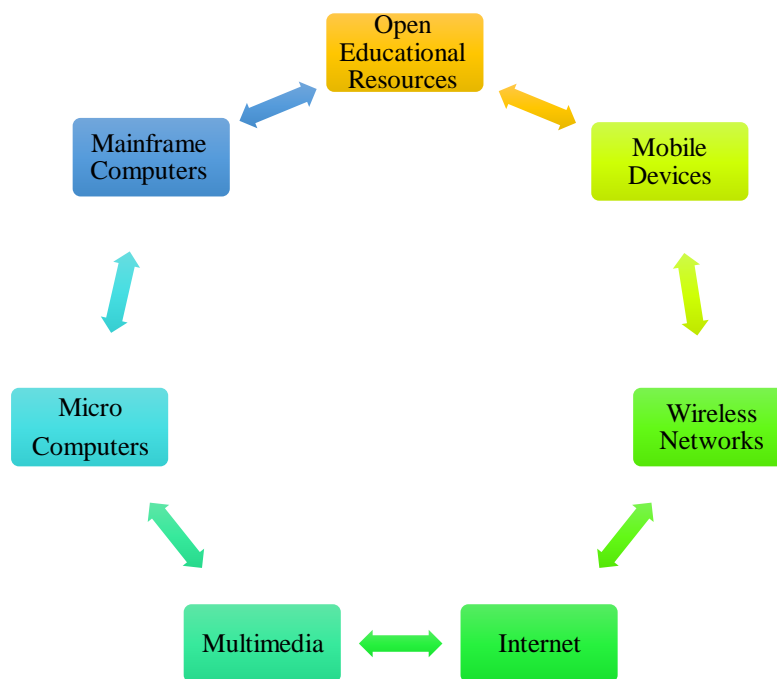


Figure 2. Technological developments

Above figures show a simplified categorizations for largely most effective practical tools and theoretical concepts to glance at history of CALL from past years (1950s) to present time, and up come future pedagogical and technological. Constructivist framework developed by Piaget (1886-1980), shows value for collaborative learning that encourages learners to use their prior knowledges and experiences to construct new knowledge (Piaget & Inhelder, 2000). Barson and Debski (1996), there has been gradual development for computer assisted language learning. It has known three different phases such as Behavioristic CALL, Communicative CALL, and Integrative CALL. Healey. D & Warschauer. M (1998), history of CALL technology includes three phases: Behavioristic CALL, Communicative CALL, and Integrative.

## Behavioristic CALL

The behaviorist school, refers to some famous psychologists like Thorndike (1913), Pavlov (1927), and Skinner (1974) they emphasized that learning is immanent changes in observable behavior in result of external stimuli in classroom. Behavioristic CALL has been commenced since decade of 1950, and flourished in 1960s to 1970s. It focusses on behaviorist learning model, repetitive language drills, and drill and practice strategy (Warschauer & Healey, 1998). Levy (1997), referring to this time frame, thinks that empiricist theory is predominant in language teaching which is explained by Stern (1983) as pedagogically that refers to Audio-lingual method (ALM), psychologically refers to behaviorism psychology, and linguistically by which concerns according with structuralism theory. The only technology in behavioristic CALL is mainframe computer, accuracy is principal objective for foreign language skills and it refers to structural view of language teaching learning or grammar translation method (GTM). Drill and practice courseware is based on model of computer as tutor (Taylor, 1980). Language laboratories have been developed in 1970s under influence of Audio-lingual Method, were superseded several decades later by computer-assisted language learning (CALL) work stations (Gündüz, 2005).

## Advantages of Behavioristic CALL

- ✎ Providing every time - place and necessary access to essential learning materials to acquiring a language. To repeat is clamant demands for learning.
- ✎ Participants enable to access same materials and to offer immediate and non-judgmental feed-back for language learning.
- ✎ Presenting such language materials on an individualized pace, without time limitations, for affording students opportunities to study in their own disciplines are useful for mastering a language.
- ✎ Keeping efficiently the records.
- ✎ Motivation
- ✎ Computer is ideal to present repeated drills, since machines doesn't get bored for carrying same lesson contents.

## Communicative CALL

Communicative approach is a reaction for ALM and it focuses on language as a medium to interact in class. In addition, this approach recognizes that using language to get comprehend inputs have done, we speech a language in order to communicate with other people. The second stage of CALL development that appeared in late 1970s and early 1980s is communicative CALL due to rejection and to expostulate behavioristic CALL in both prospects theoretically and pedagogically. Previous phase suffers from presenting and providing enough authentic communicative drill and practice for students in EFL context. Vance Stevens (1989) proposed that all CALL courseware and activities should build on intrinsic motivation and should foster interactivity learner - computer -learner. Communicative CALL according to Underwood (1984) involves following premises:

- ☞ Form-focused and meaning-based together not just focus on meaning
- ☞ Teaching grammar implicitly
- ☞ Speaking native language in classroom
- ☞ Emphasized on logic for issuance any feedback
- ☞ Avoids immediately feedback
- ☞ Uses target language exclusively both on and off screen
- ☞ Content-Based Teaching

During this period of CALL development several usefully programs were developed and used to provide skill practice in a non-drill performance. These programs include courseware for paced reading, text reconstruction, and language games (Healey & Johnson, 1995). Computer in this view additionally, remains “knower-of-the-right-answer” (Taylor & Perez, 1989). Second model of communicative CALL, in contrast to first communicative CALL model (tutorial) the purpose of CALL is to stimulate students' discussion, writing, or critical thinking. Some software used such as Sim City, Sleuth, or Where in the World is San Diego?<sup>1</sup>. Third model of communicative CALL refers to computer as tool (Taylor, 1980 and Brierley & Kemble, 1991) or computer as workhorse (Taylor & Pereze, 1989). In this model computer empowers learner to use or understand language. Using Computers as tool may include word processors, spelling and grammar checkers, desk-top publishing programs, and concordancers. Although, significant advance of communicative CALL over behavioristic CALL by end of 1980s, many scholars felt that CALL was still failing to live up for its potential (Kenning & Kenning, 1990, Pusack & Otto, 1990 and Ruschoff,1993). The critics pointed out that computer was being used in an ad hoc and disconnected fashion and thus finds itself making a greater contribution to marginal rather than to central elements of language teaching process (Kenning & Kenning, 1990). View of language in communicative CALL is cognitive for problem solving, communicative exercises, and language fluency. Finally, to use PCs rather than mainframes.

Table 1. Behaviorist vs Communicative CALL

Behaviorist View	Communicative View
Unique Activities	Task-Based and collaborative learning
Program Learning	Preparing alternatives for learners
Language as discrete components	Language as a whole
Observation and control learning	Facilitator
Extrinsic Feedback	Extrinsic and intrinsic feedbacks

### Integrative CALL

Primarily in response to criticism toward communicative approach by later 1980s and 1990s there has been a move toward constructivist theory for language teaching learning activities. Two important technological developments are significant sources of integrative CALL approach from last decades Internet & Multimedia computer. Today, Multimedia Technology has exemplified by CD-ROM which allow several medias (text, graphics, sound, animation, and video) for accessing a single machine(computer). To use Hypermedia makes Multimedia powerful. When all multimedia resources linked together students can explore their own requires conveniently to use and clicking a mouse. Hence, there are many accumulated benefits of hypermedia for language learning. First, an authentic language learning atmosphere is created especially for listening skill which compeer with visual inputs like pictures and

<sup>1</sup> Healey & Johnson (1995).

graphs, also in real world. Secondly, hypermedia has integrated other language skills too conveniently as different of media, make it authentically to combine listening, speaking, reading, and writing as a unique practice. Third, students have a rein beyond their performances, also they are able to work individually, to stay on their own individual path, and to go different section of software forwards and backwards. Finally, significant merit of hypermedia is facilities principal attention to contents without any focus on language forms or strategies. Additionally, other technological development for integrative CALL approach is Internet while Intelligent CALL may be next, and computer usage ultimately for language learning, that phase is clearly a long way down the road<sup>2</sup>. Internet technology could be combined with other technologies helping to build an integrated communicative environment for Iranian EFL students. Students who during recent years are restricted and had a little interaction to accurate speaking – English world, and they taught through a discrete topic and orientation<sup>3</sup>. Students now benefit from a high and low technology combination to implement integrated skills approach in which a diversity of language skills are practiced at same time with goal of fostering interactive capacity. Courses are based on a collaborative interpreted study of contemporary American short stories, assisted by three technological tools like audio tapes, communicate by email, and concordance. These activities are supplemented by a range of other classroom activities, such as in-class discussions and dialogue journals, which assist students in developing their responses to stories' plots, themes, and characters responses which can be further discussed with their email partners in native country. To work with and gaining knowledge from Concept, a community of learners is also found in Vygotsky's (1986) sociolinguistic theory where cognitive development is enhanced through social correspondences. Newstead (2007) states much of recent research into second-language acquisition (SLA) has moved away from traditional, behaviorists theories to focus on necessity of input and communication in target language, idea being that interaction and immersion simulate environment in which learned native language. Integrative CALL focus is for content-based instruction for EFL setting, and concentration is Socio-cognitive strategies for language skills, also attention to authentic discourse, and agency is objective provenance.

#### Integrative CALL features

- ✪ Integrating Multimedia, Internet, Web 2.0, and Mobile learning resources to create a limitless opportunity for learning.
- ✪ Quick accessibility to several authentic learning restorers, modified for students according their personal interests and needs from around world.
- ✪ Students take control beyond their own path to set their paces via Multimedia.
- ✪ Integrating media and multi-cultures to create content-based, and authentic learning environments.
- ✪ Language skills have fully been integrated through whole -language approaches for instruction and learning.
- ✪ Directly, cheaply, and easily communicating to other leaners or native speakers of target language that was devoted at anytime and anywhere, is viable for learners through using authentic synchronous, or asynchronous communication.

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<sup>2</sup> Underwood (1989).

<sup>3</sup> Meskill & Rangelova (1995).

- ✪ Web space is available for students to share and publish their own compositions, or Multimedia contents to attend in academic collaborations, or chat simply worldwide virtually with a new conversation anywhere - peer.
- ✪ The coordination of learner and learner, learner and computer.
- ✪ The primary goal is language fluency.
- ✪ Facilitator is instructor and many resources for learning.
- ✪ Booklets as facilitator resources.
- ✪ Acquisition of language contents through purposeful, reflective and creative participation lead to learning.

## Advantages of Integrated CALL

1. Internet and wireless network (Web-Based CALL)
2. Accessibility to Multimedia and Hypermedia resources such as text, sound animation, and videos (Multimedia CALL).

### 1. Web - based CALL

- Virtual libraries and online media
- Language reference materials
- Professional journals
- Listservs and email
- Online conferences
- Classroom management tools
- Collaborative projects like Web-Quest
- Student publishing
- Free lesson plans/ideas
- Research information and news
- Sites for students
- Electronic discussion forums

### 2. Multimedia CALL

- Multimedia creates a more authentic learning environment using different media.
- All language macro or micro skills are easily integrated through multimedia.
- Students are too conscious over their learning through hypermedia.
- Multimedia CALL facilitates a principle focus on content without sacrificing a secondary focus on language form.
- Advantages of adding a computer component to language instruction Provides.
- Multimodal practice with feedback and real-life skill building for computer use.
- Individualization in a large class to work on pronunciation drills.
- Pair and small group work on projects for collaborating learning.
- Diversity of resources available and learning styles used.
- Learning with a great amount of language data as exploratory function.



Table 0. Stages of CALL Technology developments (Warschauer, 2004)

Stage	1970s-1980s: Behaviorist	1980s-1990s: Communicative	21 <sup>st</sup> century: Integrative
Technology	Mainframe	PCs	Multimedia & Wireless Internet
Teaching Paradigm	GTM & ALM	CLT	Content-Based
View of Language	Structural View	Cognitive View	Socio - Cognitive View
Principal Use of Computers	Drill and Practice	Interactive exercises	Authentic Discourse
Principal Objective	Accuracy	Fluency	Authoritative & agency

#### CMC<sup>4</sup>

Computer-mediated communication is a part of our daily lives and it also has been utilized appropriately in pretty of EFL contexts. CMC has existed since 1960s, but revitalized in last five years is probably single computer application to date with greatest impact on language teaching. That technology provides learners for interacting to other students or speakers from target language (TL) 24 hours a day from home, school, or work. Communication may be asynchronous via some tools as e-mail and written messages at their times and pace, or can be synchronous like real time in using some programs like MOOs which allows people to make a simultaneous conversation by typing their words. It also permits not only one- to- one interaction, but one-to-many. Teachers or students allow to share message with a small group, whole class, one member of class, or an international communicative list for several participants. Computer-mediated communication allows users to share a great amount of collaborative tools in any format like graphic, sounds, and video as facilitator resources. CMC helps students to search in internet for millions of files around a work very swiftly to locate and for accessing authentic materials by which tailored for their own personal interest. It also enables users for publishing their works with their classmates, or publicly.

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<sup>4</sup> CMC is a series of authentic experiences that encourage students to cognitively engage content by actively trying to make sense, and to integrate experience. Computer-mediated communication is a safeguard that shields various forms of human communication through networked computers, which can be either synchronous or asynchronous and also, involve one-to-one or one-to-many and many-to-many exchanges of text, audio, and /or video messages.

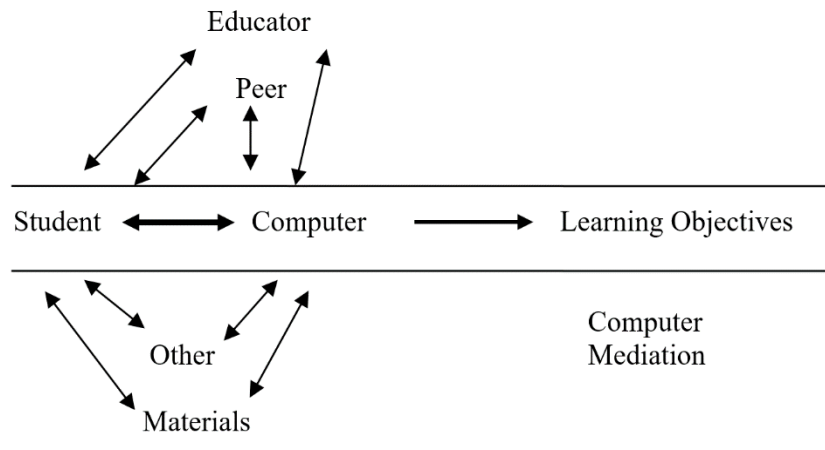


Figure 3. Why call CALL CALL model<sup>5</sup>

Levy & Hubbard (2005) model shows how learner interacts through computer in broadest sense with instructors, peers, others, and materials in pursuit of intentions to learn. CMC can involve:

- Archiving & indexing
- Transferring
- Linking
- Time control
- Transforming

### Telecollaboration

Telecollaboration is a form of foreign language education which links students cross-linguistically as well as intercultural through computer-mediated communication or CMC (Belz, 2003). It incorporates computer technology and internet into EFL contexts for teaching learning activities. Concurrently, students can use communicative tools such as e-mail, synchronous chat, threaded discussion, and MOOs to support social interaction, dialogue, debate, and intercultural exchange (Belz, 2003).

### Web 2.0 applications<sup>6</sup>

It is the second generation of World Wide Web (Web 1.0) which provides facility for online collaboration, and information sharing among people in a much active manner. Web 2.0 can support knowledge construction, immersion in foreign language, and interactivity across sites. It is an online computing platform too. Web 2.0 has affected communication, information sharing, and interoperability for everyone, including those of us in education, and particularly EFL contexts. By 2005, total number of web pages worldwide exceeded 600 billion (Kelly,

<sup>5</sup> Levy & Hubbard (2005).

<sup>6</sup> With relevant use form internet technologies such as Web 2.0 and E-learning can be applied as instrument to teach students at anywhere and anytime. Utility such as internet and mobile systems like smartphone or tablet offer students capacities proceeding along knowledge, lectures, and helpful advice for learning in acceptable status quo.

2005). O'Reilly (2005), Architecture of Participation was beginning of Web 2.0 it had also arrived some tools that are in use currently which belong to web 2.0 applications such as AJAX, Atom, Blog, HTML, Mashup, Podcast, RSS, Social-Media, Tags, Wiki, and XML. But some other web 2.0 tools used just in teaching learning activities like Blogs, Wikis, Threaded Discussions, and Skype. Web 3.0 is newest model of web application in education. Moreover, Web 2.0 allows students creating, to share their own products with a low-cost access, and to enhance communication and collaboration among learners without restriction of time and location.

### Components of CALL Son (2000)

- ✂ Computer
- ✂ Student
- ✂ Teacher

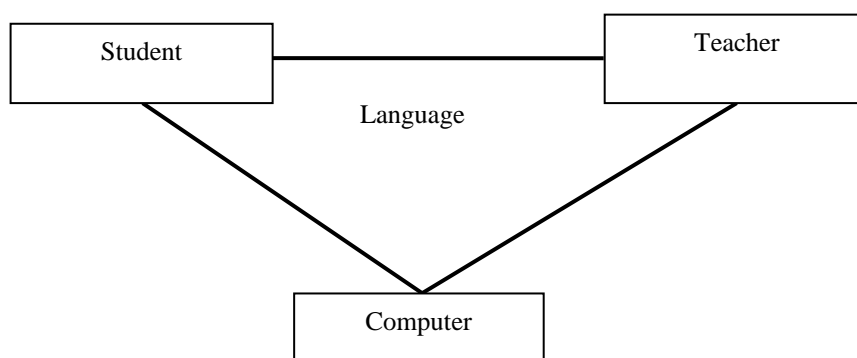


Figure 4. A model of three Components of CALL classroom (Son, 2000)

Figure 4 shows three main components in computer-assisted language learning (CALL) classroom: computer, learner, and instructor. While they are complementary to each other, each component has its own characteristics and stories of roles they play, and how those roles have changed in CALL settings. Ahmad, Corbett, Rodgers and Sussex (1985) discuss learner, language, and computer whereas Levy (1997), lists class, teacher, and computer. Ahmad et al.'s model looks at roles of learner, language and computer, and their interrelationships.

### Computer

Computer can play divers roles like tutor, tool, or tutee (Taylor, 1980) in language education. Every computer has been equipped to some devices such as keyboard, screen, Hard Drive, Ram, CPU, Fan, Motherboard, and Graphic Card which they are called hardware. But programs and codes that trigger computer systems to work are called software, like windows and its programs. Within scope of computer programs, software with an instructional purpose is known as courseware (Jonassen, 1988 and Lathrop & Goodson,1983). In respect of CALL materials, therefore most obvious category of CALL software can be courseware or computer-based lesson materials (Lian, 1991). Merit of CALL is that users have been given a variety of options to choose hardware and software. To use CALL in contexts teachers, require to select appropriate programs and tools according their teaching activities. System requirements should be checked in advance before selecting software programs. For computer-mediated communication or CMC which is considerable strategy for expansion CALL activities, and online tools must be previously predetermined and arranged on each side of web interactions. That means CALL work is acceptable while be integrated the hardware and software together.

### Student

For CALL components, learner is a person who experience computer for his/her language learning activity. Jamieson and Chapelle (1988) have considered five variables for learners that

are prominent for appraising effectiveness of CALL in EFL contexts such as age, background, ability, styles and cognitive desire. So, teachers require to know adequately learners, also they must be properly ready for responding learners' needs and attitudes toward CALL technology. For implementing lessons for CALL technology students' familiarity to computer, and their digital literacy must be previously identified to present suitable and meaningful lesson practice and activities. Deliberating that there will lead more and more learners who convenient to use CALL, and show positive attitudes for computer-based context.

## Teacher

Teachers' role in Warschauer. M & Healey.D (1998) viewpoints. Teacher's job is facilitator of learning rather than merely teaching activities. Teacher must be conscious about variety of available materials by which for prompting students' EFL skills, understanding how to teach learners using effectively materials, and they must be oppositely able for reflecting whatever student require. Unlike other CALL components (learner & computer) teacher in CALL classroom is usually considered to develop and for equipping his/her professionals as responsibilities that be determined to perform teaching duties in class. Now, teacher is being asked to know computer literacy, and new teaching methodologies to use CALL applications, and also to be involved to use computer materials in their teaching class. Primary point to fulfil this requirement is finding appropriate jobs and possible functions for teacher in computer-based contexts. That anticipates, teachers need to recognize and for identifying their roles for new issues, and necessities on themselves. Besides, teachers should accommodate themselves to computer and digital literacy, and take responsibility for their own professional development in CALL environments. Educator's main roles in CALL environments are tutor, guide, and facilitator. Teacher supplementary roles in CALL classroom are CALL observer, designer, subsidiary, evaluator, and manger. First role in CALL classroom for teachers is observer job. In fact, teachers must follow current CALL drills and activities, discriminate diversity of material for CALL, and cater fundamental skills working with computer-assisted in EFL environments. Teachers who are really engaged in designing, implementing, or evaluating CALL would be named CALL developer upon the basis of idea for categorizing CALL software development in three models which previously have referred such as designing, evaluating, and to implement. CALL designers provide their own computer applications by practice and to utilize programing languages, or authoring tools according instructional design approaches. CALL implementers apply CALL software links with students, or teachers' needs in classroom and to progress teaching methods for CALL practice. CALL evaluators propound comments on CALL material, approaches, and courses with evaluation criteria. CALL mangers, imply to function of teachers when they are supervising overall using CALL, so they become CALL mangers who direct other teachers through CALL world to facilitate self-accuses, or class setting, also administer CALL resources for learning and teaching (Son, 1997-2000). It is up to teachers' choice whether they become a CALL observer, designer, supplementary, evaluator, or manager. Depending to teachers' situations, they can utilize computer as a supplement or tool for their jobs. Teachers who employ computer in service of sound pedagogy would find ways to enrich their instructional programs (Warschauer, 1996). In research domain implies to three components of CALL classroom, a large amount of energy has been consumed for development of CALL software and studies of learner, and interaction between learner and computer (Chapelle, 1996 and Conrad, 1996). Although teachers' roles are too vital to conduct CALL in classroom, unfortunately very little attention has been paid toward developing and to study teachers.

## METHOD

Present study determined to examine implementing CALL into Iranian EFL contexts. Mixed method strategy employed to collect qualitative and quantitative data together, and also descriptive style. Creswell states, it facilitates power and flexibility of qualitative and quantitative research. Also, he identified qualitative research as an investigative method for understanding a phenomenon according on separate methodological traditions of inquiry that elicit human conditions, or social obstacles. Research domain encompasses all published qualitative and quantitative primary research for investigating role of CALL-based instruction. Search for empirical studies was carried out in several stages. We searched following electronic databases: APACALL, CALCIO Journal, CALLEJ, Elsevier, ERIC, EUROCALL, Google Scholar, IALLT CALL, IATEFL, IJCALLT-IGI Global, JALT CALL, [Onlinelibrarywiley.com](http://Onlinelibrarywiley.com), PacCALL, SAGE, SCOPUS, Script, [Tandfonline.com](http://Tandfonline.com), and TESOL to locate all possible primary studies aimed for investigating role of using new technology which is integrated in second /foreign language learning contexts as supplementary purpose.

## Participants

Totally, active participant numbers there were 87 non-native Iranian high school students that randomly selected and recruited in non-English departments. They 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. Creswell (2012) suggests researchers need about 30 participants for one study exploring relations among more than two variables.

## Instruments

For collecting 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 involved steps. Then, to determine and appraisal their CALL pre-used English language levels of proficiencies and prior scores their preferences to use CALL technology in EFL context, qualities of CALL by which was being used for learning environments (Computer). At second phase (next session and post-test), all subjects took general English language test, and its administration took place approximately 90 minutes (15 minutes for reading comprehension, 20 minutes for assessing listening comprehension levels of proficiency, 5 minutes for grammar and structure knowledge and 30 minutes for writing component and composition skills, and 20 minutes allotted to assess dialogue with numbers of missing blanks and also answer conversation questions orally). Whole test materials were catered by researcher own professional experience, but according to standard-based and proficiency-based tests like: SAT & IELTS, etc. SPSS or Statistical Package for Social Sciences was employed for statistical analysis of data. Research design for current study, is survey which was conducted online by Google Form because of recent status in Iran (COVID-19), and tools applied to collect information is self-administered questionnaire which has known as an effective instrument of research to gather specific information that encompasses a sequence of questions. A simple random sampler technique has determined to subdivide of participants (samples) which were taken from a big set of population. For random sampling strategy every respondent is taken randomly, and everybody has an equal chance of being chosen while this sampling process. Additionally, all questionnaires' contents have been

piloted before distributing accordingly to essential of research requirements, and some international standards about questionnaire designing.

### Data analysis

In this part analysis of collected information has been discussed. Research results were analyzed to purpose of determining effectiveness of integrating CALL into Iranian EFL contexts, and participants' perspectives about usefulness of CALL in FL class. To obtain data, there is using Likert questionnaire. Analyzing data results of students' pre-test and post-test results are described into tables, and they formulated according standard-base statistics (SPSS). Researcher designed a table of information about total participants pre-test and post-test results (Control and Experimental groups) that includes all language skills (listening, speaking, writing, reading, and grammar) which have been analyzed according to descriptive statistics items like Mean, SD, and additional items.

## FINDINGS AND DISCUSSION

Researcher designed a table of information about total participants pre-test and post-test results (Control and experimental group) that include assessments of language skills which have been analyzed according to descriptive statistics items like Mean & SD for observing and to obtain positive effects of integrating computer technology for language learning tasks.

### Pre-test results

Table 0. Descriptive statistics EG and CG pre-test scores

	N	Range	Min	Max	Sum	Mean	SD	Variance	Skewness	Kurtosis
EG pre-test score	52	7	10	17	671	12	2.047	4	.000	.000
CG pre-test score	35	5	10	15	434	12	1.000	3	.016	-1.000
Valid N (listwise)	35									

According to data in table 3, to test whether difference between two groups whether statistically significant or not, descriptive analysis of pretest scores indicates experimental group (mean 12) and control group (mean 12) are a little more deviated from normal score. This mean both groups are approximately at same level of language proficiency at beginning of experiment. It can be also noticed from above table, mean scores of both groups were low. Consequently, these results indicated that traditional methods are not much more effective for foreign language teaching learning environments due to today's participants requirements.

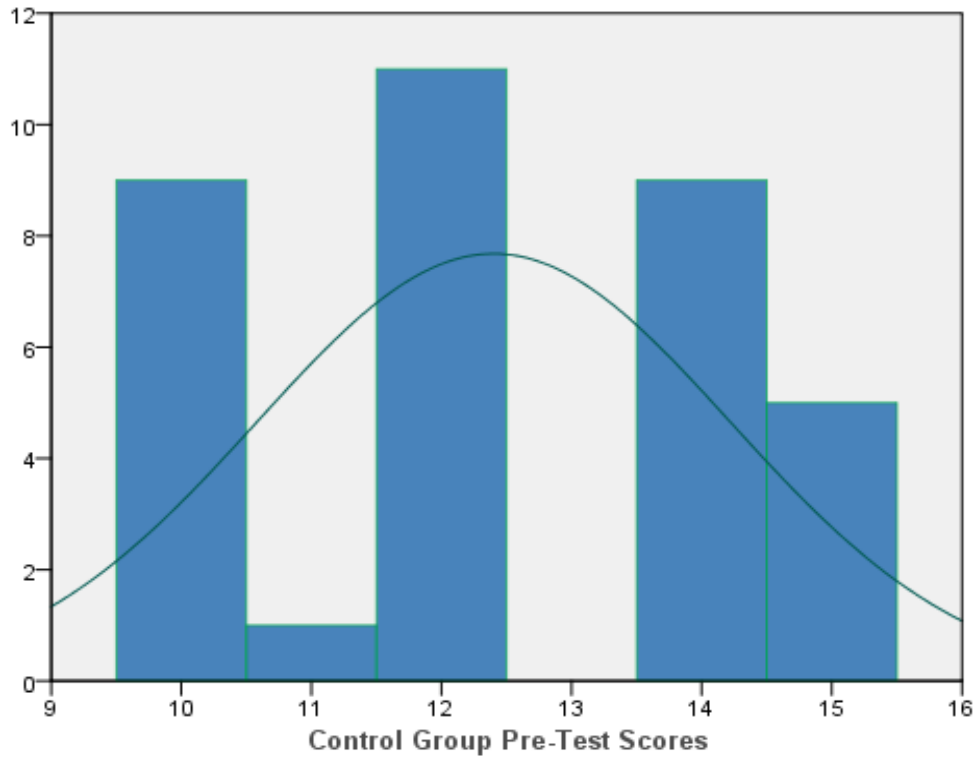


Figure 5. CG pre-test Scores

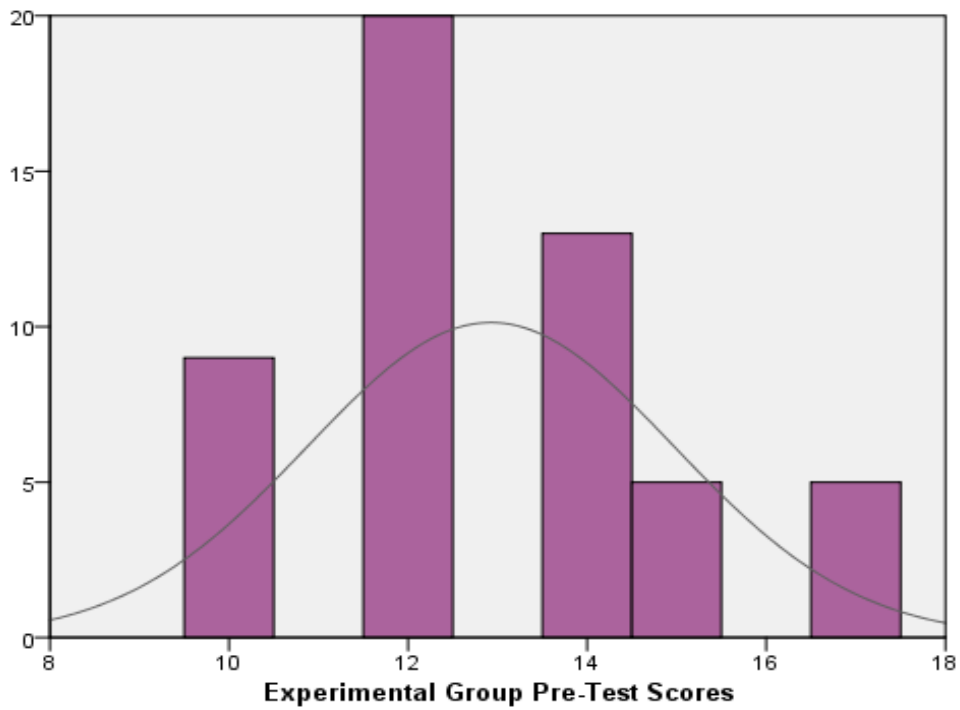


Figure 6. EG pre-test scores

Post- Test results

Table 4. T- test results of comparing statistically control and experimental groups in overall language skills.

		N	Mean	Std. Deviation	Std. Error Mean
CG	post-test score	32	13.00	1.000	.000
EG	post-test score	52	14.00	2.000	.000

Table 5. T- test results of post- test comparing control and experimental group

		Test Value = 0				
		t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
CG	post test score	42.000	41	.000	13.000	12.00
EG	post-test score	39.000	51	.000	14.000	14.00

Above tables' results show, according to results obtained on post-test of language skills there was difference between means of scores obtained by subjects of both experimental (mean, 14) and control group (mean, 13) on post-test scores. Indeed, these results revealed statistically; about effectiveness of integrating computer technology in service of language teaching learning activities, although disparity not so significant, but mean score of EG is inclined toward normal.

Conclusion

Ultimately, study previewed remedial panacea to promote students' learning needs by integrating CALL technology into EFL class. Equally, it will affect that some learning tools like CALL. Furthermore, CALL is a learning instrument which is a useful facilitator to break language teaching learning restrictions. Urgently, CALL is available technology for world education instructions. So, they must concentrate their potency exactly to solve consequents and possible challenges about the teaching learning requisites. This study also has implicated that technology– integrated settings can pinpoint and for bridging existing gaps between current and upcoming language teaching learning situations regarding to use CALL in Iranian EFL contexts, and also it helps teachers and learners to consider themselves for future as confident and a member of technology users.

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