VOL. 07 NO. 8,
FEBRUARY, 2025
E-ISSN 3026-8893
P-ISSN 3027-1061

*African Scholar Publications & Research International*
www.africanscholarpub.com

*Journal of Education Research and Library Practice (JERLP)*

# The Place of Computer-Aided Language Learning (Call) in Enhancing Effective English Language Teaching among Junior Secondary Students in Nigeria

***Jamila Sulaiman; **Mary Ocheenia Anyebe, Ph.D; ***Prof. Terver Titus Udu; & ****Smith James Akoko**

*Department of Modern Languages, School of Languages, College of Education Billiri, Gombe State, Nigeria. **Department of Arts Education, University of Jos. ***Department of Arts and Social Sciences Education, Benue State University, Makurdi. ****Department of General Studies Education, Federal College of Education - Ekiadolor, Benin City
**Corresponding Author:** jamilasulaimana@gmail.com
**DOI:** https://doi.org/10.70382/ajerlp.v7i8.017

## *Abstract*

The modern language classroom has experienced critical changes occasioned by the advent of technology, which has educational implications on learners' experiences. Regrettably, observation shows that the less effective traditional instructional approach dominates the teaching and learning process as against modern approaches. This paper explored the place of Computer-Aided Language Learning (CALL) in language teaching in the modern ICT world as an alternative to the traditional approach. It took stock of the concept of CALL, benefits of CALL and practical suggestion for stakeholders of education. It concluded that CALL is an effective instructional language method for the development of literacy skills, pronunciation and vocabulary among other

language skills. This is because it is innovative, learner-centered, technology-driven and research-proven. In view of that, it was suggested that curriculum planners should work in collaboration with English Language textbooks writers to incorporate CALL into the language programmes for primary schools and secondary schools. Furthermore, workshops and seminars should be organized for the retraining of language teachers by relevant stakeholders of education likes Ministries of Education across federal and state levels of government on the importance and use of CALL in improving learners' language achievement. It was also suggested that English Language teachers should learn to model the CALL instructional approach for improved learning outcome. Teacher education programmes should be redesigned to help prospective English Language teachers acquire digital literacy to enhance proper application of CALL, school administrators like principals and head teachers should incorporate CALL instruction on the learners' timetables, parents and guardians should prepare their children and wards for digital literacy skills and encourage them to patronize the school's computer laboratory to increase their ICT knowledge; and Government should improve on power supply and empower schools with solar panels to enable the application of the CALL teaching method.

**Keywords:** Computer-aided Language Learning, English Language teaching, literacy skills, pronunciation, vocabulary.

## *Introduction*

Over the years, technology has influenced teacher preparation, teaching and learning techniques and evaluation of teaching and learning. This is because the modern age is the era of knowledge explosion occasioned by the progress of science and technology (Garridau & Jimwan, 2019). As in other sectors of human endeavor such as entertainment, games and sports, heath and fashion industry, technology has permeated education and is already making tremendous impacts in Nigeria. However, observation reveals that the traditional approach still dominates the teaching of English as a Second Language (ESL). Teachers of English have not embraced modern approaches for improved educational outcomes; while some of them are reluctant to apply themselves to methodological trends for want of

digital literacy, others are completely uninformed of the experiences the educational technology can provide in the teaching of English Language classroom. This has made the roles of the teacher of English and the students to experience little or no changes in a fast-changing world. The teacher remains the central figure. He is both a leader and the main source of knowledge and information, whereas students are mostly receivers of the educational contents provided by the teacher without having to participate actively in the teaching and learning process. Among the junior secondary students of English in Nigeria who are largely digital natives, this approach is boring and less interesting. Hence, the use of the computer technology plays an indispensable role in getting them involved in the teaching and learning process.

According to Garridau and Jimwan (2019), the use of computers among other electronic gadgets has made the teaching and learning process attractive and convenient. Considering the global status of English as a common language of communication in addition to being an area of discipline, it is important that the teacher of English in Nigeria incorporates technology into his instructional materials to accommodate the use of computer and other related facilities for effective teaching-learning process. For one thing, a monotonous teaching approach bores listening and discourages active learning, whereas the smooth blend of technological education offers a novel platform which could arouse the enthusiasm and curiosity of learners who are eager to try new things. For another, educational experiences acquired with pleasure are bound to last longer in the memory and be put to use for problem solving even outside the formal classroom. The fact remains that effective teaching and learning of English has gone beyond the mere stereotypical, regimented/traditional classroom teaching because of the emergence of various gadgets in information and communication technology (Bitrus, 2019). Notable among these gadgets is the computer. It could be stressed that the use of the traditional method of the print literacy does not by itself lead to achieving curriculum objectives, because apart from assisting in class preparation, the computer (digital literacy) allows the teacher to assist his students in their class activities requiring the need to access information faster. This is more so that the use of computer encourages self-learning. In the view of Anthonysamy (2020), when the level of students' digital literacy is high, it can make it easier for students to participate in the learning process, giving learners a more positive feeling about their educational experience. Thus, students' learning performance may be

increased. To this end, the onus is on the modern teacher to use the computer to change, improve, or add new dimensions to his teaching so as to vary the strategies and increase the quality of activities assigned to students. In learning, the students need some motivation. Introducing them to the use of computer in their learning is a motivational push to those of them who are bored by the traditional ways of information delivery, and this expedites the transfer of information from the short-term memory to the long-term memory. For instance, young people are captivated with technology. It only behooves language teacher to capitalize on the excitement and enthusiasm that come with that interest for the purpose of enhancing language learning. The question, therefore, is: what is the place of Computer–Aided Language Learning (CALL) in enhancing English Language teaching among junior secondary students in Nigeria?

**Concept of Computer-Aided Language Learning (CALL)**

Computer-Aided Language Learning (CALL) is one of the most recommended language strategies. Gamper and Knapp (2002) define CALL as "a research field which explores the use of computational methods and techniques as well as new media for language learning and teaching" (p. 329). In more general terms, CALL can be thought of as the use of computers to help learn languages. As a sub-category of Computer-Aided Learning (CAL), CALL deals exclusively with learning languages. Specific examples of CALL tools and utilities include games, tests, exercises, and word processing, and their use in a CALL session is determined by the syllabus, software, teacher, or learner (Laghos & Zaphiris, 2009).

According to Kumar and Sreehari (2011), CALL, an abbreviation for Computer Assisted Language Learning, is an interactive method of instruction that helps learners achieve their goals of learning, at their own pace and ability. In this method, computer technology is used in teaching–learning procedures at all stages such as presentation, practice and feedback. Ehsani and Knodt (2014) observe that Computer-Aided Language Learning (CALL) has emerged as a tempting alternative to traditional modes of supplementing or replacing direct student-teacher interaction, such as the language laboratory or audio-tape-based self-study. The integration of sound, voice interaction, text, video, and animation has made it possible to create self-paced interactive learning environments that promise to enhance the classroom model of language learning significantly. This facility has paved the way for individualized learning and provided freedom of learning

anytime and anywhere according to needs and convenience of learners (Garridau & Jimwan, 2019).

Ahmad, Corbett, Rogers and Sussex in Laghos and Zaphiris (2009) point out that CALL arose from the combination of two separate factors: educational needs and technological means. The constant advances in technology are creating new and exciting opportunities for the delivery of CALL systems. However, one must not focus solely on the technology side of CALL. Pedagogical issues are also extremely important for a successful language learning process (Laghos & Zaphiris, 2009). The authors maintain that with both pedagogy and technology together as the focus of CALL research, the final systems implemented more accurately meet the language learning educational needs by providing a plethora of language learning activities.

Intelligent Computer-Assisted Language Learning (ICALL), a product of CALL, has already started to be implemented. Gamper and Knapp (2002) state that ICALL explores the use of Artificial Intelligence methods and techniques for language learning. One of the AI techniques by Laghos and Zaphiris (2009) that are being used in CALL systems include speech recognition technologies which they note have reached the stage where CALL learners can talk into the microphone, and their pronunciation and fluency are tested, giving them results on their progress. One such CALL software that takes advantage of speech recognition technologies is the "Tell me more education" packages. In the future, speech recognition will reach the stage where a conversational mode can exist between the learner and the computer, just like the learner would have a conversation with a "living" person. another is expert systems work by storing large amounts of knowledge about language learning. This knowledge includes questions and answers, typical mistakes, and learning strategies. It is then used to analyse the learners' interaction with the computer and produce detailed feedback. Other AI techniques for CALL include Machine Translation (Babel Fish Translation, for example) and Intelligent Tutoring Systems.

Computer Assisted Language Learning (CALL) programs have been widely used in language classrooms. CALL is a language learning and teaching approach in which a computer is used as a tool for doing presentation, assisting students, evaluating materials, and promoting interaction (Jafarian, Soori & Kafipour, 2012). CALL has been found to be effective in providing children with significant opportunities to practice skills in a more interactive and engaging manner as well as making improvements in children's cognitive abilities (Roschelle, Pea, Hoadley,

Gordin & Means, 2000). This means that children learn language in interactive and authentic environments through CALL programs. According to Wang (2005), these learning environments are the best way to learn a language.

In a sum, Computer–Aided Language Learning (CALL) is an approach to language teaching and learning using the computer. Because of the high potentials of CALL programs, it demands that computer technology be integrated into language teaching to promote effective instruction and interactive environment for an improved learning outcome.

**Benefits of Computer-Aided Language Learning (CALL)**

The importance of the CALL strategy to the teaching and learning of language in the modern day classroom cannot be overemphasized. Wang (2006) and Han (2008) indicate that the current computer technology has many advantages for second language learning as computer and its attached language learning programs could provide learners more independence from classrooms and allow learners the option to work on their learning material at any time of the day. CALL practitioners have particularly pointed out that computer environments motivate many students. This is because students are less threatened since there is no teacher to scold them for wrong attempts, they thus take more risk and are more spontaneous (Gruba in Filani, 2014).

According to Gündüz (2005), one of the most important advantages of the growth of CALL is that software vendors (and language teachers) no longer feel bound to grammar practice as the main goal of computer use in the language classroom. The movement for communicative teaching with computers is clearly expanding. The vocabulary software has started to be contextualized, to incorporate graphics, audio recording, playback, and video. More sophisticated error-checking programs can provide students real help in the feedback they receive, directing them to further practice or moving them to the next stage. This implies that those who need extra help with those aspects of language that improve with practice can use small, focused programs to give them additional time and assistance outside the regular class time.

Furthermore, AbuSeileek and Sa'aleek (2012) opine that classroom teaching becomes more effective with the help of computers. This is because computers are good to motivate students. Language teaching in the past was conducted mainly in the classroom with teachers' teaching and students' passive learning, mostly with the aid of the blackboard. With computers, they hold that teachers can present

pictures, videos, and written texts with or without sound. Students feel things are more real and more understandable. Through simulation and other techniques, computers can present abstract things in a concrete and easily understandable way. Many students who get bored in traditional English classes become more and more interested in this new style of teaching and learning. Thus, students do not get bored easily and may become more active. Students' learning becomes more individualized and autonomous.

It could be said that one major problem in English teaching and learning is that students, very often, have a variety of interests and levels of English proficiency. Their learning speeds and learning styles also vary greatly. Computers may help teachers to meet different students' needs by providing students with different levels of learning materials, by offering students different studying methods, by making each student work at his/her own pace. This means that students become the center of learning, and teachers, instead, become the facilitators. In contrast to traditional second language classroom study, students can study more independently, leaving for the teachers more time to concentrate their efforts on those parts of second language teaching that are still hard or impossible by the computer, such as pronunciation, work on spoken dialogue, and training for essay writing and presentation. According to AbuSeileek and Sa'aleek (2012), such individualized instruction can initiate students' active learning, promote learning with comprehension, and allow students to see their progress themselves.

Research findings indicate that CALL programs have helped English language learners increase the reading fluency and comprehension that build English proficiency. For instance, James in Naraghizadeh and Barimani (2013) reported that students who participated in CALL were able to build on their literacy skills and become successful in reading fluency and comprehension, although he cautions that CALL should not replace classroom instruction but instead blend with literacy and learning activities. Also, Al-Awidi and Ismail (2012) investigated teachers' perception of the use Computer Assisted Language Learning to develop children's reading skills in English as a second language in the United Arab Emirates, and results indicated that CALL helps children to develop reading strategies and increase their motivation. The most common strategies teachers reported using were computers to: enhance children's reading skills, support children's reading, listen to stories read aloud, recognize letter-sound relationships, and identify letters and beginning sounds of words. Teachers reported that CALL

has some benefits, such as providing opportunities for active interaction and differentiated instruction.

Besides, Kumar and Sreehari (2011) enumerate the benefits of CALL to include helping to enrich English language skills, connecting a learning place to the outside world, relating academics to the practical needs of the outside world, serving as a 'surrogate teacher', enabling collaborative and cooperative learning, carrying out repeated drills, providing impartial feedback, creating a realistic environment (for example, listening activities are combined with visuals), integrating skills such as reading, writing, speaking and listening; providing a choice of an appropriate learning strategy and acting as a ready-reckoner for all queries in the field of language learning/teaching. CALL developers claim that CALL offers an environment in which an L2 student can participate in interactive learning. In particular, some computer software provides comprehension tools which allow L2 students to request modification of the input they hear/read in order to aid their comprehension (Kenning in Hsu, 1994).

In the last few years, CALL systems have become fully integrated with audio and video support, creating interesting and attractive presentations. Laghos and Zaphiris (2009) confirm that this is because the popularity of CALL is constantly increasing as multimedia developments and technology are advancing. CALL programs, besides teaching a second or foreign language, will provide the learner with some sort of computer literacy, which is becoming essential in our modern society and which could be of great help in future training and career prospects (Gündüz, 2005). And "due to the largely increased interest in CALL research and applications, in the future there will probably be CALL systems available with functionality that at the present either seem unattainable or unrealistic." (Laghos & Zaphiris, pp. 374-376).

It can be deduced from the foregoing that CALL has enormous benefits in the teaching and learning of English language. It is an effective research-proven language teaching and language learning method that facilitates listening, enhance vocabulary development and impacts reading capabilities among other language skills on English language learners. These researchers believe it will hold same for students of English Language at the upper basic level of education in Nigeria.

**CALL and English Language Teaching in Nigeria**

It is important to examine CALL in the context of English language teaching for a number of reasons. Prominent among these reasons is the fact that it is used as a

lingua franca in many nations of the world for advancing international trade, business, and economics as well as obtaining information and conducting research all over the world (Garridau & Jimwan, 2019). Besides, Zoughoul (2003) maintains that while globalisation has eased the spread of English language, English language also functions as a tool for international communication to contribute to the globalisation process, making it necessary to teach English and develop English language skills among learners at all school levels.

In Nigeria, English is the language of education, economy, politics, research and social interaction. It is a subject at the primary and secondary levels of education and a course of study at the tertiary institution. English has not struggled to assume the status of official language in Nigeria. It is a second language to many Nigerians and is first language to Nigerians who were born in English speaking countries and those who were born in Nigerian cities where English is used as the major language of communication among residents. Such people acquire the language effortlessly in the natural linguistic environment. It is so much so that it dominates their speech faculty. Nigerian economists believe that English is crucial for economic development as it helps them to trade widely on an international scale (Obiegbu, 2015). This is true in the sense that Nigerians can travel from one part of the country to another and other parts of the world for their business transactions because the English language facilitates smooth business transaction. The fact that English is such a prestigious language in Nigeria necessitates its meaningful and functional teaching, in which case CALL may help.

Garry (2013) posits that CALL is flexible, rich and interactive in the terms of time and space and can encourage students in learning language more than any other media. It is able to generate interaction and improve communicative competence, including providing authentic material to the class or self-learning. Hence, Garridau and Jimwan (2019) are optimistic that learners can benefit from self-directed vocabulary and grammar-based exercises, particularly those that monitor voice input and assess the accuracy of pronunciation. The case will not be different in the Nigerian context. Essential to this optimism is the study on the effect of Computer Aided Instruction on students' academic performance in teaching language in Junior Secondary schools in Adamawa State, Nigeria, by Kabiru and Buns (2021), which revealed that students taught with CAI performed significantly better than their counterparts taught with chalk and board.

In recent years, an increasing number of speech laboratories have begun deploying speech technology in CALL applications. Results include voice-interactive

prototype systems for teaching pronunciation, reading, and limited conversational skills in semi-constrained contexts (Ehsani & Knodt, 2014). It is interesting to observe that with the rapid growth in technology and the escalating population of English Language learners across all levels of education in the country, CALL has promising prospects in terms of benefits and acceptance in Nigeria.

**Conclusion**

The traditional method of language teaching where the teacher is the central person as the main knowledge source and the learners are mere receivers of the information is no longer relevant in today's English Language classroom. With the advent of technology and its wide acceptance in the remotest of climes, social changes that occur with tremendous impact on learners' experiences have invariably translated into changes in the attitude of learners towards the content of the lesson and the method of instruction. Not only are learners born into a technology-driven world, they secure the encouragement of their parents and guidance to master the Information and Communication Technology (ICT) tools as a matter of utmost necessity. They play with the computer with much enthusiasm and near-addiction. To serve the educational needs of the current crop of learners, therefore, a modern, innovative, learner-centered and research-proven instructional approach is required to maximize the potentials of the technological revolution. This paper concludes that Computer–Aided Language Learning is a ready tool for this purpose in Nigeria as an effective instructional method for language teaching and learning with promising potential. This is because it develops literacy skills, helps learners in pronunciation and facilitates vocabulary development among other language skills.

**Practical Suggestions**

Based on the conclusion of this paper, it is hereby suggested that:

1. Curriculum planners should work in collaboration with English Languages Textbooks writers to incorporate CALL into the English Language programmes for junior secondary schools.
2. Workshops and seminars should be organized for the retraining of language teachers by relevant stakeholders of education likes Ministries of Education across federal and state levels of government on the importance and use of CALL in improving students' English Language achievement.

3. English Language teachers should learn to model the CALL instructional approach for improved learning outcome.
4. Teacher education programmes should be redesigned to help prospective English Language teachers acquire digital literacy to enhance proper application of CALL.
5. School administrators like principals and head teachers should incorporate CALL instruction on the learners' timetables.
6. Parents and guidance should equip their children and wards with digital literacy and encourage them to patronize the school's computer laboratory to increase their ICT knowledge.
7. Government should improve on power supply and empower schools with solar panels to enable the application of the CALL teaching method.

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