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## Practice and challenges of computer-assisted language learning in English classes at Ethiopian teacher education colleges

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### Abstract

The purpose of this study was to investigate the practice and challenges of computer-assisted language learning (CALL) in English classes by English language teacher educators at Ethiopian teacher education colleges. The participants of the study were 29 English language teacher educators teaching in six teacher education colleges in Ethiopia, who were elected through convenience sampling. Data were collected through questionnaire and interview. The quantitative data were analyzed using mean and frequency count. However, the qualitative data from the open-ended items of the questionnaire and the interview were analyzed thematically. The results of the study indicated that the participants rarely or never applied CALL in their teaching of English. They did not even send assignments via email or create Telegram or WhatsApp groups to encourage their students to share ideas in writing or learn English independently. The results further showed that there were major barriers faced by the participants in integrating CALL into language classrooms, such as lack of technical support from the administrations of the colleges where they were teaching and limited access to the internet. Moreover, the results revealed that the participants perceived that the students they were teaching had low English language proficiency, which could potentially hinder them from applying CALL in their classrooms. In fact, the participants also perceived that their students did not have the required computer skills. The participants underscored the significance of timely training to introduce EFL teachers to the application of multimedia in language classrooms. Finally, it is recommended that further research be done on how prospective teachers use technology to improve their English language skills.

**Keywords:** Computer-assisted language learning, teacher educators, English language learning

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## Introduction

The rapid development of science and technology has engendered the worldwide use of English and changes in our modes of communication immensely. This in turn resulted in the emergence and development of multimedia technology that can be applicable to English language teaching (Shyamlee & Phil, 2012). Integrating technology in language teaching and learning is generally named as computer-aided or computer-assisted language learning (CALL) (Singh, 2019; Kazemi & Narafshan, 2014). CALL includes the application of multimedia combining texts, pictures, audio, video, animation effects, the application of methods, tools, materials, devices, systems, and strategies for English language instructional purposes (Mofareh, 2019; Kazemi & Narafshan, 2014; Shyamlee & Phil, 2012). This plays a positive role in promoting activities and initiatives of students in English classrooms. For example, nowadays, since many people have computers and access to the internet, the learning of English is facilitated more effectively than ever before (Shyamlee & Phil, 2012).

Chen et al. (2021) indicated that the advance of educational technologies and digital devices have made CALL an active interdisciplinary field with increasing research potential and topic diversity. As a result, CALL has consolidated itself as an innovative field of research and practice with the emergence of a series of refereed journals, annual conferences and national and international organizations (Thomas et al., 2013). Many studies reported that the technology-enhanced teaching environment is more effective than the traditional lecture-based classroom (Chen et al., 2021; Zhang & Zou, 2020; Habbash, 2020; Arifah, 2014; Shyamlee & Phil, 2012), and students can learn better and even enjoy learning through CALL (Swann, 1992).

If we look into the most recent body of research, for example, Zhang and Zou (2020) reviewed 57 CALL articles from 2016 through 2019, and they identified five state-of-the-art topics: mobile learning, multimedia learning, socialized learning, speech-to-text or text-to-speech recognition, and game-based learning. They also found that the impacts of these technologies on language education were overall positive for facilitating practices and interactions, delivering instructional content, and restructuring teaching methods. In the same way, Chen et al. (2021) made a review of 1,295 articles in CALL which were conducted from 1995 through the end of 2020, for 25 years. Their review revealed that mobile-assisted language learning, project-based learning, and blended learning were found to be the most research areas of interests, and mobile-assisted

language learning, seamless learning, wiki-based learning, and virtual world and virtual reality were the most frequently researched topics. Further, they indicated that the results of these studies displayed CALL has been impacting the English language instruction favorably.

Cognizant of this fact, Asiri et al. (2021) stressed the importance of integrating CALL in teacher education. Moreover, they proposed that its inclusion should enable language teachers to achieve three major objectives. First, it should enable them to be aware of the ways to integrate technology with standards, goals, and curricular content while supporting students' language learning. Second, teachers should also be able to support learners develop decision-making, collaboration, problem-solving, and other critical thinking skills with CALL. Finally, teachers should be able to plan for the application of CALL technologies to a wide range of learning contexts and student populations so that they can easily adapt them.

Although recent decades have witnessed unprecedented growth in the educational technology industry, and such significant developments have made CALL an indispensable constituent of the teaching methodology in EFL classes, several studies report that EFL teachers in many parts of the world are in shortage of skills required for CALL integration in their classes and teaching methods (Habbash, 2020; Singh, 2019), although they have indicated positive attitudes towards using CALL in teaching English (Park & Son, 2009). In this regard, Alamri's (2021) study showed that the attitudes of students towards using technology, shortage of time on the part of teachers, lack of computers and other devices, and lack of technical support are major factors that hamper the proper utilization of CALL in EFL classrooms. Similarly, Ghavifekr et al. (2016) investigated that limited accessibility, poor network connections, lack of time, inadequate technical support, ineffective training and limited teachers' competence in using technology were the key issues in adopting technology for pedagogical purposes.

Whatever the reasons can be, teachers' ineffective integration of CALL in EFL classrooms highly impedes the desired learning outcomes, particularly, the language needs of the current technology friendly generation, as well as, the achievement of institutional goals of education that need to be addressed properly (Habbash, 2020). The Education and Training Roadmap, which contains recommendations for improving the quality of education in Ethiopia and the General Education Quality Improvement Package (GEQIP) stress the importance of using e-learning, digital textbooks, and online courses in schools and teacher training

programs (Ministry of Education, 2021). However, many studies which have been locally conducted reported that there was little or no use of digital technology in teaching English in Ethiopia (Abraham et al., 2022; Guadu, 2024; Welesilassie & Gerencheal, 2025). Moreover, these studies were conducted at secondary schools or universities. None of them were conducted to investigate the use of digital technology to teach English at teacher education colleges.

Therefore, the present study aims to investigate the practice and challenges of English language teachers at Ethiopian teacher education colleges by answering the following research questions: (Q1) How often do English teachers at Ethiopian teacher education colleges apply CALL to teach English? (Q2) What are the major challenges English teachers at Ethiopian teacher education colleges face in their attempt to integrate CALL into their classes? (Q3) What do teacher educators think can be done to facilitate the integration of CALL into teaching English at their colleges?

## **Emperical Studies**

### **Benefits of integrating CALL into ELT**

According to Singh (2019), currently the development of language learners' language skills can be enhanced through modern technological tools such as hardware, software, the internet, and mobile technologies. Empirical studies have proven that technology-integrated instruction that is aligned with the theories of second language acquisition and learning enhances students' self-learning, interaction and motivation (Mullamaa, 2010).

As indicated earlier, integrating technology in language teaching and learning is generally named as computer-aided or computer-assisted language learning (CALL) (Singh, 2019; Kazemi & Narafshan, 2014). According to Kazemi and Narafshan (2014), applying technology in ELT has multiple advantages. Among others, for example, it saves time and labor of the teacher; it provides learners with variety of activities; it connects learners to new thoughts and to people that they otherwise might not have met and so on. Particularly, computer-mediated communication in ELT is believed to enhance students' communicative competence as it creates opportunities to learners to practice any aspects of language (grammar, vocabulary and pronunciation, and any skills of language: listening, speaking, reading and writing) both in and outside the classroom (Warschauer, 1998). This will have a great pedagogical importance in

encouraging learner-centered language learning in which students can learn the target language at their own pace and developmental stages.

Habbash (2020) stated that contextualization makes students' language learning easy to understand, practice and develop fluency. However, learning English in non-English speaking countries takes place mostly in de-contextualized environments, and this makes the language learning a challenging task. Currently, this is made easy with technological advancements as many technological applications nowadays are handy for creating virtually real environments which could render language learning and practice effective by contextualizing learning content.

Azmi (2017) also noted that considerable number of studies revealed that information and communications technologies (ICT) in EFL improve students' motivation and self-efficacy in learning the language skills and language areas, promotes autonomous learning, fosters critical thinking skills, encourages innovation and creativity, establishes interaction, boosts communication, promotes research and cooperative learning in the language classroom.

### **Challenges of implementing technology in EFL classrooms**

Although integrating technology has a number of promising results in students' English language learning, there is a slow change in its instructional practices. For this, there can be a number of factors. Shafeeq and Baskaran (2015) pointed out that the inadequate training of teachers has been reported as the major challenge in using instructional technology. According to them, this is mostly reflected in pre-service and in-service teachers' lack of technical skills. Some teachers feel uncomfortable using educational technology in their classrooms because they are not well prepared for technological problems, and they tend to view CALL classes less favorably (Chambers & Bax, 2006). Shafeeq and Baskaran (2015) stated that, apart from their limited knowledge and skill, many teachers view technology as a supplementary teaching tool, and they do not consider it as an essential component of successful teaching-learning process of our time.

Another challenge of technology integration is teachers' inhibitions (Shafeeq & Baskaran, 2015). Some teachers are not intrinsically motivated to use technology and react negatively to situations that require them to use technology (Egbert & Thomas, 2001). Others do not have favorable attitudes toward the effectiveness of educational technology; as a result, they do not use technology as needed and for a prolonged time even

though it is often viewed as an effective instructional strategy (Akbaba & Kurubacak, 1999).

In general, Ertmer (1999 as cited in Fallah, 2016) categorized the barriers that negatively influence teachers' decisions to use technology as first-order or second-order barriers. The first-order barriers to technology integration are described as being extrinsic to teachers and include lack of access to computers and software, insufficient time to plan instruction, and inadequate technical and administrative support. In contrast, second-order barriers are intrinsic to teachers and include beliefs about teaching and computers, established classroom practices, and unwillingness to change. While many first-order barriers may be eliminated by securing additional resources and providing computer skills training, confronting second-order barriers requires challenging one's beliefs systems and the institutionalized routines of one's practice.

Shafeeq and Baskaran (2015) grouped the barriers that impeded the effective use of CALL in ELT into three: administrative, pedagogical, and attitudinal. Regarding administrative barriers, they stated that many schools do not have basic facilities such as electric power, an audio-visual room and the internet to integrate CALL. The complex nature of some applications may also discourage ELT teachers' use of technology. Teachers' perception towards the integration of technology, their lack of training to use CALL applications in their teaching-learning process and lack technical support that they are provided with are other barriers which come under this category.

Concerning pedagogical barriers, Shafeeq and Baskaran (2015) described that most teachers lack suitable materials for course requirements. In these cases, CALL materials may be available, but they may not be suitable for course requirements. Moreover, the nature of the existing testing system (which is based only on written form), shortage of time to practice CALL, too much content to be covered, large class size are some of the pedagogic barriers to effective CALL integration. Even technologically advanced countries have not achieved high levels of technology-enhanced instruction. Among many factors, teachers' knowledge and skill of technology integrated instruction, perception (attitude towards technology), workload and time, support from school administration, availability of technology infrastructures at school, syllabus and curriculum are considered to be the major ones (Singh, 2019).

Regarding this, Park and Son (2009) cited in Habbash (2020) reported that the implementation of CALL in the classroom are negatively

affected by external factors such as lack of time, insufficient computer facilities, rigid school curricula and textbooks and lack of administrative support. Habbash (2020) also revealed that EFL teachers' beliefs about CALL integration in their classes depend on various factors such as teacher's level of computer usage, the technical support that they receive from their school authorities and the type of training that they get from teachers training institutions are the major ones. Teachers' attitude towards change also plays a significant role in integrating CALL effectively. Some teachers' attitudes are negative. This is mostly because of their lack of desire to know CALL (Shafeeq & Baskaran, 2015).

On the other hand, Ertmer (1999 as cited in Fallah, 2016) generally categorizes factors that impede the incorporation of technology for classroom instruction into two: internal and external barriers. Internal barriers refer to socio-cognitive aspects such as the teachers' beliefs and perceptions towards teaching, technology use and their resistance to change. On the other hand, external barriers are concerned with the environmental limitations including lack of resources, adequate training and administrative support. According to him, even when the external barriers are completely absent, internal barriers still exist.

With regard to this, much research has been conducted so far to investigate the major factors that impede the utilization of CALL in EFL classrooms in different contexts. To note the most recent ones, Alamri (2021) conducted a study to investigate the challenges and barriers that ESL teachers encountered in applying technological tools in writing classroom at a Southwestern University in the United States. The study revealed that students' unfavorable attitudes towards using technology, lack of time, lack of computers and other devices, and lack of technical support were found to be the major hindering factors. Aslan and Zhu (2016) conducted a study in Turkey to investigate the factors that hamper pre-service and inexperienced teachers to integrate ICT into their teaching practices. Their study showed that teachers' perceived competence in ICT, computer anxiety, and pedagogical knowledge were the most influencing factors for the integration of ICT into their teaching practice.

Albugarni and Ahmed (2015) explored the perceived success factors for ICT implementation of ICT directors, head teachers, teachers and students in Saudi Arabia. Their research findings showed that lack of resources, ICT skills; training and clear policies on the implementation of ICT were found to be the major factors. Almutlaq et al. (2017) investigated the factors affecting the technology integration for higher education in Saudi Arabia. They found that lack of enough time to practice



and use of technology, the workload of teachers, low accessibility of resources, and lack of awareness about technology were major factors that negatively affected the utilization of CALL in their classrooms. Ghavifekr et al. (2016) analyzed the challenges that 100 secondary teachers in Malaysia encountered in using digital tools in classrooms. Their findings showed that limited accessibility and network connection, limited technical support, lack of effective training, lack of time, and lack of teachers' competency were found to be the main key issues in adopting technology into their pedagogical practices.

Most of the local studies on the use of digital technology to teach English focus on the use of digital technology at secondary schools or universities. For example, Abraham et al. (2022) investigated the effects of training in information communication technology on English language teaching in secondary school in Ethiopia. English language teachers' pedagogical knowledge and English language proficiency. They found that training in ICT-assisted teaching has a significant effect on the pedagogical knowledge and English language proficiency of secondary school teachers. Similarly, Welesilassie and Gerencheal (2025) conducted a study to examine the level of technological and pedagogical content knowledge of high school English language teachers. The findings of their study revealed that high school English teachers showed adequate content and pedagogical knowledge but lacked technology-related knowledge. Moreover, they found that high school English teachers did not utilize digital technology to teach English owing to many challenges. However, Guadu (2024) carried out an investigation into EFL instructors' perceptions and implementation of mobile-assisted language learning, focusing on three government universities in the Amhara region, Ethiopia. The results of Guadu's study showed that EFL instructors had a positive perception of the importance of mobile-assisted language teaching and learning; however, the instructors did not practice mobile-assisted language teaching because of lack of interest and knowledge.

The review of the local literature has shown that there is a paucity of research on the practice and challenges of using CALL or digital technology in the training of English language teachers at teacher education colleges in Ethiopia. Documents such as the Ethiopian Education and Training Roadmap and GEQIP encourage the use of information and communication technology at different levels of the educational system in Ethiopia, including the training of teachers, there is lack of research that shows how educational technology is being integrated into the training of teachers. Hence, this study sets out to investigate the



practice and challenges of computer-assisted language learning (CALL) in English classes by teacher educators at Ethiopian teacher education colleges.

## Methods

The descriptive survey design was adopted for this study to explore the frequency with which CALL was applied by English teachers teaching at Ethiopian teacher education colleges and the challenges they faced in implementing CALL to teach English.

The participants of the study were 29 English language educators teaching at six teacher education colleges found in three federal states in Ethiopia. The colleges were selected through convenience sampling with the intention of collecting data using the doctoral students who were taking the course *Technology and English Language Teacher Development* (DEde 8022) in the 2021-22 academic year at Bahir Dar University and who happened to be teacher educators at those six teacher education colleges. These doctoral students were required to return to their respective teacher education colleges once in a semester and write a report. The doctoral students volunteered to collect data from their colleges for this study.

The average work experience of the participants was 10 years with the lowest work experience of 2 years and the highest being 28.

### Data collection instruments

Questionnaire and interview were used to collect data for this study. The questionnaire had four parts. The first part was used to collect demographic information on the participants. The second part consisted of ten items which were in the form of the Likert scale and was used to gather information on the frequency of application of CALL. The third part, adapted from Habbash (2020), comprised ten items which were again in the form of the Likert scale and were used to collect data on the challenges that hindered the participants from using CALL in their English classes. The fourth and final part consisted of three open-ended questions that required the participants to write in detail about opportunities available at their colleges to use CALL and to suggest ways that can be used to integrate CALL into their courses. The total number of questionnaires distributed to English language educators in the six teacher education colleges was 52, and 29 (56%) of them returned the questionnaires.

A semi-structured interview was also used to collect data. The interview had five questions. Thirteen teachers from six different teacher education colleges were interviewed. The responses of the interviewees were audio-recorded with the consent of the participants.

### **Data collection procedures**

To check and improve the validity of the questionnaire, it was given to two colleagues of the first author. Based on their feedback and comments, two items which contained negative words were rephrased to avoid negative words. Double-barreled items were also found in the questionnaire, and they were rephrased as two separate items. The colleagues also examined the questions in the interview protocol and approved the questions.

The instruments were pilot-tested at Debre Birhan College of Teacher Education before they were used to collect data for the main study. To some participants of the pilot test the words “synchronous” and “asynchronous” were not clear, so they were defined briefly to make them clear for the main study. Using the data from the pilot test, Cronbach’s alpha was calculated to check the internal consistency of *Sections II* and *III* of the questionnaire and they were found to be 6.2 and 6.3, respectively. In the interview protocol, two questions were found to elicit similar responses, so one of them was dropped.

After the pilot study, questionnaires were distributed to explore the frequency of application of CALL by teacher educators teaching English at teacher education colleges and the challenges that precluded them from integrating CALL into their courses. Next, the interviews were conducted in English, and then the audio-recorded responses were transcribed. Finally, both the quantitative and qualitative data were analyzed.

### **Data analysis**

Mean, percentage and standard deviation were used to analyze the quantitative data. SPSS Version 21 was used to analyze the quantitative data. The qualitative data from the part of the questionnaire which consisted of open-ended questions and from the semi-structured interview was analyzed thematically.

## **Results**

### **Practice of CALL by teacher educators**

Table 1 shows how often teacher educators participating in this study applied CALL for the teaching of English at Ethiopian teacher

education colleges. The participants of the study responded by selecting from a five-point Likert scale ranging from *strongly agree* (5) to *strongly disagree* (1). The data in Table 1 clearly indicates that the participants rarely or never applied CALL in their teaching of English because most of the mean scores are far below the mean score (3.0). They don't even seem to have sent assignments through email or created Telegram groups to encourage their students to share ideas in writing. Surprisingly, giving lectures using PowerPoint appears to be a rare occurrence in the English classes of the teacher educators participating in this study. Zoom or learning management systems like Canvas might have been unthinkable for these participants to use to implement CALL in the English courses they offered.

**Table 1**

*Practice of CALL by Teacher Educators at Ethiopian Teacher Education Colleges*

Item	Mean
I give tasks to my students that should be done out of the classroom using the internet.	2.07
I instruct my students to download specific applications (apps) so that they can study vocabulary, grammar or develop any one of the language skills.	1.83
I use Zoom or any other similar digital platform to deliver the content of my courses synchronously (live).	1.41
I use a learning management system (LMS) like Moodle and Canvas to deliver the content of my courses asynchronously (not live).	1.45
Create Telegram Groups in which students share their ideas in writing.	1.14
I share resources with my students using social media such as Telegram or WhatsApp.	1.21
Give lectures using PowerPoint.	1.48
I encourage my students to use digital dictionaries.	2.14
I send and/or receive assignments through email.	1.03
I send feedback on my students' written assignments through email.	1.03
<b>Total mean</b>	<b>1.48</b>

### Challenges to implement CALL in EFL classes

Table 2 below shows the challenges teacher educators encountered in using technology in English language classrooms. The participants of the study responded by selecting from a five-point Likert scale ranging from "Strongly agree" (5) to "Strongly disagree" (1).

**Table 2***Challenges Teachers Faced in Using Technology in English Classes*

Item	Mean
Teachers have access to the internet at your college, so they can integrate CALL into their courses.	2.52
Teachers have knowledge and skills that can help them to integrate CALL into their courses.	3.31
Teachers get enough technical support from the administration to integrate CALL into their courses.	2.48
Teachers find it financially burdensome to use the internet regularly.	3.52
Teachers are mostly in favor of using course materials that are printed, and this attitude of teachers prevents them from integrating CALL into their courses.	3.03
EFL classrooms are sufficiently equipped for effective integration of CALL.	2.14
<b>Total mean</b>	<b>2.83</b>

As indicated in Table 2, there were major barriers faced by the participants in integrating CALL into language classrooms. One of them was the fact that classrooms were not adequately equipped to integrate CALL into the classroom, with a mean score of 2.14, which is below the mean score 3.0. In their interview responses, the participants affirmed that resources needed were not sufficiently available including language labs and language specific classrooms. One of the respondents explicated his disappointment this way, “We offer courses like spoken English, listening, linguistics, etc. but our opportunities to supplement our lessons with multimedia were so much restricted due to inadequate resources”. Lack of technical support from the administrations of the colleges (2.48) and limited access to the internet (2.52) might have hindered the participants from implementing CALL in their colleges. Teaching using printed materials might still have been commonly used by the participants with a mean score of 3.03, which may indicate a possible disregard for ICT.

In their interview responses, the participants asserted that they lacked skills in manipulating digital tools and apps freely available in the internet. The participants also complained about the absence of training in their colleges to help them use the latest technological innovations and digital tools. Moreover, to the open-ended item found in the questionnaire, one of the participants responded:

In our preparation of teachers for primary schools, I have never come across any training material which encourages us to teach on

technology in the language classrooms. We are accustomed to using print materials; we are still adhered to the traditional blackboard instruction which is getting out of track in the higher institutions. Thus is why our trainees lack the experience to integrate technology in language classrooms. Technology integration has never been epicenter in our training.

Similarly, in their responses during the interviews, some of the participants admitted that they were technophobes, and this prevented them from exploiting resources that were easily accessible. In spite of the many challenges they faced, the participants admitted that there existed limited resources like the internet, tape recorders, LCD projectors, TV sets, laptops, computers, tablets and mobile apps in English Language Improvement Centers (ELIC). Moreover, in their responses to the open-ended items in the questionnaire, the participants admitted that the English Language Improvement Centers were inadequate in supporting the integration of CALL into EFL classes. Likewise, the participants' limited effort in using platforms like Telegram to disseminate information to their students was also a major challenge in using technology to teach English.

**Student factors hindering the integration of CALL**

Table 3 summarizes student factors the participants perceived were responsible for hindering the integration of CALL into teaching English at teacher education colleges in Ethiopia. The participants of the study responded again by selecting from a five-point scale ranging from “Strongly Agree” (5) to “Strongly Disagree” (1).

**Table 3**  
*Student Factors Perceived by the Participants as Affecting the Integration of CALL into English Classes*

Item	Mean
Students' English proficiency level allows the integration of CALL into courses.	2.38
Students have the required computer skills to use online resources.	2.34
Students have access to electronic devices like smart phones that are needed for CALL integration.	2.72
Students have easy access to the internet.	2.62
Total mean	2.52

As indicated in Table 2 above, the mean scores for all four items are below average, which reveal that the students the participants were

teaching had low English language proficiency and their students did not have the required computer skills. Moreover, the participants believed that their students did not have easy access to the internet and at least some of them did not have smart phones. These challenges might have contributed to limiting the participants' desire or ability to integrate CALL into their English classes. The data from the interviews also corroborated the fact that the students the participants were teaching had limited access to digital resources. For example, one interviewee complained, "Moreover, our students have no access to ... technologies."

From the given excerpt, we can learn that the trainees were not experienced to use technology in an objective classroom instruction. This miss worsens the situation. None the less; the instructors agreed that the trainees had opportunities to utilize mobile apparatus though they were not used to enhance language learning purposively.

### **Participants' views to mitigate challenges**

The participants of the study were also asked during interviews to suggest ways that could be used to overcome the challenges they encountered in their attempt to integrate CALL into EFL classes. From their responses, it is possible to infer the preponderance of the need for training. The participants underlined the significance of timely training to introduce EFL teachers to the application of multimedia in language classrooms. According to them, this can be done through pre-service and in-service training. The participants recommended the inclusion of CALL in language curriculums at college and university levels. They pointed out that an important element is missing in teacher education curriculums. The participants also insisted that teacher education colleges should frequently organize on-job training for teacher educators. They suggested that this could be done in collaboration with the Ethiopian Ministry of Education, universities, local and international organizations advocating for the application of technology in education.

Moreover, the participants indicated that they should make personal efforts to acquaint themselves with digital tools. Likewise, they advised college instructors to read multiple sources which can facilitate their independent learning. On the other hand, the participants reiterated that college administrators should invest in technology to assure quality education in general and language learning in particular. They envisaged that when access to the internet improves and digital tools are widely available, teachers can easily reach their students and help their students make use of technology to improve English language learning. Finally, the participants promised to themselves to make use of, at least, the

ubiquitously found mobile devices and the sparsely provided laptops, TV sets, LCDs and computers at their colleges.

## Discussion

Regarding the practice of Ethiopian English language teacher educators in using CALL, the results indicated that technology was rarely used in EFL classes due to several impeding factors. The findings revealed that the participants of the study encountered challenges in integrating CALL into language classes. More specifically, the results of the study showed that the participants lacked the required or expected technical skill in using technology. These findings are consistent with previous research that reported lack of computers and other infrastructure and inefficiency of teachers as main factors that impeded the utilization of technology in EFL classes (Alamri, 2021; Albugarni & Ahmed, 2015; Almutlaq et al., 2017; Ghavifekr et al., 2016). Encouragingly, however, the participants enunciated that they were eager to utilize CALL in EFL classes as often as possible if training in how to utilize digital tools was provided to them. And this result is consistent with what Park and Son (2009) and Guadu (2024) found in their study about attitudes of EFL teachers towards CALL. Park and Son (2009) and Guadu (2024) discovered that English teachers considered digital technology as a useful pedagogical tool that can improve methods of teaching by providing students with a range of language inputs and augmenting students' learning experiences in real situations. When it comes to training in CALL, Abraham et al.'s (2022) study showed that training in ICT-assisted teaching has a significant effect on the pedagogical knowledge and English language proficiency of English teachers.

According to the teacher educators participating in this study, their students lacked competence in using technology, and this can affect, as noted by Warschauer (1998), the students' ability to communicate effectively if they are not competent enough in utilizing technology. However, as Swann's (1992) study showed, if CALL is integrated into students' regular school work, students can learn English better, and learning English can be an enjoyable experience for them.



## **Conclusions**

The main objective of this study was to explore the practice of CALL by English language teacher educators at Ethiopian teacher education colleges, and the major challenges they encountered in their efforts to integrate CALL into their English classes. Based on the results of the study, the following conclusions are drawn. Teachers are ready to integrate CALL in their teaching of English in EFL classes if training or technical support is provided to them. However, there is a lacuna of technological gadgets in EFL classes at Ethiopian teacher education colleges. It is also possible to conclude that both teacher educators and students at Ethiopian teacher education colleges were incompetent in using technology in EFL classes. Generally speaking, CALL was not incorporated into the syllabi of English language courses in Ethiopian teacher education colleges. Thus, CALL seems to be a new concept for teacher educators teaching at teacher education colleges in Ethiopia. Since the six teacher education colleges which were conveniently selected for this study may not be representative of all teacher education colleges in Ethiopia, some of our conclusions may not apply to some teacher education colleges.

Based on the above conclusions, the following recommendations are made. First of all, teacher education colleges in Ethiopia should provide teachers with necessary technological gadgets like laptops, LCDs, tablets, together with internet access. Syllabus designers and module writers should also incorporate tasks that enhance the integration of CALL into the teaching of English. Administrators of teacher education colleges in Ethiopia should capacitate teachers and students to utilize technology in EFL classes using accessible technological gadgets, including mobile phones, which are ubiquitously found. It is also recommended that further research be conducted on how prospective English language teachers at Ethiopian teacher education colleges use the internet and digital gadgets to improve their English language skills.

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## **Declaration statement**

We confirm that the manuscript has been read and approved by all authors and that there are no other people who satisfied the criteria for authorship

but are excluded. We further confirm that the order of authors listed in the manuscript has been approved by all authors.

### Conflicts of interest

The authors have no conflicts of interest to declare. All authors have seen and agreed with the content of the manuscript, and there is no financial interest to report. We affirm that the submission is original work and is not under review at any other publication.

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