Teachers' Attitudes and Challenges in Implementing Computer-Assisted Language Learning

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ABSTRACT

The focus of the current study is to determine the challenges teachers face and how the attitudes of teachers from different backgrounds differ in their use of computers for language teaching in the classroom. The variations of CALL tools depend on teachers' knowledge, expertise and experiences. Generally, public colleges in Bangladesh lack the necessary resources and expertise to support their teachers and students. Private university teachers integrate different tools than those used in schools. Often, teachers feel that students become uncertain if they are concentrating all the time. The research is grounded in Teacher Cognition Theory and the Technology Acceptance Model (TAM), and a conceptual framework was subsequently established. The findings describe the types of digital tools that teachers use and the obstacles they face. Eight Bangladeshi teachers of EFL working at four different institutions have participated in this research. A follow-up in-depth qualitative online survey was conducted to gather data. The result showed Bangladeshi teachers apply basic to advanced tools when delivering lectures. Despite teachers experiencing misunderstandings, challenges, and limitations at their institutions, they would like to attend training and workshops, implement AI-based teaching tools, and reach an agreement with software owners to upgrade teaching strategies.

Keywords: perceptions, computer-assisted language learning, digital tools, educational technology, online class.

INTRODUCTION

Background

Computer-assisted language learning can be defined as "the search for and study of applications of the computer in language teaching and learning" (Levy, 1997, p. 1). In the year 1950, mainframe computers were used by Collet (1980) in French programs as computer-assisted instruction (as cited in Tafazoli & Golshan, 2014). The behaviouristic tutorial-and-test approach, also called "Drill-and-kill", was dominant in TESOL in the 1940s and 1950s because the programmers did not know its relation to language learning (Hanson-Smith, 2003, p. 22). Communicative CALL was invented in the 1970s and 1980s as a reaction to this approach. Moreover, Communicative CALL had been used for communicative-related activities such as spelling, grammar checks and text reconstruction programs (Tafazoli & Golshan, 2014, p. 33). However, at the end of the 1990s, scholars tried to shift their focus from a cognitive view to a socio-cognitive view, which includes different language skills – listening, speaking, reading, and writing. This approach aimed to increase opportunities for incorporating new and advanced technologies in the language classroom (Warschauer, 1996, as cited in Tafazoli & Golshan, 2014). These theories have been criticised by Bax (2003), who proposed three different approaches: restricted, open, and integrated CALL (Polat, 2017).

Study context and problems

The Bangladeshi examination system is often criticised for its reliance on high-stakes testing and oversized classrooms (Rahman et al., 2019). Limited digital resources and inconsistent internet access further hinder teaching and learning (Khan & Kuddus, 2020; Talukdar & Sikdar, 2024). Additional challenges include an underdeveloped curriculum, improper teacher training and technical support, and insufficient instructional tools, which restrict effective CALL integration. Consequently, teachers at schools, colleges, and universities face

substantial implementation difficulties. Dhaka was selected because it hosts a diverse range of educational institutions, including English-medium schools, public colleges, and private universities, which have increasingly incorporated digital technologies into teaching and learning. In English Medium Schools, children are mostly engaged in game-based learning activities. It needs expertise in controlling, maintaining, and analysing different games—puzzles, matching images with words, spelling bees, vocabulary drills, and so on, while private universities often employ learning management systems, online assessment tools, and multimedia resources. In contrast, public colleges and private universities may experience greater challenges related to technological infrastructure, resource availability, and institutional support. These diverse institutional contexts examined in this research provide a valuable setting for exploring how teachers perceive the benefits, challenges, and pedagogical implications of CALL implementation in English language education.

Research questions

RQ 1 (a): What are the perceptions of teachers regarding the initiation of computers as a teaching tool inside the classrooms?

(b): What benefits and challenges do teachers experience (from schools to universities)?

RQ 2: How do institutional, technological, and pedagogical factors influence the implementation of CALL in schools, colleges, and universities?

RQ 3: What forms of support do teachers identify as necessary in language classrooms?

REVIEW OF RELEVANT LITERATURE AND RESEARCH

Theoretical Framework of the Study

This study is based on Teacher Cognition Theory by Borg (2003, 2015) to analyse differences in perceptions and challenges concerning the integration of CALL in higher education. Additionally, the Technology Acceptance Model (TAM) is used to support this theory (Davis, 1989). The Teacher Cognition Theory claims that an interconnected system of belief, knowledge, attitude, theories, images, assumptions, metaphors, conceptions, competencies and perspectives shapes teachers' institutional practices (Borg, 2003). Moreover, this framework signifies beliefs of teachers and their connection with institutional, cultural, and pedagogical environments. Teaching experience defines early cognition and shapes perceptions of teachers. Despite having limited training, improper infrastructure, or institutional expectations, teachers may hold positive experiences with regard to technology in classroom practices.

Underlying the theoretical framework, TAM suggests the actual use of technology through Perceived Usefulness and Perceived Ease of Use, influencing attitudes toward technology and behavioural patterns (Davis, 1989). In the academic context, TAM has been used broadly to perceive teachers' acceptance of digital tools, which include software, LMSs, and online platforms. By incorporating the TAM, this study evaluates the effectiveness of teachers' technology use, examining how perceived usefulness and ease of use influence their Willingness to Communicate (WTC) and the implementation of CALL literacy. Moreover, integrating Teacher Cognition Theory with TAM supports an interactivist perspective, recognising that teachers' attitudes and perceptions are socially constructed within contextual realities rather than shaped solely by technological factors.

Students' performance improved when teachers employed CALL tools

Students accelerate performance by using different CALL software in achieving different language skills. Some K-5 students who use CALL programs have scored higher in the spoken and written domains than those who didn't apply the tools (Feroce, Liu, & Chattergoon, 2025). Research indicates that CALL enhances learning outcomes, with approximately 86% of learners achieving good to excellent levels of vocabulary retention (Irany Z & Maulana, 2024). English language proficiency improved when students utilised digital materials and effectively integrated emotional intelligence with digital technology (Shao et al., 2025). Additionally, CALL-based online assessment creates a more relaxed and less stressful environment for learners (Chapelle & Voss,

2016; as cited in Shao et al., 2025). Online collaborative learning and practising appropriate cultural norms rely on exploring better learning environments, negotiation and knowledge building (Shamshiri, Esfahani, & Hosseini, 2023). Moreover, learners have benefited since they transformed traditional teaching materials such as textbooks, worksheets, and exercises into digital formats. This practice might increase students' cognitive and communicative abilities, interactivity, and accessibility of learning and save untold hours (Enayati & Gilakjani, 2020; Mirani, Lohar, Jat, & Faheem, 2019). Self-paced activities provide enough time to reuse and modernise existing resources. Moreover, mobile-assisted instruction (MAI) enhanced students' fluency and coherence, pronunciation, lexical resources, and grammatical range (Benlaghrissi & Ouahidi, 2024).

Attitudes and beliefs of teachers regarding CALL in the academic contexts

Research suggests that when teachers receive age-inclusive training and institutional support, their professional competencies improve significantly (Nazil & Yahya, 2023, p. 6). Adequate professional development in CALL tools, including ChatGPT, enhances teachers' confidence and ability to integrate technology into teaching and research (Slamet, 2024). Through word-processing software on microcomputers, teachers can restructure sentences, check spelling, correct translations, and design dictation tasks using on-screen texts (Gunduz, 2005). Students and teachers intend to use technologies in communication frequently in daily activities in Japan (Fathali, Marandi, & Okada, 2020). They mostly prefer peer-to-peer technologies rather than collaborative ones (Fathali et al., 2020). However, technical challenges and inaccurate language outputs may restrict creativity (Slamet, 2024, pp. 7-8). In Thailand, learners often use the internet for entertainment (Kerdboon, 2004, as cited in Khamkhien, 2012), yet classroom-based CALL use improves students' self-concept and language skills. Frequent interaction and timely feedback further motivate learners (Khan et al., 2021), while teachers' perceptions remain central to successful CALL integration (Al-Awidi & Ismail, 2014). One of the teachers from the survey said,

"The main goal of using Computers in my classes for teaching ESL reading is to motivate children, create an atmosphere of enthusiasm to give opportunities for child-directed instruction, and to stimulate children's imagination" (Al-Awidi & Ismail, 2014, p. 33).

Teachers arrange dialogues, role-plays, and information-gap tasks to accelerate communicative competence through professional development programs (Celik, 2012; Thao, Lan, & Thinh, 2024). There are MALL applications- HelloTalk and Duolingo to provide an empirical assessment of mobile app-based language learning (Zhao et al., 2024; Ma & Wang, 2024). Some popular CALL applications are—Literature, Corpus Linguistics, Computer Mediated Communication, WWW resources, adapting other materials and uses of Personalised Digitalised Assistance (PDA's) or mobile telephones (Beatty, 2010, p. 58). Past research papers indicate that pre-service teachers often struggle with technology integration because they are unfamiliar with the roles of these applications, making CALL implementation time-consuming (Wang, 2002, as cited in Feng, 2012; Gharawi & Bidin, 2016). Research from the US highlights that CALL provides instant feedback, classroom control, and guided practice (Ozfidan & Burlbaw, 2020). Teachers have also reported benefits such as enhanced vocabulary retention through multimedia and efficient visualisation of materials (Alam & Mizan, 2019). Computers are commonly used as audio-visual aids and supplementary resources, though attitudes toward sharing materials online vary in Azerbaijan, Australia, and Spain (Rafiee & Purfallah, 2014; Bilbatua & Haro, 2014). Teachers' beliefs towards technology are influenced by computer competence, age, attitudes, and access to resources, while inadequate infrastructure continues to hinder effective ICT implementation (Alsuhaibani, 2019; Memon & Shah, 2020).

Challenges for teachers and learners due to contrasting attitudes in different regions

Malaysia, Pakistan & Iran: Senior teachers in Malaysia have not received training in using computers for language teaching. Although the Ministry of Education offers special training for teachers, a few senior teachers have shown no interest in joining the course. These negative attitudes are one of the reasons for failure in inaugurating CALL. Moreover, some teachers have failed to manage time to enrol in a course as they are involved in other academic activities. This is why teachers become demotivated to create a lesson using computer-assisted tools (Mohd Nor & Vasu, 2010, p. 2). Notwithstanding, teachers' training is closely linked to their competencies in managing technologies within the classroom. Trained teachers are 30% more successful

in using CALL tools interactively and adaptively. As a consequence, teachers demonstrate a 25% improvement in assessing students' language (Luo, 2024, pp. 87). The rate varies based on the teaching contexts in different parts. Some teachers in Pakistan are ignorant of online testing and evaluation. They do not even have their own websites, domains, or LMSs to facilitate CALL tools in the classroom (Memon & Shah, 2020). Besides, in peripheral areas, technological limitations pose significant challenges for teachers and learners, as explained by Luo (2024). Also, Pakistan teachers use online chats and forums to create lessons, although institutional support for technology remains limited in some contexts (Memon & Shah, 2020). In Iran, technological integrations have not been preferred by EFL teachers due to several factors, such as: lack of benefits, limited opportunities and learner constraints (Hedayati & Marandi, 2014).

Australia & Spain: In the context of Spain and Australia, though the teachers learned a lot from CALL tools, they often found it excruciating. Most of the time, they failed to open a document due to a server error. Another teacher believed that incorporating non-verbal languages- laughter, gesture, jokes, and storytelling—is very difficult in an online session (Bilbatua & Haro, 2014). In a few exceptional cases, teachers are not interested in using e-learning platforms, as their course materials have several listening sessions. It is becoming a daunting task to attach listening modules to these platforms; moreover, learners are more interested in face-to-face interactions (Bilbatua & Haro, 2014). Besides, there are technical scarcity, improper knowledge and insufficient training, obsolete curriculum, time limitations, and financial paucity (Alsuhaibani, 2019).

Srilanka & Vietnam: The shifting from traditional classroom-based learning to technology-driven instruction has introduced several challenges, such as institutional readiness for online education, the need for policy reforms to accredit online programs, financial constraints on availing necessary technological infrastructure, and limited digital competencies of teachers. Particularly, these challenges are prominent in an economically underdeveloped context (Irshad, 2024). In Srilanka, it is claimed that the effectiveness of computer tools mainly depends on the readiness of teachers. Furthermore, computers can assist a teacher if he does not see them as a replacement but as a supplement (Sanmuganathan, 2013). However, different factors prohibit CALL integration in the Vietnamese context, such as anxiety and depression, avoidance towards technology, lack of productivity, negative attitudes, etc (Nguyen & Habok, 2022).

Bangladesh: A study concluded that students have developed more vocabulary using WhatsApp. Moreover, they showed a more positive attitude towards learning English as a foreign language than the other group, who did not use it (Hasan et al., 2022, p. 4). In contrast, much research indicates that rural learners face significant challenges in accessing the internet and digital devices due to infrastructural limitations (Karim et al., 2025). Pedagogical limitations from authorities further reduce classroom participation and limit faculty training opportunities; therefore, the assessment integrity between teachers and administrators has also declined. Similarly, Haque (2023) reports inadequate technological knowledge among instructors, administrators, and learners. In many classrooms, the absence of TV monitors hinders effective visualisation of lectures, leading to misunderstandings. Additionally, Google Classroom lacks secure one-to-one communication features, making interaction time-consuming and exhausting for learners (Islam, 2019). The absence of paid assessment software complicates online exam integrity. Furthermore, students' unfamiliarity with citation practices contributes to plagiarism, devaluing creativity and overall academic performance (Pecorari, 2015; Paul, 2020).

What actions are being ignored

Overall, the researcher has found a limited number of studies comparing the perceptions, advancements, and beliefs of private school, college, and university teachers regarding the resumption of asynchronous and synchronous CALL tools in Bangladesh. As the researcher has discussed numerous challenges in the literature review sections, there must be other undiscovered issues in implementing CALL. This paper sheds light on variations in attitudes and challenges among teachers at English-medium schools, public colleges, and private universities, as well as on solutions to the identified problems.

Conceptual Framework

Figure 1 presents the conceptual framework guiding this study. Drawing on Teacher Cognition Theory of Borg (2003, 2015) and Technology Acceptance Model of Davis (1989), the framework illustrates how teachers'

beliefs, experiences, and contextual factors influence their perceptions of usefulness and ease of use, which in turn shape their integration of CALL in teaching practices. Based on this framework, the researcher designs an interview protocol outlining the structure and content of the open-ended online questionnaire.

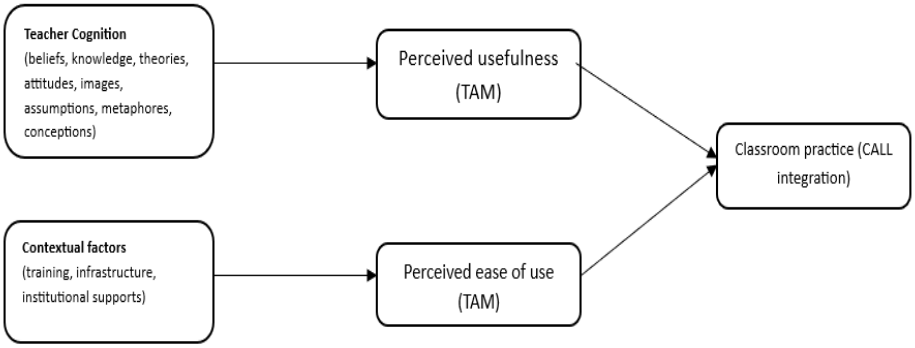

Figure 1. Conceptual Framework of the study

METHODOLOGY

Research design

A qualitative study is well-suited when the focus is on constructing meaning and interpreting experiences in a social and institutional context (Creswell, 2014). Personal experiences and social and cultural contexts impact teachers' attitudes, beliefs and challenges. That is why the quantitative method is not suitable for this research. Whereas a cross-sectional qualitative interpretivist approach allows in-depth analysis into how the perception varies in different institutions and how experience is associated with digital teaching practices at a specific moment in a classroom setting (Creswell & Poth, 2018). The qualitative online survey was conducted through a Google Form, which included open-ended questions. The reason for including open-ended questions is to elicit teachers' experiences, attitudes, perceived benefits, and challenges regarding the implementation of Computer-Assisted Language Learning (CALL). The online format allowed participants from different educational institutions to participate hassle-free and respond at their own pace.

The researcher adopts a multiple case-study approach because it provides context-sensitive insights into how environmental, institutional, and personal factors affect CALL adoption. It allows the researcher to analyse general patterns, dissimilarities, and other factors related to context and culture (Yin, 2018). Moreover, multiple cases enable both same-case and cross-case analysis, permitting pattern identification, contradictions, and interconnections across settings (Creswell & Poth, 2018). This study was conducted in Dhaka, Bangladesh, a capital region where educational institutions have increasingly incorporated digital technologies into teaching and learning practices. In this study, English-medium schools, public colleges, and private universities were considered as three distinct cases because each educational setting possesses unique institutional cultures, technological instruments, pedagogical practices, and levels of administrative support for CALL implementation. As educational sectors were treated as cases, teachers served as the units of analysis within each case.

Choosing the Sampling Technique and Participants

Table 1 presents the participants' profiles, including their names, institutional designations, teaching experience, student levels taught, and experience with CALL tools. As qualitative research seeks to explore meanings, experiences, and perspectives, non-probability sampling is appropriate for selecting information-rich participants relevant to the research questions (Creswell & Poth, 2018). Accordingly, this study adopted a purposive snowball sampling technique, whereby participants were recommended by colleagues to reduce

hesitation and encourage openness (Naderifar et al., 2017). In addition, homogeneous sampling was applied to select participants from similar institutional contexts, allowing for focused comparison and consistency in data collection (Marshall, 1996). Every teacher participating in this study must have at least one year of teaching experience. Moreover, the majority of them have more than ten years of experience. Selected teachers have unique teaching backgrounds. Every participant has responded in English. They utilise digital tools in the classes to deliver lectures and collect feedback in various ways. All participants have provided consent to answer the survey questions before the interview.

Interview Protocol

The interview protocol consisted of open-ended questions organised into several thematic sections. **Figure 2** starts with opening questions focused on participants' professional background, teaching experience and the level of students they teach. The core questions explored teachers' experiences with CALL tools, the frequency of their use, material choices, perceptions and beliefs, challenges encountered during implementation, and institutional or infrastructural concerns influencing CALL. Additional follow-up questions examined teachers' training, confidence, and perceived support related to CALL development in future.

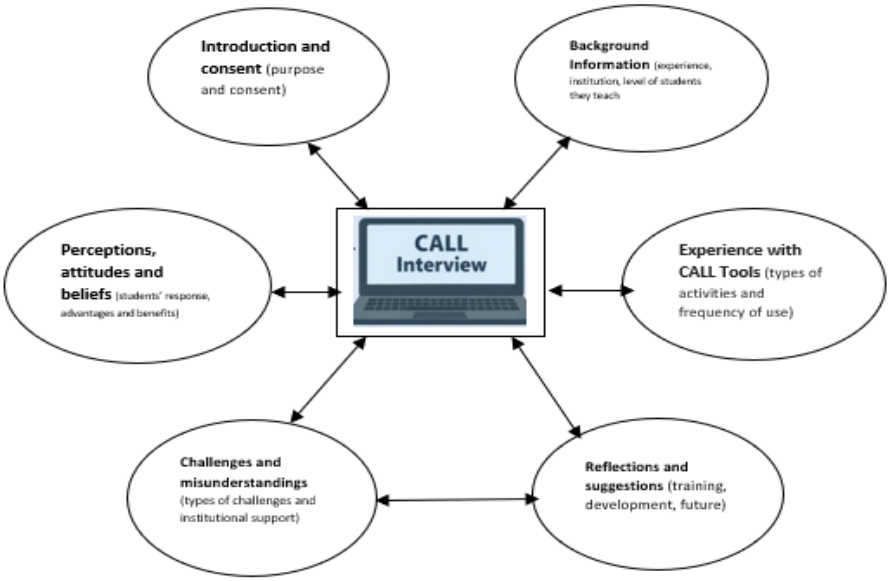

Figure 2. Semi-structured interview protocol (Qualitative online survey)

Data Collection Procedure

Firstly, a Google Form was created **(Figure 3)**, and the link was sent to the participants through Emails/Text messages/WhatsApp. Almost 15-17 open-ended questions (14 required, 3 optional) have been added to the form. However, each participant would get approximately 20-25 minutes to answer all the questions. The sample size was sufficient to declare thematic saturation and support cross-case analysis because the researcher had been receiving the same information until it continued. When gathering all the data, a thematic analysis was conducted. The conceptual framework **(Figure 1)** informed the development of the interview protocol and guided the thematic analysis. The participants' names and universities are hidden to ensure privacy and confidentiality. Specific codes (A, B, C) were used to identify each teacher. All the research procedures are preserved, and open-ended online questionnaires are analysed following a data analysis framework.

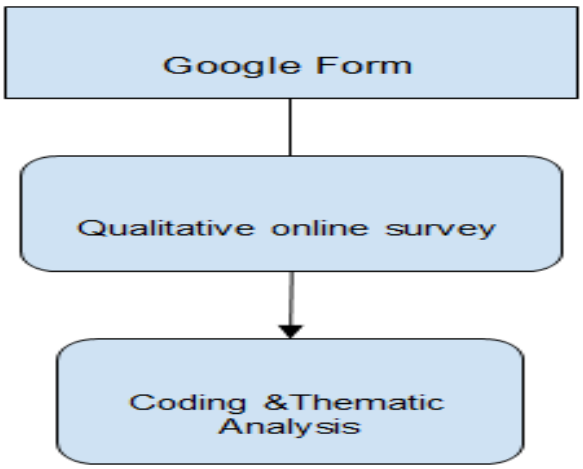

Figure 3. Steps of data collection

Framework of Data Analysis

The researcher has used a qualitative thematic analysis proposed by Kuckartz (2019) for analysing this study. This combines both theory-driven and data-driven theme development and elaborates deductive and inductive procedures. Deductive coding was guided by perceived usefulness, perceived ease of use, teachers' beliefs, supports, and challenges, while inductive coding was derived from participants' responses. First of all, the responses were read repeatedly to gain familiarity with the data and establish a general understanding of participants' experiences. Then, initial coding categories were developed from the study's theoretical framework - Technology Acceptance Model (TAM) and Teacher Cognition Theory. After that, new codes emerged from participants' online responses. Subsequently, codes were compared and grouped into broader thematic sections. Lastly, themes were generated in relation to the research questions. **Figure 4** elaborates on the stages of qualitative data analysis.

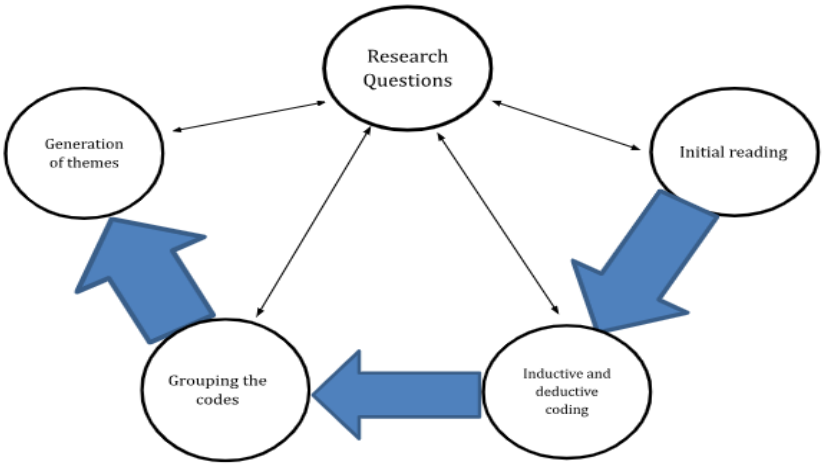

Figure 4. Thematic Framework

FINDINGS AND DISCUSSION

Table 1. Participants' Profile

No	Teacher's name (pseudonym)	Designation/institution	Teaching experience	Level of students they teach	Experience of using call tools

1.	Teacher A	Lecturer of EEE at a private university.	Less than 2 years	Tertiary	Yes
2.	Teacher B	Lecturer of BBA at a private university.	Less than 2 years	Tertiary	Yes
3.	Teacher C	Senior Math Teacher at an English-Medium School.	2–5 years	Primary	Yes
4.	Teacher D	Assistant Professor of EEE at a private university.	6–10 years	Tertiary	Yes
5	Teacher E	Senior Lecturer of English at a private university.	More than 10 years	Tertiary	Yes
6.	Teacher F	Professor of Philosophy at National University (college).	More than 10 years	Tertiary	Yes
7.	Teacher G	Associate Professor of CSE at a private university.	More than 10 years	Tertiary	Yes
8.	Teacher H	Lecturer of Textile Engineering.	Less than 2 years	Tertiary	Yes

Teachers mostly use elementary to advanced tools inside the classroom

Google Classroom has been incorporated into most of the classrooms. While teachers can readily upload instructional materials to student portals, some learners struggle to locate, download, or manage these resources.

Students often feel disturbed when the portal does not work smoothly. That is why I used to create a separate/combined class on Google Classroom every semester and upload all my documents. It ensures the availability of materials in time and increases teachers' confidence. (TA)

Mostly, writing tasks have been incorporated into assignments, projects, pair work, and other class activities. The widespread use of Google Classroom for assessing feedback indicates that teachers value CALL tools that minimize administrative workload while maintaining continuous communication with learners. This suggests that the perceived usefulness of classroom technology extends beyond instructional delivery to include classroom management and assessment functions.

Quiz software

Teachers reported that digital platforms facilitate immediate feedback and more efficient assessment practices, suggesting that CALL tools extend beyond content delivery to support formative assessment and learner monitoring. Teacher C's use of Google Classroom, YouTube, Kahoot, and Quizizz indicates a pedagogical preference for interactive and multimodal learning environments that enhance conceptual understanding and student engagement. Rather than replacing traditional instruction, these tools were strategically integrated to complement conventional teaching methods, reflecting a balanced and context-sensitive approach to technology adoption in language skills. CALL resources, including digital devices and online materials, were shown to improve learners' speaking skills (Ratnaningsih et al., 2019). In Iran, students' vocabulary acquisition and retention improved through quiz applications, multimedia software, iPads, and electronic textbooks (Enayati & Gilakjani, 2020). In Bangladeshi English-medium schools, teachers employ digital vocabulary tasks, interactive quizzes, guided listening, and structured writing activities to support diverse learners. At the university level, instruction has shifted from verbal delivery to visualisation through computer projections in both face-to-face and online classes, as noted by Teacher G. Additionally, applications such as CamScanner assist teachers in digitising worksheets efficiently.

Word Processing tools and other programs

MS Word, OneNote, Outlook, and MS PowerPoint are used to prepare lectures, questions, and suggestions for students. Applying these tools, teachers minimise workload and save time to solve other academic problems. Often, they do not elaborate on a topic despite having detailed knowledge. Instead, they adapt it into MS Word or a PowerPoint presentation, attaching the necessary links.

I frequently use them in my classroom to deliver lectures. I provide feedback with Ms Word correction tools. I record lectures using Zoom. I share PPT slide to illustrate ideas. (TF)

Moreover, teachers can enrol students' names, IDs, batch, CGPA/grade, and generate attendance using MS Excel. Not only does it provide digital academic records, but it also prevents them from being lost. Besides, if teachers record attendance through student portals instead of carrying a time-consuming manual attendance sheet, it will hold students' attention for a longer period of time. The introduction of new tools every week, semester, or month motivates learners and generates instant positive feedback. Moreover, teachers' appreciation of immediate feedback reflects the TAM construct of perceived usefulness. The technology was valued because it enhanced teaching efficiency and improved communication with learners. Consequently, positive experiences reinforced favourable attitudes toward CALL adoption.

Students rely more and more on digital resources and internet access when printed books or hard-copy journals are unavailable. Without reliable connectivity, learners cannot effectively use learning management systems, explore educational developments across regions, or examine language evolution and transformation (Selwyn, 2016). Teacher G and B's use of Google Classroom and Zoom for project sharing and multimedia integration suggests that CALL tools are increasingly functioning as platforms for collaborative learning and resource dissemination rather than merely as supplementary instructional aids. The incorporation of video materials reflects a transformation towards multimodal pedagogy, enabling learners to engage with content through diverse modes of representation. Similarly, the use of CALL tools in English-medium schools to support listening and writing activities demonstrates their role in facilitating skill-specific language development. It indicates that CALL integration is not only shaped by the availability of technology but also by teachers' professional identities and competencies. Therefore, from a Teacher Cognition Theory (TCT) perspective, these findings suggest that teachers' perceptions, attitudes, digital readiness, and challenges significantly influence how technology is utilised in language education.

Teachers of diverse backgrounds and institutions have differences in the challenges regarding CALL

Limited internet access also restricts students' ability to gather information for assignments, projects, and research. Teacher D's reports mentioned the highest attendance during CALL-supported online lessons, but remained uncertain about students' sustained attention due to infrastructural challenges such as inadequate recording facilities, poor lighting, and construction noise at the main campus, necessitating platforms like Zoom or Google Meet. Teacher E's views on CALL applications were effective in improving students' language learning outcomes, noting increased motivation and engagement despite not specifying a particular instructional context. These findings reveal a distinction between in-class teaching and cognitive engagement in online environments. Although CALL tools may increase accessibility and attendance, they do not automatically guarantee meaningful participation. The result of this research suggests that technological access alone is insufficient for effective learning and highlights the importance of pedagogical design in sustaining attention. Across educational sectors, teachers suggested opportunities to upgrade their pedagogical skills through collaborative discussions using Zoom, Google Meet, and Learning Management Systems. Teacher F's observation suggests that the flexibility in learning management systems may simultaneously create opportunities for distraction. This means increased accessibility without concentration does not necessarily translate into deeper engagement.

Yes, many students from rural areas do not have the knowledge to use zoom. They randomly log on to the link and forget to mute the microphone. Also, few students mistakenly submitted another's assignment on Google drive as they share each other's. A few do not know to prepare presentation using PPT. (TF)

Other obstacles, such as high rates of premium applications, overpricing of the internet and lack of control, impact the inauguration of CALL tools.

Technical limitations, inconsistent access, and insufficient support create misunderstandings in implementing CALL

Although the use of digital technologies has become increasingly routine across educational institutions, teachers' experiences indicate that successful CALL implementation remains heavily dependent on infrastructural and institutional conditions. Participants frequently reported technological disruptions caused by server failures, slow internet bandwidth, administrative constraints, and broader systemic limitations, suggesting that the effectiveness of CALL is influenced not only by teachers' willingness to adopt technology but also by the reliability of the surrounding digital ecosystem. Very often, the frequent updates make the process really slow. According to teacher D, the students are demotivated to stay in front of the computer because of unnecessary software updates. It opens up new layers, fonts, and colours, which is really excruciating. Moreover, teachers G and H's identification of limitations in using MS PowerPoint for presenting extensive texts, images, and videos, while also emphasizing the constraints imposed by large class sizes and limited instructional time. However, a few challenges, misunderstandings, or incompatibilities are found in using digital devices among teachers who have completed training. Teachers B and E reported few difficulties with CALL implementation, attributing their confidence to prior training and professional experience. This contrast indicates that technological challenges are not experienced uniformly; rather, they are identified by teachers' knowledge, prior exposure, and institutional support from a teacher cognition perspective.

Technology beyond control and other limitations

The amount of time students spend on Facebook, WhatsApp, Twitter, Tinder, and other LMS platforms is considerable and results in a decrease in academic concentration. Also, anxiety over failure due to bad technical services further lessens the patience to attend classes. Nevertheless, learners believe the benefits of internet use outweigh its drawbacks, making it unavoidable in daily life (Deng, 2022). It would be more beneficial if teachers could monitor students' use of technology. In response, Teacher G's recommendation mentioned instruction as an alternative for teaching.

When these technologies do not work in tandem with the teacher as a result of poor maintenance or electricity failure (our TVs do not have UPS attached to them), the teacher has to resort to verbal delivery, which may not convey the needed information to the students who are used to seeing slides or a visualised form of delivery. (TG)

In addition, free access to online resources and the lack of effective plagiarism detection tools can lead students to copy information without proper citation, thus limiting opportunities for critical thinking, originality, and knowledge construction (Nasrullah et al., 2017). This finding suggests that the educational value of CALL tools is not only a matter of their availability but also of the presence of suitable academic governance and digital literacy practices. Hence, CALL applications are useful provided that the institutions lay down rigid rules and establish a partnership with the software owners.

Most of the applications need premium subscriptions

The financial cost associated with accessing premium digital services is another significant barrier to implementing CALL. Even though many applications provide free versions, premium features that support more effective teaching, assessment, content creation, and data storage are often restricted to paid subscriptions. Subscribers can avail themselves of advanced benefits after becoming premium members. Such as, a Google Drive user needs to pay up to 150 BDT/month or 1250 BDT/year to avail 100 GB of storage. The most common paraphrasing tool, Grammarly, demands 144 USD/year from its users. Though both Google Drive and Grammarly offer discounted rates for the first few months, the price remains high for students and, in a few cases, for teachers. Subscribers of Kahoot Plus, Kahoot One, and Kahoot 360 have to pay 3-19 USD/month to access all features, apps, and premium content. While introductory discounts may temporarily reduce costs, long-term subscription fees can impose a considerable financial burden on both students and teachers, particularly in

resource-constrained educational contexts. In a few cases, this high price, government policy, low buying power of customers, and lack of institutional support concerning the internet make CALL tools harder (Azad & Islam, n.d.). Findings suggest that access to CALL might be dependent on the availability of instruments and economic accessibility. From a Technology Acceptance Model (TAM) perspective, perceived usefulness alone may not be enough to lead to technology adoption if financial costs outweigh perceived benefits.

The internet or WiFi doesn't work at all at my college. As it is a government college, support is limited. Moreover, students do not want buy mobile data in the classroom. Thus, I can't share file instantly. It is prohibited to explore my thoughts and ideas. Also, the microphone in the classroom doesn't work all time. (TF)

Additional training and support with AI integration would make CALL implementation smoother

If students avail themselves of the benefits of the software and applications, the focus will be shifted from traditional learning to blended learning. Primarily, researchers have defined blended learning as a combination of face-to-face discussion and online technology-mediated learning (Wong et al., 2020; as cited in Uras Eren & Dikiltas, 2025). The freedom of having full access to CALL tools makes students more creative, as several applications require subscriptions. Teacher C's recommendations highlight that effective CALL integration extends beyond the availability of digital tools and requires a supportive ecosystem encompassing professional development, technological infrastructure, institutional assistance, and community engagement. The emphasis on training suggests that teachers' confidence in using CALL is closely linked to their perceived competence and preparedness. The implementation of blended learning, AI-driven feedback systems, and AI-based language training is significant in establishing pedagogical environments in the classroom.

I think new teachers should be trained by the educational institutions to use these tools from the start of their careers. They should also be made aware of the standard ways of using and the consequential limitations of these tools. (TG)

Moreover, in Bangladesh, the future of CALL implementation is dependent on smartphone evolution and internet penetration. If professionals implement AI-assisted teaching tools inside the classroom, the environment will be more engaging, learner-centred, and effective. Most of the teachers think that pedagogical integration, digital competence, and training are more needed than just adopting a tool. The knowledge of teachers in the classroom can never be replaced by any tool, but if new tools were invented, the interaction of students would be more advanced.

Limitations

Though it was planned to reach public university teachers, instead, the author contacted a professor from the National University (the 7th college) as an alternative. These issues could be fixed in further research and observation by another researcher.

CONCLUSION AND FUTURE WORK

Teachers mostly adopt basic to advanced applications in the classroom. Most of the Bangladeshi schools, colleges, and universities do not have premium affiliations with software owners. Challenges and miscommunications happen due to institutional and technical limitations. This research represents an in-depth analysis of the interviews, aligning the findings with the conceptual framework, emphasising the role of teacher perceptions and contextual factors. In the near future, mixed-methods or longitudinal designs to examine how teachers' CALL practices evolve in a larger group may be adopted. Apart from that, the teachers hold positive attitudes towards CALL integration, mentioning the need for sustainable professional workshops, training, clearer institutional policies, and the inauguration of AI. Thus, this study successfully gathered a variety of perceptions and specific challenges related to the context.

Data Availability Statement

The author confirms that the data supporting the findings of this study are available within the article and its supplementary materials.

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Genai Use Disclosure Statement

ChatGPT (GPT-5.2) has been used to organize open-ended questions and find names of possible participants (teachers) from different backgrounds and departments. This helps the researcher relate each individual to the context, research questions, and interview protocols. In addition, the same platform has been used in paraphrasing information, formatting, language editing, and correcting.

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Supplementary files (Online only)

Interview questions on Google Form:

https://drive.google.com/file/d/10CyI-FJHy93tIYivok_S5XLA3G3tKCRA/view?usp=drive_link

Participants by Code (Details of the participants can be found in Table 1)

1. **Teacher A:** **https://drive.google.com/file/d/1sozpcGKznM6WsZFpr_lVeobSRIaM5FJy/view?usp=drive_link**
2. **Teacher B:** **https://drive.google.com/file/d/1f_AFvtGFiCCNiidIc_luqPCl6GZScKv2/view?usp=drive_link**
3. **Teacher C:** **https://drive.google.com/file/d/1uRT4hhBzTNiPH2CniIKWwFhciItwCpKt/view?usp=drive_link**
4. **Teacher D:** **https://drive.google.com/file/d/1YZsS5YoRKWUDbdLJHdzPnB5HTrzhMkNi/view?usp=drive_link**
5. **Teacher E:** **https://drive.google.com/file/d/1qf0GNdjFWiDhPT4hS4pQ3qDbtu8uyIRQ/view?usp=drive_link**
6. **Teacher F:** **https://drive.google.com/file/d/1VogNi2vFytHOrlDfI7t31q0ugbmoDI-3/view?usp=drive_link**
7. **Teacher G:** **https://drive.google.com/file/d/1mfYhuyZrWKs5TSMfmLb2yBtxumDMQ0w/view?usp=drive_link**
8. **Teacher H:** **https://drive.google.com/file/d/1Vlv7wKzJZTLGZuzT2G_RDV_iXvFrmH6/view?usp=drive_link**