Tech. Edu. J. 19 (1) : 293-315, Winter 2025

Technology of Education Journal
(TEJ)
Homepage: jte.sru.ac.ir

ORIGINAL RESEARCH PAPER

A Mixed-Methods Probe into CALL and non-CALL Integrated Assessment and EFL Learners' Summary Writing Ability

R. Bagheri Nevisi*, R. Shazdeh Ahmadi

Department of English Language and Literature, Faculty of Humanities, University of Qom, Qom, Iran

Received: 13 June 2024
Reviewed: 06 August 2024
Revised: 14 September 2024
Accepted: 09 November 2024

KEYWORDS:
CALL
Non-CALL
Integrated Assessment
Summary Writing

* Corresponding author
r.bagherinevisi@qom.ac.ir
(+9825) 32103683

ABSTRACT

Background and Objectives: Educational research has paid close attention to technology in language learning, especially computer-assisted language learning. CALL provides a dynamic and interactive platform for students to engage with language learning activities, multimedia resources, and communication channels. CALL has immense potential in helping English as a Foreign Language (EFL) learners to develop their skills through the summary writing process. Computer-Assisted Language Learning (CALL) has emerged as a prominent approach in language education, utilizing computer technology and interactive materials to support language learning. This mixed-methods study aimed to explore the effectiveness of CALL in enhancing the summary writing ability of English as a Foreign Language (EFL) learners, compared to a non-CALL integrated assessment.

Materials and Methods: The study employed a mixed-methods approach, combining quantitative data analysis and qualitative insights. Two intact classes of intermediate-level EFL learners, comprising 40 participants, were selected based on their intermediate language proficiency. Various measures, including placement tests, reading materials, scoring guidelines, interviews, and self-assessment reports, were utilized. Data analysis involved a One-Way Analysis of Covariance (ANCOVA) to examine the impact of instructional methods on summary writing performance.

Findings: The findings emphasized the potential of CALL-integrated assessments, highlighting personalized instruction, timely feedback, authentic writing practice, collaborative learning, integrated language skills development, and effective curriculum design.

Conclusions: The study's implications extend to personalized instruction, authentic practice, collaborative learning, integrated language skills, curriculum design, and formative assessment. The results contribute to the ongoing discourse on technology in language learning and demonstrate the positive impact of CALL on EFL learners' summary writing ability. Integrated assessment approach for non-calls involves self-reflection. Students are encouraged to analyze their own writing by examining their own progress, strengths, and weaknesses. Students can take ownership of their language learning and learn it in their own way. It enables students to set targets and track their progress over time. Reflection on writing skills can enhance students' self-awareness and a proactive approach to learning a language.

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
38	2	15

مقاله پژوهشی

بررسی ترکیبی ارزیابی یکپارچه با استفاده از فناوری در مقابل ارزیابی بدون استفاده از فناوری و توانایی نوشتن خلاصه توسط زبان آموزان ایرانی

رضا باقری نویسی*، رضا شازده احمدی

گروه زبان و ادبیات انگلیسی، دانشکده ادبیات و علوم انسانی، دانشگاه قم، قم، ایران

چکیده

پیشینه و اهداف: تحقیقات آموزشی توجه زیادی به فناوری در یادگیری زبان، به ویژه یادگیری زبان به کمک رایانه، داشته است. یادگیری زبان به کمک رایانه بستری پویا و تعاملی برای دانش‌آموزان فراهم می‌کند تا با فعالیت‌های یادگیری زبان، منابع چندرسانه‌ای و کانال‌های ارتباطی درگیر شوند. این نوع یادگیری پتانسیل عظیمی در کمک به زبان‌آموزان انگلیسی به عنوان زبان خارجی برای توسعه مهارت‌هایشان از طریق فرآیند خلاصه‌نویسی دارد. یادگیری زبان به کمک رایانه به عنوان یک رویکرد برجسته در آموزش زبان ظهور کرده است که از فناوری رایانه و مواد تعاملی برای پشتیبانی از یادگیری زبان استفاده می‌کند. این مطالعه ترکیبی با هدف بررسی اثربخشی یادگیری زبان به کمک رایانه در افزایش توانایی خلاصه‌نویسی زبان‌آموزان انگلیسی به عنوان زبان خارجی در مقایسه با ارزیابی یکپارچه بدون کمک رایانه انجام پذیرفت. مطالعه به هدف دریافت نتایج شایسته‌ای درباره کارایی فعالیت‌های نوشتاری مبتنی بر رایانه و ارزیابی یکپارچه غیر- رایانه در بهبود توانایی نوشتن خلاصه در زبان انگلیسی برای زبان‌آموزان می‌پردازد.

روش‌ها: این مطالعه از رویکرد روش‌های ترکیبی، شامل ترکیب تحلیل داده‌های کمی و بینش‌های کیفی، استفاده کرد. دو کلاس از زبان‌آموزان سطح متوسط، شامل ۴۰ شرکت‌کننده، بر اساس مهارت زبانی متوسطشان انتخاب شدند. معیارهای مختلفی از جمله آزمون‌های تعیین سطح، مطالب خواندن و درک مفاهیم، دستورالعمل‌های نمره‌دهی، مصاحبه‌ها و گزارش‌های خودارزیابی مورد استفاده قرار گرفت. تجزیه و تحلیل داده‌ها شامل تحلیل کوواریانس یک‌طرفه برای بررسی تأثیر روش‌های آموزشی بر عملکرد خلاصه‌نویسی بود.

یافته‌ها: یافته‌ها نشان داد که ارزیابی‌های یکپارچه با استفاده از فناوری قابلیت برگزاری آموزش شخصی‌سازی شده، بازخورد به‌موقع، تمرین نوشتاری متعارف، یادگیری همکارانه، توسعه مهارت‌های زبانی یکپارچه و طراحی برنامه درسی را دارا بودند.

نتیجه‌گیری: پیامدهای این مطالعه به آموزش شخصی‌سازی‌شده، تمرین اصیل، یادگیری مشارکتی، مهارت‌های زبانی یکپارچه، طراحی برنامه درسی و ارزیابی تکوینی گسترش می‌یابد. نتایج به گفتمان جاری در مورد فناوری در یادگیری زبان کمک می‌کند و تأثیر مثبت یادگیری زبان با کمک رایانه را بر توانایی خلاصه‌نویسی زبان‌آموزان نشان می‌دهد. رویکرد ارزیابی یکپارچه برای غیرحضوری‌ها شامل خوداندیشی است. دانش‌آموزان تشویق می‌شوند تا با بررسی پیشرفت، نقاط قوت و ضعف خود، نوشته‌های خود را تجزیه و تحلیل کنند. دانش‌آموزان می‌توانند از استقلال بیشتری دریادگیری زبان برخوردار شوند و آن را به روش خود بیاموزند. این امر زبان‌آموزان را قادر می‌سازد تا اهدافی را تعیین کرده و پیشرفت خود را در طول زمان پیگیری کنند. تأمل در مهارت‌های نوشتاری می‌تواند خودآگاهی زبان آموزان و رویکرد پیشگیرانه آنها را در یادگیری زبان افزایش دهد.

تاریخ دریافت: ۲۴ خرداد ۱۴۰۳
تاریخ داوری: ۱۶ مرداد ۱۴۰۳
تاریخ اصلاح: ۲۴ شهریور ۱۴۰۳
تاریخ پذیرش: ۱۹ آبان ۱۴۰۳

واژگان کلیدی:
یادگیری زبان با کمک رایانه
یادگیری زبان بدن کمک رایانه
ارزیابی یکپارچه
خلاصه نویسی

* نویسنده مسئول
r.bagherinevisi@qom.ac.ir
025-32103683

Introduction

Educational research has paid close attention to technology in language learning, especially Computer-Assisted Language Learning (CALL). CALL provides a dynamic and interactive platform for students to engage with language learning activities, multimedia resources, and communication channels. CALL has immense potential in helping English as a Foreign Language (EFL) learners to develop their skills through the summary writing process [1]. When CALL is utilized, students can access a wide range of resources such as online text materials, audiovisuals, and interactive exercises that could facilitate ease in learning summarizing techniques and thus improve their overall writing ability [2]. This integration of technology not only promotes better learning but also provides personalized and self-directed

learning since students can engage in summary writing skills within a supportive and adaptive environment. Also, CALL can offer chances for immediate feedback, in which learners can locate their weak points in writing and thus address them. The integration of CALL into EFL writing instruction presents a potentially promising way of increasing students' engagement, motivation, and autonomy as learners, leading to more efficient and enjoyable summary writing.

In this respect, integral to the effective implementation of CALL in EFL writing instruction is the notion of integrated assessment. To this end, Lee has postulated that integrated assessment is meant to bridge the gap between teaching, learning, and assessment since these three aspects interrelate with each other in order to bring a maximum advantage to learners [3]. Integrated assessment may bring in a sea change to the traditional way of teaching and assessment of EFL writing skills if used in harmony with technologically assisted learning environments like CALL [4]. Due to integrated assessment, one can align learning objectives with instructional activities and assessment tasks, assuring coherence and comprehensiveness when evaluating students' summary writing abilities. Through integrated assessment, the teachers are able to devise writing tasks that are closer to real-life situations and involve meaningful language use, thus engaging students in using their summarization skills in contexts more similar to real life. In CALL-based integrated assessment, learners instantly receive feedback and suggestions for improving their work through automatic or semi-automated means. Holistic assessment enhances the reliability and validity of evaluation practices while creating a learner-centered formative learning atmosphere.

Although CALL and integrated assessment individually have been the subject of significant research, their combined effect on EFL learners' summary writing ability is still a new strand of research. Ghanbari and Abdolrezapour propose incorporating emotional intelligence in an integrated writing assessment to enhance the construct validity of assessment practices [5]. Besides, integrated assessment can offer a more complete picture regarding the summary writing skill of students, as well as their involvement in writing, by considering learners' emotions and affective factors. The effectiveness of integrated assessment, as for, and of learning was also reflected in Sadeghi and Rahmati, within a large-scale exam preparation course [6]. There is a comprehensive assessment of the development of learners, their metacognitive capabilities, and their own thoughts and feelings. As for self-assessments, peer reviews, and teacher feedback, learners can know where they are strong, where they are weak, and engage in reflective practices aimed at continuously improving themselves. These studies therefore point to the potential benefits of integrating CALL and integrated assessment and stress the need for expanding research into this area to comprehensively understand how these variables interact and influence EFL learners' summary writing performance.

Further investigation is needed to fully realize the benefits of the integrated approach of CALL, integrated assessment, and summary writing skills. Some of the leading works have been done in this regard by Plakans et al., Uludag et al., and Deane et al. [7, 8, 9]. Plakans et al. explored the effects of CALL and integrated assessment on EFL learners' performance in summary writing, emphasizing providing learners with ample opportunities to practice summary writing using technology [10]. Uludag et al. examined the effect of

integrated assessment on learners' self-regulation strategies while performing the summary writing task and discussed how it could help develop learners' metacognitive awareness by fostering self-directed learning [9].

According to Deane et al., automatic writing assessment tools in the context of computer-assisted language learning had their own share of pros and cons, similar to the evaluation of summaries[7]. These, among other studies in the field, pave the way for further research to investigate the complex relationship between CALL, integrated assessment, and summary writing skills. Using the interaction between the variables and their impact, researchers can make evidence-based recommendations for designing instructional and assessment strategies that support learners' ability to develop their summary writing skills in technologically advanced learning environments. Writing proficiency plays a crucial role in language acquisition, enabling learners to effectively communicate their thoughts and ideas [11].

To achieve this goal, it is necessary to employ new approaches and teaching methods that will allow learners to develop writing skills.

This assertion is particularly true since technology like CALL has the capacity to generate engaging interactive learning environments for enhancing students' writing proficiency and imbuing them with confidence and precision when using the written word to express themselves [12]. Through CALL, writing experiences are bound to become more genuine. It enables the practicing opportunity in which the learners become active agents in improving their own writing skills [13, 14]. Enabling approaches focused on writing processes-oriented will ease the process of developing writing skills among the learners by focusing on the various stages of writing. Therefore, enabling students to achieve better qualities of written output [15, 16].

The existing gap in information on the association between CALL, IA, and summary writing hinders the development of good teaching and assessment strategies for enhancing writing skills among students. In this respect, it is important to seek innovative approaches that can be embedded in a variety of activities in language learning classes. Such diverse activities as group discussions, project-based assignments, etc., need to be incorporated into the class work for teachers to provide a stimulating learning environment that addresses the needs of each student. This type of approach supports student participation and caters to different student learning styles; it encourages long-term retention of the language content learned. Such an approach requires research on whether it will work, and if it does, how it would affect language teaching and policymakers. The study aimed to provide valuable insights into the effectiveness of CALL-based writing activities and non-CALL integrated assessment in improving EFL learners' summary writing ability. More specifically, this mixed-methods study aimed to explore the effectiveness of CALL in enhancing the summary writing ability of English as a Foreign Language (EFL) learners, compared to a non-CALL integrated assessment. The researchers formulated the following questions:

- Is there a significant difference between the CALL integrated assessment group and the non-CALL integrated assessment group?
- Is there a significant difference between the CALL non-integrated assessment group and the non-CALL non-integrated assessment group?
- Is there a significant difference between the CALL non-integrated assessment group and the non-CALL integrated assessment group?
- Is there a significant difference between the

CALL integrated assessment group and the non-CALL non-integrated assessment group?

- Is there a significant difference between the CALL integrated assessment group and the CALL non-integrated assessment group?

- Is there a significant difference between the non-CALL integrated assessment group and the non-CALL non-integrated assessment group?

- What is the students' attitude toward using integrated assessment in teaching summary writing?

Review of the Related Literature

Computer-Assisted Language Learning (CALL)

Computer-Assisted Language Learning (CALL) has emerged as a promising approach to enhance language education [12]. Despite its potential benefits, there are underexplored areas within CALL, particularly in the integration of technology into the writing process and the use of integrated assessment [17, 18, 19]. The integration of technology into the writing process is an essential aspect that requires further investigation [20]. Research is needed to explore how technology can effectively support different stages of writing, such as pre-writing, drafting, revising, and editing. This exploration can involve the use of writing software, online collaborative platforms, and multimedia resources to enhance writing proficiency [17, 19]. Furthermore, the use of integrated assessment within CALL is an area that needs attention [13]. Integrated assessment involves incorporating assessment tasks and feedback within the CALL environment to provide immediate and personalized feedback on writing [17]. However, there is a lack of comprehensive studies on the effectiveness of integrated assessment in CALL for evaluating writing skills. Research into AWE, peer feedback tools, and teacher-mediated feedback since CALL will provide information that points out how integrated assessment could better improve the performance of the learners in the acquisition of writing skills [21]. Comprehensive studies that cover the knowledge deficiencies of how technology integration can benefit or harm the writing process as well as how integrated assessment with the CALL could be put into operation within the contemporary second/foreign language learning context [22, 17] Computer-Assisted Language Learning (CALL) has a rich history dating back to the 1960s when it was first introduced in higher education institutions [23]. However, widespread implementation of CALL began in the 1970s, particularly in European schools [23]. Rather than being a standalone methodology, CALL is considered a supplementary tool that enhances language learning [24].

CALL encompasses a wide range of definitions and is often described as a process in which learners use computers to improve their language skills [25]. It is a dynamic discipline that combines pedagogy and technological advancements, inspiring educators to employ innovative techniques for teaching language skills [25]. Research in the last few decades has shown the positive role of digital technology in ESL/EFL learning [26, 27, 28]. According to Rainie and Horrigan, the Internet nowadays is part of the regular structure of everyday life in America [29]. Crystal also says that the languages used in computer-mediated communication might develop into the standard ways of communities [30]. In Iran, however, despite the large number of internet users engaged in educational purposes, the adoption of technology in language teaching has been slow [31].

The integration of CALL into the language classroom offers great benefits for both teachers and students. CALL enhances

motivation, relevancy, authenticity, and engagement in language learning [32, 33]. Integrating digital technology into language instruction, CALL presents interactive and dynamic learning experiences that engage the students' interest and make language learning more enjoyable and meaningful. It offers access to authentic materials and real-world contexts, allowing students to practice their language skills in practical situations. Moreover, CALL has become an integral part of language programs, promoting learner autonomy and independent learning [19, 10]. Through CALL, students will access some online resources, language-learning apps, and some interactive material adapted to individual learners' needs, thus letting them manage their own process and pace of improvement.

Relevant Empirical Studies

Larsen-Freeman has contributed much to the theoretical grounds of CALL [34]. She indicates the advantages of integrating technology into language teaching, which include increasing motivation, promoting learner autonomy, and access to authentic language resources. Another important figure in CALL is Chapelle, who discusses how technology can enhance language assessment [17]. Her work shows how technology can make assessments more authentic and more interactive, thus providing a more complex and engaging experience for learners. Motteram investigated the use of online platforms and virtual environments as support for language learning [35]. Online language courses, virtual language exchanges, and social networking sites might all be used to foster an authentic learning environment. Levy discussed language learning with computer-mediated communication Levy [18]. He explored how a set of synchronous and asynchronous online communication tools might aid language acquisition and intercultural communication skills.

Hailah Alhujaylan, in one of the studies, assesses the effectiveness of CALL on the students' improvement of writing skills in the academic setting with 60 Saudi female undergraduate students. In this regard, she has divided her subjects into the experimental group, which uses CALL, and the control group, or the traditional way of teaching. In Task #3, the experimental group outperformed the control group by a significant score of 78.20% against the latter's 72.13%, that is, a difference of 6.07% between them. On average, the experimental group enhanced their scores by 9.80% in three assessments, while the control group did so by 3.76%. It can thus be inferred from this that the integration of CALL indeed facilitates improvement in the ability to write and enables students to rise above their peers even on subsequent tasks. While the limited integration of technology in English language teaching was indeed confirmed, the study showed that if the students are given chances to extend their learning out of class, then the development in their writing skills is substantial. This points out that CALL could be a real tool to enhance deeper understanding and mastery in writing among EFL learners [36].

In conclusion, these studies collectively demonstrate the positive effects of CALL on various language skills. However, some gaps and limitations call for further investigation. Future research should explore specific features and types of CALL applications for different writing genres, examine individual differences in learners' responses to CALL, and include larger and more diverse samples. Addressing these gaps will contribute to a more comprehensive understanding of the benefits and optimal implementation of CALL in language instruction.

Method

Participants

The study adopted a mixed-methods design to delve into the effect of CALL and non-CALL integrated assessment on Iranian EFL learners' summary writing ability. The present study consisted of two intact classes, comprising intermediate-level English as a Foreign Language learners. The Oxford Quick Placement Test (QOPT) and University of Cambridge Local Examinations Syndicate were administered to 57 Iranian EFL learners. The test was accessible online and in the in-person classes. To participate, the participants had to score between 30 to 39 out of 60 on a general English test. The placement test showed that only 40 participants were qualified as intermediate in their language proficiency. Participants for the non-CALL classes were from Qom, while participants for the CALL classes were from different cities. In addition, most of the participants were English learners; most of them were even English teachers. The last sample was randomly divided into an integrated assessment group and a non-integrated assessment group, with 10 students in each subgroup. The sample included male and female students, aged between 20 and 32 years old, who were native speakers of Farsi. Table 3.1 presents the demographic characteristics of these teachers.

Instruments

The Oxford Quick Placement Test

One such tool was the Quick Oxford Placement Test, as adapted by Smith & O'Leary 2014, which was a well-established standardized test with acceptable levels of validity and reliability. This form of testing would normalize the students and provide a measure of the students' current levels of language proficiency. This comprised, in all, 65 items in multiple-choice format. Of these, 15 items tested vocabulary, 20 grammar, and 30 were cloze tests. This test was used by the experimenters to reach a common base among the subjects and measure their language abilities correctly.

Table 1: Demographic Information of the Participants

	Categories	N
Gender	Male	24
	Female	16
Age	20-22	8
	23-25	10
	26-28	9
	29-31	7
	32-34	6
Years of Learning	3-7	19
Engli	More than 7	21

The Select Readings Book (Intermediate Level)

The books entitled Select Readings were used in order to effectively carry out the instructional techniques of summary writing. Passages of equal difficulty were selected with various techniques of summary writing. These books acted as a milestone in our exploration of summary writing techniques and proved to be invaluable. We could use the content from these books to effectively apply and practice the prescribed instructional techniques. Compiled by Lee and Gundersen, the Select Readings series gives reading books for different levels of proficiency: low, intermediate, upper-intermediate, and advanced. What is more important, each one of these books displays a firm grounding in level control and great entertaining passages.

The TOEFL-iBT Scoring Guidelines

The TOEFL-iBT scoring guidelines that the researchers used to measure the performance of the learners in summary writing were the same guidelines employed by Baba (2009) in his study. The TOEFL-iBT Scoring Guidelines provide a uniform rubric for evaluating

participants' writing ability from the performance on a summary writing task. These criteria were used to score the participants' writing skills on the coherence and organization of the summary, vocabulary and grammar used, and overall effectiveness of writing.

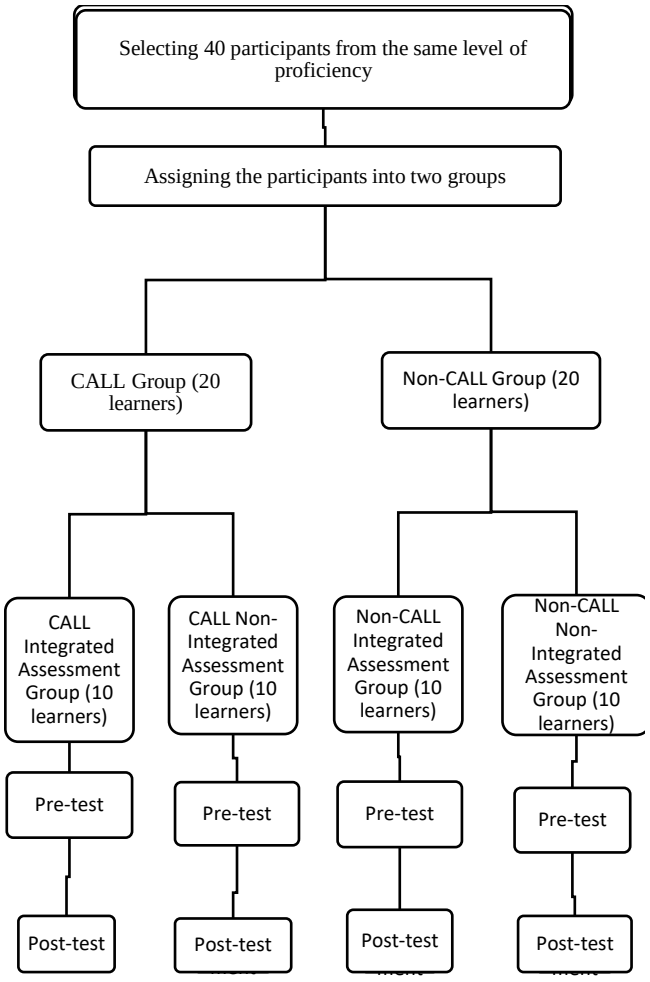

Fig. 1. The Process of Data Collection

Semi-Structured Interview

A semi-structured interview is a research method that allows for open-ended questions and follow-up questions to explore participants' experiences, attitudes, beliefs, and perceptions related to a specific topic (Rubin & Babbie, 2017). A semi-structured interview was conducted to get qualitative data on their experiences with summary writing and their perceptions of integrated assessment as a means of enhancing their writing abilities.

Self-Assessment Report

A valuable instrument called a self-assessment report was incorporated. The design of this report was based on Nunan's template [37]. Its purpose was to enable students to track their weekly progress and development throughout the course. The self-assessment report encompassed various essential elements, including a reflection on the topics covered and learned during the week, an evaluation of the students' writing skills in terms of organization, content, language usage, and task fulfillment. It also provided an opportunity for students to identify their mistakes, highlight areas of difficulty, specify their learning preferences, and outline future learning plans. The comprehensive explanation of the self-assessment report was provided to the students, and the teacher demonstrated its usage in several instances to ensure clarity and understanding. Before its implementation in the main study, the self-assessment report underwent a pilot test phase to assess its validity. This involved seeking feedback from two Applied Linguistics professors from Lorestan University, who evaluated the report's face and content validity, ultimately confirming its suitability for the study. Furthermore, the report's items were refined based on insights gathered from five grade 11 students who were asked to write on a given topic and provide feedback on any areas of ambiguity. Consequently, adjustments were made to enhance the report's language and usability in the research context.

Data Collection Procedure

Before the courses began, participants had consented, and researchers did not allow them to leave unprepared. They outlined all about the research being designed to point out the reason, manner, and merits accruable by improving their performance at places of work

and staying well. They were mailed an audio attachment to illustrate that, through involvement in language learning, this participation meant something. The researchers were aware of any issue that could arise and assured participants at all times that they might withdraw from the research process, highlighting how their participation was entirely on a volunteer basis. These approaches guaranteed strict confidentiality and privacy of information, based on the principle of keeping the participants' responses and personal data well-guarded. As a result, the conditions helped gain trust and freedom among the respondents to provide their experiences and views openly.

The research will be qualitative and quantitative. Qualitative analysis is used to examine the participants' responses to open-ended questions, identify themes, and extract relevant information. Closed-ended questions will be analyzed statistically in order of significance. The merging of these two methods by the researchers aims at a complete understanding of the participants about their technological proficiency and experiences during the study. The researchers hope that the results of this study will be helpful in informing future practices and interventions in education. Their tech literacy will help in finding out areas that might need support and training. This could be useful in guiding targeted resources and workshops to improve technology literacy among teachers and students. Researchers look to the improvement of the educational experience concerning the given technology challenges and the better digital skills of the participants.

Non-CALL Non-Integrated Assessment

The non-computer-assisted language learning, not integrated assessment classes, required four sessions after a pretest. These classes had been designed to help the students improve their summary writing skills with various techniques, along with activities. The main resource book for these sessions was "Select Reading." During each of the sessions, the students summarily wrote about different techniques. This was to equip students with the knowledge of effective summarization of texts while developing their writing skills. The sessions were organized in such a way that the student`s skills in summarizing materials started improving gradually. The study was assisted by the book "Select Reading"; every session was based on different readings of the chapters from that book. In that perspective, homework was the medium used by the researcher from the students in conducting an effective data collection method. They were required to read an additional chapter from the book and make a summary using the technique learnt in the session. In this approach, students had to individually practice and reinforce the learned techniques of summary writing. As these classes were not integrated with assessment, the activities were different from the integrated assistant class. In these non-evaluation classes, a supportive learning environment was ensured without incorporating formal evaluation methods such as peer assessment, self-access, self-evaluation, or reflection. However, the researchers conducted a final exam in order to test the students' overall understanding and progress. Another important feature was the interactive quizzes given to reinforce the summary writing skills learned in the sessions. These quizzes were made up of various question formats, including multiple-choice, fill-in-the-blanks, and matching exercises. The quizzes were designed to encourage students to arrange statements correctly and provide instant feedback to help them refine their summarization skills.

Consequently, the instrumentation in my non-computer-assisted language learning, non-integrated assessment classes took the form of four sessions designed to enhance the summary writing skills of students. The readings alone were the source of information; that is, one session equated to one chapter. The instrumentation contained summary writing, error analysis, summary paraphrasing, quizzes, and fill-in-the-blank exercises. The classes didn't involve peer assessment, self-access, self-evaluation, or reflection components, but the experimenters administered a final test to assess the overall achievement of the students. Students provided feedback on their summaries, mistakes, and suggestions for improvement. The structured nature of the sessions allowed students to first improve and then refine their summary writing.

CALL Non-Integrated Assessment

In the CALL non-integrated assessment classes, the students were continuously developed in their summary writing skills through various activities. The classes were held on the platform of Adobe Connect, thus giving the students a more dynamic and interactive environment for learning. Technology was employed to increase the level of student engagement and to facilitate efficient communication between the instructor and learners. The activities for the CALL non-integrated assessment classes were again similar to the previous class, namely, summary writing, error analysis, summary paraphrasing, quizzes, and fill-in-the-blank exercises. However, technology made them more accessible and enjoyable to the students.

Students were asked to write summaries as emails and submit them to the instructor for their homework assignments. Assignments are easy to submit this way and to track. The instructor provided the feedback by recording audio messages and sending them back. The personal approach of giving feedback not only allowed for the timely delivery of the feedback but also resulted in an interactive and more engaging learning process for the students. Computer-assisted language learning non-integrated assessment classes still maintained quizzes and tests as a part of the assessment. To make the assessments more interactive, the assessment was made using the 'Poll Box' feature on the Adobe Connect platform. This enables the instructor to include engaging quizzes and tests that the students can participate in during the live sessions. Real-time feedback and immediate results through the Poll Box feature allowed for friendly competition and excitement among the students. In these classes, most activities were to be done individually in breakout rooms. Breakout rooms in Adobe Connect facilitated collaborative and interactive learning experiences. Then, students were divided into breakout rooms, where they had the chance to work independently on the activities. This led to focused engagement and active participation. The instructor moved from breakout room to breakout room to give each student personalized feedback and guidance. This approach guaranteed personalized attention and created an interactive and supportive learning environment.

The results of the non-integrated assessment classes in the computer-assisted learning mode of languages were nothing less than astonishing. Putting the children on technology, with all its various activities and individual performance feedback, brought forth phenomenal progress in the summary writing of students. Interactive quizzes, breakout rooms for group activities, and timely feedback-all these made up an environment where every participant wanted to participate with maximum zeal. The progress and achievements of the students far exceeded expectations, with

amazing outcomes that left everyone involved dumbfounded.

Non-CALL Integrated Assessment

The researchers applied an integrated model to improve students' writing summary skills in my non-computer-assisted integrated language learning assistant classes by using rubric criteria, metacognitive questions, peer assessment, self-evaluation, self-reflection, and self-assessment. First, the instructor explained a detailed rubric in class. The rubric specified the characteristics of what constitutes a good summary and included aspects such as content, organization, coherence, and grammar. By giving the students this kind of rubric, this instructor gave students a mandate to self-assess work and understand standards met and unmet.

The instructor developed my students' metacognitive skills in summary writing by incorporating a series of thought-provoking metacognitive questions. Before they started writing, the instructor asked my students to consider questions such as: "What is the purpose of your summary?" This question helped my students understand the goal of summarizing, which is to condense and convey the main ideas of the original text concisely. "What do you do to get the main ideas of the original text?" This question invited the students to reflect on effective reading strategies such as skimming, scanning, and identifying key information.

While the students were writing, the instructor encouraged them to engage in metacognitive reflection by asking questions such as: "How will you ensure that your summary is concise and effectively captures the key points of the original text?" This question prompted them to consider the importance of conciseness and the need to prioritize the most relevant information. Another metacognitive question the instructor posed to them was: "Are you monitoring the clarity and coherence of your summary as you write and making necessary adjustments?" This question reminded them to continuously self-monitor and revise their summaries to ensure coherence and logical flow. Peer assessment played a vital role in my non-computer-assisted language learning integrated assistant classes. The participants exchanged summaries and provided constructive critiques during the peer feedback session. The instructor guided this with guidelines for peer assessment that included, among others, content accuracy, coherence of organization, language, and adherence to the requirements as stated in the rubric. This peer review process allowed students not only to receive multiple points of view and insights but also to be motivated to make their own judgments based on the feedback they received. In commenting constructively on their peers' summaries, students also learned to develop their critical thinking skills and built a deeper understanding of what a good summary should be.

Results and Findings

Testing Assumptions

The remaining five assumptions related to One-Way Analysis of Covariance (ANCOVA) will be covered in this section. First, inter-rater reliability indices were computed for the pretest and posttest of summary writing. As shown in Table 4.1, there was significant agreement between the two raters on the pretest ($r(38) = .779$ representing a large effect size, $p < .05$), and posttest ($r(38) = .916$ representing a large effect size, $p < .05$) of summary writing.

Table 2: Pearson Correlations for Inter-Rater Reliability Indices

		Pretest Rater2	Posttest Rater2
Pretest Rater1	Pearson Correlation	.779**	
	Sig. (2-tailed)	.000	
	N	40	
Posttest Rater1	Pearson Correlation		.916**
	Sig. (2-tailed)		.000
	N		40

The collected data should not show any significant deviation from normality; i.e., the second assumption. Table 3 shows the skewness and kurtosis indices and their ratios over the standard errors. As shown in Table 3, the computed ratios were lower than ±1.96. Thus, it was concluded that the assumption of normality was retained.

Table 3: Skewness and Kurtosis Indices of Normality

Group		N	Skewness		Kurtosis		Ratio	
		Statistic	Statistic	Std. Error	Statistic	Std. Error	Skewness	Kurtosis
CALL Integrated	Pretest	10	.328	.687	-1.196	1.334	0.48	-0.90
	Posttest	10	-.205	.687	.013	1.334	-0.30	0.01
CALL Non-Integrated	Pretest	10	-.232	.687	-.586	1.334	-0.34	-0.44
	Posttest	10	.144	.687	-1.754	1.334	0.21	-1.31
Non-CALL Integrated	Pretest	10	-.233	.687	-1.001	1.334	-0.34	-0.75
	Posttest	10	.234	.687	-1.007	1.334	0.34	-0.75
Non-CALL Non-Integrated	Pretest	10	.233	.687	-.369	1.334	0.34	-0.28
	Posttest	10	.101	.687	-.011	1.334	0.15	-0.01

One-way ANCOVA assumes homogeneity of variances of the groups. The significant results of Levene's tests ($F(3, 36) = 3.39$, $p < .05$) (Table 4.3) indicated that the assumption of homogeneity of variances was not retained. There is no need to worry about the violation of this assumption.

Table 4: Levene's Test of Homogeneity of Variances for Posttest of Summary Writing by Groups with Pretest

F	df1	df2	Sig.
3.391	3	36	.028

One-way ANCOVA requires that there be a linear relationship between the pretest and posttest of summary writing. The significant results of the linearity test ($F(1, 39) = 33.54$, $p < .05$, eta squared = .424 represent a large effect size) (Table 5).

Table 5: Levene's Test of Homogeneity of Variances for Posttest of Summary Writing by Groups with Pretest

			Sum of Squares	df	Mean Square	F	Sig.
Posttest * Pretest	Between Groups	(Combined)	87.660	15	5.844	1.177	.350
		Linearity	33.540	1	33.540	6.758	.016
		Deviation from Linearity	54.120	14	3.866	.779	.681
	Within Groups		119.115	24	4.963		
	Total		206.775	39			
	Eta Squared		.424				

One-Way ANCOVA requires that there should be linear relationships between pretest and posttest of summary writing across the four groups; i.e., homogeneity of regression slopes (Table 6). The non-significant interaction between covariate (pretest) and the independent variable ($F(3, 32) = 1.13$, $p > .05$, Partial eta squared = .096 represents a moderate effect size) indicated that the statistical assumption that the relationships between pretest and posttest of summary writing were linear across the four groups was supported.

Table 6: Testing Homogeneity of Regression Slopes Posttest of Summary Writing by Groups with Pretest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group	2.923	3	.974	3.919	.017	.269
Pretest	29.714	1	29.714	119.523	.000	.789
Group * Pretest	.847	3	.282	1.136	.349	.096
Error	7.955	32	.249			
Total	9878.875	40				

Answering the Questions

Table 7 shows the four groups' means on the posttest of summary writing after controlling for the effect of the pretest. The results showed that the CALL integrated group (M = 17.62, SE = .159) had the highest mean on posttest of summary writing after controlling for the effect of pretest. This was followed by CALL non-integrated (M = 16.44, SE = .160), NON-CALL integrated (M = 15.93, SE = .159), and NON-CALL non-integrated (M = 12.20, SE = .159) groups.

Table 7: Descriptive Statistics for Posttest of Summary Writing by Groups with Pretest

Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
CALL Integrated	17.627[a]	.159	17.304	17.950
CALL Non-Integrated	16.440[a]	.160	16.115	16.765
Non-CALL Integrated	15.930[a]	.159	15.608	16.252
Non-CALL Non-Integrated	12.203[a]	.159	11.881	12.526

Table 8 shows the main results of One-Way ANCOVA. The results ($F(3, 35) = 217.93$, $p < .05$, partial $\eta^2 = .949$, representing a large effect size) indicated that there were significant differences between the four groups' means on the posttest of summary writing after controlling for the effect of the pretest.

Table 8: Tests of Between-Subjects Effects for Posttest of Summary Writing by Groups with Pretest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Pretest	29.547	1	29.547	117.483	.000	.770
Group	164.432	3	54.811	217.932	.000	.949
Error	8.803	35	.252			
Total	9878.875	40				

The significant results of One-Way ANCOVA were followed by Bonferroni post-hoc comparison tests (Table 9 to Table 14).

Question 1

The CALL integrated group (M = 17.62) significantly outperformed the non-CALL integrated assessment group (M = 15.93) on the posttest of summary writing after controlling for the effect of pretest (MD = 1.69, $p < .05$) (Table 9).

Table 9: Bonferroni Post-Hoc Comparison Tests for Comparing CALL-Integrated and Non-CALL-Integrated

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
CALL Integrated	Non-CALL Integrated	1.697*	.225	.000	1.069	2.326

Question 2

The CALL non-integrated group (M = 16.44) significantly outperformed the non-CALL non-integrated assessment group (M = 12.20) on the posttest of summary writing after controlling

for the effect of pretest (MD = 4.23, p < .05) (Table 10).

Table 10: Bonferroni Post-Hoc Comparison Tests for Comparing CALL Non-Integrated and Non-CALL Non-Integrated

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
CALL Non-Integrated	Non-CALL Non-Integrated	4.237*	.226	.000	3.605	4.869

Question 3

There was no significant difference between the CALL non-integrated group (M = 16.44) and the non-CALL integrated assessment group (M = 15.93) on the posttest of summary writing after controlling for the effect of the pretest (MD = .511, p > .05) (Table 11).

Table 11: Bonferroni Post-Hoc Comparison Tests for Comparing CALL Non-Integrated and Non-CALL Integrated

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
CALL Non-Integrated	Non-CALL Integrated	.511	.225	.178	-.120	1.141

Question 4

The CALL integrated group (M = 17.62) significantly outperformed the non-CALL non-integrated assessment group (M = 12.20) on the posttest of summary writing after controlling for the effect of pretest (MD = 5.42, p < .05) (Table 12).

Table 12: Bonferroni Post-Hoc Comparison Tests for Comparing CALL Integrated and Non-CALL Non-Integrated

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
CALL Integrated	Non-CALL Non-Integrated	5.424*	.224	.000	4.796	6.051

Question 5

The CALL integrated group (M = 17.62) significantly outperformed the CALL non-integrated assessment group (M = 16.44) on the posttest of summary writing after controlling for the effect of pretest (MD = 1.18, p < .05) (Table 13).

Table 13: Bonferroni Post-Hoc Comparison Tests for Comparing CALL Integrated and CALL Non-Integrated

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
CALL Integrated	CALL Non-Integrated	1.187*	.227	.000	.551	1.822

Question 6

The NON-CALL integrated group (M = 15.93) significantly outperformed the NON-CALL non-integrated assessment group (M = 12.20) on the posttest of summary writing after controlling for the effect of pretest (MD = 3.72, p < .05). Figure 2 shows the four groups' means on posttest of summary writing after controlling for the effect of pretest (Table 14).

Table 14: Bonferroni Post-Hoc Comparison Tests for Comparing Non-CALL Integrated and Non-CALL Non-Integrated

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Non-CALL Integrated	Non-CALL Non-Integrated	3.726*	.224	.000	3.099	4.354

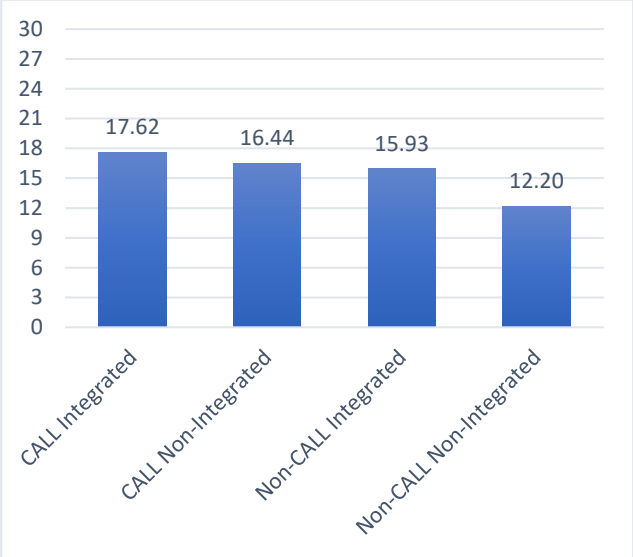

Fig. 2. Means On Posttest of Summary Writing by Groups with Pretest

Question 7

The participants mentioned the constraints and challenges they faced during the CALL-integrated class. They highlight technical issues, limited access to technology, the need to develop digital literacy skills, language barriers, individual learning preferences, time management challenges, and the lack of immediate instructor support. Furthermore, they emphasize the instructor's ability to adapt the learning style to address individual learning preferences and engage them effectively. The participants acknowledged the comprehensive support, clear instructions, and accessible resources provided by the instructor and the institution in overcoming these constraints and challenges. They also emphasize the transformative nature of the experience, the enhancement of language proficiency, and the acquisition of valuable digital literacy skills.

Participant 1: "The CALL-integrated class was an exceptional learning experience that exceeded our expectations. Technology, online platforms, and digital tools made it possible to learn a new language. Interactive activities gave us immediate feedback, enabling us to practice and improve our language skills with precision. Technology not only prepared us for the digital future but also provided us with valuable digital literacy skills that are now highly valued in the 21st century. The seamless integration of technology and language learning was incredibly empowering."

Participant 2: "The CALL-integrated class was a captivating and engaging learning experience that kept us engaged from the outset. Technology enabled us to have highly personal learning experiences, tailored to our individual interests and needs. Using collaborative tools and online resources, we were able to build a sense of belonging among our peers, connect with each other, and learn from each other with ease. Technology has given us the skills for future language learning and digital native skills for the job."

Participant 3: "We were exposed to a world of language learning opportunities through the CALL-integrated class. Interactive activities and multimedia resources made complex language concepts accessible and comprehensible. Technology allowed us to work with others without a problem, learn from our classmates, and get immediate feedback that significantly improved our language proficiency. The impact of this experience, and the transformation that it has brought, is that it highlights the transformative and immense benefits of integrating technology into language learning."

Participant 4: "We had to take a class called integrated, and it was a revelation of knowledge. We had technical problems, glitches, compatibility issues with online platforms, and software. Technology also hindered some of us from engaging and participating. And the process of becoming a digital liar was a tough one; we had to use and navigate a range of digital tools and platforms. Language barriers made it harder to understand instructions and interact with digital resources during our learning. The reward is a dreamlike flower that we work very hard to obtain in many areas in order to motivate ourselves. However, our teacher was able to adjust his teaching style to motivate us with remarkable ease and thus make his teaching more meaningful. We struggled with managing time for online activities, assignments, and self-study, but the instructor and institution provided us with ample resources and made it easy to access materials when needed. This has helped us with our language skills and digital literacy skills."

Participant 5: "The CALL-integrated class changed our language learning path and changed our language learning. We had to learn to use computers, the Internet, and software compatibility issues, etc. We didn't get to go to class and we didn't get to go to class. Besides, the process of becoming literate online was a significant challenge due to the variety of media we were exposed to. Language barriers made it harder to understand instructions and use technology. Besides, we all learn differently and may not be able to get the same things in class, which leads to less motivation. Despite everything, our instructor's exceptional adaptability and expertise allowed them to truly alter the learning approach, adjusting it to our requirements and engaging us thoroughly. We struggled with managing time for online activities, assignments, and self-study, but the instructor and institution provided us with comprehensive guidance, accessible resources, and efficient support. This has helped us learn a lot of languages and given us the digital literacy we need to live our lives."

Groups on Pretest

Table 15 shows the results of the One-Way analysis of variance (ANOVA) on the pretest of summary writing. The results ($F(3, 36) = .342$, $p > .05$) indicated that there were no significant differences between groups' means on the pretest of summary writing. The four groups' means on the pretest were 11.05, 11.57, 11.25, and 11.15.

Table 15: One-Way ANOVA for Pretest of Summary Writing by Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.555	3	.518	.342	.795
Within Groups	54.506	36	1.514		
Total	56.061	39			

Discussion

Whereas both combined experiments yield a few key differences in the groups, posttest results showed the non-CALL nonintegrated group performed better than the CALL nonintegrated group, with the CALL approach improving this ability to write summaries. It was also found that the CALL-integrated group significantly outperformed the non-CALL non-integrated group and the CALL-integrated group, indicating the added value of including assessment in the CALL approach. There is no statistically significant difference between the non-CALL integrated group and the non-integrated one. Findings point to the very important fact that the integration of technology and integrated assessment has the

potential to enhance the practice of giving EFL writing instructions. This is because the features involved in CALL result in more interactive learning and increased learners' involvement.

The present study, along with Zaghlool [38], finds the encouraging attitudes of university EFL learners toward CALL online writing activities helpful, motivating, and enjoyable since they allow access at all times and from anywhere. This research also verifies that there is a positive attitude toward the integration of CALL online writing activities in writing instruction. Integration of assessment provides the learners with on-time feedback, enabling their language development. From the above, it is evident how the CALL-based practices and measures added value to the ESL students' written expression in enhancing their learning process. These findings were further corroborated by the qualitative investigation into the error patterns and samples of writing through the delineation of areas where improvement needed to be made in students.

The identified issues regarding coherence, organization, lexical use, and grammar helped provide information that contributed to conducting instructional interventions and giving individual feedback. In addition to the quantitative and qualitative analyses, the current study also prepared a questionnaire related to perceptions and attitudes of the participants toward different types of instructional approaches. The open-ended type of question and Likert scale items allowed the respondents to present their opinions and also give some feedback regarding their learning experience. Indeed, most people in the CALL and non-CALL groups described the teaching methodologies as favorable; the technology-enhanced telephone approach kept them more interested and motivated than the simple traditional uncalled group; activities of CALLs were interactive by participants themselves; there is an appreciation of the immediate feedback from the computer programmers. Those who participated in the CALL integrated group also welcomed the assessment featured in the learning process. Through regular critique and feedback, it provided them with a way of pinpointing their strengths and weaknesses in summary writing. The information like that paved the way to spot aspects that needed improvement and monitor progress over time. Less problematic features for them were the inability of teaching activities to present as many instances of interactivity as well as the lack of variation. They said that the method somehow limits their opportunities for practice and participation in using it. Yet, there were some voices in a non-CALL group expressing favor when speaking about simplicity and familiar structure on the traditional classroom site.

A follow-up questionnaire and interview were also used to gauge things like pre-computer literacy, language acquisition strategies, and motivation. Results indicated that the CALL approach benefited students with greater computer skills and greater self-management skills. This is because such students are in a better position to utilize the interactive features of the CALL programs. Students who had never used a computer before had some initial difficulties with the CALL process.

Nevertheless, these hurdles were overcome, and they made full use of the technology-based learning environment. The research also analyzed the teacher's role in these varying approaches to instruction. For interviewing the teachers of English in charge of the sessions, their opinions have been presented. As the approach of CALL has evidenced in the words of teachers themselves, it made them more personalized, turning them into better mentors and facilitators. CALL programs made tracking

and providing feedback easier for students. On the other hand, there is a need to weigh technology use with authentic face-to-face interaction and classroom activity. CALL, an integrated assessment, has been applied to improve summary writing skills of EFL learners at the intermediate level.

The research showed that with intervention, the CALL approach and assessment significantly enhanced the improvement in learners' ability. A technology-rich learning environment nurtures engagement and interaction and fosters immediate feedback, impacting positively upon learner motivation and success. This is reflected in a study by Mathews-Aydinli and Elazi [11], which found that teachers believed their students were more motivated during interactive whiteboard (IWB) lessons. Turkish EFL students and teachers also reported positive attitudes toward this technology, feeling comfortable and recognizing its effectiveness.

Its implications can also be exploited by practitioners for their particular needs in their classroom teaching practices and the language-learning environments. Non-CALL integrated assessment is an approach that would enhance the students' language through various approaches. Rubrics, metacognitive questions, peer review, and self-assessment are all important components of this approach that help students develop their language skills. Integrated assessment that involves non-CALL; the main focus would revolve around rubrics.

They provide clear-cut guidelines and specifications as to what proficient writing means. This enables the student to independently review his or her work. The rubric helps the student point out his strengths and weaknesses as a writer, which in turn helps him upgrade his language. Also, elements such as grammar, coherence, organization, vocabulary usage, and ability of critical thinking have been highlighted on writing rubrics. One of the distinctive features of the non-CALL-integrated assessment approach is the metacognitive questions. These questions get students thinking about writing. Students can think about the purpose of writing, the methods used, clarity of ideas, and effectiveness of communication, among other aspects. This is a tool that can be used by students to get insight into their own learning and developing writing skills through metacognitive reflection. The non-CALL integrated assessment approach makes use of peer evaluation as an effective tool. The student is allowed to comment on the work of others. This peer assessment method provides the writer not only with a means to evaluate a composition but also gives rise to shared learning. The acquisition of writing styles, ways, and tactics amongst the students is of use to the overall language learning. Peer counseling also makes students think critically by examining other students' work, criticizing constructively as well, and taking part in constructive dialogues. Integrated assessment approach for non-CALL involves self-assessment.

It also provides students with the opportunity to reflect on their own writing, considering their progress, strengths, and weaknesses. This encourages students to take responsibility for their language learning, allowing them to personalize their approach. By setting targets and monitoring their progress over time, students enhance their motivation. This aligns with insights from Pinner [33], who highlights the significant relationship between student and teacher motivation, noting that students’ perceptions of computer-assisted language learning (CALL) can greatly influence their engagement and decision-making.

Reflection upon writing skills enhances students' self-awareness and proactive attitude in language learning. The non-integrated

approach mainly aims at writing proficiency but, in effect, boosts vocabulary acquisition. It is through writing that the students can interrogate various texts and pick out information relevant to their needs. Their vocabulary becomes developed through reading of many texts because the new words and phrases find their way into writing. Students are also bound to choose appropriate vocabulary while attempting to summarize information and express ideas, which leads to new vocabulary. The non-CALL integrated assessment method helps students develop critical thinking skills through metacognitive questions about their purpose, strategy, and clarity in their work. However, this approach differs from the findings of Al-Mansour and Al-Shorman [32], who examine the effects of computer-assisted instruction on Saudi university students' English learning. Their study suggests that using technology alongside traditional teaching methods leads to better student achievement. This shows a contrast between focusing on assessment without technology and integrating technology to enhance learning. Moreover, peer assessment and collaborative group activities help students critically evaluate and give constructive feedback on peer work, thereby fostering critical thinking. This will also help the students in thinking more critically and help them to write with confidence. They can also develop the ability to think critically about their own work and that of others, and enhance their critical thinking skills, which are helpful in language development. The non-CALL integrated assessment approach also recognizes the need for providing constructive feedback to students. Feedback allows students to make improvements in their language and writing growth. In addition, feedback is not confined to instructor feedback but also involves peer feedback and self-reflection. This kind of feedback coming from different sources enables the student to understand better where his or her strengths and weaknesses are, observe patterns in their writing, fix problems, and focus on specific areas of improvement.

Conclusions

The non-CALL classes were not tech-intensive, but some students showed interest in the possible benefits of integrating technology into, for example, computer-assisted language learning CALL classes. They realized the benefits and opportunities that technology brings about in enhancing teaching, facilitating interactive activities, and creating an immersive and interactive language learning environment. Good, non-CALL classes were face-to-face interaction; still, a great understanding exists that the role of technology has to be encouraged for enhanced language learning, engagement, interaction, and language development. Overall, the preliminary results of some points about the current situation of CALL and non-CALL integrated assessment methods within an EFL learning class pedagogically involve instructional practice, curriculum design, and assessment strategy implications, especially regarding teaching summary writing.

Individualized Instruction: CALL integrated assessments allow for individualized instruction. In this case, teachers can use technology to help students by offering immediate feedback regarding the specific areas that the students need to work on in summary writing. The personal nature of such feedback makes it easier for the students to realize their points of strength and weakness.

Timely Feedback: Summary writing is one of the skills that really require feedback, both CALL and non-CALL. The students can get immediate feedback regarding their summaries and thus give a second look at their writing to make

modifications. The feedback will be on time to keep the students learning and writing a summary.

Authentic Writing Practice: Integration of technology in CALL assessments has facilitated the students to get authentic writing practice opportunities. For example, students can use online activities or any writing software to summarize something in contexts similar to real-life situations. This type of authentic practice will help in enhancing the student's skills to summarize different types of texts appropriately.

Cooperative Learning: Non-CALL integrated assessment, especially face-to-face interaction, can enhance cooperative learning in summary writing. It is feasible that the teacher designs group activities to let students cooperate to summarize the texts and give feedback to peers. In this way, critical thinking ability is promoted, and peer learning and classroom coexistence are encouraged.

Integrated Language Skills: The language skills in summary writing can be gauged by the CALL-integrated assessments and the non-CALL-integrated assessments. In these, the writing skill, reading comprehension, vocabulary, and grammatical proficiency of the students can be brought out. The integrated approach goes well with the overall nature of language learning itself and helps develop a raft of language skills.

Curriculum Design: The findings of this study can be used to enhance the design of the curriculum by underlining the need for both CALL and non-CALL integrated assessment methods to be included throughout the EFL learning curriculum at appropriate times. This balance, in fact, brings a balance between technology-enhanced assessment and face-to-face interactions for a holistic learning experience and caters to diverse learning preferences and needs.

Formative Assessment: CALL and non-CALL integrated assessment methods can be used formatively to inform instructional practices. Results of the assessment will help the educator to identify areas where students need extra support, adjust their teaching methods, and apply targeted interventions to enhance their summary writing skills. Pedagogical implications can play a very significant role in teaching and learning summary writing in EFL contexts.

The limitations of the present research were significant. Firstly, self-flattery syndrome might have caused the biased conclusion because researchers often subconsciously emphasize their work in a positive light. The reactive effect most likely impacted subject behavior, as awareness of being studied could have altered subject responses and compromised data veracity. Besides, generalizing findings was limited because they can only be applied to specific circumstances and a sample population. The small sample size constrained statistical power and reliability, making definitive conclusions challenging. Finally, the cost imposed on the researcher restricted the study's scope, as limited funding hindered comprehensive data collection and analysis. These factors necessitated cautious interpretation of the results and indicated a need for further research.

Based on the current research and contributing to the field of integrated assessment methods in EFL summary writing instruction, several recommendations for future studies can be considered. A longer-lasting longitudinal study would provide valuable insights into the long-term impact of integrated assessment methods on EFL learners' summary writing skills, allowing the exploration of the sustainability of observed effects. It will, therefore, go a long way towards studying the effect of integrated methods of

assessment across various levels of language proficiency. Therefore, inclusion of all the levels of language proficiency in the study would ensure that the interpretation for the different categories of learners is obtained. The approach can be mixed methods with more data collection techniques, such as observation or document analysis, which will give a fuller understanding of the experiences of the learners, integrated assessment in summary writing. This will be a far more complete understanding of the processes and mechanisms at play. Having a greater sample size, the research can be generalized, and the larger, more diverse sample would enhance research findings, allowing more sound conclusions on how well integrated assessment methods work.

Authors' Contribution

This research project was completed by Mr. Reza Shazdeh Ahmadi under the guidance and supervision of Dr. Reza Bagheri Nevisi at the University of Qom.

Acknowledgments

We are immensely grateful to all the participants for their contributions to this research. Our sincere thanks extend to everyone who assisted us throughout this study.

Conflict of Interest

The authors declare no conflicts of interest

References

[1] Sadeghi V. Effect of Practicing a Collaborative Genre-Based Approach in a CALL Environment on EFL Learners' Writing Skill. Korea TESOL Journal, 2015;11(2):187-221.

[2] Franzke M, Streeter LA. Building student summarization, writing and reading comprehension skills with guided practice and automated feedback. Highlights from research at the University of Colorado, a white paper from Pearson Knowledge Technologies. 2006 Oct.

[3] Lee I. Assessment for Learning: Integrating Assessment, Teaching, and Learning in the ESL/EFL Writing Classroom. Canadian Modern Language Review. 2007 Sep;64(1):199–213. https://doi.org/10.3138/cmlr.64.1.199

[4] Huang HTD, Hung STA. EFL Test-Takers' Feedback on Integrated Speaking Assessment. TESOL Quarterly. 2016 Nov 25;51(1):166–79. https://doi.org/10.1093/oso/9780198236320.001.0001

[5] Ghanbari N, Abdolrezapour P. Using Emotional Intelligence in an EFL Integrated Writing Assessment. Studies in Educational Evaluation. 2021 Sep; 70:101017. https://doi.org/10.1016/j.stueduc.2021.101017

[6] Sadeghi K, Rahmati T. Integrating Assessment as, for, and of Learning in a large-scale Exam Preparation Course. Assessing Writing. 2017 Oct; 34:50–61. https://doi.org/10.1016/j.asw.2017.09.003

[7] Deane P, Odendahl N, Quinlan T, Fowles M, Welsh C, Bivens-Tatum J. COGNITIVE MODELS OF WRITING: WRITING PROFICIENCY AS a COMPLEX INTEGRATED SKILL. ETS Research Report Series. 2008;2008(2): i–36. https://doi.org/10.1002/j.2333-8504.2008.tb02141.x

[8] Plakans L, Liao JT, Wang F. "I Should Summarize This Whole paragraph": Shared Processes of Reading and Writing in Iterative Integrated Assessment Tasks. Assessing Writing. 2019 Apr; 40:14–26. https://doi.org/10.1016/j.asw.2019.03.003

[9] Uludag P, Lindberg R, McDonough K, Payant C. Exploring L2 writers' source-text use in an integrated writing assessment. Journal of Second Language Writing. 2019 Dec 1; 46:100670. https://doi.org/10.1016/j.jslw.2019.100670

[10] Handley Z. Stockwell, G. (ed.) (2012). Computer-Assisted Language Learning: Diversity in Research and Practice. Cambridge: Cambridge University Press, 231 pages, ISBN 978 1,107 01634 7 (hardback). International Journal of Applied Linguistics. 2013 Jul;23(2):274–8. https://doi.org/10.1111/ijal.12032

[11] Ridge E. R Carter and D Nunan (Eds). 2001. The Cambridge Guide to Teaching English to Speakers of Other Languages. Cambridge University Press. 294 pp. Per Linguam [Internet]. 2008 Aug 8;17(1). Available from: https://dx.doi.org/10.5785/17-1-135

[12] Mathews-Aydinli J, Elaziz F. Turkish students' and teachers' Attitudes toward the Use of Interactive Whiteboards in EFL Classrooms. Computer Assisted Language Learning. 2010 Jul;23(3):235–52. https://doi.org/10.1080/09588221003776781

[13] Warschauer M. Technology and Writing. International Handbook of English Language Teaching. 2007; 15:907–17. https://doi.org/10.1007/978-0-387-46301-8_60

[14] Flower L, Hayes JR. A Cognitive Process Theory of Writing. College Composition and Communication 1981 Dec;32(4):365–87. http://dx.doi.org/10.2307/356600

[15] Hyland K. Genre-based pedagogies: a Social Response to Process. Journal of Second Language Writing. 2003 Feb;12(1):17–29. https://doi.org/10.1016/S1060-3743(02)00124-8

[16] Silva T. Toward an Understanding of the Distinct Nature of L2 Writing: the ESL Research and Its Implications. TESOL Quarterly. 1993;27(4):657. https://doi.org/10.2307/3587400

[17] Chapelle CA. Computer Application in Second Language Acquisition. Cambridge University Press; 2001. https://doi.org/10.1017/CBO9781139524681

[18] LEVY M. Technologies in Use for Second Language Learning. The Modern Language Journal. 2009 Dec; 93:769–82. https://doi.org/10.1111/j.1540-4781.2009.00972.x

[19] Warschauer M. Comparing Face-To-Face and Electronic Discussion in the Second Language Classroom. CALICO Journal. 2013 Jan 14;13(2-3):7–26. https://doi.org/10.1558/cj.v13i2-3.7-26

[20] Jahin JH. The Effect of Peer Reviewing on Writing Apprehension and Essay Writing Ability of Prospective EFL Teachers. Australian Journal of Teacher Education. 2012 Nov 1;37(11):65–89. https://doi.org/10.14221/ajte.2012v37n11.3

[21] Vygotsky LS. Mind in Society: Development of Higher Psychological Processes. Cole M, Jolm-Steiner V, Scribner S, Souberman E, editors. Mind in Society: Development of Higher Psychological Processes. 1978 Oct 15;1(1). https://doi.org/10.2307/j.ctvjf9vz4

[22] Hampel R, Stickler U. New Skills for New classrooms: Training Tutors to Teach Languages Online. Computer Assisted Language Learning. 2005 Oct;18(4):311–26. https://doi.org/10.1080/09588220500335455

[23] Davies G. Introduction to multimedia CALL. Module 2.2. Information and communications technology for language teachers (ICT4LT). Slough, Thames Valley University. Retrieved December. 2011; 27:2012.

[24] Hardisty D, Windeatt S. CALL. Oxford: Oxford University Press. 1989 Oct.

[25] Beatty K. Teaching & Researching: Computer-Assisted Language Learning. Routledge; 2013. https://doi.org/10.4324/9781315833774

[26] Blake RJ. Brave new digital classroom: Technology and foreign language learning. Georgetown University Press; 2013 Feb 15. https://doi.org/10.1353/book13058

[27] CUMMINS PW, DAVESNE C. Using Electronic Portfolios for Second Language Assessment. The Modern Language Journal. 2009 Dec; 93:848–67. https://doi.org/10.1111/j.1540-4781.2009. 00977.xsixteen

[28] Hafner CA, Miller L. Fostering Learner Autonomy in English for Science: A Collaborative Digital Video Project in a Technological Learning Environment. Language Learning & Technology. 2011 Oct;15(3):68–86.

[29] Rainie L, Horrigan J. A decade of adoption: How the Internet has woven itself into American life. Pew Internet and American Life Project. 2005 Jan 25;25.

[30] Crystal D. Language and the Internet [Internet]. Cambridge, Uk ; New York: Cambridge University Press; 2001. https://doi.org/10.1017/CBO9781139164771

[31] Hedayati H (Fatemeh), Marandi SS. Iranian EFL Teachers' Perceptions of the Difficulties of Implementing CALL. ReCALL. 2014 Mar 28;26(3):298–314. https://doi.org/10.1017/s0958344014000172

[32] Al-Mansour NS, Al-Shorman RA. The effect of computer-assisted instruction on Saudi University students' learning of English. Journal of King Saud University - Languages and Translation. 2012 Jan [cited 2021 Mar 16];24(1):51–6. https://doi.org/10.1016/j.sbspro.2014.03.631

[33] Pinner RS. Teachers' Attitudes to and Motivations for Using CALL in and around the Language Classroom. Procedia - Social and Behavioral Sciences. 2012; 34:188–92. https://doi:10.1016/j.sbspro.2012.02.037

[34] Dueñas Vinuesa M. Diane Larsen-Freeman. 2000. Techniques and Principles in Language Teaching. Second Edition. Oxford: Oxford University Press. 189 pp. Journal of English Studies. 2002 May 29; 3:277. https://doi.org/10.18172/jes.83

[35] Laborda JG. Motteram, Gary Ed (2013) Innovations in Learning Technology for English Language Teaching British Council (London) Isbn 978-0-86355-713-2 197. British Journal of Educational Technology. 2014 Feb 17;45(2):E6–8. https://doi.org/10.1111/bjet.12143_4

[36] Alhujaylan H. An assessment of the effectiveness of CALL in teaching English language writing skills in Saudi Arabia. Arab World English Journal (AWEJ) Special Issue on CALL. 2019 Jul 3(5). https://dx.doi.org/10.24093/awej/call5.2

[37] Nunan D. Task-Based Language Teaching. Cambridge: Cambridge University Press; 2004. https://doi.org/10.1017/cbo9780511667336

[38] Zaghlool ZD. The Impact of Using CALL Online Writing Activities on EFL University Students' Writing Achievement. Theory and Practice in Language Studies [Internet]. 2020 Feb 1;10(2):141. https://doi.org/10.17507/tpls.1002.01

AUTHOR (S) BIOKETCHES

Reza Bagheri Nevisi is an Associate Professor of Applied Linguistics at the University of Qom. His research interests include teaching methodologies, language assessment, CALL, and interlanguage pragmatics. He has published different articles in ELT-related journals.

r.bagherinevisi@qom.ac.ir

Reza Shazdeh Ahmadi is an MA Graduate from the University of Qom**.** He is mainly interested in CALL-based research.

kouroshreza77@gmail.com

Citation (Vancouver): Bagheri Nevisi R, Shazdeh Ahmadi R. [A Mixed-Methods Probe into CALL Integrated Assessment and EFL Learners' Summary Writing Ability]. *Tech. Edu. J. 2025; 19(1): 293-315*

https://doi.org/10.22061/tej.2025.11060.3100