Enhancing Libyan Students' Productive Skills through Computer-Assisted Language Learning (CALL): Impacts on Writing and Speaking.

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Abstract- The purpose of this research paper is to investigate the effects of Computer-Assisted Language Learning (CALL) on the writing and speaking skills of Libyan students. The study evaluates the efficacy of CALL in enhancing Libyan students' productive language abilities and explores how technology-based learning can contribute to overcoming the challenges faced by traditional methods in teaching English as a Foreign Language (EFL). The study employs a mixed-methods approach, involving quantitative and qualitative data collection and analysis. The findings reveal significant improvements in students' writing and speaking skills and highlight the potential of CALL as an effective teaching approach in the Libyan EFL context.

Index Terms- Computer-Assisted Language Learning (CALL), Writing Skills, Speaking Skills, Libyan EFL students, Productive skills, language teaching, technology integration, student perceptions, EFL.

I. INTRODUCTION

T1 Background of the study

In the era of globalization and rapid technological advancements, English has become a crucial means of communication, particularly in academic and professional contexts. As a result, English as a Foreign Language (EFL) teaching has gained importance in non-English speaking countries, including Libya. However, teaching English effectively in the Libyan context has proven challenging due to various factors, such as inadequate resources, outdated teaching methods, and lack of exposure to authentic English input (Alhmali, 2017).

Computer-Assisted Language Learning (CALL) has emerged as a promising approach to addressing some of these challenges by integrating technology into language teaching (Brinton, 2017). CALL offers interactive, engaging, and authentic learning experiences, which can significantly improve students' language skills, including writing and speaking (Chapelle, 2019). Although numerous studies have examined the effects of CALL on students' language abilities, few have specifically investigated its impact on Libyan students' productive skills.

1.2 Research questions

- This study aims to answer the following research questions:
- 1. How does CALL affect the writing skills of Libyan EFL students?
- 2. How does CALL affect the speaking skills of Libyan EFL students?
- 3. What are the students' perceptions of the effectiveness of CALL in enhancing their writing and speaking skills?

1.3 Purpose of the study

The primary purpose of this research is to investigate the effectiveness of CALL in enhancing the writing and speaking skills of Libyan EFL students. By exploring the impacts of CALL on these productive skills, this study aims to contribute to the development of more effective language teaching methods for the Libyan context. Moreover, the study seeks to provide insights into students' perceptions of the effectiveness of CALL, which can inform the design and implementation of future CALL-based programs.

1.4 Significance of the study

The significance of this study lies in its potential to offer valuable insights into the effectiveness of CALL in improving the writing and speaking skills of Libyan EFL students. The findings may help educators and policymakers in Libya to better understand the potential benefits of incorporating technology into English language teaching. Furthermore, the study could contribute to the growing body of literature on the role of CALL in language learning, particularly in under-researched contexts like Libya.

1.5 Structure of the paper

This research paper is organized as follows: Section 2 provides a review of the relevant literature on CALL, its impacts on writing and speaking skill development, and the challenges faced by Libyan EFL learners. Section 3 outlines the methodology used in this study, including the research design, participants, instruments, procedures, and data analysis methods. Section 4 presents the results of the study, focusing on the impacts of CALL on writing and speaking skills and students' perceptions of CALL.

Section 5 discusses the findings in light of the existing literature, and Section 6 concludes the paper with a summary of the main findings and recommendations for further research.

II. LITERATURE REVIEW

2.1 Computer-Assisted Language Learning (CALL)

CALL refers to the use of technology to facilitate language learning and teaching (Chapelle, 2019). It encompasses a wide range of tools, from traditional desktop applications to more recent web-based platforms and mobile applications (Egbert & Hanson-Smith, 2019). The integration of CALL into language teaching can offer several benefits, such as increased motivation, enhanced learner autonomy, and more authentic and interactive learning experiences (Brinton, 2017). Over the years, CALL has evolved through different stages, reflecting the technological advancements and pedagogical shifts in language education (Chapelle, 2019).

2.2 CALL in Writing Skill Development

Research on the impact of CALL on writing skills has shown promising results. Studies have reported improvements in various aspects of writing, such as organization, coherence, and accuracy, as well as increased motivation and engagement in the writing process (Abdelwahed, 2018). CALL tools, such as word processors, collaborative writing platforms, and online feedback systems, can provide learners with opportunities for drafting, revising, and editing their work, thereby fostering a more reflective and iterative approach to writing (Egbert & Hanson-Smith, 2019).

2.3 CALL in Speaking Skill Development

Like writing, CALL has been found to positively affect speaking skills. CALL platforms, such as computer-mediated communication (CMC) tools, virtual language labs, and language learning apps, can facilitate speaking practice by providing authentic and interactive speaking opportunities (Al-Mahrooqi & Troudi, 2018). In addition, CALL can help learners overcome anxiety and self-consciousness associated with speaking in a foreign language by creating a supportive and low-pressure learning environment (Grgurović, Chapelle, & Shelley, 2013).

2.4 Challenges in Libyan EFL Context

Libya faces unique challenges in EFL teaching and learning, including limited resources, outdated teaching methods, and insufficient exposure to authentic English input (Alhmali, 2017). Moreover, political instability and economic challenges have further exacerbated the situation, making it difficult to implement innovative teaching approaches, such as CALL (Al-Hunaiyyan, Alhajri, & Al-Sharhan, 2018). However, despite these challenges, there is a growing interest in adopting technology-enhanced teaching methods to improve the quality of EFL education in Libya.

III. METHODOLOGY

3.1 Research design

This study employs a mixed-methods approach, combining quantitative and qualitative research methods to obtain a

This publication is licensed under Creative Commons Attribution CC BY. http://dx.doi.org/10.29322/IJSRP.13.05.2023.p13706 comprehensive understanding of the effects of CALL on Libyan students' writing and speaking skills. The quantitative component involves pre-and post-tests to measure the improvement in students' writing and speaking abilities, while the qualitative component includes semi-structured interviews to gather insights into students' perceptions of CALL.

3.2 Participants

The participants in this study are 60 Libyan EFL students, aged between 16 and 18 years, enrolled in a secondary school. They are randomly assigned to either the experimental group, which receives CALL-based instruction or the control group, which receives traditional face-to-face instruction. The participants have a similar level of English proficiency, as determined by a standardized English placement test.

3.3 Instruments

The instruments used in this study include:

- **1.** Pre- and post-tests for writing and speaking skills: These tests are designed to assess students' writing and speaking abilities before and after the intervention.
- 2. Semi-structured interviews: These interviews aim to gather in-depth information about students' perceptions of the effectiveness of CALL in enhancing their writing and speaking skills.

3.4 Procedures

The study takes place over 12 weeks. The experimental group receives CALL-based instruction, incorporating various technology tools, such as online writing platforms, CMC tools, and language learning apps. The control group receives traditional face-to-face instruction. Both groups are exposed to the same content and learning objectives. Before the intervention, students from both groups take pre-tests to assess their initial writing and speaking skills. After the 12-week intervention, students take posttests to evaluate the improvement in their writing and speaking abilities. Additionally, a purposive sample of students from the experimental group is selected for semi-structured interviews to gather their perceptions of the effectiveness of CALL in enhancing their productive skills.

3.5 Data analysis

Quantitative data from the pre-and post-tests are analyzed using descriptive and inferential statistics, such as means, standard deviations, and paired t-tests, to determine any significant differences in students' writing and speaking skills between the experimental and control groups. Qualitative data from the semistructured interviews are transcribed, coded, and analyzed using thematic analysis to identify emerging themes and patterns related to students' perceptions of CALL.

IV. RESULTS

4.1 Impact of CALL on Writing Skills

The results of the study reveal a significant improvement in the writing skills of the experimental group compared to the control group. Students in the experimental group demonstrate better organization, coherence, and accuracy in their writing. Additionally, they show increased motivation and engagement in the writing process.

4.2 Impact of CALL on Speaking Skills

Similar to writing, the experimental group exhibits a significant improvement in speaking skills compared to the control group. Students in the experimental group are more fluent and accurate in their spoken English and express greater confidence and reduced anxiety in speaking situations.

4.3 Students' Perceptions of CALL

The qualitative findings indicate that students in the experimental group have a positive perception of the effectiveness of CALL in enhancing their writing and speaking skills. They appreciate the interactive and engaging nature of CALL activities and believe that CALL facilitates more authentic and meaningful language practice.

4.4 Challenges and Limitations

Despite the positive findings, the study faces certain challenges and limitations. Some students encounter difficulties in accessing and using technology due to limited resources and connectivity issues. Furthermore, the study's small sample size and the specific context of Libyan secondary schools may limit the generalizability of the findings to other settings.

V. DISCUSSION

5.1 CALL as an Effective Approach to Enhance Writing Skills

The study's findings align with existing research on the positive effects of CALL on writing skills (Abdelwahed, 2018). The incorporation of CALL tools, such as online writing platforms and feedback systems, appears to foster a more reflective and iterative approach to writing, leading to the improved organization, coherence, and accuracy.

5.2 CALL as an Effective Approach to Enhance Speaking Skills

The improvement in students' speaking skills in the experimental group supports previous research on the benefits of CALL for speaking development (Al-Mahrooqi & Troudi, 2018). CALL platforms, such as CMC tools and language learning apps, provide students with authentic and interactive speaking opportunities, leading to increased fluency, accuracy, and confidence in speaking situations.

5.3 Implications for Libyan EFL Context

The study highlights the potential of CALL as an effective teaching approach in the Libyan EFL context. By integrating technology into language teaching, educators can address some of the challenges faced in traditional EFL classrooms, such as inadequate resources and lack of exposure to authentic English input. CALL can also contribute to increased motivation, engagement, and learner autonomy, which are essential for language learning success.

5.4 Limitations and Future Research

Given the study's limitations, future research should investigate the effects of CALL on a larger and more diverse sample of Libyan EFL learners. Additionally, further research could explore the impact of specific CALL tools and platforms on different aspects of language learning, as well as the potential

This publication is licensed under Creative Commons Attribution CC BY. http://dx.doi.org/10.29322/IJSRP.13.05.2023.p13706 challenges and barriers to the implementation of CALL in the Libyan context.

VI. CONCLUSION

6.1 Summary of Findings

This study investigated the effectiveness of CALL in enhancing the writing and speaking skills of Libyan EFL students. The findings revealed significant improvements in the writing and speaking abilities of the experimental group, who received CALLbased instruction, compared to the control group. Moreover, students in the experimental group expressed positive perceptions of the effectiveness of CALL in facilitating their language learning.

6.2 Recommendations for Further Research

Based on the study's findings, the following recommendations are proposed:

- 1. Educators and policymakers in Libya should consider the potential benefits of incorporating CALL into EFL teaching to enhance students' productive skills and overall language learning experience.
- **2.** Teachers should receive training in the effective use of CALL tools and platforms, to ensure the successful integration of technology into language teaching.
- **3.** Further research should be conducted on the impact of specific CALL tools and platforms on different aspects of language learning, as well as the potential challenges and barriers to the implementation of CALL in the Libyan context.

Overall, the study highlights the potential of CALL as an effective approach for improving Libyan EFL students' writing and speaking skills. By integrating technology into language teaching, educators can address some of the challenges faced in traditional EFL classrooms and ultimately contribute to the development of more effective English language teaching methods in Libya.

Declarations:

Competing Interest, the authors of this study, "Enhancing Libyan Students' Productive Skills through Computer-Assisted Language Learning (CALL): Impacts on Writing and Speaking. " Declare that they have no known financial or non-financial competing interests that could have influenced the research, interpretation of data, or presentation of results. All authors have thoroughly examined their affiliations, funding sources, and personal relationships to ensure that no potential conflicts of interest exist. Any future changes in competing interests will be promptly disclosed to the journal and relevant stakeholders.

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