THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN ENGLISH FOREIGN LANGUAGE LEARNING

Polycarp Otieno
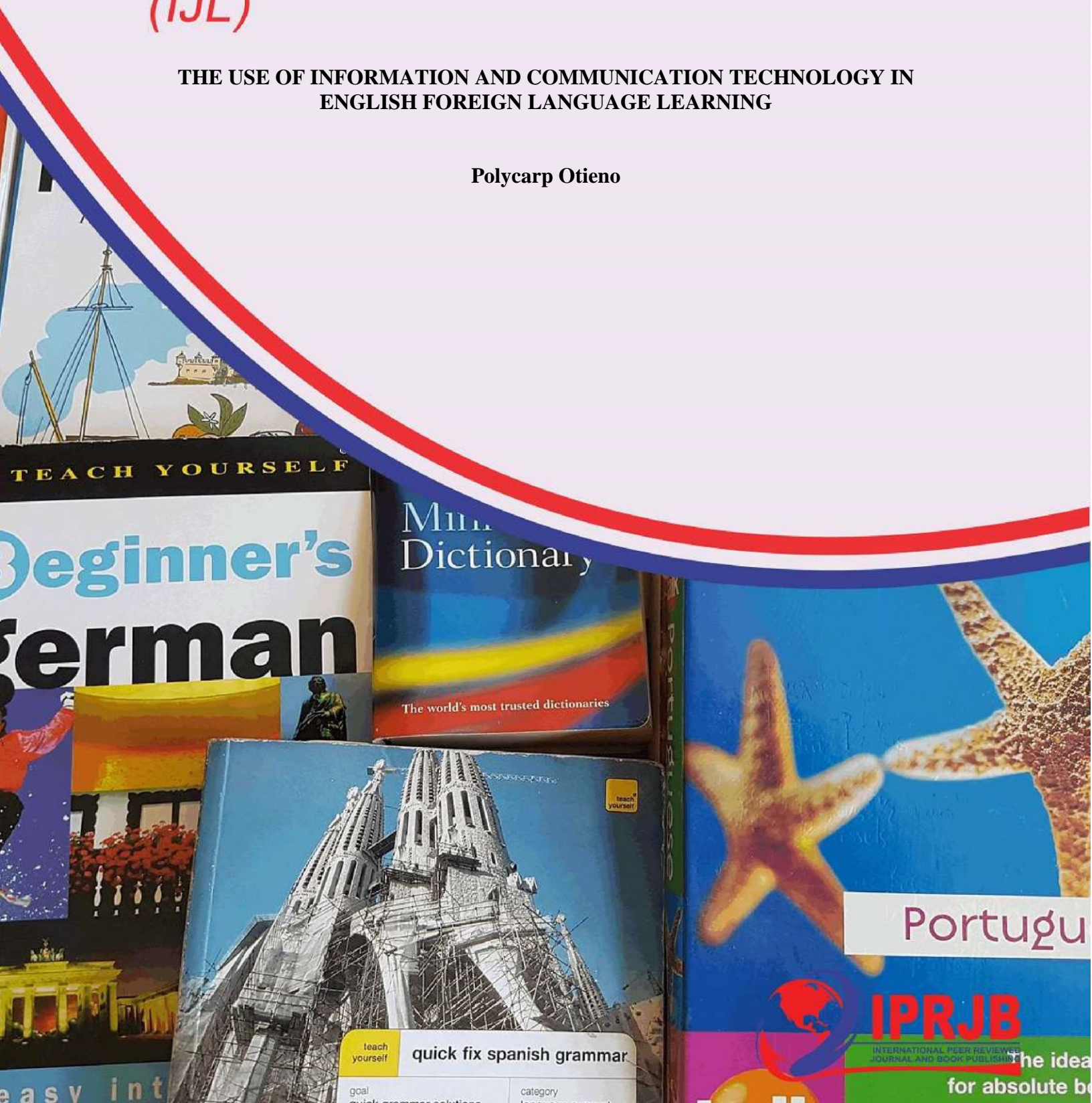
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The Use of Information and Communication Technology in English Foreign Language Learning

[1*]Polycarp Otieno
University of Nairobi
*Corresponding Author's Email: info@iprjb.org

Abstract

Purpose: The purpose of this study is to investigate the use of ICT in English foreign language learning.

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The findings revealed that there exists a contextual and methodological gap relating to the use of ICT in English foreign language learning. Preliminary empirical review reveals that ICT presents a powerful learning environment for learners in the classroom. Many countries make investments in ICT integration as ICT is viewed as an effective tool for renewing educational practice in any field. Because teachers are the main characters to employ ICT in educational contexts, they should be trained in how ICT can be integrated into the teaching process.

Unique Contribution to Theory, Practice and Policy: The Cognitive Load theory, the Interactionist theory and the Constructivist theory may be used to anchor future studies in the use of ICT in English foreign language learning. This study will provide some insights to instructors, policymakers and other relevant stakeholders in the integration of ICT in the teaching and learning of English as a foreign language to produce better results.

Keywords: *Foreign Language (FL), Information and Communication Technology (ICT), Learning, Communication Skills, Digital, Applications.*

INTRODUCTION

Over the past few decades, there has been an increase in interest in finding a cutting-edge instrument to promote language instruction. It is evident from what we have read so far that technological developments have made it feasible to adapt to a changing global environment. In today's quickly changing educational environment (EFL), information and communication technology (ICT) plays an increasingly significant role in the field of teaching English as a foreign language. As information and communication technologies (ICTs) proliferate, English language teachers (ELLs) are being urged to reevaluate the most effective ways to integrate essential ICT competencies into EFL classes. It's crucial to arm language learners with the necessary technical knowledge (Cakici, 2016).

ICT use requires a particular set of linguistic skills and methods in order to be successful. The use of technological technologies in language classes has significant effects on pedagogy, curricula, and student learning. According to widespread belief, the growth of ICT has significantly aided and produced effective learning settings (Alzahrani, 2017). The expanding power and capabilities of information and communication technologies are driving a change in the learning environment for languages, making it more crucial than ever to incorporate these tools into real-world language situations. Numerous studies have examined the advantages of using technology in second language instruction. The use of contemporary information and communication technology (ICT) in the classroom, such as the laptop, interactive whiteboard, LCD projector, internet, and social networks, will be extremely beneficial for English language learners. (Yunus, 2013)

According to Asabere and Enguah's definition of ICT in 2012, it consists of the devices, infrastructure, procedures, and tools that create the necessary conditions for the production, transmission, processing, storing, and dissemination of information in all forms, including voice, text, data, graphics, and video. ICTs include interactive whiteboards, computers, CALL software, office programs (word processing, presentation software, drawing tools, etc.), downloadable software from the Internet, commercial course book CD-ROMs, DVD players, mobile phones, electronic dictionaries, digital cameras and videos, digital audio tape recorders, document cameras, and data projectors.

ICT, according to Livingstone (2012), includes networked technologies in addition to technologies used in schools (like interactive whiteboards) and applications used across formal and informal borders (like educational games). The definition of "information and communication technology" (ICT) according to Hennessy, Ruthven, and Brindley (2005) includes a wide range of hardware (such as desktop and portable computers, projection technology, calculators, data logging and digital recording equipment), as well as software (such as generic software and multimedia resources) (Intranet, Internet). The numerous ways that data is created, transported, saved, and retrieved are referred to as "information and communication technologies" (or "ICTs"; Alkamel *et al*., 2018). Data production, storage, processing, dissemination, and exchange are all made easier by ICTs, a broad range of goods, software, and services. Computers, satellite and wireless technologies, and the Internet are examples of "new" ICTs, whereas radio, television, and the telephone are examples of "old" ICTs. (UNDP, 2003).

ICT is without a doubt a useful and cutting-edge educational tool that facilitates learning a foreign language like English. The exponential growth of ICT has had an impact on every aspect of language teaching. My kids and I have both improved our English through the use of contemporary tools in the classroom. Technology can be used to enhance and expand access to foreign language training. Technology is used to boost students' interest in and comprehension of the target language, such as computers, the internet, smart boards, mobile phones, video games, portable music players, etc. (Golonka, 2014). Classrooms will be exposed to a larger variety of English resources, scenarios, and teaching styles thanks to the usage of ICT. The environment for learning English has become more flexible, inventive, and dynamic thanks to technology. It's been demonstrated (Baroody & Dowker, 2013). The classroom environment of a language class can be tailored to each individual student by using computers and the Internet. It allows course managers and teachers more freedom in how they structure classes to pique students' interest in a variety of subjects, encourages students to continue their education outside of the classroom, and is perceived as being more understanding of each student's particular needs and preferences. Because technology is used in language training, students who are digital natives are more inclined to take chances while using the target language, which reduces teacher-centered comprehension and language learning anxiety (Israfilovna, 2014).

Shevchuk (2021) outlines how ICT has improved English language education using categories including resources available, student attitudes, learner autonomy, authenticity, assisting instructors, student-centered, and self-assessment. It is simpler to teach and learn a language now because there are so many authentic resources available, including images, animations, audio clips, and video clips. It has been demonstrated that employing ICTs can increase students' enthusiasm. Kids are highly motivated to learn a foreign language due to their positive attitudes toward language study and the stress-free learning environment made possible by computers. ICT promotes learner autonomy by giving students the tools they need to take charge of their own education. Students can pick and choose from the course materials based on what suits them best.

Additionally, the real-world situations and contexts that may be accessed via ICT are priceless. ICTs offer a variety of capacities and educational resources are readily available, thus EFL instructors just suggest and produce these tools as supplemental materials. ICT promotes student-centered learning and interaction between teachers and students, in contrast to the traditional classroom setting. ICTs make it easy and effective to evaluate both receptive and productive skills. The instructor is free to select and design acceptable evaluations of all of their pupils' abilities. (Plush, 2014)

The ability to react to and enable the use of current events, the availability of authentic materials on the web, the option to alternately combine fundamental skills and lectures that become more interesting and out of the ordinary, which increases learner motivation, are some of the most apparent effects of using ICT to support foreign language instruction.

Students' motivation to learn and their capacity for critical and creative thought have been demonstrated to greatly enhance when ICT is used in the English language classroom. Due to the increased diversity of learning environments and opportunities, as well as the enhanced accessibility of course content to practically all students, using technology in language learning can increase involvement and interest from students (Azmi, 2017).

Students have access to a variety of online services like video chat, email, and the Web through integrating ICT into the curriculum. By using these information and communication technologies (ICTs), learners in nations where English is spoken as a first or second language can gain linguistic proficiency, connect with native speakers, and learn about alternative cultural practices, values, and contemporary ways of life. According to popular belief, integrating technology in the classroom increases both the teacher's and the students' motivation to study English as a foreign language (Courts & Tucker, 2012).

Statement of the Problem

The integration of Information Technology (IT) in language instruction confers numerous advantages to learners, enhancing their prospects of acquiring a second language effectively. Previous research has demonstrated that integrating information and communication technology (ICT) into foreign language instruction yields several advantages. The advantages of incorporating technology in the language classroom are manifold. They encompass the enhancement of motivation, promotion of independent learning, fostering of critical thinking skills, encouragement of innovation and creativity, establishment of interaction, boosting of communication, promotion of research and cooperative learning, and improvement of students' performance on written class assessments. This study attempts to explore the role ICT plays in enabling the learning of English foreign language among learners (Ezin, 2017)

LITERATURE REVIEW

Theoretical Review

The Cognitive Load Theory

The Cognitive Load Theory coined in 1988 by John Sweller, suggests that our working memory is only able to hold a small amount of information at any one time and that instructional methods should avoid overloading it in order to maximize learning (Paas & Sweller, 2012)

The Cognitive Load theory posits that the incorporation of Information and Communication Technology (ICT) can mitigate cognitive load and enhance the acquisition of a second language. As per this concept, the working memory possesses a limited capacity, and learners may encounter cognitive overload when presented with an excessive amount of information or complex material. Consequently, this can impede the process of acquiring knowledge. Information and communications technology can alleviate cognitive burden through various means. The utilization of multimedia resources such as audio recordings and films can provide students with both visual and auditory aids, thereby facilitating more effective information processing and retention during the learning process. According to Roussel *et al*. (2017), interactive exercises such as quizzes and games can facilitate a more active and meaningful connection between learners and the subject matter. Additionally, these exercises have the potential to alleviate the cognitive burden associated with the topic.

Furthermore, students have the opportunity to utilize the potential of individualized instruction that is facilitated by information and communication technology (ICT). Contemporary language learners are currently able to obtain language learning resources that can be customized to their specific needs and preferences, thereby enhancing their engagement and motivation in the learning process. As a result of this phenomenon, it is probable that learners will sustain their focus and engagement during the educational experience, potentially leading to a reduction in cognitive burden (Basal, 2015). The Cognitive Load Theory posits that the integration of information and communication technologies (ICT) can potentially mitigate cognitive load and augment the process of acquiring a second language. This can be achieved by providing learners with multimedia materials, interactive exercises, and personalized learning opportunities.

The Interactionist Theory

The Interactionist theory was first suggested by Jerome Bruner in 1983 who believed that, although children do have an innate ability to learn language, they also require plenty of direct contact and interaction with others to achieve full language fluency (Fosnot, 2013).

The interactionist theory posits that language acquisition occurs through individuals' engagement in different kinds of interpersonal interaction and communication. The utilization of Information and Communication Technology (ICT) has the potential to facilitate social interactions and communication during the acquisition of a second language. The aforementioned objective is achieved through affording pupils the chance to engage in online communication with individuals who are native speakers of the language being studied.

The utilization of Information and Communication Technology (ICT) provides learners with the chance to participate in dialogues with individuals who are native speakers of the language being studied. This is made possible through the utilization of videoconferencing software such as Skype or Zoom. By utilizing this approach, individuals can enhance their oral communication skills in a manner that is authentic and organic. Online chat rooms and forums provide learners with the opportunity to engage in interactive conversations with native speakers of the language they are studying, facilitated by the capabilities afforded by information and communication technology (ICT). By availing themselves of this opportunity, students can enhance their writing skills and engage in more genuine dialogues with both their peers and individuals who are fluent in the language. Language learners may utilize Information and Communication Technology (ICT) to access language exchange platforms, including Tandem and HelloTalk. These platforms provide opportunities for learners to engage in conversation with native speakers of the target language, with the aim of enhancing their conversational skills and receiving constructive feedback on their performance. Lloyd (2012)

The Constructivist Theory

The Constructivist Theory is work by work of Jean Piaget (1896–1980). According to Ültanir (2012), the idea proposes that students develop their own knowledge and understanding of the world by active interaction with the content of the lessons they are taking. ICT (Information and Communication Technology) can support constructivist language learning by providing students with opportunities to explore, create, and share their own language learning materials.

Constructivist language learning is supported by the use of ICT (Information and Communication Technology).

Through the utilization of Information and Communication Technology (ICT), students have the ability to generate and distribute their own digital narratives in the desired language. This strategy enables learners to enhance their writing, speaking, and listening proficiencies while simultaneously engaging in the creative process. ICT has the potential to offer students a means of sharing their personal language learning experiences and reflections with their peers through social media and blogs. This approach enables students to enhance their writing and communication skills, while fostering a collaborative and participatory environment among their peers. Information and Communication Technology (ICT) can provide students with a wide range of online resources, such as language learning applications, websites, and podcasts. These resources can be explored and utilized by students to enhance their comprehension of the language they are studying. The provision of this access to students can be facilitated through the use of Information and Communication Technology (ICT). (Lee, 2014)

Empirical Review

Adilbayeva (2022) conducted a study on digital communication technology for teaching a foreign language and culture through reading. There is a growing demand for advanced and efficient digital technologies that can facilitate various tasks. The objective of this study is to investigate the potential of digital communication technology in facilitating the instruction of English as a second language. The research was conducted utilizing a quantitative approach to investigate the efficacy of information and communication technology (ICT) tools, such as websites and mobile applications, in enhancing students' reading proficiency. The study centered on the level of comprehension exhibited by the students in relation to their reading materials, and the efficacy of the ICT tools in facilitating this process. The findings of the study demonstrated the efficacy of utilizing digital technology as a means of instructing a foreign language and its corresponding culture. It has been determined by individuals that the implementation of digital technology is imperative in the realm of education.

Malinina (2015) conducted a study aimed at investigating the ICT competencies of foreign language teachers. The primary methods employed in this study included administering a questionnaire, conducting an interview, and engaging in observational techniques. The primary methodologies employed in this study included administering a survey, conducting an interview, and engaging in observational analysis. The survey comprised of 30 items that were categorized into three sections: inquiries pertaining to the instructors' personal characteristics, their proficiency in information and communication technology, and their utilization of ICT in instructional settings. The questionnaire consisted of both closed-ended and open-ended questions. The utilization of open-ended questions facilitated the acquisition of additional insights into the attitudes of educators towards the integration of Information and Communication Technology (ICT) in their teaching practices. The responses provided valuable information regarding the apprehensions that teachers may have towards ICT, as well as the challenges they encounter when incorporating it

into their instructional strategies. As per Graham Davies's taxonomy, the findings indicate that a majority of foreign language educators possess ICT proficiency beyond the fundamental or intermediate levels. The individuals in question exhibit a notable degree of optimism regarding the potential for Information and Communication Technology (ICT) to enhance the proficiency of their pupils.

Chun- Yu Lin (2014) conducted a study on the barriers to the adoption of ICT in teaching Chinese as a foreign language in US universities. This study employed a mixed-method approach, utilizing both a survey and semi-structured interviews. Out of the total of 47 CFL teachers who participated in the study, a subset of five individuals consented to undergo comprehensive interviews. Insufficient support and time constraints were identified as the primary factors contributing to the non-utilization of Information and Communication Technology (ICT) by CFL teachers. This resulted in a lack of opportunities to develop technology-based pedagogical approaches and activities. The aforementioned issues are apparent in the distinct subject expertise and workload of instructors in CFL, as well as in the educational programs and pedagogical approaches currently employed in higher education institutions. The level of confidence that CFL (Computer as a Foreign Language) teachers possess in their capacity to employ ICT (Information and Communication Technology) for lesson preparation and teaching is influenced by their age. Furthermore, the extent to which they are willing to devote time to working with ICT is influenced by their gender.

Hong Thi (2014) did an explanatory study of ICT use in English language learning among EFL university students. The research was conducted utilizing a non-probability sampling technique, specifically a convenient sample, consisting of 149 individuals majoring in English. These participants were requested to complete a survey instrument. The findings indicate that the utilization of Information and Communication Technology (ICT) by the participants was primarily for personal purposes, rather than for the acquisition of English language skills. The majority of participants expressed a positive attitude towards utilizing Information and Communication Technology (ICT) as a tool for language acquisition. They also advocated for increased incorporation of ICT in language classrooms to facilitate language learning and instruction. Acquiring an understanding of the ways in which students utilize information and communication technology (ICT) for non-academic purposes may shed light on the optimal approach to determining their educational applications.

Yunus (2013) also conducted a study on the use of Information and Communication Technology in teaching ESL writing skills. The objective of this research is to investigate the utilization of Information and Communication Technology (ICT) in the instruction of English as a Second Language (ESL) writing competencies in secondary schools of Malaysia. This manuscript presents a singular aspect of the results derived from a large-scale research endeavor conducted in secondary schools across five distinct regions of Malaysia. The scope of this study is limited to the data obtained through interviews conducted with four English teachers at a high school located in Kuala Lumpur. The findings of this study indicate that the utilization of Information and

Communication Technology (ICT) in the instruction of English as a Second Language (ESL) writing was infrequent. According to reports, the utilization of Information and Communication Technology (ICT) has been observed to have a positive impact on students' engagement, learning facilitation, vocabulary enhancement, and overall academic relevance. Several issues were identified, including challenges in maintaining student attention, numerous sources of distraction, and a tendency among students to employ abbreviated forms in their written work. The findings indicate that educators may have deficiencies in their ability to effectively handle issues and organize instructional tasks that incorporate information and communication technology in the context of English as a Second Language writing instruction.

Hsu (2012) conducted another study on English as a foreign language learners' perception of mobile assisted language learning; a cross national study. Despite the abundance of literature on the integration of information and communication technologies (ICTs) in the pedagogy of teaching English as a foreign language (EFL), further investigation is required to explore the potential of mobile-assisted language learning (MALL). The objective of this study is to investigate the perception of MALL among its end users through cross-cultural analyses. The study comprised of a sample size of 45 participants (n = 45) hailing from seven distinct countries or regions who voluntarily opted to participate. The study conducted cross-cultural analyses utilizing three suggested constructs, namely the affordances of technology, the applicability of technology, and MALL's constructivism. The statistical analysis utilizing Kruskal-Wallis ANOVA and Dunnett's T3 multiple comparison revealed statistically significant differences among participants from diverse cultural backgrounds. All participants unanimously concurred that MALL has the potential to serve as a constructive tool in the context of EFL education.

METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

FINDINGS

Our study presented both a contextual and methodological gap.

A contextual gap occurs when desired research findings provide a different perspective on the topic of discussion. For instance, Malinina (2015) conducted a study aimed at investigating the ICT competencies of foreign language teachers. The primary methodologies employed in this study encompassed the utilization of questionnaires, interviews, and observations. The survey comprised of a total of 30 questions that were categorized into three distinct domains, namely demographic information, teachers' proficiency in information and communication technology (ICT), and the implementation of ICT in the classroom setting. Based on the research findings, it

can be inferred that a significant proportion of foreign language teachers possess adequate knowledge and skills in ICT applications, surpassing basic or intermediate levels as per the classification by Graham Davies. Furthermore, these teachers exhibit a positive outlook regarding the potential impact of ICT on the competencies of their students. On the other hand, the focus of our current study is the role of ICT in English foreign language learning.

In this regard, the study also presents a methodological, that is, in reference to the study by Malinina (2015) where he used questionnaires, interviews and observation in investigating the ICT competencies of foreign language teachers whereas our current on the role of ICT in English foreign language learning adopted a desk study research method.

CONCLUSION AND RECOMMENDATIONS

The integration of technology in the classroom creates a dynamic learning environment. Numerous countries place emphasis on Information and Communication Technology (ICT) reform due to the prevalent notion that it has the potential to rejuvenate pedagogical approaches in various fields. In educational environments, the utilization of ICT is primarily carried out by educators. As a result, it is imperative that they receive instruction on how to proficiently incorporate ICT into their teaching methodologies.

The utilization of Information and Communication Technology (ICT) facilitated communication and fostered a connection that instilled confidence in our students, assuring them of our unwavering support whenever required. Additionally, it granted them the independence to concentrate on the educational facets that held the most significance for them. This technology not only facilitates preparation for the technologically advanced workplace of the future, but also fosters authentic dialogue in an environment where it is limited. It is imperative to provide clear evidence to the instructor regarding the influence of ICT materials on student learning. The efficacy of utilizing Information and Communication Technology (ICT) for motivational purposes is contingent upon adequate preparation and guidance from the instructor. Moreover, it is imperative to maintain a reasonable equilibrium between practical activities and other academic tasks.

In summary, it is insufficient for technological progressions to solely address educational challenges in developing nations. The effective implementation of Information and Communication Technologies (ICTs) has the potential to enhance educational opportunities and expand access to education in developing countries. The integration of Information and Communication Technology (ICT) in education is imperative in contemporary society, which is characterized by intense technological competition. The proper integration of Information and Communication Technology (ICT) has the potential to transform education into an ongoing developmental journey for learners. Enhancing the quality of learning can be achieved by means of accountability, thereby facilitating more efficient and effective learning outcomes for students. The technological advancements have had a profound impact on language education, as well as many other aspects of contemporary life. The Internet has emerged as a platform that enables

individuals to gain knowledge, share information, and collaborate in manners that were previously unattainable. However, a significant portion of the accomplishment is attributed to the instruction of children in acquiring knowledge and engaging in activities within this digital environment. Given the circumstances, integrating technology into pedagogy can potentially advance the utilization of technology and the internet as a valuable tool in the educational process, thereby enhancing the efficacy of our teaching methodology.

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