Integrating Information and Computer Technology (ICT) into the Instruction and Acquisition of Foreign Languages: Challenges and Opportunities within an Academic Setting

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Ab**stract**

This paper delves into the incorporation of Information and Computer Technology (ICT) within an academic environment. Recently, there has been a growing interest in utilizing ICT tools to improve language learning outcomes and provide more individualized and engaging learning experiences. This paper explores learners' perspectives on technology utilization in English classes at The Faculty of Nursing, University of Medicine, Tirana. The study encompassed 184 participants who completed student questionnaires and 24 participants who completed teacher questionnaires. The objective was to understand students' and teachers' access to ICT, the specific technologies used, and the benefits for students. Upon collecting data through questionnaires, the study revealed that students and university teachers have a positive attitude toward using ICT in the foreign language classroom and recognize its potential to enhance the teaching and learning process. The study found that the primary obstacles to technology integration in teaching include a lack of technological resources, insufficient teacher training, and limited time available to incorporate technology into existing lesson plans.

Keywords: Information and communication technology, instruction and learning procedures, and multimedia technology

INTRODUCTION

The acquisition of foreign language skills holds significant importance in the realm of education within Albania. In recent times, there has been a burgeoning interest in the application of Information and Computer Technology (ICT) tools to augment language learning endeavors, thereby offering learners more tailored and immersive educational experiences. Rooted in the cognitive theory of multimedia learning, the incorporation of multimedia elements, encompassing audio, video, and graphics, has emerged as a promising avenue for elevating the efficacy of language instruction by engrossing students and facilitating the assimilation of knowledge (Mayer, 2005). Furthermore, the utilization of ICT introduces opportunities for autonomous learning, encompassing the availability of digital resources and online collaborative ventures (Warschauer & Matuchniak, 2010).

Within the domain of foreign language pedagogy, the integration of ICT has manifested tangible improvements in language acquisition outcomes, concurrently

bolstering student motivation and engagement (Gómez Parra & Jiménez Raya, 2019). For instance, the deployment of language learning applications such as Duolingo and Babbel has demonstrated its capacity to enhance students' proficiency in listening, speaking, reading, and writing (Eslami & Fatahi-Bafghi, 2018). Furthermore, the incorporation of multimedia resources such as digital storytelling and video-based activities has proven instrumental in refining learners' communicative competence and fostering cultural awareness (Liu & Chen, 2017). Noteworthy, a study conducted by Li and Liu (2013) corroborated that the infusion of ICT into language education not only amplified students' language proficiency but also kindled their motivation and active participation in the learning process. By providing access to digital reservoirs such as online dictionaries, language learning applications, and multimedia materials, learners are exposed to diverse language sources, fostering self-directed and autonomous learning experiences.

This study endeavors to delve into the perceptions of students concerning ICT and to elucidate the challenges they encounter while incorporating ICT into their teaching practices. The ultimate goal is to proffer recommendations aimed at enhancing the utilization of ICT within the context of English language education in Albania.

LITERATURE REVIEW

Over the last ten years, there has been a growing fascination with the incorporation of Information and Communication Technologies (ICTs) into educational environments, encompassing the teaching of English as a second language. Golonka et al. (2014) and Warschauer & Matuchniak (2010) have discerned that the utilization of ICT in language instruction can have a favorable impact on students' language proficiency, motivation, and engagement.

Among the array of ICT tools applied in language education, Computer-assisted Language Learning (CALL) stands as one of the most frequently employed instruments. CALL provides students with access to a diverse range of resources, encompassing online dictionaries, grammar exercises, and multimedia materials, all of which facilitate language acquisition (Stockwell, 2010). In tandem with Computer-assisted Language Learning, mobile devices such as smartphones and tablets have garnered substantial traction in language education (Kukulska-Hulme & Shield, 2008). Mobile-assisted Language Learning (MALL) empowers learners by granting them access to language learning materials at their convenience and location, thus fostering flexibility and personalized learning experiences.

In the contemporary educational landscape, ICT has assumed an integral role across all educational tiers, from primary institutions to tertiary universities. Many educational institutions have implemented a "bring your own device" (BYOD) policy, permitting students to employ their laptops, tablets, and smartphones within the classroom. The advent of the COVID-19 pandemic further expedited the assimilation of ICT in education, leading to a widespread transition to online instruction and remote learning.

The integration of ICT in English as a Second Language (ESL) education bestows numerous advantages. Furthermore, technology facilitates the incorporation of genuine, real-world language encounters, exemplified by video conferences with native speakers or online dialogues with international peers, into the educational milieu (Jiang & Warschauer, 2016). However, despite the promising merits of ICT in language

instruction, its effective implementation is accompanied by challenges, encompassing limited access to technology devices and insufficiencies in teacher training (Tondeur et al., 2012). Additionally, the utilization of ICT in language teaching necessitates a meticulous consideration of factors such as learner needs and preferences, pedagogical objectives, and cultural context (Kukulska-Hulme & Shield, 2008). A salient impediment encountered in this context is the digital divide, denoting the chasm between individuals with access to technology and those without. In certain countries, like Albania, restricted access to technology devices and inadequate training in emerging technologies can obstruct educators and learners from harnessing the full potential of ICT within the classroom (Gashi, 2018).

Notwithstanding these challenges, the accruing potential benefits associated with the incorporation of ICT into ESL education have spurred heightened interest and research in this domain. Educators and policymakers can strive to effectively integrate technology into the educational milieu and, in doing so, positively influence learning outcomes by comprehending the utilization of ICT in ESL education.

The Role of Information and Communication Technology (ICT) in Enhancing Proficiency in the English Language

The efficacy of Information and Communication Technology (ICT) in enhancing English language proficiency has been empirically established, encompassing improvements in listening, speaking, reading, and writing skills (Liu & Huang, 2015). ICT has ushered in a transformative era in language learning and teaching, rendering it more interactive, engaging, and accessible (Wang & Li, 2020).

Concerning the domain of listening skills, learners stand to gain significantly from the multitude of audio and video resources accessible online, comprising podcasts, YouTube videos, news broadcasts, TED talks, and an array of others (Graham & Santos, 2015). Learners can leverage these resources by repeated exposure, permitting pausing and rewinding as needed, thereby refining their comprehension and pronunciation.

Speaking proficiency constitutes another facet where ICT can exert a positive influence on English language skills enhancement. Language learning applications and web-based courses commonly feature speaking exercises, enabling learners to hone their conversational abilities (Hsu et al., 2019). Furthermore, learners can actively engage in language exchange initiatives and engage in dialogues with native speakers via online video chat platforms such as Skype or Zoom (Zheng & Warschauer, 2016).

ICT also avails a diverse array of resources to elevate reading skills, encompassing electronic books, news articles, and blogs readily accessible through online platforms (Bhuasiri et al., 2012). Some language learning applications also offer graded reading materials tailored to learners at various proficiency levels.

In the realm of writing proficiency, ICT offers a substantial boon. Language learning applications and online courses typically incorporate writing exercises that afford learners the opportunity to cultivate their composition skills (Lee & Wu, 2019). Furthermore, online writing tools such as Grammarly and Hemingway furnish learners with suggestions pertaining to grammar and writing style, thereby facilitating writing refinement (Tseng & Liou, 2016).

The pervasive integration of ICT has engendered a revolution in language learning and instruction. It has endowed learners with a panoply of digital tools and resources to advance their English language proficiency across listening, speaking, reading, and writing domains. As the world increasingly interconnects, the utilization of ICT in language acquisition is poised to assume an even more pivotal role in the educational landscape.

Integration of Technology in Educational Settings

Various forms of technology serve to enrich the educational experience of students. Within this context, educators and learners alike can harness the potential of mobile devices such as tablets and smartphones to access a plethora of digital textbooks, educational applications, and online learning resources.

Several prominent manifestations of classroom technology include:

Interactive Whiteboards: These innovative tools empower educators to project content from their computers onto expansive, touch-sensitive screens. Furthermore, interactive whiteboards facilitate collaborative and engaging learning experiences by enabling students to actively interact with the displayed material.

Online Learning Management Systems (OLMS): Online learning management systems provide instructors with a platform to administer and disseminate course content, monitor student progress, and facilitate seamless communication among students. Beyond basic features like discussion forums, online exams, and assignment submission portals, OLMS may incorporate additional functionalities to enhance the learning experience.

Document Cameras: Document cameras offer educators the capability to showcase and zoom in on physical documents, objects, and experiments, thereby facilitating a more comprehensive understanding among students.

Virtual and Augmented Reality Technologies: Virtual and augmented reality technologies offer immersive learning experiences by enveloping students within virtual environments. This technology fosters experiential and interactive learning, creating opportunities for deep engagement.

These exemplify but a few instances of educational technologies. Educators remain committed to exploring novel and innovative methods for integrating technology into the educational milieu as technology continues to advance and evolve.

The Aim of the Study

This research endeavor seeks to examine the utilization of Information and Computer Technology (ICT) within the academic context of The Faculty of Nursing at the University of Medicine, Tirana. The primary objective is to gauge the influence of ICT on the pedagogical processes, meticulously evaluating both the advantages and disadvantages associated with its integration within instructional environments. Furthermore, this study endeavors to comprehensively explore the array of technological tools employed within classrooms and to elicit insights into the perspectives held by both students and educators regarding the incorporation of ICT in the realm of education.

Methodology

The principal aim of this study is to investigate the utilization of Information and Computer Technology (ICT) within the Faculty of Nursing at the University of Medicine, Tirana. Given that students are the central focus of this research, their viewpoints and insights hold paramount importance in evaluating the research hypothesis. To gather data from students efficiently and directly, a questionnaire was employed as the chosen method. The data derived from this questionnaire is instrumental in comprehending how both students and university educators employ ICT for learning purposes, as well as in delineating the challenges associated with ICT integration within the classroom setting.

The objectives of the questionnaires encompass the exploration of the attitudes and instructional strategies pertaining to technology use within the classroom, the types of technological devices possessed by participants, and the identification of the most commonly employed technology modalities.

Quantitative research methodology was deemed the most appropriate approach for data collection and subsequent analysis. The survey instrument, comprising questionnaires, was administered to both teaching faculty and students. In total, 24 university teachers responsible for instructing foreign languages, along with 184 students, were actively engaged in this research initiative. The design of the questionnaire was meticulously tailored to elicit comprehensive insights from university teachers and students concerning their utilization of ICT for educational purposes. The initial section of the questionnaire solicited information from both teachers and students concerning the specific types of technology they routinely employ. Subsequently, the second section of the questionnaire for students encompassed five inquiries relating to ICT utilization, while the second section of the questionnaire for educators encompassed nine queries probing their use of ICT in the teaching process.

Results

In this section, we analyze the data obtained from teachers and students regarding the types of technology they employ for various educational purposes. The information collected provides insights into the technological landscape within the student body and highlights the prevalence of specific devices or tools used for learning.

The findings from this section reveal a diverse array of technology adopted by teachers and students to facilitate their educational journey. Commonly mentioned technologies include personal computers, laptops, smartphones, tablets, and e-readers. Additionally, students reported the use of specific software applications and online platforms tailored to their academic needs.

The subsequent sections of the questionnaire delve deeper into how these technologies are harnessed by teachers and students in their learning endeavors.

Students' questionnaires

Section 1. Varieties of Technological Tools Employed by Students

Table 1. Varieties of Technological Tools Employed by Students

Technological Tools	Number	Percentage
Mobile phone	184	100%
Personal laptop, PC	90	48.91%
Tablet	30	16.3%
More than one listed below	124	67.39%

The data presented in *Table 1* underscores the substantial importance of technology in the lives of students. Out of the total 184 students surveyed, a comprehensive 100% of them possess a mobile phone, which they rely on for both personal communication and as an invaluable tool for educational purposes. Moreover, a significant proportion, comprising 90 students or 48.91% of the respondents, possess a personal laptop or desktop computer. These devices serve as indispensable tools for various academic activities, encompassing project work, learning endeavors, and engagement with diverse online resources aimed at enhancing their proficiency in the English language.

In contrast, the prevalence of tablets is comparatively lower, with only 30 students, constituting 16.3% of the surveyed population, having access to this technology in their homes. Nevertheless, it is noteworthy that these tablets hold a distinct role, deemed more practical than laptops for certain applications. Furthermore, the data reveals that a substantial majority of students, specifically 124 students or 67.39%, possess more than one technology device. This data point highlights the pivotal role that technology assumes in their daily lives and underscores its critical importance in the learning process.

In the subsequent sections, we turn our attention to the students' preferences for different learning approaches as evaluated through course evaluation forms administered at the conclusion of the term.

Section 2. Students' Approaches to Employing Technology within the Educational Setting

Table 2. Student Perspectives on Technology in the Classroom

Perspective	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I find technology in the classroom very helpful and engaging	10 (5.4%)	17 (9.2%)	20 (10.8%)	45 (24.4%)	92 (50%)
I enjoy using technology for research purposes	4 (2.1%)	13 (7%)	30 (16.3%)	57 (30.9%)	80 (43.4%)
Technology helps me to stay organized	7 (3.8%)	27 (14.6%)	24 (13%)	65 (35.3%)	61 (33.1%)
Technology can make classes more enjoyable and interesting	1 (0.5%)	3 (1.6%)	13 (7%)	20 (10.8%)	147 (79.8%)
All students should know how to use technology	14 (7.6%)	19 (10.3%)	21 (11.4%)	52 (28.2%)	78 (42.3%)

Based on the findings, as illustrated in *Table 2,* a substantial cohort of students (comprising 137 individuals) either agree or strongly concur that the integration of technological devices within the classroom significantly amplifies their interest and

enjoyment of their academic sessions. This augmentation in engagement and enjoyment is perceived as a noteworthy benefit by a majority of the respondents, totaling 167 students. It is noteworthy that 126 students exhibit a proclivity for incorporating technology into classroom activities, attributing its utility to aiding them in maintaining organization within their academic pursuits. Additionally, a noteworthy observation emerges with 137 students expressing their agreement, or strong agreement, that technology substantially aids them in their research endeavors. This indicates the pivotal role that technology plays in facilitating scholarly investigations among the surveyed students.

Furthermore, when assessing the assertion that all students should possess proficiency in technology usage, a total of 130 students express their agreement or strong agreement with this viewpoint. However, it is noteworthy that a subset of 21 students remains indecisive on this matter, signifying potential variability in their familiarity with technology and its application in a learning context.

Teachers' questionnaires

Section 1. Varieties of Technological Tools Employed by Teachers

Table 3. Varieties of Technological Tools Employed by Teachers

Technological Tools Employed by Teachers	Number	Percentage (%)
Mobile phone	3	12.5%
Personal laptop, PC	14	58.33%
Smart board	4	16.67%
More than one listed below	12	50%

The data presented in *Table 3* reveals that out of the total 24 teachers surveyed, 12.5% of them use a mobile phone, which they rely on for educational purposes, for listening exercises only. Moreover, a significant proportion, comprising 14 teachers or 58.33% of the respondents, use a personal laptop or desktop computer during the class. These devices serve as tools for various academic activities, encompassing project work, learning endeavors, and engagement with diverse online resources aimed at enhancing their proficiency in the English language.

In contrast, the prevalence of smart boards is comparatively lower, with only 4 teachers, constituting 16.67% of the surveyed population, having access to this technology in only 4 classrooms.

In the subsequent sections, we turn our attention to the students' preferences for different learning approaches as evaluated through course evaluation forms administered at the conclusion of the term.

Section 2. Teachers' Approaches to Employing Technology within the Educational Setting

Table 4. Student Perceptions on ICT in the Classroom

Questions	Agree	Agree (%)	Disagree	Disagree (%)
Learning is more engaging and interactive	20	83.3%	4	16.7%
Increases students' level	17	70.8%	7	29.2%
Collaborative learning is facilitated	19	79.1%	5	20.9%
Creates a digital divide among students and schools	18	75%	6	25%
Technological issues, such as software glitches...	23	95.8%	1	4.2%
Is successful only if teachers are well trained	23	95.8%	1	4.2%
Decreases social interaction and face-to-face...	21	87.5%	3	12.5%
It allows for personalized learning	16	66.7%	8	33.3%
Teachers can create dynamic and engaging lesson plans	22	91.7%	2	8.3%

As indicated in the aforementioned table, a significant percentage of teachers, specifically 83.3%, assert that the integration of ICT enhances the engagement and interactivity of the learning process. Moreover, a substantial majority, totaling 70.8%, maintain that ICT contributes to elevating student performance levels.

Furthermore, a resounding 95.8% of teachers advocate for comprehensive training to equip educators with the requisite skills for crafting effective and pragmatic lessons using ICT. Additionally, a substantial 91.7% of teachers express their confidence in their ability to formulate dynamic lesson plans by leveraging ICT tools and resources.

It is noteworthy that a considerable 95.8% of teachers acknowledge the potential for technological issues to disrupt the learning process. Furthermore, a substantial proportion, comprising 87.5% of educators, believe that the integration of ICT may have the unintended consequence of diminishing social interaction and in-person communication among students. A notable 79.1% of teachers are in agreement that collaborative learning is facilitated through ICT implementation. However, it is important to highlight that a significant 87.5% of educators believe that ICT can inadvertently contribute to a digital divide, potentially creating disparities in access to technology resources between students and educational institutions.

Discussion on Results

The findings of this study shed light on several key factors influencing the integration of technology into the classroom, as perceived by both educators and students. While there is a shared preference for using ICT in educational settings, several challenges and considerations emerge.

Firstly, it is evident that many educators require adequate training in new technologies and harbor concerns about losing control when implementing them in their teaching practices. Moreover, the limited access to technology remains a pervasive issue, often necessitating schools to provide devices for teachers or mandating educators to make personal investments in technology. A significant factor affecting the integration of technology is the students' familiarity with traditional teaching methods.

When instructors do not incorporate technology into their lessons, students tend to rely solely on conventional teaching materials and textbooks.

The survey results also indicate a desire among both teachers and students to leverage more sophisticated technological tools such as educational software, digital textbooks, and interactive whiteboards. However, the high costs associated with these technologies and the lack of confidence and training among educators hinder their widespread adoption. Concerns about technological issues, such as software glitches or hardware failures disrupting the learning process, further compound these challenges.

Addressing these findings underscores the importance of educational institutions providing comprehensive training and resources to support teachers in adapting to and effectively integrating modern technologies into their teaching methodologies. By investing in teacher training programs and making technology more accessible, educational institutions can bridge the divide and empower educators to harness the potential learning benefits of digital tools. Moreover, a substantial proportion of educators hold a positive view of ICT's potential to enhance student achievement, despite concerns about students' decreasing interest in reading. This optimism is rooted in the belief that students can enhance their language skills through various multimedia resources, including videos, online lessons, and interactive content. From the student perspective, the surveys reveal strong agreement regarding the positive impact of technology on their classes. Students find technology usage engaging, enjoyable, and organizationally helpful. A noteworthy finding is the widespread belief among students that technology proficiency is essential for preparing them for future academic levels and subsequent career prospects.

In summary, both educators and students express favorable opinions regarding the integration of ICT in the classroom. To fully leverage the potential of ICT in the teaching and learning process, it is imperative to address educators' concerns, provide robust training opportunities, and ensure that ICT aligns with effective teaching practices. These efforts can enhance the educational experience and better prepare students for the demands of the digital age.

CONCLUSIONS

In today's modern world, Information and Communication Technologies (ICT) are indispensable, especially in the realm of education. This thesis has undertaken an exploration of the current state of ICT application and accessibility within The Faculty of Nursing at the University of Medicine, Tirana. The research endeavor has sought to unravel the influence of ICT on the processes of teaching and learning, unearth the advantages and drawbacks of ICT integration across diverse subject areas, and delineate the categories of technological instruments wielded within the classroom setting.

The research methodology adopted a quantitative approach, gathering data via questionnaires administered to both high school teachers and students. The study incorporated the perspectives of 24 teachers spanning various subject domains and 184 students within the institution. From the vantage point of educators, the findings illuminate a compelling need to consistently incorporate technology into their teaching practices. This compulsion arises from a multitude of factors, encompassing the desire to maintain control over the teaching process and the evident lack of comprehensive

training in emerging technologies. Additionally, the absence of institutional provisions for technology often compels teachers to procure their own devices.

In terms of the prevalent technological landscape within classrooms, the research unveils projectors and laptops as the most commonly employed technology devices. In contrast, educational software, digital textbooks, and interactive whiteboards are notably underutilized. The integration of ICT is marked by considerable resource allocation, time investment, and financial outlay, further accentuating its associated costs. However, the unanimous consensus among respondents is that ICT can yield success if teachers are adequately equipped with the requisite training. Conversely, students ardently advocate that the infusion of technology into the classroom environment renders classes more captivating and enjoyable. Parallel to educators, students hold technology in high regard and underscore the necessity of equipping them with the skills required for effective technology utilization in educational settings.

The study also delves into an exploration of the advantages and drawbacks associated with ICT integration in the classroom. The benefits encompass interactive learning experiences, enhanced accessibility, and expanded opportunities for distance education. However, drawbacks such as technical glitches, the digital divide, and limited social interaction have been duly recognized. Despite the transformative potential of technology, the study emphasizes the enduring significance of human interactions within the classroom, particularly in the context of language acquisition. Rather than supplanting educators, technology should be viewed as a tool that augments the learning process. The research underscores the imperative of judiciously harnessing technology to capitalize on its capacity to enhance the educational experience and contribute to educational reform.

Anticipating the future, it is likely that the next generation of students will possess even greater proficiency in information technology, enabling them to communicate effectively, cultivate diverse skills, and adeptly navigate learning challenges through the internet. Engaging with ICT remains a perpetual challenge that demands ongoing dedication and effort. It is pivotal to acknowledge that technology, in isolation, is not a panacea; the crux of educational progress hinges on how effectively and seamlessly technology is integrated into pedagogical practices.

In conclusion, the evolutionary journey of ICT in education has been one characterized by continuous development, guided by technological advancements and the evolving needs of educators and students. As we march onward into the future, the inescapable reality is that ICT will continue to assume an ever-expanding role in education, ushering in fresh avenues for teaching and learning.

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