

TEACHING LANGUAGES IN THE AGE OF DIGITAL TECHNOLOGY

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Abstract

As a result of the proliferation of digital technology, the landscape of language learning and teaching has been completely revolutionized. Traditional pedagogical approaches have been turned into experiences that are dynamic, interactive, and learner-centered. In this day and age of fast technological innovation and globalization, digital resources such as online learning platforms, mobile applications, artificial intelligence (AI)-driven language tutors, and virtual reality (VR) settings have become indispensable components of contemporary language teaching. The use of these technologies makes true communication easier, encourages cultural interchange, and makes it possible to have individualized learning experiences that are tailored to the requirements of a wide range of learners. In addition, the incorporation of multimedia materials improves abilities in listening, speaking, reading, and writing by providing content that is immersive and engaging. The new responsibilities that teachers are needed to take on are those of facilitators and digital mentors. They are responsible for leading students through the process of exploring online resources and acquiring digital literacy in addition to language competency. However, problems such as digital inequality, a lack of training, and an excessive dependence on technology continue to exist, which calls for a strategy that strikes a balance between technical innovation and human connection. The purpose of this study is to investigate the shifting paradigms of language instruction in the digital era. It places an emphasis on the necessity of pedagogical adaptation, inclusion, and critical digital literacy in order to prepare students for global communication in a world that is mediated by technology.

Keywords: Digital technology, language teaching, online learning, AI in education, digital literacy, virtual learning, pedagogy.

Introduction

Language is the foundation upon which human communication, the expression of culture, and intellectual growth are built. The ways in which languages are taught and learned have experienced significant changes in the 21st century as a result of the growing interconnectedness of cultures brought about by technological advancements. The fast development of digital technology has resulted in the creation of new options for teachers and students to connect with language in ways that are more adaptable, individualized, and interactive. A hybrid environment has emerged in which digital tools, online platforms, and multimedia materials play a significant role in defining the learning experience. Traditional classroom-based education, which was formerly dominated by textbooks and face-to-face contact, has transformed into this hybrid ecosystem. The subject of language instruction has been completely

transformed as a result of the introduction of digital technology in the educational sector. This includes the development of technologies such as language learning applications, Learning Management Systems (LMS), chatbots powered by Artificial Intelligence (AI), gamified learning environments, and virtual classrooms. Language learning has become more accessible and enjoyable than it has ever been before because to the development of technologies like as Duolingo, Babbel, and Rosetta Stone, as well as programs that integrate artificial intelligence, such as ChatGPT or Google Translate. It is now possible for students to improve their pronunciation using voice recognition software, participate in global discussions that are taking place in real time, and have access to genuine language materials from all over the world with only a few clicks. In addition, the COVID-19 epidemic hastened the incorporation of digital learning tools into the mainstream education system, driving educators and educational institutions to embrace technology as the principal medium for language instruction. For the purpose of maintaining educational continuity, online teaching platforms such as Zoom, Microsoft Teams, and Google Classroom have become indispensable. Not only did this dramatic transition bring to light the revolutionary power of technology, but it also brought to light the urgent need for digital literacy among both educators and students.

It is no longer the case that language instruction is restricted to the confines of a classroom in this age of digital technology. By utilizing self-directed online modules and interactive platforms, students now have the ability to take charge of their own learning and determine the pace, location, and destination of their education. The role of teachers has evolved from that of simple information carriers to that of facilitators and digital guides who assist students in navigating the huge digital world of resources. Language learning has become more genuine and culturally immersive as a result of the incorporation of multimedia, which includes films, podcasts, blogs, and social media. This has exposed students to linguistic situations that are relevant to the real world. The use of digital instruments into language instruction, on the other hand, brings up significant obstacles. A number of factors, including digital divides, uneven degrees of access to technology, and inadequate teacher preparation, frequently contribute to discrepancies in the results of learning. Furthermore, an excessive dependence on technology may diminish possibilities for true human connection, which continues to be essential in the process of understanding language subtlety and being sensitive to cultural expectations. Therefore, it is necessary for educators to find a middle ground between utilizing technical advancements and maintaining the humanistic nature of language acquisition. The purpose of this research is to investigate the shifting paradigms of language instruction in the modern day, with the objective of analyzing the advantages, disadvantages, and pedagogical consequences of learning settings that are enhanced by technology. The purpose of this session is to address the ways in which digital technologies may be effectively incorporated into educational programs in order to improve students' communication abilities, create intercultural competence, and encourage habits of lifelong learning. In the end, teaching languages in this age of digital technology demands not just technical expertise but also a refreshed concept of pedagogy. This understanding should be one that integrates technological innovation with the cognitive, emotional, and cultural aspects of human learning.

Evolution of Technology in Language Teaching

The origins of technology-assisted language learning may be traced back to the early days of Computer-Assisted Language Learning (CALL) in the 1980s. During this time period, the emphasis was placed on drill-and-practice software that was meant to promote the acquisition of grammar and vocabulary (Chapelle, 2001). According to Kukulska-Hulme and Shield (2008), computer-assisted language learning

(CALL) eventually morphed into Mobile-Assisted Language Learning (MALL), which is characterized by portable devices that enable ubiquitous learning. Authors such as Warschauer and Kern (2000) brought attention to the fact that digital communication technologies, such as email and online discussion forums, made it possible for students to engage in genuine language engagement outside of the confines of the classroom. The conventional paradigm of the classroom, which is centered on the instructor, is being reshaped by technology-mediated language learning settings, according to more recent study conducted by Blake (2016). These spaces encourage cooperation, creativity, and autonomy.

The Role of Digital Platforms and Applications

In today's world, mobile applications and online platforms have emerged as indispensable tools for the facilitation of language learning. According to Godwin-Jones (2018), gamification is utilized by platforms such as Duolingo, Babbel, and Memrise in order to foster increased levels of motivation and engagement among learners. According to Bañados (2006), Massive Open Online Courses (MOOCs) have played a significant role in democratizing access to high-quality language training. Bañados discovered that blended models, which combine digital and face-to-face instruction, have the ability to boost language competency and student satisfaction. AI-driven technologies like Google Translate and ChatGPT have further revolutionized learning dynamics by offering quick feedback, translation, and conversational practice (Li & Hegelheimer, 2013). These tools have also enhanced the ability to communicate with others. Adaptive and personalized learning is made possible by these developments, which cater to a wide range of learner requirements and unique learning styles.

Multimedia and Interactive Learning Environments

The usage of multimedia has been shown to dramatically improve both the comprehension and retention of information by students, according to research. The Multimedia Learning Theory was presented by Mayer (2009). This theory proposes that integrating visual and aural inputs is beneficial to both understanding and long-term memory. According to Brett (1997), the use of multimedia components in language learning environments, such as movies, podcasts, and interactive simulations, offers students the opportunity to be exposed to genuine linguistic input and cultural settings. The findings of research conducted by Reinders and White (2016) provide more evidence that multimedia tools encourage learner autonomy. These resources enable students to participate in learning experiences that are self-paced, immersive, and that resemble real-life communication contexts.

The Shift Toward Online and Blended Learning Models

Learning over the internet has become the most popular method of education as a result of the proliferation of high-speed internet and the globalization of digitalization. The notion of blended learning was first conceived by Garrison and Vaughan (2008), who emphasized the capacity of blended learning to encourage greater involvement and reflection. Blended learning is a combination of traditional classroom education with online instruction. Numerous studies (Dhawan, 2020; Bao, 2020) were conducted during the COVID-19 epidemic to investigate how language instructors all around the world reacted to the use of online platforms such as Zoom, Google Meet, and Microsoft Teams. It was possible to engage in both synchronous and asynchronous learning using these platforms, which not only ensured continuity but also revealed difficulties in terms of evaluation, motivation, and digital preparedness.

Teacher Roles and Digital Pedagogy

It is necessary for instructors to acquire digital competences and alter their pedagogical duties in order to accommodate the incorporation of digital technology into language teaching. A framework for online teaching skills was presented by Hampel and Stickler (2005). The framework places an emphasis on digital literacy, intercultural communication, and learner autonomy. In a similar vein, Rahimi and Yadollahi (2017) observed that the attitudes that instructors have about technology have a substantial impact on the success of technology-enhanced learning. For the purpose of assisting instructors in properly integrating technology while also retaining meaningful human connection in virtual classrooms, training programs and continuing professional development are vital.

Learner Autonomy and Motivation in Digital Contexts

When it comes to learning settings that are mediated by technology, research repeatedly emphasizes the significance of learner autonomy. The argument put up by Benson (2011) is that digital learning platforms provide students the ability to take responsibility for their own education, which in turn encourages self-regulation and intrinsic motivation. A person-in-context method, in which learners' digital experiences and worldwide relationships impact their motivation, is supported by technology, according to Ushioda (2011), who also argued that technology allows for this approach. According to Reinhardt (2019), gamified platforms, interactive feedback systems, and virtual communities all contribute to sustained engagement and confidence among language learners.

Challenges and Limitations of Technology Integration

Even while it has many benefits, teaching a language using digital means is not without its difficulties. In his article, Warschauer (2010) brought attention to the problem of digital inequality, pointing out that some groups of students might be marginalized due to unequal access to devices and dependable internet infrastructure. According to the findings of other research (Beatty, 2013; Levy & Stockwell, 2006), the absence of teacher training and pedagogical alignment are two of the obstacles that prevent efficient utilization of technology. According to Bax (2011), an excessive reliance on automated technologies may also diminish the opportunity for spontaneous conversation and developing a deeper awareness of cultural differences. As a result, it is essential to take a well-rounded strategy that incorporates both traditional education and technological methods.

Emerging Trends: AI, VR, and Data-Driven Learning

In the field of language learning, recent developments in Artificial Intelligence (AI) and Virtual Reality (VR) have opened up new perspectives and opportunities. According to Fryer and Carpenter (2006), chatbots powered by artificial intelligence give adaptive feedback and tailored learning paths. Virtual reality settings, on the other hand, provide immersive simulations for experiencing language practice (Lin & Lan, 2015). Further, data analytics and learning management systems provide instructors with the ability to monitor students' progress and modify their lessons to meet the specific requirements of each individual student. Not only do these innovations develop language competency, but they also foster digital citizenship and international awareness. They are aligned with the abilities that are necessary in the 24th century.

Methods

This particular type of study was descriptive and qualitative in nature, and it aimed to provide a description of the perspectives of instructors on the utilization of digital tools in classroom activities, as well as the obstacles that they experience when it comes to digital teaching. There were two sections to the questionnaire that were created. A questionnaire with closed-ended questions was included in the first section, while an open-ended questionnaire was included in the second portion. Six different experts' opinions were used to validate the questionnaire once it was piloted. In the final open-ended questionnaire, there were two sections: the first portion focused on digital tools in the classroom, and the second section discussed the obstacles of effectively using digital teaching and creating their own digital media in the context of school practices. The researcher looked over the lesson plan in order to provide support for the data. Participants in this study were 33 English instructors working in high schools located in three sub districts of the Ogan Komering Ulu regency. These sub districts were Baturaja Timur sub district, Baturaja Barat sub district, and Muara Jaya sub district. In all, there were 76 English teachers working in these sub districts. Every single one of them had a degree in English education, and their teaching experience ranged anywhere from one year to twenty years.

Results and Discussion

The Result of Closed-Ended Questionnaire

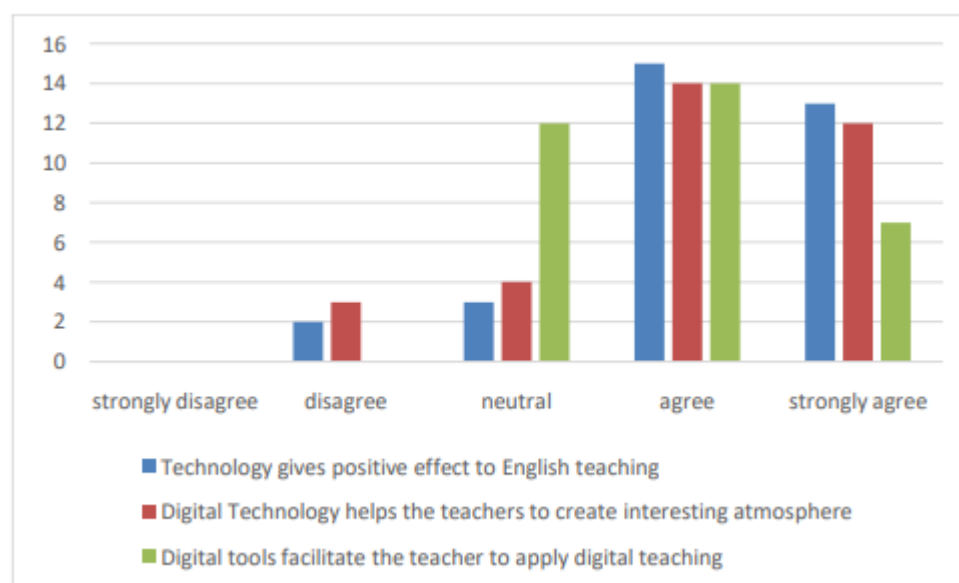


Chart 1 Technology for English teaching

According to Chart 1, 6% of English instructors are in disagreement with the statement, 8% of them are indifferent, 43% of them agree, and 43% of them strongly think that technology has a good influence on English teaching. The following percentage of English instructors is as follows: 43% of them are in agreement, 12% of them are neutral, and 36% of them are in complete agreement that digital technology assists teachers in creating an exciting atmosphere. By the end of the day, 43 percent of English instructors are in agreement, 36 percent of them are neutral, and 21 percent of them are in complete agreement that digital tools make it easier for teachers to implement digital teaching.

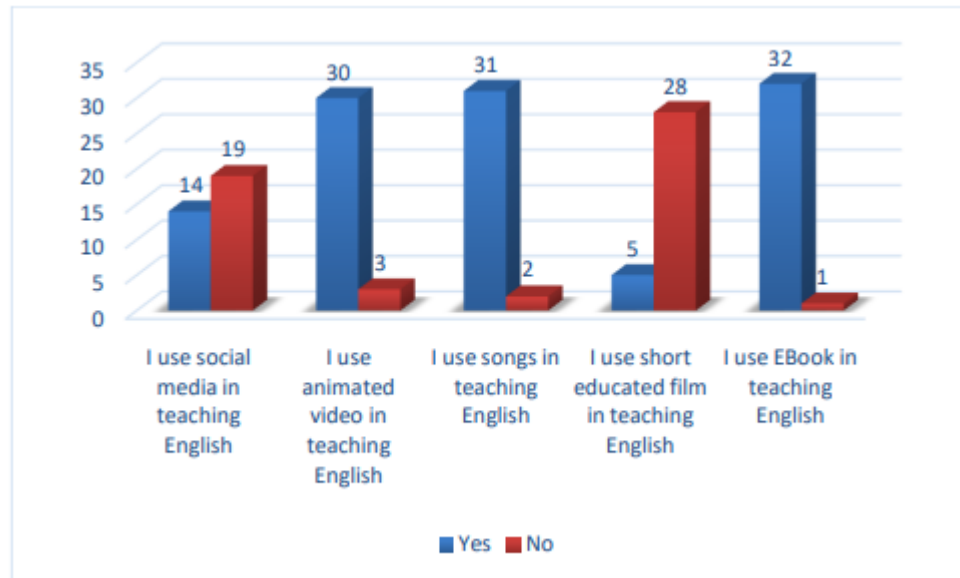


Chart 2. Digital tools in teaching English

Using social media was utilized by 42% of English teachers in the classroom, animated videos were utilized by 91% of English teachers, songs were utilized by 94% of English teachers, short educational films were utilized by 15% of English teachers, and electronic books were utilized by 97% of English teachers. These findings were presented in Chart 2.

The Result of Open-Ended Questionnaire

Digital Tools in the Classroom

Laptops, computers, speakers, Microsoft PowerPoint, mobile phones, and websites were the many forms of digital technology that the participants utilized in their daily lives. The findings appear to be consistent with the findings of earlier study carried out by (Yordming, 2017), which found that the Internet, wireless speakers, personal computers, and mobile phones are the most often utilized digital gadgets. It was clear that the English teachers had a working knowledge of the various digital tools and media. During the course of this investigation, a significant number of English instructors utilized video as a kind of digital media in the instructional and educational process. What Participant 2 had to say about it

“When I was teaching my students a brief English conversation, I used my own laptop and speaker. This allowed the students to perfect their pronunciation and overall listening comprehension by repeating the discussion and practicing it”

Participant 6

“It was the content that I obtained from YouTube that I utilized as my teaching material. On occasion, I would ask my students to create a video together, which they would then submit to social media and debate in the classroom”

Participant 30

“The only thing I do is supply the cell phone and demonstrate that the items were downloaded from YouTube. The school I attend does not possess adequate facilities to give it ”

The participants are responsible for providing the following: a laptop, a power point presentation from Ms., an LCD projector, email, and a laptop as the teaching medium, and resources that have been downloaded as the sources of teaching and learning materials. Secondary English as a Foreign Language (EFL) student-teachers are not provided with a variety of digital technologies, they use traditional digital devices in a straightforward manner, and they are confronted with some barriers that prevent them from applying digital technologies at an adequate level. This is in contrast to the findings of the research that was conducted by Itani (2018). According to the findings of a study, English instructors thought that they utilized social media platforms as digital resources in the classroom, as well as animated films and electronic books, in the process of teaching and learning. When it comes to teaching English, it is very necessary for instructors of English to make use of a wide variety of digital tools and to capitalize on the advantages offered by digital technology.

Challenges for the English Teachers to Apply the Digital Teaching

The English instructors faced a number of problems, including a lack of training for teachers, a lack of time, and a lack of resources, which made it difficult for them to effectively use digital teaching and produce their own digital media in the classroom.

Participant 1

“The instructors require this sort of training or seminar in order to improve their proficiency in the utilization of technology in the teaching of English, and the institution ought to be equipped with high-quality facilities such as language laboratories and online learning environments”

Participant 4

“A limited amount of time is available for instructors to investigate the use of technology in the classroom (time that is lost in preparation), and pupils should be focusing on other topics. There ought to have a computer laboratory, as this would be preferable”

It is essential for a teacher to be aware of where to acquire pertinent information, how to discover solutions to difficulties, and what to continue studying in this age of digital technology. Furthermore, it was discovered by Amirsheibani and Iraj (2014) that language teachers exhibit a good attitude on the utilization of computer technology in the classroom. Anggeraini et al. (2019) discovered that the English as a Foreign Language (EFL) instructors had an intermediate level of digital literacy. To talk more generally, a teacher is required to increase their digital technological skills, teaching techniques, and professional learning in order to keep up with new advances. Additionally, they must be able to realize that change is occurring at such a rapid pace and must be willing to embrace and prepare for progress. Learning from networks that are relevant to professional advances or personal interests is one thing that can be done in order to create knowledge, obtain information, and make effective use of technology in the process of teaching. Through the process of obtaining video teaching tutorials from YouTube and then practicing them in the classroom, the English teacher may establish a professional approach to dealing with the technology that is employed in the classroom. There are a lot of helpful things that a teacher may learn from YouTube, such as how to produce a movie maker, which will allow the teacher to develop his

or her own movie maker to utilize as a medium for teaching. activity-based learning is a kind of professional development for English instructors, and this particular activity is one of such activities. The native speakers can provide them with practice without the need for them to meet face to face. It is possible that the sources for the instructor who taught in the remote region (in this particular instance, the lack of access to internet and absence of energy facilities) are the sources. According to the findings of Sung et al. (2016), the technology is not often utilized in the state schools located in the southern area of Ecuador. In addition to that, the instructor can get the knowledge necessary to run the online learning application and technologies that are designed to strengthen the teaching and learning process in the modern era. In that scenario, the instructor has to be able to make use of the most recent and helpful apps and learning resources available in the digital era, such as online writing programs and tools. It was noted in Ozturk (2013) that instructors should reevaluate their teaching methods and make the most of the potential aids available to them in order to prepare for the digital teaching environment. For teachers to be able to reap the benefits and maximize the efficacy of digital teaching, it is a fact that they must possess a high level of digital literacy. In order for educators to be prepared for the teaching of the digital era, they should actively participate in professional development opportunities such as seminars, workshops, and training sessions that focus on teaching English and technology. English instructors have the opportunity to improve their knowledge and the breadth of their abilities by participating in programs of this nature. In addition, the English instructors have the opportunity to report on their study, which will be presented during the seminar, and to compose an article that will be published in the academic journal. By participating in certain types of training and seminars, as well as workshops, as either a participant or a presenter, English instructors have the opportunity to get the most recent knowledge on English instruction in the modern day. Furthermore, the most essential thing is that they are able to share the results of their participation with their partners.

Conclusion

Literature reviews and trend analyses show that digital technology's incorporation into language classrooms has revolutionized language instruction. Access has been increased, engagement has been boosted, and learner autonomy has been fostered by digital technologies, which include online learning platforms, mobile applications, AI-driven tutors, immersive multimedia, and virtual reality settings. In ways that conventional schools couldn't, these technologies allow students to engage with real-world language resources, hone their communication abilities in real-time, and cultivate intercultural competency. Nevertheless, there are obstacles to overcome while embracing digital technologies. Problems with technology-enhanced language learning include the possibility of over-reliance on automated systems, inadequate teacher preparation, and internet and gadget inequality. In addition, while there are new ways to learn languages using digital tools, nothing beats face-to-face communication for gaining sophisticated comprehension, practical skills, and cultural awareness. Therefore, a well-rounded strategy that incorporates both technology advancement and solid pedagogical concepts is necessary for effective language instruction in the digital age. Teachers need to transform into digital mentors and facilitators that help students safely use the internet while also encouraging them to think critically, work together, and stay motivated. Students, meanwhile, need to work on their digital literacy and develop methods for self-regulating their learning if they want to fully benefit from online resources. Finally, there are enormous potential and formidable problems for language teaching in this digital era. With careful planning, technology has the potential to improve students' language skills, encourage them to

communicate across borders, and equip them to meet the challenges of a globalized society. Embracing digital innovation while conserving the humanistic and cultural components of learning is key to the future of language teaching. This synergy may guarantee that language education is inclusive, engaging, and successful for all learners.

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