THE ROLE OF TECHNOLOGY IN IMPROVING STUDENTS' LEARNING: CRITICAL PERSPECTIVES OF RECENT TRENDS AND ISSUES

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Abstract. *The advancement of technology and technological tools has significantly transformed modern pedagogy and the way language teaching is constructed and delivered.*

Today, it is difficult to imagine language teaching without technological assistance. The emergence of technology and digital tools profoundly impacts the language acquisition process.

The technology implementation can reinforce and facilitate language learning making it more engaging, learner-oriented and effective. However, technology use in ELT (English language teaching) is an umbrella term referring to from availability of any digital device to interactional involvement, creation, and reaction within the online platform pushing language learners to use the target language authentically and meaningfully. This article will discuss the influence and augmentation of the language learning of the latter dynamic. Considering the fact that in modern world, young people profoundly analyze and rationalize what and why they perform certain actions, they decide to accomplish them or not.

This can be extrapolated to the learning realm where learners have become more conscious of what they are doing to learn the language and whether it responds to the demands required in current reality. The article also focuses on the importance of digital literacy of the language instructors which is viewed as an integral part of modern and effective pedagogy.

Key words: *digital literacy, technology, language learning.*

Introduction

The integration of technology and varied digital tools in education, specifically in foreign language classes, has become an integral part of the learning and teaching process. With the advancement and rapid development of digital tools that focus on education and on transforming language acquisition into an engaging and natural process, learning has taken a different trajectory.

Several decades earlier, language learning was solely about absorbing the theoretical base of knowledge and memorizing rules and linguistic elements without explicit and appropriate context.

Today, however, the situation has changed considerably. The proliferation of virtual platforms and digital applications has facilitated language learning in contextualized and engaging ways, enhancing learners' motivation, awareness, and active participation. Moreover, it has also fostered autonomous learning, enabling learners to acquire the target code from any location and at a self-directed rhythm.

Theoretical Perspectives

The following section synthesizes key theoretical interpretations grounded in the literature on the incorporation of the technology in language teaching. This work synthesizes and critically examines the topic of importance and benefits of technology that positively impact learners' effective language learning. Specifically, the articles by Golonka et al. (2014), Hockly and Dudeney (2018), and Bui (2022) are scrutinized to collect data on the effectiveness of digital technologies in teaching a language as a foreign language. Though all the articles presented in

this extension project have the identical aim, Hockly and Dudeney (2018) concentrate on existing and future technological trends in ELT (English Language Teaching).

However, the article by Bui (2022) examines factors influencing the way language instructors use digital technology in their teaching practices. Bui (2022) reviewed 20 empirical studies and identified that digital technology is predominantly applied for teacher-centered intentions. To exemplify, Taiwanese EFL educators mostly use videos and PowerPoint slides for teaching grammatical competence and vocabulary. However, digital technology implementation is not common for activities that promote students' interaction (Bui, 2022, p. 4). Similarly, Andrei (2017), as cited in Bui (2022), discovered that ESL teachers in the U.S. utilized electronic boards to demonstrate stimuli on the screen, but not to engage learners' interaction.

Another critical observation found by Bui (2022) was that digital technology use in the EFL context is informed by beliefs and assumptions held by language instructors. The concept of pedagogical "constructivist beliefs" is mentioned as positive in the teaching context where language 62 educators apply digital tools to facilitate learning and foster language learners' interaction (Ertmer et al., 2012, as cited in Bui, 2022). In contrast Hockly and Dudeney (2018) and Golonka et al. (2014) implemented technology for learner's interactive engagement, particularly, in adaptive and mobile learning and online tools such as ASR, corpus, ePortfolios and others respectively.

The article by Hockly and Dudeney (2018) scrutinizes teaching technology and notifies the consequences of digital solutionism, a premise that exclusive technology use enhances learning. The technological divide is a central issue in the work. For example, the English in Action project that was conducted in Bangladesh communicated the target language input through TV, radio, and mobile phones. The project proved how mobile connectivity lowers obstacles. Similarly, in another project, messages including grammatical tips and recommendations were sent to the language learners in Sudan and Libya (Hockly & Dudeney, 2018). The division was also based on the locality, indicating a digital access gap between rural and urban areas and socioeconomic conditions. It was emphasized by Hockly and Dudeney (2018) that the issue of limited or underdeveloped technological skills was noted in students, even from high socioeconomic status families. Moreover, adaptive learning was observed where students spent an hour applying adaptive technology prior to continuing the teacher-led language class. The model was criticized for several reasons. This approach raised ethical issues and indicated that it resulted in decreased teacher-learners' authentic interaction, scaffolding, support, and consequently learning improvement.

Lafer (2014), as cited in Hockly and Dudeney (2018), contended that it resulted in regression of crucial skills such as critical thinking since memorization and standard exam preparation were centralized, leading to creativity decline and authentic communication. As compared to the two mentioned articles on technology use in EFL and ESL teaching, the article by Golonka et al. (2014) evaluated the efficacy of certain digital tools used in language learning. The research findings indicated three categories and their functional power in using 63 technological tools in EFL teaching: Strong, moderate, and weak verification. Strong evidence incorporates ASR (Automatic speech recognition) and online chat tools. The implementation of ASR demonstrated pronunciation refinement. The feedback was also useful and effective. Similarly, online chat tools enhanced learners' linguistic output and language complexity (Golonka et al., 2014). Electronic glosses and corpora use were considered as moderate evidence in language teaching. These tools improved reading comprehension and lexical retention,

especially when assisted with visuals (Golonka et al., 2014). It was also mentioned that grammatical discovery was advanced by corpus implementation.

However, learners found it challenging working using corpora tools. Weak evidence encompassed interactive white boards (IWB) that increased motivation and engagement but did not demonstrate learning achievements. EPortfolios, as learning tools were reported to stimulate reflection. Specific obstacles in using digital tools were identified in the three discussed articles.

Barriers in Bui (2022) were mostly due to pedagogical beliefs and a lack of technological training. Hockly and Dudeney (2018) emphasized the digital split regarding socioeconomic position and locality.

Golonka et al. (2014) mentioned limited methodological quality and difficulties in using complex online tools as barriers in digital tool implementation. Regarding learning results, the study showed confined student-oriented learning (Bui, 2022), momentary gains and long-term decline in critical thinking and creativity (Hockly & Dudeney, 2018), and enhancement in linguistic performance using digital tools (Golonka et al., 2014). In conclusion, the implementation and integration of technological tools in language learning may significantly improve performance and linguistic output in all language skills, provided that the language instructors are sufficiently trained and competent in technological use. Additionally, the improvement can emerge when tools are applied to engage learners interactively. The time spent on learning via digital tools and authentic communication with a teacher should be balanced effectively to achieve long-term and high-quality academic achievements.

Pedagogical Implications

Technology implementation in language learning proves effective since it engages and motivate learners leading them to take the responsibility for their educational process. The use of digital tools, specifically those stimulating learners to interact and respond to the technology stimulus, facilitates and enhances the language acquisition process through natural approach.

Interaction is perceived as a critical and core aspect indicating authenticity in present digitally developed reality (Mishan, 2017, p.17). Authenticity is viewed as a key and integral part of language learning modern pedagogy advocating the importance of implementation of authentic materials and authentic task design and realization.

Task authenticity implies the creation and engaging learners in activities explicitly reflecting real-life actions and language use which may include formulaic language and functional language in use. The target code in this context is usually perceived as a tool by means of which mental condition and cognitive message is conveyed. Therefore, authentic tasks offer the opportunity where learners can be involved in the realistic actions they encounter and accomplish regularly. To exemplify, the task can be designed and organized in a way where learners are required to read a post in a blog in social media and react to the post. Further, they can be directed to respond to the post by writing comments or a reply post expressing their view on the topic or sharing their experience by activating their schemata. To put it succinctly, learners will not only passively observe the digital tool but also actively react and respond to it, which indicates meaningful and authentic interaction where effective learning occurs. (Mishan, 2017, p.17). Notably, modern pedagogy pushes educators to be digitally literate and engage learners to create products of the input or more specifically, intake they received as a result of the instruction.

This implies that, technology implementation in the classroom can be categorized into three basic classifications, specifically, observational participation, dynamic interplay, and

production. The production subcategory of the systematization and digital tool application indicates the learners creative design and production of the learning materials which involves the motivation, creativity, critical thinking, and collaboration. At this stage, learners are directed to create their digital products which illustrate the linguistic input they processed or have been processing during the class or classes.

Learners should be perceived as not passive absorbers of the data; rather, they need to be viewed as active participants in the language acquisition process, who take responsibility for their learning and creation of the final product can serve as a tangible and unambiguous indicator of the achieved learning goals. Student-created digital products enhance learner autonomy, identity expression, and transferable competencies (Kiddle, 2013, p.199). Therefore, learners can be involved in creation of their posts, slides, graphs, and many other products in Canva.com or other technological applications. It can be noticed that creation of the products as a result of the language input upgrades learner motivation and interest which are critical building blocks in learning construction. The table below presents a classification of digital tool implementation in the language classroom.

Table 1.

Categorization of technological implementation in language learning.

Category	Explanation	Digital Tools
Observational participation	Learners passively receive linguistic input via materials presented by means of technology.	You Tube, True Tube, TedTalks
Dynamic interplay	Learners are engaged in interaction with the digital tool. They need to react and respond to the digital trigger.	GimKit, Kahoot, Word Wall, Quizlet, Bamboozle, Padlet, Kialo, Miro
Production	Learners create products exploiting technology.	Canva, Power Point, Google Docs, Prezi

The table illustrates how technology and digital tools can be categorized based on the learners' interaction and engagement with the technological aid. Before, the classroom where learners were exposed to the instructional technology was viewed as technology-driven language classroom.

However, modern pedagogy indicates that language instructors are required not only to expose learners to the digitally delivered input but also to push learners to interact by reacting and responding to the digital stimulus. For achieving this, teachers should upgrade as linguistically, professionally, pedagogically so digitally. In addition, learners, if engaged to act in the language classroom identically as they do in real life, that is, read posts in social media, ads, articles in online magazines and respond by writing comments, response posts, or their posts, the learners' motivation will be increased.

Moreover, the learners can realize that language learning is not only rote learning and memorization of fixed grammar rules and tones of word lists but it is the skill which is important for regular communication, identity construction and expression, and self-realization.

The issue emerges when some teachers show little aspiration to learn to implement digital tools into their classrooms. They often comment that such tools may not yield effective results and usually adhere to traditional, theory-based teaching methods and approaches. The core issue, however, is how to engage these teachers and help them to realize that implementation of digital

tools at least at some specific stages of the lesson can lead to substantial improvement in learning outcome and increase learner motivation.

Eventually, this is a teacher's job to make the boring learning process more authentic and enjoyable and facilitate this complicated and not for everyone compelling language learning.

Mindful and right choice of digital tools based on learners' age, language proficiency level, and interests is fundamental. To accomplish this task, teachers are recommended to conduct a needs analysis for deep and thorough understanding of the learners.

Conclusion

Cultivating awareness of technological culture and digital literacy in language classrooms is imperative quality for a competent and professional educator. We live in a world where technology and social media have become an integral part of our existence, particularly of our learners' life. For this reason, it is indispensable to learn or hone the skills of digital literacy and organize the lessons by multimodality principles. It should be mentioned, that digital literacy may allow teachers to select and implement the technological tools which will result in the resultative language learning. Application of digital apps should not be only fun, but it should work in favor of students and support learners' progress in their language acquisition journey.

Language educators are advised to be facilitators and utilize the digital tools and websites designed for education in more appropriate and useful way. It is critical to mention that learners' cultural background and ethical aspects should be considered to gain more advantage of the learning process. To conclude, the technology use for academic purposes has transformed the pedagogy and methodology in language learning. Looking ahead, the digital tools will continue to play a significant role in constructing education, provided employed critically and comprehensively.

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