

THE ROLE OF TECHNOLOGY IN IMPROVING LANGUAGE SKILLS IN EDUCATION

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Abstract. Language is one of the key aspects in human development and the educational process. Technology has become one of the major forces shaping education. This research aims to further examine the role of technology in improving language skills in education. This research uses a qualitative methodology in the form of a literature review, which implies that the research will examine and explain data by utilising information and textual content from various sources. Data analysis techniques included content analysis to identify patterns and themes in the literature, theme analysis to understand the framework, coding to categorise data, constant comparison analysis to compare data, synthesis of findings, and triangulation to validate analysis results. The results show that technology plays a very important role in improving language proficiency in education. In the digital era, wider access to learning resources, technology-based learning applications, adaptive learning, and the use of technology in the classroom have opened up great opportunities for students to improve their language skills.

Keywords: Technology, Language, Education

Abstrak Bahasa adalah salah satu aspek kunci dalam perkembangan manusia dan proses pendidikan. Teknologi telah menjadi salah satu kekuatan utama yang membentuk pendidikan. Penelitian ini bertujuan untuk menelaah lebih dalam peran teknologi dalam meningkatkan kemampuan berbahasa dalam pendidikan. Penelitian ini menggunakan metodologi kualitatif dalam bentuk tinjauan literatur, yang menyiratkan bahwa penelitian ini akan meneliti dan menjelaskan data dengan memanfaatkan informasi dan konten tekstual dari berbagai sumber. Teknik analisis data termasuk analisis konten untuk mengidentifikasi pola dan tema dalam literatur, analisis tema untuk memahami kerangka pemikiran, pengkodean untuk mengelompokkan data, analisis perbandingan konstan untuk membandingkan data, sintesis temuan, dan triangulasi untuk memvalidasi hasil analisis. Hasil penelitian menunjukkan bahwa teknologi memainkan peran yang sangat penting dalam meningkatkan kemampuan berbahasa dalam pendidikan. Dalam era digital, akses yang lebih luas ke sumber-sumber belajar, aplikasi pembelajaran berbasis teknologi, pembelajaran adaptif, dan penggunaan teknologi dalam kelas telah membuka peluang besar bagi siswa untuk memperbaiki kemampuan berbahasa mereka.

Kata Kunci: Teknologi, Bahasa, Pendidikan

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INTRODUCTION

Language, in the context of human development as well as education, has emerged as one of the most prominent elements (Faizin HS, 2015). Proficient language skills are not only essential for everyday communication, but also mark a key skill in the course of human learning. The development and improvement of language skills play a vital role in helping students better understand learning materials, foster effective communication (Sadiku, 2015), and expand their access to information and wider opportunities in the world.

Over the past few decades, technology has emerged as one of the major forces that has significantly influenced and shaped the field of education (Ausat et al., 2023). Breakthroughs in the world of information and communication technology (ICT) have widened the scope of innovation and have provided very promising opportunities in terms of improving students' language skills (Al-Rahmi et al., 2020). The research conducted here aims to deeply explore and understand the critical role of technology in achieving substantial improvements in language proficiency in educational settings.

The proliferation of digitalisation in education has paved the way for the introduction of new tools and resources that educators can implement with the aim of improving and developing students' language skills (Pokhrel & Chhetri, 2021). Apps, innovative software, rapidly growing online learning platforms, and modern hardware such as tablets and computers have become increasingly common in classroom settings (Haleem et al., 2022). However, in order to understand the true potential of technology and how it can be effective in improving language skills in both mother tongue and foreign languages, we must also explore and identify the challenges that may arise with the use of such technology. In this way, we can gain a deeper insight into how technology can make positive contributions and solutions for progress in the language education process.

In addition, technology has also opened the door to greater access to language teaching materials and learning methods (Costa & Castro, 2021). Through the advent of the internet, students now have the ability to access a wide array of educational resources from all corners of the globe, opening up opportunities that were once unimaginable. However, with the rapid growth of access to information on the internet, questions arise that are not only practical, but also ethical. These questions relate to the quality of information available on the internet, as well as the extent to which educators can assist students in developing the critical skills necessary to assess and use these resources effectively and reliably. This considers the complexities of the digital world, and creates space for further exploration of the ethics,

understandings and competencies that need to be instilled in modern educational processes involving technology.

This research will go in-depth to identify the ways technology has been used in education to improve language skills, both in the classroom context and beyond. This will include analysing the various tools and methods that have been used, as well as evaluating the positive and negative impacts of using technology in language education. As such, this research aims to provide a better insight into the role of technology in the improvement of students' language skills and identify areas where further developments are needed.

METHOD

This study is a qualitative literature review, indicating its intention to scrutinize and elucidate data by drawing upon information and texts sourced from a variety of outlets. The principal aim of this qualitative literature review is to compile, evaluate, and integrate the existing corpus of knowledge pertaining to the subject of interest, specifically the role of technology in enhancing language skills within the realm of education. Data will be collected from a range of relevant resources, including scholarly journals, books, research reports, and other academic articles, spanning the time frame from 2001 to 2023, which allows the researcher to observe the evolution, trends, and changes that have transpired during this period. The data collected were 22 articles, all of which are relevant to the research topic being discussed.

The utilization of qualitative methodology in this literature review empowers researchers to delve deeply into the intricate and multifaceted aspects of the subject (Elo et al., 2014). This approach facilitates the incorporation of multiple information sources and exploration of diverse perspectives, thereby enhancing the analysis and strengthening the credibility of the findings. The data collection process encompasses thorough textual analysis, information retrieval, and the categorization of relevant data concerning the research focus. Consequently, the researcher will structure this data, compare and synthesize insights from various sources, and identify recurring patterns, themes, and trends arising from the collected information.

A notable advantage of employing a qualitative literature review is its adaptability to comprehend and expound upon complex phenomena, as it is not confined by numerical or statistical constraints (Rahman, 2016). This method also affords researchers the opportunity to gain profound insights into the evolution of the subject of study over time, as well as the transformation of concepts and perspectives associated with the topic throughout the years. In this research endeavor, it is imperative to scrutinize the reliability and credibility of the utilized

sources, while also critically evaluating the gathered information. In adopting a qualitative approach, the researcher must adeptly present findings with objectivity and reflection, offer lucid and precise interpretations, and acknowledge the limitations of the methodologies and data sources employed (Bradshaw et al., 2017). In this qualitative methodology of literature review, there are several data analysis techniques that can be applied. These include content analysis to identify patterns and themes in the literature, theme analysis to understand the framework, coding to categorise the data, constant comparison analysis to compare the data, synthesis of findings, and triangulation to validate the analysis results. The researcher will use these techniques to understand the role of technology in improving language skills in education and identify patterns, trends and themes in the literature. These data analysis techniques will result in an in-depth understanding of the subject's development over the research period.

RESULTS

Language, in its profound significance as an indispensable medium of communication woven into the tapestry of our everyday lives, transcends mere functionality as a tool for interpersonal interaction (Amery, 2019). It constitutes the very bedrock upon which the edifice of human relationships is constructed, occupying a central role in the nuanced landscape of social dynamics. Proficiency in language extends beyond its role as a communication tool, serving as a multifaceted key that not only unlocks access to diverse realms of communication across various contexts but also throws open wide the portals to invaluable prospects within the realms of education and careers (Widyaningrum et al., 2020).

Particularly in the modern era, characterized by the relentless march of digital and information technology, the role of technology stands as a pivotal, unignorable element in the quest to enhance language skills within the educational sphere. The contemporary technological landscape has birthed an infinite array of possibilities, enabling the seamless integration and utilization of a myriad of digital resources (Sun et al., 2023). This metamorphic transformation has fundamentally reshaped the very foundations of pedagogical methods and learning paradigms, imbuing them with an innovative edge while significantly enhancing their efficiency.

However, it is crucial to recognize that the role of technology within the educational context is far from being a mere auxiliary force. Instead, it assumes the mantle of a transformative catalyst, one that plays a paramount role in shaping and enriching the linguistic competencies of today's students. This catalytic role proffers a vast and profound expanse of opportunities, offering not only an avenue for augmenting language comprehension but also a

conduit for honing the art of effective communication. Moreover, it bestows upon students a broader access to a plethora of informational sources and untapped opportunities, thereby nurturing their growth in a rapidly globalizing world. As technology continues to advance and intertwine with the fabric of our increasingly globalized society, it is reasonable to anticipate that language development will persist in its trajectory of growth, delivering substantial advantages to education and the richness of our quotidian existence.

DISCUSSION

Technology plays a vital role in education, especially in providing much wider access to learning resources in different languages. With the advent of the internet, students and learners can now very easily explore a wide range of learning resources, from books to articles, videos and lessons in different languages. This not only provides opportunities to deepen their understanding and language skills, but also promotes significant linguistic and cultural enrichment. In addition, there are various technology-based learning apps and platforms that are specifically focussed on improving language skills (Prayudi et al., 2021). These apps include exercises involving pronunciation, vocabulary, grammar and everyday communication, such as Duolingo, Memrise and Rosetta Stone, which allow students to hone their language skills independently. Not only does technology provide wider access, it also facilitates more personalised and interactive learning. In a technology-based learning environment, students can set their own learning pace, focus on the aspects that need the most attention, and get instant feedback (Dhawan, 2020). In addition, technology also enables collaborative and distance learning, which broadens the scope of global education and allows students to interact with peers from different countries. With its central role in facilitating education, technology continues to help prepare students for future challenges and develop essential language skills in this era of globalisation.

In addition, the implementation of technology in the classroom environment also plays a central role in changing the dynamics of learning (Firmin & Genesi, 2013). Teachers can utilise advanced hardware and software, such as projectors, computers and technology-based learning applications, to create a more interactive and engaging learning experience (Pasaribu et al., 2023). Through the utilisation of technology, teachers can design lessons that allow students to participate actively and exploratively in the language learning process, creating an atmosphere that spurs their interest. In addition, it needs to be recognised that distance learning and online learning have become very important options, especially during the COVID-19 pandemic which forced physical restrictions. In this context, technology plays a key role in facilitating

the continuation of education (Zhang, 2022). It allows students to stay connected with their teachers, participate in language learning, and acquire language knowledge effectively without the need to be in the same physical location. Thus, the role of technology in language education involves not only improving the learning experience in the physical classroom but also enabling continuous and flexible access to education, regardless of geographical constraints or special situations.

Apart from its primary role in providing wide access to language learning resources, technology also has a positive impact in enriching students' understanding of the cultural aspects attached to the language they are learning (Xiao & Zhi, 2023). Through media such as videos, music, and various other multimedia content that can be accessed with the help of technology, students have the opportunity to deepen their understanding of the culture that speaks the language. Such exposure to the culture not only helps to enhance the understanding of the language itself, but also forms a deeper understanding of the social and cultural context in which the language is spoken. In this regard, technology plays an important role in supporting the development of language skills, while opening the door for exploration of the culture attached to the language, which in turn enriches students' learning experience. Not only limited to cultural recognition, technology also provides an invaluable tool in improving students' spelling and grammar skills. Through apps and software such as Grammarly, students can improve their spelling and grammar skills quickly and efficiently. In addition, technology-based learning systems can automatically identify students' individual weaknesses in language and provide customised exercises to help them improve (Almusaed et al., 2023). With technology, students can not only learn languages more easily, but also in a personalised and effective way (Shadieff & Yang, 2020). Thus, technology not only plays a role in teaching language, but also in guiding students towards a higher level of understanding and language skills holistically.

All these important roles played by technology in improving language proficiency in education underline how integral technology is in the language learning process. Nonetheless, it is important to remember that technology is just one tool in the educational repertoire, and that motivation and self-discipline remain the main factors in achieving outstanding language proficiency (Lai & Gu, 2011). Technology, so far, has opened the door for students to approach language in a more interactive and customised way, providing unlimited access to learning resources, as well as broadening their horizons about the culture attached to language. However, the ultimate success in achieving a good level of language proficiency still depends on the individual's determination and earnestness in undergoing the learning process. The

importance of wise and contextualised use of technology in education cannot be ignored. In this context, the right approach in integrating technology into the curriculum and learning process should be prioritised. Students need to be empowered to use technology as an adequate learning tool, not just for entertainment. This can be achieved through careful guidance and supervision, and by emphasising individual responsibility in designing their own learning experiences. In this way, technology will remain a powerful ally in achieving progress in language, while respecting the important role of personal motivation and dedication in the educational journey.

CONCLUSION

In the ever-evolving digital era, technology plays a very important role in the effort to improve language skills in the educational environment. The role of technology in language education can be understood through several interrelated dimensions. First of all, technology provides wider and more flexible access to diverse learning resources. Through the internet and various technology-based learning platforms, students can explore a variety of learning resources, ranging from texts, videos, to interactive learning applications, all of which are available in multiple languages. This opens up great opportunities for students to deepen their understanding and language skills without being limited by geographical or physical constraints. Moreover, technology-based learning apps specifically designed to improve language skills, such as Duolingo, Memrise, and Rosetta Stone, provide a learning environment that focuses on pronunciation practice, vocabulary, grammar, and everyday communication. In addition to its role in language improvement, technology also facilitates understanding of the culture associated with the language. Through various media, such as videos, music and other multimedia content accessible through technology, students have the opportunity to understand and immerse themselves in the culture that speaks the language. This not only opens up insights into the cultural aspects attached to the language, but also helps students experience and internalise deeper meanings within the cultural context. Thus, technology not only provides access to language learning resources, but also helps students bridge their understanding of the culture that shapes and gives meaning to the language.

RECOMMENDATIONS

In order to maximise the role of technology in improving language skills in education, several important steps need to be taken. Firstly, educational institutions should better integrate technology in their curriculum. This could include the development of in-depth technology-

based learning modules, which provide students with diverse language experiences. In addition, teacher education in the use of technology in language teaching should also be prioritised. Teachers need to be given adequate training and support to effectively use technology in the classroom, so that they can create an engaging and rewarding learning environment. However, these efforts must also go hand in hand with efforts to ensure equitable access to technology and the internet. There is a digital divide that needs to be addressed so that all students have equal opportunities to utilise technology in their education. Along with that, careful monitoring of technology use in education is also needed. This can ensure that students are not only using their devices for entertainment, but also for effective learning. Furthermore, it is important to motivate students and emphasise the importance of self-discipline in the use of technology. Students should be given the understanding that technology is a tool to achieve their learning goals, and that they have a personal responsibility in making the best use of this technology. With a wise approach and the right support, we can harness the potential of technology to enhance language skills in education and prepare students to face the global challenges of the future.

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