

Technology Integration in English Language Learning in Era Digital

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Abstract—The digital era has brought significant changes to the world of education, including in English language learning. Technology has become an important tool that supports the teaching and learning process, enables innovation in teaching methods, and enhances student engagement. This article discusses various forms of technology integration in English language learning, such as the use of software-based applications, e-learning platforms, and social media. Additionally, this article explores the benefits, challenges, and impacts of technology on mastering English language skills, such as listening, speaking, reading, and writing. The analysis results show that the use of technology can enhance student motivation and learning outcomes if applied with the right approach. However, there are challenges such as accessibility, teacher readiness, and training needs that must be addressed to optimize technology integration. This article also offers practical recommendations for educators on effectively utilizing technology.

Keywords: Technology Integration, English, Digital, Innovation, E-Learning, Skills

1. INTRODUCTION

In today's digital era, advances in information and communication technology have changed the way we communicate, collaborate, and learn. The integration of technology is increasingly important in educational environments, especially in English language teaching, to meet the diverse and ever-changing needs of students. Effective teaching and learning strategies are largely shaped by the evolution of English language education. Permendikbud Number 65 of 2013 emphasizes the importance of ICT integration to improve the effectiveness of learning at all levels of education. The extraordinary technological advances in the world today present additional challenges for teachers in addition to the high standards that society has for the quality of education, including the fact that education is currently taking place in the period of the industrial revolution 4.0[1].

Traditionally, learning English is often done through conventional methods such as lectures, textbooks, and face-to-face exercises. However, with the advancement of technology, this approach is starting to be less effective in attracting students' interest and improving their language skills. Today's students are more familiar with digital devices such as mobile apps, online learning platforms, and social media can be a solution to create an effective learning environment. Technology plays an important role in English language learning by offering materials and tools that facilitate the learning process. Multimedia resources including audio, video, and simulation can assist students in understanding linguistic concepts. The use of technology in language learning can increase student engagement and expand their access to diverse learning resources[2].

This research aims to explore various aspects of technology integration in English language learning, including the benefits and challenges faced by educators and students. By understanding how technology can be used optimally in the learning process, it is hoped that a more enjoyable and productive learning experience can be created. This research will also provide guidance for educators in designing learning strategies that utilize technology effectively to improve student learning outcomes in the digital era.

2. METHODS

The main method in this qualitative study is a literature review. Information is gathered from a variety of sources, such as books, research reports, and journal articles that discuss the use of technology in the pursuit of English. The technological approaches used in learning, the impact on language skills, and the barriers to technology implementation have been studied.

3. RESULTS

3.1 Positive Impact of Technology

The integration of technology in English language learning brings many positive implications for teaching and learning.

1. Increased Learning Motivation

The use of technology in English learning is proven to increase students' motivation to learn. Students are more engaged in their education when interactive apps and internet resources are available. The use of technology in the classroom has the potential to improve understanding and inspire children to learn[14]. Students who use mobile apps show significant improvements in learning motivation, student engagement, and subject matter comprehension compared to those who only use traditional learning techniques[15]. In addition, students are

encouraged to participate more actively in their studies by using gamification in English language learning programs. A more engaging and competitive learning environment is generated by components such as points, badges, and interactive challenges. It increases the motivation of students to complete the activities given to them and helps them remember the information they have learned.

2. Speaking Skills Development

Students' speaking skills have also improved significantly thanks to the use of technologies such as VR and voice-based applications. These methods allow students to practice speaking in a more realistic context, thus increasing their confidence when communicating in English. Students can learn independently and develop their speaking skills thanks to technology[16]. Technologies such as video conferencing and voice-based apps allow students to practice speaking in a more natural way. Students are encouraged to speak more actively through technology-based teaching strategies including using online learning platforms that allow them to participate in online discussions or play communication scenarios[16]. In addition, students are encouraged to participate more actively in their studies by using gamification in English language learning programs. A more engaging and competitive learning environment is generated by components such as points, badges, and interactive challenges. It increases the motivation of students to complete the activities given to them and helps them remember the information they have learned.

3. Independent Learning

In the contemporary era of information and communication technology in education, students can learn independently by using programs developed by artificial intelligence[17]. Students who use technology to learn English show an increase in learning independence. The use of technology in independent learning can improve students' abilities and knowledge and make it easier for educators in learning activities[17]. Students can also change their learning pace thanks to technology. Students can learn challenging content and move on to the next level once they have mastered a specific topic thanks to adaptive learning apps. For students with different levels of understanding, it offers more flexibility.

4. Interaction and Communication

The integration of technology improves the interaction between teachers and students as well as between students themselves. The use of digital communication tools facilitates more in-depth and collaborative discussions in the learning process[18]. Students can exchange ideas and experiences with each other through online discussion boards and e-learning platforms. In addition, by providing students with the opportunity to interact with native English speakers, technologies such as video chat and virtual classes enhance the educational process. As a result, students can gain a deeper understanding of the culture and improve their communication skills.

3.2 Teacher Teaching Effectiveness

Today's technological capabilities greatly help teachers in their work as they have increased the variety of learning processes, which makes learning more lively and vibrant. In the past, learning only consisted of listening to the teacher explain things and having little interaction between the teacher and the student[19]. Technology in learning can help educators in providing material to students and seeing the learning results given[6]. In addition, teachers can use data from digital learning platforms to modify their teaching methods thanks to technology. Teachers can better understand students' learning styles and offer tailored interventions to help them achieve their learning goals when learning analytics become available.

4. CONCLUSION

The integration of technology in English learning in the digital age provides many significant benefits, ranging from increased motivation to the development of speaking skills and learning independence. Despite challenges such as gaps in access to technology in different regions, the benefits offered are much greater. Therefore, it is important for educators to continue to adopt technological innovations in their teaching methods in order to prepare students for future global challenges.

REFERENCES

- [1] A. Daud, A. F. Aulia, and N. Ramayanti, "Integrasi teknologi dalam pembelajaran: Upaya untuk beradaptasi dengan tantangan era digital dan revolusi industri 4.0," *Unri Conf. Ser. Community Engagem.*, vol. 1, no. May, pp. 449–455, 2019, doi: 10.31258/unricsce.1.449-455.
- [2] M. Warschauer, *Technology and Social Inclusion*, no. December. 2003. doi: 10.7551/mitpress/6699.001.0001.
- [3] T. Soedarto, H. Hendrarini, R. Alit, and T. P. Anggriawan, "Inovasi Teknologi Pemasaran Digital Pada Cv . Supply," vol.

- [4] A. Alimuddin, J. Niaga Siman Juntak, R. Ayu Erni Jusnita, I. Murniawaty, and H. Yunita Wono, "Teknologi Dalam Pendidikan: Membantu Siswa Beradaptasi Dengan Revolusi Industri 4.0," *Menur Pumpungan, Kec. Sukolilo, Kota SBY*, vol. 05, no. 04, pp. 36–38, 2023.
- [5] H. S. Wahyudi and M. P. Sukmasari, "Artikel Teknologi dan Kehidupan Masyarakat," *Artik. Teknol. dan Kehidup. Masy.*, vol. 3, no. (1), pp. 13–24, 2014, [Online]. Available: <https://media.neliti.com/media/publications/227634-teknologi-dan-kehidupan-masyarakat-7686df94.pdf>
- [6] A. Maritsa, U. Hanifah Salsabila, M. Wafiq, P. Rahma Anindya, and M. Azhar Ma'shum, "Pengaruh Teknologi Dalam Dunia Pendidikan," *Al-Mutharahah J. Penelit. dan Kaji. Sos. Keagamaan*, vol. 18, no. 2, pp. 91–100, 2021, doi: 10.46781/al-mutharahah.v18i2.303.
- [7] S. Lestari, "Peran Teknologi dalam Pendidikan di Era Globalisasi," *Edureligia; J. Pendidik. Agama Islam*, vol. 2, no. 2, pp. 94–100, 2018, doi: 10.33650/edureligia.v2i2.459.
- [8] D. Pristiwanti, B. Badariah, S. Hidayat, and R. S. Dewi, "Pengertian Pendidikan," *J. Bioedukasi*, vol. 4, no. 2, pp. 337–347, 2022, doi: 10.33387/bioedu.v6i2.7305.
- [9] F. Nasution, L. Y. Anggraini, and K. Putri, "Pengertian Pendidikan, Sistem Pendidikan Sekolah Luar Biasa, dan Jenis-Jenis Sekolah Luar Biasa," *J. Bioedukasi*, vol. 3, no. 1, pp. 422–427, 2022.
- [10] Y. Alpian, S. W. Anggraeni, U. Wiharti, and N. M. Soleha, "PENTINGNYA PENDIDIKAN BAGI MANUSIA," vol. 1, no. 1, pp. 66–72, 2019.
- [11] H. Bengu, S. P. Kelin, and R. P. Hadjon, "Penerapan Etika Bisnis Dalam Kegiatan Umkm Di Era Digital," *TIMOR CERDAS – J. Teknol. Informasi, Manaj. Komput. dan Rekayasa Sist. Cerdas*, vol. 2, no. 1, pp. 1–7, 2024.
- [12] P. Rahayu, "Pengaruh Era Digital Terhadap Perkembangan Bahasa Anak," *Al-Fathin J. Bhs. dan Sastra Arab*, vol. 2, no. 1, p. 47, 2019, doi: 10.32332/al-fathin.v2i2.1423.
- [13] T. N. Azis, "Strategi pembelajaran era digital," *Annu. Conf. Islam. Educ. Soc. Sains (ACIEDSS 2019)*, vol. 1, no. 2, pp. 308–318, 2019.
- [14] A. Zahir, "Pengaruh pemanfaatan teknologi pembelajaran terhadap motivasi belajar siswa SMPN 1 Lanrisang Kabupaten Pinrang," *Univ. Negeri Makassar*, vol. 1, no. 1, pp. 1–10, 2018.
- [15] F. Salomo Leuwol, B. Basiran, M. Solehuddin, A. R. Vanchapo, D. Sartipa, and E. Munisah, "Efektivitas Metode Pembelajaran Berbasis Teknologi Terhadap Peningkatan Motivasi Belajar Siswa Di Sekolah," *EDUSAINTEK J. Pendidikan, Sains dan Teknol.*, vol. 10, no. 3, pp. 988–999, 2023, doi: 10.47668/edusaintek.v10i3.899.
- [16] E. Melati, M. Kurniawan, M. Marlina, S. Santosa, R. Zahra, and Y. Purnama, "Pengaruh Metode Pengajaran Berbasis Teknologi Terhadap Kemampuan Berbicara Dalam Pembelajaran Bahasa Inggris Di Sekolah Menengah," *J. Rev. Pendidik. dan Pengajaran*, vol. 6, no. 4, pp. 14–20, 2023, [Online]. Available: <http://journal.universitaspahlawan.ac.id/index.php/jrpp>
- [17] B. Karyadi, "Pemanfaatan Kecerdasan Buatan Dalam Mendukung Pembelajaran Mandiri," *Educ. J. Teknol. Pendidik.*, vol. 8, no. 2, pp. 253–258, 2023, doi: 10.32832/educate.v8i02.14843.
- [18] D. Muliasari and T. F. Efendi, "Pengaruh penggunaan teknologi pembelajaran interaktif terhadap peningkatan kemampuan bahasa inggris mahasiswa prodi informatika di itb aas indonesia," no. 2021, pp. 1–9, 2022.
- [19] M. A. Mubaroq and M. F. Ilham, "Peran Teknologi dalam Peningkatan dan Efektivitas Proses Pembelajaran," *Masaliq*, vol. 3, no. 4, pp. 541–549, 2023, doi: 10.58578/masaliq.v3i4.1209.