

High-Tech Innovations in English Language Teaching: Investigating the Role of Digital Solutions in Saudi EFL Context

Ansa Hameed¹

¹Department of English, College of Science and Humanities, Alkharj, Prince Sattam bin Abdulaziz University, Saudi Arabia

Correspondence: Ansa Hameed, Department of English, College of Science and Humanities, Alkharj, Prince Sattam bin Abdulaziz University, Saudi Arabia. E-mail: a.zahoor@psau.edu.sa

Received: December 18, 2023

Accepted: February 7, 2024

Online Published: February 21, 2024

doi:10.5430/wjel.v14n2p518

URL: <https://doi.org/10.5430/wjel.v14n2p518>

Abstract

As modern technology continues to advance, language teaching has also embraced the integration of high-tech innovations and solutions. The performance of the students is positively impacted by these new digital learning methods. However, since technology keeps evolving, it is imperative to monitor the use of modern digital solutions in educational settings. In line, it has become increasingly important to delve into the effects of digital applications, platforms, and tools on language learning and teaching practices. The present study aims to probe the role of digital solutions in ELT pedagogy within the context of Saudi Arabia. For this purpose, this study aims to examine the perceptions of teachers and learners regarding the efficacy of digital solutions for the improvement of language competence and performance along with the challenges faced during the process. The research utilizes a mixed-methods approach, incorporating both surveys and interviews as data collection instruments, involving a sample population comprised of 417 students and 10 teachers. The findings reveal that students are quite enthusiastic about the use of digital applications, resources, and technology in the EFL classrooms; however, they have also exposed the lack of usage of the latest trends in technology in the learning environments. Moreover, the teachers also show a positive attitude toward the integration of high-tech solutions in the pedagogy for a better and improved learning and teaching experience. However, they also express a certain degree of unease over their level of technology apprehension, cost-related issues, and the long-term viability of digital solutions in the educational landscape. The study suggests that digital solutions have the potential to bridge the gap in access to quality education, predominantly in far-off areas or for people with limited resources. Considering the role of digital solutions in ELT can certify that educational opportunities are more reachable and inclusive for all Saudi learners, irrespective of their geographic location or socio-economic background. Thus, relevant stakeholders have to take certain initiatives to fill the gaps.

Keywords: Digital solutions, language teaching, EFL context, perceptions

1. Introduction & Literature Review

The English language in Saudi Arabia has undergone a complex historical trajectory, marked by conflicting perspectives and evolving perceptions. However, it has eventually positioned itself as a vital asset within the educational context of the country. In contemporary times, learning English as a foreign language in KSA is one of the key concerns for academia, particularly when it has become a prerequisite for a better economy, expanded tourism, global collaboration, and flourishing industry in line with Vision 2030. Khawaji (2022) asserts that various socio-political factors have led the Kingdom to emphasize English proficiency as an important asset of educational practices. Various programs have been offered in this regard like “Watani”, “Jehazi”, and “Tatweer” (Assulaimani, 2019) to endorse better EFL learning practices. Among these initiatives, Tatweer came up with technology-based solutions to promote a better EFL learning and teaching experience in Saudi academia (Assulaimani, 2019).

In recent years, technology has become an integral component of the education system, including its application in the field of language teaching. Farooq and Soomro (2018) comment that “technology has impacted the learning approaches and vice-versa with an aim to improve the standards of language teaching/learning process” (pp.10). The incorporation of technology in language instruction originated as a distinct area of study in 1970 and has since made notable advancements. A wide range of digital solutions have been introduced in the field of education, spanning from the use of computers as ordinary tools in classrooms to the development of computer-mediated communication applications. Additionally, language-learning applications and language-teaching robots have emerged as prominent technological advancements in this domain. Dash (2022) writes that the “use of technology in teaching English consolidates the integrated view of the modern means of system and association with other components which benefits students by achieving the required results” (pp.8). The field of technology and IT has a crucial role in offering various digital solutions and technological inventions.

Oikonomou and Patsala (2021) defines digital tools as platforms, applications, programs, etc. that are used with electronic devices like mobiles, laptops, computers, etc. Currently, a huge number of digital tools are available in the form of online language learning platforms (Duolingo, Cambly, Babbel, etc.), virtual classrooms (Zoom, Skype, LMS, etc.), mobile apps (Fluent U, HelloTalk, etc.), digital assessment tools (Pearson Test of English (PTE) Academic, and TOEFL iBT, etc.), online resources (British Council LearnEnglish, BBC

Learning English, TED-Ed, etc.), gamification (Kahoot, Quizlet, etc.), research and writing assistants (chatbots, AI tools), etc. All of these tools and apps serve various purposes to improve the student's proficiency as well as the teachers' efficiency in ELT classrooms. Hockly and Dudeney (2018) argue that these digital innovations have blessed the lives of language teachers by making many of their jobs easier to do.

Many studies are available that claim that these digital solutions have been employed in ELT classrooms for effective results (e.g. Moorhouse & Yan, 2023; Cancino & Panes, 2021; Oikonomou & Patsala, 2021; Margaryan & Kalugina, 2020; Hsu, 2016). Moorhouse and Yan (2023) report that teachers are aware of the variety of digital tools and use them for various reasons to promote effective learning processes. Cancino and Panes (2021) have talked about the efficacy of the Google Translate app in refining the writing skills of EFL learners in schools in Chile. Similarly, in another study conducted by Oikonomou and Patsala (2021) in Greece, the researchers studied the perceptions of school teachers towards the use of technology in language teaching. They found that teachers were very satisfied with such digital tools for improving in particular the listening and speaking skills of the students. Margaryan and Kalugina (2020) explain a number of benefits of using technological innovations and solutions in classrooms, which include, motivation for learners, easy access, availability, collaboration, authenticity, etc. Hsu (2016) investigated the practicality of mobile-assisted language teaching and found it valuable in the EFL context. Similarly, another study advocated the expediency of computer-assisted pedagogy for improving the reading skills of English language learners (Macaruso & Rodman, 2011).

Following the recent trends, Saudi Arabia has also policies in action to digitize the education sector. According to a news report, "Shifting to digital education to support teacher and student progress will no doubt be a cornerstone of National Transformation Program (NTP)" ("Digital transformation", 2019). Many pieces of research have been conducted to report the effectiveness of the usage of various technologies within the Saudi academic context, for example, Hakim, 2020; Alswilem, 2019; Farooq & Soomro, 2018; Morris, 2011. Hakim (2020) examined the teachers' perspectives on the use of digital tools in EFL settings during the COVID-19 phase. He found that teachers found such technology very useful during such critical times but preferred traditional learning in normal circumstances. The research conducted by Alswilem (2019) examined the perspectives of secondary school teachers regarding the integration of technology into English instructional settings. She reported that teachers had a positive attitude towards such an approach but lacked some basic training and resources for the purpose. Farooq and Soomro (2018) studied the EFL teachers' perceptions at Taif University, Saudi Arabia toward the preference and use of technology in their classrooms. Their findings revealed that teachers make partial use of technological tools to assist learners in the learning process. Morris (2011) conducted an experimental study by using various technology-based tools in EFL classrooms in Saudi Arabia and reported positive impacts.

However, there are very limited studies that have explored the teachers' perspectives and not much as well related to the students' perspectives regarding the usage of digital solutions in the ELT context. Moreover, the majority of the studies are focused on limited technological use like LMS, the use of audio-visual aids, and classroom devices (like smart boards). The present study aims to explore in particular, whether or not, besides the routine technological devices and platforms, the EFL teachers in Saudi Arabia focus on a more modern and wide range of digital solutions like chatbots, AI-based tools, language learning apps, games, etc. Finally, the majority of the previous studies are conducted in a limited context usually at a single institutional level so results are not generalizable. The present study aims to cover a larger context (universities in the Riyadh region) in the survey phase, for the purpose of generalization.

1.1 The Problem Statement and Objectives

There is no denying fact that the digital applications, tools, and platforms have made English language teachers' jobs much easier by facilitating the teaching and learning processes. However, it is always crucial to know how far these high-tech solutions are making a significant contribution. For this purpose, the study aims to investigate how the integration of high-tech innovations facilitates English language learning outcomes, student engagement, pedagogical practices, and overall language proficiency levels among Saudi EFL (English as a Foreign Language) learners. By addressing this research problem, the study strives to offer insights and recommendations for augmenting the use of digital solutions in English language teaching in the selected context, eventually enhancing the quality of English language education in the region.

- To scrutinize the perceptions and attitudes of learners and teachers towards the incorporation of high-tech innovations in ELT practices in Saudi Arabia
- To recognize the challenges and obstacles confronted by teachers and learners in implementing digital solutions in EL classrooms
- To provide recommendations for efficient integration and execution of digital solutions in the selected ELT context, considering factors such as digital literacy, infrastructure, and teacher professional development.

Striving for a knowledge-based economy, Saudi Arabia has paved the way to establish and grow a digitized learning environment. Thus, the present study has a particular significance in promoting the integration of high-tech innovations and digital solutions in the EFL (English as a Foreign Language) context, in line with the National Transformation Program (NTP) and Saudi Vision 2030. The findings of the research would provide useful insights into the needs and challenges of EFL teachers concerning modern digital tools. The recommendations of the study would be valuable for the policymakers and the concerned stakeholders to comprehend the significance of digital learning solutions and ways to implement the best practices. It would also assist in enhancing the quality of education in Saudi Arabia which is also one of the desired SDGs (Sustainable Development Goal-4) as set by the UN.

2. Research Methodology

2.1 Research Design

The research employs a mixed method design using surveys, and interviews as the main instruments of the study. A mixed-method approach helps to get a better understanding of the data by combining quantitative figures with qualitative descriptions. According to Creswell (2014), mixed-method design gives an in-depth understanding of the research problem. As the research deals with two kinds of participants: students and teachers, it is carried out in two steps.

2.2 Sampling and Instrument

The first phase of the study is an online survey conducted through social media apps (mainly WhatsApp, LinkedIn, and Twitter) to reach a wider variety of EFL students in Saudi universities within the Riyadh region. The participants of the study are selected through random sampling. Both male and female undergraduate students in the English departments of various universities were contacted to participate in the study. The questionnaire was distributed using various above-mentioned channels and almost 417 responses were received (mainly from EFL learners of Prince Sattam bin Abdulaziz University, King Abdulaziz University, Majmaah University, and King Saud University). A total of 400 responses were used for analysis as they were in complete form.

The main tool of the study is a close-ended questionnaire comprised of thirty-two questions. These questions are divided into five sections, demographic data, recording their perceptions of digital solutions, examining their exposure to the latest language learning technologies, and collecting their views regarding the benefits and challenges of using digital solutions. Besides the demographic data (5 questions), there are 24 close-ended statements provided on a Likert scale of 5 (from strongly disagree-5 to strongly agree-1) and 3 open-ended questions to collect their suggestions and opinions. The survey questions are carefully designed based on existing literature, theoretical frameworks, and consultation with experts in the field of English language teaching and educational technology. This ensures that the survey items measure the intended constructs accurately. Before administering the survey to the target participants, a pilot study is conducted with a small sample (15 students) to assess the clarity, relevance, and appropriateness of the survey questions (24 items other than demographic). The results of the pilot study helped the researcher to calculate the coefficient of reliability (Cronbach's Alpha using SPSS) that was satisfactory (with a value of 0.813). Feedback from the pilot study participants is used to refine and improve the survey instrument.



Reliability Statistics	
Cronbach's Alpha	N of Items
.813	24

Figure 1. Reliability statistics of the research instrument (Source: SPSS)

The second phase of the study deals with recording the teachers' perspectives of digital solutions concerning their knowledge, practices, benefits, disadvantages, and challenges regarding the usage of digital solutions. This is done through face-to-face interviews with ten faculty members, currently teaching English as a foreign language. These members were selected through convenience sampling, as per the availability and willingness of the participants. These ten participants who showed their willingness and participated in the actual study belonged to two prestigious universities in the Riyadh region. For this purpose, a comprehensive interview guide was developed to confirm consistency across interviews and focus on the relevant research questions. The guide includes open-ended questions that encourage participants to provide comprehensive and evocative responses. After conducting the interviews, the researchers provided the participants with an opportunity to review the summaries of their interviews. This scrutiny phase augments the accuracy and credibility of the collected data.

2.3 Data Analysis Procedures

The data collected through various means is analyzed according to its nature. The quantitative data is analyzed using descriptive statistical measures (through SPSS) to calculate mean and standard deviation values, whereas qualitative data is analyzed using the content analysis method. The findings are presented in a relevantly suitable manner (tables for quantitative data and discussions for qualitative data).

There are no ethical considerations for the present research. Participants are provided with clear information about the research, its purpose, and their rights as participants. Moreover, no personal information like names or phone numbers have been obtained during the survey part. Informed consent is obtained from the interview participants as well, ensuring their voluntary participation and confidentiality.

3. Findings and Discussion

This section provides the results of the study. Firstly, the findings from the survey part are presented.

The close-ended questions were comprised of 24 items divided into three major domains: students' perceptions of usage of digital solutions and technology in EFL classrooms, their exposure to a variety of digital tools, and finally the benefits and challenges of technology-aided language learning experience. The first section deals with students' perspectives on technology use in English language classrooms. This section contains eight items that are further divided into three main areas: their viewpoints of technology use for learning

various language skills and vocabulary (4 statements), the motivation factor (1 statement), and overall experience (3 statements). Tables 1, 2, and 3 below present the findings.

Table 1. Students' perceptions of the use of digital solutions

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Vocabulary acquisition	400	2.00	5.00	4.0000	.74927
Reading	400	1.00	5.00	3.8600	.95008
Writing	400	1.00	5.00	3.8200	1.04419
Listening/ speaking	400	1.00	5.00	3.8600	.90689
Valid N (listwise)	400				

Table 2. Students' viewpoints concerning motivation

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Motivation	400	1.00	5.00	3.9100	.89661
Valid N (listwise)	400				

Table 3. Students' perspective on the use of technology in efl classrooms

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Enjoyable experience with high-tech solutions in the EFL context	400	1.00	5.00	4.0400	.81243
Valid N (listwise)	400				

The results in the above tables depict that students have very positive viewpoints of the digital apps, aids, devices, and platforms that they experience and use in their EFL classrooms. For all language skills and vocabulary, the mean value ranges from 3.8 to 4 which shows their agreement with the constructive use of digital solutions. They also agree that such solutions motivate them for a better language-learning experience. Finally, the findings also reveal that they are overall satisfied with their enjoyable learning experience (mean value 4.04) with the technology use.

The second section of the questions also comprised eight questions aimed at investigating their present exposure to various technological solutions. The main goal was to see whether or not they are exposed to the latest digital solutions (like AI-based solutions, chatbots, high-tech apps, mobile-aided platforms, etc.). The findings are presented in five main areas: the students' exposure to a variety of digital solutions, limited use of technology, traditional use of technology, use of latest digital solutions, and their need for advanced use of technology. Table 4 presents the findings.

Table 4. Students' perspectives on the types of digital solutions they are exposed to

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Variety of digital solutions in use	400	1.00	5.00	1.9900	.95508
Limited use of technology	400	1.00	5.00	3.9200	1.08468
Traditional use of technology (smart boards, AV aids)	400	1.00	5.00	4.0000	1.05963
Use of advanced digital solutions (like chatbots, AI games)	400	1.00	4.00	2.1100	.90551
Need for more advanced use of technology	400	1.00	5.00	4.1400	.87310
Valid N (listwise)	400				

This section reveals very interesting facts. The data shows that students are not exposed to a variety of digitized solutions as well as up-to-date technology in their learning context (mean value 1.99 in the first item and 2.11 in the third item show their disagreement with the statements that they are provided with a variety of the advanced technological aids and apps). They also agree that their teachers make limited use of tech devices and are often more oriented toward traditional technological devices. In response to the statement they need more advanced use of technology in their EFL classrooms, they have shown strong agreement (mean value 4.14).

The third section of the close-ended questionnaire explores the benefits and challenges related to digitized solutions in EFL classrooms. For this purpose, there were eight questions. The first four questions were related to benefits like improvement in language use, access to authentic language sources, increase in confidence, and provision of personalized learning experience. Table 5 below presents the findings. These findings show that students have agreed positively with almost all four statements as mean values are above 3. Thus, it is clear that high-tech devices and solutions can be fruitful in the EFL context.

Table 5. Students' perceptions of technology benefits

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Improvement in overall language skills	400	1.00	5.00	3.8700	.90285
Access to authentic English language resources	400	1.00	5.00	3.8200	.94331
Increased confidence in using English	400	2.00	5.00	4.0975	.82747
Personalized learning experiences	400	1.00	5.00	3.9175	.94229
Valid N (listwise)	400				

The second part of the same section posed four questions to investigate whether or not students face some challenges while using technology. The first two questions inquired about the possibility of problems and challenges they face and the last two questions were precisely related to the nature of issues. Table 6 below presents the findings. The results indicate that students do face certain problems while using technology in their classrooms and that these issues are both practical and technical.

Table 6. Students' viewpoints on the challenges faced

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Challenges when using digital tools and platforms	400	1.00	5.00	3.6300	1.08486
Difficulties in practical aspects	400	1.00	5.00	3.2100	1.15292
Difficulties in technical aspects	400	1.00	5.00	3.6300	1.11184
Valid N (listwise)	400				

The last three questions of the students' questionnaire were open-ended to get an in-depth understanding of their perspectives and experience with digital solutions. These three questions mainly focused on three areas: benefits, challenges, and suggestions. Using the content-analysis method, the findings in each question were coded to identify major strands. The summary of the findings is presented below in Figure 2.

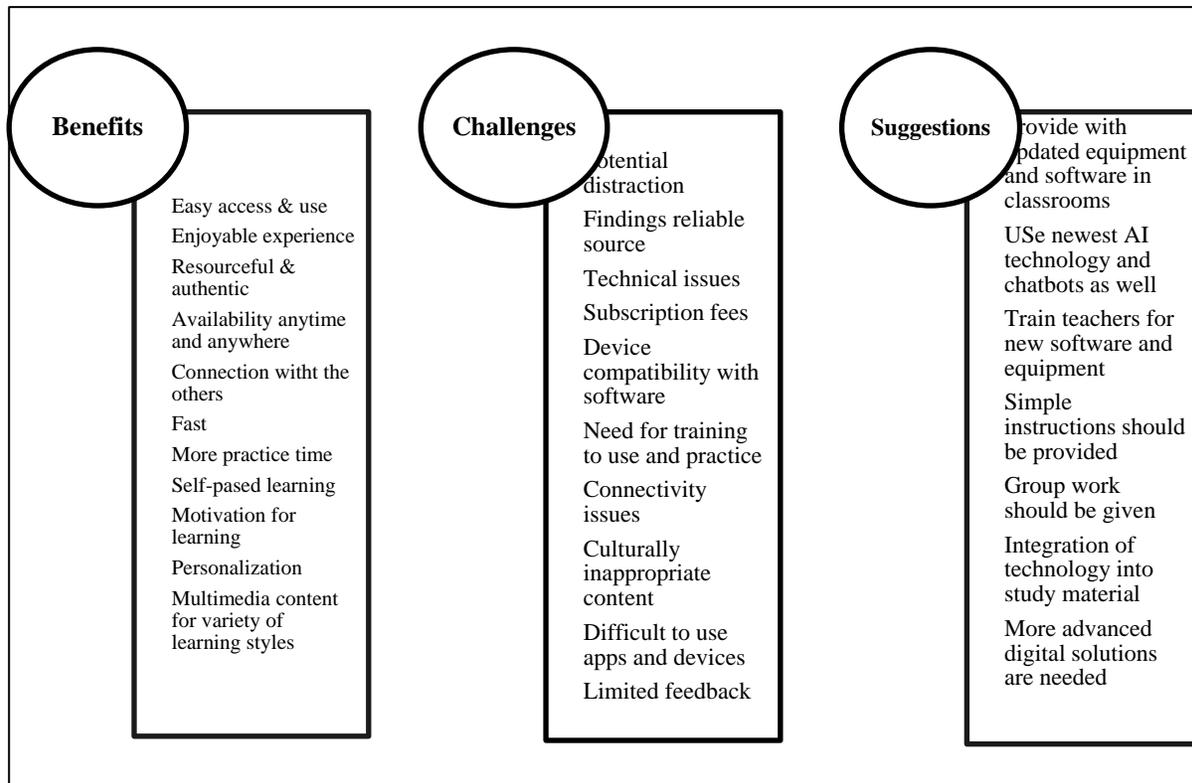


Figure 2. Summary of students' responses to open-ended questions (Source: Own processing)

Students found digital solutions as a very effective way of learning language materials and skills, that can inspire them as well can elevate their self-assurance and self-confidence. In fact, they have very positive perceptions about the use of digital solutions for better language learning experiences as highlighted by Margaryan and Kalugina (2020) as well. The responses of the students also expose the fact that students are aware of the latest trends and are very concerned about the limited use of technological solutions in their EFL classrooms. The majority of the students reported that teachers commonly use routine technology like smart boards, LMS, or audio-visual aids but they are rarely exposed to newer technologies (software, apps, platforms, etc.) as one of the students writes, "I don't know whether or not my teacher is aware of chatbots or some fun learning games. She never uses any new thing in class." (student 121). This is quite an inadequate situation as technology for education is rapidly progressing around the world, and EFL teachers prefer to remain updated (as highlighted in the studies by Moorhouse & Yan, 2023; Cancino & Panes, 2021).

The second phase of the study is focused on exploring the EFL teachers' perspective on the use of technology-based solutions in their classrooms and their usual practices and experiences in this regard. The mean age of the participants is 41.7 years and each of them has an EFL teaching experience of more than 10 years. As the interviews were conducted after the students' responses, where a main finding was the lack of innovative and recent technological solutions by the teachers in the EFL settings, the first section of the interview involved the teachers talking about the digital solutions they use often and in routine. Table 7 below presents a summary of commonly used apps, platforms, and devices.

Table 7. Commonly used technological solutions

Tech Devices	Smartboards, projectors, speakers, headphones, smart pens
Online Learning Systems (LMS)	BlackBoard, Canva
Virtual Classrooms and Video conferencing tools	Zoom, Google Meet, Teams
Language Learning Apps	Duolingo, Lingoda, Babbel
Online Language Resources	British Council, ILETS, TedTalk
Presentation tools	PowerPoint
Podcasts and Audiobooks	Podcasts, Ebooks
Social Media Apps and Platforms	Facebook, WhatsApp

The above table clearly indicates that teachers have very limited use of technological solutions including routine learning management systems, some social media, and other language learning apps. At the same time, the majority of the teachers use British Council or ILETS training modules to obtain material for their classes. The following categories of recent technological solutions for EFL classrooms are completely missing:

- Content creation and authoring tools
- Language exchange platforms
- Digital dictionaries and annotating tools
- Corpus-based tools
- Immersive technologies to create virtual learning environments
- AI-based technologies like Chatbots
- Gaming apps and simulations for language learning

As mentioned above, the world is being bombarded with recent technological innovations almost every other day, and our learners belong to a digital age, thus teachers must stay updated. Farooq and Soomro (2018) argue that our learners need technologies that are more advanced and innovative as they easily get bored with routine. Hockly and Dudeney (2018) stress the need for innovative digital solutions for a better EFL learning environment.

The other sections of the interviews focused on recording the teachers’ perspectives of these innovative technologies in a language-learning context and are divided into three sections: viewpoints related to impacts, challenges faced, and recommendations. Figure 3 below presents a pictorial overview of the findings related to teachers’ perspectives on the impacts of using digital solutions in their classrooms (based on the codes and themes identified during the analysis procedure).

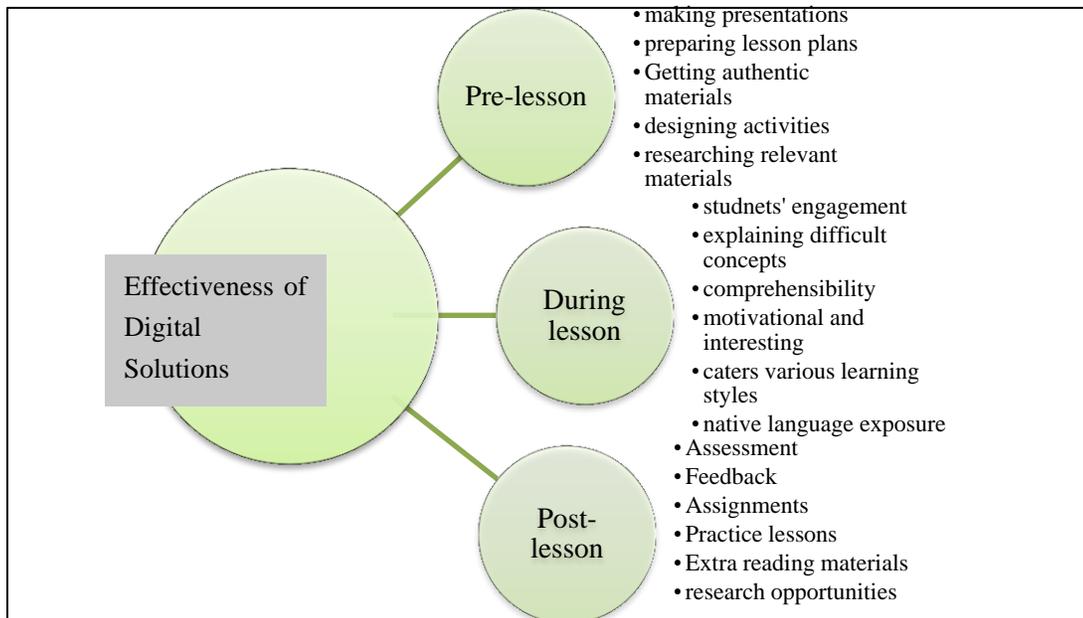


Figure 3. Teachers’ perspectives on the impacts of technological solutions (Source: own processing)

The findings reveal a positive perspective of EFL teachers towards the availability and usage of digital solutions before, during, and after classrooms. The majority of the teachers agree that technology has made their job easier at various stages of the language teaching process. Various respondents described their experience as prolific and effective.

I believe technology turns pedagogy into an interesting and enjoyable process. It increases motivation. (Participant 8, Personal communication)

Yes, the youth today are fascinated by technological advancements. Digital platforms cater to different learning styles of the students. (Participant 6, Personal communication)

The use of digital solutions encourages and increases students' language motivation. Also, their use makes them more responsive and responsible for target excellence. (Participant 3, Personal communication)

Access to a variety of updated content and materials. Also, plenty of concepts and skills-based activities. Interesting for the learners to do something online, and other than rote learning and book reading. (Participant 1, Personal communication)

Overall, the analysis of their responses reveal a positive perspective toward the use of digital solution in EFL classrooms, however, they have also identified certain limitation and challenges. The major challenges are summarized in Figure 4 below.

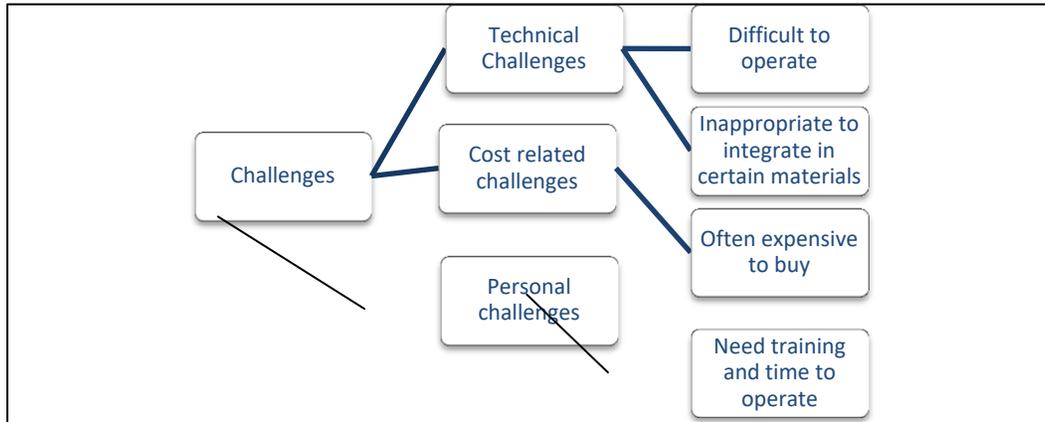


Figure 4. Challenges faced by teachers

The respondents have explained their perspectives related to challenges encountered during the usage of certain technical innovations in EFL classrooms. For example,

At times lack of digital gadgets, connectivity issues, and lack of technical support become a nuisance. (Participant 3, Personal communication)

Some digital tools are a bit complicated and students find the navigation process challenging.

Some digital tools require payment and cannot be afforded by the student community. (Participant 4, Personal communication)

Lack of adequate technical support, unavailability of infrastructure, etc. Students regularly use devices for social media, playing games, instant messaging, text messaging, and emailing rather than for class work causing distraction. which made it very hard for the teacher to control. (Participant 9, Personal communication)

The final segment of the interview focused on taking suggestions from the teachers to enhance the usage of digital tools in EFL settings and to tackle the possible challenges. Figure 5 below presents the findings.

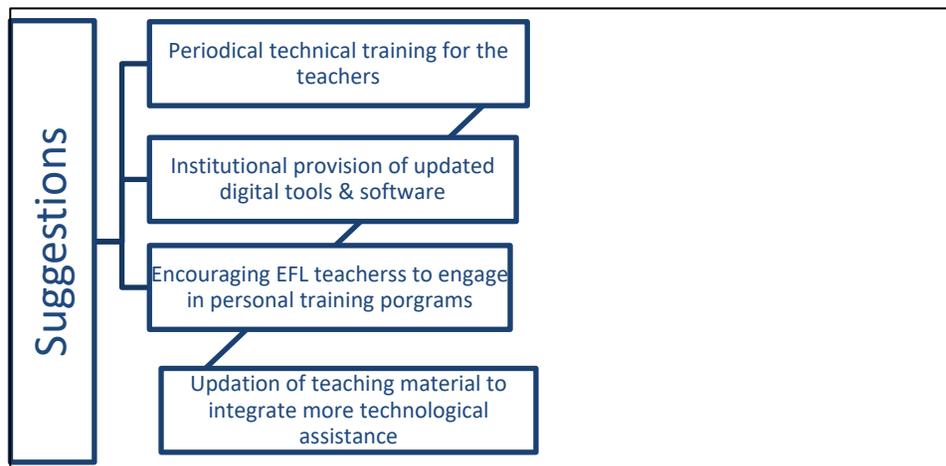


Figure 5. Summary of suggestions provided by the teachers

In light of the challenges faced by the teachers during the usage of technological solutions in their lessons, they have provided some practical suggestions as seen in the above figure. In the words of some of the participants,

Informative workshops are needed about the latest digital solutions and a thorough knowledge of how to use them. (Participant 7, Personal communication)

Technological advancement is taking place at a rapid rate. The instructors have to regularly update themselves about the latest and most popular tools in the market. Technology-oriented professional development programs can be beneficial to the teaching fraternity. (Participant 5, Personal communication)

The findings in this section indicate the students' and teachers' interest in the use of technology-oriented solutions to have a better language learning environment. They have positive perspectives concerning the use of digital tools and apps in the EFL context however students complained about the use of traditional and limited use of technology. The findings from the teachers' data also indicate that they are not very much aware of contemporary high-tech innovations. The reasons are sometimes technical and sometimes personal but evidently indicate the need for the revision of current policies and actions by the concerned stakeholders in academia.

4. Conclusion

Technology has become a standard component of modern, international life. High-tech solutions are becoming more and more common and essential for daily work in a variety of settings, including communities, businesses, and industries. The academia is also under great influence in employing technological-based solutions to a variety of educational scenarios. These technology-integrated language learning pedagogical approaches have shown a great sign of improvement, as indicated by many researchers discussed above. The goal of the current study was to examine and evaluate the perspectives of educators as well as learners on the use of digital tools for a better EFL learning experience, within the context of Saudi universities in Riyadh region. For this purpose, a comprehensive survey study was conducted to collect the data from the students. Whereas, the teachers' data was obtained by using the interview technique. Without a doubt, technology has become an effective tool for supporting English language learning, and both teachers and students agree that it has a good effect on the educational process as a whole

The findings of the study reveal that EFL learners in the selected context contemplate tech-based solutions as stimulating and motivating ways of learning the English language. Their responses expose the fact that they think digital tools and apps have made their learning process operative, easy, and convenient. They consider it a convenient way of learning vocabulary and language-related skills. However, they have also shown their concern with the quality of digital solutions as a majority of the teachers use routine and traditional means like audio-visual aids, smartboards, and LMS (Learning Management Systems). They have provided suggestions to train teachers to use the newer and modern technology in the EFL settings.

The findings from the teachers' interviews also suggest that teachers are prone to use limited ways of technological software and hardware. In this regard, they have requested institutional assistance to provide them with the latest digital solutions (expensive ones) and also to offer regular workshops to train them. The results no doubt indicate that teachers find technology advantageous to the teaching-learning environment in academia.

Based on the findings, the present study suggests that there is a dire need for a coalition between policymakers, educators, institutions, and administration to ensure the provision of updated digital solutions. To close existing gaps, an extensive plan that involves funding, chances for professional growth, and tactical planning is needed. Saudi EFL education may fully utilize technology through cultivating a culture of innovation and adaptability, which will make the learning environment more dynamic and interesting for both teachers and students.

Acknowledgments

The author extends her appreciation to Prince Sattam bin Abdulaziz University for funding this research work through the project number (PSAU/2023/02/25840).

Authors contributions

Dr Ansa Hameed was solely responsible for all the stages of the research, from conceptualizing idea to producing the final draft.

Funding

The author extends her appreciation to Prince Sattam bin Abdulaziz University for funding this research work through the project number (PSAU/2023/02/25840).

Competing interests

The author declares that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Alswilem, D. A. M. (2019). Saudi English teachers' use of technology in secondary classrooms: Perceptions, barriers, and suggestions for improvement. *Advances in Language and Literary Studies*, 10(6), 168-178. <https://doi.org/10.7575/aiall.v10n.6p.168>
- Assulaimani, T. (2019). The future of teaching English in Saudi Arabia. *Universal Journal of Educational Research*, 7(8), 1623-1634. <https://doi.org/10.13189/ujer.2019.070801>
- Cancino, M., & Panes, J. (2021). The impact of Google Translate on L2 writing quality measures: Evidence from Chilean EFL high school learners. *System*, 98, 102464. <https://doi.org/10.1016/j.system.2021.102464>
- Cresswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). United States of America: SAGE Publications, Inc.
- Dash, B. B. (2022). Digital tools for teaching and learning English language in 21st century. *International Journal Of English and Studies, [e-journal]* 4(2), 8-13.
- Digital transformation of Saudi education sector vital in realization of Vision 2030. (2019, May 26). *Saudi Gazette*. [online] Available at: <https://saudigazette.com.sa/article/567319>
- Farooq, M. U., & Soomro, A. F. (2018). Teachers and Technology: Trends in English Language Teaching in Saudi Arabia. *International Journal of English Linguistics*, 8(5), 10-19. <https://doi.org/10.5539/ijel.v8n5p10>
- Hakim, B. (2020). Technology Integrated Online Classrooms and the Challenges Faced by the EFL Teachers in Saudi Arabia during the COVID-19 Pandemic. *International Journal of Applied Linguistics*, 9(5), 33-39. <https://doi.org/10.7575/aiall.v9n.5p.33>
- Hockly, N., & Dudeney, G. (2018). Current and future digital trends in ELT. *RELC J.*, 49, 164-178. <https://doi.org/10.1177/0033688218777318>
- Hsu, L. (2016). Examining EFL teachers' technological pedagogical content knowledge and the adoption of mobile-assisted language learning: A partial least square approach. *Comput. Assist. Lang. Learn.*, 29, 1287-1297. <https://doi.org/10.1080/09588221.2016.1278024>
- Khawaji, A. (2022). Transition of English language teaching in Saudi Arabia: A critical evaluative Study. *Arab World English Journal*, 13(4), 265-280. <https://doi.org/10.24093/awej/vol13no4.17>
- Macaruso, P., & Rodman, A. (2011). Benefits of computer-assisted instruction to support reading acquisition in English language learners. *Biling. Res. J.*, 34, 301-315. <https://doi.org/10.1080/15235882.2011.622829>
- Margaryan, T. D., & Kalugina, L. V. (2020). Digital Transformation of English Language Teaching (ELT) at a Technical University: BMSTU Case Study. *ITM Web of Conferences*, 35, 01009. <https://doi.org/10.1051/itmconf/20203501009>
- Moorhouse, B. L., & Yan, L. (2023). Use of digital tools by English language schoolteachers. *Educ. Sci.*, 13, 226. <https://doi.org/10.3390/educsci13030226>
- Morris, N. O. (2011). *Using technology in the EFL classroom in Saudi Arabia*. MA TESOL Collection. 511. [online] Available through: https://digitalcollections.sit.edu/ipp_collection/511
- Oikonomou, V. L., & Patsala, P. (2021). The Integration of Educational Technologies in Foreign Language Education: Teacher Practices and Attitudes in Greece. In *IT and the Development of Digital Skills and Competences in Education*; IGI Global: Hershey, PA, USA, 253-275. <https://doi.org/10.4018/978-1-7998-4972-8.ch015>