

# Saudi K-12 teachers' views on English teaching using technology

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## ABSTRACT

Teachers play a vital role as key stakeholders in the educational process. They have comprehensive insights into specific challenges that schools encounter, and their perspectives can provide in-depth presentations on particular issues faced within schools. This study investigated the perceptions of Saudi K-12 teachers on the use of technologies in teaching English as a foreign language (EFL). A mixed-method study was conducted in 13 K-12 schools in the southern part of Saudi Arabia to investigate teachers' perceptions of using technologies in teaching and learning EFL. The study involved 35 teachers, both male and female, who teach English at different levels in K-12 education. Quantitative data were collected through questionnaires ( $n = 30$ ) and analyzed quantitatively. Qualitative data were collected through interviews ( $n = 5$ ) and analyzed thematically. The study found that Saudi K-12 teachers generally have positive perceptions of the use of technologies to teach English in their classrooms. They believe that technologies can improve student motivation, engagement, and achievement. They also believe that technologies can give students access to a wider range of resources and help them develop 21st-century skills. The study also identified some challenges to the use of technologies in Saudi K-12 education, such as lack of teacher training, limited access to technology, and cultural factors. However, the study also provided valuable insights into the criteria that teachers use to choose technologies to teach English in Saudi Arabia. The findings of this study have implications for the development of technology policies and practices in K-12 schools. The findings also provide valuable insights for teachers and researchers who are interested in the use of technologies in EFL in general and K-12 education in particular.

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## INTRODUCTION

The use of technology in education has emerged as a response to the evolving needs of society. Technological advancements have had a significant impact on the philosophy, goals, and levels of education, positioning education as the foundation for addressing current and future challenges (Henderson et al., 2015; McDiarmid & Zhao, 2023; Mhlongo et al., 2023). In order to facilitate the progress of the educational process, improve its efficiency, and enhance its effectiveness, it is essential to invest in educational technology and utilize information and communication technology (ICT) in teaching and learning (Leahy et al., 2019; Rabah, 2015; Ratheeswari, 2018). The design of education and teaching in educational technology involves optimizing the utilization

of learning resources and employing effective teaching and learning theories and methods to create a dynamic educational environment that supports the achievement of educational objectives for English as a Foreign Language (EFL) learners (Son, 2018). Educational technology can be used to create a more engaging and interactive learning environment for EFL learners (Son, 2018).

According to the (Saudi National Unified Portal, 2023), Saudi Arabia's Vision 2030 places significant emphasis on digital inclusion as a key factor in propelling the nation towards the UN Agenda 2030, Sustainable Development Goals, and overall development. The Kingdom's comprehensive strategy encompasses various initiatives and objectives to foster digital inclusion, such as enhancing values of equity and transparency, improving service quality for citizens, developing e-Government, and strengthening communication channels with citizens and the business community. According to the Saudi National Unified Portal (2023), a crucial aspect of this strategy involves building digital literacy and skills among the population. Saudi Arabia has made commendable progress in this area, positioning it among the top ten countries globally for digital skills. The Kingdom has developed a Digital Skill Framework that defines various ICT skills and levels of responsibility, and it strives to ensure that at least 90% of its individuals possess basic ICT skills by 2024. The Kingdom has also implemented a number of initiatives to promote digital inclusion for women, vulnerable groups, and remote regions. These initiatives include the Women Empowerment Program in Technology, the Digital Giving Initiative, and measures to ensure accessibility standards for government portals and mobile applications. Overall, Saudi Arabia is committed to digital inclusion as a key driver of its economic and social development. The Kingdom's comprehensive strategy encompasses a multifaceted approach that involves skills development, comprehensive education initiatives, infrastructure enhancement, and initiatives catering to women, vulnerable groups, and remote regions. Through these measures, Saudi Arabia strives to bridge digital divides and create a society that is empowered and ready to harness the opportunities of the digital age.

ICT in education is a term that has gained prominence in recent years (Zhao & Chen, 2023). The term "technology" encapsulates the diverse tools and methodologies employed by organizations to create, transmit, store, and manage information (Januszewski & Molenda, 2013). Technology is a varied collection of technological resources and instruments used to interact and communicate with the public. In a broader sense, ICT encompasses tools and services designed for information processing and communication (Januszewski & Molenda, 2013). Common manifestations of ICT include hardware devices like mobile phones, televisions, and laptops, as well as various software applications (Alhamami, 2018). The integration of ICT in our daily lives has been profound, and its significance in the realm of education is undeniable (An et al., 2015). While the incorporation of technology in educational settings isn't a novel concept, there remains a gap in understanding its application within the educational sector (Hughes & Roblyer, 2023). The advent of ICT in education heralds the emergence of a new global economy, compelling educational institutions to reevaluate their goals and methodologies in light of the ever-expanding information access (Bratitsis, 2023). This digital shift not only enhances the pertinence and reach of education but also prepares students for a predominantly digital professional environment. However, the potential benefits of ICT in classrooms can only be fully realized if educators are equipped with digital literacy and the requisite skills to harness these technologies (Bratitsis, 2023).

Teachers' perceptions of using ICT can provide insight into their attitudes, beliefs, and self-efficacy about using ICT in the classroom. Wang & Zhao (2023) argue that teachers' attitudes, skills, and knowledge are crucial to effectively integrating technology. They state that whether or not teachers can effectively integrate technology into the classroom is strongly influenced by their values and concerns. The teacher's perception of using ICT is how teachers view, understand, and interpret the use of technology in teaching and learning (Byker et al., 2017). Teachers' perceptions of ICT can have a significant impact

on their use of technology in the classroom. Spiteri and Rundgren (2020) point out that most ICT integration research focuses on how people evaluate technology's role in education. However, they argue that there is a need to focus more on the teachers' views on integrating ICT into teaching and learning processes. Spiteri and Rundgren (2020) found that teachers would use ICT more often if they perceived ICT training was worthwhile (positive perceptions). They also found that teachers who had positive perceptions of ICT were more likely to use it in their classrooms. Aşık et al., (2020) argue that teachers' perspectives are also significant in shaping the use of technology in English language education. They state that teachers' beliefs about the nature of language learning and teaching, as well as their beliefs about the role of technology in education, can influence how they choose to use technology in their classrooms. Teachers' perceptions of the use of ICT play an important role in determining how they use technology in the classroom. Research suggests that teachers with positive perceptions of ICT are more likely to use it effectively. It is therefore important to provide teachers with opportunities to develop positive perceptions of ICT and to learn how to use it effectively in their teaching (Alhamami & Costello, 2019).

ICT has become an essential part of the educational system. It has transformed scholarly society into a knowledge-based society, providing students with access to a wealth of information and resources. However, ICT cannot replace teachers, who are essential to the quality of education (Merikko & Kivimäki, 2022). A study by Collins and Halverson (2018) found that using ICTs can dramatically change classroom dynamics and students' learning. An ICT-enhanced classroom encourages student participation, group work, individual expression, content analysis, and critical reflection. This is because ICT can be used to create interactive and engaging learning experiences that are tailored to the individual needs of students. In addition, ICT can be used to provide students with access to a wider range of educational resources, including online courses, simulations, and virtual learning environments. This can help to level the playing field for students from all backgrounds and make education more accessible to everyone (Aslan & Zhu, 2017). There are also some challenges associated with using ICT in education (Starkey, 2020). One challenge is that not all teachers are comfortable using technology. Another challenge is that ICT can be expensive, and not all schools have the resources to provide students with access to it. Despite these challenges, the positive impacts of ICT on education outweigh the negative effects. ICT has the potential to improve student learning, motivation, and engagement. It can also help to close the achievement gap and make education more accessible to everyone (Starkey, 2020). The future of education is inextricably linked to ICT. By embracing technology, we can create a more equitable and accessible educational system that reparses students for the challenges of the 21st century.

Against this backdrop, the present study explores teachers' perceptions of using ICT in teaching and learning a foreign language in Saudi schools, with a specific focus on using modern technology devices in teaching and learning EFL in the southern part of Saudi Arabia. The study seeks to investigate teachers' opinions regarding the advantages and disadvantages of using modern technology in their classrooms and explore opportunities for its further integration. Furthermore, the research aims to identify the challenges of utilizing ICT in English language teaching and learning within schools. Additionally, the study discusses the criteria teachers employ in selecting the appropriate ICT devices for teaching EFL in public schools. Finally, the study will summarize English teachers' experiences and perspectives on integrating modern technology devices into the teaching and learning of English at Asir schools.

Many researchers have investigated the use of ICT tools in teaching and learning. There is a lack of research on Saudi English teachers' perceptions of utilizing ICT in teaching and learning Saudi EFL learners in K-12 education. This study aims to fill this gap by investigating the following: K-12 teachers' perceptions of the use of ICT in their teaching; The challenges that teachers face in using ICT in their classrooms; The criteria that teachers use in deciding the type of technology they use; The findings of this study will

provide the government with a visualization of Saudi English teachers' awareness and readiness to integrate ICT into their teaching process. The study is significant because it provides insights into the perceptions of Saudi teachers regarding the use of ICT in teaching and learning EFL. The findings of the study can be used to inform the development of policies and practices for the integration of ICT into English language teaching in Saudi Arabia. In addition, the study aimed to explore the integration of ICT in the classroom, with a specific focus on teachers' perceptions of incorporating ICT in teaching and learning foreign languages in Saudi public schools. Filling a gap in research on Saudi EFL teachers' technology perceptions, this study delves into their views on its benefits (improved student engagement, access to resources, etc.), challenges (training, access, cultural factors), and decision-making criteria. Using a mixed-method approach, the study offers valuable insights for policymakers, teachers, and researchers as it informs technology integration within the Saudi K-12 EFL context. The study had three primary questions, Question 1: What perception do the teachers hold about the use of ICT in teaching and learning? Question 2: Do the teachers use ICT in the classroom? Question 3: What criteria do teachers use in deciding the type of technology to use?

## METHOD

### Context and Sample

This study was conducted among EFL teachers in Asir Region schools in south Saudi Arabia. Asir Region is a diverse region with a population of over 2 million people. The research focused on Abha schools, which are located in the central part of the region. The study targeted Saudi English teachers who teach at elementary, middle, and high school levels.

A total of 13 schools were involved in the study, including: 3 high schools for boys, 3 high schools for girls, 3 secondary schools for girls, 2 secondary schools for boys, 1 primary school for boys, and 1 primary school for girls. A total of 35 teachers participated in the study. The teachers were selected using a purposive sampling method, which means that they were selected based on their willingness to participate in the study and their experience teaching EFL.

### Research Design

The research design for this study is a mixed methods approach. This means that the study will collect both qualitative and quantitative data (Creswell, 2011; Creswell & Clark, 2018; Kamalodeen & Jameson-charles, 2016). The qualitative data will be collected through interviews with teachers, and the quantitative data will be collected through a survey.

The survey asked teachers about their perceptions of the use of ICT in teaching EFL, the challenges they faced in using ICT in their classrooms, and the criteria they used in deciding the type of technology they use. The interviews asked teachers about their experiences in using ICT in their classrooms and their views on the future of ICT in EFL teaching.

The mixed method allows the researchers to gain a more comprehensive understanding of the topic of the study (Riazi & Candlin, 2014). The qualitative data will provide insights into the teachers' experiences and perspectives, while the quantitative data will provide insights into the prevalence of certain attitudes and beliefs among teachers. The data collection and analysis were conducted in two phases; initially, the survey data were collected and analyzed, followed by the collection and analysis of the interview data in the second phase. The findings from both phases were then integrated to offer a comprehensive understanding of the study's topic.

## **Instrument Questionnaire**

The questionnaire was designed to assess teachers' perceptions of using ICT in teaching and learning EFL at Saudi schools. The questionnaire was adapted from a previous study by [Jatileni and Jatileni \(2018\)](#).

The questionnaire consisted of four sections: First, demographics: This section collected information about the teachers' gender, age, teaching experience, and level of education. Second, modern technology devices: This section asked teachers about their use of different types of modern technology devices in their teaching. Third, perceptions of using ICT in teaching and learning EFL: This section asked teachers about their perceptions of the advantages and disadvantages of using ICT in teaching EFL. Fourth, criteria for choosing ICT devices: This section asked teachers about the criteria they use when choosing ICT devices for their teaching. The questionnaire used a Likert scale, with five response options: strongly agree, agree, neutral, disagree, and strongly disagree.

## **Interviews**

The interviews were conducted with a subset of the teachers who participated in the survey. The interviews were semi-structured, meaning that they followed a set of predetermined questions but also allowed for flexibility and follow-up questions. The interviews, recorded and transcribed, aimed to uncover teachers' experiences, challenges, and outlook on ICT in EFL teaching.

## **Data Analysis**

The quantitative data from the questionnaire were analyzed using descriptive statistics, including frequencies, means, and standard deviations ([Hartman et al., 2019](#); [Yates et al., 2021](#)). The qualitative data from the interviews were analyzed using thematic analysis, which involves identifying and coding themes in the data ([Alhojailan & Ibrahim, 2012](#); [Zhang & Wu, 2022](#)).

## **Piloting**

The instruments used in this study were appropriate for the research questions and the mixed methods approach. The questionnaire was a reliable and valid instrument for collecting quantitative data, and the interviews were a reliable and valid instrument for collecting qualitative data. The reliability and validity of the data collection instruments were assessed. The reliability of the questionnaire was assessed using Cronbach's alpha, which is a measure of internal consistency. The overall reliability of the questionnaire was 0.831, which is considered to be good. The reliability of the interview was assessed using a formula that calculates the percentage of agreement between the researchers and the participants. The validity of the questionnaire and interview questions was assessed through a pilot study. The pilot study involved three teachers for the questionnaire and two instructors for the interviews. The participants were asked to complete the questionnaire and to answer the interview questions. The researcher then reviewed the participants' responses to assess the validity of the instruments. The results of the pilot study indicated that the questionnaire and interview questions were valid. The outcomes of the pilot study indicated that the instruments effectively measured the intended constructs, as evidenced by the participants' responses.

## **Participants**

The study participants were 35 EFL teachers in Asir Region schools in Saudi Arabia (30 responded to the questionnaire and 5 participated in the interview). The participants were 17 males and 18 females. They all had a bachelor's degree in English or a related field, and they were all qualified to teach English in Saudi schools. Their average experience teaching English EFL learners was between 3 and 15 years. The participants were divided into three groups based on the level of schooling they taught: primary,

intermediate, and high school. Seven participants taught at the primary level, 9 taught at the intermediate level, and 19 taught at the high school level. Most of the participants had not received any formal training on how to use ICT in the classroom. However, all of the participants were fluent in Arabic, and they had all studied EFL in Saudi Arabia. Five of the participants were interviewed. Two of the interviewees were male high school teachers, and three of the interviewees were female secondary school teachers. Table 1 summarizes participants information.

**Table 1.** Teachers' Demographic Information

Characteristic	Sub-category	n	(%)
Gender	Female	18	51.4%
	Male	17	48.6%
Years of experience	0-5 years	9	25.7%
	5-10 years	16	45.70%
	More than 11 years	10	28.60%
Level taught	Primary	7	20.00%
	Intermediate	12	34.30%
	High school	16	45.70%

### Procedure of Data Collection

The questionnaire was delivered to Saudi English teachers in the Asir Region. The participants were informed of the purpose of the questionnaire and asked to read the questions carefully and answer them. A cover letter was attached to the questionnaire, which included the researcher's email address and phone number if the participants had any questions. The data were collected over an eight-week period. The questionnaire was sent to the participants via WhatsApp, a smartphone application. The questionnaire consisted of 45 items, which were answered using a Likert scale. The items asked about the participants' perceptions of using ICT in teaching English, the challenges they face in using ICT, and the criteria they use when choosing ICT devices.

In addition to the questionnaire, five Saudi teachers were interviewed. The interviews were conducted over the telephone and lasted for 15-20 minutes. The first three minutes of each interview were spent explaining the term ICT to the participants and asking for their permission to record the conversation for research purposes. The interviews were semi-structured, which means that they followed a set of predetermined questions but also allowed for flexibility and follow-up questions. The data analysis was conducted over a period of three weeks.

## RESULTS AND DISCUSSION

### Questionnaire Results

#### Demographic Information

The questionnaire was administered to a total of 30 teachers, all of whom were engaged in teaching English across various schools in the Asir Region. The survey was structured into five distinct sections. The initial section was dedicated to gathering demographic data, encompassing age, gender, and the educational level at which they teach English. This data is detailed in the participant description section.

#### ICT Experience and Training

The first section also incorporated queries concerning the duration of ICT device utilization in teaching English as a foreign language. Notably, two-thirds of the

respondents indicated that they had not undergone any formal training pertaining to the use of ICT in language instruction. In terms of their experience with ICT in teaching, the distribution was as follows: Less than one year: 4 teachers; Between one to three years: 12 teachers; Between four to eight years: 9 teachers; and More than nine years: 5 teachers.

### Modern Technology Devices Utilization

This section posed two primary questions. The first sought to identify the range of modern technological devices employed by teachers in their EFL instruction. Given the option to select multiple devices, the responses are illustrated in Figure 1.

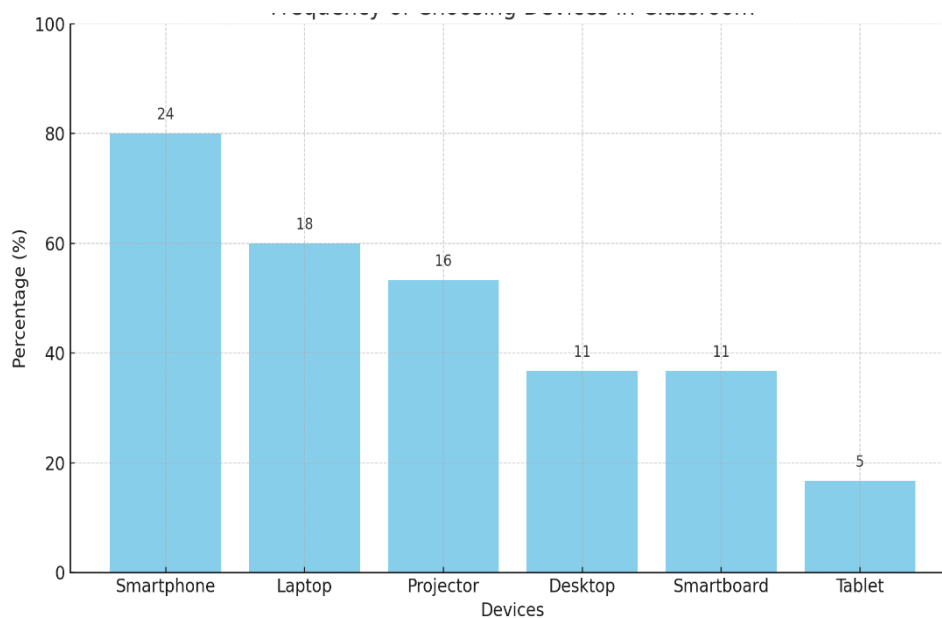


Figure 1. Frequency of chosen devices in the classroom

Figure 1 shows that smartphones are predominantly used by teachers in their instructional process. Concurrently, 11 teachers reported using desktop computers and smartboards within their educational settings. Tablets emerged as the least favored device, with laptops and projectors being used by 18 and 16 teachers, respectively. The subsequent query inquired about the integration of specific applications or platforms in EFL instruction. Respondents could select either 'Yes' or 'No'. If the response was affirmative, they were prompted to specify the application or platform in a subsequent short-answer section. Of the total respondents, 63.3% confirmed the use of such platforms, while 36.7% negated their use.

### Teachers' Perceptions on ICT Usage

The section dedicated to understanding teachers' perceptions on ICT usage comprised eight statements. These statements were designed to delve into teachers' viewpoints on the integration of modern technological tools in the teaching and learning process for Saudi EFL students. Responses were gauged using a Likert scale, with the following designations: 5 - Strongly Agree, 4 - Agree, 3 - Neutral, 2 - Disagree, and 1 - Strongly Disagree. The collected responses are summarized in Table 2.

Table 2. Teachers' Perceptions on ICT Usage in Teaching

Statement	Mean (M)	Standard Deviation (SD)	Direction

Modern technology simplifies teaching.	4.36	8.28	Strongly Agree
Modern technology bolsters EFL learners' critical thinking.	3.96	5.98	Agree
Modern technology fosters innovation and problem-solving in EFL learners.	4.1	5.12	Agree
Modern technology augments collaborative learning among EFL learners and teachers.	4.03	4.71	Agree
Modern technology ensures educational quality.	4.26	6.36	Strongly Agree
Absence of modern technology hinders teachers from staying updated with educational trends.	3.9	4.51	Agree
Teachers should be incentivized to integrate modern technology in pedagogical activities.	4.03	6.04	Agree
Integrating modern technology in teaching is perceived as time-consuming.	1.933	5.9	Disagree

As evident from [Table 2](#), a significant majority concurred that modern technology facilitates teaching. Teachers largely agreed that modern ICT tools enhance EFL learners' critical thinking and promote their innovative and problem-solving capacities. A predominant consensus emerged around the idea that modern technology fosters collaborative learning among EFL learners and educators. On the topic of educational quality, a majority felt that modern technology plays a pivotal role in ensuring high standards. However, a few dissenters disagreed with this sentiment. The absence of modern technological tools was perceived by many as a barrier to keeping abreast with contemporary educational trends. While most educators felt the need for encouragement in using modern technological tools, a small fraction did not see its immediate necessity. Lastly, while the majority did not find the integration of modern technology in teaching to be time-consuming, a few did express reservations about its time-intensive nature.

### ICT Utilization in the Classroom

This section delves into the practices and experiences of Saudi English teachers regarding the use of ICT tools in their classrooms. The responses were measured using a Likert scale, with designations as follows: 5 - Strongly Agree, 4 - Agree, 3 - Neutral, 2 - Disagree, and 1 - Strongly Disagree. The collated responses are presented in [Table 3](#).

**Table 3.** Utilization of ICT Devices in the Classroom

Statement	Mean (M)	Standard Deviation (SD)	Direction
I utilize modern technology (e.g., Desktop computer, Laptop, Tablet with internet) for information retrieval during lesson planning and preparation.	2.56	3.43	Disagree
I employ modern tools (e.g., Interactive whiteboard, Projector) to engage and	2.26	6.01	Disagree



captivate my EFL learners.			
I have access to and use desktop computers with internet in the classroom.	2.33	4.32	Disagree
My school provides computer access exclusively in the computer laboratory.	2.86	2.33	Neutral
I permit EFL learners to utilize modern technological devices during lessons.	2.267	3.18	Neutral
I have undergone training to employ various modern technological devices in teaching.	1.93	5.65	Disagree

From the data in Table 3, a majority of the teachers indicated that they do not predominantly use modern technology for lesson planning and preparation, with only a few expressing strong agreement or agreement. The second statement revealed that most educators do not rely on ICT tools, such as projectors or interactive boards, to engage EFL learners. However, a minority reported the opposite. Concerning internet accessibility in classrooms, the majority reported a lack of such facilities, while a few confirmed their availability. On the topic of computer labs, the responses were mixed, with some having access, others not, and a few remaining neutral. When asked about allowing students to use modern technological devices during lessons, the majority were against it, with only a few in favor. Lastly, the majority of teachers indicated that they had not received training on the use of modern technological devices in teaching, with only a handful affirming they had.

### Criteria for ICT Tool Selection by Teachers

The final segment of the questionnaire delved into the determinants that influence teachers' selection of ICT tools for English instruction. This section comprised six statements aimed at elucidating the criteria Saudi educators prioritize when opting for contemporary technological devices. Responses were gauged using a Likert scale, categorized as: 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, and 1-Strongly Disagree. The consolidated responses are delineated in Table 4.

Table 4. Criteria for ICT Tool Selection in English Instruction

Statement	Mean (M)	Standard Deviation (SD)	Direction
My selection of modern technology tools for teaching is primarily influenced by lesson objectives and activities.	3.9	4.99	Agree
The availability and accessibility of technology tools at the school predominantly dictate my choice.	3.7	3.88	Agree
I select technology tools based on the diverse needs of EFL learners.	3.73	4.03	Agree
I gravitate towards technology devices that I am acquainted with or use regularly.	4.03	5.16	Agree
I opt for the most recent technological tools available for instruction.	3.83	4.57	Agree
Curriculum guidelines or subject-specific policies significantly influence my choice of technology tools.	3.63	3.03	Agree

As inferred from Table 4. English educators predominantly base their ICT tool selection on lesson objectives, school infrastructure, and the diverse requirements of EFL learners. A significant proportion of educators prefer tools they are familiar with, underscoring the importance of user experience in technology adoption. The inclination towards leveraging the latest technological advancements for instruction was also evident. Furthermore, curricular guidelines and subject-specific policies emerged as pivotal determinants in the ICT tool selection process.

### **Interview Insights on ICT Utilization**

A qualitative approach was employed to gain a deeper understanding of the perceptions of English language educators in the Asir Region. Five educators, comprising 2 males and 3 females, were interviewed using a semi-structured format. The interview was segmented into three sections, each encompassing open-ended questions aligned with the study's objectives, culminating with a concluding query.

### **Perceptions on ICT Integration**

The inaugural section delved into educators' perceptions regarding the integration of ICT tools. Responses to the first query predominantly indicated a favorable stance towards the integration of modern technology in EFL instruction. For instance, one female educator opined, "Integration should be judicious, with the educator being central to the learning process." Another male educator emphasized the indispensability of technology, stating, "Modern technology is paramount for both educators and learners striving for comprehensive knowledge acquisition in the EFL context." However, the educators unanimously highlighted challenges, such as inconsistent internet connectivity and inadequate institutional support. The dearth of essential ICT tools, like projectors or smart boards, further impedes the creation of an optimal ICT-integrated learning environment. Yet, despite these obstacles, educators endeavor to harness ICT to enhance lesson engagement.

### **ICT Deployment in Classrooms**

The subsequent section centered on the practical application of ICT in classrooms. Responses varied, reflecting individual preferences, budgetary constraints, and institutional provisions. Regarding the second query, a mixed bag of opinions emerged. While four educators acknowledged the utility of ICT, one expressed reservations, cautioning against over-reliance and emphasizing the need for contingency plans. Another educator remarked on the transformative impact of the Covid-19 pandemic on educators' ICT perceptions, suggesting that the crisis underscored the value of technology in instruction. The findings underscore a potential correlation between educators' ICT perceptions and its efficacy in English instruction. The pandemic has seemingly bolstered the consensus that ICT is instrumental in EFL instruction.

### **Criteria for ICT Tool Selection**

The final section probed into the criteria educators prioritize when selecting ICT tools. Responses indicated a strong correlation between ICT classroom application and tool selection criteria. Common criteria encompassed tool availability, accessibility, and user-friendliness. Educators emphasized the efficiency, student engagement, and instructional planning facilitation offered by ICT tools. One educator noted the proclivity of contemporary students towards technology over traditional resources like textbooks. In summation, while ICT tools present a valuable asset for educators, judicious selection, ensuring student accessibility, and alignment with instructional objectives are paramount. When queried about advice for peers, the consensus revolved around the importance of continuous training, staying abreast of technological advancements, and selecting tools tailored to student needs to foster effective.

## Discussion

The present study sought to elucidate the perceptions of Saudi K-12 English educators in the Asir Region concerning the integration of ICT devices in the pedagogy of EFL students. Additionally, the research delved into the practical application of ICT within classrooms and the determinants influencing teachers' selection of specific ICT tools.

The findings of this study suggest that Saudi English teachers have positive perceptions of using ICT devices in teaching and learning EFL students. However, they face a number of challenges in implementing ICT tools in their classrooms, such as the lack of availability of ICT devices, the poor internet connection, and the lack of teacher training. The study also suggests that teachers choose ICT tools based on a number of criteria, including the lesson objectives and activities, the subject policy and syllabi, the teachers' personal experience with the tools, the accessibility of the tools in the classroom, and the teachers' preference for using the latest technology. The study concludes that the government and school administrators need to provide more support for teachers to use ICT devices in the classroom. This support could include providing more ICT devices to schools, providing teacher training on how to use ICT devices effectively, and improving the internet connection in schools. The study also suggests that teachers need to be given more guidance on how to select ICT devices for their teaching. This guidance could include providing teachers with information about the different types of ICT devices available, the benefits and limitations of each type of device, and the criteria for selecting ICT devices. By providing more support for teachers and addressing the challenges that they face, the government and school administrators can help to ensure that all EFL learners in Saudi Arabia have access to the benefits of ICT-enhanced learning.

In addressing the inaugural research question, data collated from both questionnaires and interviews with English educators in southern Saudi Arabia revealed a predominantly affirmative stance towards the adoption of ICT devices in EFL pedagogy. This suggests a heightened awareness among Saudi educators regarding the potential merits of ICT integration. This observation aligns with the findings of [Salem & Mohammadzadeh \(2018\)](#) in the Libyan context, which underscored a positive disposition among educators towards ICT adoption in academic settings.

The preliminary segment of the questionnaire encompassed a series of statements aimed at discerning the prevailing attitudes of English educators towards ICT integration. The consensus was that ICT tools streamline the teaching process and augment the learning experience for EFL students. This sentiment resonates with the observations of [Jayanthi & Kumar \(2016\)](#), who posited that contemporary technological tools foster both autonomous and collaborative learning environments, rendering traditional methodologies less compelling.

Furthermore, the emphasis on comprehensive training for the efficacious deployment of ICT tools was palpable. [Sabiri \(2020\)](#) highlighted the positive ramifications of ICT on English language instruction, emphasizing its potential to elevate student achievement. The overarching sentiment is that, while technology can significantly enhance the learning experience, its integration should be judicious and meticulously planned.

The findings pertaining to the second research question indicate that while there's a favorable disposition towards ICT, its actual implementation in classrooms in the Asir Region remains fraught with challenges. Factors such as limited availability of essential tools and inconsistent internet connectivity hinder its full integration. [Prestridge \(2012\)](#) emphasized the superiority of modern educational tools over traditional methods, suggesting that the former can yield superior student outcomes.

However, the interviews revealed that despite these challenges, educators remain sanguine about the transformative potential of ICT. This mirrors the findings of [Gebremedhin and Fenta \(2015\)](#), who noted that while educators face hurdles in ICT integration, they remain convinced of its transformative potential. The overarching sentiment is that with adequate support and resources, the integration of ICT in Saudi schools can be highly successful.

The third research question sought to understand the criteria that guide educators in their selection of ICT tools. The findings suggest that educators' choices are influenced

by a myriad of factors, including lesson objectives, institutional policies, personal familiarity with the tools, and the allure of cutting-edge technology. Ghavifekr & Rosdy (2015) highlighted the efficacy of educators when using familiar ICT tools, suggesting that familiarity can enhance productivity.

Moreover, the availability and accessibility of specific ICT tools play a pivotal role in their selection. Teachers are also inclined towards the latest technological innovations, believing that they can offer students a more immersive learning experience. Lomos et al., (2023) posited that schools equipped with a diverse array of ICT tools can foster an environment conducive to effective ICT integration, leading to enhanced learning outcomes.

This study was limited to English teachers working in Asir schools in Saudi Arabia. Therefore, the findings may not be generalizable to other contexts. Additionally, the study only focused on teachers' perspectives on using ICT in teaching and learning EFL. Future research could expand the study to include teachers from a wider range of schools and educational levels, as well as students' perspectives. This would help to ensure that the findings are more generalizable. Another limitation of this study is that it did not consider the emotional and psychological influence of teachers on students' acceptance and use of ICT in teaching and learning. Future research could explore this issue by conducting interviews with teachers and students to better understand their experiences. Finally, this study was a cross-sectional study, which means that it only looked at the participants' attitudes and beliefs at one point in time. Future research could conduct a longitudinal study to track students' use of ICT over time and to better understand the impact of ICT on student learning. Despite these limitations, this study provides valuable insights into the perceptions of English teachers in Saudi Arabia on using ICT in teaching and learning EFL. The findings of this study can be used to inform future research on the use of ICT in Saudi educational environments.

## CONCLUSION

The This study concludes that the integration of ICT in Saudi schools is crucial by focusing on teachers' perceptions of integrating ICT in teaching and learning a foreign language at Saudi schools. The study had three goals: to investigate teachers' perceptions of using ICT in teaching and learning foreign languages, to examine the use of ICT in the classroom, and to identify teachers' criteria when choosing the type of technology. A mixed-methods approach was used to collect qualitative and quantitative data through questionnaires and interviews with 35 EFL Saudi teachers in Asir Region schools. The findings showed that Saudi teachers generally have a positive perception of using ICT in the classroom. However, they face challenges in using ICT tools in their classrooms, such as limited resources, lack of teacher training, and technical support. The study suggests that providing more resources and training to teachers would help them implement ICT effectively in their classrooms. This would allow students to benefit from the potential of ICT to improve their learning.

Furthermore, English teachers rely on lesson objectives, accessibility, and learners' needs when choosing ICT tools. Most teachers use familiar technology, modern tools, and curriculum or subject policies as criteria for selecting ICT tools. The findings of this study contribute to the existing literature on the use of ICT in education. They also provide insights for policymakers and educators on how to better integrate ICT into Saudi schools. Some specific recommendations for policymakers and educators are: Provide more resources and training to teachers on how to use ICT effectively in the classroom. Improve the availability of ICT tools in schools. Provide technical support to teachers who need it. Encourage teachers to use ICT tools that are aligned with the curriculum and subject policies.

## CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

## AUTHOR CONTRIBUTIONS

Al-almi, A.M.: Conceptualization (lead), methodology (lead), writing – original draft (lead), review (supporting), editing (supporting), securing funding. Alhamami, M.: Conceptualization (supporting), methodology (supporting), writing – original draft (lead), review (lead).

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