Effectiveness of Digital Technology Tools in Teaching Pronunciation to Saudi EFL Learners

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The use of digital technology has become ubiquitous in every walsk of our lives. It has had a significant impact not only on social and technological aspects but also on educational areas, including (English) language teaching. Digital tools, the gift of new technologies, have proved to be an essential component of English Language Teaching (ELT). This study focused on finding out the efficacy of teaching pronunciation via digital tools (CDs, digital books, projectors, smart boards, and synchronous and asynchronous online materials) as opposed to traditional methods (printed materials, drilling, and imitating the teacher) to Saudi male EFL undergraduates. To investigate the differences, a quasi-experimental, pretest-posttest design (between-subjects) was used. The experimental and control groups (n = 25 in each group) were tested before and after the treatment on similar intra-sentential pronunciation activities at segmental (minimal pairs, word recognition, and consonant and vowel identification) and suprasegmental (stress patterns) levels. The results revealed that the participants in the experimental group learned pronunciation significantly better than the participants in the control group. This means that if students are exposed to digital technology tools, they will learn pronunciation better in comparison to the conventional method of teaching. The study is significant for both teachers and learners as it may help them make use of digital technology tools to improve students' pronunciation as well as their speaking skills .

Keywords: CALL; digital tools; pronunciation; EFL teaching and learning; segments and suprasegments, Saudi learners

The role of correct speech production is critical to understanding a language. Its basic utterances, from sounds to words, must be spoken appropriately and intelligibly. The ability to produce and perceive the important sounds of a language to achieve meanings in linguistic contexts is called pronunciation (Seidlhofer, 2011, p.56). In addition to having a good command of grammar and a sizable amount of vocabulary, intelligible pronunciation is a prerequisite for a clear understanding between the interlocutors. Poursalehi et al. (2014) assert that correct pronunciation ensures effective communication. Poor or bad pronunciation, on the contrary, can cause "pragmatic misunderstandings" (Pennington & Zegrac, 1998, as cited in Pennington, 1999). Morley (1998) also adduces that if learners lack proficiency in pronunciation skills, they may lose their confidence, which may influence them negatively while gauging their abilities and

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credibility. Fraser (2000) goes a step further. He declares that with bad pronunciation, learners may end up restricting themselves to socio-academic advancement and having limited work opportunities in the future.Therefore, to be able to communicate clearly and fluently, the enormous importance of pronunciation has now been widely accepted.

Although accurate pronunciation is a sine qua non for proper understanding of spoken discourse, it has been treated as the "Cinderella" of foreign language teaching (Seidlhofer, 2011, p.56). Most of the time, other components are greatly emphasized while pronunciation is hardly touched upon in the classroom. It is neglected (Derwing, 2010) and not given proper attention, whereas other sub-skills, i.e., grammar and vocabulary, are considered to a great extent. Consequently, the learners come up with faulty pronunciation and it becomes fossilized in the long run if not treated properly. This is also true for Saudi EFL students. Apart from that, lack of face-to-face contact with authentic pronunciation, spending more time with their mother tongue, the absence of some phonological-cum-phonetic features in their mother tongue, such as /p/, /t/, /v/, /d/, /t/, /tʃ/, lack of teaching resources, and traditional ways of teaching also contribute to the inadequate acquisition of intelligible pronunciation.

To address the perennial problem of pronunciation, digital technology offers many novel opportunities for EFL/ESL learners in a personalized and effective way (Blake, 2013; Liakin et al., 2015), which are lacking in traditional language classrooms. It shows an improvement over traditional methods and demonstrates the role that digital technology can play in teaching pronunciation. Digital instructional tools include a wide variety of digital technology consisting of video clips (online or recorded on DVDs), audio-video podcasts, video-conferencing tools, internet resources, and pronunciation software, to name a few. The learners can receive audio feedback on their utterances and performance after comparing them with simulated native speakers. They can see their lips' positions and manoeuvres in the oral cavity (manner and place of articulation) when they produce different sounds and compare their pitch contours with those of the native speakers or test their phoneme discrimination skills by playing a computerized version of software such as *Kaplan*. These modern technologies create a game-like atmosphere for pronunciation practices that do not exist in traditional classroom settings. Therefore, the purpose of this study is to examine the effectiveness of using digital tools for pronunciation teaching as opposed to traditional methods to Saudi male EFL undergraduates in suprasegmental (patterns of stress) and segmental (vowel and consonant sounds, sentence completion, minimal pairs, and word recognition) pronunciation activities.

Objectives of the Study
The study aims at:
1. Finding out the efficacy of digital tools in teaching pronunciation to Saudi EFL learners
2. Comparing the effectiveness of digital tools and traditional ways of teaching pronunciation in the case of Saudi EFL learners

Significance of the Study
Digital technology is now used in almost every aspect of our lives. It has had a tremendous influence not only on technological and social issues but also on educational fields such as (English) language instruction. The gift of new technology, i.e., digital tools, has proven to be a crucial component of English Language Teaching (ELT). The idea of incorporating digital tools into language classes as a way to improve learners' phonetic and phonological skills considerably has been advocated by Pennington (1999) and Celce-Murcia et al. (2011). Learners can use these tools for a variety of purposes without reluctance or exhaustion. Digital technology tools can be applied in the classroom to arouse students' interests, interaction, and motivation.

They can use pronunciation software to explore and take advantage of an infinite number of possibilities with mechanical, immediate, and personalized feedback in lifelike environments (Warschauer & Healey, 1998). What Levis (2007, p. 184) puts forward in the context of computers can be applied to digital technology tools that they can offer individualized instruction, regular practice via focused repetition exercises and listening discrimination, and automated visual assistance that shows learners how closely their pronunciation resembles model pronunciation. As a result, their performance will be enhanced and this will be reflected in their learning outcomes because those who are taught by using digital tools have better grades than those who are taught by instructors in conventional classrooms.

Theoretical Framework and Literature Review

The last part of the twentieth century proved highly valuable for changes in instructional technology. Technological advances, along with multimedia, the internet, and the World Wide Web, have paved the way for developing novel language learning and teaching techniques. The process of learning has become a web of interconnected platforms, which includes not only teachers, students, and books but also modern technological tools such as computer-assisted language learning (CALL), which has become well established in L2 settings for enhancing pronunciation with digital technologies. The American Council on the Teaching of Foreign Languages (ACTFL) also noted that language learning and teaching have benefited from the use of modern technology (ACTFL, 2013). It is becoming increasingly uncommon to find a language class that does not make use of some sort of technology, which can vary from audio-visual and animation effects in language teaching classrooms to software programmes, databases, and web pages that a user may access. Other multimedia resources, such as laptops, tablets, iPods, and cell phones, have been transformed into a type of portable classroom and have made language learning easier than ever. Texting, calling, and emailing have turned into techniques students can put to use to improve their language skills and sub-skills. The majority of English lessons are taught nowadays using internet-connected interactive whiteboards (IWBs) with visualizers, scanners, and other digital accessories (Moss et al., 2007). Hockly (2011) also emphasizes the integration of the latest technology into teaching and learning. According to Zaman et al. (2021), computer-aided instruction (CAI) boosts students' learning capacity and understanding, hence it should be used in academic contexts. Larsari (2011) similarly asserts that students' linguistic and pragmatic competencies will be improved if EFL instruction is supported by Computer-Mediated Communication (CMC).

English language instructors have always focused on enhancing the language skills of their learners and have experimented with a variety of teaching methods, improvising and even improving on previous techniques. When it comes to pronunciation teaching or learning, there is "a lack of serious research" (Gilakjani & Ahmad, 2011). Hashemian and Heidari Soureshjani (2013) pointed out that the ability to speak English entails several skills, for example, grammar, vocabulary, and pragmatics, but pronunciation is the most important of all of them. Therefore, investigating the pronunciation and the relative effectiveness of different methods and materials with different types of learners is of critical importance (Macdonald et al., 1994; Munro & Derwing, 1995). In this regard, computer-aided pronunciation (CAP) in conjunction with CAI offers an opportunity for improving learners' pronunciation as well as phonetic and phonological competence (Pennington, 1999). A step in this direction was taken by some scholars recently. A few attempts are summarized below.

Al-Qudah (2012) used computer-assisted programmes to examine 149 (76 female and 73 male) students' proficiency in English pronunciation in the second semester of their third year at Al Zaytoonah University, Jordan. The participants were categorized into the control group and

the experimental group. To teach English pronunciation, printed materials were used for the participants in the control group, whereas the experimental group was given training through a computer-assisted program. A descriptive analysis was conducted for the pre-test and post-test of the participants' English pronunciation. Statistical techniques such as analysis of variance (ANOVA) were utilized to compare the control and experimental groups along with their male-female divide. The post-test results revealed significant variations in favour of the experimental group, but the gender-wise performance of students remained statistically non-significant.

Ong'onda and Muindi (2016) investigated whether the introduction of CALL software would affect learners' pronunciation while studying English phonetics at Mount Kenya University. The research design was quasi-experimental, with two groups, i.e., the experimental and the control group. There were 40 students in each group. The experimental group was exposed to computerized pronunciation instruction, but the control group was traditionally trained in pronunciation. The findings suggested that exposure to Computer Assisted Pronunciation Training (CAPT) had a positive effect on EFL students. It was also recommended that if CAPT programmes were added to pronunciation training, they could help learn the target language.

Liu and Hung (2016) employed My English Tutor (MyET), a CAPT software, to improve the pronunciation of fifty-one Taiwanese vocational institutes. They aimed at the sentence level structure, including target phrases with segmental and suprasegmental characteristics, at the beginning of every session. The participants worked on the software individually and rehearsed the sentences given in the task. For the exam, they completed three activities: (1) listening to a sentence and repeating it; (2) reading aloud a sentence without listening to a model of a speaker from an English-speaking country; and (3) listening to and repeating questions and responding to them. After giving the instruction, participants were given a questionnaire and a computerized speaking test to answer. The findings of the repeated measures analysis of variance suggested that the quality of the participants' pronunciation improved significantly.

Another study on improving EFL students' pronunciation skills through Web-based/CALL instruction was conducted on 85 Iranian students by Rahnavard and Heidar in 2017. The researchers used the Oxford Placement Test to validate their participants' levels of proficiency. They were randomly distributed into two groups consisting of 30 participants in each, i.e., 30 in the control group and 30 in the experimental group. Participants in both of these groups were given a pre-test of pronunciation, and then the control group was trained through traditional methods, whereas the experimental group was given the treatment of CALL/Web-based instruction for 12 sessions. The data analysis indicated a statistically significant difference in performance between the two groups; namely, the experimental group displayed that web-based learning had positive effects on the participants' motivation to improve pronunciation. They recommended using web-based instruction for second language learners, instructors, and syllabus designers.

Syafitri et al. (2018) also focused on improving the pronunciation of beginner-level students in a public high school in Indonesia using the multimedia software PowToon. They had six meetings with their participants, employing quantitative as well as qualitative data collection techniques such as tests, observation, questionnaires, interviews, and diaries. The findings of this research showed that utilizing PowToon was effective in improving participants' pronunciation in a speaking class. It raised their levels of motivation, attention, and interest in learning. Hence,

it was suggested that for teaching speaking, instructors should make use of PowToon, particularly if they want to improve their learners' motivation and pronunciation.

In 2019, Khafajy investigated the impact of electronic language software on the English pronunciation skills of grade four students in a primary school. To achieve this goal, the researcher developed two instruments: one was a questionnaire to determine essential and suitable pronunciation abilities, and the other was a pre-test and post-test tool with a key to assess pupils' productive pronunciation abilities. This quasi-experimental study had 60 male and female grade-four primary stage participants divided into the control group and the experimental group. The control group was instructed using traditional methods, whereas the experimental group was trained using electronic language software. The findings of the study showed that utilizing the electronic language software to enhance English pronunciation abilities in grade four primary stage pupils had a good effect. It was suggested to keep up with the trend of using CAPT applications in a blended learning environment to help elementary school pupils enhance their English pronunciation abilities.

Utilizing a technology-based English pronunciation app, Haryadi and Aprianoto (2020) measured the self-learning and participation of students at Mandalika University of Education (UNDIKMA), Indonesia. In a quasi-experimental study, forty-eight students aged 19–21 were divided into two groups (24 in each) and given pronunciation training using the app. Data collected through interviews and observation showed that learners' participation, i.e., engagement, attitude, and conduct, as well as self-learning, improved.

Bozorgian and Shamsi (2020) tested the efficacy of CAPT on five Iranian EFL students. They trained these students on suprasegmental aspects of English pronunciation using MyET for two months. The data collected through direct observation, interviews, and reflective notes of learners and researchers showed that the subjects improved their performance in the use of suprasegmental features. In addition to that, students were shown to have developed a positive attitude towards the tool and technique because they helped them become confident and autonomous in pronouncing English.

Sosas (2021) measured the effects of e-technology tools while teaching English speaking to university students aged 17–19 years in the Philippines. She divided 21 participants from junior, sophomore, and senior levels and had Focus Group Discussion (FGD) in language classes. The participants frequently used modern technology tools such as correspondence via email, interaction through social media, video conferencing, real-time and actual compering, and onstage speaking performances while they were involved in real professional and academic situations. The results showed that participants had positive learning outcomes in terms of speaking English.

Using digital technology tools in any form not only helps improve pronunciation but also language in general (Liu & Hung, 2016; Ong'onda & Muindi, 2016) and makes learners engaged, confident, motivated, and independent (Haryadi & Aprianoto, 2020; Syafitri, 2018). These researchers applied various forms of digital tools to improve their participants' pronunciation and concluded with positive results (at both levels of segmental as well as suprasegmental). In addition to that, Dekaney (2003), Hirata (2004), AbuSeileek (2007), and Neri et al. (2008) reported that learners who were taught with CAPT did better than those who were instructed with traditional teaching methods. However, only a few of them investigated the effects of using digital tools in the context of Saudi EFL learners and compared the differences between traditional and digital ones to improve pronunciation skills. Furthermore, Almaqrn and

Alshabeb (2017) noticed that in Saudi Arabia, neither instructors nor students put much emphasis on improving pronunciation skills. The researchers also observed that Saudi EFL students have difficulty listening to and pronouncing English correctly and face many problems. This circumstance hinders the development of their linguistic skills, too (Nasim et al., 2022). The goal of this study is to provide a solution that can facilitate the process of pronunciation learning. Plenty of data from several studies also demonstrates the significance of digital tools using the CALL approach to teach pronunciation. In addition to narrowing the research gap in pronunciation teaching and solving its learning problems, this study is a step towards contributing to the pedagogy of pronunciation integrated with multi-modal resources.

Research Questions
1. What is the effect of using digital tools to teach pronunciation on Saudi EFL learners' achievement?
2. Which is the more effective way of teaching pronunciation to Saudi EFL students: a digital-tool-embedded
    approach or a traditional method?

Hypotheses
1. Teaching pronunciation using digital tools improves Saudi EFL students' pronunciation.
2. There is a significant difference between the effects of using digital technology tools and traditional methods on teaching pronunciation.
    Ha: $M1 \neq M2$ and
    H0: $M1 = M2$

Method

Research Design
This study is quantitative in nature, and its framework is a quasi-experimental, pretest-posttest (between-subjects) design. Two groups, control and experimental, were formed from the two already existing classes being taught by EFL instructors. The independent variable is the treatment of the CALL approach along with some digital technology tools (smart boards, projectors, digital books, CDs, and asynchronous and synchronous online materials) in the experimental group versus the absence of digital technology tools in the traditional teaching approach (teacher-imitation, drilling, and printed materials) in the control group. The dependent variable is the learning outcome of students on the pre-test and post-test.

Sample
The participants, selected through convenience sampling, were third-level Saudi male students at Al-Ghad International College for Applied Medical Sciences in Tabuk, Saudi Arabia. They were categorized into two groups: control and experimental. Each group was comprised of 25 students of mixed abilities in the English language. The age of these participants ranged from 17 to 21 years old. All of them were native speakers of the Arabic language. Before starting the study, a test of normality was performed on the sample's learning outcome. The Shapiro-Wilk value of the pre-test scores was 0.219 and of the post-test was 0.367, which indicates the normality of the data was more than 0.05 in each case.

Instrument
The pronunciation tests consisted of items and audio clips from the book that the participants were studying. The book, "*Ship or sheep?: An intermediate pronunciation course*", was written by Baker (2016) and published by Cambridge University Press. Both the pre-test and post-test were similar in design and had activities on sound discrimination, identifying sounds, listening for words, distinguishing minimal pairs, listening for sentences, and filling in the

blanks. These exercises were grouped into four categories: vowel sounds (VS), consonant sounds (CS), stress identification (SI), and sentence completion (SC). Each question carried 1 mark, and there were a total of 100 questions for 100 marks. The participants were given 45 minutes to complete each test before and after the treatment. The tests were validated (reviewed) in terms of their content and form by three EFL professionals. The reliability calculated for these tests was reported to be 0.79. These tests measured the students' pronunciation proficiency. The materials provided on computers were the same as the materials in the textbooks. It included smart boards, projectors, digital books, CDs, and asynchronous and synchronous online materials as digital tools, which covered the desired aspects of the study.

Procedure

The research was conducted over 15 weeks. It included a pre-test at the beginning of the study, a treatment session during the study, and a post-test after the treatment. The classes were held three times a week, and the duration of each class was 100 minutes. The academic objectives were the same for both groups, and the same homework was given to each group. In the 13th week, the post-test was administered. Students were given instructions on taking the tests. They were also asked to pronounce the phonemes, words, and sentences on the tests during the treatment session. The participants in the experimental group were also allowed to record their speech production. The instructors teaching those classes facilitated the experiment.

A pre-test at the beginning of the study was administered to both the control and experimental groups (n = 25 in each group) to check initial group achievement. They were assessed on identical intra-sentential pronouncing activities at the suprasegmental (patterns of stress) and segmental levels (vowel and consonant sounds, sentence completion, minimal pairs, and word recognition). During the treatment session, the experimental group was exposed to digital technology in its various forms (smart boards, projectors, digital books, CDs, and asynchronous and synchronous online materials). The computers had headsets for students to use in the language laboratory, and all devices were connected to the Internet. All subjects used digital tools under the guidance of their instructors. The instructors helped them to use all the devices effectively. On the other hand, the control group was restricted to learning the pronunciation of the English language through traditional methods (teacher-imitation, drilling, and printed materials). After the treatment, both the control and experimental groups (n = 25 in each group) were evaluated again on identical intra-sentential pronouncing activities at the suprasegmental (patterns of stress) and segmental levels (vowel and consonant sounds, sentence completion, minimal pairs, and word recognition).

Data Analysis

The present study adopted a pre-test and post-test design, a quasi-experimental research design to test the hypotheses posed in the study. To achieve the objectives of the research and test the hypotheses, the researchers used the Spearman-Brown equation to calculate the reliability coefficient, descriptive statistics, Pearson correlation coefficient, and t-tests. To process the data and obtain accurate results, SPSS version 25 was used.

Results

Participants' overall performance on the pronunciation pre-test

The mean scores and standard deviations of the control group and the experimental group on the pre-test of pronunciation can be seen in Table 1.

Table 1

The pre-test results of the pronunciation test for the control and experimental groups

				t-test			
	N	Mean	SD	t	df	Sig.(2-tailed)	Sig.(1-tailed)
Control Group Pre-test	25	69.44	13.55	.368	48	.715	.357
Experimental Group Pre-test	25	68.08	12.59				

The mean scores for using the traditional method for teaching pronunciation were (M = 69.44, SD = 13.55) in the control group, while they were (M = 68.08, SD = 12.59) in the experimental group. The table also displays the difference in mean scores of the two groups on the pre-test using the independent-samples t-test. At the 0.05 level, there was no statistically significant difference between the control and experimental groups at the start of the test and before any kind of treatment was given to the experimental group because the p-value was greater than 0.05 (p = 0.357, df = 48, p≥0.05). This means each group consisted of students with a similar level of competency in pronunciation activities. Figure 1 depicts a graphical comparison of the results of the students' performance on the pre-test between the control and experimental groups.

Figure 1

Pronunciation pre-test scores of the experimental and control groups
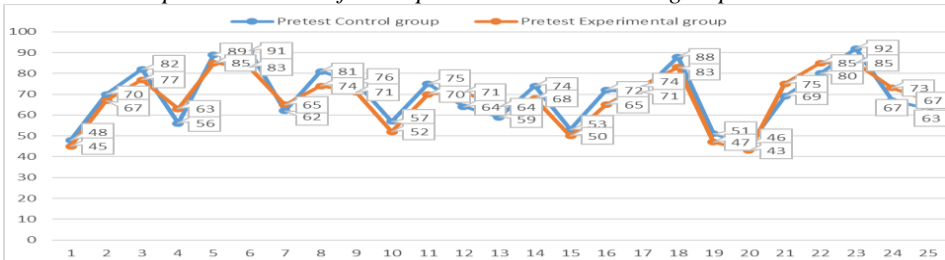
A comparison of the efficacy of teaching pronunciation via digital tools and traditional methods between the two groups

To answer the research questions that investigate the efficacy of teaching pronunciation via digital tools and compare the effectiveness of the two instructional methods used with the two groups, the mean scores of the participants in the experimental group and the group control on the post-test of pronunciation were analysed. The results are displayed in Table 2.

Table 2

The post-test results of the pronunciation test for the control and experimental groups

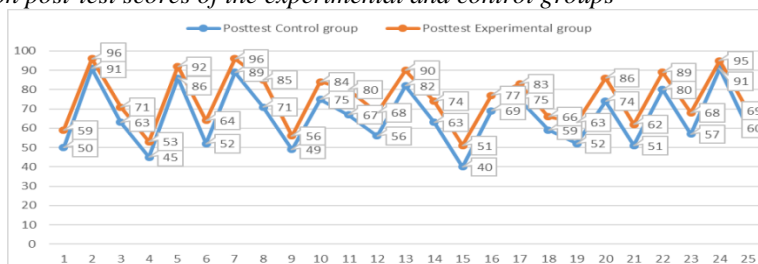|				t-test			
	N	Mean	SD	t	df	Sig.(2-tailed)	Sig.(1-tailed)
Control Group Post-test	25	65.88	15.07	-2.23	48	.030	.015
Experimental Group Post-test	25	75.08	14.04				

The mean score of the experimental group was (M = 75.08, SD = 14.04) whereas it was (M = 65.88, SD = 15.07) for the control group, as presented in Table 2. The independent samples t-test revealed a statistically significant difference in mean scores between the experimental and

control groups (p 0.015, df = 48, p≤0.05). Figure 2 graphically represents a comparison of the score results between these two groups on the post-test.

Figure 2
Pronunciation post-test scores of the experimental and control groups


Testing of hypotheses

To test the directional hypotheses 1 and 2, the significance level α=0.05 was determined. Table 1 and Table 2 report the results of the differences between the experimental and control groups on the pre-test and the post-test. The mean differences between the control and the experimental group on the pre-test were not statistically significant (p≥0.05, p =.357). On the other hand, the mean differences between the experimental and control groups on the post-test were statistically significant (p≤0.015). Therefore, Ha: M1≠M2 will be retained, and H0: M1=M2 will be rejected here.

Participants' performance on the segments and suprasegments on the post-test

For analysing the participants' performance on the pronunciation test in detail, the researchers categorized the tests into four parts: vowel sounds (VS), consonant sounds (CS), stress identification (SI), and sentence completion (SC). The post-test performance of participants on these segmental and suprasegmental units is shown in Figure 3.

Figure 3
Segmental and suprasegmental analysis of the experimental and control groups
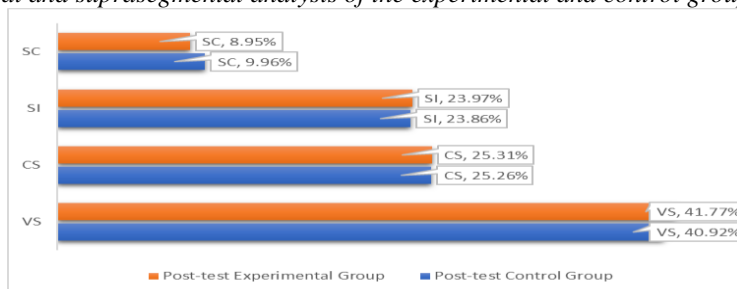
Discussion

The participants' performance in the control group was lower (40.92%) on discriminating vowel sounds, i.e., in minimal pairs and categorizing words under which they belong. Similar were the results for the control group in recognizing the consonant sounds (25.26%) and stress identification (23.86%). On the other hand, the experimental group showed improvements in all three of these categories when they were taught via digital tools. Their performance improved in identifying vowel sounds (41.77%), categorizing consonant sounds (25.31%), and marking stress patterns (23.97%). The participants, however, did not show any

improvement in the fourth category. They showed a drop in the performance of choosing a word for sentence completion from 9.96% to 8.95%.

Successful and effective communication depends on a speaker's ability to pronounce what they are saying in the proper way. Correct pronunciation includes intra-sentential pronunciation at segmental (minimal pairs, word recognition, and consonant and vowel identification) and suprasegmental (stress, intonation, and rhythm patterns) levels. Therefore, the best method of teaching them is always recommended. This study analysed the pronunciation activities of Saudi EFL students with and without digital tools to show the efficacy of the former.

The data on the pre-test revealed that learners in both groups, i.e., the experimental group and the control group, had a similar degree of pronunciation competence. However, the data from the post-test made it clear that the participants who were taught pronunciation via digital technology tools became significantly more competent than those who were taught via the traditional method of learning pronunciation, i.e., a case where their teachers taught them using teacher-imitation, drilling, and printed materials. In other words, after 13 weeks following the start of the study, teaching pronunciation using digital tools embedded in the CALL approach was more effective than the traditional way of teaching pronunciation to the EFL students at Al-Ghad College, Tabuk. Therefore, the researchers declare that the intervention of digital technology tools will improve the experimental group's pronunciation in the post-test.

The result of the directional hypotheses also proves the significant differences between the two ways of teaching. The acceptance of the alternative hypotheses and the rejection of the null hypothesis showed that using various forms of digital technology tools in a CALL embedded setting will bring out significant differences between those who did not use them.

The findings on segments (VS, CS, and SC) and suprasegments (stress patterns) also justify the inclusion of digital tools to effectively teach pronunciation. The phonological and phonetic contradictions in consonant and vowel sounds and stress patterns were better understood by the participants when they were taught and trained via digital tools, while the participants in the other group, who were taught using traditional methods, were not found to be as competent as their counterparts. Sentence-completion activities were found to have no improvement but were favourable towards traditional pronunciation teaching.

The outcome of this study matches that of previous studies. For example, in their investigations, AbuSeileek (2007) and Luo (2016) found that using digital tools such as CAPT helped learners better understand segmental and suprasegmental features, particularly stress patterns. Dekaney (2003) endorsed the use of teaching IPA using technology, and Neri et al. (2008) discovered the usefulness of CAPT in teaching isolated words. Mehrpour et al. (2016), Liu and Hung (2016), and Gilakjani and Rahimy (2019) strongly backed up the role of teaching pronunciation in general, as their studies revealed favourable results for digital tools.

This marginal increase in the performance of the participants who were exposed to the digital tools painted a positive picture of using digital technology tools with its latest tools to create a congenial atmosphere that facilitated learners to take part and interact with each other, leading to an improvement in their pronunciation. Clements and Sarama (2003) also support the idea of using appropriate technological resources because they are beneficial to learners, enhancing their linguistic knowledge. The findings are also in line with the assertions made by Pennington (1999) and Eskenazi (1999, p. 448) regarding CAP and CALL. Pennington (1999)

observed that CAP outperforms HAP (human-aided pronunciation instruction such as a human pronunciation coach or a phonetician). Eskenazi (1999, p. 448) identified five major features of successful learning present in the CALL program: (1) students listen to a lot of speech; (2) they speak more and more; (3) they get good feedback; (4) they are relaxed and comfortable without anxiety; and (5) they are assessed continuously. He also believes that the key characteristic of the CALL is to provide feedback via visual comparison of native models with the learners' speech. Therefore, in the light of these statements, it can be stated that using digital technology tools is of immense help in improving pronunciation.

From these findings, it can be inferred that the participants were more motivated and interested, and found the use of digital technology tools assisted their pronunciation learning. It is worth mentioning that they preferred the simulated voices of native speakers over their teachers, who presented them with printed materials, taught them how to pronounce words and sentences, and asked them to imitate. During the digital technology session, the teacher was a facilitator and a guide who instructed the participants on what, when, and how to use the learning process. As a result, pronunciation instruction became learner-centred rather than teacher-centred.

One reason for the positive outcome of using digital technology tools for pronunciation improvement could be the shifting perspective towards them. Learners are attracted to using it. They are called *digital natives,* and they want to replace traditional forms of learning with digital technology (Srivastava, 2020). Walker and White (2013) also assume that every youngster nowadays has a natural interest in digital technology and has a lot of knowledge about it. Using digital technology also helps in improving their grades (Srivastava, 2020), and this reason is enough to motivate them to use it and bring about more changes in their pronunciation. Furthermore, these tools are integrated in such a way that learners can control their process of pronunciation learning. They may have access to the material at any time, which promotes their autonomy.

Conclusion and Recommendations

The significance of digital technology and its application to teaching, particularly languages, has grown recently. Digital tools from computer devices to mobile phones facilitate the teaching of pronunciation as well as other language skills. It has a remarkable role to play in English language teaching and in setting a favourable stage for reform and exploring new teaching models in the new epoch. It has been proven that digital technology tools play a positive role in enhancing the activities and initiatives of students in learning and improving their pronunciation effectively.

This study primarily investigated the efficacy of digital technology tools in teaching pronunciation to Saudi EFL students at Al-Ghad College, Tabuk, Saudi Arabia. Secondly, it compared the differences between teaching pronunciation via digital technology tools and traditional methods. The results on the pre-test revealed no significant difference between both groups, i.e., the experimental and control groups, before the start of the treatment, but the results on the post-test revealed a significant difference, proving the efficacy of digital technology tools over traditional methods of teaching pronunciation. Therefore, the null hypothesis was rejected and the alternative hypothesis was retained, meaning that there was a significant difference between the participants' performances in the pronunciation activities as given in the tests. In other words, participants in the experimental group showed that digital technology tools assisted them in learning pronunciation more than the traditional method. These results underpin the findings of previous studies by Pennington (1999), Neri et al. (2008), and Celce-Murcia et al.

(2011), where learners become engaged, develop an interest, and are motivated to explore several possibilities in digital technology tools.

The study has pedagogical significance for students, teachers, and researchers, as well as curriculum planners. The teaching of pronunciation can be made engaging, enjoyable, and interesting using digital tools, and students may be able to acquire the language better. Once motivated, they will apply all their senses to learning pronunciation in different programmes, such as tongue twisters, sound animations, videos, and songs, along with authentic material. Students will develop autonomy as they may use these gadgets according to their pace and availability.

There are pedagogical benefits for teachers, as teaching will become learner-centred and learning-centred, as opposed to teacher-centred in traditional classrooms. They may also have an opportunity for self-development to become qualified and use this technology effectively. They will have more of a role as supervisors than as transmitters of information.

The planning of the syllabus is based on learners' needs, and new technology will be required by curriculum designers. It should be regarded as an essential part of the course content. Therefore, the teaching context should be developed and learning opportunities should be created for pronunciation teaching. Similarly, researchers should also conduct more research in different contexts connecting psychological constructs to technological tools.

Limitations
This study focused only on measuring the effectiveness of digital technology tools mentioned in the study. There are a number of other digital tools that may be integrated to test different effects on improving pronunciation. Also, the study involved students training, practising, and responding to the tests by choosing the correct sounds, stress, and words. It is recommended that future studies may test students' pronunciation by recording their responses. The sample of this study was limited to Saudi male EFL students only.

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