

The Effects of Blended Learning on First-Year Arab University Students' Oral Production

Salah M ALI¹, Kamariah Yunus², Turkey Alshaikhi¹, Mohammed Abdulgalil Abugohar³, Taleb Mohana¹, & Taya Mustafa¹

¹ University of Tabuk, Institute of Languages, Saudi Arabia

² Universiti Sultan Zainal Abidin (UniSZA), Malaysia

³ Dhofar University, Salalah, Oman

Correspondence: Salah M ALI, University of Tabuk, Institute of Languages, Saudi Arabia.

Received: June 1, 2023 Accepted: August 17, 2023 Online Published: September 7, 2023

doi:10.5430/wjel.v13n8p146

URL: <https://doi.org/10.5430/wjel.v13n8p146>

Abstract

Arab language learners struggle with oral production due to limited exposure to the English language, the absence of direct interaction with English-speaking populations, and the prevailing English teaching and learning approaches offered by educational institutions. Blended learning approaches in language teaching and learning were established in the English as a Foreign Language (EFL) context to improve students' skills. This study examined the impact of a blended learning approach on first-year Arab university male and female students' oral production using a mixed-methods' approach. The study enrolled 120 First-Year Arab university students from four Arab countries (Syria, Jordan, Egypt, and Saudi Arabia). Study participants from each country were then randomized into two groups: experimental and control groups. Additionally, four teachers and four students volunteered to participate in study interviews. Data was collected using three research instruments: The Oxford Online Placement Test, the pre-test and post-test, and semi-structured interviews. The use of the blended learning approach in the EFL context had a positive impact on first-year Arab university students' oral production. Using a blended learning approach in EFL contexts can enhance students' achievement and improve students' engagement. However, instructors were faced with barriers such as limited technological infrastructure, uneven digital literacy, and cultural norms and values when attempting to use the blended learning approach in Arab EFL classrooms. There are significant implications for instructors and institutions that seek to use a blended learning approach, such as pedagogical adaptation, technological competence, content creation, and individualized learning.

Keywords: blended learning; tertiary education; oral production; speaking skills

1. Introduction

Advances in learning technology have compelled institutions of higher education to reshape their program designs and delivery modes. Universities should assist graduates to develop a skill set that will facilitate career progression by cultivating an atmosphere in which students feel comfortable with technology-based learning (Bernard et al., 2014). Currently, technology is considered the focal point of education. Furthermore, education has benefited from technological instruments that enhance the teaching and learning process (Bæ & Gulbrandsen, 2021).

Blended learning, also known as hybrid learning or B-Learning (Shu & Gu, 2018), which is aided by technology, involves combining technology with face-to-face instruction to deliver conventional class activities via computer-mediated and online training models. Therefore, instructors act as facilitators, and students may engage, learn, and ask questions even outside typical school hours. In summary, blended learning is a flexible education method that combines online distant learning instructional materials with face-to-face instruction (Yang, Dibyamandala, & Mangkhang, 2022).

Blended learning offers numerous benefits over face-to-face classrooms. For instance, blended learning enhances oral production, accords learners with various personality types the opportunity to talk, and facilitates independent learning (Hojnacki, 2016). Universities face increasing pressure to enhance students' academic performance and offer students an optimal learning environment. Blended learning had already been established as a best practice way before the present cohort of students were admitted to higher educational institutions; nonetheless, educational institutions have had to accommodate the changing needs of each generation of students (Cuesta Medina, 2018).

Current students have been brought up in technology-rich surroundings and, therefore, are more technologically literate than prior generations. However, research indicates that students' technological savviness does not always translate to confidence, particularly in an educational context (Johnson et al., 2016).

English is a lingua franca in the world. Despite its ubiquity and the relatively recent emphasis on English fluency and the communication of meaning rather than grammatically accurate English-speaking proficiency, English language learners in EFL environments find it difficult to attain English-speaking proficiency. Some authentic English characteristics are difficult to comprehend and express

meaningfully. Technological advances have availed resources to assist students in improving their English skills. But overcoming the challenges of authentic spoken English remains unwavering despite several research studies integrating different technological aspects into language courses (Ainol & Zailin, 2012).

The productive development of human resources is currently a focus of higher educational institutions in four Arab universities in four nations (Syria, Saudi Arabia, Jordan, and Egypt). Education is more crucial than ever as it equips individuals with the knowledge, skills, and adaptability needed to navigate and thrive in a complex and evolving society. These universities are now focused on providing educational services that advance economic progress and meet labour market needs. In addition, the four Arab universities intend to attain global education key performance indicators (KPIs) above the worldwide average by assisting their students to construct digital infrastructure. Therefore, there is a pressing need to incorporate a blended learning approach into classroom instruction so that students may comprehend the significance of digital technology in societal development.

The current paper investigates the effects of a blended learning approach on first-year Arab university students' oral production. Blended learning, an educational teaching and learning paradigm that is not limited to language education, has been studied across other disciplines (Dumford & Miller, 2018). Many research studies have examined the impact of blended learning on student writing, listening, and reading skills, and sub-skills such as grammar (Qindah, 2018) in the field of language education. Since oral competence, which is a crucial aspect of acquiring a second or foreign language, is the primary objective of language education in the Arab world, research is needed to evaluate the beneficial effects of a blended learning approach on language learners' oral communication.

The current research study examined the impact of blended learning on tertiary learners' speaking performance by addressing the following research question:

“Does the blended learning approach have an impact on first-year Arab university students' oral production?”

2. Literature Review

A considerable amount of research that used blended learning as its main theme in various and different contexts exists in the literature. Blended learning received increasing focus before and after the COVID-19 pandemic. Ibrahim and Alwi (2017) conducted a quasi-experimental, pretest-post-test design study to examine the impact of blended learning in lowering anxiety and fostering public speaking skills of ESL learners to a sample of 65 learners enrolled in the fifth semester of the bachelor's in a civil engineering program at a Malaysian technical university using the Personal Report of Public Speaking Anxiety as the pre and post-test to assess students' level of anxiety pertaining to public speaking. Ibrahim and Alwi (2017) also implemented the Competent Speaker Speech Evaluation Form to measure the students' public speaking performance at pre and post-conditions. These authors' study findings indicated that a blended learning environment has a positive influence on the development of students' public speaking skills.

Moreno and Malovrh (2020) measured the effects of a flipped and blended course design on the four reading, writing, speaking, and listening skills for beginner-level Spanish following a traditional present-practice-produce instructional format by comparing participants to a control group. The findings of their pre/post-test design showed that two experimental groups, which met three days per week in the classroom and used flipped-blended coursework, developed receptive and productive skills at a faster rate than a control group that met four days per week in a classroom only. These findings offer a template for the successful restructuring of language programs through the incorporation of a cognitive model of learning processes, controls for depth of language processing, and a reconceptualization of instructional context.

In contrast, Yoon and Kim (2020) investigate the effectiveness of flipped learning in a Korean EFL context by comparing changes in oral production from flipped learning to blended learning and flipped learning to conventional learning. Study participants included 70 first-year students in a Korean university who were divided into three groups: conventional, blended learning, and flipped learning. Online contents were used for the flipped learning group, online contents, and messengers for the blended learning group, while the conventional group received paper-based activities. The pre- and post-tests were administered and evaluated using a rubric following the IELTS speaking assessment criteria. There were significant increases between the pre-test and post-test scores regarding fluency and coherence and lexical resources for all three groups. However, only the two experimental groups (flipped learning/blended learning) had significant improvements in terms of grammatical range and accuracy, and pronunciation.

Likewise, Baek and Lee (2021) proposed a blended learning model that incorporated mobile devices and social networking to overcome the contextual limitations of Korean or Asian EFL learners while examining the impact of the model on English speaking skills. The research study investigated the influence of mobile-assisted blended learning (MABL) on the students' level of speaking proficiency in an experimental design involving 125 participants. MABL positively altered the students' speaking proficiency and its aspects, such as intelligibility and comprehensibility.

Terzioğlu and Kurt (2022) elucidated the impact of a blended-learning-based learning management system (LMS) on speaking fluency and listening skills development among intermediate students in Turkey in a quasi-experimental study. Fifty Turkish-speaking students from two classes who were divided into a control group and an experimental group utilized an interactive platform to learn English over eight weeks. The study adopted a pre and post-test design. The mean listening and speaking post-test scores of both groups were compared by effect size, analysis of covariance, paired sample *t*-test, and independent samples *t*-test. Moreover, a questionnaire and an interview were conducted to investigate students' perceptions regarding the LMS on speaking fluency and listening skills. Study findings

revealed a significant difference between the two groups. Thus, the experimental group surpassed the control group in both speaking fluency and listening skills, as reflected by the positive evaluations of LMS and the reports obtained from the questionnaire and the interviews.

A review of 361 sample documents on English-speaking (ES) teaching and learning in Scopus (2010–2021) by Wang, Abdullah and Leong (2022) analyzed using Excel and VOSviewer 1.6.17 by the number of yearly publications, countries, authors, citation numbers, and keywords. They found that the number of publications on ESL education increased from 2010 to 2021, whereas the research topics were of a multidimensional trend, covering communicative skills, language knowledge, assessment, teaching or learning methods, ICT-related applications, and cognitive factors. Notably, within the realm of ICT-related applications, notable areas of investigation included flipped classrooms, blended learning, and e-learning, while cognitive factors examined encompassed motivation, anxiety, and affect. They also reported that learners in higher educational institutions, rather than children, were the main research subject of ES education. Their study sheds light on the focus of blended learning in published literature.

Staker and Horn (2012) surveyed various practices and concepts regarding blended learning in K-12 education and then pointed out that many BL programs fall into one of four main categories: rotation model, flex model, self-blend model, or enriched-virtual model. The diagram in Figure 1 depicts the four common blended learning models emerging across the K–12 sector today.

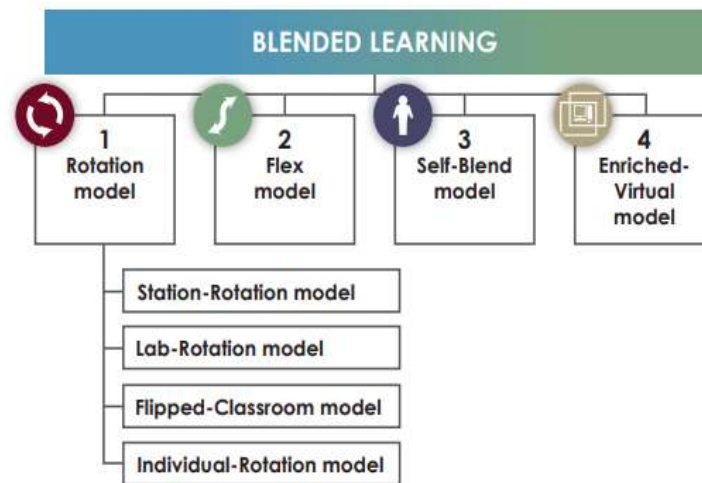


Figure 1. Blended-learning models (Staker and Horn, 2012)

Staker and Horn (2012) describe the rotation model as a program in which within a given course or subject (e.g., math), students rotate on a fixed schedule or at the teacher's discretion, between learning modalities, at least one of which is online learning. The flex model represents a program in which content and instruction are delivered primarily online, with students moving on an individually customized, fluid schedule among learning modalities, and the teacher-of-record is on-site. The self-blend model describes a scenario in which students choose to take one or more courses entirely online to supplement their traditional courses and the teacher-of-record is the online teacher. Lastly, the enriched-virtual model implies that students divide their time between attending a brick-and-mortar campus and learning remotely using online delivery of content and instruction within each course (e.g., math). In this study, the researchers selected the blended learning rotation model as it aligned with the nature of the EFL classes researchers targeted in this study.

The rich record of research on blended learning makes it a proven, feasible method to implement in an EFL context of Arab students. Furthermore, it allows experimental evaluation of its impact on the deficiencies in English speaking proficiency and oral production observed among Arab students.

Following the thorough literature review conducted, a gap in blended learning research regarding its application and efficacy in addressing the specific requirements of Arab English as a Foreign Language (EFL) students' oral production was identified. While numerous studies have examined the advantages of blended learning in a variety of educational contexts, there is a conspicuous lack of research on how blended learning strategies cater to the linguistic and cultural nuances of Arab learners seeking to improve their oral production. Scarce research has been devoted to understanding how blended learning corresponds with the distinctive challenges and requirements of Arab EFL students, as many extant studies are primarily focused on Western or Asian contexts. This gap highlights the need for a study that explicitly investigates the impact of blended learning on English speaking skills among Arab EFL students with a view to contribute valuable insights to improve the efficacy of EFL instruction for this unique learner group.

3. Methodology

3.1 Participants

This study recruited a random sample of 120 first-year male and female university students from four Arab countries (Syria, Saudi Arabia, Jordan, and Egypt). Riazi (2016) states that random sampling accords all persons in a population an equal opportunity to participate in

research. There were 15 students in a control group and 15 students in an experimental group from each country. All participants spoke Arabic as their first language and were of the same educational background. All participants had undertaken the Oxford Online Placement Test (OOPT) to ensure they were homogeneous in terms of the English language proficiency (Upper A2 and lower B1). Participants' ages ranged from 18 to 20 years old. Students had been studying the English language for 15 hours each week for two months. Notably, all participants verbally consented to take part in the study. All participants were also informed that they could withdraw their consent to participate in the study at any point during the conduct of the study. Moreover, participants were informed that they would remain anonymous throughout the study and would be informed of the study findings. Furthermore, the researchers selected four EFL instructors with an M.A. in Teaching English as a Foreign Language (TEFL) and a Certificate in Teaching English to Speakers of Other Languages (CELTA) to teach the two groups in each country. Lesson plans were sent to the designated instructors to standardize teaching instruction across the board. In addition, experienced certified Diploma in Teaching English to Speakers of Other Languages (DELTA) holders administered the pre-and post-tests to all groups.

3.2 Instruments

The researchers used the following instruments to collect study data:

3.2.1 The Oxford Online Placement Test (OOPT)

The Oxford Online Placement Test (OOPT) was conducted to assess participants' homogeneity in terms of English language proficiency. All students were ranked between upper A2 and lower B1. OOPT was chosen for several reasons. First, on the recommendation of three TEFL full professors as well as the Oxford University Press (OUP) representative as it is fit for study purposes. Second, OOPT is a reliable, accurate and suitable instrument for placing learners in language classes. Third, the OOPT is administered entirely online and can be taken at a student's convenience, either in the classroom or at home. But we conducted the exam at a predetermined venue and allowed students 80 minutes to complete the test to facilitate the collection of comparable results. Besides, OOPT delivers immediate results. But the OOPT does not test students' speaking; pre-post test scores are used to address this limitation.

3.2.2 Pre-test Post-Test

The International English Language Testing System (IELTS) speaking test was selected to serve as a pretest-post-test for many reasons. First, IELTS is one of the best international English language tests that accurately measures candidates' speaking proficiency. Second, IELTS is valid and reliable, as it comprises reliable and distinct criteria that both participants and teachers are familiar with. Third, the researchers nominated certified DELTA holders to administer the pre-and post-tests to all groups for a fair and reliable assessment across the board. In the IELTS Speaking test, applicants will speak with certified DELTA examiners in an interactive setting that simulates real-world scenarios. The speaking test lasted 11 to 14 minutes and consisted of three sections.

Section 1: Candidates answered questions about themselves and their families.

Section 2: Candidates spoke about a certain topic.

Section 3: Candidates delved into the topic mentioned in section 2 (British Council, n.d.).

The pre-test had been conducted a week before the start of the experiment and the post-test was conducted at the end of the two-month study period.

3.2.3 Semi-Structured Interviews

Brinkmann (2014) states that a semi-structured interview obtains in-depth information and insight on an examined topic. This study used the semi-structured interview instrument to provide further insight and in-depth information on the effects of the blended learning approach on first-year Arab university students' oral production. The semi-structured interview questions were used to elicit the participants' experiences with blended learning for oral production, as well as their perspectives on implementing blended learning in EFL classrooms. Four teachers and four students from the experimental group were interviewed on Zoom and Google Meet at the end of the experiment.

3.3 Procedure

Pre-Implementation Stage

This study lasted for two months, and it investigated the effects of the blended learning approach on first-year Arab university male and female students' oral production. Initially, the researchers secured the participants' consent through a consent form, which was printed out and distributed to all participants, signed, scanned, and sent back through the teacher in charge of the relevant group in a relevant country. After that, the Oxford Online Placement Test (OOPT) had been conducted a week before the start of the study to ensure participants' homogeneity in terms of the level of English language proficiency. Participants had to attempt the OOPT in an agreed-upon venue to ensure accurate results and were allowed 80 minutes to complete the test. Since the OOPT results are immediate, participants had been informed of their formal acceptance to be the participants of this study verbally. Then, Participants had been scheduled for the pre-test a week before the study started (IELTS speaking test). Certified DELTA holders had been nominated to administer the pre-and post-tests to all groups to ensure fair and reliable assessment across the board. The pre-test had been conducted via Zoom and Google Meet in a test room allocated for this purpose in each location. Following EFL assessment best practices and ensuring the reliability and validity of the test, the two speaking examiners tested the first two students together and shared the results. Such a best practice adds more to the

reliability of the test score and is used for calibration purposes to standardize the marking process. The test room had been equipped with a good internet connection, quality headphones, a comfortable chair, and a desk with a sheet of paper to guarantee smooth, comfortable, and easy access to the pre-post-test by having the same testing conditions. Participants had been randomly divided into control groups and experimental groups.

Implementation Stage

Sample curriculum plans and sample lesson plans were sent out to the four teachers to standardize the teaching process. Both the control group and the experimental groups received QSkills for Success Listening and Speaking, Third edition, Special Edition. Conventional classroom teaching approaches were used for the control group. Conversely, the experimental group's curriculum plans were tweaked to have some aspects of blended learning detailed below.

- Flipped Classroom Activity

All students received a G-form link to watch a video and respond to several questions in advance of each class. The flipped classroom activity encouraged students to come to class prepared and confident to apply their ideas in various classroom scenarios and to have a solid grasp of the teaching material.

- Video Reflection

Students used selected videos for reflection and presented them with the corresponding video exercises in class. Once students had mastered the target language, they recorded their reflections and personalized comments on the academic content of each video and submitted them via Dropbox. Only two submissions were permitted before each deadline. A unique grading rubric was developed for this exercise.

- Targeted Speaking Activity

Each module included a speaking task to encourage students to concentrate on the active production of language. Instructors downloaded audio recordings of students speaking and graded them using a rubric corresponding to the Common European Framework of Reference for Languages (CEFR) level intended for the course. Students' recordings were either accepted or rejected. Students had to redo rejected recordings and resubmit them for review in advance of the task's deadline. Each student was allowed a maximum of two attempts to satisfactorily accomplish a speaking task.

- Feedback

General feedback was provided to all students weekly through a live Zoom or Google Meet session. Student-specific feedback was not provided.

Post-Implementation Stage

All students were invited to attempt the post-test (IELTS Speaking Test) at the end of the two-month study period. The same DELTA examiners administered the post-test to all groups via Zoom and Google Meet in a test room allocated for this purpose in each location. Semi-structured interviews were also conducted with four teachers and four students through Zoom and Google Meet.

3.4 Validity of the Study Tools

The Oxford Online Placement Test (OOPT) was selected due to its endorsement by TEFL experts and an Oxford University Press (OUP) representative attesting to its suitability for evaluating the English language proficiency level of participants. In addition, its online administration yields consistent and immediate results, further strengthening its validity. The IELTS speaking test is an internationally recognized transparent and standardized criteria offered in conjunction with certified DELTA examiners who also contribute to its robust validity in accurately measuring candidates' speaking proficiency. The semi-structured interviews provide in-depth insights into the experiences and perspectives of the participants. Therefore, the selected study instruments would enhance the validity of the study data.

4. Data Analysis

4.1 Participants' Profile

The majority (72%) of the sample population was comprised of 18-year-old students, and the remainder were 19-year-olds (24%) and 20-year-olds (4%). Most participants (58%) were male. (Figure 2)

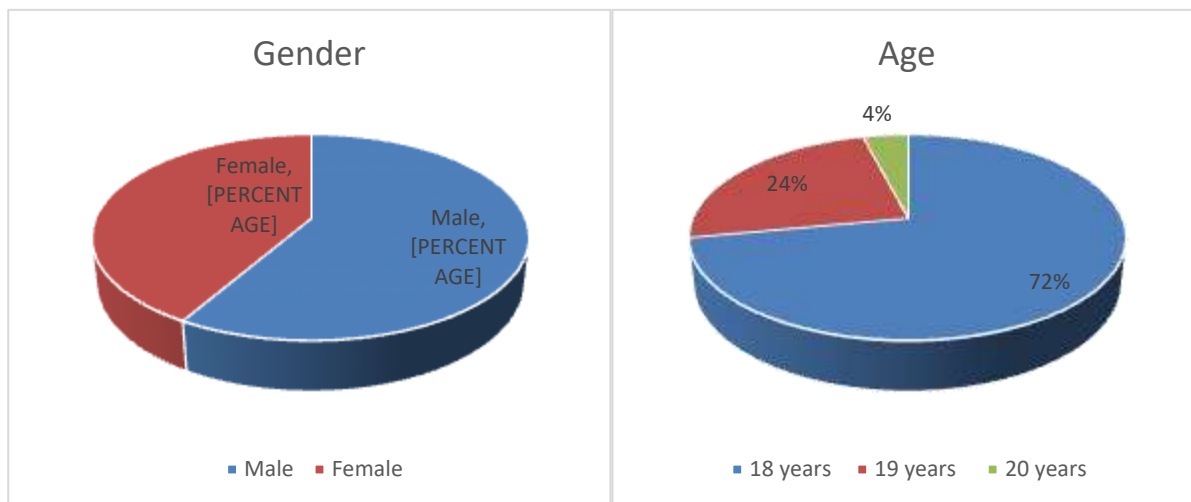


Figure 2. Study participants' age and gender profile

There was an equal distribution of participants from each of the four Arab countries, and the majority (93%) were unmarried, as indicated in Figure 3.

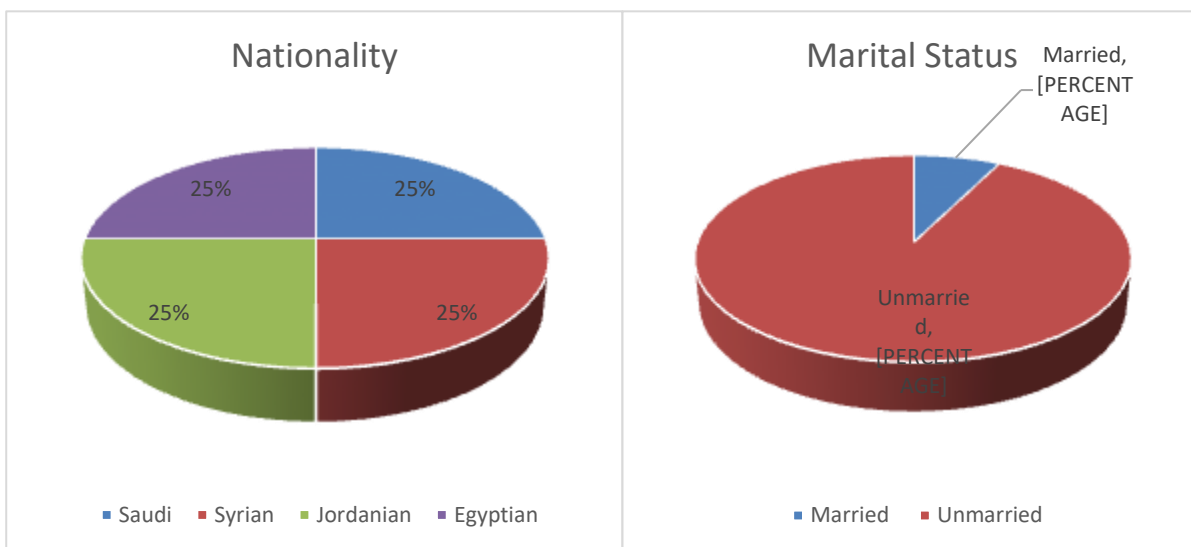


Figure 3. Study participants' nationality and marital status

4.2 The Oxford Online Placement Test (OOPT)

Oxford University Press's (OUP) Oxford Online Placement Test (OOPT) uses a continuous numerical scale to reflect a student's status. Participants' Oxford Online Placement Test scores ranged from lower A2, upper A2, to lower B1. (Table 1)

Table 1. Student Distribution by Language Proficiency Level and Score Range (OOPT)

Level	Score Range	Number (proportion) of students
A1	1-20	0
Lower A2	21-30	9
Upper A2	31-40	76
Lower B1	41-50	35
Upper B1	51-60	0
Lower B2	61-70	0
Upper B2	71-80	0
C1	81-100	0
C2	>100	0

As illustrated in Table (1), 63% of students who took the placement test were at the upper A2 level. 29% of the sample population were at the lower B1 level, whereas 8% were at the lower A2 level.

4.3 Participants' Pre-test and Post-test Scores

Table (2) demonstrates that students' post-test scores were higher than their pre-test scores.

Table 2. Students pre and post-test scores on the IELTS speaking test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	3.6292	120	.45140	.04121
	Posttest	4.3000	120	.52420	.04785

Table (3) shows that pre-test and post-test scores were highly correlated.

Table 3. Correlation Between Pre-test and Post-test Scores

Pair 1		N	Correlation	Sig.
	Pretest & Posttest	120	.838	.000

There was a significant difference between the pre-test and post-test scores for all participants. (Table 4)

Table 4. Paired Samples Test: Comparison of Pre-test and Post-test Scores for All Participants

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-.67083	.28621	.02613	-.72257	-.61910	-25.676	119	.000

The changes in scores observed in experimental groups were significantly higher than those observed in the control groups. (Table 5)

Table 5. Between Subjects Factors/ Dependent Variable: Difference Descriptive Statistics Student Distribution by Language Proficiency Level and Score Range

Group	Mean	Std. Deviation	N
Control	.567	.2679	60
Experiment	.775	.2672	60
Total	.671	.2862	120

Table (6) illustrates a similar error variance of the dependent variable (first-year students' oral output) across groups.

Table 6. Levene's Test of Equality of Error Variances^a

Dependent Variable: Difference			
F	df1	df2	Sig.
6.586	1	118	.012

The performance of the experimental group exceeded that of the control group; this was statistically significant. (Table 7)

Table 7. Tests of Between-Subjects Effects

Dependent Variable: Difference Analysis of Between-Subjects Effects on Difference Scores

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	1.302 ^a	1	1.302	18.192	.000	.134	18.192	.988
Intercept	54.002	1	54.002	754.484	.000	.865	754.484	1.000
Group	1.302	1	1.302	18.192	.000	.134	18.192	.988
Error	8.446	118	.072					
Total	63.750	120						
Corrected Total	9.748	119						

a. R Squared = .134 (Adjusted R Squared = .126)

b. Computed using alpha = .05

The estimated marginal means were higher in the experimental groups than in the control group, as seen in Figure (4).

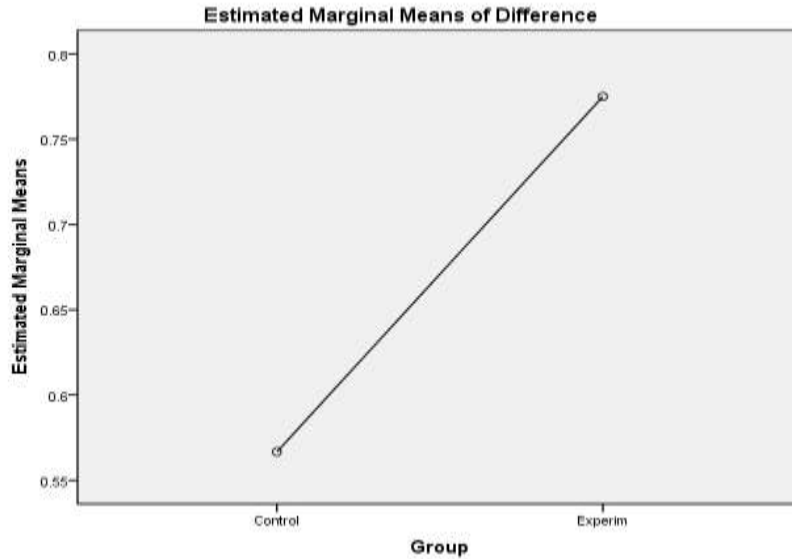


Figure 4. Comparison of Estimated Marginal Means between Experimental and Control Groups

The mean score for the experimental group was significantly higher than that of the control group, as shown in Tables (8) and (9).

Table 8. Group Statistics

Group Statistics for Difference Scores: Control and Experiment Groups

	Group	N	Mean	Std. Deviation	Std. Error Mean
Difference	Control	60	.567	.2679	.0346
	Experiment	60	.775	.2672	.0345

Table 9. Independent Samples Test

Comparison of Independent Samples: Levene's Test for Equality of Variances and t-test for Equality of Means

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Difference	Equal variances assumed	6.586	.012	-4.265	118	.000	-.2083	.0488	-.3051	-.1116
	Equal variances not assumed			-4.265	117.999	.000	-.2083	.0488	-.3051	-.1116

Table (10) compares participants' mean scores of control to experimental groups across the four countries from where participants were drawn. Table (10) presents the mean scores across different control and experimental groups in Saudi Arabia, Syria, Jordan, and Egypt. The table is divided into two sections: Pre-Test and Post-Test. This table provides an overview of the mean scores across different groups and countries, allowing for a comparison of the pre-test and post-test performance in both control and experimental conditions.

Table 10. Mean scores across all control and experimental groups

	Mean	Saudi Arabia		Syria		Jordan		Egypt	
		Cont.	Experiment	Cont.	Experiment	Cont.	Experiment	Cont.	Experiment
Pre-Test		3.8	3.766	3.666	3.633	3.6	3.533	3.5	3.533
Post-Test		4.366	4.533	4.2	4.466	4.1	4.233	4.1	4.333

5. Findings and Discussion

5.1 Students' OOPT and Pretest-posttest Scores

This section addresses the research question, "Does the blended learning approach have any effect on first-year Arab university students' oral production?"

To ensure the reliability and validity of the findings, the researchers took measures to ensure that all tools employed in this study were

specifically chosen and designed to align with the objectives of the research. The Oxford Online Placement Test used at the outset excluded other factors that may have been disruptive to the conduct of this study. All study participants had similar scores, as indicated in Table (1). Homogeneous classes help teachers to effectively meet the curriculum objectives.

The majority of students (63%) were ranked at the upper A2 CEFR level, while the rest were ranked at the lower B1 CEFR level (29%) and the A2 CEFR level (8%) (Table 1). Comparable CEFR levels facilitated the design of appropriate material to meet the study objectives.

The mean post-test score (4.3000) exceeded the mean pre-test score (3.6292) (Table 2). Thus, there was an improvement in students' score and performance.

The pre-test and post-test scores were highly correlated (.838) (Table 3). There was a significant difference (.000) between the pre-and post-test scores across all participants (Table 4).

Table (5) illustrates that the experimental group had a much large mean difference between the pre- and post-test scores (.775) than the control groups (.567), indicating that the intervention worked better in the experimental group than in the control group.

Levene's Test of homogeneity illustrated that the variance of the dependent variable (First-year students' oral production) was equal across groups ($p=.012$) (Table 6), implying the students were homogeneous.

The difference between the experiment and control groups was statistically significant (Table 7). Hence, using components of the blended learning approach improved students' oral production.

The estimated marginal means increased across levels, as shown in Figure (4). Therefore, the experimental group outperformed the control group.

Tables (8) and (9) reiterate the previously mentioned findings regarding the experimental group having a better mean score than the control group.

Comparing students' mean scores among the four countries illustrated an improvement in both the experimental and control groups, with better performance observed in the experimental groups than in the control groups. Furthermore, Saudi and Egyptian students had the highest and lowest mean pre-test scores, respectively. Moreover, Saudi and Jordanian students had the highest and lowest mean post-test scores, respectively. Additionally, the highest improvements in the experimental and control groups were observed among Syrian students (0.833 improvements) and Egyptian students (0.6), respectively (Table 10). Future research could further investigate the differences among students from different countries.

The use of the blended learning approach in EFL classrooms significantly impacts first-year Arab university students' oral production. Blended learning components that could be integrated into the curriculum include flipped classroom activities, video reflections, targeted speaking activities, and oral feedback.

5.2 Semi-Structured Interviews

Interview data were analysed and coded following the saturation method suggested by Guest *et al.* (2020). Students could express themselves in English or their L1. The obtained data helped provide insight into the effects of the blended learning approach on first-year Arab university male and female students' oral production by clarifying information about students' learning behaviour and improvement. Data extracted from the interviews resulted in many emerging themes that are discussed in the following sections.

5.2.1 An Analysis and Discussion of Teachers' Interviews Responses

Q1: While interacting with your students in class, have you noticed any improvement in your students' oral production in both groups? If the answer is yes, why do you think such improvement occurred?

T1: "Absolutely, students improved their speaking skills noticeably throughout the course, especially Group B. Students in Group B were able to express their ideas more clearly than students in Group A. I think the reason behind that is the use of video reflections in which students practised the language more and more."

T2: "Yes definitely, there was an improvement in my students' speaking performance. Both groups improved. I believe Group B were the best in term of improvement. Almost at the end of the course, they were able to agree and disagree with each other in class which was a positive sign of improvement. Group A also improved but still, you can notice the difference between the two groups. I think the speaking activity that students were supposed to upload and the feedback they got was the key point in their improvement."

T3: "It was clear that there was an improvement in all students' oral performance. However, I would say Group B was better than Group A in terms of oral production. Online activities played a big role in this improvement."

T4: "Let me say Group B was much better than Group A at the end of the course when it comes to speaking. Flipped classroom and video reflection were fantastic and had an effect on my students' speaking performance."

All four teachers reported that Group Bs' (Experimental Groups) performance in oral production exceeded Group As' (Control Groups). All teachers attributed such improvement to the use of the blended learning components such as flipped classroom activity, video reflection, speaking activity, and online feedback. Thus, the blended learning components had a positive effect on students' oral production.

Q2: Based on your observation, did the use of blended learning activities such as flipped classroom activity, video reflection, targeted speaking activity, and online feedback play a direct role in improving students' oral production? Were students motivated to work on such components?

T1: *"I would say yes. It played a role, but I don't know whether it is direct or indirect, but definitely, they did play a positive role. Students were completely motivated and happy working on the online activities. They liked it when they recorded their voices and uploaded them online."*

T2: *"Of course. They played a significant role in improving students' oral production. Students were active and motivated. They had fun using their mobile devices to learn"*

T3: *"It was obvious that students were motivated and impressed by such activities. I felt it is the first time my students were introduced to such activities. So yes, the above components did play a role in improving my student's speaking performance. They liked it when they expressed themselves better at the end of the course."*

T4: *"If we are to compare the two groups, it was clear how students managed speaking in both groups. Group B, unlike Group A, was able to initiate discussions and talk about their experiences even in how they uploaded materials on the online platform."*

All four teachers stated that the blended learning components played a crucial role in improving students' oral production as students were motivated and willing to work on these components. Students' involvement in such blended learning components exposed them to novel ways of learning and improving their speaking skills.

Q3: Did your students in Group B experience any challenges while accessing the blended learning components?

T1: *"Yes actually there were some difficulties such as internet access, no laptops, mobile phone is old. But they managed to submit all tasks required."*

T2: *"Honestly speaking, it was a headache at the beginning because my students were not prepared for such kinds of blended components. They didn't even know how to record and upload."*

T3: *"Well. It was not easy at all. For such integration, I think students need to be prepared for technological integration. Although they found it interesting and motivating, the problems still kept emerging every now and then."*

T4: *"My students were completely lost at the beginning. It was new to them how to access the components, how to record, reflect, upload, and how to receive online feedback. Everything was new to them but it was positive at the end. There were problems such as I don't have internet access, my phone is not working, my brother took my laptop, I uploaded my recording but I couldn't see it."*

The integration of any blended learning components requires the training and preparation of students. Students should be well-prepared before accessing online educational material to capitalize on such educational material. Information, communication, and technological infrastructure are required for students to submit online tasks. Schools are tasked to provide such equipment and tools, failure to which a blended learning approach would not be possible.

Q4: Would you like to add anything/ Comment on any aspect of the course?

T1: *"It is really useful to integrate blended learning components into EFL classrooms. I would suggest that we can limit the use of such components inside the classroom, as students might waste class time figuring out how each component works. Although this is an advantage but at the same time, it is a disadvantage."*

T4: *"Such blended aspects might expand to other skills, too. Also, there should be guidelines on how to use some aspects of the program inside the classroom."*

Two teachers expressed their frustration over the over-use of technology inside the classroom with limited time for students to reflect and offer peer feedback. They also recommended that blended learning should be expanded to include other skills.

5.3 An Analysis and Discussion of Students' Interviews Responses

Q1: Did the course components (flipped classroom activity, video reflection, speaking activity) help you improve your speaking? If yes, what did you like the most and why?

S1: *"Yes the course was awesome and useful. My speaking has developed a lot. I am now able to talk and express myself freely and correctly. I liked video reflection because it was interesting and fun. It was learning and at the same time recording and uploading my recording. I enjoyed it."*

S2: *"Yes it did. The targeted speaking activity was useful and enjoyable. We record and reflect on a topic in a fun way. Our teacher was tolerant and patient. We committed mistakes but they were for our benefit."*

S3: *"My speaking improved a lot. I could agree, disagree, express my ideas correctly, and complain about things. It was motivating how we dealt with technology and how we received teacher's notes online. That was good practice outside the classroom. I like video reflection"*

S4: *"yes, it was good. I liked video reflection because I reflected on many topics and expressed my ideas while I am home. No pressure at all so I felt comfortable and learnt a lot. It was fun."*

The course components helped students improve their speaking skills and enhance their confidence. Students reported that blended learning components were motivating and interesting as they had fun while learning. The course offered students an opportunity to interact with technology as a means of learning.

Q2: Did you find any difficulty dealing with technology while accessing/submitted your tasks? Any challenges?

S1: "Yes at the beginning. It was tough, but we managed it in the end."

S2: "I am not a good user of technology, so it was difficult for me, but at the end it was just easy and fun."

S3: "Difficult but the teacher helped us a lot to overcome these problems. It is the first time I deal with such things in an English lesson."

S4: "Sometimes difficult and sometimes ok because sometimes we use our mobile phones, and sometimes we use the laptop at school. Sometimes we have internet problems, and sometimes we have technical problems. That was confusing and took so much time"

Students' answers indicated that they had several challenges in integrating technology into their classes. It took them time and effort to submit their tasks and familiarize themselves with such components. Students also mentioned the unavailability of resources needed to implement such technology. However, all students agreed that using technology was enjoyable for their learning.

Q3: If you were to enrol in an English course in the future, would you like to be in Group A (a control group) or Group B (an experimental group) and why?

S1: "Group B of course. No way for me to be in Group A. I enjoyed studying English here, and I am happy and motivated. I will recommend this course to my friends, too."

S2: "I will choose Group B, definitely. I liked the targeted speaking activity because it provided us with an opportunity to develop and reflect on our speaking performance. Group A was the old way of teaching. It is good but not as good as Group B."

S3: "Group B because I enjoyed studying English and I learned how to use my mobile phone for learning not only for playing games. This course also allowed me to express my ideas in English without any pressure."

S4: "Group B because I liked how I was allowed to submit my recordings twice. The teacher allowed us to submit twice if we have a rejection based on feedback from the teacher. There was no pressure on us because we did most of the tasks online from home"

All four students agreed that if they were to join an English course in the future, they would join a group that had blended learning components because such a program allowed students to practice the language inside and outside the classroom. Moreover, they highlighted that integrating technology into the learning process would be highly motivating, considering that technology is an integral part of their daily lives. In addition, this course freed students from the pressure to submit their tasks while at school.

6. Study Limitations and Recommendations

There were some limitations. First, the study sample size was limited to only 120 participants. Subsequent research should recruit more participants. Second, the study was conducted over a two-month period but the development of oral English proficiency is a lengthy process. Longitudinal studies over a longer period are recommended to investigate the development of oral production. Third, the study did not investigate other attributes that may have influenced the improvement of oral production, such as anxiety, motivation, and readiness to speak. Future research should account for the moderating influence of affective variables, such as anxiety.

7. Conclusion

Blended learning had an immense and immediate impact on first-year Arab university students' spoken accuracy as participants were motivated to improve their speaking. Participants could enunciate more meaningful syllables after engaging in blended learning components. EFL learners combined online and offline instruction to transition from an object- and other-regulation to self-regulation and stored and internalized the input they had received in the blended environment.

Acknowledgement

The authors convey appreciation to those who contributed to the research paper's success. The authors express gratitude to the participants who participated in the study and the anonymous reviewers whose constructive comments helped to improve the paper's quality.

References

- Ainol, H., & Zailin, S. (2012). Teaching public speaking in a blended learning environment. *International Journal of Social Science and Humanity*, 2(6), 573-576. <https://doi.org/10.7763/IJSSH.2012.V2.175>
- Baek, J., & Lee, C. (2021). Effects of mobile-assisted blended learning on university students' English speaking proficiency in Korea. *The Journal of Asia TEFL*, 18(4), 1266-1284. <https://doi.org/10.18823/asiatefl.2021.18.4.12.1266>
- Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. (2014). A meta-analysis of blended learning and technology use in higher education: From the general to the applied. *Journal of Computing in Higher Education*, 26(1), 87-122. <https://doi.org/10.1007/s12528-013-9077-3>
- Bø, T., Sandvik, K., & Gulbrandsen, B. (2021). Continued use of E-learning technology in higher education: A managerial perspective. *Studies in Higher Education*, 46(12), 2664-2679. <https://doi.org/10.1080/03075079.2020.1754781>

- Brinkmann, S. (2014). Unstructured and Semi-Structured Interviewing. In P. Leavy (Ed.), *The Oxford Handbook of Qualitative Research* (pp. 277-299). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199811755.013.030>
- British Council. (n.d.). Free online IELTS Speaking practice tests. Retrieved September 23, 2022, from <https://takeielts.britishcouncil.org/take-ielts/prepare/free-ielts-practice-tests/speaking>
- Dumford, A. D., & Miller, A. L. (2018). Online learning in higher education: Exploring advantages and disadvantages for engagement. *Journal of Computing in Higher Education*, 30(3), 452-465. <https://doi.org/10.1007/s12528-018-9179-z>
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS One*, 15(5), e0232076. <https://doi.org/10.1371/journal.pone.0232076>
- Hojnacki, S. (2016). Oral output in online modules vs. face-to-face classrooms. In M. McCarthy (Ed.), *The Cambridge Guide to Blended Learning in Language Teaching* (pp. 107-122). Cambridge University Press. <https://doi.org/10.1017/9781009024754.011>
- Ibrahim, A. H., & Alwi, N. A. N. M. (2017). Public speaking for engineering students in a blended learning environment. In 7th World Engineering Education Forum (WEEF) (pp. 525-529). IEEE. <https://doi.org/10.1109/WEEF.2017.8466978>
- Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., & Hall, C. (2016). *NMC Horizon Report: 2016 Higher Education Edition*. The New Media Consortium. Retrieved from <https://www.learntechlib.org/p/171478/>
- Moreno, N., & Malovrh, P. A. (2020). Restructuring a beginner language program: A quantitative analysis of face-to-face versus flipped-blended Spanish instruction. *Hispania*, 103(2), 259-274. <https://doi.org/10.1353/hpn.2020.0036>
- Qindah, S. (2018). The effects of blended learning on EFL students' usage of grammar in context. *The Eurasia Proceedings of Educational & Social Sciences (EPESS)*, 10, 11-22. Retrieved from <http://www.epeess.net/en/download/article-file/534204>
- Riazi, A. M. (2016). Innovative mixed-methods research: Moving beyond design technicalities to epistemological and methodological realizations. *Applied Linguistics*, 37(1), 33-49. <https://doi.org/10.1093/applin/amv064>
- Shu, H., & Gu, X. (2018). Determining the differences between online and face-to-face student-group interactions in a blended learning course. *The Internet and Higher Education*, 39, 13-21. <https://doi.org/10.1016/j.iheduc.2018.05.003>
- Staker, H., & Horn, M. (2012). *Classifying K-12 blended learning*. The Christensen Institute. Retrieved from <http://www.christenseninstitute.org/wp-content/uploads/2013/04/Classifying-K-12-blended-learning.pdf>
- Terzioğlu, Y., & Kurt, M. (2022). *Elevating English language learners' speaking fluency and listening skill through a learning management system*. SAGE Open, April-June, 1-15. <https://doi.org/10.1177/21582440221099937>
- Wang, J., Abdullah, R., & Leong, L. M. (2022). Studies of teaching and learning English-speaking skills: A review and bibliometric analysis. *Frontiers in Education*, 7, 880990. <https://doi.org/10.3389/educ.2022.880990>
- Yang, Y., Dibyamandala, J., & Mangkhang, C. (2022). The effects of mobile blended active language learning on the English critical reading skills of high school students in Thailand. *Journal of Curriculum and Teaching*, 11(5), 1-14. <https://doi.org/10.5430/jct.v11n5p1>
- Yoon, S., & Kim, N. (2020). To flip or not to flip: A comparative study on flipped, blended, and conventional learning in EFL Korean context. *The Journal of Asia TEFL*, 17(4), 1363-1376. <https://doi.org/10.18823/asiatefl.2020.17.4.13.1363>

Copyrights

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

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/>).