

The Impacts of Blended Learning on English Education in Higher Education

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Abstract

The research examines the effects of blended learning (BL) on English education in Saudi Arabian higher education and its potential future developments in the context of increasing integration of information and communication technologies (ICTs). The study emphasizes the importance of measuring students' actual outcomes, access to learning opportunities, and views of those outcomes when evaluating the effectiveness of English education. The authors compare minority retention and graduation statistics in traditional English classes and BL English courses and present a set of consistent principles for measuring progress in English language acquisition and development, regardless of course format or final grade. The study suggests that BL has the potential to enhance accessibility, personalization, and active learning in English education, especially in a post-pandemic "new normal" where technology is increasingly used and diverse language learners need to be accommodated. The authors argue that BL's development will be closely tied to advances in ICTs that model language learning and cognition aspects. The research provides valuable insights into BL's impact on English learning, teaching, and development in higher education, useful for educators, researchers, language experts, and policymakers shaping the future of English education in Saudi Arabia.

Keywords: blended learning, online learning, higher education, English education, learning environment

1. Introduction

The technological advances of the Information Age have significantly transformed the educational environment. Universities are required to implement swift adaptations to enhance the learning experience and align with the swift progression of technological innovation in order to meet the demands of their students. Blended learning is one of the many approaches that are being considered to integrate ICT into the curriculum. By integrating online and in-person-F2F elements, blended learning-BL aims to empower students with greater autonomy over their educational journey by granting unlimited access to course materials (Ashraf et al., 2021). By harnessing the potential of hybrid ICT, novel pedagogical frameworks can be investigated; this permits the seamless integration of classroom materials from both online and offline platforms into a unified, immersive, and perpetual learning experience, irrespective of where and when learning process occurs or the passage of time.

Since 2000, scholars have been devoting their attention to the analysis of various BL perspectives (Dziuban et al., 2018). This trend has continued to gain momentum since 2020, notwithstanding the global COVID-19 pandemic. Despite 22 years of research dedicated to BL, numerous problems and concerns continue to persist without resolution. Further research is warranted to examine the impact of various BL models in diverse contexts on the cognitive and behavioral outcomes of students (Ashraf et al., 2021). Additionally, blended learning solutions must be customized to fulfil the needs of particular courses (Xie & Tsai, 2021).

Among the 13.4 million confirmed enrollments in distance education, 20% were enrolled in BL courses. In Saudi Arabia, BL was offered by 20% of faculties and universities. An expanding body of research examines the impact of BL on both educators and learners as its prevalence in schools rises. In their annual reviews of institutions for teaching and learning, Al-Khafaji (2022), Nazaré de Freitas and Assoreira Almendra (2022), and Shamsiev (2022) consistently identify blended learning as a paramount concern.

The results mentioned above underscore the necessity for further investigation into the development and evaluation of BL models tailored

to particular educational settings. A growing number of scholars are investigating potential applications of integrated learning, and English as a foreign language-ETL course have emerged as one domain where it has demonstrated promise (Dziuban et al., 2018). The research on the effects and outcomes of Blended Learning-BL in English Teaching and Learning-ETL has been the subject of discussion in numerous publications. When effectively implemented, BL improves students' language proficiency, fosters an environment that is more conducive to English study, and inspires them to devote more time to the subject. Blended learning yields favorable outcomes for every integrated skill in the English language (Hashemi & Si Na, 2020). Collaborative learning, technology-based instruction, social media applications, and learning management systems were the focal points of a recent review article on BL approaches (Ramalingam et al., 2022). Notwithstanding the considerable importance of BL in Saudi Arabia, scholarly resources concerning BL design and ESL education are scarce. It is, therefore, imperative that research on the design of BL models and their applications to English ESL education continue uninterrupted. It is worth noting in this context that blended education is one of the recognized and applied educational systems in the world, including the Kingdom of Saudi Arabia. Although there are several trends about the ratio of online education to traditional education in blended education, they all agree that the largest percentage should be online education. In general, this system relies on a mixture of traditional education at a rate of approximately 25% through direct meetings, and online learning at a rate of approximately 75%.

2. Literature Review

Blended learning could be defined as an approach that integrates the most advantageous aspects of conventional classroom instruction with those of online learning. To better meet the requirements of each student, for instance, the social and interactive components of traditional classroom learning are combined with the adaptability and accessibility of online learning (Shantakumari & Sajith, 2015). The efficacy of learning may be enhanced by a multitude of evolving and expanding features for blended learning, which have been compiled by a multitude of specialists (José Sosa Díaz et al., 2021; Picciano, 2019). In general, the research revealed that mixed learning exhibited superior performance compared to conventional face-to-face learning with regard to group comprehension and individual achievement and satisfaction (Tayebinik & Puteh, 2016; Topping et al., 2022; Wang et al., 2023).

An essential web-based innovation, the English learning management system has significantly facilitated the development of an online platform that incorporates conventional instruction and learning. An assortment of functionalities is offered by a learning management system-LMS in order to streamline the process of creating and managing the curriculum and pedagogical approaches for a given course (Alghafis et al., 2020). Discussion forums, online grading and review, file sharing, assignment administration, scheduling, notifications, and curriculum schedules are among these functionalities.

Multiple studies have posited that the implementation of learning management systems could potentially augment traditional and distance learning at academic institutions (Alghafis et al., 2020; Alkhunaizan & Khan, 2021; Iffat Rahmatullah, 2021; Rehman et al., 2021). Although numerous factors can impact the implementation of a learning management system, such as the financial support of institutions, the emotional well-being of instructors and learners, and the accessibility of pertinent IT resources, the additional data that could be extracted from such a system could be utilised to enhance academic programs (Jie et al., 2021). The efficacy, performance, and ineffectiveness of the Learning Management System-LMS were found to be substantially influenced by instructors, as reported by Almufarreh et al. (2021) and Matarirano et al. (2021). Prior research has demonstrated that instructors' self-efficacy, technical competence, and instructional quality standards all increased as a result of LMS implementation (Mohammadi et al., 2021).

Although a pandemic period has seen an increased use of blended learning, few studies have analytically reviewed the effectiveness of blended learning in different countries. Cao (2023) meta-analysis study aimed at summarizing previous studies on the effectiveness of blended learning in different countries in terms of student performance, student attitudes toward blended learning, educational achievement, and student engagement in different countries. Through a meta-analysis. The study findings indicated that blended learning can improve performance, attitudes and achievement in most countries. Yet, blended learning cannot significantly improve students' participation in academic activities in both China and the USA. No statistically significant differences were detected in the performance of students in the USA between blended and non-blended learning.

In another study, Al Nursi (2020) conducted research to examine the impact of a blended learning approach on high school students' English proficiency. Nursi's study aimed to investigate whether the English language proficiency of 12th grade students differs significantly in the IELTS test based on the delivery model (blended learning model and traditional delivery model). An experimental approach was used, and IELTS test scores were an indicator of students' linguistic proficiency. Purposive sampling method was used. The sample consisted of 63 twelfth grade students in a private school in the city of Al Ain in the United Arab Emirates. The results showed that there were statistically significant differences between the averages of the experimental group (blended learning) and the control group (traditional method). The results of Nursi's study support the impact of the blended learning approach in improving students' proficiency in English as a foreign language (EFL)

The Belief Action Outcome (BAO) model for information systems was used in the study since it was thought important to investigate this relatively unexplored theory in practical circumstances. In the realm of educational research, the BAO model elucidates the relationship between individuals' thoughts, behaviors, and outcomes.

Current State in Blended Learning

There are numerous differing viewpoints in the education literature regarding the relative importance of in-person and online communication. For example, as stated by Ebner and Gegenfurtner (2019), in-person training can consume up to 50% of the total teaching time. But according to Bilal et al. (2022), between 30% and 79% of a course's total enrollment should be conducted online. Furthermore, according to Banyen et al. (2016), the optimal proportion for integrated learning is 60% online instruction and 40% in-person instruction.

Multiple studies have found that blended learning is becoming an increasingly prevalent pedagogical approach in higher education institutions (Chen, 2022; ElSayary, 2021). Following an investigation and installation process, specialists have determined that the integrated learning application provides numerous benefits. The scholarly investigation conducted by Suleri and Suleri (2018) purportedly implemented blended learning in the context of higher education.

Blended learning techniques foster both independent and collaborative learning, as highlighted by Lim (2016), McCutcheon et al. (2018) and Talan and Gulsecen (2019). Additionally, they facilitate novel means of communication between instructors and learners (Shu & Gu, 2018). Blended learning environments offer a distinct prospect for assessing students' engagement (Hasanah & Nasir Malik, 2020). In order to succeed in the online components of the course, it is recommended that students develop self-motivation and expertise in utilising diverse instructional approaches, according to research (Baragash & Al-Samarraie, 2018; Bervell et al., 2020). According to several studies, blended learning is thought to impact student retention, academic achievement, and satisfaction significantly (Pye et al., 2015; Zeqiri & Alserhan, 2021).

Research on the complex adaptive blended learning system

A deeper comprehension of blended learning-BL programs and the resolution of a knowledge deficit can be achieved through the implementation of the Complex Adaptive Blended Learning System-CABLS, a framework introduced by Y. Wang et al. (2015).

According to them, this arrangement —helps to reveal the untapped potential and key issues... such as the provision of learning support, the promotion of institutional engagement, and the non-linear relationships among subsystems in blended learning!(Cleveland-Inne & Wilton, 2018).

Y. Wang et al. (2015) investigated BL experiments utilising this paradigm over twenty months (January 2013–August 2014). Learners were the subject of the majority of review articles (95%), with content (79%), technology (54%), and subsequent sections (79%). When broken down by instructor (32%), institution (17%), and learning assistance provider (15%), the percentage falls significantly. However, an exhaustive examination of the interrelationships among these facets is lacking due to the fact that the majority of research focuses on a single subject (Cheng et al., 2023). As a result, a more comprehensive investigation into the BL situation is required, with particular emphasis on the interdependencies that exist among the different components.

Perceptions of University Students' Learning Behavior

Prior to the COVID-19 pandemic, blended learning had previously been used at the university level (Dakduk et al., 2018; Heilporn et al., 2021). According to 2011 research that examined college students' experiences with blended learning, the online approach was well received (Dakduk et al., 2018). The study primarily focused on gathering perspectives from students both before and after using the system. A study investigating the relationship between blended learning and student engagement in higher education was carried out in 2014. Observations that use a combination of both qualitative and quantitative research methodologies, together with educational tools that promote group work, were shown to have the capacity to enhance student involvement.

Conversely, the pandemic is seen as a pivotal moment for colleges since it pushed online and blended learning to the forefront (Bozkurt, 2022). University students were allowed to use online materials alongside their usual in-person sessions using the unique blended learning concept. The worldwide COVID-19 outbreak triggered this step.

After the pandemic lockdowns (the adaptation phase), Al-Kahtani et al. (2022) examined thirty Saudi Arabian health science students over three years (2018–2021). The researchers found that the students had improved learning outcomes, were more engaged, and had simpler access to their coursework (Al-Kahtani et al., 2022). While the majority of research participants indicated comprehension of course material delivered in online or hybrid formats, the blended-mode group exhibited significantly higher performance.

3. Objectives of the Study

The main objective of the current study was to compare retention and dropout rates between higher education students in Saudi Arabia who were enrolled in blended learning courses and those who were enrolled in traditional face-to-face and online courses. The research authors also sought to ascertain whether enrollment and dropout rates change by race or ethnicity of students. In addition, another objective of this study was to examine students' final evaluations of blended learning and other modalities to better understand what makes students satisfied with their education. The researchers considered students' expected grades, their interest in the subject, and the structure of the courses themselves when calculating the conditional probability of those who adhered to the recommendation.

4. Methods

For each course mode, the recording procedure changed the grade C into one and grade D into zero. Declassification (the process of ceasing a protective classification often under the principle of freedom of information.) did result in some knowledge loss, but the

confirmation bias (the tendency to search for, interpret, favor, and recall information in a way that confirms or supports one's prior beliefs or values) brought by having to adhere to several departmental norms for grade distribution more than made up for this. This served as a student's "on track to graduation index" at the measurement level, and the incidence or non-occurrence of withdrawal was also defined. During some academic years, the success and failure rates of minority and non-minority students in hybrid, online, and face-to-face courses were compared.

After that, a classification and regression tree were used to examine the final grades (CART). The dependent variable was the students' responses to the question, "Did you have a positive overall course experience?" That was a simple yes-or-no inquiry. College enrollment, course level, and the other eight protocol rating categories were research factors (lower undergraduate, upper-undergraduate, and graduate). Decision trees are helpful in this kind of investigation because alternative approaches, such as floating methods and surrogate generation, may be used instead of imputation for missing data, which is a method by which the observed values of each variable are averaged and the missing values for that variable are imputed by this average. For example, the limitations of a logistic regression technique prevent it from being used in all situations. This situation has ten independent variables; one has three levels, another has nine, and the other eight each have five levels. As a result, there must be too many two-way interactions and more than 50 dummy variables in the logistic regression model. However, the decision-tree method might be used to swiftly finish the same study, enabling the researcher to explore higher-order interactions. The fact that several variables are often scaled strengthens the argument for using decision trees as an analytical tool. A numerical value may be assigned to each category, although the values are not mutually exclusive. Decision trees still consider the variables' ordinal values when making judgments. The if-then style used to write decision tree rules is clear. The effectiveness of these recommendations may be assessed by comparing the probabilities or by calculating the percentage of adequately categorized data. For forecasting purposes, the approach creates rule structures that resemble trees.

The method for creating models that forecast overall teacher ratings

In this study, CART in SPSS 23 was utilized by researchers for data collecting and analysis (George & Malley, 2019). As there was a strong connection between the rating on the item for the Overall Rating of the Instructor and the other variables, it was chosen as the dependent measure (university, course level, and the other eight items on the instrument). The three main components of a CART analysis are data reduction, separation, and standardization. Decomposing the data into its component elements is the first stage in the process. Recursive tree-based algorithms divide data into branches and leaves. CART divides the data into subsets periodically until the frequency differences across the subsets are either too tiny to be seen to the human eye or all observations in a subset fall into the same category (e.g., all observations in a subset have the same rating). Unnecessary terminal nodes are generated in vast numbers during the model-building process. CART uses pruning techniques to reduce the system's dimensionality to solve the problem. The study's analysis of the tree's terminal nodes through time gradually decreases and terminates after a certain threshold. One strategy is to calculate misclassification rates. A formula that predicts a particular teacher will get an excellent rating has a 95% chance of success, and its margin of error is 5%.

Using decision trees might have unintended results.

While examining such datasets using decision-tree techniques, readers should know a few disadvantages. For instance, essential nuances may be overlooked when using trees to analyze ordinal and interval data because of the use of ranks. The most significant problem with decision tree analysis is that it may provide inconsistent results since little changes made at the beginning may significantly impact the final result. Several problems with the study's model were resolved using the k-fold cross-validation method. A random number generator was then used to split the dataset into ten equal pieces. The remaining subgroups are combined in the function's final step, with each cohort acting as a test partition. Ten models were created due to this approach, and each one was trained using a different test partition from the whole dataset. Despite its computational complexity, CART was selected as the analytical model because it provides clear and testable concepts that may be used in some contexts. As it is less sensitive to initial estimates than many other multivariate procedures and does not need a deep background of statistics for interpretation, CART has an obvious appeal to researcher consumers. We chose our analytical strategies carefully so readers might concentrate on our findings without being too reliant on how we interpreted them.

5. Results Success and Withdrawal Evaluated at The Institutional level

The long-term consequences of UCF's hybrid and online programs are now the subject of research. Similar data were gathered by UCF across some semesters and academic years, allowing for the observation of patterns, the identification of potential problems, and the continuous assistance of faculty and students from a broad range of backgrounds.

Table 1. Comparison of Minority and Non-Minority Success Rates by Course Modality

	Blended-Learning		Online-Learning		(FacetoFace)Learning	
Term	%	N	%	N	%	N
Fall	92%	18,865	90%	38,557	88%	154,361
Non-Minority	93%	11,684	91%	22,764	90%	84,688
Minority	91%	8,472	89%	16,884	86%	58,762
Spring	92%	17,816	91%	41,781	89%	144,755
Non-Minority	93%	10,845	91%	54,398	90%	78,292
Minority	91%	7,878	90%	18,514	87%	57,574
Summer	96%	7,583	93%	27,851	92%	38,883
Non-Minority	97%	4,962	94%	17,367	94%	22,286
Minority	95%	3,752	91%	13,793	90%	17,888
Fall	92%	20,479	91%	41,532	88%	155,538
Non-Minority	93%	12,328	92%	23,511	89%	83,313
Minority	91%	8,474	90%	17,178	86%	54,123

Table 1 highlights differences between minority and majority groups by showing the proportion of students who succeeded in various mixed, online, and traditional classroom settings. This overview gives a sense of the institution's growth and possible issues, even if letter grades (A, B, or C) may only sometimes represent accurate learning results. The overall winner when comparing withdrawal and success rates is BL. The hybrid learning paradigm at UCF has improved its students by making deliberate use of digital resources. All minority groups have received these benefits. Spending less time on the ground could help with parking and getting to lessons on time. Also, UCF teachers must complete a tailored degree for online and hybrid learning. The purpose of this 7-week professional development program for teachers is to inspire them to reconsider their curriculum in light of this innovative educational strategy (Walker, 2022; Tuan et al., 2022).

When students drop one or more courses, their academic performance and persistence deteriorate (Table 2), and they risk missing out on financial aid and scholarships. Although grades may not be a perfect indicator of learning, they are a reliable indicator of a student's likelihood of finishing their degree. So, wherever feasible, it is crucial to consider how a variable's modification influences students' results. Since hybrid courses have a lower overall withdrawal rate than entirely online and in-person courses, they are an excellent option for both.

Learning settings, as seen by the students

By examining various potential high-stakes indicators, it may be possible to predict how innovations like blended learning will impact institutions. Using a standard student rating system or asking students to assess the resources in the classroom are two techniques for gathering information on the views and happiness of students. Dissatisfied instructors may be prevented from effectively adopting and disseminating an innovation by unfavorable reflection since their evaluations often influence faculty appraisal. Specific questions about the impact of various online and hybrid course formats on teacher evaluations have been raised by the UCF Faculty Senate. Students may obtain the UCF Student Impression of Instruction form on the school website towards the end of each semester. A splash page contains a link to the appropriate form for each student's classes. Teachers may choose when students get access to the assessment form via an automatic email. The week of the final examinations is the application deadline. The faculty receives a summary report after each semester.

The faculty senate at the University of Saudi Arabia designed the instrument over eight years, carefully considering the growth of multiple learning modalities, including blended learning. The strategy was developed with the participation of various campus stakeholders to provide the university community with meaningful formative and summative instructional data (students, professors, administrators, instructional designers, and others). The Senate approved the final tool, and it is now accepted practice. Academics debate the veracity of student evaluations of teacher effectiveness and classroom performance.

Some studies have been published in recent years that provide reasons against the practice (Kreitzer & Sweet-Cushman, 2021). The several suggested alternatives have yet to make it into higher education. So, the process will likely continue.

Table 2. Rates of withdrawal by minority status and mode of study

	Blended-Learning		Online-Learning		(Face to Face) Learning	
Term	%	N	%	N	%	N
Fall	4%	20,942	5%	38,558	5%	172,396
Non-Minority	4%	12,656	6%	22,766	5%	94,879
Minority	4%	9,397	6%	16,885	6%	68,628
Spring	4%	19,422	5%	41,914	5%	162,152
Non-Minority	3%	11,612	5%	24,474	5%	87,779
Minority	4%	8,921	5%	18,551	5%	65,484
Summer	3%	7,821	4%	29,851	4%	43,772
Non-Minority	2%	4,853	4%	17,369	3%	24,737
Minority	3%	3,879	4%	13,793	5%	20,146
Fall	4%	22,593	5%	41,669	5%	174,682
Non-Minority	4%	13,389	5%	23,572	5%	93,643
Minority	4%	10,315	5%	19,186	6%	72,148

The psychometric quality of the data (domain sampling) was confirmed before looking at the item responses gathered from these students throughout campus. In the past, the alpha coefficient was employed to measure credibility (internal consistency). By demonstrating that the inverse of the correlation matrix across items tends toward a diagonal as the domain sampling characteristics of the items increase, (Hoekstra et al., 2019) have created an item property theorem that gives confidence in one's data. The Guttman Theorem has a corollary known as the least statistically significant sample size (MSA). The index, ranging from zero to one, might be seen as defining standards for judging MSA's value. An index value between .80 and .99 indicates a highly representative domain sample, giving the researcher good evidence for the sought dependent variable. Indicators of success are in the 0.70s, and indicators of failure are in the 0.60s. Before dimensionality analysis was widely used, the MSA was often used to evaluate data. The researchers assessed the construct validity of the questions using the MSA value calculation as a benchmark. Before doing the latent dimension analysis, the researchers followed the suggested process and used this technique on the study's data. The current instrument offers very reliable domain sampling, with an MSA of .98 and an alpha reliability value of .97. Both of these statistics include all of the psychometric characteristics of the test.

The online student assessment form presents a brand-new digital data set at the beginning of each semester. Collecting evaluations over many semesters might result in a more comprehensive data collection. The data collection includes prefixes, numbers, sections, semesters, departments, colleges, teachers, and student enrollment. Departments and faculty compare courses and delivery methods based on their overall effectiveness rating (Table 3).

Only three factors—all student ratings of the instructor from a questionnaire—made up the final choice rules tree.

1. First, by helping students succeed in their classes,
2. Creating an atmosphere conducive to education, and
3. Talking business and sharing insights.

The final model did not include any background data about the pupils. No matter how they rate them on the other criteria, if a student gives a teacher high marks in these three areas, the instructor has a 99 percent probability of receiving an exceptional overall evaluation, according to the final guideline. The opposite is also accurate. A teacher will most likely get a failing review if they obtain poor grades in all three categories.

Tables 4, 5, and 6 show the results of the CART rule when applied to elements like predicted course grade, willingness to enroll in the course, and modality. Based on a student's response,

Table 3. A criterion for determining whether or not a professor will get a passing grade in all areas(N=59,267)

	Excellent!	Very Good!	Good!	Fair!	Poor!
Complete the goals of the study.		✓			
Make a place to study.		✓			
Exchange thoughts		✓			

Table 4. Percentage Overall and when the conditional rule is met for the anticipated grade, good

Grade	Overall	Rule Satisfied
F	28	98
D-/D/D+	25	94
C-/C/C+	34	94
B-/B/B+	48	96
A-/A	67	98

Students' knowledge who follows the rule have a nearly 100% probability of ranking each course as extraordinary, regardless of the marginal possibility. According to one research, students who projected passing results in their courses were nearly twice as likely to adhere to the rules as those who predicted poor scores. Students who strongly disagree with the recommendation of the course to a friend also prefer to give their courses higher grades (Table 4).

Table 5. Overall, and when the conditional criterion is met, the percentage of students who say they "want to take this course" rate as "great."

	Overall% Excellent	Rule Satisfied
No opinion!	39	96
Strongly disagree!	27	93
Disagree!	35	96
Agree!	49	97
Strongly agree!	79	99

Table 6. Percentage Exceptional performance generally and under certain conditions for each course mode

Course Modality	Overall% Excellent	Rule Satisfied
Blended-Learning	60	99
Online-Learning	57	98
Face-to-face Learning	56	99
Blended Lecture Capture Learning	47	99
Lecture Capture Learning	53	97

Blended learning is the most excellent option when evaluating the training more abstractly. The normalization of students' evaluations of their educational experiences is shown in Table 6 by the rule. Teachers will succeed if they follow the guidelines.

However, the percentage increased to 93% for those who followed the regulation.

6. Discussion

The study found that blended learning positively impacted English learning activities. On the contrary, online learning in isolation was surpassed in performance by integrated learning amidst the COVID-19 pandemic. Consistent with the findings of prior research, the results of this study indicate that integrated learning has the potential to enhance education in numerous ways (Zhang & Zhu, 2020). In order to optimise technological advancements, potentially leading to improved academic performance through blended learning, it was imperative to integrate technology into the instructional framework. Although individuals did require minor technical support, the majority of students found the integration of technology into their studies to be enjoyable and advantageous. Consistent with the results reported by Wright (2017), blended learning enabled an abundance of appealing, captivating, motivating, and enjoyable device-based activities during the instruction and dissemination of course material. Moreover, the results aligned with the conclusions drawn by Kintu et al. (2017), which revealed that an educational program customised for children born into the digital age required a substantial integration of technological resources.

Blended learning classes enabled students to acquire knowledge in a variety of methods, both independently and in groups, according to the research. Castro (2019) discovered that through the use of online platforms, students can study at their own pace and without physical constraints. In addition, Anas (2020) argued that blended learning, which integrates technology with a personalised learning environment, could be advantageous for gifted children. Blended learning is predicated on the opportunity for instructors and pupils to engage in dialogue; it has the potential to enhance education substantially. Furthermore, this research revealed that while the control group did not receive any grammar instruction, the experimental group demonstrated superior overall performance due to a combination of traditional and online methods. Dziuban et al. (2018) report that the integration of digital devices and applications, including mobile applications, into blended learning has produced positive results in terms of increasing student engagement across a variety of learning activities.

The results indicate that students would have more time for practice and additional learning assignments if they were permitted to forego classes and utilize blended learning to complete more. According to Zhang and Zhu (2020), integrated learning possesses the capacity to enhance the efficiency of teachers' knowledge dissemination while concurrently affording students supplementary opportunities for self-reflection on their learning. Blended learning has the potential to enhance students' memorization by granting them access to a more extensive range of instructional materials (Halverson & Graham, 2019). For instance, students may review previously learned grammatical structures in the supplementary exercises. Students may also select the approach that most effectively benefits them in the context of blended learning. The current study revealed an enhancement in grammatical performance, indicating that integrated learning effectively supported growth in both personal and professional domains. Students' comprehension of the subject matter and course content would be enhanced through collaborative project work with our instructor.

7. Conclusion

One of the various instructional strategies researched included opinions on student success, disengagement, and the classroom environment. These factors might one day be crucial in choosing the ideal configuration for blended learning. The information provided here demonstrates how increasing racial and ethnic diversity in the classroom improves graduation rates for all students without affecting access for most students. Students often see blended learning as the most practical aspect of their educational environments. Once the most important components of students' education are considered, it becomes evident that demographic and environmental factors have minimal bearing on students' decisions. The ranking is primarily unaffected by factors like the student's institution (or significant), the course's level or modality, the student's anticipated grade, or their desire to enroll. Teachers who can establish relationships with their students, maintain high standards for themselves, and keep a stimulating learning atmosphere are highly prized. Independent of other considerations, courses that satisfy these three criteria nearly invariably get high student evaluation scores. Although final course marks are summative, the other three components include formative features since they are all linked to effective pedagogy and attentive to faculty development via channels like the faculty centre for teaching and learning. Furthermore, a skills-based approach would be a more reliable and valuable measure that can be presented for the coming research on this filed is to evaluate the impact of the blended learning method in terms of the English language skills students achieve (e.g. reading, writing, speaking, and listening) as this procedure might be more accurate than evaluating it through the grades students achieve in the related courses. In other words, this assessment approach can be used to determine whether students learn better in this modality than in other modalities. These results are encouraging since they appear when it is critical to modify instructional strategies to meet the demands of Saudi Arabian students today.

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