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

Concerns in blended learning and studies

Blended learning (BL) is a popular method in higher education that blends traditional classroom instruction with online learning environments. Several experts in higher education now consider BL to be the "new conventional paradigm" or "new norm." Because of problems with definition and institutions' unwillingness to oversee a creative activity that sometimes emerged spontaneously, it has been difficult to determine its exact reach. 65.2% of schools in an earlier poll said they offered some hybrid or blended learning. The study defined blended learning (BL) as "a mix of online and in-class teaching with decreased in-class seat time for students." It was found that 20% of Saudi Arabia's colleges and universities offered BL, and 20% of the country's 13,4 million verified distance education enrolments were in BL courses.

Blended learning methodologies will heavily influence technology usage in higher education during the next two years (Cifuentes-Faura, 2021; Weni Nelmira et al., 2022). As more and more institutions experiment with BL, a growing body of research examines its effects on teachers and students. Universities routinely cite Blended learning as a top priority in The Learning Initiative's annual evaluation of higher education institutions for teaching and learning (Freitas & Almendra, 2022 & Shamsiev, 2022; Abdul-Hussain et al., 2022). This line of inquiry is inspired by the question, "How is blended learning affecting the teaching and learning environment? " Contributes to developing a community of practice in this area. As researchers contemplate the practical ramifications of these findings, they look further into the complicated link between BL and students' cognitive, emotional, and behavioural states. Several books (Sanguras, 2021; Paraschi, 2022; Portillo & Lopez de la Serna, 2021; Wahjono & Wiyono, 2021; Snow, 2020; Muthmainnah et al., 2022) have been written to compile research on how blended learning can be better understood, and at least one organization, the Online Learning Consortium, has sponsored an annual conference that is solely focused on blended learning across all levels of education and training. These actions are similar to blended learning methods in many respects. Some examples include theoretical frameworks, adaptability, genuine assessment, cutting-edge research

methodologies in formal education (K-12), business training, and military education. Several of these resources also address students' perspectives on what makes a well-rounded education in terms of accessibility, achievement, and disengagement.

The number of disadvantaged students in Saudi Arabia is rising, and the gap between their academic performance and those with more access to resources is expanding. Fair access to educational opportunities is essential for those living in low-income communities. Can blended learning increase educational fairness by helping children from low-income households get more out of school? Even though most evidence points to "yes," the answer is now "to be decided." To wit: (Kumar et al., 2021; Sonya Nelson et al., 2022). The term "quality education" is nebulous since it might mean different things to different people (Gonz áez-P érez & Ramrez-Montoya, 2022; Pakorn Akkakanjanasupar et al., 2022). Most of the time, we see high-quality education as a personal matter, assigning it to a particular set of materials, teaching methods, or theoretical frameworks without giving sufficient evidence to support our claims. They succinctly summarize the issue by saying that quality is relative to the beholder and does not exist in isolation. By defining high-quality education using metrics based on syntax rather than semantics, the resultant surrogate models are too simple and approximative, and the resulting metrics are frequently incapable of measuring what they were designed to measure. This is what the seminal work on what it means to be outstanding claims, "While quality is accurate, attempting to define it leads to chaos. You will never be able to do that ".

The impact of digital media on culture and instruction

Understanding the capabilities of digital technology, especially ICTs, is essential for blended learning. In response, Boltuc (2020); Maram Abu Al-Nadi (2022); proposes the concept of digital ICTs with the ability to autonomously absorb information, much like humans and other kinds of biological life. ICTs may be able to automatically exchange data with one another if they are designed with the user in mind. As we have progressed, we should now be "in the loop," developing and improving the technology rather than only using it. These days, information rather than sensory experiences form the basis of our worldview (Roberts, 2020). Information is the cornerstone of our educational system and our economic system as a whole. Because our universe is a mashup, differentiating the various parts has become more challenging. It helps pinpoint potential future applications of ICTs or specialized AI. To better emphasize more human traits like empathy, creativity, and problem-solving, educators may benefit from learning analytics, adaptive learning, calibrated peer review, and automated essay scoring (Lagakis & Demetriadis, 2022; A Akmam et al., 2022). Like with any new technology, this has the potential to save costs while simultaneously enhancing the professional standing of teachers. It would be a significant improvement, for instance, if AI were used to help teachers so that they could devote more time to giving individual students constructive criticism and guidance (Ross et al., 2019; Balcerzak & Rajchel, 2022; Pakorn Akkakanjanasupar et al., 2022). In the right hands, robots have the potential to broaden our understanding of the value of an empathetic education and the nature of humanity itself. This new combination will affect the questions of "what" and "for what" in education and policy. The cutting edge of knowledge expands and shrinks throughout time. This concept equips us with the resources to learn and take the initiative independently, ending our role as observers. He has experimented with several approaches to the new norm of blended learning.

2. Literature Review

Many scholars have provided a lengthy list of research questions that, if answered, might significantly improve the efficiency of blended learning (Widjaja & Aslan, 2022; Eti Hadiati et al., 2022). Compared to traditional classroom settings, BL has increased students' sense of belonging while boosting their academic performance (Bhagat et al., 2021; Borjalilu & Bozorgi-Amiri, 2022; Syahrawati et al., 2022; Park & Shea, 2020; Mardi Mardi et al., 2022). The most successful blended learning programs stress the need for administrative help in planning and implementing course changes (Matheos & Cleveland-Innes, 2019; Armellini et al., 2021; St. Wardah Hanafie Das et al., 2022; Agariadne Dwinggo Samala et al., 2022). To keep up with the ever-changing research topics available in the literature, which are vast, complex, and have varying definitions of what constitutes "blended learning," ongoing, in-depth research on the instructional approaches and support necessary to promote achievement and success is necessary (James & Swan, 2021; Khusniyati Masykuroh et al., 2022).

Academic accessibility

There is a "digital gap" in education since not everyone has simple access to digital resources (Pun, 2021; Wang & Liu, 2021; Yoto Yoto et al., 2022). The ability of the internet to transmit knowledge broadly, however, has the potential to expand the range of educational possibilities open to students who need to fit the typical profile. Recent research found that students in Saudi Arabia who originate from low-income families are less likely to complete high school. Many investigations have shown that (Hussar et al., 2020). Nevertheless, as more students attend online schools, this number might increase by millions (Marasi et al., 2022; Kumar Vandrangi, 2022; Yoto Yoto et al., 2022; Yuli Agustina et al., 2022). The current endeavor to enhance the use of free online learning materials has produced significant cost savings without lowering the quality of instruction (Spica, 2021) and (Bol et al., 2022).

Although all socioeconomic groups may have comparable literacy, affluence, citizenship, and English proficiency levels, not everyone will get the same advantages from access. Others have contested the generally accepted belief that the internet has benefitted impoverished individuals. Except for students of Arabian heritage, the completion rate of students from underrepresented groups in Saudi Arabia was much lower than that of students from dominant groups. Arabian students who utilize online education have considerably lower graduation rates than those who do not. However, research on K–12 online education success determinants found that just one out of fifteen courses targeted at ethnic minorities showed substantial variations in student test results. Further study is needed to thoroughly comprehend how various groups learn in online and hybrid contexts.

Defining a treatment's impact

Throughout the last ten years, there have been at least five meta-analyses on the topic of blended learning environments and how they affect students' performance in the classroom (Müller & Mildenberger, 2021; Lusa et al., 2021; Wood, 2022; Habibu Hayatu Babajo, 2022). In every study that compared blended learning to online or traditional face-to-face settings, the former consistently outperformed the latter by a small to moderate margin. However, certain limitations to this study preclude us from making generalizations. The researchers' technique stood out to reviewers of (Shamsaee et al., 2021; Velidi, 2022; Azelin Aziz et al., 2022; Muhammad Nurtanto et al., 2022)'s meta-analyses (Brown et al., 2022; Khalilullah Amin Ahmad et al., 2022) because of the tight study inclusion criteria and scale-free effect size indexes they used. Both investigations concluded no significant variations in student results for conventional, online, or hybrid courses. However, this sort of study poses concerns, especially about blended learning. As nothing else is happening in the mixture that may potentially obfuscate the findings, the effect estimates are based on the linear hypothesis testing technique, which assumes that the treatment and error components are uncorrelated. While the blended learning studies have been carefully evaluated, the assumption of independence is, at best tenuous. Hence additional caution is needed when interpreting this meta-analysis study.

Another problem is brought up by integrated teaching and learning. Not all mixes are created equal due to differences in their structure. A wide range of methods is mentioned in the studies, including lab assessments, online instruction, electronic mail, course websites, computer labs, mapping and scaffolding tools, computer clusters, interactive presentations, evidence-based practice, handwriting capture, electronic portfolios, learning management systems, and virtual devices. We clarify that the mismatch between these two possibilities for curricular architecture is what gives rise to the misunderstanding. Integrated learning is a border object representing a broader concept rather than a treatment effect of statistical significance. It is a hazy concept that aids individuals in advancing their professions while dividing them.

Nonetheless, it has a more significant influence on its group. For instance, the theoretical underpinnings of philosophy, mathematics, optics, education, and rhetoric provide a more specific explanation. There are additional complexities to take into account. Nevertheless, since "all nonlinear systems have their unique properties, although all linear models are similar," care should be used when extrapolating the size of the effect obtained when examining the influence of blended learning within a specific learning environment.

3. Objectives of the Study

In a study conducted at the University of Saudi Arabia, retention and dropout rates were compared between students enrolled in blended learning courses and those enrolled in traditional face-to-face and online courses. The research authors also sought to ascertain whether or not enrolment and dropout rates changed by the race or ethnicity of the students. Researchers examined students' final assessments of blended learning and other modalities to understand better what makes students satisfied with their education. In assessments for salary increases, recognition, and tenure, instructor evaluations are substituted with student input. The researchers considered the students' projected grades, their interest in the subject, and the structure of the courses themselves when computing the conditional likelihood for those who adhered to the recommendation.

4. Methods

For each course mode, the recoding procedure changed a grade of C or above into a one and a grade of D or below into a 0. Declassification did result in some knowledge loss, but the confirmation bias 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 an awesome overall course experience?" That was a simple yes-or-no inquiry. College enrolment, 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. 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 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; Than Oo, 2022; Fahmi Rizal et al., 2022; Siriluk Pichainarongk & Satesh Bidaisee 2022). 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 terminate 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 preservation through time comes to a close. 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**		**(Face to Face) 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; Florido-Ben fez, 2022; Hasanuddin 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 unfavourable 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 can access 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; Masganti Sit, 2022)). The several suggested alternatives have yet to make it into higher education. The process will likely continue. The implied directive from the faculty senate was the driving force behind this study team's decision to begin their inquiry.

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. 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 a high mark 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 who follow 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. They will succeed if they follow the guidelines. However, the percentage increased to 93% for those who followed the regulation.

6. Discussion

The emerging characteristic of complex adaptive systems is the subject of our investigation. Their interactions with the ecosystem's other important agents make the environment more complex than the components alone. It is hard to predict blended learning's full potential and difficulties since it interacts with every aspect of higher education.

Much of what we refer to as blended learning is blended teaching that considers pedagogical arrangements should not be surprising. This approach challenges certain commonly held beliefs about successfully providing aid in the classroom. Active learning experiences and individual variances in blending are only two such examples. The best we can do to gauge impact is via proxy indicators, such as student testimonials on their learning experiences, accomplishment, grades, assessment process results, etc. It needs to be clarified to what degree these devices provide accurate results. However, if we adopted a more eclectic strategy for education, we would be better off. (Elgohary et al., 2022; Kusmawaty Matara et al., 2022; Mesiono, 2022) point out that blended learning is not new. This practice dates back to the Medieval Ages when the professor was no longer required to read from the sole copy of the course materials that still existed. Like new technologies, books were revolutionary because they challenged established teaching methods.

The search for a suitable definition of blended learning has been exciting and challenging. While it has been claimed that the term's definitional flexibility lessens its contextual relevance, detractors should not rule out the possibility that this is not the case. Think about the idea of integrated learning. These two poles reorganize the boundaries of time, space, location, presence, and order of knowledge. According to our study, people prosper when they use idealistic cognitive models, sometimes called haphazardly created concepts.

Nonetheless, there is a strong likelihood that, like quality, our perceptions of integrated learning depend wholly on ourselves. This raises the question of whether or not to include blending in-point hypothesis testing and meta-analysis as a treatment effect. We have discussed the theory and practice of blended learning and how the norm is evolving (Era Buhari Luneto et al., 2022; Wenming Wang & Pimurai Limpapat 2022). Like unresolved chaotic solutions, the presence of an attractor and its ultimate domination cannot be demonstrated. In light of this, blended learning seems to start a significant revolution in higher education that will spread to K–12 and business training. Because of its adaptability, we can tailor blended learning to achieve various educational goals. If the idea is correct and we live in a world where we are more on the communication loop than in it, our educational future may be different. If our results are accurate, do not overfit the University

of Saudi Arabia, and our theoretical presumptions are at least partially solid, the future potential of blended learning should comfort us about the upcoming changes.

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 center for teaching and learning. 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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