

Leveraging Blended Learning To Cushion The Effect Of Fuel Subsidy Removal On Students' Academic Achievement

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Abstract

The research examined the impact of blended learning, specifically emergency remote teaching, to lessen the effects of fuel subsidy removal on students' academic achievement at the University of Ibadan. The study, which used a descriptive survey research design, included every student. The number of participants of 150 students was selected at random from the institution's three faculties—the arts, education, and social sciences. Data collection was done using a 43-item questionnaire measuring the Blended Learning to Cushion the Effects of Fuel Subsidy Removal on Students' Academic Achievement' (BLLEFSRSAA) Scale ($r=.78$), which consisted of three sub-scales: LMS Course Design Scale ($r=.77$), Online Facilitation Scale ($r=.79$) and Online Assessment Scale ($r=.78$). The data was analysed using descriptive statistics such as mean, standard deviation, multiple regression, frequency counts, and simple percentages. The study's findings showed that the blended learning of emergency remote teaching—more especially, the design of the LMS course, online facilitation, and assessment—had a statistically significant effect on reducing the negative effects of the removal of fuel subsidies on students' academic achievement ($F(3,145) = 45.244$; $R^2 = .473$), accounting for 48.3% of the variance. Given these results, it is proposed that in order to promote learning and development progress in the digital era, blended learning initiatives that emphasise the use of emergency remote learning to enhance students' learning are necessary.

Keywords: Blended Learning; Emergency Remote Teaching; Fuel Subsidy Removal; Students' Academic Achievement; University of Ibadan.

1. INTRODUCTION

In Nigeria, blended learning (BL) has become a permanent solution for pupils experiencing learning challenges as a result of the COVID-19 epidemic and the most recent cancellation of fuel subsidies. The University of Ibadan responded to the two challenges through the introduction of BL of ERL(ERL) to assist the students in ameliorating these challenges. This in essence, the ERL put in place at the University of Ibadan has the potential to help the students solve the problem of fuel subsidy removal.

BL has helped students better understand how to approach their education and has started to address some of the new issues in the field of education. The COVID-19 a global outbreak, which started in 2020, had an impact on education and led to advancements that went outside traditional in-person instruction. At the University of Ibadan, ERL was introduced to ensure learning continue during and after the pandemic. From the year 2020 to date, the University has continued using this method of learning and students have adapted to it. This method of learning has brought many opportunities for students to have access to LMS, Telegram, WhatsApp, and other learning applications to continue learning [1] (Alasa & Quadri, 2022); [2] (Omoghbe, Quadri & Kutu, 2020).

This system affords students to have access to course materials online, have contact with their tutors through Synchronous and Asynchronous mode, have access to assignments, and online tests/quizzes and get feedback promptly. This mode of learning still continues up till now when the issue of fuel subsidy removal arose in 2023, students who found it difficult to meet up with physical class attendance, took advantage of ERL to make up. This mode of learning enables students to have access to their courses online anywhere at any time. This, in essence, reduces the student's stress level, solves the problem of transportation costs and opens doors

to virtual library for students. How far this has impacted students' academic achievement is the main thought of this study.

Due to urgent situations, ERT is a brief switch to a different form of instruction delivery [3] (Hodges et al., 2020). It involves using completely remote teaching methods for instruction and training, which are often given in-person or by BL. It was intended that when the crisis or emergency had passed, the teachers would return to the earlier model. Instead of restoring an established educational setting, the main objective in this situation is to give rapid accessibility to training and instruction. Its design facilitates simple setup and accessibility during emergencies or crises. The condition was referred to as "pandemic pedagogy" or ERL and learning [4]. A recently developed method of delivering lessons is emergency remote internet teaching, particularly in times of disaster.

ERT refers to the rapid and unforeseen shift from traditional to online education prompted by the COVID-19 pandemic-induced state of emergency in several countries. This pedagogical method contrasts with pre-COVID-19 online education regarding course structure and evaluation instruments [5]. This signifies that parents, educators, students, and educational institutions were insufficiently prepared to address the issue. As a result, the unique learning environment was greatly impacted by the usage of developing technologies, which were either entirely online or combined with traditional classroom instruction on campus [6]. These technologies altered the way students interacted with learning by providing new features that enabled asynchronous as well as synchronous contact between students and professors [7]; [8]; [9]. Teachers and students were both astonished and nervous since the transfer was unexpected and unplanned. Institutions have lately made the decision to use emerging technologies to transition to an online platform in order to engage students and provide educational services. For students to learn and be satisfied with distance learning, their participation is crucial [10]. Some countries have closed their schools and institutions in response to crises as they just recently started using technology for online education [6]; [8]. Both teachers and students used new technologies for the first time during this shift.

While ERT was the focus of this research, the term "online teaching and learning" was often used in the survey, since participants were likely unfamiliar with the term owing to its infrequent usage in Nigeria. Online learning is more than just the transfer of knowledge via distant information technology; it is a social and cognitive activity [11]; [12]. Thus, comprehensive planning for studying online include not only choosing the content but also the prioritisation and facilitation of various interaction forms.

Consequently, it might take up to nine months to create a distance learning course. The concept of learning remotely using social media and the terminology deployed have become the subject of much discussion among academics. To differentiate this type of instruction from the widely recognised and acclaimed high-quality "online education," ERT has become a popular alternative term among online education scholars and practitioners [7]. The word "teaching" may be preferred by certain students over terms like "learning" or "instruction. The study's goals are best served by using the word "teaching," which is characterised as the function, behaviour, or activity of a teacher as well as the cooperative sharing of knowledge and experience, rather than delving into the nuances of those ideas [13]. Another reason is that a teacher, instructor, or professor's job is the first one they do when there are emergency adjustments in the way of delivery. It differs from conventional interactions which have been prearranged and designed for internet access. Due to unanticipated events, ERT is an interim shift in the way the lesson is delivered. This implies that when the crisis or emergency has passed, instruction will resume in its previous manner. Under these conditions, the principal aim is to facilitate temporary entry to educational and pedagogical assistance in a manner that is easily executable. It also guarantees reliable access during emergencies or crises, rather than necessitating the reconstruction of a whole educational institution. With this understanding, we may begin to differentiate ERT from "online learning."

When schools and colleges were forced to close during the crisis, several nations came up with different ways to respond. They used methods like mobile learning, radio, BL, and other more practical alternatives. The COVID-19 epidemic accelerated the adoption of digital teaching and learning, despite the fact that many instructors lack adequate digital literacy skills [14]. Furthermore, many were unclear about their responsibilities [15]. As a result, it was imperative to quickly implement an internet-based educational turnaround as an ERL substitute [16]. Educational institutions have to assume more responsibility for the

processes of course design, development, and implementation as a result of the switch to ERT. Teams responsible for academic growth and guidance must find ways to meet the institution's need for educational consistency. It should also aid faculty members in cultivating the competencies required for online instruction and engagement. Given the substantial number of faculties in need of support and the anticipated rapid growth of online teaching and learning tasks, such actions are imperative. Consequently, companies must reevaluate the functioning of instructional support units, particularly during emergencies.

The quick turnaround required for ERT might result in lower-quality instruction. A well-executed course development project may need many months to finish. The desire to "merely publish it online" runs counter to the time and work often put into creating a top-notch course. Instead of being long-term solutions, these distance learning classes deserve to be perceived as temporary solutions to pressing problems. Specifically, how little consideration may be given to the accessibility of learning resources during ERT. This is one justification for bringing up universal design for learning (UDL) in conversations about education. In order to ensure that all students can access and benefit from course materials, activities, and assessments, Universal Design for Learning places a strong focus on creating flexible, inclusive, and learner-centred educational environments. According to [17], the COVID-19 epidemic sparked a shift in digital schooling. According to this perspective, COVID-19 presents opportunities to enter a new area of internet learning, where an individual's residence is their workplace [3]; [17]. Emergency remote teaching (ERT) is now included in the literature because, despite the fact that some distant learning had already been established, the pandemic hastened its development and broadened its uses [18]. It is necessary to conceptualise the word since the term "ERT" has been used in relation to the epidemic [3].

Higher education organisations and academics are increasingly learning from the experiences of scholars as a result of the ongoing lockdowns and closures caused by subsequent COVID-19 outbreaks. Thirty closures occurred nationwide as of November 2020, representing 32.7% of all enrolled students engaged in remote learning [19]. In particular, academic institutions are investigating the experiences of teachers in order to ascertain how to enhance the existing teaching methodology [20]; [21]. The epidemic prompted the creation of ERL. For instructors, students, and parents, the scenario was unexpected and unusual, which set it apart from the well-thought-out and organised conventional ways of instruction. For the first time in history, all instructors and lecturers had to teach online, and all students had to take all of their lessons online. Providing an effective educational setting requires meticulous instructional design and development, a challenging endeavour in well-structured online education [22] (Ergulec, 2019; [23]. ERL serves as a short-term educational remedy for an emerging issue. Therefore, it is not appropriate to see the courses offered in this kind of circumstance as long-term fixes. However, with the goal to enhance students' digital literacy in this digital age, the University of Ibadan renamed it to BL.

On the other hand, students' academic achievement can be defined as the specific knowledge or skills that a learner is expected to acquire as a result of a learning activity. [24] explains that academic achievements typically reflect the knowledge, skills, attitudes, or abilities a learner has developed following their engagement in a particular higher education experience. [25] asserts that students' academic performance is quickly becoming the primary indicator of the efficacy of higher education. Research shows that learning increases when students comprehend the mastery goals of their courses and degree programmes, which is one reason for the growing emphasis on academic accomplishment [26]; [25]; [27]. It is becoming more and more necessary for colleges and universities to show that their students are meeting the learning objectives in addition to outlining them [25]; [26]. Therefore, the measure of success at the University of Ibadan extends beyond enrollment and graduation rates; it also includes the documentation of students' achievements in relation to the learning outcomes tied to the degrees they receive.

Recently, many educational theorists and scholars have begun to focus on defining what constitutes students' academic achievements. The current understanding of academic achievement emphasises the importance of assessment and accountability. Academic achievement encompasses the knowledge, skills, and dispositions such as attitudes, beliefs, and attributes that students can demonstrate as a result of their educational experiences [28]. In addition to reflecting on students' knowledge, [25] contended that academic success should also represent the cognitive and emotional development that takes place throughout college, such as enhancements in civic involvement and critical thinking. To achieve this, there is a need for a conducive

learning condition for students to thrive through the LMS course design, online facilitation and assessment components of ERT.

Purpose of Research

The specific purposes of this study are to:

1. ascertain the degree to which BL of ERL (LMS course design, online facilitation and assessment) influences lessen the effects of fuel subsidy removal on students' academic achievement.
2. determine how students feel about the impact of BL of ERL (LMS course design, online facilitation and assessment) to lessen the effects of fuel subsidy removal on their academic achievement.

Research Questions

The subsequent research questions form the basis of the current study:

1. How did BL of ERL (LMS course design, online facilitation and assessment) influence or lessen the effects of fuel subsidy removal on students' academic achievement?
2. How did the students perceive the effect of BL of ERL (LMS course design, online facilitation and assessment) to lessen the effects of fuel subsidy removal on their academic achievement?

2 THEORETICAL FRAMEWORK

Several studies have supported their study on online learning using theoretical frameworks that have been changed or employed. The E-Learn Cube Framework was chosen as the appropriate theory for this study. The E-Learn Cube, which comprises six essential components that individually affect the effectiveness of distance learning, was developed by [29] in reference to [30] work and built upon the study of [31]. Design, content, instructor, internet, assistance, and student involvement are the six key success factors for online learning. Among the six criteria are 17 characteristics that are closely related to the study carried out by [29]. Because they provide a thorough viewpoint on the creation and design of e-learning materials for teaching and evaluation, these aspects are suitable for this research. As a result, the design element mostly concerns how students view the course's organisation, movement, convenience, and accessibility in terms of simplicity and usefulness [32]. How the material is chunked or easily assimilated is another facet of course design [33]. A robust correlation exists between the course content and the structure. The material element is associated with students' perceptions of the course's usefulness, versatility, and orientation, as well as their level of work comfort [29]. The teacher's presence is another essential component of the E-Learn Cube. [34] asserts that an instructor's mindset, together with the manner in which they educate, assess, and provide feedback to their students, affects the whole experience of the student. Rubrics are often used to provide comments. A rubric functions as both a scoring tool and a mechanism for input and course enhancement. [35]. On the other hand, technology serves as a medium for the interaction possibilities and distribution of material.

A student's overall perception of a course may be improved or distorted by their experience with the technology [36]. Numerous students may encounter trauma during their first experience with learning and evaluation in an online environment. Thus, it is essential to have assistance from all sources, including government, institutional, facilitator, and technical support [37]. Finally, the success and experience of online courses are influenced by the motivation and attitudes of the students. Peers, however, may have a favourable or negative impact on experiences [29]. For instance, How did you feel about this module's design? What impact did the calibre of your Internet connection have on your participation and experience in this course? Or, In what ways has peer pressure affected your involvement in events? Some of the survey questions were developed and aligned with [29] updated theoretical framework. Give further details in your response. What connection does it have to the student, technology, and design aspects? Aspects of the constructionist approach to learning and evaluation as well as the student's viewpoint on information and communication Technology (ICT) usage are highlighted by each dimension. It is crucial to understand that the variables in the subject under investigation, including online design, facilitation, and evaluations, have been described by this theory.

3 RESEARCH METHODOLOGY

The research methodology used in this study was descriptive. University of Ibadan undergraduate students were also given the survey. The sample consisted of 150 people in total. The research participants, especially the students from the three faculties of Arts, Education, and Social Science, were chosen using a straightforward random selection technique. Fifty students were chosen from each of the three faculties. The primary data collection instrument was a series of structured questionnaires entitled BL to Lessen the Effects of Fuel Subsidy Removal on Students' Academic Achievement'(BLLEFSRSAAS). The demographic data of the respondents is the main focus of the first part. The second section was constructed to measure the Effect of BLLEFSRSAAS at the University of Ibadan. The respondents independently completed the questionnaire with assistance from two research assistants. After explaining the purpose of the study, the participants were politely urged to complete the questionnaire. Respondents filled out 150 questionnaires, which were collected and utilised to analyse the data. Descriptive statistics, including frequency counts and basic responder demographic percentages, were used to examine the demographic data. The first research question was addressed using multiple regression, while the second research question was addressed by descriptive statistics of count frequencies and simple percentages at a significance level of 0.05.

Validity of the Instruments

The face, construct and content validity of the questionnaire, which served as the main instrument of study, were evaluated. The content validity of the questionnaire was assessed using expert opinion and literature review, and key indicators were identified. The questionnaire was tested by specialist researchers in the Science and Technology Education Department, Faculty of Education to determine the validity of the instrument. Improvements, critiques, and advice from these experts were incorporated into the final version before pretesting.

Reliability

A pretest was carried out to ascertain the instrument's reliability. The researcher created a scale to rate the perception of participants on the effect of BLLEFSRSAAS at the University of Ibadan. This scale consists of 10 items, each of which has a Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SA). The values that were assigned to these alternatives were 4, 3, 2, and 1, respectively, and the researchers chose a comparable population to the current study. Several other students in the selected institution had similar characteristics and were therefore selected. Students from Alayande University of Education, Oyo, received thirty copies of the questionnaire, and the coefficients were determined using Cronbach's alpha. The created questionnaire's reliability value, as determined by pretesting, was $r = 0.78$. This signifies the instrument's internal consistency and dependability.

4. RESULTS AND DISCUSSION

Table 1: Demographic Distribution of Participants

Frequency Distribution of the Student by Gender

Items	F	%
Male	63	42%
Female	87	58%
Total	150	100%

The results showed that there were 63 (42%) men and 87 (58%) women among the participants. The fact that there were more women than men was shown.

Table 2: Frequency Distribution of the Students by Age

Items	F	%
16-20 years	78	52%

21-26 years	52	34.7%
Above 26 years	20	13.3%
Total	150	100%

As shown in the above table, 78 (52%), 52 (34.7%), and the remaining 20 (13.3%) respondents were in the 16–20 and 21–26 age ranges. This showed that the great majority of those who responded were in the 16–20 age range.

Table 3: Frequency Distribution of the Students by Level

Items	F	%
100L	30	20%
200L	22	14.7%
300L	28	18.7%
400L	74	49.3%
Total	150	100%

According to the above statistics, thirty participants (20%) were in 100L, 22 respondents (14.7%) were in 200L, 28 respondents (18.7%) were in 300L, and 74 respondents (49.3%) were in 400L.

Table 4: Frequency Distribution of Students by Ethnic

Items	F	%
Yoruba	136	90.7%
Igbo	8	5.3%
Hausa	1	0.7%
Others	5	3.3%
Total	150	100%

Eight (5.3%) of the 136 participants were Igbo, according to the above data, while the remaining 90.7% were Yoruba. The Yoruba ethnic group included the largest number of respondents, but the Hausa ethnic group had the lowest frequency, with just one respondent (0.7%). Others included 5 replies or 3.3% of the total.

Table 5: Frequency Distribution of Students by Religion

Items	F	%
Christianity	68	45.3%
Islam	79	52.7%
Traditional	3	2%
Total	150	100%

As can be seen from the preceding table, 68 (45.3%) of the respondents were Muslims, and 79 (52.7%) were Christians. It depicted that the Islam religion worshipers had the most respondents. While traditional worshipers had the lowest frequency of just 3(2%) respondents.

Answers to Research Questions

RQ 1: To what extent does the BL of ERL (LMS course design, online facilitation and assessment) influence cushion the effects of fuel subsidy removal on students' academic achievement?

Table 6: Analysis of interpersonal relationships using multiple regression

R= 0.695						
Rsquare= 0.483						
Adjusted R square = 0.473						
Std Error = 2.2404						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	784.266	3	261.422	45.244	.000 ^b
	Residual	837.761	145	5.778		
	Total	1622.027	148			

Source: Field work

Results on the combined effect of BL components (online facilitation, online assessment, and LMS course design) in reducing the negative effects of fuel subsidy removal on students' academic performance are shown in Table 1. The multiple regression correlation coefficient (R) of 0.695, multiple R^2 of 0.483, and adjusted R^2 of 0.473 in the following table show a linear connection between the independent and dependent variables. This suggests that there is a statistically significant difference at $P < 0.01$ and that the independent factors (LMS course design, online facilitation, and online assessment) explain 48.3% of the variation in the dependent variable. An F-ratio of $F_{(3, 145)} = 45.244$ was obtained from the analysis of variance for the multiple regression data, and it was significant at $P < 0.01$. As demonstrated by the multiple regression correlation coefficients (R), the results of the multiple regression analysis showed a linear relationship between the dependent variable (students' academic achievement) and the blended learning components (LMS course design, online facilitation, and online assessment). A significant 48.3% of the variation in the dependent variable was explained by the independent factors taken together. In addition, the findings imply that other variables that were overlooked by this model could have had an impact on the remaining variance.

RQ2: How did the students perceive the effect of ERL (LMS course design, online facilitation and assessment) to cushion the effects of fuel subsidy removal on their academic achievement?

Table 3 Perception of the effect of ERL (LMS course design, online facilitation and assessment) to cushion the effects of fuel subsidy removal on their academic achievement

Table 3.1: LMS Course Design

Online Course Design	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
The LMS's online course materials are rational, well-structured, ordered, and understandable.	16 (10.7%)	100 (66.7%)	27 (18)	7 (4.7)	150
Clear learning goals and results were supplied via the LMS's online course materials.	21 (14%)	97 (64.7%)	32 (21.3%)	0 (0%)	150
Appropriate tests, prompt and helpful feedback, and attentive teacher assistance are all provided by the LMS's online course design.	27 (18%)	94 (62.7%)	29 (19.3%)	0 (0%)	150

The presentation of the online course materials is dynamic, captivating, and eye-catching.	26 (17.3%)	94 (62.7%)	27 (18%)	3 (2%)	150
The LMS's online course design included an intuitive navigation mechanism and user interface.	26 (17.3%)	99 (66%)	22 (14.7%)	3 (2%)	150
Discussions and group activities with other students were made possible by the LMS's online course design.	23 (15.3%)	98 (65.3%)	27 (18%)	2 (1.3%)	150
Clear instructions and recommendations for assignments and activities were supplied via the LMS's online course design.	24 (16%)	93 (62%)	31 (20.7%)	2 (1.3%)	150
The LMS's online course design included a range of multimedia components and technological capabilities (such as interactive tests and videos) to improve learning.	29 (19.3%)	99 (66%)	21 (14%)	1 (0.7%)	150
The distance learning course's design encourages flexibility and self-directed study.	19 (12.7%)	96 (64%)	31 (20.7%)	4 (2.7%)	150
Diverse learners' requirements and preferences are taken into consideration while designing online courses using the learning management system.	22 (14.6%)	99 (66%)	26 (17.4%)	3 (2%)	150

Source: Field work

Note that whereas Disagree and Strongly Disagree accumulate to Disagree, Agree and Strongly Agree aggregate to Agree.

Table 3.1 indicated that a vast majority of respondents, 116 (77.3%), agreed that the online course materials were effective, orderly, plain, and appropriate and that the LMS conveyed certain learning objectives and outcomes. One hundred eighteen participants (78.7%) agreed with the statement. A significant majority of respondents, 121 (80.7%), agreed that virtual instructional material provides suitable tests, prompt and constructive feedback, and attentive teacher assistance. All responders agreed with the statement about the LMS course design shown in Table 3.1 above.

Table 3.2: Online Facilitation

Virtual Facilitation	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Clear directions for the learning exercises were given by the online facilitators.	26 (17.3%)	94 (62.7%)	30 (20%)	0 (0%)	150
The participants were successfully drawn into insightful conversations by the online facilitators.	26 (17.3%)	93 (62%)	30 (20%)	1 (0.6%)	150

Feedback on questions and assignments was promptly given by the online facilitators.	17 (11.3%)	98 (65.3%)	33 (22%)	2 (1.3%)	150
A welcoming and inclusive online learning atmosphere was established by the online facilitators.	18 (12%)	95 (63.3%)	36 (24%)	1 (0.6%)	150
Multimedia materials were successfully employed by the online facilitators to improve learning.	23 (15.3%)	100 (66.7%)	26 (17.4%)	1 (0.6%)	150
The attendees were urged to collaborate and actively participate by the online facilitators.	35 (23.3%)	83 (55.3%)	30 (20%)	2 (1.3%)	150
Complex subjects were explained succinctly and clearly by the online facilitators.	28 (18.7%)	88 (58.7%)	31 (20.7%)	3 (2%)	150
The technical tools and online learning platform were efficiently administered by the online facilitators.	24 (16.3%)	95 (63.3%)	30 (20%)	1 (0.6%)	150
I was encouraged and inspired to participate fully in the learning process by the online facilitators.	32 (21.3%)	86 (57.3%)	32 (21.3%)	0 (0%)	150
Overall, the online facilitation improved my educational experience.	28 (18.7%)	98 (65.3%)	24 (16%)	0 (0%)	150

Source: Field work

Note that whereas Disagree and Strongly Disagree accumulate to Disagree, Agree and Strongly Agree aggregate to Agree.

Table 3.2 above shows that 123 respondents, or 82.0%, agreed that online facilitators employed multimedia materials to improve learning. Afterwards, 120 participants, or 80%, said that the online instructors provided precise instructions for the educational activities. According to the results, most respondents agreed with the assertion on internet facilitation; however, only 24 people (16%) voiced dissent, claiming that virtual instruction improved the way they learned.

Table 3.3: Online Assessment

Online Assessment	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
The online evaluation offers explicit and well-articulated instructions.	29 (19.3%)	68 (45.3%)	48 (32%)	5 (3.3%)	150
The style and organisation of the online tests are explicit and straightforward.	30 (20%)	73 (48.7%)	45 (30%)	2 (1.3%)	150

A wide range of questions, such as multiple-choice, essay, and problem-solving questions, are used in online assessments to gauge different levels of knowledge and proficiency.	29 (19.3%)	68 (45.3%)	51 (34%)	2 (1.3%)	150
The online evaluation offers prompt feedback about performance.	24 (16%)	78 (52%)	46 (30.7%)	2 (1.3%)	150
The online evaluation identifies strengths and areas for development.	30 (20%)	71 (47.3%)	47 (31.3%)	2 (1.3%)	150
The online evaluations are equitable and impartial in their evaluation.	20 (13.3%)	72 (48%)	56 (37.3%)	2 (1.3%)	150
The online tests provide a thorough representation of the course content and learning objectives.	29 (19.3%)	46 (30.7%)	71 (47.3%)	4 (2.7%)	150
The online evaluation accurately evaluates and enhances comprehension and recall of the subject content.	29 (19.3%)	42 (28%)	76 (50.7%)	3 (2%)	150
The online examinations are demanding and foster critical thinking, introspection, and self-evaluation.	30 (20%)	30 (20%)	87 (58%)	3 (2%)	150
The online evaluations serve as useful instruments for gauging progress throughout the course.	30 (20%)	19 (12.7%)	97 (64.7%)	4 (2.7%)	150

Source: Field work

Note that whereas Disagree and Strongly Disagree accumulate to Disagree, Agree and Strongly Agree aggregate to Agree.

Table 3.3 indicated that although 101 respondents (67.4%) opposed the notion that online evaluations serve as effective instruments for monitoring progress throughout the course, a majority of respondents (103, 68.7%) agreed that the style and structure of the assessments are coherent and straightforward. In addition, 102 (68.0%) agreed that online assessment delivers prompt feedback on performance, while 90 (60%) of the respondents refuted the assertion that online assessment offers timely feedback on performance.

5. DISCUSSION OF FINDINGS

The results from the first research question underscore the impact of BL in ERL, particularly in LMS course design, virtual instruction, and evaluation on students' academic performance at the University of Ibadan. The results show that these three teaching components collectively contributed to predicting students' academic success at the institution. In fact, when combined, they accounted for 48.3% of the variance in academic achievement. This suggests that by implementing the three components considered in this study, students' academic performance could improve by 48.3%. In addition, 51.7% of the variance is beyond the purview of this study. The cumulative impact of LMS course design, virtual instruction, and evaluation on students' academic performance in this research is 48.3%. This conclusion correlates with the findings of [22] and [23], who say that a skilfully structured learning program is a complicated effort in which strategically built blended learning of experiencing reflective learning may produce an effective educational environment.

Similarly, [38]; [9] noted that providing well-written, well-illustrated, and well-packaged online course materials for BL of ERL is crucial for enhancing teaching and learning effectiveness, as well as students' academic achievement. Furthermore, [39] emphasised that the integration of platforms like Moodle and Blackboard, along with online libraries, course modules, regular online interactions between tutors and learners, and appropriate access times for online learning, could significantly improve online learning to cushion the effects of fuel subsidy removal on students' academic achievement if implemented effectively.

In line with the observations made by distance education scholars, it is essential for educational institutions integrating a form of distance education like ERL to be equipped with the necessary technologies to meet the demands of this mode of learning [40]; [41]. This aligns with [39] assertion that having the right environmental infrastructure is crucial for students' academic success in distance learning. The authors further noted that distance learning employs a variety of technologies to connect with learners remotely and is designed to foster interaction and validate learning. This corroborates the results of [42], [1], and [43], who highlighted that the incorporation of environmental facilities has been facilitated by the use of learning apps. Examples of these tools include LMS, Moodle, Zoom and Google applications. Among the elements are social networking sites like Telegram and WhatsApp, as well as Google Meet and Classroom. This integration is vital for fully incorporating ICTs to enhance distance learners' participation, retention, and overall academic success. This, in essence, supported the findings of this study that the three components are germane to facilitate learning in order to cushion the effects of fuel subsidy removal on students' academic achievement. Students' perceptions of the three elements that would lessen the effect of the elimination of fuel subsidies on their academic achievement at school are shown by the findings of research question 2. The results demonstrated that each of these three teaching components had a substantial impact on the students' learning outcomes in this specific context. According to the students, the institution should support these three teaching elements as they are important. This implies that if these teaching components are considered, the academic performance of students could improve. This aligns with the principles of UDL, which prioritise the creation of open, adaptable, and learner-centred learning environments. Ensuring that all students can gain entry to and enjoy the assignments, activities, and course materials at any time and place is the goal. In addition, the COVID-19 epidemic triggered reforms in digital schooling, according to [44]. Students may apply and use the information they have learnt thanks to digital learning materials. These observations provide credence to the idea that Covid-19 has created new opportunities for innovation in the field of online learning [17].

This finding also supports [11] assertion that online quizzes, group discussions, collaboration, and easy access to exam results through tools like WhatsApp Messenger, Email, Edmodo, Google Forms, and Moodle are effective assessment strategies for distance learners as well as online learning. In addition, [45] noted that learners who can utilize smartphones and Android devices as supplementary support services have easier access to online course modules and study guides, facilitating interaction between tutors and learners, as well as among peers, which can lead to significant educational improvements via platforms like Zoom and WhatsApp, ultimately enhancing their academic performance. This supports the finding of [39] that the key to successful teaching and learning in distant education is creating self-instructional materials, which frequently take the place of conventional lectures as the primary information source for students. Furthermore, the study by [46] concurs with the current research, emphasising that the internet's potential to enhance education, broaden access to resources, and support innovative teaching and learning methods across the continent is immense.

6. CONCLUSION

The research examined the influence of BL of ERL (LMS Course Design, Online facilitation and assessment) to lessen the effects of fuel subsidy removal on students' academic achievement at the University of Ibadan. Consistent with previous findings, the inference drawn is that the available BL of ERL (LMS Course Design, Online Facilitation, and Assessment) employed within the institution significantly influences students' academic achievement, as well as their perceptions. The introduction of BL of ERL at the University of Ibadan necessitates its significance of lessening the effects of fuel subsidy removal on students' academic achievement. This enhances students' educational efficacy and academic success inside the institution.

7. Recommendations

The study's results prompted the following recommendations:

- The government should approve the use of BL in university education to mitigate the effects of fuel subsidies on student attendance, reduce travel expenses, and alleviate stress levels.
- The lecturers should encourage the students to leverage the use of virtual libraries and open educational resources to generate learning materials.
- The use of learning and Google platforms, together with social media, should be promoted in educational settings to alleviate stress levels for both students and instructors.
- BL and digital literacy should be developed among students and tutors through sensitisation programmes such as workshops, seminars, and symposia. The initiative will help students and instructors become more adept at using electronic devices to blend in.
- The university need to prioritise BL more since that petrol subsidies have been removed. The decision will improve the motivation, engagement, retention, and technical skills and competencies of both in-person and online students.
- Policymakers need to support the incorporation of BL into curricula, methods of instruction and learning, evaluation procedures, and chances for professional growth for all education stakeholders.

Conflict of Interest

The authors declare that there is no conflict of interest in relation to this paper.

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Data Availability Statement

Data will be made available on reasonable request.

Use of artificial intelligence

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