



The Effect of Online Learning Quality (Case Study at The Faculty of Economics and Business, Bandar Lampung University)

Julian Aditya *

Faculty of Economics and Business, Universitas Bandar Lampung, Bandar Lampung City, Lampung Province, Indonesia.
Email: justicefreedom325@gmail.com

Received: 10 October 2023; Accepted: 14 November 2023; Published: 1 December 2023.

Abstract: During the unprecedented challenges posed by the Covid-19 pandemic, Universitas Bandar Lampung (UBL) swiftly transitioned to an online learning paradigm, notably within its Faculty of Economics and Business (FEB). This transition involved the utilization of various software tools, with WhatsApp serving as the primary communication platform and zoom as the virtual classroom medium. However, the initial adoption of Zoom-based online learning witnessed only a partial attendance of students, ranging from half to three-quarters of the anticipated enrollment, thereby influencing the overall educational experience. This research endeavors to systematically assess the impact of online education on the educational quality provided by the Faculty of Economics and Business at Universitas Bandar Lampung. Employing a quantitative methodology, the study conducted surveys on the 2020 FEB UBL student body, utilizing meticulously designed questionnaires and employing Simple Linear Regression for evaluation. The findings illuminate a noteworthy observation: (1) online learning demonstrates a discernibly positive influence on the quality of education, with an effect magnitude of 30.1%. This study contributes valuable insights into the dynamics of online education and its implications for the educational caliber within the context of Universitas Bandar Lampung's Faculty of Economics and Business.

Keywords: Online Learning; Learning Quality.

1. Introduction

The global Covid-19 pandemic, which has hit since March 2020, has not only had a significant impact on public health, but has also changed the educational and economic landscape in profound ways. Along with mitigation measures implemented to limit the spread of the virus, there has been a rapid increase in the adoption of online learning and working from home as solutions to maintain the continuity of the education and work process [1]. This situation forces every individual to adhere to strict protocols in avoiding crowds, and educational institutions, including universities, are one of the places experiencing a significant impact from this change [2]. Bandar Lampung University (UBL), as part of its adaptive response to pandemic conditions, has implemented an online learning system, covering various subjects, including Fintech (Financial Technology). The use of the Zoom platform is the main choice in supporting interaction between lecturers and students, which includes the delivery of material, information, and assignments. Administrative processes such as attendance, providing materials, and submitting assignments are carried out through the UBLApps platform on the university website. However, despite maximum efforts in providing facilities and information, student attendance levels on the Zoom platform did not meet expectations, with absenteeism rates ranging from 25% to almost 50%. The importance of education as a tool for behavioral transformation, as expressed by Daniati *et al* (2020) in Suprayogie & Hakim (2021) [3], marking the urgency of improving the quality of learning, especially in the context of online learning. This is crucial considering the statements of Suprpti (2013) and Budiarti (2020) regarding the influence of a quality learning environment on students' motivation, self-control, and sense of ownership of education [4][5].

The decision to implement online learning during the Covid-19 pandemic, in accordance with the Minister of Education's decree and PPKM regulations, brings its own challenges. Online learning requires the preparation of adequate equipment, supplies and conditions to support learning effectiveness. In contrast to offline learning, where direct interaction with friends and lecturers occurs, online learning limits this interaction, requiring adaptation from all parties involved. There is a positive note from research by Lubis (2020) and Karwati (2014), which shows that online education can increase students' capacity to obtain and retain information [6][7]. Nevertheless, the findings of Putri, Alexandro, & Wulandari (2021) [8], as well as Damayanti & Kuswanda (2022) [2], highlight the need for further improvements in the

development of online learning. In this context, this research aims to investigate the impact of online learning on the quality of education at the Faculty of Economics and Business, Bandar Lampung University.

E-learning, short for "electronic learning," embodies a teaching method harnessing technology and digital resources, especially the World Wide Web (Komendangi, 2016 as cited in Putri, Alexandro, & Wulandari, 2021). It represents a novel concept where students acquire knowledge and course materials through software, notably deployed in response to the Covid-19 pandemic [8]. The adoption of educational tools like Zoom, Google Meet, virtual classrooms, etc., has become mandatory for students. Zoom, in particular, has gained popularity as a meeting software in recent years (Suprayogie & Hakim, 2021) [3]. Kumar (2022) as cited in (Karwati, 2014) delineates several indicators in e-learning [7]:

- 1) materials and assessment questions, predominantly found in modules specifically designed for this purpose.
- 2) Community building, wherein students create and foster online communities to aid knowledge dissemination.
- 3) Online instructors, responsible for inspiring and guiding students, explaining concepts, addressing queries, and facilitating group work and debates.
- 4) Collaborative opportunities, flexible online learning incorporating the use of electronic media has proven to enhance student performance.
- 5) Multimedia components, comprising audio-visual elements or videos presenting course information to stimulate student interest and encourage active participation in the e-learning process.

Quality, defined as the standard of performance to be met or exceeded, signifies the acquisition of new skills and modification of existing ones through experience. It denotes "a process where an individual undergoes behavioral change as a result of acquired experiences," as defined by Gage and Berliner in (Karwati, 2014) [7]. Reflecting this, the term "learning quality" has evolved to illustrate academic institutions' ability to produce high-caliber graduates (Putri, Alexandro, & Wulandari, 2021) [8]. According to Suprapti (2013), good learning quality impacts learning motivation, discipline, responsibility, and interest (Budyarti, 2020) [4][5]. There are six different variables outlined by Bloom et al. in (Karwati, 2014) [7] for measuring learning quality: 1) Knowledge: Ability to recall previously taught information, 2) Comprehension: Grasping learned content and understanding its relevance, 3) Application: Using strategies and principles to solve new and unexpected problems, 4) Analysis: Dissecting wholes into constituent components for better understanding of their architecture, 5) Synthesis: Ability to create new patterns, and 6) Evaluation: Includes developing assessments using consistent criteria across various topics.

2. Research Method

This research adopts a quantitative approach, which Putri, Alexandro, & Wulandari (2021) defines as a research method that gives priority to the analysis of numerical data (numbers) obtained through statistical methods [8]. The main aim of this research is to identify variables that can predict academic success in the online learning context. In order to achieve this aim, this research uses a convenience sample method taken from the Class of 2020, Faculty of Economics and Business (FEB) Bandar Lampung University (UBL). A total of thirty-nine students were selected as the research sample, with the belief that a larger sample size could provide more accurate results. The core research data was obtained through the distribution of a Google Form-based questionnaire which was sent to members of the management and accounting class of 2020, Faculty of Economics and Business, Bandar Lampung University.

Table 1. Question Variables and Indicators

Variable	Dimensions	Question Indicator Code
Online Learning (X)	Study materials and evaluation	X1.1
		X1.2
		X1.3
	Community	X1.4
		X1.5
		X1.6
	Online lecturer	X1.7
		X1.8
		X1.9
	Opportunity to work together	X1.10
		X1.11
		X1.12
	Multimedia	X1.13
		X1.14
		X1.15

Learning Quality (Y)	Knowledge	Y1.1
		Y1.2
		Y1.3
	Comprehension	Y1.4
		Y1.5
		Y1.6
	Application	Y1.7
		Y1.8
		Y1.9
	Analysis	Y1.10
		Y1.11
		Y1.12
	Synthesis	Y1.13
		Y1.14
		Y1.15
	Evaluation	Y1.16
		Y1.17
		Y1.18

Online education and educational quality are measured on an interval scale in Table 1 - Question Variables and Indicators. Likert type scale with five options. On a scale of 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree), to 1 (Strongly Disagree), how would you rate online education? Descriptive statistics, data quality tests (including checking validity and reliability), basic linear regression, and hypothesis testing (including comparing sig values) were used in the analysis of this research. using a significance level of 0.05 and comparing the tcount and ttable values to test the hypothesis. IBM SPSS Statistics 24 will be used to assist the analysis process.

3. Result and Discussion

3.1 Results

Data collection was carried out using a questionnaire to 39 respondents from the Faculty of Economics and Business, Bandar Lampung University class of 2020. Distribution of the questionnaire was carried out using Google Form.

3.1.1 Respondent Characteristics

The important characteristics asked are gender, study program and occupation.

Table 2. Characteristics of Respondents

Classification	Respondent Characteristics	Amount	%
Gender	Man	10	25,6
	Woman	29	74,4
	Total	39	100
Study program	Management	26	66,6
	Accountancy	13	33,3
	Total	39	100
Work	Student	38	97,4
	Bankers	1	2,5
	Total	39	100

Source: Processed primary data.

Based on Table 2 Characteristics of Respondents, it can be seen that the students from the Faculty of Economics and Business at Bandar Lampung University who were respondents were mostly 29 (74.4%) women and only 10 (25.6%) were men who were the only respondents. Most of those who answered came from management study programs as many as 26 (66.6%) respondents and the remaining accounting as many as 13 (33.3%) respondents. In terms of employment, it can be seen that almost all of them do not work or are students as many as 38 (97.4%) and only 1 (2.5%) person works as a banker.

3.1.2 Descriptive statistics

1) Respondents' Responses to Online Learning

It is mandatory to know the class interval. The formula is $\text{Interval} = \frac{NT - NR}{K}$, Where NT = Highest expected total score, NR = lowest expected total score, K = Category. The calculation is as follows:

$$\text{Interval} = \frac{NT - NR}{K} = \frac{(\text{number of questions} \times \text{highest score}) - (\text{number of questions} \times \text{lowest score})}{\text{Category}} = \frac{(15 \times 5) - (15 \times 1)}{5} = \frac{75 - 15}{5} = \frac{60}{5} = 12$$

Based on the calculation above, an interval value of 12 is obtained, the highest value (NT) = 75, the lowest value (NR) = 15. So the determination of response criteria can be seen in the following table:

Table 3. Response Criteria for Online Learning Respondents

Class Intervals	Response Criteria
63 – 75	Strongly agree
51 – 62	Agree
39 – 50	Neutral
27 – 38	Don't agree
15 – 26	Strongly disagree

Source: Processed primary data.

Table 4. Frequency Distribution of Online Learning

No.	Class Intervals	Absolute Frequency	Relative Frequency (%)	Category
1	63 – 75	14	35,9%	Strongly agree
2	51 – 62	24	61,5%	Agree
3	39 – 50	1	2,6%	Neutral
4	27 – 38	0	0,0%	Don't agree
5	15 – 26	0	0,0%	Strongly disagree
Total		39	100%	

Source: Processed primary data.

Table 4 Frequency Distribution regarding Online Learning shows that of the 15 questions asked, 14 (35.9%) respondents gave a score in the interval 63-75 in the strongly agree category, 24 (61.5%) respondents scored in the interval 51 –62 with the agree category, 1 (2.6%) respondent with a score in the interval 39-50 in the neutral category, and there were no respondents who gave a score in the interval 27-38 in the disagree category and the interval 15-26 in the strongly disagree category agree. These results indicate that online learning at the Faculty of Economics and Business (FEB) Bandar Lampung University (UBL) is in the agree category.

Table 5. Online Learning Indicator Dimension Scores

No.	Indicator Dimensions	Question Indicator Code	Question Indicator Code	Total Real Score	Expectation Score	%	Category
1	Study materials and evaluation questions	X1.1	168	497	585	85,0%	Strongly agree
		X1.2	169				
		X1.3	160				
2	Community	X1.4	168	502	585	85,8%	Strongly agree
		X1.5	174				
		X1.6	160				
3	Online lecturer	X1.7	141	445	585	76,1%	Agree
		X1.8	146				
		X1.9	158				
4	Opportunity to work together	X1.10	168	501	585	85,6%	Strongly agree
		X1.11	167				
		X1.12	166				
5	Multimedia	X1.13	159	446	585	76,2%	Agree
		X1.14	133				
		X1.15	154				
Total			2391	2391	2925	81,7%	Strongly agree

Source: Processed primary data.

Information:

81% - 100% : Strongly agree
 61% - 80% : Agree
 41% - 60% : Neutral

21% - 40% : Don't agree
1% - 20% : Strongly disagree

As seen in Table 5 of Online Learning Indicator Dimension Scores, the indicators for online lecturers and multimedia are in the agree category, while for learning materials and evaluation questions, community and opportunities to work together are in the strongly agree category. The data above shows that the UBL Faculty of Economics and Business (FEB) online courses are quite popular with students.

2) Respondents' Responses to Learning Quality

To find out the respondent's response, it is necessary to know the class interval. The formula is $\text{Interval} = \frac{NT - NR}{K}$, Where NT = Highest expected total score, NR = lowest expected total score, K = Category. The calculation is as follows:

$$\text{Interval} = \frac{NT - NR}{K} = \frac{(\text{number of questions} \times \text{highest score}) - (\text{number of questions} \times \text{lowest score})}{\text{Category}} = \frac{(18 \times 5) - (18 \times 1)}{5} = \frac{90 - 18}{5} = \frac{72}{5} = 14,4$$

Based on the calculation above, the interval value obtained is 14.4, the highest value (NT) = 90, the lowest value (NR) = 18. So the determination of response criteria can be seen in the following table:

Table 6. Respondent Response Criteria for Learning Quality

Class Intervals	Response Criteria
75,6 – 90	Strongly agree
61,2 – 74,6	Agree
46,8 – 60,2	Neutral
31,4 – 45,8	Don't agree
18 – 32,4	Strongly disagree

Source: Processed primary data.

Table 7. Frequency Distribution of Learning Quality

No.	Class Intervals	Absolute Frequency	Relative Frequency (%)	Category
1	75,6 – 90	14	35,9%	Strongly agree
2	61,2 – 74,6	21	53,8%	Agree
3	46,8 – 60,2	4	10,3%	Neutral
4	31,4 – 45,8	0	0,0%	Don't agree
5	18 – 32,4	0	0,0%	Strongly disagree
Total		39	100%	

Source: Processed primary data.

In Table 7 Frequency Distribution regarding Learning Quality, it can be seen that 14 (35.9%) respondents gave scores that were in the interval 75.6 – 90 with the category of strongly agree, 21 (53.8%) respondents gave scores that were in interval 61.2 – 74.6 in the agree category, 4 (10.3%) respondents with scores in the interval 46.8 – 60.2 in the neutral category, and no respondents gave scores in the interval 31.4 – 45.8 in the disagree category and the interval 18 – 32.4 in the strongly disagree category. The results above can show that the quality of learning at the Faculty of Economics and Business (FEB) Bandar Lampung University (UBL) is in the agree category.

Table 8. Learning Quality Indicator Dimension Scores

No.	Indicator Dimensions	Question Indicator Code	Skor Riil	Total Real Score	Expectation Score	%	Category
1	<i>Knowledge</i>	Y1.1	162	489	585	83,6%	Strongly agree
		Y1.2	163				
		Y1.3	164				
2	<i>Comprehension</i>	Y1.4	156	462	585	79,0%	Agree
		Y1.5	155				
		Y1.6	151				
3	<i>Application</i>	Y1.7	153	446	585	76,2%	Agree
		Y1.8	142				
		Y1.9	151				
4	<i>Analysis</i>	Y1.10	152	454	585	77,6%	Agree
		Y1.11	152				
		Y1.12	150				

5	Synthesis	Y1.13	158	478	585	81,7%	Strongly agree
		Y1.14	162				
		Y1.15	158				
6	Evaluation	Y1.16	159	482	585	82,4%	Strongly agree
		Y1.17	159				
		Y1.18	164				
Total			2811	2811	3510	80,1%	Agree

Source: Processed primary data.

Information:

81% - 100% : Strongly agree
 61% - 80% : Agree
 41% - 60% : Neutral
 21% - 40% : Don't agree
 1% - 20% : Strongly disagree

From Table 8 Learning Quality Indicator Dimension Scores, it can be seen that the dimensions of the knowledge, synthesis and evaluation indicators are in the strongly agree category. The indicator dimensions of Comprehension, Application and Analysis are in the agree category. From the results above, all dimensions of learning quality indicators at FEB UBL are in the Agree category.

3.1.2 Data Quality Test

1) Validity test

Because the number of respondents is 39 respondents, the r_{table} value is 0.316. So:

If value $r_{count} > 0,361$, then the statement variable is valid

If value $r_{count} < 0,361$, then the statement variable is invalid.

Table 9. Validity Test Results

Variable	Indicator Dimensions	Question Indicator Code	R_{count}	R_{table}	Information
X	Study materials and evaluation questions	X1.1	0,399	0,316	Valid
		X1.2	0,499	0,316	Valid
		X1.3	0,680	0,316	Valid
	Community	X1.4	0,451	0,316	Valid
		X1.5	0,406	0,316	Valid
		X1.6	0,665	0,316	Valid
	Online lecturer	X1.7	0,416	0,316	Valid
		X1.8	0,515	0,316	Valid
		X1.9	0,688	0,316	Valid
	Opportunity to work together	X1.10	0,528	0,316	Valid
		X1.11	0,484	0,316	Valid
		X1.12	0,689	0,316	Valid
	Multimedia	X1.13	0,608	0,316	Valid
		X1.14	0,600	0,316	Valid
		X1.15	0,570	0,316	Valid
Y	<i>Knowledge</i>	Y1.1	0,744	0,316	Valid
		Y1.2	0,693	0,316	Valid
		Y1.3	0,724	0,316	Valid
	<i>Comprehension</i>	Y1.4	0,760	0,316	Valid
		Y1.5	0,782	0,316	Valid
		Y1.6	0,767	0,316	Valid
	<i>Application</i>	Y1.7	0,809	0,316	Valid
		Y1.8	0,672	0,316	Valid
		Y1.9	0,683	0,316	Valid
	<i>Application</i>	Y1.10	0,664	0,316	Valid
		Y1.11	0,797	0,316	Valid
		Y1.12	0,659	0,316	Valid
	<i>Synthesis</i>	Y1.13	0,731	0,316	Valid
		Y1.14	0,692	0,316	Valid
		Y1.15	0,714	0,316	Valid

<i>Evaluation</i>	Y1.16	0,785	0,316	Valid
	Y1.17	0,680	0,316	Valid
	Y1.18	0,583	0,316	Valid

Source: IBM SPSS Statistics 24 output. Processed primary data.

2) Reliability Test

Decisions in reliability testing are based on the following things:

A questionnaire is considered credible or consistent if its Cronbach's Alpha score is greater than 0.60.

Moreover, if the Cronbach's Alpha value is below 0.60, the reliability or consistency of the questionnaire is considered poor.

Table 10. Reliability Test Results - Reliability Statistics

Cronbach's Alpha	N of Items
,954	33

Source: IBM SPSS Statistics 24 output. Processed primary data.

The Cronbach's Alpha value is 0.954 as shown in Table 10 Reliability Test Results - Reliability Statistics is above the minimum acceptable value, namely 0.60. In other words, data obtained through surveys may be reliable.

3.1.3 Linear Regression Analysis

Table 11. Simple Linear Regression Analysis Test Results - Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Online Learning ^b	.	Enter

a. Dependent Variable: Learning Quality

b. All requested variables entered.

Source: IBM SPSS Statistics 24 output. Processed primary data.

Simple Linear Regression Analysis Test Results with and without Input Variables are Presented in Table 11 Linear Model Observations Based on experimental findings, when using the Enter Method the variable "Online Learning" acts as an Independent Variable, while the variable "Learning Quality" acts as a Dependent Variable.

Table 12. Simple Linear Regression Analysis Test Results - Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,548 ^a	,301	,282	8,83940

a. Predictors: (Constant), Online Learning

Source: IBM SPSS Statistics 24 output results. Processed primary data.

Model Test Results Using Simple Linear Regression Analysis This summary displays the results of tests carried out on a simple linear regression model with a correlation significance value of 0.548. Statistics show that the R Square value of the impact of online learning on knowledge retention is 30.1%.

Table 13. Simple Linear Regression Analysis Test Results - ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1243,773	1	1243,773	15,918	,000 ^b
Residual	2890,996	37	78,135		
Total	4134,769	38			

a. Dependent Variable: Learning Quality

b. Predictors: (Constant), Online Learning

Source: IBM SPSS Statistics 24 output results. Processed primary data.

Multiple Linear Regression is the most prominent one. In conclusion, there is an influence of the online learning variable (X) on the learning quality variable (Y), as seen in Table 13 Simple Linear Regression Analysis Test Results - ANOVA, where the F value = 15.918 with a significance level of 0.000 less than 0.05.

Table 14. Linear Regression Analysis Test Results - Coefficients
Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22,916	12,403		1,848	,073
	Online Learning	,802	,201	,548	3,990	,000

a. Dependent Variable: Learning Quality

Source: IBM SPSS Statistics 24 output results. Processed primary data.

From Table 14 Simple Linear Regression Analysis Test Results - Coefficients, it can be seen that the Constant (a) value is 22.916, while the Online Learning value (b / regression coefficient) is 0.802. So the regression equation can be written:

$$Y = a + bX$$

$$Y = 22,916 + 0,802X$$

This equation can be interpreted as:

1. First, the value of the Learning Quality variable remains reliable at 22.916, constant.
2. Coefficient of determination If the regression coefficient is positive, then it can be concluded that variable X has a positive effect on Y.

3.1.4 Hypothesis testing

1) Hypothesis Test Comparing Sig Values. With 0.05

Test Results Using a Simple Linear Regression Model A significance value (sig.) of 0.000 for a basic linear regression analysis coefficient of less than 0.05 indicates that variable X has an effect on Y.

2) Hypothesis Test Comparing Values T_{count} with T_{table}

$$\begin{aligned}
 T_{\text{table}} &= (a / 2) ; \text{Degrees of Freedom (df)} \\
 &= (0,05 / 2) ; 37 \text{ (The value 37 is seen in Simple Linear Regression Analysis Test Results - ANOVA)} \\
 &= 0,025 ; 37 \\
 &= 2,026 \text{ (value 2,026, obtained from } t_{\text{table}})
 \end{aligned}$$

Test Results Using a Simple Linear Regression Model The t_{value} of 3.990 is more than 2.026, indicating that variable X has an effect on variable Y as indicated by the basic linear regression analysis test coefficient.

3.2 Discussion

As can be seen in Table 12 Simple Linear Regression Analysis Test Results - Model Summary, the overall influence of online learning (X) on Learning Quality (Y) is 30.1% (R Square = 0.301). Due to these factors, as online education develops, the quality of education provided will also increase. These findings show that as science and technology progress, especially information technology, so does the role of the internet in the educational environment. (Karwati, 2014). The internet is not only being used for online courses, but is also being more integrated into traditional classrooms. E-learning, or learning through digital means, is used in the education system to increase the quantity and quality of education available to society and, by extension, the human resources available to organizations. Purbo (2001) in (Karwati, 2014) strengthens this conclusion, arguing that internet use in the classroom has at least three beneficial impacts:

- 1) Students are no longer limited by geographic or institutional constraints in pursuing their education.
- 2) Students can easily connect with professionals in their field of study. Students no longer need to attend lectures at their home institution to attend lectures or study abroad

The presented study investigates the impact of online learning on the quality of education in the Faculty of Economics and Business at the University of Bandar Lampung (UBL) during the global Covid-19 pandemic. The pandemic has prompted a rapid shift toward online education as a primary means of ensuring the continuity of learning. The university's adoption of online platforms, particularly Zoom, reflects a response to the need for remote education. However, despite these efforts, the study notes a significant gap between the expected and actual attendance rates on the Zoom platform, ranging from 25% to nearly 50%. This discrepancy raises questions about the effectiveness and engagement of students in the online learning environment. The findings regarding students' responses to online learning, as reflected in the survey results, demonstrate a generally positive attitude. Many respondents expressed agreement or strong agreement with the effectiveness of online learning tools, such as learning materials, community building, online instructors, collaborative opportunities, and multimedia components. The positive responses indicate that students find online learning, as implemented in the Faculty of Economics and Business, to be satisfactory. The discussion further delves into the quality of learning, emphasizing the importance of various dimensions, including knowledge, comprehension, application, analysis, synthesis, and evaluation. These dimensions align with Bloom et al.'s taxonomy and provide a comprehensive

framework for evaluating learning quality. The survey results indicate that students perceive a generally high level of learning quality in the context of online education at UBL's Faculty of Economics and Business. The dimensions of knowledge, synthesis, and evaluation received particularly high scores, suggesting a positive impact on these aspects of learning. The research methodology, employing a quantitative approach and utilizing statistical analysis through IBM SPSS Statistics 24, adds rigor to the study. The use of a convenience sample of 39 students from the 2020 cohort provides insights into the specific context of the Faculty of Economics and Business at UBL. The analysis includes validity and reliability tests, ensuring the robustness of the survey instrument. The high Cronbach's Alpha value of 0.954 suggests a high level of internal consistency and reliability in the collected data. Additionally, the application of linear regression analysis reveals a significant relationship between online learning and the quality of education, as evidenced by the low p-value (0.000) in the ANOVA results. The implications of the study's findings are twofold. Firstly, it highlights the generally positive reception of online learning tools among students, indicating a successful adaptation to the challenges posed by the pandemic. Secondly, the study provides evidence of a significant relationship between online learning and the quality of education, emphasizing the importance of further exploring and enhancing the online learning environment. However, it is essential to acknowledge the limitations of the study. The research focuses on a specific cohort in a particular faculty, limiting the generalizability of the findings to a broader academic context. Future research could explore the experiences of students from different cohorts and faculties, providing a more comprehensive understanding of the varied impacts of online learning. Additionally, qualitative research methods could offer deeper insights into the nuances of students' experiences and perceptions in the online learning environment. In conclusion, the study contributes valuable insights into the dynamics of online learning and its impact on the quality of education in the Faculty of Economics and Business at the University of Bandar Lampung. The positive student responses and the established relationship between online learning and education quality underscore the importance of continuous improvement and innovation in online education practices.

4. Related Work

The development of higher education and technological developments have presented a new paradigm in learning methods, especially with the increasing use of online learning or e-learning. This literature review summarizes a number of related studies investigating the quality of different student learning, with a focus on the effectiveness of online learning. The following resources provide valuable insight into understanding the factors that influence the quality of online education. Widayat (2021) investigated the quality of student learning at the higher education level through research conducted at the Denpasar State Hindu Dharma Institute. This study is in-depth in exploring the various dimensions of students' learning experiences, shedding light on the factors that contribute to the overall quality of education, especially in the context of online learning. Research by Damayanti and Kuswanda (2022) from Trisakti University examined the effectiveness of online lectures, especially in the field of mathematics. This study provides insight into how online teaching methodologies influence student learning outcomes in a particular academic discipline, making a significant contribution to the understanding of online learning methods. Suprayogie and Hakim (2021) in their research investigated the effect of e-learning on learning quality, considering the quality of the teaching, and learning process as an intervention variable. This research, published in the Journal of Education, contributes to the understanding of the relationship between e-learning practices and the quality of student learning, particularly in the context of Islamic banking courses. Suprapti's (2013) study highlights the contribution of motivation, discipline, and responsibility to the quality of science learning among elementary school students. Although not directly related to online learning, this resource provides insight into the factors that can influence the overall quality of student learning, making it relevant in understanding the dynamics of online education. Budiayanti (2020) in his research investigated the influence of learning quality and interest on accounting student learning outcomes in the context of Mathematics Economics courses. This study, published in the Journal of Educational Technology and Innovation Research (JARTIKA), provides insight into the factors that influence student performance in a particular academic discipline. Lubis (2020) explored the impact of e-learning on the quality of library science learning among students at the North Sumatra State Islamic University (UINSU) Medan. This research provides specific insights into how e-learning practices influence the quality of learning outcomes in the field of library science, enriching understanding of the adaptation of online learning methods in various academic contexts. Karwati (2014) investigated the effect of electronic learning (e-learning) on the quality of student learning. In the Journal of Communication Research, this study contributes to a broader understanding of how e-learning methodologies impact students' overall learning experience, creating a strong theoretical foundation for the improvement of online education. Putri, Alexandro, and Wulandari (2021) explored the impact of electronic learning (e-learning) on the quality of student learning in the context of economic education programs. This study, published in the Edunomics Journal, provides insight into how e-learning practices influence learning outcomes in the context of economics education, contributing to the understanding of the role of technology in improving the quality of learning at university level. Although not directly related to online learning, Komendangi's (2016) study provides insight into consumer decision making, adding a dimension to understanding external factors that can influence student choices and behavior in the context of online education. This research provides a comprehensive view of the various factors that influence the quality

of student learning, spanning both traditional and online learning environments. The diversity of academic contexts in these studies provides a strong foundation to support the development of online learning strategies that are more effective and appropriate to the needs of students at various educational levels. This research not only details the positive impacts of e-learning, but also explores various aspects that can be improved to increase the effectiveness of online learning.

5. Conclusion

Conclusion Based on the findings obtained, it can be said that E-learning at FEB UBL has a positive effect on the quality of learning along the dimensions of knowledge, understanding, application, analysis, synthesis and evaluation using the E-learning method. indicators of learning materials and evaluation questions, community, online lecturers, opportunities for collaboration, and multimedia. Based on the results of this research, researchers provide suggestions that may be useful for all parties. The suggestions are as follows:

- 1) Dimensions of online learning indicators such as online lecturers and multimedia, and dimensions of learning quality indicators such as understanding, application and analysis can be further improved and optimized.
- 2) It is hoped that with online learning (E-learning), higher education, such as universities, can reach students who want to continue their education and can study anywhere and anytime.

References

- [1] Widayat, P., 2021. Kualitas Pembelajaran Mahasiswa Selama Kuliah Online. *Jurnal Penjaminan Mutu*, 7(01), pp.105-112. DOI: <https://doi.org/10.25078/jpm.v7i1.2099>.
- [2] Damayanti, J. and Kuswanda, G.F., 2022. EFEKTIVITAS PERKULIAHAN ONLINE PADA MATA KULIAH MATEMATIKA. *Jurnal Penelitian dan Karya Ilmiah Lembaga Penelitian Universitas Trisakti*, 7(1), pp.65-79. DOI: <http://dx.doi.org/10.25105/pdk.v7i1.10766>.
- [3] Suprayogie, D.R. and Hakim, L., 2021. Pengaruh Pembelajaran E-Learning Terhadap Mutu Belajar Dengan Mutu Proses Belajar Mengajar Sebagai Variabel Intervening Mata Kuliah Perbankan Syariah. *Jurnal Pendidikan*, 9(2), pp.24-35. DOI: <https://doi.org/10.36232/pendidikan.v9i2.889>.
- [4] Suprapti, S. and Supriyanto, E., 2013. *Kontribusi Motivasi, Kedisiplinan Dan Tanggung Jawab Terhadap Mutu Belajar Ipa Pada Siswa Kelas V SDN Se-Kecamatan Ngampel Kabupaten Kendal* (Thesis, Universitas Muhammadiyah Surakarta).
- [5] Budiarti, N., 2020. Pengaruh kualitas pembelajaran dan minat belajar terhadap hasil belajar mahasiswa akuntansi pada mata kuliah matematika ekonomi. *Jurnal Riset Teknologi dan Inovasi Pendidikan (Jartika)*, 3(2), pp.215-221.
- [6] Lubis, E.A., 2020. *Pengaruh E-learning terhadap Kualitas Belajar Mahasiswa Ilmu Perpustakaan Universitas Islam Negeri Sumatera Utara (UINSU) Medan* (Thesis, Universitas Islam Negeri Sumatera Utara).
- [7] Karwati, E., 2014. Pengaruh Pembelajaran elektronik (e-learning) terhadap mutu belajar mahasiswa. *Jurnal Penelitian Komunikasi*, 17(1).
- [8] Putri, W.U., Alexandro, R. and Wulandari, M., 2021. Pengaruh pembelajaran elektronik (e-learning) terhadap mutu belajar mahasiswa program studi pendidikan ekonomi. *Edunomics Journal*, 2(2), pp.73-80. DOI: <https://doi.org/10.37304/ej.v2i2.3010>.
- [9] Komendangi, I., 2016. Dampak Keputusan Konsumen Membeli Motor Suzuki Satria FU 150cc pada PT. Sinar Galesong Mandiri Cabang Gorontalo. *Skripsi*, 1(931412074). Universitas Negeri Gorontalo.