Online Learning in the Covid Pandemic Era: What Are Students' Learning Achievements Like?

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Abstract. Unquestionably, with the Covid-19 epidemic, online media play a significant part in education nowadays. Therefore, Online media-based learning offers the biggest potential for learning. This research is the result of online learning that has been carried out for one semester. The aspect that is assessed is the outcome of the elementary school curriculum's study and development course. The research method employed was quantitative research with a descriptive (non-experimental) methodology, with PGSD students from the University of Mataram serving as research subjects. The steps of the research process were creating the necessary instruments, gathering the data, interpreting the data, and conducting a conclusion. Data collection through testing of SPSS application was utilized for data analysis, which included descriptive statistics. The data is presented in the form of tables and diagrams. The research questions include, "How is student achievement in online-based learning measured?" Can student learning outcomes outperform graduation requirements? According to the descriptive statistical test, more than half of the students scored below the class average. Student learning achievement has been inadequate. More over half of pupils must retake the "Elementary School Curriculum Study and Analysis" course in order to pass. The ramifications of this research will have a broad impact on the future of online learning.

Keywords: Online Learning · Learning Achievements

1 Introduction

Today, the use of technology in education is a requirement. Traditional face-to-face classroom learning has numerous drawbacks. Furthermore, with the Covid-19 epidemic, the utilization of technology in learning is critical. All activities are completed online [1]. This is due to the Corona virus's extremely rapid spread [2]. The Covid-19 outbreak has caused widespread alarm in all countries around the world [3]. Furthermore, because no vaccine has yet been developed, temporarily restricting activities outside the home is the most efficient strategy to slow the spread of the pandemic [4]. The implication is that widespread societal limitations are implemented [5]. Face-to-face learning is impossible

due to social constraints. Conventional learning should be avoided in order to prevent further spread. Distance learning is one option that can be used. Distance learning that is currently being created is not only autonomous learning through the distribution of modules and other readings, but has been transformed through the use of new technology. This is referred to as E-learning.

The abrupt shift in learning model from face-to-face to online has brought new issues. Furthermore, there is no adequate preparation in online learning [6]. This is simply the result of the government's lockdown strategy. All activities involving large crowds should be avoided. Instead, activities are conducted online. Learning exercises are included. The online learning concept is unfamiliar to many students and lecturers. Furthermore, participation in training can still be determined to be limited. With this pandemic, all education actors must learn online learning paradigms [7]. Given that one of the successes of online learning is the training of technology users [8]. This is one of the pandemic's benefits. Even if learning is forced, there are many educators who can learn about new learning technology. One aspect of digital literacy is the use of information technology in learning. Everyone, especially those facing the problems of the twenty-first century, needs to be digitally literate [9]. Furthermore, post-pandemic existence is expected to make the employment of information technology an essential need.

The contemporary learning process is undeniably influenced by current technological breakthroughs, particularly in terms of learning effectiveness and efficiency [10]. Whatever learning paradigm is used, it must at the very least allow students to actively participate in their learning. The learning paradigm should enable students to look for and find something, as well as think systematically, critically, and rationally [11]. The ability to think critically and analytically is one of the level skills that pupils must have [12]. Higher order thinking is one method for problem solving [13]. This type of ability is extremely important right now, especially during a pandemic, which forces students to study more independently in order to develop their abilities. Furthermore, the ability to solve difficulties is required by the younger generation in order to overcome numerous problems [14]. Furthermore, worldwide developments are becoming faster and more difficult to forecast, like as the onset of the Covid-19 pandemic.

In some circumstances, the usage of virtual technology can boost students' motivation and learning outcomes [15]. The usage of virtual technology is relevant to Indonesia's curriculum change spirit. Curriculum changes are not only occurring in Indonesia, but are becoming a global trend. Students are encouraged to learn independently in the new curriculum, which is student-centered and focuses on problem solving [16]. Students simply learnt how to memorize well in order to receive good grades in the earlier curriculum. Media use not only highlights basic cognitive abilities, but it can also drive the brain to think more creatively and innovatively. There are numerous online learning media available now, thanks to technological advancements. The WhatsApp Group (WAG) social media platform is one of the most accessible and well-known. This media is popular since it is simple to use and conserves internet bandwidth. Students in online learning frequently face the availability of a poor internet connection and the expensive cost of internet quota.

Student achievement is one indicator of the learning process's success. Learning achievement is deemed to be successful if the majority of students achieve scores higher than the minimum passing requirement. Therefore, it is necessary to analyze student learning achievement during online learning. Learning evaluation is critical. Furthermore, in order to compete worldwide, every organization must always think critically when faced with global pressure [17]. The usage of learning methods is one of the elements that determine learning achievement [18]. Based on this, this study will investigate the impact of online learning approaches on student learning achievement. Given that online learning media is still in its infancy for students. The goal of this study was to examine student learning achievement while participating in online learning. This is done to evaluate the implementation of online learning. As a result, the problem of this research study is how student learning outcomes are affected by online learning. Can student learning outcomes outperform graduation requirements? This research is supposed to yield correct data as an evaluation material for the learning that has occurred.

2 Methods

This research utilizes quantitative research with a descriptive (non-experimental) approach. The limitation of this study strategy is that it cannot generalize research findings to the full population [19]. This study's subjects are fourth semester of elementary school teacher education study program students or commonly known as PGSD, with the sample chosen based on the findings of the random sampling method. Class 4A in the morning was sampled, and there were 34 students in total. Making instruments, collecting data, presenting and interpreting data are the steps in this research. Data collection is accomplished through the use of up to 40 exam questions. The data evaluated in this study are the findings of the "Elementary School Curriculum Study and Analysis" mid-semester examination. Furthermore, the data is given in tables and diagrams to help researchers interpret the research findings. The SPSS application was used to perform statistical analysis on the data. Through statistical processes, descriptive statistics are utilized to describe student achievement. Students' average value, percentage,

Table 1. Criteria for PGSD student passing grades.

Score Range	Grade
80–100	A
72–79	B+
65–71	B
60–64	C+
56–59	C
50–55	D+
46–49	D
0–45	E

mode, median, maximum value, and minimum value are all calculated using descriptive statistical analysis.

The following formula is used to compute the value of learning achievement to make it easy to calculate:

$$Score = \frac{Score\ obtained}{total\ score} \times 100$$

The learning achievement scores obtained are then compared with the applicable value guidelines in the PGSD study program at the University of Mataram. Table 1 are the criteria for student passing grades that apply.

3 Results and Discussion

3.1 Results

The online learning model is carried out using WAG and Google Classroom media. After learning is done, then an exam is carried out using a test totaling 40 items. Student answers were analyzed based on the applicable graduation standard criteria. The results of data analysis are then presented using tables to make it easier to interpret the results. The following is a description of the research data.

Based on the results of student tests, scores can be obtained as listed in Table 2. The following is data on the distribution of the frequency of student achievement in the subject "Research and Analysis of Elementary School Curriculum".

The distribution table of learning achievement above shows that the distribution of students is mostly in the 0–45 interval, which is 11 students. This means that students get the most "E" scores. The second most frequent interval class is the 4th and 6th interval classes. Each interval class has 7 students. The 4th interval class has a value range of 60–64 while the 6th interval class has a value range of 50–55. The lowest frequency is

Tabel 2. The Frequency Distribution of Student Achievement

No	Interval	Frequency
1	80–100	0
2	72–79	1
3	65–71	3
4	60–64	7
5	56–59	4
6	50–55	7
7	46–49	1
8	0–45	11
Total		34

Table 3. Descriptive analysis of student achievement

| N	34
Mean	52,72
Median	52,50
Mode	60
Std. Deviation	10,379
Variance	107,715
Skewness	,085
Std. Error of Skewness	,403
Range	40
Minimum	35
Maximum	75
Sum	1793
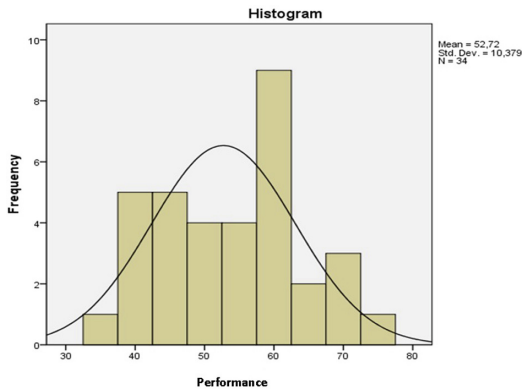
Fig. 1. Histogram of The Average Student Achievement

in the first interval class with a value range of 80–100. None of the students scored in that range at all. Table 3 are the results of a descriptive analysis of student achievement.

Based on the data above, the student's maximum score is 75. The lowest score is 35. The distance between the maximum score and the minimum score is 40. The middle value is 52.50. The average value that can be achieved by students is 52.72. The value that appears the most is 60. The standard deviation value is 10.379. Skewness value 0.085. This means that the data distribution is skewed to the left. This shows that more students' scores are below the class average. The following can be presented the average value of student achievement tests in the form of a histogram:

According to the curve in Fig. 1, the average score of the 34 students is 52.72. Table 4 displays student achievement when converted to the corresponding grade in the study program.

Table 4. Convert Values with Letters

Score Range	Frequency	Percentage	Grade
80–100	0	0%	A
72–79	1	3%	B+
65–71	3	9%	B
60–64	7	21%	C+
56–59	4	12%	C
50–55	7	21%	D+
46–49	1	3%	D
0–45	11	32%	E
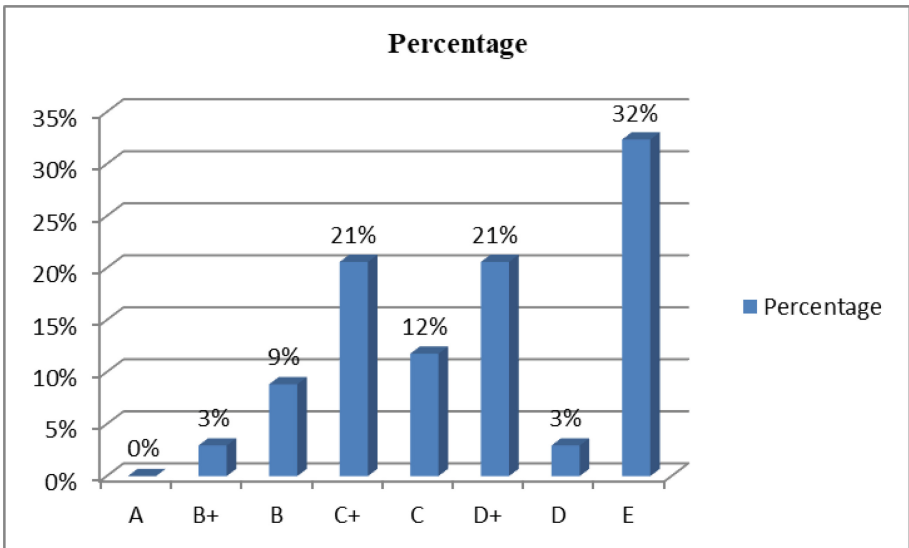
Fig. 2. Student Grades

Based on the table above, it can be seen that 34 students were only able to score B+. The number is also not too much, only 3% of the sample or only 1 student. The value of students who fall into category B is 9% or 3 students from 34 samples. The next score, which is quite a lot in the C+ category, is as many as 7 students or 21% of the existing sample. Values included in category C are 12% with a total of 4 students. The next score that quite a lot of students got was the D+ score with a total of 7 students, while the D score was only obtained by one student. The category of scores that most students get is E with the number reaching 32% or as many as 11 of the research sample. To make it easier to see the distribution of the value categories obtained by students, it can be seen in Fig. 2.
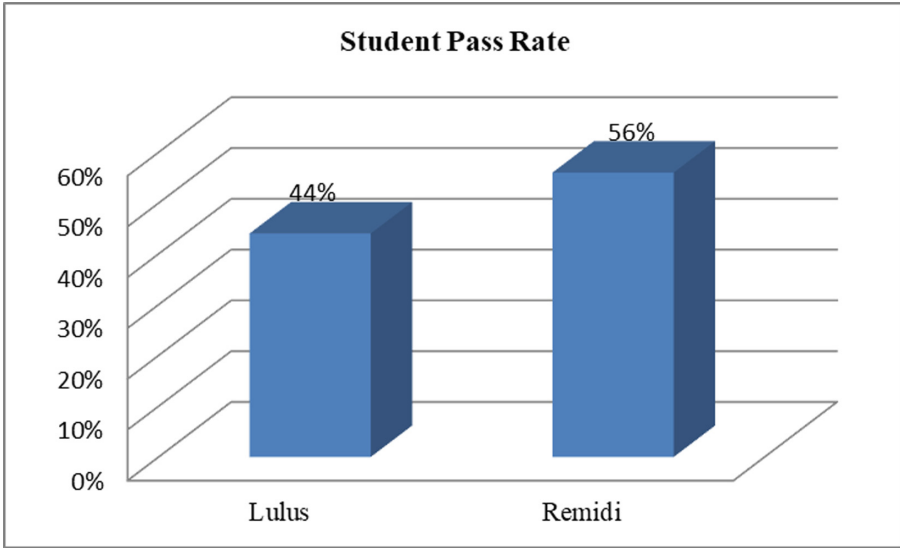
Fig. 3. Comparison of the number of students who graduated with remedial

Based on Fig. 2, it can be seen that most of the students scored in category E. The total number of students who scored D+, D and E was greater than the A-C scores. The passing standard for the course is category C. This indicates that most students have to take a re-examination in order to pass the "Elementary School Curriculum Study and Analysis" course. The following is a comparison of students who have to take the re-examination with students who pass.

Based on Fig. 3, it can be seen that the graduation rate of students in the "elementary school curriculum study and analysis" subject using the online learning model is only 44%. This means that students who can pass the course are less than 50% or no half of the class. The consequence is that more than 50% of students have to retake the exam in order to pass.

3.2 Discussion

Based on the results of the research above, it can be seen that the number of students who can graduate without remedial is less than 50%. The value of students who are included in the pass category is also not satisfactory. Based on the descriptive statistical test using the SPSS application, the class average value was 52.72. This value, if converted into a grade according to the standard at the University of Mataram, is equivalent to a D+ score. The value of D+ in the assessment standard is included in the category not yet passed. This shows that most students cannot understand the lecture material optimally. The results of this study indicate that online learning in the "Elementary School Curriculum Study and Analysis" subject needs to be evaluated. Furthermore, because the online learning paradigm is relatively new, improvements in learning implementation are required. There is no comprehensive preparation prior to online study. Because of

the intensity of the issue, learning takes place. These issues must be addressed promptly in order for online learning to function properly. This research is also consistent with the findings of Rahmatih and Fauzi [20], who found that while online learning is less effective, students prefer face-to-face learning because they are freer to express themselves and are not constrained by signal factors, especially for students who live in remote areas.

The online media used in learning the subject "Elementary School Curriculum Study and Analysis" are WAG and Google Classroom. These two media are used as a medium for discussion between lecturers and students. Modules and other readings were offered by lecturers as a source of student learning. In this instance, lecturers are not the only source of learning. Students are expected to study independently by reading the prepared modules and teaching materials. Reading interest is very crucial at this time when online learning is taking place since it plays a very vital role in the success of student learning. The desire to read is also an element that affects student learning achievement [21]. To be meaningful, this reading activity must, of course, be founded on seeing, recalling, and comprehending the information received from reading, so that what is read becomes capital to improve learning accomplishment [22]. As a result, a lack of reading interest will have an influence on student understanding. This is one of the reasons behind low student achievement.

Based on the findings of the preceding study, lecturers should consider the students' current situation before deciding on learning methods. Ideally, a student should be rigorous in his or her reading so that the learner's knowledge base expands. According to Rachmawati [23], reading diligently is essential for increasing knowledge and insight. A person's creative thoughts and critical thinking will develop if he has a comprehensive knowledge and understanding that will be valuable to him, especially during the learning process. However, in actuality, and as a current issue, not all students are careful readers.

A person's interest in reading is undoubtedly driven by self-motivation [24]. This is related to the learning styles of students. Each learner has a unique learning style. Students with visual, audio-visual, and kinesthetic learning styles exist. According to one study, learning styles can influence student learning outcomes [25]. As a result, the learning technique must take the student's learning style into account. Furthermore, in the midst of the Covid-19 pandemic, kids' focus on learning is diminished. Given that kids study in isolation and are concerned about the Corona outbreak. This should be taken into account so that lecturers can use learning approaches that make it easier for students to learn. In a pandemic situation like this, educators must devise the most effective online learning methods conceivable. Learning's most important goal is not a value. Grades are less essential than a person's competency and skill level [26]. However, online learning can fundamentally train youngsters how to learn autonomously. Student learning independence influences how learning achievement is produced; if a person has a high level of learning freedom, learning achievement can also rise [27]. As a consequence of the discussion of the study's findings, while online learning is still less successful for present students, it has the advantage of educating students to study independently from multiple sources, which is projected to boost students' reading enthusiasm.

4   Conclusion

The study's findings indicate that the usage of online learning methods in the "Elementary School Curriculum Study and Analysis" course is less effective. This is evidenced by the low learning accomplishment outcomes of students who nonetheless receive a high number of "E" scores, particularly the interval value of 0–45 with an average learning achievement value of 52.72 for 34 students. Furthermore, the majority of the pupils were unable to meet the graduation requirements. The number of students who must retake the exam exceeds the number of students who pass without remediation. This demonstrates the importance of evaluating online learning in the "Elementary School Curriculum Study and Analysis" subject for future learning enhancement.

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