Demands for Blended Learning During the Covid-19 Pandemic

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ABSTRACT

The purpose of this study is to analyze the application of the blended Learning model that has taken place at UIN Mataram, especially the PIAUD study program during the Covid-19 pandemic with a Learning Management System (LMS) system. This research is a descriptive qualitative research, and qualitative data is obtained through observation, documentation, and interviews with credible sources. The analysis is carried out inductively, the collected data is constantly reduced and verified. The results showed that learning in the PIAUD UIN Mataram study program uses a blended learning strategy with a percentage of 70:30, namely 70% online and 30% face-to-face. The use of Moodle-based LMS assistance helps students and lecturers in carrying out blended learning lectures effectively. The shortcoming found is that this research is still in the form of an analysis of the application of the blended learning model, so more in-depth research is needed regarding the effectiveness and assessment results of the application of the blended learning model with LMS. The readiness of educators, students and other educational personnel must be improved related to digital literacy, because blended learning using LMS really requires these skills.

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1. INTRODUCTION

The demands of blended learning during the COVID-19 pandemic resulted in major changes in aspects of the overall learning process in Indonesia. Various components related to education and learning have been shifted to online activities, namely from home (Wiresiti, 2021). This adds to the benefits and uses of ICT. Various activities related to blended learning in lectures, followed by meetings, seminars, final exams, graduations, training, field practice training or field practice carried out in a blended manner at UIN Mataram has its uniqueness which is quite unique and interesting to study. Blended learning is carried out due to various considerations to produce more comprehensive and effective learning. Calls from the central government regarding large-scale social restrictions and PPKM have been diminishing. Thus, the demands of blended learning become the attention, priority,
and support of various universities and other educational institutions enthusiastically (Envira Putri Poernawan, 2021)

Learning with the blended learning model has begun, not only adaptation to the pandemic situation but already before the pandemic. Research conducted by I Ketut Widiara (Widiara, 2018) revealed that blended learning as a new innovation and appropriate to be used as a generator of confidence and independence of students (students) by not only relying on knowledge or resources from the teacher but can explore beyond that. Anasi (Anasi, 2019) shows that before conducting lectures using a blended learning model or mixed lectures with the help of e-learning, there are several things that need to be developed. These include RPS that support the implementation of blended learning, learning modules that support online learning, the existence of learning videos, appropriate assignments and support for blended learning.

In tertiary institutions, the implementation of learning is carried out online following the policies of the University. One of them is the State Islamic University (UIN) Mataram. The issuance of circular letter Number: 629/Un.12/HM.01/03/2020 which states that the campus will conduct online lectures from 16 to 28 March 2020. The lectures which were originally face-to-face were later changed through the help of several applications, such as Zoom, Google Classroom, Google Meet, WhatsApp Group and several other online media (Ro’yuna, 2020). Mataram State Islamic University is a campus that is more transparent in providing information related to lecture developments. Either through account pages, social media, newspapers or WhatsApp groups.

After the issuance of the first circular letter, it was followed by the issuance of a circular letter by the Director General of Islamic Education Number B-2721.1/DJI/PP.00.9/08/2021, which stated that the implementation of Islamic Religious Higher Education (PTKI) lectures for the 2021/2022 academic year could conducted face to face with the enactment of quota restrictions. The Chancellor of UIN Mataram then conveyed the decision related to the circular, that a meeting had been held with various parties and there would be face-to-face learning which was limited to semester I and semester III (Admin- Berita, 2021). The issuance of the circular indicates that face-to-face offline lectures have begun with a limited quota. West Nusa Tenggara, especially the city of Mataram, which is still in the PPKM level 3 zone, is of course a consideration for conducting face-to-face lectures. So looking for a middle way to anticipate the spread of the virus in the university environment, lectures can be done using Blended Learning, which is a mixed method between online and offline (online and offline).

Blended Learning is a learning method that combine between learning on line with conventional learning (face to face). In this learning model, students are facilitated to be able to learn and repeat material independently for one part of the session using learning materials and resourceson line and one part of the other session is carried out face-to-face in the classroom (Nyoman Ayu Sri Desi Ariani, 2021). Blended learning is also called mixed learning, where there is a learning setting, namely activities called synchronous and asynchronous (Febriantoro, 2018). Synchronous is centered on the teacher or educators, although they are in different locations but are carried out at the same time between educators and students on the internet network. While asynchronous is still carried out by educators but not at the same time as students, subject matter has been sent and can be uploaded or downloaded anytime and anywhere by participants students in accordance with the rules in learning (Sudarsana et al., 2018).

Departing from blended learning, UIN Mataram itself has carried out blended learning in several faculties and departments, one of which is the Department of Early Childhood Islamic Education (PIAUD), especially semesters 1 and 3. Several lecturers and students whom the researchers met in interviews (brief question and answer) in the PIAUD Department said that blended learning lectures had begun. Continuing the above, the researcher then conducted interviews related to the use of media or applications in the teaching and learning process during blended learning with the head of TIPD UIN Mataram who said:

“The use of applications such as Zoom, Google Classroom, Google Meet and other online media is deemed less effective in accommodating the reporting needs for teachers and educational
standards, in addition to the need to record activities during the online learning process. The use of the application that I have mentioned is still carrying out various needs manually” (interview with the head of TIPD 7 October 2021)

Lecturers as educators who are also academics require reporting in every teaching process carried out, both online and offline lectures. This concerns the processing of lecture materials starting from the preparation of the syllabus, curriculum, lecture materials, quizzes, attendance and all kinds of things. In the 21st century, the world of education is more specifically demanding on the activeness of students in using internet media (Wijayanti et al., 2017). Students as learners not only receive knowledge or seek information on social media but are involved in the learning process. Followed by the results of an interview with the head of TIPD, who said:

“UIN Mataram itself has made preparations from several years ago to face the times, especially facing the 21st century where all kinds of things use the internet. In the early years of facing the covid-19 pandemic, we were still using several applications in the form of google meet, zoom, google classroom and WhatsApp group, but seeing conditions that were not possible during the lecture process, we then agreed with high school officials to use a more advanced application or web device. large and can accommodate the needs of both lecturers and students. The device is an LMS (Learning Management System)”

Winda Wijayanti et al (Wijayanti et al., 2017), concluded that LMS-based blended learning is done as an alternative that can be used by teachers to improve students' ICT skills as well as being a solution for teachers who lack time to deliver lessons. More Vito Triantori (Triantori, 2018) added that such learning seeks to use the internet for students by adding a conventional touch. Lecturers or teachers serve as supervisors by first providing relevant information and related tasks. The discussion about blended learning becomes important, especially in the 21st century which is all internet. This convenience again requires educators and students to understand digital literacy or the internet world.

Based on the background and literature review above, it can be seen that the implementation of blended learning is a demand in the post-pandemic or new normal adaptation. Especially campuses that have never implemented blended learning. This policy must also be supported by the use of digital literacy which must be mastered by the entire academic community and students. Therefore, whether the application of blended learning is in accordance with the use of the learning management system as software in managing the course of blended learning during the adaptation of lectures during the pandemic. Thus, this research is important for a more in-depth analysis related to the application of blended learning with LMS. Mainly a reference for other institutions both at the university level and other institutions below it, such as high school, junior high school, elementary school and so on.

2. METHODS

This article is a case study research in the Department of Early Childhood Islamic Education (PIAUD) UIN Mataram West Nusa Tenggara, especially in semesters 1 and 3 who have done blended learning or mixed learning (online and offline). This study uses qualitative research with a phenomenological approach, namely an approach in the form of analyzing human symptoms such as cases or phenomena that occur in the field (‘Aziz, Muhammad Abdul Latif, 2019). The methods used in collecting data are observation, interviews and documentation. Observations are used when conducting research on human behavior, work processes, natural, symptoms and when the respondents to be observed are not too large (Sugiyono, 2021). While interviews are use to find out various things from respondents more intensively with a small number of respondents (Sugiyono, 2021), but related to the pandemic conditions so that lectures are often conducted offline, the researchers conducted interviews in offline form. The focus of this research is on the implementation of blended learning lectures or mixed lectures between offline and online which was started at the
level of UIN Mataram, especially the PIAUD department. Using a case study design, which is an objective description of a situation (Shofie Rizqita Yusra, Rita Mariyana, 2019).

Data collection started from brief observations in several classes that conducted offline lectures, then continued with interviews with several parties or informants, namely lecturers, heads of TIPD and PIAUD students at UIN Mataram. Documentation is carried out offline and online, namely face-to-face learning and through LMS. The research was conducted for two months at two semester levels, namely semester 1 and semester 3 which both have 5 classes, so the total class is 10 classes. The instrument used is a survey via google form related to the implementation of blended learning lectures using LMS.

3. FINDINGS AND DISCUSSION

PIAUD UIN Mataram is one of the study programs at UIN Mataram which has only been established for a few years, namely from 2015 which means that it already has 7 batches. Before entering the pandemic period, Study Program was still conducting face-to-face lectures between lecturers and students. Lectures still use conventional methods, namely lecturers provide teaching materials, syllabus, lesson plans, videos or audio visuals, or are absent on that day directly to students. Entering the pandemic period in 2020, universities (campuses) began to switch to online, namely online lectures remotely. The process lasts until 2021, which means two batches are conducting lectures online or online. All lectures, ranging from absences, lecture materials, assignments, and assignment collection rooms are carried out online.

Blended learning combines the best features of classroom learning (face-to-face) and the best features of online learning to increase active independent learning by learners and reduce the amount of face-to-face time in class (Husamah, 2014). Blended learning is well known and used by many institutions including universities, one of which is at UIN Mataram. Differences in the use of blended learning methods in each institution are different, according to the online and offline portions. According to Heinze and Procter’s concept of implementing blended learning, some use a 50:50 percentage, which means 50% online and 50% face-to-face, and a percentage of 70:30, which means 70% online and 30% face-to-face (Nunung Nurhadi, 2020). In addition, there are also those who use a percentage of 75:25 which means 75% face-to-face meetings and 25% online, and 25:75 which means 25% face-to-face and 75% online (Abdullah, 2018). Research conducted by Ketut Suma, et al. gave results that the use of 70% face-to-face and 30% of online learning is effectively used in learning, including in solving problems and increasing learning motivation (Suma et al., 2020)

The use of the percentages mentioned above, returns to institutions that implement blended learning, and how is the readiness of all parties who will be involved in blended learning. Blended learning can not only be used in one type of lesson or field, but can be used and applied in sharing fields. In addition, the results obtained are more significant than traditional learning and contribute greatly to student learning outcomes and the development of internet use (Wichadee, 2013)

Figure 1. The concept of Blended Learning (Aleksej Heinze, 2004)
The PIAUD Department of UIN Mataram is one of the majors that has started to apply blended learning. This application is not carried out by all teaching staff, considering the condition of students who are still in their hometowns after some full time online or studying from home. The implementation of blended learning in the PIAUD department applies the concept of a 70:30 percentage, which means that 70% do online learning more and then 30% do face-to-face learning. This is in accordance with a circular from the campus rector which states that face-to-face lectures are limited. In accordance with the results of an interview with the head of the PIAUD department of UIN Mataram, face-to-face lectures are still limited and mostly use online (online) lectures.

The blended learning course begins with the creation of a WA (WhatsApp) group by Kosma (the class leader) as well as accepting other students and lecturers who are in charge of courses. The lecturer then creates a zoom link that will be used by students and lecturers to start the first lecture as well as an introduction at the beginning of the lecture. In addition to introductions, the lecturer will discuss the lecture contract as well as the RPS. RPS is given by directly dividing the percentage group at the next meeting and the lecturer on that day will provide an introduction or brief material related to the basic concept.

At the zoom meeting, the lecturer will also share the entry code into the online lecture system or web LMS (Learning Management System), which in this case is Moodle-based. The second meeting (second week) was conducted through LMS. Students fill out the attendance list which has been opened 30 minutes before the start of the lecture. Furthermore, the presenters send discussion materials in the discussion room or forum. The discussion was carried out for some time until the lecture was finished. Finally, the lecturer provided material reinforcement and conclusions related to the course of the discussion. During online lectures at LMS, lecturers and students not only conduct discussions, but also give assignments. Assignments can be in the form of making learning videos, looking for journals related to material, and studying similar material on youtube or other social
media. Assignments will be submitted in the LMS in the task column. Lecturers can also send a virtual meeting link on the LMS, either via Zoom or Google Meet if you need a virtual discussion.

Lectures using LMS will be held 5 to 6 times and the next meeting before UTS and UAS will be conducted offline (face to face). At offline meetings, lecturers and students will discuss or review material during online lectures at LMS. In addition, offline lectures are not only conducted before the UTS or UAS, but also other exams such as oral exams, teaching practices, observations and so on that require face-to-face meetings.

LMS as a software application designed to deliver, track, report and process learning materials, as well as monitor the progress and interactions of students for the purposes of teaching and learning activities and online activities (connected to the internet) (Darmawan, 2014). At the college level, the Learning Management System (LMS) is used using distance education technology which consists of material in the form of flash animations, student notes, user roles, evaluation systems such as surveys and quizzes, as well as evaluation of student performance in traditional and mixed education (Yigit et al., 2014). LMS devices can be used by lecturers and students in many ways such as managing lecture materials starting from compiling syllabus, uploading materials, giving assignments, receiving and responding to student work, making quizzes or tests, conducting assessments, monitoring student participation, and interacting with fellow lecturers and students both in scientific forums and online discussions (Lestari, 2013).

LMS as an instrument used by users in managing web-based learning resources or e-learning, so that students can receive lecture materials, assignments, interact with other students and other information related to lecture activities (Listiawan, 2016). LMS as a development in the world of education, especially developing digital literacy so that students are internet literate. The use of LMS as an appreciation for the development of digital literacy, both in schools and universities. The LMS that are spread and used in various institutions are different but still in one type, including E-Learning, SPADA (Online Learning System) and LMS (Learning Management System). In his case, UIN Mataram as one of the campuses that conducts blended learning lectures using LMS, especially in the Department of Early Childhood Islamic Education (PIAUD).

Semesters 1 and 3 of the 2020 and 2021 classes are the two batches that conduct lectures in a blended learning manner. According to the results of interviews with several 1st and 3rd semester students during observations in the PIAUD classroom on the 2nd floor, some lectures are conducted using blended learning and some are fully online. In both cases, students use the Moodle-based LMS (Learning Management System) application. Previously, when entering online lectures at UIN Mataram in 2020. The campus conducted simultaneous training for students and lecturers or education staff in training to operate LMS. The training is divided into two parts, the first for lecturers and the second for students. The lecturer’s special training discussed how to process Moodle-based LMS including how to enter assignment collection folders, attendance list folder, creation and distribution of meeting links and automatic scoring methods for students. The second training specifically for students discussed how to register for the LMS, fill out the attendance list, and submit assignments. Special training for students is still limited considering the pandemic conditions by sending representatives of 3 students per class. After the training is complete, the 3 students will share their knowledge with other classmates.

Figure 4. LMS training
The head of the TIPD UIN Mataram said that the use of the Moodle type LMS was very rich in uses. The facilities offered are more adequate and guarantee the needs of students than Google Classroom, which only standardizes scheduling (scheduling). LMS is also structured in presenting and providing services to service users. In addition, LMS can be accessed anytime and anywhere by students and lecturers by having to be connected to the internet. Below are some pictures of how to operate the LMS. In Figure 5, you can see the front view of the LMS at the beginning of logging in via the web using a laptop. Below it will be seen the choice of Faculty and the majors that students will choose to enter according to their majors (Figure 6). After choosing a major, students can immediately choose a course and will be led into the learning features (Figure 7).

Figure 5. Initial view of accessing the LMS

![Initial view of accessing the LMS](image1)

Figure 6. List of faculties and majors

![List of faculties and majors](image2)

Figure 7. Features of the choice of the learning process

![Features of the choice of the learning process](image3)

Different from the appearance of an LMS using the web, students in this case are facilitated by an LMS based on Moodle. Moodle is an abbreviation of Modular Oriented Dynamic Learning Environment, which means a dynamic learning place using an object-oriented model, with students directly entering the digital “classroom” to access learning materials (Darmawan, 2014). So, students download the Moodle application on the Play store then log in to the account with the username and
password. If using the web, students will do the previous steps, but if using Moodle, students will immediately enter the choice of majors and courses obtained in that semester. Seen in the display image below is the Moodle application using a mobile phone.

Figure 8. PIAUD Department Dashboard

In Figure 5, students are directly directed to a list of courses taken and classrooms. Then in Figure 6, students can immediately see the features provided in fulfilling the learning process. These features include attendance lists, materials, discussion rooms, RPS, quizzes, assignments, task collection, and zoom or google meet (virtual) links. For students who do not understand LMS, whether using the web or the Moodle application, they can immediately inform the university authorities. In addition, how to operate the LMS can also be seen on the web and YouTube videos uploaded by the university. There is no compulsion to use LMS for students, either using a web application or Moodle, so students are free to use whichever one.

Based on the results of interviews with students and lecturers of PIAUD UIN Mataram, it was stated that the use of LMS had its advantages and disadvantages. According to an interview with the head of the department (as well as a teacher), the use of LMS must follow the system, starting from
uploading the RPS, the material for the first second meeting and so on, uploading assignments, attendance, and virtual meeting links. Meanwhile, post-lockdown, namely blended learning (mixed learning), lecturers will continue to do the same thing at LMS, only that they will hold face-to-face meetings several times if it is felt that there is material that needs to be straightened out by meeting face-to-face. In addition, when entering or approaching the semester exam, the lecturer will review the lecture material while online.

In the PIAUD department, blended learning is still being carried out. Some lecturers will hold face-to-face meetings if deemed necessary, such as courses that require field studies or observations, playing and game courses, microteaching and other courses. In addition to interviews with lecturers, interviews were also conducted with semester 1 and 3 students. Interviews were conducted directly and using google form. Some of the questions that the researcher gave on the google form were the facilities or media used in accessing the LMS (Moodle), how to master the use of the LMS, how to master the material while it was given through the LMS, how the LMS looked, how was student satisfaction during lectures using the LMS, and what features only need or should be added in the LMS.

The use of LMS in early semester students or semesters 1 and 3 is not an easy thing to master quickly. Students who are not used to accessing digital media will find it difficult to operate it. However, the results of direct interviews show that students continue to learn from their fellow classmates. This is also because during the school period (SMA) all learning is done face-to-face. In addition, students use the web or digital more by opening social media. From the results of the interview using the google form above, in Figure 10. students who understand as much as 76%, do not understand as much as 24% and do not understand there are none.

The results above are based on the observations of the researchers on the results of the google form that those who choose to understand less, namely from semester 1 and those who choose to

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Yuyun Ayu Lestari, Naimah / Demands for Blended Learning During the Covid-19 Pandemic
understand more from semester 3. Furthermore, in Figure 11, the mastery of the material provided while using LMS in offline lectures prefers to be understood. namely 65.4%, who chose to be very understandable as much as 6.7%, chose to be less understood as much as 2.9% and those who chose not to understand were none 0%. The picture is in accordance with the purpose of blended learning in the PIAUD UIN Mataram department, by conducting offline lectures it can provide an understanding of material that students have not understood during offline lectures.

The appearance of a product will be an attraction in choosing and using it. It’s the same with the LMS display. The results shown in Figure 12 state that 51% are very attractive, 45% are less attractive and 2.9% are not. In Figure 13, the student satisfaction in using the LMS during lectures is 72.1% satisfied, 26% dissatisfied and 1.9% very satisfied. These results are then added with several other form results, namely 100% students use cellphones (mobile phones). The last question is what features need to be added in the LMS. The results obtained are more answered that there must be a notification feature in the form of notification if the lecture has started, filling out absences and quizzes, as well as having a microphone feature so that students do not need to type during lectures.

The use of LMS certainly provides convenience in all aspects of lectures, especially during online or mixed lectures. The PIAUD Department of UIN Mataram is still conducting blended lectures, seeing the pandemic conditions that make it impossible to fully meet face-to-face. Based on interviews with several sources above, it was found that there were several shortcomings while using the LMS. The drawback is that a minimal or inadequate internet connection will hinder the course of lectures. So lectures using LMS must remain connected to the internet. Another drawback is the lack of
interaction between lecturers (educators) and students (students) directly or face to face. But with blended learning, students and lecturers can still interact directly if needed.

4. CONCLUSION

Early Childhood Islamic Education Study Program (PIAUD) as one of the study programs or departments within UIN Mataram which has conducted blended learning lectures with the issuance of face-to-face lecture circulars. Face-to-face lectures are limited to semesters 1 and 3. Lectures using blended learning are then carried out by the department under campus instructions using a Moodle-based Learning Management System (LMS) web tool. Lectures online or online are still not understood by students, especially semester 1 and 3 students. The results of interviews with students about the use and satisfaction of using LMS as an intermediary or liaison between lecturers and students are still inadequate. The view given is the main attraction in using the LMS.

The convenience for educators is that the learning process can be recorded automatically, making it easier for educators to report during lectures. The drawback in using LMS during lectures is that both educators and students must be connected to the internet, meaning that if the internet is less stable or inadequate, the lecture will not run optimally. Lectures or learning with blended learning models are currently widely practiced, but must have the right strategy. This article is very important for readers, especially educators, in implementing new strategies in the midst of a pandemic or taking advantage of the digital world.

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