LEARNING MANAGEMENT IN THE COVID-19 PANDEMIC BASED ON BLENDED LEARNING ON EDUCATION MANAGEMENT STUDENTS UNIVERSITY OF CENDERAWASIH JAYAPURA

Manajemen Pembelajaran Di Masa Pandemi Covid-19 Berbasis Blended Learning Pada Mahasiswa Manajemen Pendidikan Universitas Cenderawasih Jayapura

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ABSTRACT:

Pembelajaran Berbasis Blended Learning (PBBL) as a technology-based learning model, has been widely used by most educational institutions in maximizing learning systems. However, unlike the case with Cenderawasih University in Jayapura city, PBBL is still considered new, because the infrastructure systems are not optimal. Based on the preliminary studies that have been carried out, there are indications of student discomfort in carrying out PBBL. The purpose of this study was to find out how the implementation of PBBL management during the Covid-19 pandemic and provide recommendations for good and appropriate PBBL models, so that in the future this model can be applied to the learning system at Cenderawasih University in order to improve the quality of learning. The research subjects were students of the Bachelor of Education Management study program at Cenderawasih University, Jayapura using a qualitative approach with data collection techniques in the form of triangulation which was a combination of interviews with 3 teachers/lecturers as research subjects, observations on the media and lecture facilities and documentation in the form of learning outcomes. As a result of the research, the Education Management Undergraduate Study Program has not implemented PBBL management properly and appropriately, so the authors provide recommendations for a PBBL management model based on previous studies and

Keywords:
blended learning; manajemen pendidikan; pandemi covid-19

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several literature books related to Blended Learning, which are adapted to the implementation of the system. Learning at Cenderawasih University.

ABSTRAK:

Pembelajaran Berbasis Blended Learning (PBBL) sebagai model pembelajaran yang berbasis teknologi, telah banyak digunakan oleh sebagian besar institusi pendidikan dalam memaksimalkan sistem pembelajaran. Namun berbeda halnya dengan Universitas Cenderawasih di kota Jayapura, PBBL masih dianggap baru, dikarenakan sistem sarana prasarana yang belum maksimal. Berdasarkan pada studi pendahuluan yang telah dilakukan, terdapat indikasi ketidaknyamanan mahasiswa dalam menjalankan PBBL. Tujuan penelitian ini adalah untuk mengetahui bagaimana penerapan manajemen PBBL di masa pandemi Covid-19 dan memberikan rekomendasi model PBBL yang baik dan sesuai, sehingga kedepannya model ini dapat diaplikasikan pada sistem pembelajaran di Universitas Cenderawasih dalam rangka peningkatan kualitas belajar. Subjek penelitian adalah mahasiswa program studi S1 Manajemen Pendidikan Universitas Cenderawasih Jayapura dengan menggunakan pendekatan kualitatif dengan teknik pengumpulan data berupa triangulasi yang merupakan gabungan dari wawancara kepada 3 orang pengajar/dosen sebagai subjek penelitian, observasi pada media dan fasilitas perkuliahan dan dokumentasi berupa nilai hasil belajar. Sebagai hasil penelitian, Program Studi S1 Manajemen Pendidikan belum menerapkan manajemen PBBL dengan baik dan sesuai, sehingga penulis memberikan rekomendasi model manajemen PBBL yang didasarkan pada penelitian-penelitian yang telah dilakukan sebelumnya dan beberapa buku literature yang terkait dengan Blended Learning, dimana disesuaikan dengan penerapan sistem pembelajaran di Universitas Cenderawasih.

INTRODUCTION

In 2019, Indonesia was surprised by the spread of a virus that was able to spread and infect quickly. Covid-19 or Corona Virus Disease 2019 is a new virus variant that first appeared in
China in December 2019. Covid-19 is genetically similar to SARS which was discovered in 2002. Covid-19 cases are like a snowball, where the number of spikes in infected people increases daily (Aditia, 2021). Based on data on the official Covid-19 website, which was updated on June 3, 2022, globally, the number of Covid-19 cases has spread to 232 countries with 528,816,317 positive cases and 6,294,969 deaths. Meanwhile, there were 6,056,017 positive cases in Indonesia, with 5,896,290 recovered and 156,604 people dying (COVID-19 Handling Task Force, 2021 Covid-19 will contaminate other people mostly through droplets or saliva of an infected person that comes out of the nose or mouth through sneezing and coughing. Therefore, everyone should avoid physical contact with each other and gather in one place. The recommended prevention methods are social distancing, always wearing a mask, and always washing hands with soap or using hand sanitizer after making physical contact with objects or traveling out of the house.

Based on the Covid-19 pandemic, all educational institutions and institutions are recommended by the government to carry out distance learning activities (PJJ) or online as a form of effort to implement health protocols. In addition to providing these recommendations, the government, in this case, the Ministry of Education and Culture, has also provided assistance in the form of internet quota subsidies for students, teachers, students, and lecturers for four months (September to December 2020) in the early period of the pandemic. Amount of assistance, students 35 GB/month, teachers 42 GB/month, and students and lecturers 50 GB/month. The head of the education unit must complete the mobile phone number of active students through the dapodik application before September 11, 2020, and some other assistance (GTK, 2020). The amount of assistance that the government has provided aims to keep the learning process normally going even though it is done differently. Although the government has made many maximum efforts to continue the learning process, problems still exist. One of the studies conducted by Komariah (Komariah et al., 2021) entitled "Online Learning Barriers in Lectures During the Covid-19 Pandemic" stated that the barriers to student learning during the pandemic from the biggest internal factor were miscommunication between lecturers and students (25,71%), decreased motivation (24,28%), poor time management (17,15). Meanwhile, external obstacles
in online learning are internet signal/network that is difficult or unstable in the neighborhood (55.13%), availability of internet quota (12.97%), and limited facilities/gadgets (9.18%).

Over time, the current pandemic condition has gradually improved, with the government providing the general public with three doses of the COVID-19 vaccine for free. All schools and colleges are starting to change the way of learning from online to Blended Learning-Based Learning (PBBL). PBBL is learning that combines learning delivery strategies using face-to-face activities, computer-based learning (offline), and online (internet and mobile learning) (Dwiyogo, 2018). PBBL is currently considered suitable to meet learning needs during the Covid-19 pandemic because, theoretically, PBBL will provide a better learning experience. After all, it mixes and matches various resources and provides learning facilities by providing various learning resources to students, such as mobile learning and interactive multimedia, videos, power point presentations, journals, books, dictation, and others (Dwiyogo, 2018). The same thing was also stated by (Masban, 2021) in his research entitled "The Effect of Blended Learning in the Covid-19 Pandemic Period on Learning Motivation and Understanding of Students’ Concepts". In this study, it can be seen that the use of blended learning contributed 47% to increasing students' learning motivation and 61% to students’ conceptual understanding in class XII MIPA1 SMA Negeri 1 Sakra. Despite implementing PBBL, schools and universities still apply health protocols in face-to-face learning.

In its journey, PBBL did not necessarily succeed in all schools and colleges and their parts. Especially during the Covid-19 pandemic, most learning activities use e-learning. As is the case with students of the Education Management (MP) Undergraduate Program at Cenderawasih University, Jayapura, Papua, PBBL is indicated not to be going well because it sees the desire of students who prefer face-to-face learning in class. Other problems faced, more or less the same as those faced by all other educational institutions when full PJJ was still being carried out, such as the availability of gadgets and internet connectivity. During the pandemic, applied to learn management underwent a very significant change. From the first meeting each other face to face, we now have to go through the virtual world without any direct interaction. The collection of assignments and learning methods,
usually discussed in class, must now be done online. Teaching materials that were originally in the form of modules now have to be accessed via the internet by the students themselves. For MP students, this is a new thing, so in practice, both lecturers and students need time to adapt from changes offline to online.

Students’ problems in using and utilizing technology are also the main focus of lecturers in giving assignments and teaching materials. Another important problem is the lack of readiness to deal with PBBL or PJJ and the lack of adequate facilities and infrastructure to support PBBL. Thus, both universities and faculties must immediately procure and optimize existing information technology facilities and provide training and socialization to students and parents to be ready to face information technology-based learning models.

RESEARCH METHOD

This research is research with a qualitative approach. A qualitative approach is a research procedure that produces descriptive data in the form of written or spoken words from the people and behaviors studied (Tanzeh, Ahmad Arikunto, 2019). The subjects in this study were three teaching lecturers, one of whom was the Head of the Study Program. The objects of research in this study are several things that include learning management according to (Rukajat, 2018), which consists of management of learning places/classrooms, management of learning materials, management of activities and time, management of students, management of learning resources, and management of teaching behavior.

The data analysis stage in this study refers to the Miles and Huberman model (Sugiyono, 2017), which consists of several stages, namely the first stage is the data collection stage, the second stage is the data reduction stage, the third stage is the display data conclusion drawing or verification stage.

RESULTS AND DISCUSSION

The results and discussion are presented in several sections: the data analysis results and the learning management recommendations.

The following is the data analysis result divided into several stages.

Data Collection Phase (Collection Data)

At this stage, data collection using triangulation techniques in the form of observations, interviews, and
documentation of learning outcomes, the results obtained were adjusted to the object under study, namely:

1. Classroom management: During the Blended Learning process, combines real (face-to-face) and virtual (distance) classrooms. Lecturers only use the ZOOM meeting facility for virtual classes, whereas the Study Program provides only two accounts to facilitate virtual classes. As a result, virtual classes did not go according to schedule because each lecturer had to coordinate with each other in using the account. In addition to using ZOOM meetings, the Whatsapp Group chat application is a communication medium between lecturers and students.

2. Management of learning materials: According to (Rukajat, 2018), the management of learning materials includes aspects of planning assignments and learning tools, providing feedback, and providing an assessment program that allows all students to demonstrate performance as a result of learning. Overall, the management of learning materials in modules/books and the materials provided during virtual classes did not go well compared to real classes. The obstacles faced are the internet network and the availability of devices/gadgets used in conducting virtual classes. As a result, the lecturer only conveys the lecture material. The absence of a lab or computer room with an internet network makes students try harder to take virtual classes.

3. Management of activities and time: In this management, activities and time spent in real and virtual classrooms are very different. In order to save the internet quota during virtual classes, the activities and time used only contain material presentations and group discussions.

4. Student Management: According to Muslich (Rukajat, 2018), in order to develop individual and social abilities, student/student learning arrangements should alternate between individual (individual), pair, and group learning. In some lecturers, the management of students is adjusted to the material or teaching materials brought; if the material requires discussion, the students will be directed into several groups. The goal is to help each other and work together among students.
5. Management of learning resources: According to AECT (Association for Education and Communication Technology) (Samsinar, 2019) defines learning resources as all sources that include data, people, and goods used by students, either individually or in combination, usually in informal situations, to facilitate learning. Meanwhile, Yusuf (Samsinar, 2019) defines learning resources as media, objects, data, facts, ideas, people, and others. Learning resources only come from modules/books made by lecturers, materials, or occasionally using journals for students to review.

6. Management of teaching behavior: According to Risher (SARAH, 2018), lecturers' teaching behavior consists of 3 main elements, namely knowledge, attitudes/personal qualities, and skills/skills. The teaching behavior of lecturers is appropriate to show the elements described in the definition above. However, faculties or even universities have not carried out many or participated in seminars or workshops to improve the quality and skills of lecturers.

Data Reduction Phase (Data Reduction)

Reduction is summarizing, choosing the main things, and focusing on important things to look for themes and patterns (Sugiyono, 2017). Data reduction is also carried out to sharpen, classify, direct, and discard unnecessary data and organize data in such a way that conclusions can be drawn and verified (Salmaa, nd). At this stage, the data that is reduced is data from interviews, observations, and documentation, so priority is obtained to focus on the availability of a computer lab that has a stable internet network, expansion of resources, learning materials, and media, learning modeling settings, especially during virtual classes (distance learning). As well as maximizing the existing media and facilities.

Presentation of Data (Display Data)

The purpose of presenting data is to make it easier for researchers to understand and plan further work based on these circumstances. In addition, through the presentation of this data, researchers can see which data is important and needed and which data is not needed. The following is the presentation of the data shown in Diagram 1 below.
Based on the diagram above, some management parts need improvement so Blended Learning-based learning management can run well.

**Conclusion Drawing and Verification (Conclusion Drowing/Verification)**

At the conclusion stage, the author records the data analysis results, which are then used as the basis for providing recommendations. The conclusions obtained in each management section are:

1. The management of the virtual classroom is still not well organized or not on schedule because it is only centered on 2 ZOOM meeting accounts provided by the study program. This differs from real classrooms or face-to-face meetings, where classrooms are available according to a predetermined schedule. Most of the task collection media is only through the WhatsApp group platform, where the platform has limited storage capacity, namely in cellphone memory.

2. Management of learning materials is more or less the same as resource management. Learning resources only use modules/books and weekly materials made by lecturers so that students are less likely to explore new things related to learning materials. Some lecturers sometimes use scientific journals to be reviewed to add insight to students.

3. Management of activities and time related to the lecture/student learning process. Students enjoy more time with the lecturers during face-to-face meetings because communication can run
well. As for the activities and time during virtual classes, students feel less comfortable and do not enjoy them because of the limited internet facilities and devices they have for attending lectures. For that, lecturers must make a structured activity, especially during virtual classes, so students cannot get bored and follow.

4. In student management, lecturers have often divided study groups with the aim that each student can be a trigger for other students to cooperate (contextual learning model). However, not infrequently, conventional learning models with the lecture method are often applied to virtual classes. As a result, students who experience unstable internet network problems will feel useless and bored attending class.

5. For teaching behavior management, most lecturers have tried the contextual learning model to encourage students to be more active and creative. However, lecturers do not often attend seminars and workshops related to the discussion of Blended Learning.

Recommendations for Blended Learning-Based Learning Management

Before implementing the recommendations given, structured planning must be carried out first. Some of these plans, according to (Oktifa, 2021.), are as follows:

1. The university or faculty identifies the urgency in implementing learning using the Blended Learning method and registering the facilities and infrastructure needed in the application of this learning method. The facilities and infrastructure needed in PBBL management are the availability of several computer labs, where these lab rooms function as a place for students to explore insights and knowledge and as a place to take online lectures if they do not have a personal computer/laptop equipped with an adequate internet network.

In addition, all campus areas or student center must be covered by an internet network with stable data speeds to make it easier for students to improve the quality of their studies.

2. Designing learning techniques using the Blended Learning method, including determining
the platform. Which is used to support this learning.

3. Disseminate the policies taken to students and parents. This is important because Blended Learning for ordinary people is foreign.

The following are recommendations based on the data analysis results compiled based on previous research and related literature books.

**Classroom Management**

Lectures are carried out in real terms and in class according to a predetermined schedule. The facilities available in the classroom should include hardware such as a slide projector, film projector or LED TV, OHP, and other multimedia devices. The faculty should also provide facilities for a computer lab connected to the internet network, which can be accessed by students so that they can help the lecture process online.

In virtual/online lectures, the classrooms use the e-learning form of LMS. LMS stands for Learning Management System. According to Riyadi (Setya Raharja, 2010), LMS is software used to create online-based web and manage learning activities and their results. In the LMS, some features can meet all users' needs in terms of learning.

For students of the Learning Management study program, recommendations for using virtual classrooms during Blended Learning lessons can use well-known platforms such as Google Classroom or Moodle. According to (UPI Public Relations, nd), the advantages of Google Classroom for learning management are:

1. Creating easy, comfortable, and efficient class groups,
2. Improving communication between teachers and students,
3. Saving time on assignments and student assessments,
4. Centralizes files into one folder,
5. It can be used even if learning is done offline.

![Figure 2: The Role of LMS in the Learning Process](https://sites.google.com/site/anandasuciatissite/home/pengantar-e-learning/5-learning-management-system-lms-beserta-contohnya)
Compared to Moodle, using Google Workspace will be a communicative and interactive learning tool for MP students. The operation and attractive display design can help students understand the use of technology. Google Workspace provides packages that can be accessed for free or paid, depending on users’ needs.

Based on the results of research regarding the comparison between Google Classroom and Moodle, the results show that:

**Table 1: Google Classroom VS Moodle**

<table>
<thead>
<tr>
<th></th>
<th>Google Classroom</th>
<th>Moodle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Rating</td>
<td>4,6/5</td>
<td>4,19/5</td>
</tr>
<tr>
<td>(990 Reviewers)</td>
<td>(1631 Reviewers)</td>
<td></td>
</tr>
<tr>
<td>Ease of Use</td>
<td>4,5/5</td>
<td>4,0/5</td>
</tr>
<tr>
<td>Price and Function</td>
<td>4,5/5</td>
<td>4,5/5</td>
</tr>
<tr>
<td>Conformity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Support</td>
<td>4,5/5</td>
<td>4,0/5</td>
</tr>
<tr>
<td>Functionality</td>
<td>4,5/5</td>
<td>4,0/5</td>
</tr>
</tbody>
</table>

(Source: Adapted from Software Advise on (Trisno, 2021)

**Learning Material Management**

Based on student learning styles that are still influenced by environmental and social situations, the learning materials that can be applied are Problem Based Learning (PBL). Through the PBL model, students learn by requiring much thinking in solving real-life problems so that many materials and learning resources are needed; then, students will be divided into several groups to establish cooperative relationships. One of the goals of PBL is to improve intellectual skills (Yamin, 2013), activeness, and independence.

**Table 2: PBL Implementation Steps in PBBL**
<table>
<thead>
<tr>
<th>Fase</th>
<th>Kategori</th>
<th>Aktivitas Pendidik</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide orientation on problems</td>
<td>Online/Offline</td>
<td>Communicate learning objectives, describe various important logistical needs, and motivate students to engage in selected real problem-solving activities.</td>
</tr>
<tr>
<td>Organize or divide students to research in groups</td>
<td>Online/Offline</td>
<td>Help students define and organize learning tasks related to problems that have been oriented in the previous stage.</td>
</tr>
<tr>
<td>Assist in independent and group investigations</td>
<td>Offline</td>
<td>Encourage students to get the right information, conduct experiments, and look for explanations and solutions.</td>
</tr>
<tr>
<td>Develop and present artifacts and exhibits</td>
<td>Online</td>
<td>Assists students in planning and preparing artifacts such as reports, videotapes, and models and helps them to convey them to others.</td>
</tr>
<tr>
<td>Analyzing and evaluating problem-solving processes</td>
<td>Offline</td>
<td>It helps students to reflect on their investigations and the processes they use.</td>
</tr>
</tbody>
</table>

(Source: Adapted from Arends on (Yuyu, 2017)

**Activity and Time Management**

Management of activity arrangements carried out during PBBL can use Synchronous and Asynchronous Blended Learning models. According to Arfan et al. in (Misnawati, 2021), Synchronous Learning or Synchronous Learning is learning carried out with a real-time communication system where lecturers can deliver material in class to students directly face to face either in face-to-face learning rooms (live - synchronous learning) or virtual synchronous learning. Learning or asynchronous learning is carried out asynchronously, meaning that educators provide material that can be used as a reference by students to study independently, depending on the opportunity and time. However, of course, it is still under the control and monitoring of the teacher or lecturer. The material can be studied again by students in the form of PPT files, PDF files, or video files.

![Figure 4: Quadrant of Blended Learning Settings (Source: Chaeruman, 2018)](http://doi.org/10.31800/jtp.kw.v11n1.p165–185)

Besides being synchronous, the asynchronous Blended Learning model will also help students understand the material given by the lecturer. Through this model, students will be familiar with independent learning, so they do not depend on learning materials/sources that only come from lecturers. Recommendations for managing synchronous and asynchronous
Blended Learning learning activities will be presented in table 3 below.

### Table 3: PBL Implementation Steps in PBBL

<table>
<thead>
<tr>
<th>Learning Settings</th>
<th>Synchronous</th>
<th>Asynchronous</th>
<th>Asynchronous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct (SL)</td>
<td>Independent (AM)</td>
<td>Collaborative (AK)</td>
</tr>
<tr>
<td>1. Lecture</td>
<td>1. Virtual Class</td>
<td>1. Reading</td>
<td>1. Participation in discussion</td>
</tr>
<tr>
<td>2. Discussion</td>
<td>2. Audio Conference</td>
<td>2. Watching</td>
<td>Through an online discussion forum</td>
</tr>
<tr>
<td>4. Workshop</td>
<td>4. Webinar</td>
<td>3. Listening</td>
<td>Groups through online assignments</td>
</tr>
<tr>
<td>5. Seminar</td>
<td>(Audio, Audiocast)</td>
<td>3. Individual/group publications</td>
<td></td>
</tr>
<tr>
<td>6. Lab Practice</td>
<td>4. Studi Online</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Individual/group projects</td>
<td>5. Simulation/practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Etc</td>
<td>6. Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Role Play</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Journal Publication</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Etc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Chaeruman, 2018)

According to (Dwiyogo, 2018), there is no standard proportion of face-to-face and online. The combination of online and offline can be adjusted according to the needs and time determined by the faculty. Lecturers as facilitators should be able to maximize learning activities and the allotted time so that lectures can run effectively.

**Student Management**

According to Muslich in (Rukajat, 2018), in order to develop individual and social abilities, and also think critically (Utomo & Wihartanti, 2019), student/student learning arrangements should alternate between individual (individual), pair, and group learning. Model development has no appropriate learning approach (Dewi et al., 2019). Every MP student has different backgrounds, abilities, intelligence, talents, learning, and thinking styles. This is one of the main focuses of lecturers in implementing PBBL for students. However, in managing students and their activities, it is necessary to apply a learning management model to be used as an indicator or benchmark in carrying out PBBL.
Student management is related to the management of implemented activities. If the activities are applied in Blended, students can study individually or in pairs; if it is time for learning Blended asynchronous, students can be grouped into several working groups. By grouping, students are expected to understand the material better because it complements each other between students in the group.

![Figure 5: Rotation Model](image)

Based on the wishes of most students who want face-to-face meetings rather than online, the researcher recommends the Blended Learning Station Rotation learning model. This model combines three spots in one hour face-to-face

The three spots consist of online instruction, Teacher-led instruction, and collaborative activities and stations (Humanities, 2nd). For example, one face-to-face student meeting takes 90 minutes, and then within 90 minutes, it will be divided into three different times for each stage. In this rotation model, at least one spot conducts online lectures, while others can be in small group learning, group projects, individual tutoring, and written assignments/exams (Dwiyogo, 2018).

![Figure 6: Example of the Implementation of Learning Resource Management](image)

At the end of the semester, to assess whether students have been able to think critically after PBBL, according to (Utomo & Wihartanti, 2019) critical thinking skills can be measured by the criteria (1) Open thinking, (2) Taking a stand when evidence and reasons are sufficient, (3) Considering the whole situation, (4) Equip yourself with information, (5) Seek as much truth as possible, (6) Solve problems systematically, (7) Look for alternatives, (8) Look for reasons/causes, (9) Look for clear statements of a problem, (10)
Using credible sources and mentioning them, (12) Trying to be relevant to the main idea, and (13) being sensitive to the feelings remembering the main things, (11) Using credible sources and mentioning them, (12) Trying to be relevant to the main idea, and (13) being sensitive to the feelings, level of knowledge, and ability levels of others.

**Learning Source Management**

AECT (Association for Education and Communication Technology) (Samsinar, 2019) defines learning resources as all sources that include data, people, and goods used by students individually and in combined form, usually in informal situations, to facilitate learning. Yusuf (Samsinar, 2019) defines learning resources as media, objects, data, facts, ideas, people, and others. Based on this definition, the learning resources that students can utilize are not limited and do not only focus on one source. Especially at this time, most of the world of education has used computer technology and the internet, and students can access as many learning resources as possible. Learning resources used in PBBL must combine traditional and online sources and adapt to learning models and methods. Traditional learning resources for MP students, centered only on modules/books made by lecturers, can be further developed into worksheets (LKS), articles, journals, handouts, newspapers, magazines, and others. In contrast, online learning resources can be developed using the study program website portal, audio, visual, video, web-blog, online discussion forums, and others. The mixing of learning resources that will be used in a Blended Learning must be properly synchronized to maximize the transfer of knowledge to students. Management of learning resources based on learning activities is presented in table 4 below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Learning Activities</th>
<th>Learning Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Providing stimulus</td>
<td>Syllabus, web blogs, online journals,</td>
</tr>
<tr>
<td>2</td>
<td>Preparing study instructions</td>
<td>for national library sites, modules, PowerPoint</td>
</tr>
<tr>
<td>3</td>
<td>Performance development</td>
<td>Syllabus, module, PowerPoint, e-book</td>
</tr>
<tr>
<td>4</td>
<td>Provision of feedback</td>
<td>Module, PowerPoint, assignment, web-blog, online journal</td>
</tr>
<tr>
<td>5</td>
<td>Measurement of learning achievement</td>
<td>Test and non-test instrument, oral test, multiple-choice and questionnaire</td>
</tr>
</tbody>
</table>

(Source: Processing data based on (Yaumi & Damopolii, 2017)
Good learning facilities must support the necessary learning resources. When PBBL is implemented, the facilities needed are not only classrooms, whiteboards, projectors, and others. However, it also requires computerized technology. If educational institutions do not have proper facilities, PBBL activities will not run optimally. Students will lose interest in learning and tend to be ignorant because they feel they do not have the facilities needed; as a result, student achievement will decrease. This is in line with research on the effect of learning facilities on student achievement conducted by (Marhamah et al., 2021), showing that educational facilities have an effect of 37.8% on student achievement, and (Utami, 2020) shows the contribution of learning facilities to learning achievement of 11.0%.

Teaching Behavior Management

Teaching behavior is the ability of an educator to carry out obligations responsibly and appropriately by his profession, which includes cognitive and affective aspects during the implementation stage (SARAH, 2018). According to (SARAH, 2018), the teaching behavior of lecturers consists of 3 main elements, namely:

1. Knowledge
   Knowledge refers to intellectual abilities such as remembering to problem-solving.
2. Manner/Personal Quality
   Manner/Personal Quality refers to feelings, attitudes, and ways of judging and rejecting something.
3. Skills/Proficiency
   Skills/Proficiency are everything oriented to motor skills related to body parts or actions requiring coordination between nerves and muscles.

The teaching behavior of lecturers in the lecture/learning process is very influential on the feedback process given by students. The behavior adopted by lecturers face-to-face, online, and even blended will be different, given the varied processes, models, and learning resources, so a lecturer needs to be equipped with good knowledge and skills to guide students in every learning model. Based on constitutional research on teaching behavior and learning behavior at the Faculty of Social and Political Sciences, Atma Jaya University Yogyakarta (Perbawaningsih et al., 2017), there is a relationship between lecturer teaching behavior and student learning behavior. Students need lecturers as
models in the sense of role models or examples, so lecturers need to have "resources" and "power" to become models in the classroom because power will create obedience and influence.

Suggestions and recommendations for improving the professional quality of teaching staff/lecturers (Dwiyogo, 2018) are as follows:

1. Lecturers should be given and equipped with training to improve the profession's quality.

2. Lecturers are provided with supporting facilities and infrastructure to keep up with technological developments/current times.

3. Lecturers teach according to their competence and ability to improve their knowledge of information technology.

4. It is necessary for innovative learning to be developed continuously so that it can strengthen the teaching profession and can attract students' interest and grasp of the material presented.

5. Mastery of media, materials, and learning strategies; lecturers' skills need to be improved through training or certification.

6. Training in the deepening of scientific material and presentation methods on an ongoing basis is to be continuously improved by the person in charge of improving the quality of teaching staff.

CONCLUSION

Based on the research conducted, it can be concluded that:

1. Lecturers of the Education Management study program have not implemented learning management in PBBL in a mature and organized manner, so learning achievement is not optimal.

2. PBBL applied is not by the rules and procedures.

3. Problems or issues that occur mostly come from students and the institution.

4. The six recommendations for learning management given are adjusted to previous studies related to the rules or procedures for good PBBL implementation to achieve learning objectives. These recommendations can also be included in the PBBL draft model,

which will later be applied to students.

5. The PBBL recommendations can be carried out during the Covid-19 pandemic and can be applied as a learning model if teaching lecturers cannot attend face-to-face in class or as tools used by teaching lecturers in developing learning methods that aim to make students accustomed to learning active and independent.

REFERENCE LIBRARY


https://doi.org/10.29210/3003875000


Ringkasan Google Workspace for Education | Google for Education. (n.d.). Retrieved June 16, 2022, from


Yuyu, Y. (2017). Literasi Sains Dalam Pembelajaran IPA. Jurnal

Cakrawala Pendas, 3(2), 21–28.