DEVELOPMENT OF A HYBRID LEARNING MODEL BASED ON THE OPEN BROADCASTER SOFTWARE (OBS) APPLICATION IN ECONOMICS SUBJECTS AT SMAIT HARAPAN MULIA PALEMBANG: NEEDS ANALYSIS

By:
Nur Islamia 1)
Makmum Raharjo 2)
Santi Oktarina 3)
Universitas Sriwijaya 1,2,3)
E-mail:
06032682125008@student.unsri.ac.id 1)
makmumraarjo@unsri.ac.id 2)
santiokarina@fkip.unsri.ac.id 3)

ABSTRACT

The development of a hybrid learning model based on OBS is needed in a special learning of learning at a distance. This study aims to analyze the need for the development of an OBS-based hybrid learning model to improve student learning outcomes in economics subjects. This type of research is a survey research and a literature study as the basis and direction of this research. The instrument used was a needs analysis questionnaire with 25 questions given to 36 students of class X science and X social studies at SMAIT Harapan Mulia Palembang. In this study, data analysis used descriptive presntase. Based on the results of this study, students need an OBS-based hybrid learning model to improve learning outcomes in Economics subjects. Overall, this study implies that this learning model can improve student learning outcomes in Economics subjects. The application of the OBS-based hybrid learning model can be recommended for use in other subjects to gain effectiveness in learning activities

Keywords: Hybrid Learning, OBS, Economic

1. INTRODUCTION

The current Pandemic era has caused almost all sectors to experience delays, including the education sector. Almost every region imposes emergency regulations, especially on education so that it can continue to run effectively and efficiently starting from PTMT (Limited Face-to-Face Learning), shifting,

conducting online learning to learning using the Blended Learning Model. As in the Circular Letter from the Palembang City Government Education Office Number 420/0338/ DISDIK/2022 which states that the implementation of educational learning in education units at the PAUD, TK, SD, Package A and SMA levels and package B continues to provide

Blended Learning learning services

Learning Model Blended Learning, blended itself is defined as "a mixture together to improve quality to improve" and learning is learning (Collin, 2007). Blenden Learning is a combination of hands-on learning and internet-based learning that is assisted by technology to achieve the expected learning goals. (Djauhari, 2021) then the question arises what learning will be mixed together. According to (Mosa, 2006) conveyed that what is mixed are two main elements, namely classroom learning with conventional face-to-face (classroom lesson) with online learning. Broadly speaking, the Blended Learning model is learning that combines several learning models into one to achieve a higher quality learning.

The Blended Learning model is a learning model that combines face-to-face learning with e-learning. according to graham in (Tayebinik & Puteh, 2013) states that blended learning is a combination online offline of and learning in which there are several conveniences in online classes with communication through face-to-face. The combination of this learning can be done

534

in various forms, it can be direct learning and then it can be done online, or the implementation of learning is carried out face-to-face part of the study group, and part of the learning through elearning besides that the Blended Learning Model can be done face to face (offline) and online (online) at the same time by presenting students directly in the classroom virtually. Learning that is carried out face to face and presents students directly virtually is known as the Hybrid Learning model

Hybrid learning itself is Hybrid Learning, which is a learning model that integrates innovation and technological advances through an online learning system with interaction and participation from traditional learning models (Hendrayati & Pamungkas, 2016: Makhin, 2021) The delivery of learning using the Hybrid Learning model is closely related to the use of facilities and infrastructure or supporting tools to facilitate the delivery of messages and materials by educators to students so that they can be more effective and efficient if assisted by supporting equipment and facilities. So good facilities and infrastructure become important in the

education process (Wahyuni et al., 2022). One of the tools that can support hybrid learning is the use of petrification applications such as open broadcaster Sofware (OBS). OBS is a video recording and live streaming application that can help a teacher in making learning materials in the form of video recordings. (Attamimi & Wanma, 2022)

Preliminary observations made by researchers at SMAIT Harapan Mulia Palembang, where SMAIT Harapan Mulia Palembang is one of the schools that carry out hybrid learning using online and offline learning at the same time. In **SMAIT** addition. Harapan Mulia Palembang has supporting facilities such as monitor screens (LCD) in each class and very adequate internet access to support online learning and hybrid learning models and each student has their own device in the form of IPad to carry out online learning using the zoom meeting application or google meet from home. Another supporting factor is the number of study groups at SMAIT Harapan Mulia Palembang which is not too many in one rombel ranging from 15-25 students, so it is not too difficult to condition learning, especially in supervising learning carried out online (Online).

The Hybrid Learning model used at SMAIT Harapan Mulia is carried out where educators prepare devices in the form of IPad and Zoom independently as well as students in the classroom and teachers observe the presence of students virtually from their respective homes Zoom meetings through and start learning. Unfortunately, for some students who cannot attend online or offline, who are constrained by internet access, there is a lot of lost learning in students. Where Hybrid learning, which was initially expected to be able to bridge the delivery of learning, actually makes the learning less effective, because learning only occurs one way, namely from educators only to students. especially those who are present offline, but not vice versa. As well as students who cannot attend online do not get any learning at all.

Based on this problem, researchers developed a Hybrid Learning model using a recorder and streaming using the Open Broadcaster Software (OBS) application so that recordings and learning video results later learning can be more

enjoyable and can be learned by students who cannot be present during learning due to internet connection through recorders and video streaming. So that students can still receive learning as a whole. The development of a hybrid learning model based on video recorders and streaming with the Open Broadcaster Software (OBS) application is expected to be able to help educators in delivering more interesting and innovative learning materials to students, especially for students who learn online and who are constrained by internet access, so that students are more motivated to learn and can understand learning through video recorders and streams that are interesting and can viewed many times.

2. METHOD

This research is a survey research and library study and was carried out at SMAIT Harapan Mulia Palembang in November 2022. The population used was all participants in class X at SMAIT Harapan Mulia palembang which

amounted to 36 students, who came from X social studies and X science who studied economics subjects. The data collection technique used in this study is a Needs Analysis questionnaire given to students to find out the needs of students OBS-based hybrid learning, in for addition to observation sheets, learning processes, student analysis, and literature studies. The research instruments used in this study are the valley of comprehensive analysis, observation sheets, and literature related to the development of learning models to improve student learning outcomes in the pateri of economic actors. As for the data analysis technique carried out is descriptive statistical analysis. Analysis of needs is carried out on the data obtained in the form of prestation. The percentage obtained is based on the results of the calculation of the likert scale that has been modified. Through the likert scale, it can be determined that the variables to described make the indkator variable.

$$Percentage(\%) = \frac{\sum gain\ score}{\sum max\ score}$$

Table 1 Interpretation of Student Rsponsse Score

Percentage (%)	Category
0%-25%	Very Unneeded
26%-50%	No Need
51%-75%	Need
76%-100%	Desperately
	Need

(Lian et al., 2021)

3. RESULTS AND DISCUSSION

Based on the results of filling in the questionnaire analysis of the needs of developing an OBS-based *Hybrid* learning model, an overview of student

responses to the syntax is obtained which is the learning steps used in class by using 10 questions, which can be seen in the following table:

Table 2 Analysis of the needs of the syntax

Question	Presented	Category
1. Do you need a discussion during online learning?	69,4%	Need
2. Do you need relevant examples in learning?	88,9%	Desperately needed
3. Do you need a learning model that provides context in everyday life	75%	Need
4. Do you need material reinforcement on learning	80,6%	Desperately needed
5. Do you need learning when you're not doing distance learning	80,6%	Desperately needed
6. Do you need sequential learning	77,8%	Desperately needed
7. Do you need a critical approach to learning	72,2%	Need
8. Do you need a repetition of the material before starting the lesson	75%	Need
9. Do you need learning that can work with the team	66,7 %	Need
10.Do you need a learning presentation from both teachers and students	75%	Need

Based on the data above, it can be

concluded that student responses to the

development of *a hybrid* learning model based on OBS produce and show that students need online learning when students cannot attend face-to-face, when learning students also need discussion at the time and given examples related to problems that are relevant and in accordance with the context of daily life based on problem solving in addition to The learners need reinforcement and

repetition of the material before learning is carried out, the need for sequential learning, and the need for presentations in learning from both teachers and peers.

Furthermore, the principle of reaction related to the reaction or follow-up from the teacher to students either individually or in groups from the questionnaire obtained the results:

Table 3
Analysis of the needs of the reaction principle

Questio n	Presented	Category
1. Do you need a teacher in the delivery of the material	94,4%	Desperately Need
2. Do you need an explanati on from your peers	69,4%	Need
3. Do you need an explanati on of the results of the group discussio n	69,4%	Need

From the table above, it is concluded that students really need explanations

from the teacher and also need a learning model that presents the management of presentations from the group. So that teachers can become facilitators, and class managers, and teachers can be learning resources for students.

Social systems are interactions that

occur in learning, both interactions between students, interactions between groups. or learners with groups. From the needs analysis questionnaire, results were obtained in the form of:

Table 4
Analysis of the needs of social systems

Question	Percentage	Category
1.Do you need interaction between students while learning	75%	Need
2.Do you need interaction with the teacher during the learning process	80,6%	Desperately Need
3.Do you need interaction between individuals with groups	83,3%	Desperately Need
4.Do you need interaction between groups during learning	91,7%	Desperately needed
From the table above it is concluded Further	ermore in the	e support system

From the table above, it is concluded that students really need interaction between students, either individually, or in groups and students need teacher interaction as a learning resource. Furthermore, in the support system which is a conditioned and appropriate element and supports a learning. From the needs analysis questionnaire, the following results were obtained

Table 5
Support system needs analysis

Support system needs analysis			
	Question	Percentage	Category
1. D	Oo you need visual media when learning	83,3%	Desperately needed
2. D	Oo you need audio media during learning	66,7%	Need
3. D	Oo you need audio-visual media when learning	86,1%	Desperately Need
	Oo you need a helper medium to make learning more nteresting	94,4%	Desperately Need
	Oo you need a re-recording when you take part in online learning	100%	Desperately Need

6. Do you need another reference book in learning	69,4%	Need
7. Will you need a presentation explaining the material	80,6%	Desperately Need
8. Do you need an app in your learning to showcase your learning during online learning	94,4%	Desperately Need

From the table above, it can be concluded that students need audio-visual media in the form of video and need additional media in the form of applications so that online learning can be more interesting and can record learning that includes online and offline learning.

Based on the questionnaire that has been given to students, it requires online learning when students cannot attend face-to-face, during learning students also need discussion at the time and given examples related to problems that are relevant and in accordance with the context of daily life based on problem solving, besides that students strengthening and repetition of the material before learning is carried out, the need for sequential learning, as well as the need for presentations in learning from both teachers and peers. In addition, students really need explanations from the teacher and also need a learning model that presents presentation management from the group. From this, students really need interaction between students, either individually, or in groups and students need teacher interaction as a learning resource. and students need audio-visual media in the form of video and need media additional in the form of applications so that online learning in order to be more interesting and can record learning that includes online and offline learning. The learning model is summarized in an OBS-based hybrid learning model, where participants can discuss, teachers can display visual and audio visusal media and various other OBS features.

Based on the findings obtained in other studies, it can be seen that the measure of the influence of *hybrid* learning on student academic achievement is at a high level (Kazu et al., 2022). In line with the results obtained As a result of the analysis, it is understood that *hybrid* learning has a great influence on the academic performance of students. For this reason, the use of *hybrid* learning in

educational environments should be encouraged, and the necessary infrastructure and facilities should be provided.- (Kazu et al., 2022)

In the journal entitled Hybrid Learning as a Future Learning Model Strategy (Indra, 2010) with the title provides an illustration that in the future this hybrid learning model will increasingly gain a place in society, due to the increasing awareness among educators of the importance of flexible cyber integration and the latest learning, so that hybrid learning This is a learning strategy that will be widely used in the future. Similarly, the research conducted by (Fauzan & Arifin, 2017) with the title Hybrid Learning as an Alternative Learning Model states that hybrid learning is very young to be applied because it is a combination conventional learning by combining internet-based learning.

In addition to this, the implementation of *hybrid* learning in learning at Kalam Kudus Pematangsiantar Christian High School (Ganovia et al., 2022) there are several stages carried out by educators, including: planning, implementing and evaluating learning assessments. In

limited face-to-face learning, educators prepare learning tools and in online educators learning planning, direct students through applications with internet networks available in education units Limited face-to-face learning and online learning using a hybrid model is the best choice to start learning activities with during this pandemic, the development of uncertain and uncertain times the existence of a certainty.

The results of the implementation of community service activities in the form of training on making learning videos using OBS Studio show an increase in participants' knowledge about making learning videos including knowledge about learning video making techniques, applications used to make learning videos, the importance of the ability to make learning videos for teachers, and knowledge about OBS Studio (Sarkity, 2021). In addition, from several studies conducted by the author, among others, in a study entitled "The Use of Open Broadcast Software Studio in Designing Learning Videos in the Pandemic Era" stated that interactive learning video models based on the OBS application can make learning more interesting effective, especially for generation-Z students who mostly have an audio-visual learning style. teachers design distance learning with OBS more effective. (Qorib & Zaniyati, 2021).

Some of the advantages of using an **OBS**-based hybrid learning model, including educators being able to describe positive engagement with students in the classroom and some students participating in learning at home at the same time. The disadvantages and advantages of the hybrid learning model can be used as educators and educational units to carry out learning that is adapted to current conditions. The participation of all citizens of the education unit is very important. There needs to be good cooperation and communication to organize the expected learning conditions from some of the studies above, it can be concluded that HBRD learning can and is needed in learning.

From the results of the needs analysis that has been carried out as well as several literature studies described, it is stated that there is a need for an OBS-based *hybrid* learning model in Economics subjects at SMA IT Harapan Mulia Palembang, as well as several sources

542

stating that hybrid and OBS learning models are able to improve student learning outcomes.

4. CONCLUSION

Based on the results of research through the needs analysis questionnaire that has been carried out, it can be concluded that the development of an OBS-based hybrid learning model at SMAIT Harapan mulia Palembang in improving student learning outcomes is very necessary. As well as the use of OBS that has been carried out by several researchers, it shows that the use of OBS can be one of the most innovative hybrid learning options

5. REFERENCES

Attamimi, Y., & Wanma, J. R. (2022).

Training for Making Interactive
Learning Media Based on Open
Broadcaster Software (OBS) Studio
for State State School Teachers
Inpres Ardipura 1 Kota Jayapura.
International Journal of Social
Service and Research, 2(1), 60–65.
https://doi.org/10.46799/ijssr.v2i1.70

Collin, W. (2007). Blended learning. Https://Www.Collinsdictionary.Com/ https://www.collinsdictionary.com/dictionary/english/blended-learning

Djauhari, R. A. (2021). Pengembangan Perangkat Pembelajaran Ipa Berbasis Blended Learning Menggunakan Aplikasi Google Classroom Untuk Saintifika, 23(1), 8–15. https://repo.undiksha.ac.id/7422/

Fauzan, & Arifin, F. (2017). Hybrid Learning sebagai Alternatif Model Pembelajaran Fauzan , Fatkhul Hybrid Learning sebagai Alternatif Model Pembelajaran. Seminar Nasional Profesionalisme Guru Di Era Digital, November 2017, 244–252.

Ganovia, P., Sherly, S., & Herman, H. (2022). Efektivitas Hybrid Learning dalam Proses Pembelajaran untuk Siswa Kelas XI SMA Kalam Kudus Pematangsiantar. Jurnal Pendidikan Tambusai, 6(1), 1478–1481.

Hendrayati, H., & Pamungkas, B. (2016).

Implementasi Model Hybrid

Learning Pada Proses Pembelajaran

Mata Kuliah Statistika Ii Di Prodi

Manajemen Fpeb Upi. Jurnal

Penelitian Pendidikan, 13(2).

https://doi.org/10.17509/jpp.v13i2.34 30

Indra, N. (2010). Pembelajaran Hibrida Sebagai Strategi Model Pembelajaran Masa Depan. Masyarakat Telematika Dan Informasi: Jurnal Penelitian Teknologi Informasi Dan Komunikasi, 1(2), 119–130. http://www4.uwm.edu/ltc/hybrid/ind ex.cfm

Kazu, İ. Y., Kurtoğlu, C., Ii, Y., İbrahim,
------I, Kazu, Y.,
& Prof, A. (2022). Investigation of
the Effectiveness of Hybrid Learning
on Academic Achievement: A MetaAnalysis Study. Cemre Kurtoğlu
Yalçın, English Teacher, Ministry of
National Education International
Journal of Progressive Education,
18(1), 2022.
https://doi.org/10.29329/ijpe.2022.42
6.14

Lian, B., Oksatianti, B. R., Risdianto, E., & Mayub, A. (2021). Need Analysis of MOOCs-Based Learning Media Development to Improve Student Motivation. AL-ISHLAH: Jurnal Pendidikan, 13(2), 868–873. https://doi.org/10.35445/alishlah.v13i

2.646

544

- Makhin, M. (2021). Hybrid Learning:

 Model Pembelajaran pada Masa
 Pandemi di SD Negeri Bungurasih
 Waru Sidoarjo. Mudir: Jurnal
 Manajemen Pendidikan, 3(2), 95–
 103.

 https://doi.org/10.55352/mudir.v3i2.3
- Mosa, E. (2006). Puntoedu: a blended elearning model face-to-face settings and virtual environments. 1744– 1749.
- Qorib, A., & Zaniyati, H. S. (2021).

 Penggunaan Open Broadcast
 Software Studio Dalam Mendesain
 Video Pembelajaran Era Pandemi.

- SYAIKHUNA: Jurnal Pendidikan Dan Pranata Islam STAI Syichona Moh. Cholil Bangkalan, 12(1), 87– 98.
- Sarkity, D. (2021). Pelatihan Pembuatan Video Pembelajaran Menggunakan Open Broadcaster Software (OBS) Studio untuk Guru SMAN 1 Bintan Timur. Jurnal Anugerah, 3(1), 1–14. https://doi.org/10.31629/anugerah.v3 i1.2944
- Tayebinik, M., & Puteh, M. (2013).

 Blended Learning or E-learning?

 2008. http://arxiv.org/abs/1306.4085
- Wahyuni, D., Sartika, I. D., & Novianti, R. (2022). Standar Alat Bermain dan Kualitas Satuan PAUD. 6.