

# Blended Learning Model to Improve Learning Independence of University Students

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## ABSTRACT

The purpose of this study is to find out how the application of the blended learning model to the learning independence of PGSD students. The approach used in this research is descriptive quantitative with data analysis using percentages. The research subjects were students of the 2020 Garut University PGSD Study Program as many as 41 respondents. In this study, a sample was taken using a purposive sampling technique with a population of PGSD students as a whole. The results showed that student learning independence was successfully improved using the blended learning model, which was above 50 percent and included indicators of confidence, initiative, and motivation. Meanwhile, student responses related to the use of the blended learning model have an average of 61.9 percent, which is a positive response. So, it can be said that the blended learning model can increase the learning independence of PGSD students.

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## 1. INTRODUCTION

Years have passed, but coronavirus disease 19 has yet to find a point of certainty that it will subside. Even at the beginning of 2021 in Garut Regency, the statistical spike in confirmed positive patients for COVID was increasing. This must be an important note for all parties not to give up in the face of a virus that has claimed many lives in the world. Awareness of real action, responding to every challenge stimulus, and adapting to new normal situations absolutely needs to be applied in every field, including in the field of education (Firman, Ni'mah, & Asvio, 2022; Latipah, Asvio, & Imaduddin, 2022; Mindani, Satrisno, & Asvio, 2023).

During this pandemic, the digital touch in the field of education which has not yet been developed and implemented has become a culture and demands to be mastered by lecturers. If previously technology was only used to communicate in the form of social media and information, now the digital

world has become the main learning medium. Therefore, it is important to initiate skills using digital for lecturers.

Lecturers as facilitators in learning must have sufficient digital literacy to serve to change learning patterns that are now implementing distance learning. If the teacher's digital literacy is not good, of course, there will be obstacles in the learning process that has been mandated. Learning that is being carried out at this time, the tendency of learning in the current era is that learning can be done anywhere, anytime, with anyone, and through any learning resources. Thus, efforts to organize the environment as a learning resource are very important so that the learning process occurs in students. As stated by (Praherdhiono, 2017) the hope is that students can learn without limits by utilizing the latest technology (Al Aslamiyah, Setyosari, & Praherdhiono, 2019).

The conventional approach is considered "obsolete" and needs to be replaced with a new approach that can build learning activities for students. For this reason, the authors are interested in studying life-based learning as a solution that can be applied to maximize the digital potential for learning (Thaariq, 2021). At the moment the learning that is used is Blended learning which is considered very appropriate and supports the development of information technology. Blended learning is still very well used in Indonesia, especially in universities because it is still controlled traditionally (Al Aslamiyah et al., 2019). According to Praherdhiono (2017), blended learning is the best way to combine face-to-face and online learning. The application of blended learning can minimize the problem of conventional learning which is less able to facilitate various kinds of student characteristics (Al Aslamiyah et al., 2019).

The application of blended learning in higher education is currently very effective, because blended learning provides innovation in the learning process. According to Uwes (Al Aslamiyah et al., 2019) blended learning is a learning model that combines synchronous and asynchronous strategies in such a way as to create an optimal learning experience to achieve the expected learning outcomes. Blended learning is a blend or combination of various learning, namely combining face-to-face learning with traditional learning concepts that are often carried out by education practitioners by delivering direct material to students with online and offline learning that emphasizes the use of technology (Izzati, Hanifah, Anggraeni, Azizah, & Rohmah, 2021).

Blended learning is a new learning strategy that provides many advantages for students, as well as a form of information and communication technology to support a new model of learning. In fact, blended learning was identified as one of the top ten emerging trends in the knowledge delivery industry (Mehmet, 2010; Nouby & Alkhalizi, 2017; Rooney, 2003). Blended learning can improve learning outcomes equal to or higher than students studying conventionally or fully online, although success rates vary between disciplines (Heinze, 2008). There is a significant increase in academic ability in students who use face-to-face learning combined with online and offline learning technologies compared to learning that only uses classical (face-to-face) classes. However, it must be noted that the success of blended learning does not happen automatically. A key factor is considering pedagogy and instructional design in terms of how best to utilize technological tools (Bibi & Jati, 2015; Rachman, Sukrawan, & Rohendi, 2019).

Blended learning describes an opportunity that integrates the innovation and advantages of technology in online learning with the interaction and participation benefits of face-to-face learning. Meanwhile, blended learning as learning that combines synchronous and asynchronous learning settings effectively to achieve learning objectives (Chaeruman, 2020; Ismaniyati, Sungkono, & Wahyuningsih, 2015; Sohayu, 2018). Some of the definitions above provide an illustration that blended learning is a combination of face-to-face learning and online learning with the help of information and communication technology in an appropriate manner to achieve learning objectives. As for being able to apply the Edmodo-based blended learning model in learning, it is necessary to plan in advance according to the needs and characteristics of students (Agustiono, Ahman, Machmud, & Waspada, 2020; Bhaskara, 2020; Fahrurrozi & Majid, 2017).

Traditional learning in the classroom with online learning that utilizes information technology. According to Garrison & Vaughan (2008) by optimizing the integration of existing oral communication in face-to-face learning with written communication in online learning is the basic concept of the Blended learning model. Furthermore, another understanding of Blended Learning is learning that is flexible besides that the use of e-learning or online learning is one form of flexible learning in the Blended Learning method (Syarif, 2012). So that the application of this model is able to increase the mutuality and quality of learning. This learning can show better differences in terms of motivation, interest, and student learning outcomes compared to other methods, especially methods in direct learning (Hermawanto, Kusairi, & Wartono, 2013; Sjukur, 2012; Syarif, 2012). So that the Blended Learning method has succeeded in becoming a trend and widely used in leading universities in the world. However, learning is not solely based on technology because learning is essentially more on the process of interaction between teachers, students and learning resources. Even though e-learning can be used independently by students, the existence of the teacher becomes very meaningful as an adult whose function is to provide support and accompany students in the learning process (Panjaitan, Murniarti, & Sihotang, 2021; Plummer, 2012; Syarif, 2012). In other words, the face-to-face process is important and cannot be left behind in learning. Therefore, a learning model that combines face to face learning methods with e-learning in an integrative and systematic manner will make the learning process more meaningful (Usman, 2018).

The application of the e-learning system is an innovation in learning methods responding to mastery of technology in the 4.0 era which in its implementation does not reduce the quality of education or the demand for skills expected in the industrial era 4.0 itself (Astuti & Febrian, 2019), so that through the Learning Management System (LMS) students of Garut University can learn by using blended learning in the classroom.

The results of the researchers' observations of several students of the Garut University PGSD Study Program, obtained information that students did not fully have the value of independence, especially during a pandemic condition like this. Online learning through LMS has many obstacles, especially on student independence. Many things can be seen that students are not sure of what they have, namely their own abilities, so students need direction and guidance in terms of assignments or still need direction from their friends and there are even students who need the help of friends from other classes in completing various tasks. Task or learning problem. So that students are suspected of not being able to study independently.

Students still carry out activities on orders from other people, students often cheat on exams done offline by making small notes for them to cheat, even dare to ask friends during exams, in doing assignments they are still on the overnight speed system because online learning assumes to get grades with It's easy, even when the lecturer is not online, students take advantage of their study time without asking what to do. As with the opinion expressed by (Novitasari, Adi, & Praherdhiono, 2018) in his article, students often take advantage of system weaknesses that are combined in assignments, this results in a decrease in student morale to express their learning outcomes in learning (Sari, 2022).

The very complex online learning process requires students to be able to form independent learning for themselves. Various factors affect one's learning independence, namely factors that come from oneself (endogenous factors) and factors that come from outside oneself (exogenous factors) (Rijal & Bachtiar, 2015). Someone who is said to have independent learning if that person has his own will to learn, is able to solve problems in the learning process, has responsibility, and has high self-confidence (Aini & Taman, 2012). One's learning independence can be seen from all the habits and daily learning activities. If someone has low learning independence, it is characterized by unfinished tasks, paying less attention to the teacher teaching, daydreaming, and not having a good learning strategy. So, in the end learning achievement will also decrease (Harahap, Harahap, & Simarmata, 2021).

The success of students in attending college depends on their learning process, both studying in groups and studying individually. Effective ways of learning in tertiary institutions should provide more opportunities for students to have learning skills (learning to learn), meaning that students not

only learn about remembering facts but also being able to interpret these facts (Nurhayati, 2011). Self-management skills, critical thinking skills, in order to have satisfying learning outcomes, one of which requires student independence in learning. Learning independence is not the same as self-study, a student who is active and creative in his learning can be interpreted as skilled and independent. Nurhayati (2011) also emphasized that students whose learning processes are skilled without the help of others, have their own initiatives, do not depend on lecturers, supervisors, friends or other people, so it can be interpreted as an independent learning process. The main provisions needed by students are adjusting campus life to be independent, proactive, critical, and creative (Daulay, 2021).

This attitude of responsibility towards tasks in learning is an indicator of student learning independence, students who are independent in learning have the responsibility to monitor themselves in any way, both in achieving a goal, and in focusing on what is assigned to them. The independence of student learning is indicated by the ability of students to know how they learn, and know the learning strategies used so that the learning process will reap more optimal results. The success of students in learning mathematics is determined by the independent learning of each individual, student abilities achieved after learning experiences are one of the learning outcomes (Ningsih, Misdalina, & Marhamah, 2017; Sudjana, 2013).

From an educational point of view, learning independence implies the capacity that students have in the process of self-regulation in learning activities. This self-regulation capacity plays an important role in achieving success in university. Learning independence is defined as a complex socio-cognitive system, manifested at different levels and control over the learning process in a person, which includes: abilities, capacities, attitudes, decision making on choices, planning, and action in learning (Ariebowo, 2021; Astuti & Febrian, 2019; Chitashvili, 2007).

Several studies using the Blended Learning learning model include (Barnard, Lan, To, Paton, & Lai, 2009) who succeeded in identifying that the Blended Learning learning model has the potential to facilitate student learning independence, besides that several other studies have also proven that this method can have a good effect on independence thing. The success of students in learning is determined by the independence of learning from each individual. According to (Sudjana, 2013) the abilities of students that are achieved after learning experiences are learning outcomes. Slameto (2015) added that learning outcomes are a change that occurs continuously in behavior and is not static. As discussed in the face-to-face learning model, in the problem of web-based learning so far, there will still be meetings with teachers, at these meetings students can convey several problems during the learning process, whether related to teaching materials or problems related to internet connection. After students complete the independent study period in the last week and end with semester exams (Usman, 2018).

The results of observations made that the value of student learning independence has not developed optimally and well, especially for the student level. If this condition is not handled immediately, it is feared that it will have an impact on student learning achievement. So, it is necessary to make efforts to encourage independent learning of students. Based on the explanation that has been described above, it is necessary to have a learning model that can be used to encourage student learning independence. That is why blended learning is one way to minimize these problems.

## 2. METHODS

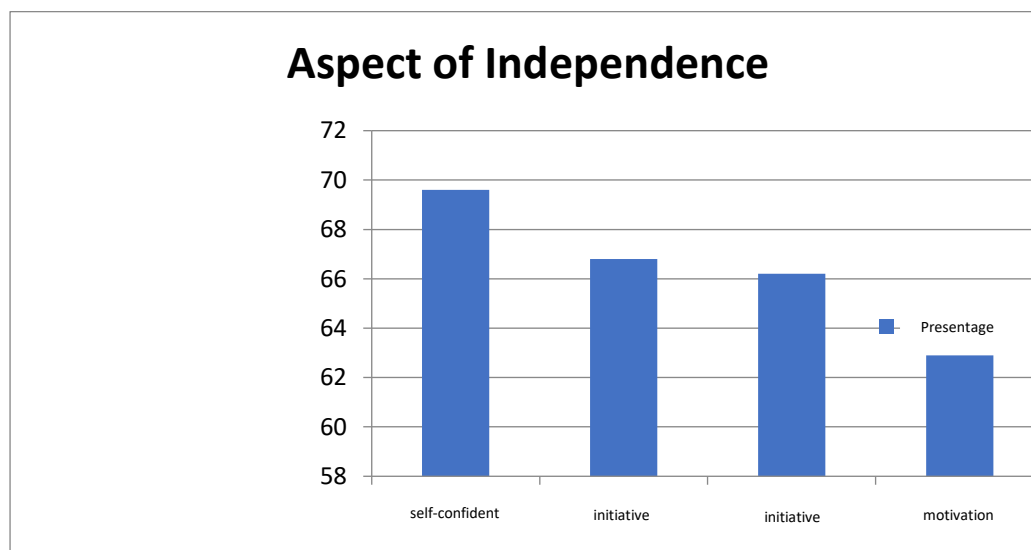
The approach used in this research is descriptive quantitative with data analysis using percentages. The research subjects were students of the 2020 Garut University PGSD Study Program as many as 41 respondents. In this study, a sample was taken using purposive sampling technique with a population of PGSD students as a whole. The instrument of this research is a questionnaire with 39 statements using a Likert scale as an alternative choice. The results of the data obtained will be analyzed using quantitative descriptive analysis in the form of percentages. This is to make it easier to read and understand the data.

Data analysis was carried out quantitatively, which was carried out by calculating the acquisition score of each indicator. After that calculate the percentage of answers from each indicator. After obtaining the results of the percentage of each indicator, then the researcher draws conclusions on the results of the study. Researchers use guidelines from (Sugiyono, 2011), namely "the higher the percentage of respondents, the better the perception of respondents".

In more detail, this research can be explained by the following stages: 1) **Preparation:** observation of blended learning in PGSD students, observations were made before and after the research, prior to the research there were learning observations, especially in learning in lectures, while observations were made after blended learning; 2) **Implementation:** conducted on fifth semester Elementary School Teacher Education (PGSD) students to conduct research related to blended learning on student independence through a questionnaire to measure student independence through blended learning; 3) **Data Collection:** the results of the questionnaire are processed using a Likert scale related to student independence through blended learning; 4) **Data analysis:** after collecting data, then analyzing the data from the questionnaire with interpretation; 5) **Conclusion:** results that have been interpreted through percentages are then concluded.

### 3. FINDINGS AND DISCUSSION

In the analysis of these results data will be described the tendency of student learning independence when applying blended learning which refers to the six indicators of learning independence developed by Hidayati & Listyani (2010), namely: 1) Independence from others, 2) Have self-confidence, 3) Be disciplined, 4) Have a sense of responsibility, 5) Behave on their own initiative, and 6) Exercise self-control. In this study, the aspects developed into 4 indicators are self-confidence, initiative, responsibility and motivation. The score data from the calculation of the indicators are as follows: The aspect of student independence in the self-confidence indicator is 69 percent, while for the initiative indicator it is 66.5 percent, while the sense of responsibility is 66 percent and motivation is 62.5 percent. For more details can be seen from the following graph:



With the existence of a learning model that can be used to encourage student learning independence to reach above 50 percent, blended learning is suitable for use at this time.

Blended learning has a positive response from the average student questionnaire results of 61.9% of the 20 questionnaire items given to students. The highest student response answered related that with blended learning the questionnaire statement "By doing presentation activities in front of the class, I can simultaneously practice my speaking skills." Getting the highest response of 89.7% had a very positive response, meaning that this learning was able to train students to be able to express ideas by practicing public speaking skills. The student response related to learning through blended learning is the questionnaire statement "When in group discussions or presentations, I just have to be quiet and don't need to give any responses." 45% had a negative response, meaning that many students disagreed when their presentations had to be silent, students should be at during the presentation can express his ideas.

The findings in this study reinforce previous findings. Findings in research reveal that the blended learning model is able to increase student learning independence at the University of Garut through the use of technology (Lapitan, Tiangco, Sumalinog, Sabarillo, & Diaz, 2021; van Niekerk & Webb, 2016). The Discover, Learn, Practice, Collaborate and Assess (DLPCA) strategy that paved the way for the transition from traditional face-to-face teaching to online teaching during the pandemic (Lapitan et al., 2021). The findings of Truss & Anderson (2023) reveal that there are factors that influence blended learning, namely academic reflexivity, social interaction, and agency, in a dynamic combination, important for understanding and explaining academic navigation about blended learning as a pedagogical feature. The findings of Suwannaphisit, Anusitviwat, Tuntarattanapong, & Chuaychoosakoon (2021) reveal that blended learning is no less effective than traditional learning for teaching medical students. Meanwhile, the findings of Finlay, Tinnion, & Simpson (2021) contradict these findings, where the findings reveal that sports students prefer face-to-face teaching.

The development of Blended Learning also leads to the teaching materials used, one of which is in the form of modules in electronic packaging. In web-based learning, electronic models are known as independent teaching materials or packaged teaching materials for students to study independently. In independent teaching materials besides the material there are also exercises that students must do to measure their learning progress, in blended learning, in addition to electronic module teaching materials another development of teaching materials is the use of media or technology. One feature of the web-based learning process, including the use of text, audio, video, and multimedia is to enrich material for practice and to strengthen students in learning one topic. In blended learning, packaging is done digitally and accessed through web-based teaching materials, the use of text, audio, video and multimedia is carried out during the independent learning period. Material packaged using text, audio, video and multimedia is packaged with certain storage media (Usman, 2018). In this case implemented in learning at the University of Garut.

#### 4. CONCLUSION

The blended learning model has succeeded in increasing the independence of Garut University PGSD students. PGSD students have a positive response to the use of the blended learning model. So, it can be concluded that the blended learning model is successful in increasing the independence of Garut University PGSD students. This study has a population and sample that is not large in terms of quantity and also has research variables that are less varied, so the researcher hopes that future researchers will examine the population and sample with a large quantity, as well as examine various other variables that affect blended learning.

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