

The Application of the Blended Learning Method to Achieve Independent Learning in Nursing Communication Course

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ABSTRACT

Blended learning is proven to be able to increase learning independence in the Nursing communication course which is observed through classroom action research. Student learning independence in cycle one is quite good with an average score of 81.14, and it increases to 92.94 in cycle two so that it becomes a good category. The weakness of implementing blended learning at the beginning of the cycle is that students are less skilled at using i-learn and MS Teams, difficult to understand the material and feel that the learning media is less attractive and monotonous. In cycle two, the weaknesses of cycle one were fixed using animation learning media. The impact of improving learning media has a significant effect on increasing learning independence in cycle two compared to cycle one (p -value = 0.001). Reflection discussion in cycle 2 showed that nearly 75% of students were actively involved in discussions.

Keywords: Blended learning, independent learning, nursing communication

1. INTRODUCTION

In fact, blended learning has long been known, along with the development of information technology. Blended learning is starting to be in great demand. Since the corona virus 19 outbreak hit the world. Internet network-based learning, which is often called online learning, has become the excellence because it is considered as one of the solutions to reduce the transmission of this deadly virus [1].

Online learning without face to face learning requires students to have full concentration power. This is certainly difficult to control because students have more time to fantasize than face-to-face learning [2]. Besides that the teaching material is delivered in the form of elusive reading [3]. Therefore, the best solution is to combine face-to-face learning with online learning [4] which is better known as blended learning.

Blended learning offers flexibility in terms of time, place, and variations in learning methods so that it is very beneficial for students. Blended Learning has the advantage of increasing the effectiveness of learning, expanding the range of learning, making time and cost efficient, improving final achievement and learning independence [5], [6], [7]. Learning independence will be reflected in the students' sense \

of responsibility for their learning success, so that the learning process does not depend on factors from lecturers, friends, class and others.

In order for blended learning to be effective, lecturers need to plan their learning well. Therefore special subject design techniques, special learning techniques, and special methodologies of communication through various media are needed. If the competence of the lecturer is not sufficient in this alternative learning, it will greatly contribute to lowering the level of student understanding of lecture material and reducing student concentration.

1.1. Related Work

Blended learning offers a combination of face-to-face learning with online learning, so there are many alternative learning resources for students outside of the materials that have been provided by the lecturer. Online learning is able to increase students' learning independence [8], because it can create responsibility and autonomy in learning [9]. Students are required to prepare their own learning, evaluate, organize and simultaneously maintain motivation in learning [10], [11] and this condition is very challenging for students so as to increase interest in learning [12].

1.2. Our Contribution

This research article provides information about the blended learning application of student learning independence in the Nursing Communication course. The application of the blended learning method is an innovative step to take advantage of the various potentials available at Andalas University, such as the available i-learning platform and the availability of high-capacity internet networks. This facility can be used to support face-to-face learning deficiencies such as the absence of lecturers, reading sources and the large number of students.

The blended learning application is carried out at the planning, action, observation and reflection stages in accordance with the existing stages of classroom action research. The output of this activity is in the form of a new semester learning plan (RPS) using a blended learning strategy that can be used as a guide for the Nursing Communication teaching team.

1.3. Paper Structure

This paper is arranged according to a predetermined system. Part 2 describes the background which contains explanations of nursing communication course, independent learning and blended learning applications through classroom action research. Results and discussion and conclusions will be discussed later.

2. BACKGROUND

2.1. Nursing Communication

Communication for nurses is the main activity in providing services to patients. Ineffective communication will cause the patient to not survive. Medical errors such as medication errors, misoperation and death are the main causes of ineffective communication [13]. Nursing Communication subject plays an important role in shaping effective nurse communication behavior.

Effective communication requires critical thinking skills and continuous practice independently. Learning independence will be difficult to achieve if the learning of this subject is only done face-to-face because the lecturer cannot always attend the lecture. Nursing Communication Learning is expected to be more meaningful if in practice it uses blended learning because lecturers and students can communicate even though there are limitations on distance and space. Students can also get learning feedback from the lecturer when face to face.

2.2. Blended learning Application

The blended learning application for nursing communication uses a classroom action approach. This classroom action research consists of four stages, namely planning, implementing, observing, and reflecting [14] and carried out at least two cycles. The number of cycles

in classroom action research depends on the achievement of the benchmarks, but should not be less than two cycles [15]. In this study, the measure of success is the learning independence of students in the Nursing Communication course.

2.3. Independent Learning

Learning independence will be reflected in students' sense of responsibility for their learning success. Independent learning is the key to achieving and increasing student learning abilities. Independent learning also has benefits for students not only when they are still in school but also useful when entering the world of work [16]. Furthermore, independent learning is a process where individuals take the initiative in planning, implementing and evaluating the learning system [17]. So independent learning is the ability of students to carry out self-regulatory learning by utilizing the potential that exists around them.

In fact, there are still many students who have problems with this independent learning. This is due to the use of learning methods that are not quite right, so that students are satisfied with the information that is only conveyed by lecturers [18]. Indicators of learning independence are quite complex. There are at least 3 elements that can be measured as a form of learning independence [19].

3. RESULT AND DISCUSSION

The implementation of blended learning in the Nursing Communication course is carried out in fourteen meetings. The composition of learning is 75% synchronous learning and 25% asynchronous learning. The learning media used are i-learn, Microsoft Teams, and the WhatsApp application.

The semester learning plan is published on i-learn media a week before lectures begin, so that there is sufficient time for students and the faculty team to prepare themselves. The results of implementing blended learning are measured through processes and outcomes. Process measurement is carried out through observation of the implementation of cycles one and two, while the output is measured based on 3 elements of independence. The complete results will be described as follows.

3.1 Average Student Learning Independence in Cycle One and Cycle Two

The measurement of student learning independence in cycle one was observed at the 3rd and 6th meetings. This measurement involved 30 students who were taking nursing communication courses. The average score of the first cycle of learning independence was 81.14. It is included to the sufficient category. The mean results of learning independence for the 13 indicators can be seen completely in table 1.

Table 1. Average score of Student Learning Independence in Cycle One (n = 30).

Indicator	Cycle 1		Cycle 2	
	Score	Category	Score	Category
1. Personal attributes				
- Learning Initiatives	92	Good	101	Good
- Selecting and defining learning strategies	93	Good	91	Good
- Setting learning targets and goals	70	Less	76	Adequate
- Mean Personal Attributes	83.25	Adequate	91	Good
2. Processes				
- Evaluating learning processes and outcomes	81	Adequate	93	Good
- Diagnosing learning needs	69	Less	88	Adequate
Monitoring, organizing and controlling the learning	80	Adequate	96	Good
The mean of Processes	76.67	Less	92.33	Good
3. Learning context				
Viewing adversity as a challenge	83	Adequate	94	Good
Self efficacy (self concept)	84	Adequate	97	Good
The Mean of Learning context	83.5	Adequate	95.5	Good
The Mean of Learning Independence	81.14	Adequate	92.94	Good

Table 1 shows the average learning independence ability of students. Cycle one is quite good with a score of 81.14. The score for the element of learning independence that has the highest is the element of the learning context. This score differs slightly from the independence in the process. When viewed from the indicators of independence, learning initiatives and the ability to determine learning strategies are the best indicators of independence compared to other indicators. Meanwhile, the ability to use and find other learning

resources is the worst independent learning ability.

The poor independence of learning in utilizing other learning sources was answered during the reflection stage. Reflection activities are carried out through discussion forums and the results of the discussion are recorded in the minutes of the meeting. The difficulty expressed by students at the beginning of blended learning was the lack of students' skills in using i-learn and MS Teams, because they had never previously used both applications. A small proportion of students complained that it was difficult to understand the material in the learning video because they were used to listening directly from the lecturer and there were 5 students who stated that the presentation of the video was not interesting and monotonous.

Complaints about internet access are also an obstacle in this cycle, so that students delay studying course material while waiting for the internet network to improve. Poor time management is also a problem for students in learning independently. Apart from the above obstacles, the discussion forum through the I-learn and MS Team was observed to be less active. Only a small proportion of students participated in the discussion. When it was confirmed, the students answered that they did not understand what to discuss. This limitation will be material for improvement to carry out learning in cycle two.

The second cycle is carried out after the midterm exam, the 9th and 10th meetings. In the second cycle, improvements are made in the learning media by using animated videos. Animated videos were made by lecturers after attending online training at kelasanimasi.com. The impact of improving learning media was able to increase the mean score of learning independence to 92.94 or an increase of 11.8 points. The increase in this score changed the independence category from sufficient in cycle 1 to a good category in cycle 2. Although there was an increase in the score of learning independence in cycle 2, the achievement of independence was only 77.45% of the maximum total independence (score 120 points).

Even though the improvement of nursing student independence has not been maximized, blended learning has succeeded in encouraging independent learning to be better than face-to-face learning. Learning is said to be successful and of quality if all or at least 75% of students are actively involved [20]. The activeness of these students is reflected in the reflection discussion in cycle

2 in discussions with MS Teams. Almost 75% of students have been actively involved in the discussion.

3.2 The Differences of Student Learning Independence in Cycle One and Cycle Two

The difference in the results of the measurement of student learning independence in face-to-face learning and the blended learning method was analyzed using the parametric test because the data were normally distributed and the data scale was numerical. The parametric test used is the paired t test. The complete results can be seen in table 2.

Table 2. The Differences in Student Learning Independence in Cycles One and Two (n = 30).

The Measurement of learning Independence	Score of Individual Attribute	Score of Process	Score of learning Context	Score of Learning Independence
Cycle 1	83.25	83.50	76.67	81.50
Cycle 2	91.00	95.50	92.33	92.94
The difference in cycle 1 and 2	7.75	12.00	15.66	11.44
p-value	0.001	0.001	0.001	0.001

Table 2 shows that there are significant differences in learning independence in cycles 1 and 2 in all aspects. The highest score for the difference in independence is in the aspects of the learning context. Aspects of the learning context are influenced by the environment [19], such as lecturers, peers and seniors.

The results of this study also inform that the indicator of the learning context that has the highest score of increasing independence is Self-efficacy or self-concept (cycle 1 score = 84, cycle 2 = 97). Self-efficacy affects student self-regulation, activeness and psychology in lectures [21]. The level of education also contributes to the level of self-efficacy that students have. Final year students have higher self-efficacy than entry-level students. This is because final year students usually have gained more knowledge and experience than entry-level students [22].

4. CONCLUSION

It can be concluded that blended learning is successful in increasing student learning independence in nursing communication courses. This independence score will continue to increase if the observation is continued in the blended learning cycle 3 and cycle 4 because based on the results of the research cycle 1 and cycle 2 shows an increase in learning independence scores by 11.4 points. If in cycle 2 the student independence score is 92.94, then in cycle 3 the independence score will be 104.34 and in cycle 4 the student learning independence will increase to 115.74 or reach 96.45% of the maximum

independence score.

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