

Article

# Development Of Student-Centered Learning With Problem-Based Learning Through Blended Learning In 3.B Block (Normal Delivery Care)

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## A B S T R A C T

3.B Block is the second block that give students the opportunity to understand the concepts, changes and mechanisms of normal delivery, basic needs of mothers in labor, implementation of assessments of mothers in labor and neonates, determining planning, management and evaluation of labor. This study applies a blended learning and tutorial in the PBL method to improve students' critical thinking skills. This Classroom Action Research was held at the Undergraduate Program of Midwifery, Faculty of Medicine, Andalas University. The subject of this study was the third semester student in the 2021/2022 academic year . This study compares the development of student scores from the first meeting to the fourth meeting of the tutorial. Data collection tools using assessment sheets and written tests. The results showed that the blended learning model could improve students' creative thinking skills. The increase in the average value of students' creative thinking abilities from 79,24 at the first meeting to 84,69 at the fourth meeting. This study also showed the increased value of the pre-test and post-test scores of students. Where the results showed that the majority of students had a score range in 75-79 (30.30%).

## I. INTRODUCTION

Block 3.B, which is entitled Midwifery Care for normal delivery, is the second block that must be studied by third semester students in the Undergraduate Midwifery Program Faculty of Medicine, Andalas University. Students who take part in the learning in this course block give students the opportunity to understand the concepts, changes and mechanisms of normal delivery, basic needs of mothers in labor, implementation of assessments of mothers in labor and neonates, determining planning, management and evaluation of labor, as well as

documenting midwifery care during childbirth. normal and newborn. Thus mastery of the material in Block 3B is important, because it will provide provisions for students in providing midwifery care to mothers who give birth.

3B Block, entitled Midwifery Care for childbirth, is a block that must be studied by third semester students in the Undergraduate Study Program of Midwifery, Faculty of Medicine, Andalas University. Students who take part in learning in this block have finished taking blocks 1A, IB, IC, 2A, 2B, 2C and 3A. They already know briefly about midwife education in block 3A, to become a midwife it is very important that they learn this concept of midwifery. Block 3B is important to study because experience shows that when new students choose to major in midwifery in college, they do not necessarily understand how a midwife serves clients. This is because when choosing a major after finishing high school.

Learning is prepared in the form of lectures by experts in the appropriate fields, tutorial discussions, and skills training in the laboratory. This block runs for 5 weeks, each module will be discussed every week, so this block will discuss 5 modules. In addition to expert lectures, students will carry out clinical skills training. Every week there will be a plenary discussion on the topic adjusted to the lecture and tutorial material. At the end of the block, the 3C block theory learning evaluation will take the form of a written test. The contribution of this block to the competencies / learning outcomes in the curriculum of the study program is that students are able to master 29 main competencies, 9 supporting competencies and 1 specific competency as a midwife who is spread in 7 (seven) Midwife competency areas.

## II. METHODS

The subject of this study was the third semester student of Undergraduate Program of Midwifery, Faculty of Medicine, Andalas University in the 2021/2022 academic year. This research uses quasi-experimental with pretest posttest control group design.

## III. RESULT

There was an increase in the average value from the first week to the second week of the meeting.

**Table 1. Comparison of the average value from the first week to the second week of the meeting.**

Value range	First week		Second week	
	f	%	f	%
85 – 100	9	27	24	72
80 – 84	17	51	8	24
75 – 79	0	0	0	0
70 – 74	7	21	1	0,3
65 – 69	0	0	0	0
60 – 64	0	0	0	0
55 – 59	0	0	0	0
50 – 54	0	0	0	0

Based on the table above, it can be seen that the average value of student knowledge has increased every week. In addition to looking at the development of scores from the first week, this study also looked at the pre-test and post-test scores of students as follow :

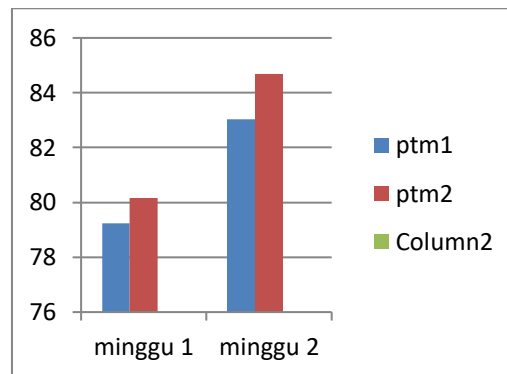
**Table 2. Comparison of pre-test and post-test scores of students**

Value range	Pre test		Post test	
	f	%	f	%
85 – 100	1	3	1	3
80 – 84	0	0	4	12,12
75 – 79	4	12,12	10	30,30
70 – 74	4	12,12	8	24,24
65 – 69	6	18,18	7	21,21
60 – 64	9	27,27	2	6
55 – 59	6	18,18	1	3
50 – 54	3	9	0	0

The result showed that the pre-test scores of the majority of students are in the range of values between 60-64, (27.27%) of 33 people. Then a post test was carried out and the results showed that the majority of students had a score range of 75-79 (30.30%) of 33 people.

### 3.1 Figures

This study compares the knowledge level of 3B Block students for the 2021/2022 academic year by looking at the comparison of students' average scores in the first week and second week of lectures. There was an increase in the average value from the first week to the second week of the meeting.



**Fig 1: Comparison of student average scores**

## IV. DISCUSSION

Learning method use the Student Center Learning (STL) with the problem based learning (PBL) approach through blended learning, namely by using several methods, including tutorials, plenary, topic discussion, independent learning, practicum and several introductory lectures the process includes using the online method using the Ilearn application which has been facilitated by academics.

Every student and lecturer has an account so they can access Ilearn during learning. In Ilearn, the lecturer acts as a provider of teaching materials that can be uploaded to the account of the lecturer in question, then students can access their ilearn account and enter the section of the course they want to study at that time. In 3B Block, students on their Ilearn accounts can access block guides, scenarios as material for tutorial discussions and teaching materials in introductory Lectures by each lecturer who gives lectures. These teaching materials can be in the form of modules, videos or podcasts so that they are more interesting for students and can be accessed from their respective places without having to meet face-to-face. This is expected to increase student output and outcomes so that it can make students more qualified, especially in 3B Block.

Along with the development of technology, humans are required to be able to think creatively in terms of creating innovations in all areas of life. Thus, creative thinking is one aspect of high order thinking skills that need to be instilled in students' minds to create good innovations in all fields.

This is in accordance with the opinion of Graham (2004) indicating that blended learning as an alternative solution to solve the learning gap is currently more focused on face-to-face learning or only online learning. This perspective reveals about the online learning experience, but it is basically not just an online experience. Blended Learning can stimulate skills, give creative attitudes to be able to carry out learning activities independently, where learning activities do not depend on the instructor, so learning with blended learning is integrated to provide convenience and build independent attitudes for students to be creative and innovative in carrying out learning activities (Gopalakrishnan, 2014).

This is in line with the results of research by Lutfiasari (2016), there is an effect of using problem based learning methods on partograph filling skills. The PBL learning method can be an alternative learning method in the partograph sub-chapter in the course of Maternity and Newborn Midwifery Care (Lutfiasari, 2016).

Renityas research, (2015), there is a significant difference with different test results ( $P = 0.014$ ) between student learning participation using a problem based learning model with class group discussions in the course of maternity midwifery care. Where the PBL model has a better learning participation rate than class group discussions, then Problem Based Learning through blended learning is effective in increasing student learning participation.

Students who have high independence excel in blended learning which is more student-centered. Therefore, increasing student independence is critical in improving learning outcomes that need to be the attention of lecturers and other educational researchers (Sandi, 2012).

Learning using the blended learning method has been proven to increase learning creativity in P3IPA lectures at the University of Yogyakarta with the results showing that the blended learning model can improve students' creative thinking skills. This can be seen from the increase in the average value of students' creative thinking abilities from C+ (enough) to A (very good) (Annisa, 2017).

## **V. CONCLUSION**

Based on the results of the discussion above, it can be concluded that blended learning has a positive impact on increasing student learning scores and motivation in 3B Block. In the assessment before and after the action, obtained an increase in the value of knowledge between before and after treatment.

## REFERENCES

- Bahri, Syaiful et al. 2010. Teaching and Learning Strategies. Jakarta: Rineka Cipta. [3] C. Baier, J-P. Katoen, Principles of Model Checking, MIT Press, 2008.
- Azizah, 2017, The Effectiveness of Small Group Discussion Learning Strategies on Student Achievement in Pie Subject Class VIII at SMP Negeri 27 Surakarta in the 2016/2017 academic year. Essay. Islamic Religious Education Study Program, Faculty of Tarbiyah and Teacher Training, Surakarta State Islamic Institute
- Daryanto 2014. Scientific Learning Approach for Curriculum 2013. Yogyakarta: Gava Media
- Carman, Jared, M. (2005). Blended learning design: five key ingredients. <http://www.agilantlearning.com>
- Graham, Charles R. (2004). Blended Learning Systems: Definition, Current Trends, and Future Directions. Taken from <http://www.publicationshare.com/grahamintro> accessed on 12 January 2014
- Gopalakrishnan P, Swati Patki, Varghese SS, Harsha CH, Antony R. Effectiveness of different methods of education among first year medical students in Central Kerala. *Int J Med Pharm Sci.* 2014; 5: 01–4. [10] B. Meyer, Applying "Design by Contract", *Computer* 25(10) (1992) 40–51. DOI: <https://doi.org/10.1109/2.161279>
- Lutfiasari D & Prasetyanti DK. 2016. The Use of Problem Based Learning Method Against Partograph Filling Skills in Semester III Students in Midwifery Study Program (D III) Kadiri University
- Renityas, NN. 2015. The Effectiveness of Problem Based Learning Models Against the Level of Learning Participation in Pregnancy Midwifery Care Courses in the Diploma Program. *Nursing and Midwifery Journal*, Volume 2, No.1, April 2015. DOI: 10.26699 / Inj.v2i1 .ART.p092-094.
- Sandi, Gede. The Effect of Blended Learning on Chemistry Learning Outcomes in terms of Student Independence. *Journal of Education and Teaching*, Volume 45, Number 3, October 2012.
- Annisa, Yulistia. An alternative: why implement blended learning in the implementation of p3ipa learning?. SWCU Science Education National Seminar II, 2017.

## BIOGRAPHY

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Yulizawati was born in Kampar on July 20, 1981. In 2001, she continued her studies at Associate's degree of Midwifery Program. In 2005 she completed the study and earned a master's degree in midwifery at Padjajaran University. In 2010 she completed her education and earned a master's degree in midwifery from the post-graduate program in Padjajaran University. Currently, she serves as the head of the undergraduate midwifery study program at the Faculty of Medicine, Andalas University. Many awards and journal publications that cannot be mentioned one by one.

## **Second Author**

Henni Fitria was born in Padang on May 15, 1988. At the age of 18, she continued her studies at Associate's degree of Midwifery Program. In 2011 she completed the study and earned a master's degree in midwifery at Poltekkes Padang, Ministry of Health. In 2017 she completed her education and earned a master's degree in midwifery from the post-graduate program in midwifery Andalas University.