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Applying Flipped Classroom Based Family Nursing Care Learning Model to Learning Outcome in Nursing Institution

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Abstract: The learning model is now required to be more varied and innovative so that the expectations of the learning objectives can be achieved well. The purpose of this study was to determine the effect of Flipped Classroom learning methods on student learning outcomes in Family Nursing courses. The research method used true experiment with a randomized control group pre-post design. The study population was students who took Family Nursing courses in the sixth semester as many as 155 students divided into 4 classes. The research sample was taken using a stratified simple random sampling technique. Class A and B students (treatment) get the flipped classroom method, while C and D students (control) get the small group discussion method. The results of the study were in the form of learning outcomes (written tests) in the form of multiple choices with 34 questions. Analyst results show that there is an influence of Flipped Classroom that has an influence on student learning outcomes in Family Nursing.

Keywords: -

1. Introduction

The implementation of learning in the classroom is one of the main tasks of the teacher. The teacher's conventional teaching pattern plays a more dominant role, so students tend to be passive. The conventional teaching pattern has set students to pay attention to the teaching of teachers in the classroom. Students will then be given an assessment for homework to show mastery of the topic.

Educational theory has been developed to help improve the learning model. Educational change is starting to develop slowly, offering new educational models and unique ways to connect with their students, inform, collaborate and assess the learning process. Thebased learning model flipped classroom is one of the student-centered learning models to improve learning effectiveness. The flipped classroom utilizes technology that supports learning materials that can be accessed anytime and anywhere. While the learning time in class is used by students to collaborate with project colleagues, practice skills and receive feedback about their progress.

Family Nursing Courses passed by students in the sixth semester. In this course there are 3 credits in which 2 credits are theoretical and 1 credits are practicum. Students are also given the topic to conduct home visits and resolve cases found in families based on family nursing care theory.

Based on preliminary studies conducted by researchers in the first semester of semester VI (January to March 2018), students who take Family Nursing courses on some concept materials are given files in the form of power points to be taught before the lecture schedule. Expectations of researchers when the lecture schedule with themethod is lecture carried out, students already have an understanding of the material to be taught and interactive discussions will occur during the lecture process. The researcher found that as many as <10% of students in each class read the material given by the lecturer. This is what motivates the instructor to provide or improve learning methods that are more interesting than the distribution of material power point.

2. Research Methods

This research used true experiment design. The population was student in 6th semester of the academic year 2017/2018 University of Nahdlatul Ulama Surabaya. Data collected in December 2018

until Mei 2019. The sample picked up with double cluster sampling. Data were obtained with quiz that containing 30 question (given 40 minutes). Data was analyzed by Independent sample t-test.

3. Result

From the result of the research, the frequency distribution data is obtained as follow

Table 1. Distribution of frequency variable

Category	Treatment Group (n=57)		Control group (n=57)	
	n	%	n	%
Gender				
Male	10	17,54	9	15,79
Female	47	82,46	48	84,21
Age				
20	9	15,79	11	19,3
21	42	73,68	42	73,68
22	6	10,53	4	7,02

Table 2. The Analysis of Academic Score

Group	Score		95% CI	T	ρ*
	Pre-test (Mean±SD)	Post-test (Mean±SD)			
Treatment Group	44,46±10,17	54,58±11,94	-13,32 ; -6,93	6,35	0,00
Control Group	42,68±11,78	50,54±12,00	-11,11 ; -4,61	4,84	0,00

Table 1 shows that of the 2 groups of respondents the most had female gender. Table 2 shows that based on the Paired t-test statistical test the value of p = 0.00 is obtained. The value of p <0.05 so that it can be concluded that there was a significant change in the value of the test results between before and after the Flipped Classroom method was given in the intervention group. The results of the study were said to be significantly evidenced by the mean value of 95% CI in 2 groups not involving the number 0. In the treatment group there was an increase in test results greater than the control group indicated by the value of t count 6.35.

4. Discussion

The results of the study showed that the value of the test / learning results experienced an increase between before flipped classroom and after the treatment group. The control group also experienced an increase between before and after using another method, namely small group discussion. If you see the statistical results of changes in the increase in test results the treatment group is greater than the control group.

Rindaningsih, Ida (2018) stated that the learning of the Flipped Classroom model had a strong influence on honing student skills. Learning outcomes in the form of a Learning Program Design are created effectively with high awareness and responsibility of students. This is because technological advances in various information both in the form of text and learning videos can be utilized if properly managed by lecturers.

Ario, Marfi and Asra, Azmi (2018) stated that the implementation of flipped classroom learning provides ample time for students to understand the subject matter at home. If the material provided is still poorly understood, students can play the video repeatedly.

This study respondents are in the same level or semester so the characteristics of age and also the courses taken are the same. The results of the study were said to have influence because compared to

the previous lecture process, students only entered the class, given material then listened to and occasionally asked questions between lecturers and students, so that students were found to have no preparation in attending lectures even though they already knew the lecture schedule and material that would taught. Different from the method applied by the researcher, higher results were obtained in the group given the Flipped Classroom method, students were asked by the lecturer to record things that were still confused or not clear and were asked to study the material to be taught, so that during the lecture the students were more understand. Likewise with classes that do not use the flipped classroom method, students are used the small group discussion method, where students are asked to discuss outside the class with their groups so that they can discuss the material to be taught so that students, in turn, deliver what they have learned.

5. Conclusion

The flipped classroom learning model is one of the effective learning methods to improve student learning outcomes because students are required to record important and unknown things outside the classroom so students when the class takes place, students are ready to carry out the teaching and learning process.

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