

The Effect of Flipped Classroom Learning in Learning Motivation on Nursing Student Program During the Covid-19 Pandemic

Nurlaila Fitriani¹, Arum Pratiwi^{2*}, Chlara Yunita Prabawati³, Enita Dewi⁴

^{1,2,4} Universitas Muhammadiyah Surakarta

³ Universitas Muhammadiyah Surabaya

*Corresponding author. Email: ap140@ums.ac.id

ABSTRACT

The purpose of this study is to identify the effectiveness of the use of Flipped Classroom on student learning motivation during the covid-19 pandemic in nursing pedagogical learning models (adults). The learning of the nursing profession demands more practice than theory. In order to make it easier for students to meet competency targets, new learning methods need to be created to face learning challenges during the pandemic. The learning model will be applied, namely the Flipped Classroom model which is a combination of traditional learning models and media-based learning in the form of images and videos. This research method uses a quantitative method with a quasi-experimental study approach using paired sample t-test analysis. The population of this study was all students of the nursing profession program in 2021. The results of this study found the fact that IFC learning had a significant effect on the learning motivation of nursing professional students (P value = <0.05).

Keywords: *Flipped Class Room, Motivation, Covid-19 pandemic.*

1. INTRODUCTION

The COVID-19 pandemic has had many impacts on various sectors. One of them is the Education sector where since the spread of Covid-19 entered Indonesia, the Ministry of Research, Technology and Higher Education policies enforce online learning. Learning from home poses a challenge for the world of education in Indonesia, one of which is the learning process for the nursing profession program. Nursing profession learning, especially theory and skill-based nursing, requires online lectures to accommodate the demands of professional program student learning outcomes that highlight students' ability to solve problems, reason and apply theory into practice. Online learning programs indirectly become a call for educational reform, especially in health education programs such as nursing [1]. The steps taken to solve this problem are to encourage universities to provide attractive, targeted online education services with maximum output. During this pandemic period, the university has provided several facilities to support online learning using various media that facilitate conventional online learning such as online discussions via applications or lectures through audio and video-based video conferencing methods. This method is also good for online learning. However, this form of learning has not been able to accommodate the complex learning outcomes that must be achieved for students of the nursing profession program [2].

One of the online learning methods that can be done to answer these challenges is the Flipped Learning online learning method. Flipped Learning is a learning

method that consists of educators preparing or selecting videos or types of learning methods, then explaining new concepts to be learned, then students studying the content at home, followed by group sessions in online classes where new ideas are discussed online. brief, then applied and put into practice [3]. This method focuses on the activeness of students to get involved in the learning and teaching process. Studies have shown that online flipped learning can increase learning motivation, problem-solving skills and understanding [4]. Another advantage found in Flipped Learning online learning is that it is flexible so that students and lecturers can monitor and analyze the progress of online learning activities carried out, various learning processes can be accommodated by Flipped learners who are considered very suitable for professional students who are the millennial generation. Thus, the suitability of this learning method is expected to increase student interest and motivation in studying at home during the Covid-19 pandemic.

Although there has been a shift towards online classes, relatively little is known about how these methods are used in the curriculum of the nursing profession [5]. In addition, evaluation in this program needs to be carried out so that research related to the implementation and evaluation of online learning systems needs to be carried out.

The purpose of this study was to determine the effect of Flipped Learning on student learning motivation during the Covid-19 pandemic.

2. METHODS

This study uses a quantitative method with a quasi-experimental study approach using paired t-test analysis. The plan for data collection will be carried out at the Nursing Study Program of the University of Muhammadiyah Surakarta Indonesia which will be implemented in semester first courses based on the curriculum and expected learning outcomes. The population of this study is all nursing students, with the following inclusion criteria:

- 1) Currently conducting active lectures in college
- 2) Able to discuss and carry out the learning process analytically
- 3) Willing to be a respondent

The number of eligible samples with the criteria will be determined using the G power application in accordance with the design and methodology of this study, the results of the minimum number of samples is 72 participants.

3. RESULTS

The results of the analysis of the frequency distribution of the characteristics of the respondents in table 1 show that most of the 35 respondents (44.4%) are at the age of 22 years. Characteristics of respondents' gender shows that most of the 65 respondents (90.2%) of respondents are female. Characteristics of respondents' study duration showed that most of the 24 respondents (33.3%) had a study duration of 5 hours/day. Characteristics of respondents in the semester of respondents showed that most of the 72 respondents (100%) were in odd semesters

Table 1. Characteristics Respondents

Variable	F	%
Age		
21	10	13,88
22	35	44,44
23	26	36,11
31	1	1,38
Gender		
Male	7	9,72
Female	65	90,27
Duration Study (Hour/Day)		
1	2	2,77
2	11	15,27
3	20	27,77
4	15	20,83
5	24	33,33

Based on the table 1 The results of the distribution analysis from table 2 it is known that of the 72 respondents who have moderate learning motivation

with an average value of 225 with a minimum value of 114 and a maximum of 287

Table 2. Description of Nurse Profession Student Learning Motivation

Variable	Mean	Median	SD	Max	Min
Learning Motivation	225,74	227,50	19,776	173	287

The results of the distribution analysis from table 2 it is known that of the 72 respondents who have moderate learning motivation with an average value of 225 with a minimum value of 114 and a maximum of 287

Table 3. The effect of IFC on student learning motivation

Variable	Mean	Std	95%CI		Mean Diff	P-Value
			Lower	Upper		
Learning Motivation	6,41	28,10	12,55	0,28	71	0,041

Based on table 3 we conclude that the action of flipped online learning has a significant effect on the ability and learning motivation of nursing profession students (P value <0.05).

4. DISCUSSION

4.1 Description of student learning motivation

By definition, motivation is a process that stimulates and energizes physical and mental activity towards certain goals. Academic motivation is the driving force of academic study, and is considered an effective factor determining whether students will complete their program in school or college [6]. The importance of academic motivation lies in the fact that motivated students show more interest in dealing with learning activities and realizing achievements in the educational environment.

Academic motivation is very important in nursing training because it provides quality nursing services with sufficient motivation to receive a lot of information and skills and undergo a continuous educational process. Students with high self-confidence have high self-confidence on the contrary those with low learning motivation are more prone to experience low self-esteem and depression.

Academic motivation and causes vary between students and throughout the program. Changes in educational motivation may be due to clinical experience and professional challenges from the student's perspective. Studies have shown that, despite the fact that nursing students start the program highly motivated, their motivation declines throughout the program [7].

Lack of academic motivation in students causes a slowdown in academic achievement. Since the nursing profession is concerned with people's lives, loss of motivation may have a destructive effect on public health as well, resulting in considerable capital losses. Student learning motivation includes natural processes, goals, internal problems, internal functions, and factors external factors, driving forces of educational effort and performance, and facilitators of learning and educational achievement [8]. Each of these attributes emphasizes one aspect of motivation and may overlap, with one another. The results of the fieldwork study show that the concept of academic motivation is inner strength, unique, and incentive for educational achievement, and is influenced by several factors. It is the result of internal and external personal factors. Internal factors are mostly related to students' interests, values, and beliefs, while external factors include family, academic, and professional factors. These factors are actually the antecedents that create academic motivation in nursing students, which is very consistent with the findings of reviewing published articles [9]. The results obtained by reviewing the articles indicate that academic motivation is related to the consequences of educational attainment, higher learning quality, educational satisfaction, learning continuity, lower anxiety levels, higher creativity, and competent training of nurses. The results of fieldwork studies also show that motivation results in higher educational achievement and performance [10].

4.2 The effect of IFC on student learning motivation

The results of this study indicate that in learning during a pandemic, the data reported that students' learning motivation is better in the flipped learning method, compared to traditional learning. This study is similar to a research review which found that nursing students preferred the flipped learning approach to traditional classes [11]. In this study, it was also found that student learning achievement increased in the flipped learning stage. This is supported by the efficiency of the online flipped learning (FC) method of having unrestricted access to pre-recorded video lectures before class allowing students to learn anywhere and anytime, at their own pace. Students can also watch videos multiple times to better understand a particular topic. Another explanation is the availability of more active learning time in class to help increase students' understanding of the subject matter [12]. In the FC system, there are many learning activities that students can do in their respective places without meeting face-to-face but still being able to complete the assignments and group discussions that have been given according to the set time. Lots in-class activities such as small group discussions promote student-peer interaction. Reviewers and critics of assignments and lecturers also feel they have a greater opportunity to provide more feedback during in-class sessions. There are also greater opportunities for students to apply their knowledge in class.

Online learning is more effective than traditional learning because it gives students the freedom of time [13]. One can open the study video in his own time. There is no need to go to an institution to attend lectures. Students can study and complete online education courses in their own timeframe as opposed to traditional learning. It takes less time to learn a lot because lecturers teach certain topics in less time. For students living in rural areas, online learning applications provide better educational options and students benefit from lecturers to build their careers [14]. Most importantly everyone can learn through the e-Learning platform. Students do not need to schedule a lot of time to get a new course. they can learn through their own devices anytime and anywhere. Besides, traditional learning is becoming expensive nowadays, whereas E-Learning is much cheaper than before [15].

However, nursing students need to do clinical practice to improve their skills and hone their knowledge. Critical thinking skills will also be obtained more in the clinical area because they deal directly with patients who are actually being treated in hospitals. Practical experience in a real setting can give students a more realistic picture of real health problems and care services. In addition, the clinical exposure experienced by students is also possible to contribute to their perception and readiness to learn to work together and collaborate in interprofessional learning [16].

The results of this study showed greater improvements in goal setting ability, self-leadership belief, and capacity for rational problem solving of the flipping study group compared to the traditional study group. There is ample evidence that an active e-learning approach is positively related to cognitive skills, including critical thinking. Several recent experimental studies in nursing have suggested that content knowledge and cognitive skills, students' confidence in performing core nursing skills, student satisfaction and achievement and other learning outcomes increase after participation in flipped nursing courses.

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