Student motivation toward flipped classroom learning implication: New challenge to engage technology and active learning in economics

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ABSTRACT

This research purpose is to analyze student motivation in learning activities increases because of the influence of (1) self-efficacy and flipped classroom media learning; (2) the result will be shown that the using of flipped classroom media learning as one of a tools that able to motivate student to be more active especially in economics. This research will use Anova test analysis using quasi experiment from one-group-pretest-posttest design model data primary with the analysis tehnique of quantitative descriptive. Flipped classroom started a strategy in a media learning for lecturers and students to be more active. This research time schedule will be done in one semester and from our respondents there will be a measure data result about the influence of self-efficacy and the usage of media learning of flipped classroom able to increased student's motivation in learning and understanding their lectures inside and outside the class. This research result hopefully able to describe other option that enrich the learning proccess for college students due to the study of economic and business issues worldwide.

Keywords: motivation, flipped classroom, learning media, self-efficacy

INTRODUCTION

Research Background

In the learning process, students are required to understand the material and complete the lecture tasks well. With these demands, a student must have confidence in the competencies in completing a task or high self-efficacy. According to Prayitno (2002: 62) one of the determinants of student success in college is the extent to which the student is able to complete with both the assignments given by the lecturer well and on time. According to Whipple in Hamalik (2009), learning activeness is a teaching and learning process that emphasizes the activeness of students physically, mentally, intellectually and emotionally in order to obtain learning outcomes in the form of a combination of cognitive, affective and psychomotor aspects in the classroom. The understanding of learning activity is only limited to the scope in the classroom, so that through active learning by utilizing digital technology or e-learning and supported by the "flipped classroom" method is expected to be able to create active learning for students in the classroom and

outside the classroom. The problems faced in creating active learning the first is the mastery of lecturers in interaction patterns, learning situations, media and technology. The second problem is the ability of students to empower themselves to learn facts; concept; principle; law; theory; and other innovative ideas by using technology to find; interpret; assess and use information so that students are able to produce creative ideas or ideas to solve problems and determine attitudes in decision making. The importance of learning activities of the students of the management program of UPN "Veteran" East Java in the success of the learning process, one of which is influenced by internal factors inherent in students (talent, interests, and IQ), one of which is shown by the level of self-efficacy. According to Bandura (1986: 25) Self-Efficacy refers to beliefs about one's ability to organize and carry out actions to achieve the results of self-efficacy is a key factor in the source of human action, "what people think, believe and feel influence them in acting ". In the context of student learning processes, the notion of self-efficacy in this study is self-assessment beliefs with regard to the competence of students in management study programs to achieve success or success in their learning activities at UPN "Veteran" East Java.

In the results of previous studies with the title of the relationship between students' academic self-efficacy and procrastination in completing lecture assignments, it can be concluded that the relationship between self-efficacy and academic procrastination has a significant negative relationship. These results mean that the higher the self-efficacy of a student, the lower the level of academic procrastination (Damri, et al: 2017). In this regard, the student's behavioral tendency in the learning process can be predicted through the level of self-efficacy that is possessed so that the importance of the role of student self-efficacy is able to create student learning activities in the management study program in the learning process both inside and outside the classroom. In this study using self-efficacy and learning activeness as variables to be studied before and after the application of Flipped classroom learning media. The novelty in this study was to use the variable self-efficacy and student learning motivation as a variable to be measured the level of difference before and after the application of flipped classroom learning media using a quasi-experimental method with a one-group-pretest-posttest design model. and description of the problem, this research aims to determine the differences in the level of self-efficacy and learning motivation of students with the use of the flipped classroom method. So the title in this study is the Implication of the Application of Flipped Classroom Learning Media Against Self-efficacy and Student **Learning Motivation**

Research problem

Based on the background, the problem can be formulated is whether the application of flipped classroom learning media affects the self-efficacy and learning motivation of students in the Management Study Program of the Faculty of Economics, UPN Veterans of East Java.

Research purposes

This study aims to determine the increase in learning motivation and the application of flipped classroom learning media strategies to students' self efficacy and learning motivation in the Faculty of Economics Study Program of UPN Veteran East Java, so as to identify the influence of flipped classroom learning strategies on student self efficacy and motivation and analyze the most influential attributes in their learning process for one semester.

A. Learning Media

The word "media" comes from a Latin word which means intermediary or "medium". While in the world of education the word 'media' is called learning media. Arsyad (2013: 10) said that learning media is everything that can be used to convey a message or information in the teaching and learning process so that it can stimulate students' attention and interest in learning.

B. Flipped Classroom

According to Graham Brent (2013) flipped classroom is a strategy that can be provided by educators by minimizing the amount of direct instruction or direction in their teaching activities while maximizing interactions with each other. Another flipped classroom opinion is a method that asks students to watch videos, read books or read power point slides of subject subjects or courses, then study at their homes and then do projects or activities in the classroom (Agustina, 2015)

C. Self Efficacy

Bandura (1977) proposed several dimensions of self-efficacy, namely magnitude, generality, and strength. Magnitude, related to the level of difficulty of a task performed. Generality, related to the field of duty, how wide an individual has confidence in carrying out tasks. Strength, related to the strong weakness of an individual's beliefs.

D. Motivation

Vroom in Koontz (1990) suggests that people will be motivated to do certain things in order to achieve goals if they believe that their actions will lead to the achievement of these goals. This expectation theory is based on:

- ❖ Expectancy, is an opportunity given due to behavior or an assessment that the possibility of an effort will lead to the expected performance.
- ❖ Value (Valence), is the result of certain behaviors having certain values / dignity (power / motivational value) for each individual concerned. In other words, Valence is the result of how far someone wants the rewards / significance associated with the individual about the expected results.
- Linkage (Instrumentality), is the perception of the individual that the results of the first level of expectations are something that exists in the individual that occurs because of the desire to achieve results in accordance with the goals or beliefs that performance will lead to rewards.

RESEARCH METHODOLOGY

Road Map Research

This study was to determine the implications of the application of a flipped classroom learning media strategy on student activity. The results of this study is a learning media strategy that is able to influence student self-efficacy and activity, so that on the next research opportunity can be developed an information technology-based learning media that has competitiveness in the days of digital learning.

To fulfill the purpose of this research, a research method is needed. In this study the authors chose to use a quasi-experimental method with a one-group-pretest-posttest design model. Which means that the author will only use one group of subjects so that the author can find out the effects that will result from the treatment (treatment) given to the class as the subject group. The researcher is a lecturer in the management study program, where this research will be carried out in two assessment cycles, namely the first cycle in the period before the Flipped Classroom learning media strategy is carried out after 7 initial meetings after the UTS so before UAS. Data collection techniques used in this study are using documentation, questionnaires, observations and interviews. This research process is carried out cyclic as suggested by Kemmis and McTaggart (1988) with regard to plan, implementation, monitoring, and reflection. Researcher hopes that by distributing questionnaires, direct observation and interviews can show the level of student motivation through self-efficacy and flipped classroom learning media strategies. This study uses a survey method to students of Management Department of UPN Veteran East Java force 2015-2016. By applying the flipped classroom learning media strategy to the intended class by the next author, students as respondents answered the questionnaire the researchers asked. Stages of research were carried out starting from preliminary surveys, identification of variables, preparation of questionnaires, distribution of questionnaires before UTS and before UAS, conducting research, collecting research sample data, Anova test and SPSS analysis.

Types and Data Sources

The data collected in this study are:

- 1. Primary data, namely data obtained from the results of the data tabulation questionnaire, direct observation and interviews of students.
- 2. Secondary data, namely data obtained from the results of literature studies, research journals, publication materials and related parties that are related to this research.

Respondent Determination Technique

The technique of determining Respondents is done intentionally (purposive judgment sampling). The population in this study were all students of Management Study Program at the Faculty of Economics and Business, UPN East Java Veterans. Samples according to Margono (2002: 121) are as part of the population taken by using certain methods. The sample in this study were students of Management Department UPN Veteran Jatim 2015/2016 class as an experimental class with a total of 30 people. The sample was chosen by purposive technique which then selected 30 parallel A students as the experimental class where classroom action research is an experimental research because of the relationship between attributes in it. Then a combination of stimuli is done to get the respondents / panelists' ratings as consumers towards the best combination of attributes based on consumer preferences.

Operationalization of Variables

The variable used in this classroom action research is a flipped classroom learning media strategy that is given through the experimental class for 7x meetings after the mid-test (UTS). Student self-efficacy and activity analysis are indicators that shape well or not the implications of the flipped classroom learning media strategy, for shredded fish products in the form of product

attributes. Product attributes are product elements that are considered as important by consumers and used as a basis for good decision-making to purchase (Tjiptono, 2008).

Analysis Framework

The formation of combination stimuli is done by combining the level attributes into a stimuli or profiles that are formed in carrying out the flipped classroom method. After the operationalization of the variable is then carried out by collecting data with the stages of determining the research sample. The assessment is done with a Likert scale as in the table below:

Table 1. Likert Scale

No.	Statement	Score
1.	Very Agree	5
2.	Agree	4
3.	Fair	3
4.	Dissagree	2
5	Very Dissagree	1

Respondent's assessment on a combination of attributes is the material for analyzing class actions using the flipped classroom method. Likewise, combination stimuli are processed using conjoined method, so that it will produce motivation values for each attribute and student self-efficacy as respondents.

Learning motivation and self efficacy are values that result from students' assessment of flipped classroom learning media with positive values that indicate a high level of consumer preference for a product level / level and a negative value that indicates a low level of consumer preference towards product level / level.

RESULTS AND DISCUSSION

Reliability and Validity Test

Validity and reliability are important in a measurement. A scale or measuring instrument can be said to have high validity if the instrument performs its measurement function, or provides a measurement result that is in accordance with the purpose of doing the measurement. While tests that have low validity will produce data that is not relevant to the purpose of measurement. According to Aritonang R. (2007) the validity of an instrument relates to the ability of the instrument to measure or reveal the characteristics of the variables intended to be measured. In research, reliability is the extent to which measurements of a test remain

consistent after repeated repetition of the subject and under the same conditions. Research is considered reliable if it provides consistent results for the same measurement. Based on the results of Corrected item-total corralation shown in tables 3.1 and 3.2, where the corrected item-total corralation value is shown higher than the table r product moment value of 0.349 with the number n=30 and the significance of 5%. Thus, it can be stated that all measurement indicators used in this study have validity and reliability well, so that further analysis can be done at the treatment stage using flipped classroom learning media.

To find out the relationship between learning motivation and self efficacy used Correlation Test of significance value before the action and after action. Test results can be seen in table 2 and table 3 below.

Table 2. Pretest Correlation Test

	Scale Mean if	Scale	Corrected Item-	Cronbach's		
	Item delected	Variance if	Total	Alpha if Item		
		Item Deleted	Correlation	Deleted		
Self-efficacy						
Magnitude	4.2333	0.737	1.0000	-0.599		
Generality	4.1333	1.361	1.0000	0.547		
Strenght	7.5000	1.776	1.0000	0.570		
Learning Motivation						
Expectation	4.5333	1.430	1.0000	0.531		
Value	8.0000	1.034	1.0000	0.138		
Instrument	4.7000	2.355	1.0000	0.668		

(Source: Primary Data 2018)

Table 3. Posttest Correlation Test

	Scale Mean if Item delected	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted		
Self-efficacy						
Magnitude	8.7333	1.444	1.0000	0.885		
Generality	8.3000	1.183	1.0000	0.466		
Strenght	9.2333	0.599	1.0000	0.415		

Learning Motivation

Expectation	8.7667	1.430	1.0000	0.799
Value	8.0000	1.034	1.0000	0.138
Instrument	7.9333	1.651	1.0000	0.819

(Source: Primary Data 2018)

T Test Results

In the T test results obtained the average value of pretest Self-efficacy and student learning motivation is 28.833, while for the posttest value, the average self-efficacy and learning motivation is 50.9667 with the number of respondents 30 students as samples. These results stated that there was an increase in the level of self-efficacy and student motivation after the application of flipped classroom learning media.

T-Test Self-efficacy and Student Learning Motivation

The relationship between the two data is pretest (initial data) and posttest (data after treatment) the application of flipped classroom learning media has a correlation value of 0.450 with a significance of 0.013 (<0.05)

Paired Samples Statistics

						Std. Error
			Mean	N	Std. Deviation	Mean
Pa	iir	pretest	28,8333	30	2,76784	,50534
1						
		posttest	50,9667	30	3,01128	,54978

Pa ired Sample s Correlations

		N	Correlation	Sig.
Pair 1	pretest & posttest	30	,450	,013

Through paired sample tests it can be seen that the probability value or sig. (2-tailed) <0.05, then there is a significant difference between the results of treatment at pretest and posttest, which means that there is an effect of using learning strategies in improving learning outcomes by applying flipped classroom media to student.

MANAGERIAL IMPLICATION

This research took place at the Faculty of Economics and Business UPN "Veteran" East Java, the meeting was held in 2 cycles, namely before and after the Midterm Examination. The learning method is a tool in the teaching and learning process in the process, not all students can immediately understand and digest the visualization of the material delivered by the teacher or in this case the lecturer. Through self-efficacy and the use of the flipped classroom method, it makes a solution to increase student learning activeness. Based on the results of questionnaires, the following results were obtained:

Application of flipped classroom learning media on student self-efficacy.

Self-efficacy refers to individual beliefs about their ability to mobilize motivation, cognitive resources, and actions needed to successfully carry out tasks in a particular context, with indicators: (1) magnitude, namely the ability to complete work with certain difficulties,

2. Generality, namely ability to carry out tasks with a variety of task fields, (3) Strength (Strength) is the strength or weakness of an individual's beliefs. The results obtained when the flipped classroom has not been applied (pretest) can be seen in Figure 1 as follows:

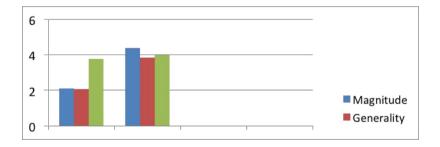


Figure 1: Self-efficacy Pree Test dan Post Test Chart

(Source: Primary Data 2018)

From the chart above, it can be seen that the level of self-efficacy before the use of flipped classroom learning media (pree test) has a relatively low mean value with an average value of less than 3, namely the magnitude indicator (mean = 2.1167) and generality (mean = 2.0667) but only on the tool indicator which has a high enough value (mean = 3.75). During post test or after using flipped learning learning media, a high level of self-efficacy is obtained, namely magnitude (mean = 4.3667); generality (mean = 3.85) and strenght (mean = 3.9667). So that it can be concluded that there is an increase in student self-efficacy after being given treatment using flipped classroom learning media, this is in line with the opinion of Angraeni (2016), which means that the more strong or high self-confidence of students, the higher the interest in learning.

Application of flipped classroom learning media to student motivation.

The motivation of students or students in their learning varies according to the character of each student or student, this can be explained by (Sudjna, 2010) some indicators of learning activeness, namely: paying attention and reading (Visual), discussion, asking, solving problems (Oral), doing problem or task (writing). The level of student activity before the use of flipped classroom learning media (pree test) has a relatively low average value with a value (mean <2.5) that is in the visual indicator (mean = 2.2667) and oral (mean = 1.8667) and writing (mean = 2.35). This is consistent with the opinion of Sahputra and Hadi (2017) that conventional learning processes that emphasize the delivery of knowledge from teachers to students and the activities of students during the learning process mostly only listen to all the information conveyed by the teacher, thus causing a lack of student participation in the process learn how to teach.

At the time of the post test or after the use of flipped learning learning media, a high level of activity (mean> 2.5) is visual (mean = 3.7167); Oral (mean = 3.4) and Writing (mean = 3.383). So it can be concluded that there is an increase in student activity in the learning process after being given treatment using flipped classroom learning media. This is in line with the opinion of Bergman and Sams (2012) that the application of Flipped Classroom learning media makes students more motivated in completing their work in the form of reports and practice questions. In addition, the flipped classroom learning media is used by teachers to reduce the amount of direct instruction in learning, so that the time spent in class is more efficient and more focused on the execution of assignments and report writing of group discussions in class as Bergmann and Sams (2012) argue.

CONCLUSION

Based on the results of research conducted the influence of the use of flipped classroom learning media on the self-efficacy and activeness of students in the management program of the Faculty of Economics and Business UPN "Veteran" East Java are as follows:

- 1. The use of flipped classroom learning media proved to have a significant difference in student self-efficacy before and after treatment using flipped classroom learning media. This is indicated by an increase in the mean self-efficacy value of the pree test to the post test after being given treatment using flipped classroom learning media. This is caused during conventional learning (pretest) students experience self-confidence in understanding the material, overcoming difficulties and doing assignments on lectures. So using the flipped classroom learning media is able to train students to explore their potential which is optimally owned in the learning process and becomes confident in the ability of the self to complete the college assignment. This is in accordance with the results of Nurhayati's research (2015) where, the learning process with the application of active learning can improve academic self efficacy and student learning outcomes.
- 2. The use of flipped classroom learning media proved to have a significant difference in student activity before and after treatment using flipped classroom learning media. This is indicated by an increase in the mean pree test to the post test after being given treatment using flipped classroom learning media on all student activeness indicators. This is because the emergence of students' desire to be more active in using learning media because students feel it is very interesting and not boring, and is able to provide a clear picture of the work done.

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