

College Students' Engagement and Motivation in the Flipped Learning Classroom (A Quasi Experimental Study on the Income Tax Management Course)

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Abstract

The Flipped Learning is a learning strategy that reverses the traditional learning process. Learning begins with the provision of learning resources to be studied by college students outside the classroom. Lecturers provide learning resources such as materials in the form of powerpoints, modules, questions and videos. This research is a quasi-experimental study on the income tax management courses by considering aspects of college students' engagement and motivation in the learning process. Data were obtained by using questionnaires and were analyzed by using the descriptive statistics. Based on the data analysis, it is found that the application of the flipped learning is able to get students actively involved and have high motivation in learning.

Keywords: *motivation, students' engagement*

Introduction

Education in the era digital is marked by the use of technology in learning. Technology is not merely as a media, but, it also provides the various resources. Through using the technology, it can also be applied the newest learning method that combines the use of technology with the face-to-face lecture. Lecturing can be also done without face-to-face meeting or it can be called distance learning. One of the learning methods that combines the face-to-face meeting with the use of technology is flipped learning model. Flipped learning is one of the model learning that can increase the active learning of the college students (Hamdan, McKnight, McKnight, & Arfstrom, 2013). Traditional learning is the learning process which reverse "I Do", "We Do", "You Do", and by using flipped learning, they become "You Do", "We Do", "I Do" Schmidt (2016). The two components of the definition of flipped learning is "moving the lecturer to out of class". Usually, learning is presented through electronic media and moving the practice, such as assignment and homework to inside the Educause class (2012).

The idea of doing flipped learning occurs due to the trouble faced in traditional learning. When the college students are given a task, they do not fully capable to do it alone and they need help from their parents. Not all college students' parents have capability in achieving the content or material learned by their kids. By using flipped learning, the problem in mastering the material faced by the college students will be helped by the expert who is a lecturer. This flipped learning strategy might make all the college students access the learning material even they are in sick condition or unable to come to the class (Ash, 2012).

According to Sams & Bergmann (2012), the lecturer acts as a facilitator to motivate, guide, and give feedback toward the college students' performance of learning in lecturing by using flipped learning method. The role of the lecturer is changed from as a person who has various resource (traditional) into lecturing director by managing the class system which covers the provision of accessing material for the college students outside of the class (Strayer, 2007) and becoming a discussion leader and a problem solver which is done in the class. Nederveld and Berge (2015) add some information that in flipped learning, the class activity will be spent to learn high level of learning. The other previous researches also show that flipped learning is capable to enhance the college students' learning achievement, motivation, engagement, and interaction. Here are the results of previous researches which show the flipped learning can increase the college students' motivation learning.

Table 1. College Students' Motivation

Author(s)	Impact
Davies et al. (2013)	College students were able to learn based on simulated learning, they were motivated to learn at their own pace, and recommended flipped learning to other friends
Enfield (2013)	The flipped classroom can improve college students' self-efficacy in independent learning
Kim et al. (2014)	College students undertake substantial out of classwork and are motivated to do so independently
Galway et al (2014)	Increasing in self-perceived knowledge
McLaughlin et al. (2014)	The strategy of flipped learning approach will foster college students motivation in further learning
McGivney-Burelle and Xue (2013)	College students are able to work at their own pace

Source: Zainuddin, Z., & Halili, S. H. (2016).

The college students who have high motivation can be manifested in the active involvement while lecturing. The college students' involvement while studying show that the other resources also show the application of flipped learning is capable to improve the involvement of college students as followed on the table here:

Table 2. College Students' Engagements

Authors and year	Impact
McLaughlin et al. (2013)	College students can enhance their engagement in classroom activity, participate in discussions, exchange ideas, and solve problems with peers
Chan et al. (2014)	College students are satisfied with the class activities, their attendance improve, and they have more opportunities for active learning
Talley and Scherer (2013)	College students can confidently produce a summary of the biological process in their own works
Missildine et al. (2013)	College students have engaged in active learning
Kim et al. (2014)	By interacting with asynchronous video lectures outside of the class, college students are more confident and prepared while discussing in the class
McLaughlin et al. (2014)	College students participate and engage in discussion class and improve high level of confident to apply their knowledge
Hung (2015)	College students engage with the learning environment and the learning process

Source: Zainuddin, Z., & Halili, S. H. (2016).

This research is done to see the motivation and the college students' involvement in lecturing that apply the flipped learning style.

Methods

This research is the experimental research by applying flipped learning. The purpose of the research is to see its influence toward the motivation of college students and the involvement of college students. This research uses total sampling. The amount of sample is 37 college students. This research uses the test result of income tax management subject as the data research. The data of motivation and involvement of college students use the Likert scale questionnaire. The research data is processed by using descriptive statistic and respondents' result level of motivation and involvement of students for the classes which use flipped model learning.

Results and Discussion

Flipped Learning lesson was done is two steps- Exploration step (outside of the classroom) and Discussion step and problem solving in the class (face to face). Kim et al. (2014) stated that the students could prepare the activity in the class by watching and exploring online lesson material before coming to the class. The involvement of college students related with the activity in the class could be participation in discussion, exchanging idea, and finishing problem with their peer (McLaughlin et al., 2013). The learning process in the class by using flipped learning method in income tax management class gave the picture of students' motivation:

Table 3. Motivation Table

Number	Statements	Total	Average	TCR (%)	Category
1	I am happy to read the book or article related with income tax management	141	3,8	76,2	High
2	I am interested listening toward the video related with income tax management material	140	3,8	75,7	High
3	I study income tax management to fulfill my curiosity about tax	160	4,3	86,5	Very High
4	I need to repeat the material of income tax management that is taught by the lecturer at home	148	4,0	80,0	High
5	The task of income tax management given by the lecturer ease my material understanding	165	4,5	89,2	Very High
6	I am happy to learn the income tax management because I can know many things about tax	163	4,4	88,1	Very High
7	The compliment given by the lecturer can increase my spirit to learn income tax management diligently.	160	4,3	86,5	Very High
8	I do the task well in order to get good mark	168	4,5	90,8	Very High
9	I use the spare time to study the income tax management	138	3,7	74,6	High
10	I work cooperatively in team to finish the income tax management task well to get good mark	150	4,1	81,1	Very High

Table Cont...

11	Studying income tax management by discussing is much fun because we can exchange perspectives in mind and information with friends	152	4,1	82,2	Very High
12	I am excited learning income tax management due to the calmness and condusiveness	159	4,3	85,9	Very High
13	Although my income tax management mark is lower than friends, I keep spirit to learn to obtain the better mark	166	4,5	89,7	Very High
14	I try studying the income tax management from books, books in the library, articles, internet, and every source to get the good result	153	4,1	82,7	Very High
15	I try following the income tax management lesson from the beginning until the end with full concentration in order to help other people who have difficulty in understanding tax	164	4,4	88,6	Very High

Source: Zainuddin, Z., & Halili, S. H. (2016).

Based on the data in table 4, it can be known that the college students' motivation for the class which apply flipped learning is high, even for particular thing such as the effort to learn from various resources is very high. This result is on one track with many other research results that by applying flipped learning will increase empowerment, development, and ability of the college students to learn independently or with their own speed (McLaughlin et al., 2013; Galway et al., 2014). Flipped learning depends on the college students who do the substantial work outside of class and motivated to do it independently (Kim et al., 2014). Many researches show that the impact of flipped learning is to enhance the motivation of college students in learning. The college students can study based on the simulated learning and they are motivated to learn with their own speed (Davies et al, 2013).

Flipped learning increases the involvement of college students. The involvement of college students is the college students' active participation toward the routine activity in the class such as sending the homework, listening, giving the material explanation, doing what is requested by the instructor to do, and actively attending the class (Yang & Cheng, 2014). The college students' motivation results the involvement of college students (Zepke, Leach dan Butler,2009). This result of research also shows that the application of flipped learning model is able to increase the involvement of college students as it can be seen in the table 5:

Table 4. The Involvement of College Students in Lecturing

Number	Statements	Total	Average	TCR (%)	Category
1	Asking directly toward the leacture while lecture is being held	126	3,4	68,1	High
2	Giving the opinion when the discussion is taking place in the class	135	3,6	73,0	High

Table Cont...

3	Making the important note about the material which is being delivered by the lecturer	159	4,3	85,9	Very High
4	More silent when the lecture is going on	113	3,1	61,1	High
5	Doing the assignments on time	166	4,5	89,7	Very High
6	Reading the required resource before being talked in the class	121	3,3	65,4	High
7	The desire not to join lecture	172	4,6	93,0	Very High
8	Feeling not ready to follow the lecture due to the unfinished task	151	4,1	81,6	Very High
9	Ready to explain the material of lecture toward friends who need it	153	4,1	82,7	Very High
10	Joining to do the group assignments	167	4,5	90,3	Very High
11	The group assignment is delivered to friends who are smarter	157	4,2	84,9	Very High
12	There is study group to help each other in studying	141	3,8	76,2	High
13	The syllabus is given by the lecturer in the beginning of lecture	179	4,8	96,8	Very High
14	The lecturer gives the big chance to the college students to understand the material of lecture independently	155	4,2	83,8	High
15	The lecturer gives the group task or individual task	157	4,2	84,9	High
16	Lecture is held in the form of discussion	131	3,5	70,8	High
17	The college students are required to discuss the main topic learned in the class	138	3,7	74,6	High
18	The lecturer gives the big chance to ask toward the college students	168	4,5	90,8	Very High
19	The main resource of studying needed by the college students is enough	153	4,1	82,7	High
20	The text books needed for each subject is easy to find in the library	133	3,6	71,9	High
21	It is easy to find the lecturer to discuss the difficulty of college students about the subject that his/her has.	120	3,2	64,9	High

Table Cont...

22	The availability of academic administration system eases the college students arranging the study planning.	148	4,0	80,0	High
23	The availability of subject section is appropriate according to the needs of college students	144	3,9	77,8	High
24	The availability of lecture room is enough	150	4,1	81,1	Very High
25	The facility of lab/workshop is adequate	155	4,2	83,8	Very High

Source: Zainuddin, Z., & Halili, S. H. (2016).

The involvement of college students for the class which apply the flipped learning is high and for the certain indicators is very high such as asking to the lecturer toward the difficult material and the activeness in doing task. Many other results of research also show that the involvement of college students in learning increases by applying the Flipped Learning model. According to Atiqah Nurul Asri, Tutuk Widowati, Umi Anis Roisatin (2018), they stated that the application of Flipped Classroom Learning model in D3 Study Program of Informatics Management of Politeknik Negeri Malang can increase the involvement of college students in learning activity and easily understand the delivered material. The involvement of college students improves the active participation of college students of routine class activity, such as sending the homework, listening toward the topic, doing what is asked by the instructor, and actively attending the class (Delialioğlu, 2012). McGivney-Burelle dan Xue (2013) and also explains that the college students enjoy the availability of instructors in the class to help them when they solve the problems.

Conclusions

Learning by using flipped learning system for the research which has been done can increase the college students' motivation, so the involvement of college students toward lesson as a result also increase. The college students' motivation is marked by the interest of college students toward the lesson, repeating the material at home, and showed by the effort to obtain the optimum result. The college students is also actively involved with the routine activity in the class, such as asking, listening to the explanation, solving the problems, and using the learning facility. This learning model is deserved to be developed further in the class in order to increase the other positive aspects in learning.

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