Integration of Videos in Flipped Classroom Learning Model at University of Muhammadiyah Gresik

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ABSTRACT

The COVID-19 pandemic has given the effect of changing learning models and requiring lecturers in university level to improve their skills in implementing online learning. At University of Muhammadiyah Gresik, various learning models were applied by lecturers, one of which was the flipped classroom learning model. The flipped classroom learning model used was integrated with the video material explanation uploaded to YouTube for easy access. As the post-effect of online learning during the pandemic, lecturers and students have gained lots of experiences in using technology in teaching learning process. The implementation of flipped classroom has helped lecturer and students to overcome problems faced in online learning process. Therefore, it is necessary to find out whether the use of flipped classroom should still be implemented in new normal education or should lecturers return with the previous traditional learning model. A descriptive quantitative research design was used in this study to find out the students’ perception toward the implementation of flipped classroom. The result showed that students had positive responses toward the implementation of flipped classroom. Students responded that flipped classroom helped them understand the material easier, provided more interactive activities in the classroom, and guided them to improve their learning abilities independently. Thus, flipped classroom was also considered as an innovative learning model that could be implemented in the learning process in new normal of education.

INTRODUCTION

Due to the COVID-19 pandemic, lecturers have experienced various changes in the world of education. One of the most significant changes was the implementation of the online learning process. During the online learning process in the pandemic, lecturers were required to improve their skills in
implementing online learning, especially in the expertise of applying learning media technology. In addition, learning process in 21st century requires teachers to apply a student-centered learning model (Alamri, 2019; Du, et al., 2019). Various kinds of innovations have been carried out and developed for the online learning process, including the development of learning modules, models and media. This phenomenon turned out to have a positive effect on the improvement of lecturers in terms of integrating technology in the learning process.

At University of Muhammadiyah Gresik, one of learning models applied by lecturer in online learning process was flipped classroom learning model. In general, flipped classroom is an adaptive learning model and has long been circulating in the world of education. In flipped classroom, the subject matter must be studied first by students at home or outside the classroom before the learning process begins. By using flipped classroom learning model, teachers will no longer need to explain the material and can directly lead the learning process in the classroom to discussion activity, practice questions, or any other interactive activities (Chandra & Nugroho, 2016).

By providing students more time to study the material first, lecturer and students can focus more on PBL (Problem Based Learning) for discussion activity in the classroom. According to Johnson (2013), flipped classroom is a learning model that allow teachers to minimize the number of direct instructions in learning process so that teacher and students can maximize the process of interaction and discussion in the classroom. Flipped classroom is also considered as an adaptive learning model. Thus, in the era of technological development, flipped classroom can be integrated with the use of technology. Previously, flipped classroom was implemented in a traditional way. With the development of technology, flipped classroom can be easily integrated with technology. Syam (2014) states that flipped classroom can also be implemented with the use of technology where the teachers can make a video explaining the material and then distribute it to the students so that they can watch the video to understand the material before the learning process begins.

In this study, the writer implemented flipped classroom learning model in online learning process. As a similar learning process done by Farida, et all (2019) who developed a flipped classroom learning model by utilizing video media. The reason of distributing video material to the students as one of the features of flipped classroom was to anticipate various problems that might arise during the online learning process. One of which was the students’ poor internet connection while listening to the material explained directly by the lecturer via virtual video conference. The flipped classroom learning model can be an interactive learning model by integrating the use of internet and technology (Shyr & Chen, 2018; Awidi & Paynter, 2019). Thus, the writer used YouTube as a media platform to upload the video materials. YouTube was used due to its high-quality server provided. This platform is also known as one of the primary sources of entertainment for students where they spend several hours a day watching videos on it (Valle-Ramón., et al. 2020). YouTube is an easy, innovative, attractive and student-friendly tool (Mahasneh., et al. 2020). Therefore, the implementation of flipped classroom in online learning process can make students easier to understand the learning material because they are given more suitable time to study the material from the video given.

This study aimed to find out the students’ perception toward the implementation of flipped classroom learning model during online learning process. It was hoped that with this study, students could provide a clear perception response to the implementation of flipped classroom so that it could be well received to continuously be implemented in the learning process in the new normal education.

METHODS

This study used a descriptive quantitative research design. 60 students from semester 2 to 6 were selected as the respondents because they have experienced the learning process using flipped classroom learning model during online learning process. The data collection used was in the form of questionnaire adapted from Aljaraideh (2019). The questionnaire was distributed to the respondents and the result was analyzed in likert scale and described clearly. To obtain a deeper result and better understanding from the perspective of the respondents. The writer then implemented a semi-structured interview process
to find out students’ opinion toward the implementation of flipped classroom in the learning process in new normal of education.

FINDINGS AND DISCUSSION

Students’ Perception toward Flipped Classroom Learning Model

The total percentage result from the questionnaire was found 77.16% with the category “Agree” indicating that the students’ perception toward flipped classroom in the learning process was considered quite good and acceptable.

Table 1. Students’ Perception towards Flipped Classroom

| No | Statement                                                                 | Percentage | Category |
|----|---------------------------------------------------------------------------|------------|----------|
| 6  | I frequently pause or repeat parts of the videos in order to increase my understanding of the material. | 87.67%     | Strongly Agree |
| 10 | Flipped classroom attracts my attention to learning and teaching process. | 78.67%     | Agree     |
| 17 | Flipped classroom reduces the effort to understand the basic knowledge of the subject matter. | 26%        | Disagree |
| 23 | Flipped classroom gives me greater opportunities to communicate with other students. | 72.67%     | Agree     |
| 26 | Flipped classroom matches my learning style. | 70.67%     | Agree     |
| 30 | Flipped classroom learning has reduced my dependency on the instructor. | 70.33%     | Agree     |

In statement no. 6 “I frequently pause or repeat parts of the videos in order to increase my understanding of the material” which is contractively in line with the statement no. 17 “Flipped classroom reduces the effort to understand the basic knowledge of the subject matter” indicates that the use of the flipped classroom model could help students easily understand the learning material. Research from Jiménez, et al (2021) showed that most students actively participated in the flipped classroom learning model, the model was liked by, and provided benefit to the students. This is because one of the features of the flipped classroom involves providing students with video explanation of the material, allowing students to watch the video explanation and prepare for class beforehand. In flipped classroom, learning material must be studied first by the students at home or outside the classroom so that later when the class begins, it is not necessary for the teacher to explain the material and can lead the learning process in the classroom into discussion activities, practice exercises or other interactive activities (Chandra & Nugroho, 2016).

Students’ response in statement no. 6 is also in line with the result in statement no. 26 “Flipped classroom matches my learning style”. The flipped classroom learning model had succeeded in becoming a learning model that was suitable with students’ learning style. It also improved the development of students’ interest in learning which is accordance with the result obtained in statement no. 10 “Flipped classroom attracts my attention to learning and teaching process”. In general, students’ interest in learning is one of the important things in learning process. It is considered as one of the factors that affect the quality of students’ learning outcomes (Syah, 2007).

The use of flipped classroom learning model can also provide other benefits to the students. One of them is to give students more time to understand the learning material. Therefore, from the result in statement no. 30 “Flipped classroom learning has reduced my dependency on the instructor”, flipped classroom had increased the students’ development in becoming independent learners. The basic principle that students must have is that they must be more active and independent in the learning process (Lee., et al. 2010). Another advantage of flipped classroom was also found in the result of
statement no. 23 “Flipped classroom gives me greater opportunities to communicate with other students”. With the feature of flipped classroom where students can gain better understanding about the material before the class begins. Thus, it provided students more time to have discussion activities in the classroom with their classmates.

Students’ Opinion toward the Implementation of Flipped Classroom in the Learning Process in New Normal of Education

Based on the result of interview, the majority of students showed positive responses to the advantages of flipped classroom learning model. Students responded that they could understand more about the learning material by watching the video explanation.

“Flipped classroom learning model matches my learning style. I can understand the material better by watching the video material”.
“I can watch the video material anytime and anywhere. It helps me understand the material easier”
“Learning the material using video explanation before the class begins gives me chance to be more ready for the class.”

In addition, students were fond of flipped classroom because they could watch and repeat the video anytime and anywhere. Thus, it could further improve the students’ ability to understand the material, think more critically, and enhance learning skills so that they could be more prepared in the learning process and could also have the potential to increase the results of better academic scores. One of the benefits of independent learning is that students can plan and assess their own learning outcomes (Oishi, 2010).

Students have more time to interact with lecturers or other students when the learning process in class starts because they are better equipped to apply what they have learnt after first mastering the learning material through the flipped classroom learning model.

“Flipped classroom is an effective way to help me understand the material better and give more interaction process with lecturer and my friends”
“Flipped classroom helps me become a more independent learner”

This creates a good learning atmosphere in the classroom where the discussion activity process between lecturer and students becomes more extensive and interactive. According to Johnson (2013), flipped classroom is a learning model that can be implemented by minimizing the number of direct instructions in teaching practice so as to maximize the process of interaction and discussion with each other. Besides many positive responses from the students, it was also found a result related to deficiencies in the use of flipped classroom. Students revealed that the flipped classroom could sometimes be boring if the duration of video material was too long. In addition, there were also students who responded that sometimes they were still hampered by internet problems while watching the video material.

The majority of students participating in the interview indicated that they preferred flipped classroom to the traditional learning model. This was because flipped classroom was considered as a learning model that was both contemporary and compatible with the majority of students’ learning styles.

“Flipped classroom learning model is better than traditional learning model”
“Flipped classroom is better than traditional learning model because flipped classroom is more flexible and can help me understand the material easier”
“Using flipped classroom helps me reduce dependency to lecturer while in traditional learning model, I still need to ask a lot to the lecturer”
“In traditional learning model, we still need to listen to the explanation from the lecturer. But by using flipped classroom, we can use the learning time more for discussion activity”

Many of the students responded that flipped classroom was better than traditional classroom because flipped classroom could make students easier to understand the learning material and they did not need to always depend on the lecturer so that the development of independent learning of the students could also be improved. However, there were also responses from few students who stated that the traditional classroom learning model was still better because they preferred to understand the material explained directly by the lecturer in the classroom.

“I still think that traditional learning model is better than flipped classroom because I like to listen to the material explanation directly from the lecturer in the class”

A result from Hidayah & Mustadi (2021) also showed that early grade students tended to not choose flipped classroom as their favorite learning model. However, the traditional learning model was not favored either.

One of the phenomena during COVID-19 pandemic in the world of education is changing the face-to-face learning process into online learning process (Sukawati, 2021). In addition, this has given a positive effect on the development of the expertise of lecturers in terms of applying technology in the learning process where the experiences and knowledge they have gained could continue to be applied in the new normal of education. The result from the interview showed students agreed that flipped classroom learning model should still be implemented in the learning process in new normal of education.

“Because of the era of technology, I think flipped classroom should be implemented more especially in new normal education”
“By providing video, students can learn the material first at home so that later when the class begins, students can be more prepared”
“Implementing flipped classroom in new normal education can make the learning process more effective and help me improve self-learning”

Some of the reasons from the students were flipped classroom make them able to watch the video to learn and understand the learning material better before they start meeting face-to-face with the lecturer in the classroom. This was because students preferred the learning process in the classroom to focus more on discussion and other interactive activities rather than understanding the learning material at the beginning of the class. Excessive dependence on teachers should be minimal over time because it has negative implications where students lose opportunities for autonomous exploration of the classroom environment and peer involvement (Split., et al. 2017). In addition, the use of the flipped classroom learning model could also make students more confident in carrying out the learning process in the classroom and become better independent learners.

CONCLUSION

From the research findings, the result showed that students had positive responses toward the implementation of flipped classroom in learning process. Moreover, students also suggested that flipped classroom should be implemented more in the learning process in new normal education. Flipped classroom learning model can be an innovative way in teaching learning process in the new normal of education especially at the university level. This is because lecturers and students are able to apply the use of technology better. There are many benefits that can be obtained by students in the flipped classroom learning model including; making the students understand the learning material better, improving students’ development as independent learners, and enhancing the learning process
in the classroom with more interactive activities. The majority of lecturers and students in the new normal of education are now accustomed to using technology in everyday life. Therefore, flipped classroom can be implemented as an innovative learning model that is suitable with students' learning styles. Although the flipped classroom learning model can be well received by students in the new normal of education. However, lecturers must still focus on what obstacles that can arise in the process such as the students’ problem in internet connection. The video material provided should also be interactive in order to prevent boredom to the students. Furthermore, this study was also limited in the implementation of flipped classroom integrated with video explanation. Future research can apply similar research with different integration of technology or other interactive teaching media.

REFERENCES

Alamri, M. M. 2019. Students' academic achievement performance and satisfaction in a flipped classroom in Saudi Arabia. International Journal of Technology Enhanced Learning, 11(1), 103-119.
Aljaraideh, Y. 2019. Students’ Perception of Flipped Classroom: A Case Study for Private Universities in Jordan. JOTSE, Journal of Technology and Science Education. 9(3): 368-377.
Awidi, I. T., & Paynter, M. 2019. The impact of a flipped classroom approach on student learning experience. Computers & Education, 128, 269-283.
Chandra, F. H. & Nugroho, Y. W. 2016. Peran teknologi video dalam flipped classroom. Dinamika Teknologi. 8 (1): 15 – 20.
Valle-Ramón, D., Muñoz-Repiso, A. D., & Gómez-Pablo, V. B. 2020. Project-Based Learning Through the YouTube Platform for Teaching Mathematics in Primary Education. Education in the Knowledge Society, 21 (2020): 16
Du, X., Zhang, M., Shelton, B. E., & Hung, J. L. 2019. Learning anytime, anywhere: a spatio temporal analysis for online learning. Interactive Learning Environments, 1-15.
Farida, R., Alba, A., Kurniawan, R., & Zainuddin, Z. 2019. Pengembangan Model Pembelajaran Flipped Classroom Dengan Taksonomi Bloom Pada Mata Kuliah Sistem Politik Indonesia. Kwangsan: Jurnal Teknologi Pendidikan. 7. 104. 10.31800/jtp.kw. v7n2.p104–122.
Jiménez, M. A. S., Ponce, P., & Vázquez-Cano, E. 2021. YouTube Videos in the Virtual Flipped Classroom Model using Brain Signals and Facial Expressions. Future Internet, 13(9). 224.
Johnson, G. B. 2013. Student Perceptions of The Flipped Classroom, Columbia: The University of British Columbia.
Lee, Y. M., Mann, K. V., & Frank, B. W. 2010. What Drives Students Self-Directed Learning in a Hybrid PBL Curriculum. Adv in Health SciEdu. 2010:15.
Mahasneh, D., Shoqirat, N., Singh, C., & Hawks, M. 2020. “From the classroom to Dr. YouTube”: Nursing students’ experiences of learning and teaching styles in Jordan. Teach. Learn. Nurs. 2021, 16, 5–9.
Oishi, I, R. V. 2020. Pentingnya Belajar Mandiri bagi Peserta Didik di Perguruan Tinggi. Jurnal IKRA-ITH Humaniora, Vol 4, No 2.
Shyr, W. J., & Chen, C. H. 2018. Designing a technology-enhanced flipped learning system to facilitate students’ self-regulation and performance. Journal of Computer assisted learning, 34(1), 53-62.
Split, J. L., Vervoort, E., & Verschuieren, K. 2017. Teacher-Child Dependency and Teacher Sensitivity Predict Engagement of Children with Attachment Problems. School Psychology Quarterly, 33(3), 419–427.
Sukawati, S. 2021. Pentingnya Inovasi Pembelajaran di Era Pandemi. IKIP Siliwangi Bandung.
Syah, M. 2007. Psikologi Belajar. Jakarta: PT. Raja Grafindo Persada.
Syam, A. 2014. The Flipped Class: Shedding Light on the Confusion, Critique, and Hype. The Daily Riff. 7 April 2015.