

Research Article

Analysis of the Flipped Classroom Model on Students' Critical Thinking Skills

Erwin Simon Paulus Olak Wuwur*, Linda Puspita*, Punaji Setyosari, Muhamad Alfian

Universitas Negeri Malang, Indonesia

Abstract.

The role of education is very important in improving human resources. The purpose of education is to prepare students to be able to develop and apply knowledge. This study analyzes students' critical thinking skills using the flipped classroom model. The method used in this research is descriptive qualitative method. Data were collected through class observations and interviews. The results of the study show that the use of the flipped classroom model can help shorten learning time in class, that learning is not boring, the students' analytical ability increases, as well as their ability to work together and communicate.

Keywords: flipped classroom, critical thinking skills

Corresponding Authors: Linda Puspita; email: lindapuspita6885@gmail.com

Published 5 June 2023

Publishing services provided by Knowledge E

© Wuwur et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICITEP Conference Committee.

1. INTRODUCTION

The role of education is very important in improving human resources. The purpose of education is to prepare students to be able to develop and apply knowledge. In education, it is inseparable from a learning process which includes students, teachers and the learning environment that are interrelated with one another (Hidaya & Meini, 2019). At present, education is still dominated by teachers as the main center for educational resources in the classroom. Some elementary school teachers still use conventional learning models or lectures (Savitri & Meilana, 2022). This makes students passive in the learning process and makes the atmosphere in the classroom boring.

According to (Supriyatni, 2021) the learning process that occurs in the classroom must be designed properly and correctly so that it can have an influence on the student learning process. The way that must be taken in order to obtain quality education is to improve the quality of the learning process in the classroom. The success or failure of a learning process can be seen how prepared the teacher is with the models,

 OPEN ACCESS

approaches and strategies that will be used when teaching so that what is conveyed can be understood and understood by students (Sahara & Sofya, 2020).

Flipped Classroom is one of the learning models that can be used by teachers in improving the learning process in the classroom. In the learning process in the flipped classroom model, it is more directed to students studying subject matter at home before activities in class (Walidah et al., 2020). With the flipped classroom model, students are given the freedom to learn from various sources, so students don't get bored easily because they listen to the teacher's explanation. In learning with the flipped classroom model, students seek and study individually the topics that have been given.

(Harapan, 2021) suggests that the flipped classroom is a learning model that uses a mixed learning approach (blended learning) between learning outside the classroom (asynchronous) and face-to-face learning (synchronous). This model has two steps, namely 1) homework (PR), providing relevant materials or materials to be studied and discussed at the next meeting; 2) learning activities in the classroom, students will carry out discussions related to the material that has been studied. By searching and finding, students must be able to critically communicate the findings from various sources.

Critical thinking is one of the characteristics of 21st century learning known as 4C, critical thinking (critical thinking), creativity (creativity), communication skills (communication skills) and collaboration (working together). (Nuraida, 2019) states that critical thinking is a complex process, if implemented properly and correctly, will assist in the systematic review of complex ideas, so that problems become lighter to solve. Another definition is according to (Dola Syamsu et al., 2020) critical thinking is a person's ability to think in a high-level realm consisting of critical thinking, creative thinking, analytical thinking, in solving a problem.

Students' critical thinking skills must be involved in the learning process, in order to create quality and learning objectives as expected. Fun learning is a two-way communication between teachers and students. Teachers must use a student-centered learning model. One of the learning models is the flipped classroom. Education is a conscious and planned effort to create a learning environment and learning process.

2. METHOD

This research uses descriptive qualitative method. Sugiyono (2017) states that "qualitative research methods are research methods based on postpositivism or interpretative philosophy, used to examine the condition of natural objects, where the researcher is the key instrument, data collection techniques are carried out by triangulation (a

combination of observations, interviews, and documentation). the data obtained tend to be qualitative, the data analysis is inductive/qualitative in nature and the research results are to understand the meaning, understand the uniqueness, construct phenomena and find hypotheses". This study will observe the learning process by applying the flipped classroom model to the critical thinking skills of students at SDN Malang, class V.

The research subjects were 20 students and teachers of class V SD Negeri 1 Toyomarto, Kecamatan Singosari, Kabupaten Malang. Data were collected through class observations and interviews. In class observation, the researcher observes and records everything that happens in the form of field notes. The interviews adopted open-ended questions and the participants provided open-ended responses.

3. RESULTS AND DISCUSSION

Based on the results of observations and interviews, it was found that first, the use of the flipped classroom model can help shorten learning time in class. This is evident because students have been looking for and studying the material that has been given by the teacher. The teacher is not the only source of learning in the classroom because students look for various sources of topics or materials. Teachers as facilitators and companions in the learning process in the classroom. As in the journal (Rindaningsih, 2018) which states that using the flipped classroom model as an effective, efficient strategy and can maximize student responsibility in learning. In addition, the new learning paradigm requires that learning be student-centered.

Second, learning is not boring. This is because students can repeat or study related material at any time. Before learning in class begins, students have studied it first with various learning sources such as from YouTube, the internet and magazines. This makes students more enthusiastic in learning because of various sources with varied learning methods. Added by (Sakti et al., 2020) that students are currently born in the era of technology, so learning in the classroom must also be collaborated because students will feel bored if learning is only with the lecture method and working on student worksheets.

Third, the students' analytical ability increases. One way to think critically is to be able to analyze topics or learning materials. With the flipped classroom learning model, the level of student analysis is better because it connects various learning resources with the material provided as a reference in classroom learning. According to the characteristics of 21st century learning relating to critical thinking, according to (Aslamiyah, 2021)

explains that critical thinking is a practical level skill that requires analysis in solving a problem by looking at various points of view with logical thinking.

Fourth, the ability to work together and communicate. With the results of the analysis and finding related material, students are able to communicate and work together in presentation discussions in class. With various opinions and sources found, students can work together to summarize the material found by each group member to be accounted for in class. 21st century skills require students to be able to collaborate or work together and be able to communicate well. According to Aslamiyah, 2021, communication skills are skills in conveying messages and ensuring that the recipient of the message can understand the content and meaning conveyed both orally and in writing. While collaboration (Aslamiyah, 2021) states that the ability to work together in groups with respect between members and the willingness to help each other.

4. CONCLUSION

Effective and efficient learning is learning that is able to present a fun and student-centered learning model. One model that is good and adapts to the current situation is the flipped classroom. From the results of research and discussion, it can be concluded that using the flipped classroom learning model can improve students' critical thinking skills because it can shorten learning time, make learning not boring, analytical skills and the ability to work together and communicate.

References

- [1] Aslamiyah AEW. Pendidikan Keterampilan dan Ilmu Sosial Abad ke-21. *Jurnal Inovasi Ilmu Sosial*. 2021;2(2).
- [2] Dola Syamsu F, Program D, Pendidikan S, Stkip Bina B, Meulaboh B, Nasional J, Peunaga M-T, Ujong C, Meureubo K, Barat KA. GENTA MULIA PENGEMBANGAN LEMBAR KERJA PESERTA DIDIK BERORIENTASI PEMBELAJARAN DISCOVERY LEARNING UNTUK MENINGKATKAN KETERAMPILAN BERPIKIR KRITIS SISWA. *GENTA MULIA*, 1 2020.
- [3] Harapan UP. IMPLEMENTASI MODEL FLIPPED CLASSROOM MENGGUNAKAN METODE DISKUSI PADA PELAJARAN MATEMATIKA SEKOLAH DASAR Sinthia Marlina Amperawati Turnip, Wiputra Cendana. In *PEDAGOGIK: Vol. IX (Issue 1) 2021*.
- [4] Nuraida D. PERAN GURU DALAM MENGEMBANGKAN KETERAMPILAN BERPIKIR KRITIS SISWA DALAM PROSES PEMBELAJARAN. 2019.

- [5] Pelajaran Dasar Desain Grafis di SMKN, M, Hidayah N, Sondang Sumbawati M. Efektivitas Model Pembelajaran Flipped Classroom terhadap Self Regulated Learning dan Hasil Belajar Siswa pada EFEKTIVITAS MODEL PEMBELAJARAN FLIPPED CLASSROOM TERHADAP SELF REGULATED LEARNING DAN HASIL BELAJAR SISWA PADA MATA PELAJARAN DASAR DESAIN GRAFIS DI SMK N 1 SURABAYA.
- [6] Rindaningsih I. Efektifitas Model Flipped Classroom dalam Mata Kuliah Perencanaan Pembelajaran Prodi S1 PGMI UMSIDA. *Proceedings of The ICECRS*. 2018;1(3). <https://doi.org/10.21070/picecrs.v1i3.1380>
- [7] Sahara R, Sofya R. Pengaruh Penerapan Model Flipped Learning dan Motivasi Belajar Terhadap Hasil Belajar Siswa. *EcoGen* 2020;3(3). <http://ejournal.unp.ac.id/students/index.php/pek/index>
- [8] Sakti RH, Sukardi S, Giatman M, Nazar E, Wakhinuddin W, Waskito W. Flipped Classroom-Computer Based Instruction untuk Pembelajaran Revolusi Industri 4.0: Rancang Bangun dan Analisis Kebutuhan. *Edumatic: Jurnal Pendidikan Informatika*. 2020;4(1):63–72. <https://doi.org/10.29408/edumatic.v4i1.2074>
- [9] Savitri O, Meilana SF. Pengaruh Model Pembelajaran Flipped Classroom terhadap Pemahaman Konsep IPA Siswa Sekolah Dasar. *Jurnal Basicedu*. 2022;6(4):7242–7249. <https://doi.org/10.31004/basicedu.v6i4.3457>
- [10] Supriyatni Mrs. Meningkatkan Hasil Belajar IPA Melalui Model Pembelajaran Flipped Classroom Terintegrasi Portal Rumah Belajar untuk Siswa SD. *JIRA: Jurnal Inovasi Dan Riset Akademik*. 2021;2(8):1322–1330. <https://doi.org/10.47387/jira.v2i8.218>
- [11] Sugiyono. *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung : Alfabeta, cv; 2017.
- [12] Walidah Z, Wijayanti R, Affaf M. Pengaruh Model Pembelajaran Flipped Classroom (FC) terhadap Hasil Belajar. 2020.