

THE ROLE OF THE FLIPPED CLASSROOM IN ENHANCING STUDENTS LEARNING INDEPENDENCE

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Abstract: The advancement of educational technology has led to the development of innovative learning models, one of which is the Flipped Classroom, which has the potential to enhance students' learning autonomy. This study is a literature review aimed at analysing the concept of flipped classroom, student learning autonomy, and the role of flipped classroom in promoting autonomous learning based on previous research. The method used was a systematic review of relevant national and international articles and journals discussing the implementation of flipped classroom in educational contexts. The findings indicate that the flipped classroom allows students to study materials independently before class, utilize classroom time for interactive activities, and improve responsibility, engagement, and self-regulation in learning. The review confirms that the implementation of the flipped classroom can enhance students' learning autonomy, provided it is supported by students' readiness, teacher competence, and adequate technological facilities. Therefore, the flipped classroom can be considered an effective learning strategy to support 21st-century education.

Keywords: Flipped Classroom, Learning Autonomy, Learning Model, Literature Review, 21st-Century Education.

INTRODUCTION

The development of information and communication technology has brought significant changes in the world of education, especially in the learning process in the classroom. 21st century education demands a change in the learning paradigm from teacher-centered learning to student-centered learning. In this context, students are required to have various important skills such as critical thinking, creativity, collaboration, and independent learning to be able to face the increasingly rapid development of science and technology (Bishop & Verleger, 2013). However, in reality, the learning process in various educational institutions

still uses conventional methods that tend to be teacher-centered. In this learning model, the teacher acts as the primary source of information, while students only act as passive recipients of the material. This condition can lead to low student engagement in the learning process and the underdevelopment of student learning independence. In fact, learning independence is a crucial factor in determining student success in the learning process (Zimmerman, 2002). Learning independence is a student's ability to manage their own learning process, from planning, monitoring, and evaluating their learning activities. Students with strong learning independence are able to take initiative in learning, feel responsible for assigned tasks, and seek learning resources independently without relying too much on teacher assistance (Knowles, 1975). Therefore, a learning model is needed that can encourage students to be more active and independent in their learning. One learning model that has developed along with advances in educational technology is the flipped classroom.

The flipped classroom is a learning model that reverses traditional learning patterns, where material delivery takes place outside the classroom through instructional videos, reading materials, or other digital media, while classroom time is used for discussions, problem-solving, and more interactive learning activities (Bergmann & Sams, 2012). Through this approach, students are expected to study the material independently before participating in classroom activities. The flipped classroom model provides students with the opportunity to learn at their own pace and ability. Furthermore, this approach encourages students to take greater responsibility for their learning process because they must prepare themselves before class activities begin. Research conducted by O'Flaherty and Phillips (2015) shows that implementing a flipped classroom can increase student engagement, conceptual understanding, and independent learning abilities during the learning process. Furthermore, various studies have shown that the flipped classroom has significant potential for enhancing student learning independence. This is because students are required to independently access learning materials, manage their study time, and prepare questions or discussions before class (Bishop & Verleger, 2013). Therefore, this learning model focuses not only on delivering material but also encourages students to develop independent learning skills. Based on this

description, it can be concluded that the flipped classroom is an innovative learning model with the potential to enhance student learning independence. Therefore, a literature review is needed that examines various previous research findings related to the implementation of flipped classrooms in learning and their role in enhancing student learning independence. This study is expected to provide a more comprehensive picture of the flipped classroom model's effectiveness in supporting a more independent and active learning process.

The Concept of the Flipped Classroom Learning Model

The flipped classroom is an innovative learning model that has developed alongside advances in information and communication technology in education. This learning model emerged in response to the need for more flexible, interactive, and student-centered learning. In the flipped classroom, the learning process, typically conducted in the classroom, such as the teacher's delivery of basic material, is moved outside the classroom through various digital learning media, such as instructional videos, e-modules, interactive presentations, and online reading materials.

According to Bergmann and Sams (2012), a flipped classroom is a learning approach that reverses the traditional learning process, where students first study the material at home before participating in classroom activities. This allows classroom time to be used for more active activities such as discussion, collaboration, problem-solving, and the application of previously learned concepts. This approach allows students to have a more meaningful learning experience because they are directly involved in the learning process.

The flipped classroom also emphasizes the use of technology to support the learning process. Technology allows teachers to provide a variety of learning resources that students can access anytime and anywhere. This gives students flexibility in organizing their learning time according to their individual needs and abilities. Furthermore, students can review material repeatedly if they are still having difficulty understanding a particular concept.

In practice, a flipped classroom typically consists of two main stages: pre-class learning and in-class learning. In the pre-class learning stage, students study material provided by the teacher through digital learning media. These activities can include watching instructional videos, reading modules, or accessing other learning resources relevant to the material to be studied. This stage aims to provide students with an initial understanding of the concepts to be discussed in class. Furthermore, in the in-class learning stage, the teacher facilitates various collaborative and interactive learning activities. These activities can include group discussions, problem-solving, presentations, experiments, and project-based learning activities. Through these activities, students not only understand the concepts theoretically but also are able to apply them in various learning situations.

Besides its numerous advantages, the flipped classroom also presents several challenges in its implementation. One of the main challenges is students' readiness to learn independently outside of the classroom. Not all students have strong independent learning skills, so guidance and motivation from teachers are needed to ensure students can optimally utilize the learning resources provided. Furthermore, the availability of technology access is also a crucial factor in the successful implementation of the flipped classroom.

The Concept of Student Learning Independence

Learning independence is a crucial competency for students in the educational process. In the context of modern learning, students no longer merely receive information but also actively develop knowledge and skills through various learning experiences. Therefore, the ability to learn independently is crucial for students to optimally develop their potential. Knowles (1975) defined independent learning as a process in which individuals take the initiative in determining learning needs, formulating learning goals, identifying necessary learning resources, selecting appropriate learning strategies, and evaluating learning outcomes. This definition demonstrates that independent learning is not only related to one's own learning abilities but also involves various aspects such as planning, implementing, and evaluating the learning process.

Zimmerman (2002) explains that independent learning is also related to the concept of self-regulated learning, namely the individual's ability to regulate and control the learning process. In this process, students not only develop learning strategies but also manage their motivation, attention, and learning behavior to effectively achieve learning goals. Students who demonstrate strong learning independence typically exhibit several characteristics. These include taking initiative in learning, setting clear learning goals, being highly motivated to learn, managing study time effectively, and independently seeking and utilizing various learning resources. Furthermore, students who are independent in their learning also tend to have a sense of responsibility for their learning process.

Learning independence is also closely linked to student academic success. Students who demonstrate independent learning skills are typically better able to face various challenges in the learning process because they possess effective learning strategies and are able to overcome learning difficulties independently. Therefore, developing student learning independence is an important goal in the educational process. However, in conventional learning practices, developing students' independent learning is often neglected. Many learning processes still focus on teacher-directed delivery, leaving students passive in the learning process. This can hinder the development of independent learning skills. Therefore, learning models are needed that encourage students to be more active and independent in their learning.

The Role of Flipped Classrooms in Enhancing Student Learning Independence

The flipped classroom is a learning model that can support the development of student learning independence. In this learning model, students have greater responsibility for the learning process, particularly during the pre-class learning phase. At this stage, students are required to study the learning material independently before participating in classroom activities.

Furthermore, the flipped classroom provides students with opportunities to develop critical thinking and problem-solving skills through various classroom activities. Once students have a basic understanding of the material, they can more actively engage in discussions and collaborate with their classmates. These

activities not only enhance conceptual understanding but also help students develop communication and collaboration skills.

Flipped classrooms also offer flexibility in the learning process because students can access learning materials anytime and anywhere. This allows students to learn at their own pace and at their own pace. Students who struggle with material can revisit it repeatedly until they fully grasp the concepts. Through these various activities, the flipped classroom can help students develop a more independent and responsible learning attitude. Students become more accustomed to preparing themselves before class and are more active in seeking information related to the learning material.

Analysis of Previous Research Results

Various studies have shown that flipped classrooms have a positive impact on increasing student learning independence. Research by O'Flaherty and Phillips (2015) showed that implementing flipped classrooms can increase student engagement in the learning process and provide opportunities for students to learn more independently. Furthermore, Bishop and Verleger (2013) also stated that flipped classrooms can enhance student learning activities because they have the opportunity to study the material before participating in class. This allows students to be better prepared for learning activities and more active in discussions and exchanges of ideas with classmates. Other research also shows that using video lessons in flipped classrooms can help students understand the material more flexibly. Students can replay the videos as needed, making the learning process more effective. Furthermore, the use of digital learning media can also increase student motivation because the material is presented in a more engaging and interactive format.

However, the success of flipped classroom implementation is also influenced by various factors, such as student readiness for independent learning, teachers' ability to design engaging lessons, and the availability of adequate technology facilities. Therefore, the implementation of flipped classrooms requires careful planning to provide optimal benefits for the learning process. Overall, the literature review indicates that the flipped classroom is a learning model with

significant potential for enhancing student learning independence. By utilizing technology and a student-centered learning approach, this learning model can help students become more active, independent, and responsible in their learning.

Conclusion

Based on the literature review, it can be concluded that the flipped classroom model is an effective learning innovation in supporting student-centered learning. This model reverses traditional learning patterns by moving material delivery outside the classroom through various digital learning media, while using in-class learning time for more interactive activities such as discussions, problem-solving, and group work.

The implementation of a flipped classroom provides students with the opportunity to study the material independently before classroom activities begin. This encourages students to be more active in the learning process, increases their sense of responsibility for their learning, and develops time management skills and learning strategies. Thus, the flipped classroom can help enhance students' learning independence. Therefore, the flipped classroom can be an effective learning strategy to support student learning independence and 21st-century learning.

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