

## Student Learning Independence Through Flipped Classroom In Inclusive Elementary School

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### Abstract

This study aims to describe the learning independence of fifth grade students of Inclusive Elementary School through flipped classroom learning model. The research method used is qualitative method. Data were collected using triangulation techniques and the results of the study put more emphasis on the results of data generalizations obtained from the results of questionnaires, observations, interviews, and field notes. Based on the research results, it can be concluded that 3 out of 16 learners (19%) have high learning independence, 7 out of 16 learners (44%) have moderate learning independence, and 3 out of 17 learners (19%) have low independence. Flipped classroom is quite effective to support the implementation of differentiated learning in inclusive classrooms since it helps teachers in dividing the time to provide differentiated learning for students with special needs while regular learners carry out deeper learning via activities. Providing learning tasks at home also helps to be efficient in teaching material in class and can increase parental involvement to actively help their children carry out independent learning tasks in pre-class activities. This is expected to increase students' learning independence in inclusive elementary school.

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## INTRODUCTION

The current education curriculum in Indonesia is the 2013 Curriculum which is learner-centered with the implementation of a scientific approach. The scientific approach or scientific process-based approach is a form of learning approach by organizing learning experiences in a logical sequence including five learning processes, which are observing, questioning, gathering information / trying, reasoning / associating, and communicating which is abbreviated as the 5 M learning process (Permendikbud, No. 103 of 2014). The conditions that have occurred nowadays, There are significant changes due to the covid 19 pandemic which have caused many changes including a much different culture of activity, restrictions on space for movement to changes in all aspects. The Ministry of Education and Culture issued a policy to overcome educational problems during the Covid-19 pandemic by considering several regulations in the 2013 Curriculum. On the development and implementation of learning through blended learning. According to Kurniawati (2019) blended learning is a combination of offline and online learning using technology. Therefore, blended learning is the best option to overcome educational problems during pandemic.

Hadjam explained that educators of children with special needs need to have insight into children's development and problems and how to conduct effective learning strategies (Mangunsong, 2011). Teachers who teach in public schools that provide inclusion services and teach learners with special needs must also have theoretical insights about children with learning difficulties in order to be able to handle learning problems experienced by regular learners and learners with special needs in their classes. Abdurrahman (2012) explains that teachers need to have theoretical knowledge that can be used as a provision in creating learning strategies that are not only effective for achieving learning objectives but also effective for building a healthy personality in children. Teachers who have insight in theoretical knowledge about

child development and problems are expected to be able to provide daily handling of children with learning difficulties in their class and be able to find innovations in handling student problems, especially during the Covid-19 pandemic due to limited access to education services.

Professional teachers are required to understand the background of students well, understand their strengths and weaknesses in order to help them develop their full potential. A professional teacher is a figure who does not stop learning to add insight and has a willingness to improve himself. Inclusive Education is an education system that provides opportunities for all students who have abnormalities and have the potential for intelligence and/or special talents to attend education or learning in one educational environment together with students in general. Inclusive Education provides equal opportunities for every child to receive education regardless of the child's condition. This allows learners with special needs to attend regular schools.

Problems related to study independence due to the impact of distance learning during Covid-19 pandemic found in the results of questionnaires by teachers show that the majority of students finished their learning tasks with the help of family members while the minority of students finished their learning tasks independently and there are even some students who do not finish their learning tasks. The implementation of learning during the new normal period of the pandemic covid 19 has followed the development of technology and communication. The importance of implementing offline and online learning has introduced a learning model that includes offline and online learning, namely blended learning. Gusty (2020) explains that blended learning supports deep and meaningful learning without leaving educational values so that it still has the potential to increase the effectiveness and efficiency of the learning experience by using technology such as various kinds of Learning Management System (LMS).

One of the alternative blended learning models recommended by the government is the flipped classroom. The Ministry of Education and Culture (Kemdikbud, 2020) explains that flipped classroom is a learning model where students before learning in class learn the material first at home according to the tasks given by the teacher. This model requires students to be more independent. Because they study the material first before the class meeting. During face-to-face meetings at school, the teacher explains the material by asking students to present what they have learned so that they can train students' learning independence. Saputra & Mujib (2018) stated that flipped classroom is the concept of delivering learning material which is usually done in class replaced by delivering the learning material at home for student to study first, and vice versa. Meanwhile, Hayati (2018) theoretically shows that flipped classroom has the opportunity to support the learning process science. Implementing flipped classroom can make a positive contribution considering science studied from elementary to tertiary levels (Aini, et al: 2020)

Implementing the flipped classroom model, teachers can dedicate more time in class to engaging and interactive learning activities or projects that emphasize practice. The teacher becomes a facilitator or coach for each learner.

Flipped classroom supports the implementation of differentiated learning as teachers can tailor the content, process and product to the needs and character of each learner. Teachers have more opportunities to observe their learners in understanding a material, and can identify their strengths and weaknesses by measuring the ability to understand the concept of material that has been learned.

Flipped classroom learning is learner-centered learning. One of the benefits of the flipped classroom method is that it gives learners more responsibility for their own learning. This encourages them to develop more effective individual learning skills. When experiencing difficulties, learners are required to find solutions and solve these problems independently. The independence that comes from this learning process can lead to increased confidence in the classroom which can have a positive impact on increasing learner engagement in lessons.

There are many types of flipped classroom models, some of which are traditional flipped classroom and peer instruction flipped. The following is a step chart of the two types of flipped classroom models according to Steele there are traditional flipped classroom dan peer instruction flipped (Kinteki, 2020).

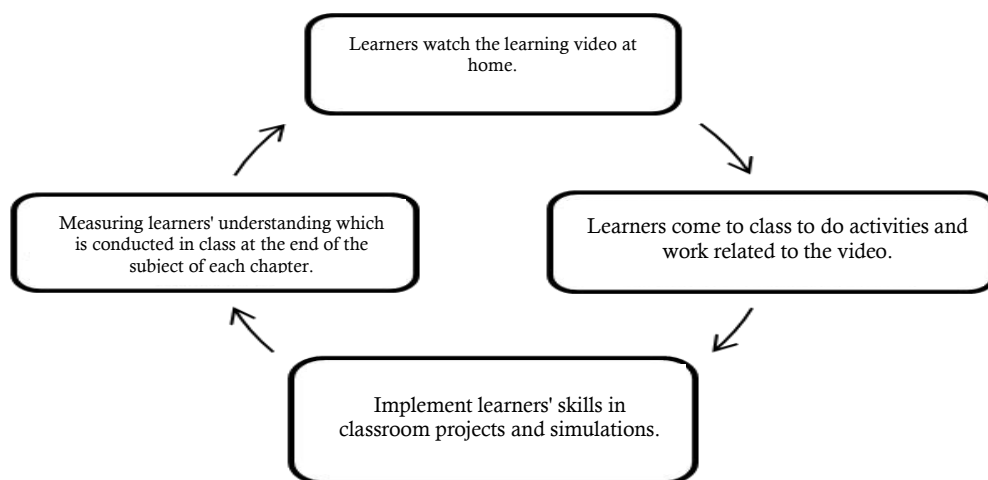


Chart 1. Steps Traditional Flipped Classroom Type

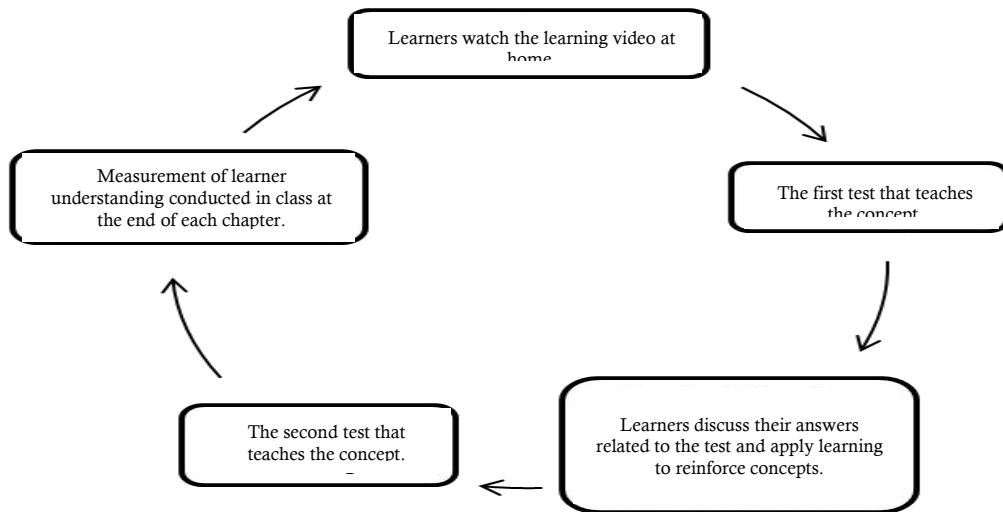


Chart 2. Steps  
Peer Instruction Flipped Classroom

Several studies have shown that the flipped classroom model is more effective in improving the quality of learning and students' engagement in the learning process, as well as providing better learning outcomes. For example, research by Enfield (2013) states that the flipped classroom model can increase learners' motivation to participate in class learning, intensive interaction so that learning independence is formed. This model is effective in helping learners learn the material and improve their ability to solve problems independently. Interaction in the classroom can occur intensively, any learning difficulties can be resolved immediately, so that learning independence and motivation are formed which will ultimately improve student achievement. Wahyuni (2019) states that student learning independent is important for students so that they are able to be more responsible for their own learning process. Meanwhile, Hamka & Vilmala (2019) explained that independent learning is a sense of responsibility that a person has to achieve goals, desires, and the essence of learning process by their own accord. Responsibility can be taught by implementing a student center learning models with a clear instruction from teacher. Flipped classroom is

one of the learning models that can improve students' ability to learn independently.

Siti (2022) with the results of research showing that flipped classroom learning implemented during the pandemic by using the Google Classroom application for learning activities at home and the Whatsapp Group (WAG) application as a facility for face-to-face activities received good appreciation from students, they liked the activities with the implemented model. Hastuti (2020) explained that one form of learning that can develop students' motivation and learning independence is the flipped classroom, this learning is carried out in reverse by combining online and face-to-face learning. This form of learning allows students to learn effectively and efficiently, more easily access teaching materials, and ultimately increase students' motivation and learning independence because learning is done independently. Meanwhile, Puspitasari & Imega Syahlita Dewi (2021) concluded that learning independence of Semester III students STKIP PGRI Nganjuk Science Education Study Program for the Academic Year 2021-2022 through the Blended Learning learning model, the Flipped Classroom type obtains a percentage of 91.57% according to the very good category.

Flipped classroom is a model that requires learners to be actively involved in learning in order to receive information. Flipped classroom allows learners to access various learning materials more flexibly thus increasing learners' involvement in learning so that it becomes more active. Teachers can use the flipped classroom to better assist learners and provide personalised learning for learners with different needs and characteristics. This study aims to describe the learning independence in Inclusive Elementary School through flipped classroom learning model.

## METHODS

The research method used is a qualitative method. Sugiyono (2015) explains that qualitative research is research used to examine an object condition scientifically with the researcher as the key instrument. The sampling of this study was carried out using purposive sampling technique, which is fifth grade students of SDN Kuripan Kidul 02 with a total of 18 students. The data were collected using triangulation techniques, and the results of the study put more emphasis on the results of data generalizations. This research is focused on obtaining data on the learning independence of students using a flipped classroom obtained from the results of questionnaires, observations, interviews, and field notes. The assessment is carried out to find out the situation of students so that they can provide follow-up according to the situation of these students. This qualitative research uses a descriptive research type, because the goal to be achieved is to describe or give an overview on how the learning independence of fifth grade students at SDN Kuripan Kidul 02 Pekalongan City during distance learning using the flipped classroom learning model. The purpose of this descriptive research is to make a description, overview systematically, factually, and accurately about the facts in the field.

The data collection techniques in this study used questionnaires, observation sheets and field notes. In this study, the researcher

determines the research subject that is suitable for the research topic, which is students who are already seen as independent in learning, and teachers who already know how students' learning independence in remote learning. Thus, the samples taken in this study were 6 fifth grade students. The results of the questionnaire score of learning independence of all respondents will be categorized as high, medium, low. The results of the completed questionnaire will be described by the researcher to find out the character of students' learning independence in each category.

## RESULTS AND DISCUSSION

### 1. The Use of the Flipped Classroom Model

The flipped classroom model used in fifth grade at SDN Kuripan Kidul 02 uses the traditional flipped classroom type with the flow of activities including: 1) pre-instruction activities, 2) pre-class activities, 3) in-class activities, and after-class activities. First, in the pre-instruction activities, the teacher prepares the pre-class activities, in-class activities, and after-class activities. Next, enter the activities before the face-to-face in class (pre-class).

Second, pre-class activities are carried out through first exposure via videos/readings. Teachers give instructions to students to observe learning videos and materials that will be studied in class. Independent learning activities at home by observing videos and studying materials according to teacher instructions. Third, in-class activities begin with introductory activities during face-to-face learning, followed by content warm-up, deeper learning via activities, and individual quizzes. Introductory activities include: 1) the teacher explores students' prior knowledge, 2) the teacher conveys the learning objectives, 3) divides the class into several small groups. Furthermore, in the content warm-up activity, the research provides self-assessment by bringing up examples of problems in everyday life which are carried out by discussing in groups to analyze the causes and solutions to overcome these problems based on independent learning experiences. Then, students convey the results of

the discussion and are followed by confirmation from the teacher.

Deeper learning via activities includes deeper learning activities carried out in groups by using student worksheets and science practicum activities regarding heat transfer. Learners carry out practicum activities and make a report on the results of the practicum which will be presented in front of the class and continued with confirmation by the teacher. Furthermore, individual quiz activities are carried out by answering quizzes to increase understanding of the concepts of material that has been learned. The quiz is done individually which is already contained in the student worksheets. Furthermore, the teacher and students conduct questions and answers to confirm the answers.

Third, after-class activities include closing activities and giving some homework+preparation for the next class. The teacher closes the learning by giving reinforcement and together with students conclude the learning. Furthermore, the teacher provides reflection, feedback, and evaluation of learning. Some homework+preparation for the next class is given after the evaluation at the end of the lesson. Teacher gives learning tasks at home and conveys the plan of learning activities and what needs to be prepared for the next meeting.

## 2. Student Learning Independence

Indicators of student learning independence in the application of the flipped classroom model that will be measured include opinions according to Tahar and Enceng which are: 1) able to manage learning strategies, 2) able to manage study time, 3) able to overcome learning difficulties, 4) able to measure the ability of learning, 5) can choose appropriate learning resources including tutors: 1) able to manage learning strategies, 2) able to manage study time, 3) able to overcome learning difficulties, 4) able to measure the ability of learning, 5) can choose appropriate learning resources including tutors (Simatupang, et al: 2022).

Based on the results of interviews with a psychologist from the Pekalongan City Education Office who serves as a Special Assistance Teacher at SDN Kuripan Kidul 02, it was concluded that there are 2 out of 18 students in fifth grade at SDN Kuripan Kidul 02 who are student with special needs with 1 student with special needs in the category of Intellectual Disability and 1 student with special needs in the category of hyperactivity with dyslexia. Both students are declared not to have learning independence or are included in the low learning independence category.

Based on the results of the learning independence questionnaire for fifth grade students, it is known that 3 out of 16 children (19%) have high learning independence, 7 out of 16 children (44%) have moderate learning independence, and 3 out of 17 children (19%) have low independence. Furthermore, based on the results of field notes, DF and FM, who are 2 of the 3 learners in the high learning independence category, have parents who are very supportive and always provide monitoring related to their children's learning activities and task completion. DF and FM are also students who are diligent, disciplined, and always complete the learning tasks given. Furthermore, AP, one of the students with a high learning independence category, is a jolly, communicative, and active person at school. However, AP is not always complete in every learning task given. This is because AP lives far from school, so he is often absent if no one takes him to school. This makes him often lag behind in learning material.

Learners with moderate independence category consist of several different characteristics. There are 2 out of 7 learners who are the smartest students in the class while the other 5 learners are jolly, quiet children, and come from a background of parents who are relatively busy working. Next, 3 learners in the low learning independence category, are student with special needs with Intellectual Disability who have low absorption of knowledge and communication skills. However, according to the results of the psychologist's assessment, all

three of them can still participate in regular learning activities with modifications to the learning evaluation that are adjusted to their level of understanding.

## CONCLUSION

Based on the results of the study, it can be concluded that 3 out of 16 students (19%) have high learning independence, 7 out of 16 students (44%) have intermediate learning independence, and 3 out of 17 students (19%) have low independence. Due to the diverse characteristics of learners and students with special needs in elementary schools providing inclusive services that only have one class teacher as the main teacher in the classroom, the implementation of the flipped classroom model is the best alternative learning model that can be applied in daily learning. Flipped classroom is effective to support the implementation of personalised learning in inclusive classrooms because it helps teachers to divide the time to provide personalised learning for students with special needs while regular students are doing deeper learning through activities. Providing learning tasks at home also helps to optimise time for teaching material in class and can invite parental involvement to actively help their children carry out independent learning tasks in pre-class activities. This is expected to increase students' learning independence in inclusive elementary school..

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