



# Overview of Teacher Ability Using Core Type Cooperative Model with Blended Learning Method to Increase Student Learning Outcomes

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**Abstract:** The low teaching ability of teachers is one of the factors that cause low student learning outcomes. The purpose of this research is to examine and analyze the ability of teachers to teach and students' learning completeness. This research is classroom action research. Collecting data using student learning outcomes tests and observation sheets of teacher teaching abilities. Analysis of student learning outcomes test data was carried out using percentage statistics, and observational data on teachers' teaching abilities were analyzed using descriptive assessment scores. The results showed that the teacher's ability to manage to learn has increased in each cycle. In cycle 1, it was included in the poor category, then increased in cycle 2 to be good and increased again in cycle 3 to be better. Student learning outcomes increase in each cycle. Individually in cycle 1, 35% complete their learning. Cycle 2 is 60.00% and cycle 3 is 92.00%. Classical completeness in cycle 1 is 42.00%, cycle 2 is 65.00% and cycle 3 is 85.00%.

**Keywords:** CORE type cooperative model; Blended learning method; Student learning outcomes

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## Introduction

The low student learning outcomes are partly due to the low ability of teachers to teach, Sudjana (2002) in his research shows that 76.60% of student learning outcomes are influenced by the ability of the teacher. Teacher competence has a positive influence on student learning outcomes (Sartika et al, 2018). Barth (1990) defines teaching ability as a method, technique, and teacher teaching strategy that aims to focus and keep students' attention through effective teaching. Hazmi, (2019) explains that Teaching is an activity to manage the learning environment to interact with students to achieve learning objectives. The learning objectives are behavioral changes (knowledge, attitudes, skills).

The condition of students is passive, there are no experimental activities, data analysis, presentations in

front of the class, and low student learning outcomes the dominant cause comes from the teacher who still dominates the learning process and has not utilized innovative learning strategies (Lagur et al., 2018). Active learning will increase if every student wants to play an active role in learning in the classroom. The quality of learning will increase if the teacher is able to create learning conditions that are active, creative, innovative, and make effective communication between teacher and student interactions using appropriate methods to attract students' attention in the following lessons. Student learning activities are strongly influenced by the teacher's ability to manage to learn. As a teacher, in carrying out the learning process, you are required to choose a learning model that can stimulate the enthusiasm of every student to be actively involved in the learning experience (Tabroni et al., 2022). This

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situation is exacerbated by the arrival of the Covid 19 disease, learning can sometimes take place face-to-face and sometimes not.

One of the learning models that demand an increase in student learning outcomes that are more active with a mixed system between face-to-face and online is the Core type cooperative learning model with the Blended learning approach and this approach teaches students to experiment. Involving teachers and students online and offline makes students more active because students are directly involved in the learning process and the atmosphere of teaching and learning is fun so that it is easier for students to master concepts. The lessons received are meaningful because they find the answers themselves (Fauziah, 2020). Blended Learning is learning that combines face-to-face (conventional learning, where students and educators interact directly with each other, each can exchange information about teaching materials), independent learning (study with various modules that have been provided), and self-study online (Darma et al., 2020).

Calfee, et al (2004) stated that what is meant by the CORE learning model is a learning model that makes students construct their knowledge by connecting and organizing new knowledge with old knowledge then thinking about the concepts being studied (reflecting) and students can expand their knowledge during the teaching and learning process (extending). For this learning model to function optimally in the uncertain COVID-19 situation, it needs to be supported by the Blended Learning method.

Blended learning is a learning system that combines face-to-face learning with technology-mediated instruction (Bender, 2006). Blended learning-based learning aims to facilitate learning by providing various learning resources by taking into account the characteristics of students in learning (Leiwakabessy, 2021). Learning can also encourage students to make the best use of face-to-face contact in developing knowledge. Then, preparation and follow-up can be done offline and online. Online learning programs are not recommended for learning that still considers the need for face-to-face contact between learners and teachers. However, in learning, there are times when students cannot come because of various obstacles (Husni, 2011).

Concerning the situation above, teachers must be able to manage the learning process face-to-face and online which can make students active, creative and fun. For this reason, besides having to master the material, the teacher must also master basic teaching and IT skills so that they can carry out their roles optimally (Ummah & Fauziah, 2021). Good mastery of basic teaching skills will greatly affect student behavior (Underwood, 1987; Arqam, 2019).

The eight basic teaching skills that must be mastered by teachers are (1) basic and advanced questioning skills, (2) reinforcement skills, (3) variation skills, (4) explaining skills, (5) opening skills. and closing lessons, (6) classroom management skills, (7) small group and individual teaching skills, (8) small group discussion leadership skills (Djamarah, 2000; Wahyulestari, 2018; Lestari, 2018; Nurwahidah, 2020; Ngazizah, 2019; Irawati, 2020; Rhamayanti, 2018).

The results of Rahmatullah's research (2016) explain that: improving teacher performance and student learning outcomes can be done by increasing the teaching ability of teachers in schools. Improve the quality of learning, it depends on the professionalism of the teacher in a learning activity (Putri & Soedarmo, 2019). The results of Simanjuntak's research, 2013 explained that the ability of teachers to carry out learning in terms of students' perceptions was quite good and the results of learning mathematics were categorized as sufficient and good.

Research on the use of the CORE learning model has been carried out, but a review of the use of the CORE learning model with the blended learning approach has not been carried out, so it is important to do this. The purpose of this research is to examine and analyze the ability of teachers to teach with the CORE Cooperative Model and Blended Learning Approach.

## Method

This type of research is classroom action research (CAR), in which each cycle includes planning, action, observation, and reflection. This research is one of the efforts that teachers can implement to improve the quality, roles, and responsibilities of teachers, especially in learning management (Sanjaya, 2013). The number of subjects in this study was 30 students, while the object was an increase in student learning outcomes who were taught with the CORE type learning model using the Blended learning method.

Sukmadinata (2006) explains that descriptive research is a form of research aimed at describing existing phenomena, both natural phenomena and man-made phenomena. The phenomena can be in the form of forms, activities, characteristics, changes, relationships, similarities, and differences between one phenomenon and another.

Before collecting data, the researchers made preparations: making lesson plans according to the CORE type learning model and the Blended Learning approach for three cycles, preparing an instrument for observing the teacher's ability to teach and testing student learning outcomes in the form of questions.

Data on teacher teaching abilities were collected using an observation sheet instrument consisting of initial activities, core activities, and closing activities

according to the lesson plan using the CORE type cooperative model and the Blended Learning approach. Observations were made by 2 observers. To get data on student learning outcomes, a pretest and a post-test were given, for each cycle 10 multiple choice questions were made according to the indicators in the lesson plan.

The data analysis technique is an observation sheet on the ability of teachers to teach with the CORE type of learning model and the Blended Learning approach using a descriptive assessment as shown in Table 1.

**Table 1.** Descriptive Assessment Interpretation

Scale	Criteria
1.00 - 1.69	Not Good
1.70 - 2.59	Quite Good
2.60 - 3.50	Good
3.51 - 4.00	Very Good

(Sudjana, 2002)

To determine the completeness of student learning outcomes were analyzed by descriptive statistics, namely using individual and classical completeness scores. Each student is said to have completed learning (individual completeness) if the correct answer is 65% of students, and a class is said to have completed learning (classical completeness) if in the class there are 85% of students who have completed their studies. To analyze

individual completeness and classical completeness, the following formula is used:

$$P = \frac{f}{n} \times 100\% \dots\dots\dots (1)$$

Description:

P = searched percentage

f = the frequency of questions completed

n = the total number of questions

In classical completeness, f is the frequency of students who answered correctly, while n is the total student.

**Result and Discussion**

The results of the study explained that the research was carried out in 3 cycles by observing the teacher's ability to manage to learn using the CORE Cooperative Model with a Blended Learning approach. Before the learning was carried out, the model teacher had prepared a lesson plan following the 2013 curriculum and the syntax: 1. Connecting 2. Organizing, 3. Reflecting, 4. Extending according to the syntax of the CORE type cooperative learning model. At the time the learning took place, observations were made on the teacher's ability to manage learning by 2 observers. The results of the research are shown in Table 2.

**Table 2.** The ability of teachers to manage to learn using the CORE type of learning model using the Blended Learning approach

Teacher Ability	Cycle 1	Cycle 2	Cycle 3
Starting the lesson			
- Giving pretest questions	Good		
- Performing apperception, motivation, and conveying learning objectives	Quite Good	Good	Very Good
Conducting core activities			
- Explaining the material and encouraging students to ask questions and search for literacy online	Quite Good	Good	Very Good
- Dividing students into groups	Quite Good	Good	Good
- Directing students to discuss to do LKPD	Good	Good	Good
- Guiding students in conducting experiments	Good	Very Good	Very Good
- Guiding students to analyze experimental data	Quite Good	Very Good	Very Good
- Instructing each group to present	Good	Good	Good
Closing the lesson			
- Guiding students to conclude the lesson and giving rewards	Quite Good	Good	Very Good
- Giving post-test questions	Quite Good	Good	Very Good
Class situation			
- Students enthusiastically follow the lesson	Quite Good	Good	Very Good
- Student-centered learning	Good	Good	Very Good

The teacher's ability to carry out core activities in cycle 1 is quite good. This is caused by several things, namely: 1. the model teacher is still nervous in explaining the material and spends a lot of time looking for online literacy and also not optimally inviting students to ask questions, 2. Dividing students into groups spends a lot of time because they do not master the class, and 3. The teacher lacks time to guide students in conducting experiments because time is used a lot

When opening the lesson, the teacher's ability to close the lesson is quite good, the teacher forgets to invite students to conclude the lesson together, and also gives a post-test using too long which is about 30 minutes. but in the second cycle, after revising the lesson plans and reflecting on the apperception and motivation sections, the teacher's ability to open lessons increased to good, meaning that the teacher was able to focus students' attention on the lessons to be explained. In cycle 2, the

teacher's ability to carry out core activities was classified as good. The teacher's ability to close the lesson is classified as good and the teacher's ability to manage the class is classified as good, the teacher can make students enthusiastic and able to make student-centered learning.

In the third cycle, the teacher's ability increased to excellent, the teacher was able to arouse curiosity, and the enthusiastic attitude of students, provide variations in learning, and also make connections with previous learning. This means that the teacher has experience in conditioning students to be ready to take part in learning, the teacher can give a comprehensive picture of what students have learned, and know the level of achievement of students and the level of success of the teacher in the learning process.

The results of Putri, R et al, 2017's research entitled *The Ability of Physics Teachers in Applying Learning Models to the 2013 Curriculum and the Constraints* faced to explain that: (1) the teacher's ability to plan and implement learning is in a good category, and (2) the obstacles faced are: faced by teachers, namely the change in the format of the lesson plan, the allocation of time to implement the learning model in the 2013 curriculum, and the implementation of the attitude competency assessment.

Based on the results of the study, it was found that there was an increase in student learning outcomes from cycle 1 to cycle 3, both from classical and individual mastery. In terms of individual completeness, it is as shown in Figure 1.

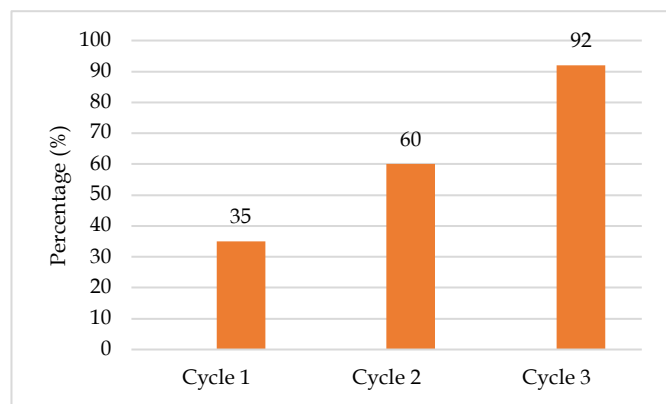


Figure 1. Individual Completion Percentage

In cycle 1 there are 35.00% of students said to be complete. This means that from 30 students 11 students have completed their studies and 19 people have not completed their studies because they do not understand the material taught by the teacher. In the second cycle, there is an overall individual mastery of 60.00%, meaning that 19 students have completed their studies while the other 11 have not finished because they do not understand the material taught by the teacher. In the third cycle, 92.00% of students have completed their studies, meaning that 28 students have completed their

studies and 2 students have not completed their studies because they do not understand the material taught by the teacher.

In terms of classical completeness, it is as shown in Figure 2.

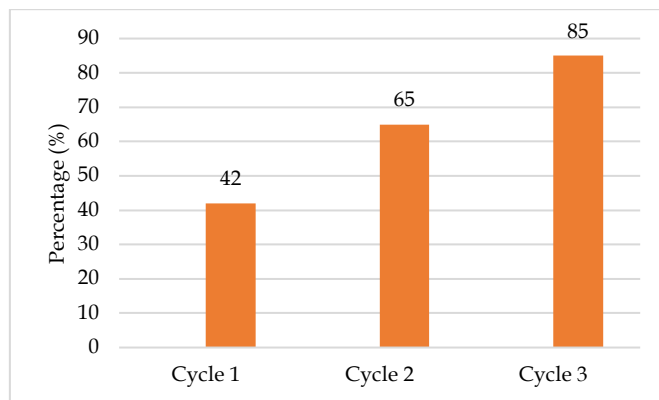


Figure 2. Classical Completion Percentage

In Figure 2 above, it can be explained that in cycle 1, the percentage of classical completeness reached 42.00%, meaning that from the 10 questions given there were 6 questions that had not been completed. In the second cycle the percentage increased to 65.00%, meaning that out of 10 questions, only 3 questions had not been completed. In the third cycle, the percentage increased again to 85.00%. This means that out of 10 questions, only 1 question has not been completed.

In terms of individual and classical completeness, the application of the CORE cooperative model with the blended learning method has succeeded in improving student learning outcomes. The use of the CORE learning model has a positive and significant effect on student learning outcomes (Mukarramah, 2018; Utari et al, 2020). Nina's research, Niarti (2021) explains that learning using the CORE type of cooperative model affects the mathematical communication skills of eighth-grade students of SMPN 2 Kediri. Furthermore, research by Subarjo, et al (2014) states that the CORE learning model can improve the understanding of concepts in science subjects for fifth-grade students in Jembrana Regency. Anggraini (2019) in his research found that blended learning can improve student learning outcomes, this is following the research results of Cakmar et al (2021) that student physics learning outcomes after the implementation of blended learning are in the high category. Blended learning can improve learning outcomes and can increase student interest in learning compared to full learning using online learning (Abdullah, 2018).

### Conclusion

Based on the results of the research that has been done, it can be concluded that the ability of teachers to

manage learning by applying the CORE type of cooperative learning model with the blended learning method has increased in each cycle. In cycle 1 it was included in the poor category, then it increased in cycle 2 to be good and increased again in cycle 3 to be better. Student learning outcomes with the application of the CORE type learning model increase in each cycle. Individually in cycle 1, 35.00% complete their learning. Cycle 2 is 60.00% and cycle 3 is 92.00%. Classical completeness in cycle 1 is 42.00%, cycle 2 is 65.00% and cycle 3 is 85.00%.

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