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## Contextual teaching and learning approach in social science: Its role to encourage pupils' cognitive learning achievement

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**Abstract:** This research aims to encourage pupils' learning achievement using contextual teaching and learning (CTL). This type of research is called classroom action research. The subjects of this study were the pupils of the fourth grade of the SD Katolik Mataloko, which amounted to twenty people. The instrument used to measure learning outcomes for pupils in this study was a multiple-choice test. An indicator that shows the success of the research is that pupils can achieve a minimum completeness score of 85% at a minimum standard value of 75. Based on the results of classroom action research carried out in class IV at the Mataloko Catholic Elementary School, it can be concluded that the application of CTL can improve the pupils' learning outcomes in class IV at the SD Katolik Mataloko. The improvement in learning outcomes is shown by the research results from pre-cycle to cycle II, namely 100% pupils is a pass which indicates they have succeeded in achieving the minimum standard.

Keywords: Social science learning, contextual teaching and learning, learning success

# Pendekatan pembelajaran kontekstual dalam ilmu sosial: Perannya untuk mendorong prestasi belajar kognitif siswa

Abstrak: Tujuan penelitian adalah untuk mendorong hasil belajar siswa menggunakan contextual teaching and learning (CTL). Jenis penelitian ini disebut penelitian tindakan kelas. Subjek penelitian ini adalah siswa kelas IV SD Katolik Mataloko yang berjumlah dua puluh orang. Instrumen yang digunakan untuk mengukur hasil belajar pada siswa dalam penelitian ini berupa tes pilihan ganda. Indikator yang menunjukkan keberhasilan pelaksanaan penelitian yaitu siswa dapat mencapai nilai ketuntasan minimal 85% pada nilai standar minimum 75. Berdasarkan hasil penelitian tindakan kelas yang telah dilaksanakan di kelas IV SD Katolik Mataloko, dapat disimpulkan bahwa penerapan CTL dapat meningkatkan hasil belajar siswa kelas IV SD Katolik Mataloko. Peningkatan hasil belajar ditunjukkan oleh hasil penelitian dari pre-cycle ke siklus II yaitu 100% siswa tuntas yang mengindikasikan mereka berhasil mencapai standar minimum.

Kata Kunci: Pembelajaran IPS, pembelajaran berbasis kontekstual, keberhasilan belajar

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#### INTRODUCTION

To realize learning goals in schools cannot be separated from the role of teachers as teachers in schools. In teaching and learning activities in schools, the presence of teachers is very important; this is because the teacher is the manager of the teaching and learning activities. As the manager of teaching and learning activities, the teacher has the authority to choose the learning approach that will be used in the teaching and learning process. The learning approach is a crucial factor that must be considered in the teaching and learning process because the learning approach is a means to realize teaching goals. The better the learning approach chosen, the better the learning objectives will be realized, and the educational purposes will be better. Much learning focuses on knowledge and procedural but ignores facts (Virranmäki et al., 2021). In fact, by studying the facts, pupils understand the incident well. When pupils can understand well, they will succeed in learning, and the learning objectives will succeed.

Realizing the goals of teaching is part of realizing the goals of education in general. The realization of the achievement of teaching objectives can be seen in students' learning achievements in a particular subject. The Education Curriculum System aims to indicate the mastery of certain competencies by the pupils, which have been determined according to the characteristics and peculiarities of the material from subjects that refer to the Minimum Completeness Criteria (MCC) in certain subjects. Achievements possessed by students can be in the form of skills they get from teaching and learning activities. The subject matter of the Natural Appearance in Indonesia's territory is part of the social studies subject presented for fourth-grade pupils in the first semester. Social Sciences enable children to understand the community in which they live and grow up that they are active and responsible members of society (Kumar & Vakkil, 2020). Including social learning in the curriculum school makes pupils able to adapt to society (Raheem, 2012). Thus, social studies learning must be innovative and must shift from conventional education.

There are still many social learning teachers who use conventional learning approaches. They lecture or present some concepts and ask pupils to memorize the concepts. Many pupils are not complete in social studies subjects with such a learning pattern, especially if the children have low memorization abilities. When viewed from the material's content in social studies subjects, many learning patterns can be used in presenting social learning subject matter, one of which was chosen by researchers in conducting this research. Several factors cause pupils to be incomplete, among others: (a) The teaching and learning process (KBM) is not fun enough so that the pupils are bored with the lessons. (b) Lack of attention of pupils in following the teaching and learning process. (c) Selection of an inappropriate learning approach. (d) Pupils are not interested in taking lessons. Mataloko Catholic Elementary School is located in Ngada Regency, Golewa District, based on the experience of researchers when conducting Field Teaching Practice (PPL) at the school, during the subject of natural features being discussed, many pupils were not complete in achieving learning objectives; therefore it was necessary to find other ways to improve pupil achievement. Furthermore, one alternative to the existing problems is to change the approach to learning; according to the researcher, the most appropriate approach is to use the Contextual Teaching and Learning (CTL) learning model.

The contextual approach / CTL is a learning concept that helps teachers relate the material being taught to real-world situations and encourages pupils to connect their

knowledge and its application in their lives as family and community members. In a contextual classroom, the teacher's job is to help pupils achieve their goals. That is, the teacher deals more with strategy than providing information. The teacher's job is to manage the class as a team that works together to find something new for pupils in the class.

For teachers and prospective teachers in the selection of learning models to improve student learning outcomes and achievement in both low and high grades in all elementary school subjects (Irwan & Hasnawi, 2021), such as CTL use. CTL is suitable for pupils, but CTL can improve teacher competence and knowledge (Fadhli & Yoenanto, 2021). Learning that leads to a contextual direction through local resources (Damopolii et al., 2019. Contextual resources are good for learning (Damopolii et al., 2021). Learning resources adapted using CTL have improved mastery of the pupil concept (Dewi & Primayana, 2019). The basic principle of CTL is to develop the ability of pupils to relate what they know to people's lives through the application of concepts (Dude, 2020). CTL can optimize the ability of pupils to think rationally about modern life (Budiman et al., 2020). Pupils can read and understand discourse well in a textbook due to CTL, even though their level of motivation is different (Gianistika, 2021). The advantage of CTL is that pupils can explore the world around them to study phenomena so that their concepts are strong (Lestari & Ela Suryani, 2021).

Other researchers have found that using local history as a contextual problem in CTL makes pupils critical thinkers (Mahmud et al., 2021). Pupils who are not invited to learn in authentic contexts, such as environmental changes, make it difficult for pupils to learn this material (Syukri & Razak, 2021). They suggest that a CTL application is needed to strengthen the problems that occur in pupils. Only 3% of pupils cannot self-regulate, and more than 50% of pupils can self-regulate when the teacher uses CTL, even if they give a positive response (Merawan et al., 2021). Pupils look active, are motivated to solve problems, and experience increased mastery of concepts during their learning in the CTL class (Ekowati et al., 2015). The concept of sports can be improved when the pupils are in the CTL settings (Bulqini & Wiyono, 2021).

Several researchers have found CTL to be able to optimize pupil performance. The goodness of this learning should be considered to increase cognitive learning achievement (CLA). Pupils were introduced to facts from the real world and what happened in their lives. When pupils can understand the world, understand facts, find solutions to problems, and succeed in doing so, their knowledge is self-formed. The learning process takes place naturally in activities Pupils work and experience, not transfer knowledge from teacher to student. Pupils. All of that can be empowered with a CTL-based action. The purpose of this action research is to encourage pupils CLA to use the CTL approach.

#### **METHOD**

The type of research used by the author in this study is Classroom Action Research. To facilitate the action, the researcher conducted Classroom Action Research by referring to the research procedure which will be described in the outline below. The reference basis for this research procedure is taken from the details of the research procedure developed by Kemmis and Mc Taggart. In this study, the subjects in this study were the fourth graders of SD Katolik Mataloko, Ngada Regency. The number of pupils is twenty.

The research instrument used by the author is an interview guide, observation or observation guide, documentation from photos or videos. The research instrument consisted of ten multiple-choice tests with four choices. This instrument aims to collect data in determining the level of creativity of social studies subject teachers in applying a contextual learning approach (CTL) to show the learning achievement of grade IV pupils.

Observational data on pupil activities have been analyzed using percentages to describe pupils' activities and classroom management ability during the training. The data obtained by the test technique is in the form of raw data, which needs to be processed and analyzed to provide answers about the abilities and inabilities of the pupils in carrying out the tasks given by the researcher. The data processing method in this research is by comparing the pupil learning outcomes before the action with the pupils' learning outcomes after the action.

A pupil has finished studying if it has achieved a score of 75, and the class is called complete learning if in that class there are 85% who have achieved absorption capacity of more than or equal to. 75. Calculation results of CLA pupils are categorized based on table 1.

| Table 1. Criteria of activities and CLA |                |  |  |
|-----------------------------------------|----------------|--|--|
| Range                                   | Category       |  |  |
| Activities/CLA ≥ 80                     | Very Good (VG) |  |  |
| 70 ≤ Activities/CLA < 80                | Good (G)       |  |  |
| 60 ≤ Activities/CLA < 70                | Sufficient (S) |  |  |
| 40 ≤ Activities/CLA < 60                | Less (L)       |  |  |
| 40 > Activities/CLA                     | Fail (F)       |  |  |

Table 1. Criteria of activities and CLA

#### RESULTS

This research has succeeded in increasing the CLA pupils. In addition, the activities of pupils and teachers experienced an increase at the end of the cycle. The increase in impact occurs from the application of the CTL approach. Table 2-3 and Figures 1-2 present our CAR findings.

Table 2 reveals that the average teacher activity reaches 77. One aspect is "Providing opportunities for pupils to brainstorm in forming hypotheses," which is low in the first cycle. In the second cycle, aspects experienced an increase of 25 points to 75. Two aspects in the first cycle achieved perfect scores: "Guiding pupils in making conclusions" and "Giving assessments on student worksheets." These two aspects got a score of 100 from the observer's observations. The other nine aspects received a good category from the observer. In the third cycle, nine aspects got a perfect score from the observer. Three aspects reach the good category. No aspect gets a bad rating from the observer. The results of the pupil activity measurement showed that there was an improvement in the implementation of CTL in the second cycle. The average pupil activity is 94, which proves that the teacher activity during CTL is excellent. CLA pupils during CTL implementation are presented in table 3.

Table 2. Teacher activities during the use of CTL

|    |                                                                                           | Score |        |  |
|----|-------------------------------------------------------------------------------------------|-------|--------|--|
| No | Teacher Activities                                                                        | First | Second |  |
|    |                                                                                           | Cycle | Cycle  |  |
| 1  | Delivering the competencies you want to achieve                                           | 75    | 100    |  |
| 2  | Presenting material as an introduction to learning                                        | 75    | 75     |  |
| 3  | Provide guidance to pupils in identifying problems                                        | 75    | 100    |  |
| 4  | Provide opportunities for pupils to brainstorm in forming hypotheses                      | 50    | 75     |  |
| 5  | Provide opportunities for pupils to take steps in accordance with the proposed hypothesis | 75    | 100    |  |
| 6  | Provide guidance to pupils in sequencing the experimental steps                           | 75    | 100    |  |
| 7  | Provide guidance to pupils in obtaining information through experiments                   | 75    | 100    |  |
| 8  | Assess pupils who present the results of the discussion                                   | 75    | 100    |  |
| 9  | Guiding pupils in making conclusions                                                      | 100   | 100    |  |
| 10 | Doing questions and answers about things that the pupils don't understand                 | 75    | 75     |  |
| 11 | Making learning conclusions together                                                      | 75    | 100    |  |
| 12 | Giving an assessment on the student worksheet                                             | 100   | 100    |  |
|    | Average                                                                                   | 77    | 94     |  |

The findings in Table 3 show that the CLA in the pre-cycle revealed that there were only six pupils that achieved CCM. Fourteen pupils have not yet reached CCM. This finding indicates that many pupils have low knowledge. Their knowledge has not been optimally trained. In the first cycle, ten pupils passed, and ten did not pass. Although there is still half the number of not pass pupils, there is an increase in pass pupils. The unexpected result presented in the second cycle was that all pupils are pass in this cycle. None of the pupils failed in learning. These findings indicate that the CTL approach promotes CLA pupils. CLA pupils achieve optimal learning.

Table 3. CLA pupils for both cycles with pre-cycle data

| Pupils | Pre-cycle | Decicion | First cycle | Decicion | Second cycle | Decicion |
|--------|-----------|----------|-------------|----------|--------------|----------|
| S1     | 70        | Not Pass | 80          | Pass     | 84           | Pass     |
| S2     | 40        | Not Pass | 60          | Not Pass | 80           | Pass     |
| S3     | 75        | Pass     | 80          | Pass     | 85           | Pass     |
| S4     | 40        | Not Pass | 70          | Not Pass | 90           | Pass     |
| S5     | 75        | Pass     | 80          | Pass     | 85           | Pass     |
| S6     | 60        | Not Pass | 70          | Not Pass | 85           | Pass     |
| S7     | 75        | Pass     | 85          | Pass     | 95           | Pass     |
| S8     | 50        | Not Pass | 65          | Not Pass | 80           | Pass     |
| S9     | 60        | Not Pass | 70          | Not Pass | 80           | Pass     |

| Pupils | Pre-cycle | Decicion | First cycle | Decicion | Second cycle | Decicion |
|--------|-----------|----------|-------------|----------|--------------|----------|
| S10    | 50        | Not Pass | 65          | Not Pass | 85           | Pass     |
| S11    | 40        | Not Pass | 60          | Not Pass | 90           | Pass     |
| S12    | 65        | Not Pass | 75          | Pass     | 85           | Pass     |
| S13    | 50        | Not Pass | 60          | Not Pass | 85           | Pass     |
| S14    | 75        | Pass     | 80          | Pass     | 90           | Pass     |
| S15    | 30        | Not Pass | 75          | Pass     | 75           | Pass     |
| S16    | 50        | Not Pass | 70          | Not Pass | 80           | Pass     |
| S17    | 70        | Not Pass | 85          | Pass     | 85           | Pass     |
| S18    | 80        | Pass     | 80          | Pass     | 90           | Pass     |
| S19    | 75        | Pass     | 80          | Pass     | 95           | Pass     |
| S20    | 50        | Not Pass | 70          | Not Pass | 80           | Pass     |

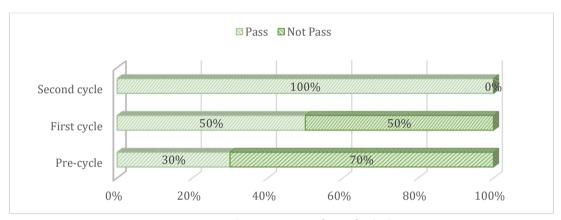


Fig. 1. Comparison of pupils CLA

It appears in figure 1 that there are differences in pupils that pass in each measurement. As many as 70% of pupils fail in learning, and only 30% are successful in the initial measurement. After implementing the action with CTL in the first cycle, it was found that there was an increase of 20% of successful pupils. In this cycle the pass pupils reached 50:50 with pupils which did not pass. The perfect achievement in the second cycle was found that 100% of the pupils were successful. No pupils fail to reach the specified standard. The categories of CLA pupils are shown in Figure 2.



Fig. 2. Student CLA categories

The findings revealed that there were 5% whose CLA was very good before learning. In the second cycle, it increased by 35% to 40%, and at the end of the cycle, it rose again by 55% to reach 95% of pupils which reached the very good category. This condition also occurs in other categories; even the fail category of CLA pupils gradually disappears in each cycle. At the end of the cycle, only two pupils CLA, namely Good and very good. CLA pupils who are dominated by the very good category indicate that CTL optimizes CLA pupils. The following are the results of the reflection carried out before entering the second cycle.

- 1. The teacher conveys the learning objectives that students must achieve clearly and explores the knowledge of students about the material to be studied.
- 2. Students do not play an active role during the learning process because learning is carried out with lectures by the teacher, so that some students still do not understand the learning material from the teacher.
- 3. Lack of interaction between teachers and all students, so students who do not understand the learning material are silent as if they already understand it.

The shortcomings in the first cycle were used as input in understanding or improving in the second cycle. The results of this reflection have been successfully controlled in the second cycle. The results of the second cycle of reflection were decided not to continue to the third cycle because 100% of the pupils had passed.

#### **DISCUSSION**

The learning involvement of the fourth-grade pupils of the Mataloko Catholic Elementary School is very less; when the teacher explains the learning material, the pupils' attention is very less, and most of them are silent. Teachers must be considered that they must be able to choose various methods and appropriate strategies according to the material to be taught to stimulate pupil activity. Offering the use of the CTL approach is a solution for this improvement. Our action finding is that CTL can promote optimal CLA pupils. No pupils failed as long as they were studying in a class with a CTL approach setting. In the beginning, it showed poor CLA pupils, but the CLA pupils improved completely in the second cycle. Although Pupils have not been able to respond well and are hesitant to present the results of group work on CTL use in cycle one, in cycle two, they achieve completeness (Taneo et al., 2021). In the first cycle, more than 50% of the pupils were weak in concept, but entering the third cycle, the understanding of the dominant pupils was high (Hyun et al., 2020).

The CTL approach has a good impact on the CLA pupils. Its approach causes pupils can find a suitable solution (Purwati et al., 2019). Contextual learning is a learning concept in which the teacher presents. The real world into the classroom encourages pupils to connect the knowledge it has and its application in their daily life, while pupils acquire knowledge and skills from limited context, little by little, and from the process of constructing itself, as a provision to solve problems in his life as a student community members. The use of contextual-based learning materials supports pupils in finding solutions to the issues that occur (Sinambela et al., 2021).

The core of the CTL approach is the linkage of each learning material or topic with real-life and linking it to factual conditions. Pupils are also given reading material in order to strengthen their cognitive. When pupils learn in CTL, they can increase their understanding of reading content (Indrayadi et al., 2020). The information they obtained was discussed with group friends. The results of their discussions are communicated to the themes in other groups. Class settings with CTL stimulate pupils to speak well so that they can communicate well when sharing information (Suadiyatno et al., 2020). The good presentation of the presenter group caused the other pupils who listened to understand the concept of the lesson. Here there is an interrelationship between pupils' activities and the development of their thinking. Pupils' thinking is growing because they get additional scientific information from other groups.

In the CTL that has been carried out, it can be seen that the pupils are actively discussing with their friends. CTL enhances pupil learning activities and makes pupils creative pupils (Solehah et al., 2021). Activities in CTL do not make pupils fail in learning. This study proved that the longer the pupils were involved in the CTL approach condition, the more their CLA was pushed. The fact in this research is that pupils reach the minimum standard that has been set for social studies lessons. In the implementation of CTL in social studies lessons, each pupil can mention natural features in everyday life according to what they have learned outside the classroom. Pupils tell based on their daily experiences. Pupils are asked to think, analyze and relate the material being taught according to the real-world situation they experience. Don't forget that every successful pupil is given an award.

#### CONCLUSION

Based on the results of the class action research conducted in the fourth grade of the Mataloko Catholic Elementary School, the CTL implementation can encourage the CLA of pupils. The pre-cycle results show the improvement in CLA to the end cycle, namely the second cycle. At the end of the cycle, 100% of pupils pass, indicating they have reached the standard set for social studies lessons.

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