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Strategy of Cooperative Learning on The Improvement of Student Learning on Subject Social Scienceintegrated in Junior High School 3 Tondanominahasa District North Sulawesi Province

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Abstract
The problem in this research is Is there an increase in student learning outcomes on economic subjects with the implementation of cooperative learning strategies. The hypothesis of this study is the implementation of cooperative learning strategies can increase student learning outcomes in social studies Integrated in Junior High School 3 Tondano.This research used experimental research design with Two Group Post Test Design with a sample of 60 students of class VIII Junior High School 3 Tondanowere divided into experimental and control groups. Both groups were given the initial test and final test. The experimental group applied cooperative learning strategies, while the control group was given no treatment. The statistical methods used in analyzing the data is the test statistic - t with significant real level α 0:05. The results showed that the average value of students after implementation of cooperative learning strategy 8:17 while those using conventional learning systems students' average score 7:02 on economic subjects. While the results of statistical tests with tcount = 5.26 is greater than table = 2.00, so the conclusion rejecting statistical hypothesis (H_0) and accept the hypothesis (H_A) that the experimental group applied cooperative learning strategies can improve student learning outcomes. Then these results concluded that the application of cooperative learning strategies can improve student learning outcomes in social studies Integrated in Junior High School 3 Tondano.
Keywords: cooperative learning, learning outcomes, integrated social science

Preliminary
Improvement of humanresources capable of mastering science and technology is an educational task. Today we need to realize the importance of education in order to realize the complete Indonesian man. In this case, as teachers/teacher candidates we can not be separated from quality improvement and quality, especially in learning. Therefore, the current educational attention be directed to the dynamics involving tasks and better understand how its implementation.

To achieve these objectives, the school as a formal body entrusted to carry out education in schools and informal institutions, the school education involves several components in the learning process as teachers/educators,students,course materials, teaching methods, media teaching aids and evaluation all influence each other.

In line with that to improve student learning outcomes need to be seen what affect the learning process in Junior High School 3 Tondano is the method of teaching, the relationship of teachers and students, the relationship of students with students, school discipline, lessons and school time, the state of the building, method of learning as well as the community as the students' activities in society, mass media, friends hang out, and shape people's lives, it greatly affects learning achievement owned by students.

Based on field observation and interviews with some teachers in Economics in Junior High School 3 Tondano obtained information that the Economic learning that take place in schools, teachers and learners experiencing many difficulties in implementing the learning process.

Difficulties experienced by teachers are the teachers have yet to implement a learning strategy that fits in the learning activities of students and teachers also lack economies only account for 2 people.

Difficulties experienced by learners in the form of dropping knowledge and lessons learned, as friends the other absorbent faster, even many students are still confused in following the lessons because they do not know where to start and how to solve problems encountered in the process of learning teach. This can be seen in student learning outcomes on economic subjects less than 48% of students scored below 6.4.

In order to solve the difficulties experienced by teachers and students of this, it takes a learning strategy that fits and can provide adequate tools to carry out the teaching and learning process, reduce lag by other students, helping students to work together, and can also help students to solve the problems properly and quickly. In the implementation of teachers is a very important component, because the successful implementation of the educational process is highly dependent on the teacher.

Learning strategy in question is cooperative learning strategies. Sudibyo (2003) explains that the cooperative learning model is a model of learning in which students learn in small groups that have different levels of ability, which together help each other in doing the task.

Based on the above background, the authors are interested in conducting research experiments titled "**Cooperative Learning Strategies Toward ImprovedLearning Outcomes At Integrated Social Science Subjects in Junior High School 3 Tondano"**.

Research Objectives

This study aims to find the percentage increase student learning outcomes in social studies Integrated in Junior High School 3 Tondano through cooperative learning strategies.

The Concept of Cooperative Learning Strategy (CLS)

The learning model is a series of group study conducted by students in certain groups to achieve learning objectives have been formulated. There are four essential elements in the CLS, namely: (1) the participants in the group; (2) the rules of the group; (3) their efforts to learn the group; and (4) the goals to be achieved.

Participants are students who make the learning process in each study group. Grouping students can be determined by a number of approaches, including clustering based on the background of ability grouping based on a mixture of a good mix in terms of interests and mix in terms of ability. Whatever approach is used, learning objectives should be the primary consideration.

Rules of the group is everything be agreed upon by all parties involved, both students as learners, and students sebagasi members of the group. For example, the rules on the division of duties of each member of the group, time and place of execution, and so forth.

Efforts to learn is all the activities the students to improve their ability that has been owned and improve the ability of new, good ability in the aspect of knowledge, attitudes, and skills. The learning activities carried out in group activities, so that among the participants are able to membelajarkan through the exchange of ideas, experiences, and ideas.

Aspects of interest are intended to give direction of planning, implementation, and evaluation. Through a clear purpose, each member of the group can understand the objectives of each learning activity.

One of the strategies of group learning model is Cooperative Learning Strategies (Cooperative Learning) (CLS). CLS is a learning strategy group that lately the attention and education experts recommended to be used.

Cooperative learning is a learning model by using a system of grouping /small team, which is between four to six people who have a background in academic ability, gender, race, or ethnicity were different(heterogeneous). System assessment is carried out against the group. Each group will receive awards (reward), if the group is able to demonstrate achievement of the required. Thus, each group member will have a positive dependency.

That kind of dependence which in turn will raise the individual's responsibility to the group and interpersonal skills of each member of the group. Each individual will help each other, they will be motivated for success of the group, so that each individual will have an equal opportunity to contribute to the success of the group. CLS has two main components, namely the duty components cooperative (Cooperative Task) and a component of the incentive structure of cooperative (cooperative incentive structure).

Cooperative tasks related to things that cause members to work together in completing the task group; whereas the incentive structure of cooperative is something that is motivating people to work together to achieve group goals. The incentive structure is regarded as the uniqueness of cooperative learning, because through the incentive structure of each member of the group worked hard to study, encourage and motivate other members master the subject matter, so as to achieve the group's goals.

So, the interesting thing of CLS are their expectations other than to have the impact of learning, namely steamy achievement of learners (student achievement) also has impact Bridesmaids such as social relations, the acceptance of students who are considered weak, self-esteem, the norms of academic, award, against time, and the like to give help to others. This learning strategy can be used when:

- Master emphasized the importance of collective efforts in addition to the individual effort in learning.
- If the teacher requires all students (not just students who are smart only) to obtain success in learning.
- If a teacher wants to instill that students can learn from other friends, and learn from the help of others.
- If a teacher wants to develop communication skills of students as part of the curriculum.
- If the teacher requires increased student motivation and increase their level of participation.
- If the teacher requires the development of students' abilities to solve problems and find solutions solving.

Cooperative learning Model

Expert pedagogy Dewey (1916) requires the teacher creates a learning environment in a social system characterized by democratic procedures and the scientific process. Their responsibility is to motivate students to work cooperatively and to think about important social issues that arise in the day. In addition to efforts to solve problems in their small groups, students learn the principles of democracy through from day to day interactions with each other (Arens, 1997).

Cooperative learning model is a model of learning by setting small groups by taking into account the diversity of the group members as a forum for students to work together and solve the problem through social interaction with their peers, providing the opportunity for students

to learn things well at the same time and he became resource for another friend.(http://ipotes.wordpress.com/2008/05/10/cooperatif/Learning methods-).

In cooperative learning not only learn the material, but students must also learn specific skills called cooperative skills. Cooperative skill serves to launch a working relationship social scienceand tasks.(Http://attmuharam.blogspot.com/2009/01/learning models -html)

Results of Learning

Nana Sudjana (2001: 20) argues that the result of learning is the student success rate in achieving school subjects expressed in the form of scores or grades obtained from the test on a certain matter. Meanwhile, according to NgalimPurwanto (1999:45) states that the achievement of student learning outcomes are obtained within a certain period and the ability of student success is recognized through the achievement of the curriculum.

According to Anwar. S. (1999:30) argues that the factors affecting learning outcomes are internal factors and external factors. Internal factors as the characteristics of students that include: the ability of intellectual and non-intellectual like: interests and talents like motif learning, physical factors such as the state of the senses and physical condition in general. Internal factors include: family environmental factors such as economic conditions, the attitude of parents and others. Meanwhile, school factors, for example: teaching and learning, school conditions, the material is learned/taught, teaching aids, learning approaches, learning model, curriculum and learning objectives.

Research Hypotheses

The hypothesis of this study was formulated as follows: "The use of cooperative learning strategies can improve student learning outcomes in social studies Integrated in Junior High School 3 Tondano".

Research Methodology

The method used in this research is the experimental method. In which the method of this experiment is to obtain something which is an approximation to the information that can be obtained by actual experiment with a state that does not allow to control or manipulate all the variables.

Operational Definitions

In this study presented two research variables are as follows:

1. Learning the economy using cooperative learning strategies as independent variables or independent (X) with the operational definition is a learning cooperative learning strategies to enhance the activity of students in the learning process indicators is: cooperate with each other, to complete the task on time, respect the opinions of others , help each other to understand the material, appreciates thecontribution.

2. Results of learning as a dependent or independent variable (Y) with its operational definition is student learning outcomes in the form of scores and grades obtained by students in the form of data subjects Social Science Integrated final value as a number of evaluation results, learned in the first semester of the school year 2015/2016 with the indicator: the number of values in the form of documents.

The Study Design

In accordance with the research and the methods used in this study, the design of this study using an experimental research design that is shaped Two Group Post Test Design in which

the so-called experimentalgroups and one control group with the so-called draft form as follows:

Class	Group	Pretest	Treatment	Post test
Class$VIII_a$	Experiment Group	-	X	T_1
Class$VIII_b$	Control Group	-	-	T_2

The Sampling Technique

Population

The population is a group of complete element which is usually a person, an object, a transaction, an event where we are interested to learn or become the object of research (Kuncong, 2003: 103). Goal of this research is all class student at Junior High School 3 Tondano totaling 530 people.

Samples

The sample is part of the number and characteristics possessed by the population. While the sample of this research is class VIII A and VIII B with the number of students 60 people on the grounds that in this class average value subjects Integrated Social Science /Economics.

Data Collection

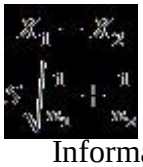
TECHNIQUES

In order to collect data, how to obtain data using the following techniques:

1. The observations were made at every stage of learning, observation data collected through observation sheets as well as a research instrument. Test formative at the end of each lesson.
2. Provide pre-written test before applying cooperative learning strategies and after actions as a cooperative learning strategies were post - test, on a group or individual.
3. The data was taken from the pre-test and post-test is expressed in the form of a score or number.

Data Analysis

Data analysis techniques used in this research is the analysis of data for research experiment using research designs Two Group Post Test with the formula:



Information :

t = coefficient of t value

= Average - Average the experimental group

= Average - Average pull the control group

S = Variance

S_1 = Standard deviation of theexperimental group

S_2 = standard deviation of the control group

n_1 = number of samples the experimental group

n_2 = number of samples of the control group

With the process analysis reached by steps as follows:

1. Looking average (menu): X
2. Calculates variance
3. Choosing the appropriate formula
4. Calculate the price of t
5. Checking the list of table t
6. Summing up the data analysis

Results and Discussion

Research Result

Conducting research on class and class VIIIA VIIII that the research sample of 60 people. The data of independent variables (X_1) is charged VIIII class teaching cooperative, while the control group VIIIA with conventional teaching (not subjected to the treatment of cooperative teaching).

Data Analysis Technique

Steps wear t-test

Step 1

Calculating the mean / average value of the experimental class and the control group with the formula:

Mean = $\cdot_1 = \frac{\cdot\cdot}{n}$ 1

Information 1 :

$\cdot$ = amount; $\cdot_1$ = Average; X_1= the value of the experimentaltest; n_1 = sample.

Note: $\cdot X_1 = 335$; $n_1 = 41$

$\cdot_1 = \frac{355}{41} = 8{,}17$

Note : $\cdot X_2 = 288$; $n_1 = 41$;

$\cdot_2 = \frac{288}{41} = 7{,}02$

Step 2

To test whether theimplementation of cooperative learning strategies can improve student learning outcomes in Junior High School 3 Tondano, used analyzes with appropriate statistical techniques to test the research hypothesis, then testing the analytical requirements that must be met, namely the testing of normality and homogeneity test population.
To determine whether the sample comes from a population that is normally distributed, then do the test Normality test data Lilliefors.

Data normality testexperimental group.

Step one: Determine thehypothesis testingHypothesis testing is
Ho: the sample comes from a population that is normally distributed
H_A: samples come from populations that are not normally distributed

Step two: Determine the test criteria.
Testing criteria are:
Accept H_o jika $L_o \leq L_t$
Reject H_o jika $L_o > L_t$

The third step: Calculate Z_i, $F(Z_i)$, $S(Z_i)$ and the difference $F(Z_i)$,- $S(Z_i)$ and input into the table.

Note: = 8.17

$Sd_1 = 0.92$

Step four: Summing up the results of calculations.

From the calculations listed in Table 4.2, obtained by the difference of the highest or $L_{observation}$ worth 0.0354. Based on the tables of critical values L α Lilliefors test at 0:05 with dk 39 found L_{tabel} worth of 0142. So $L_{observation} < L_{tabel}$ie 0.0354 <0142. Based on testing criteria if Lo <Lt then Ho is accepted. Thus the conclusion of the test sample is derived from a normal distributed population.

Normality Testing Data Control Group

To determine whether the sample comes from a population that is normally distributed, then do the test Normality test data Lilliefors. Normality Tests carried out with the following steps: Step one: Determine the hypothesis testing

Hypothesis testing is

Ho: the sample comes from a population that is normally distributed

H_A:samples come frompopulations that are not normally distributed

Step two: Determine the test criteria

Testing criteria are:

Accept Ho if Lo ≤ Lt

Reject Ho if Lo> Lt

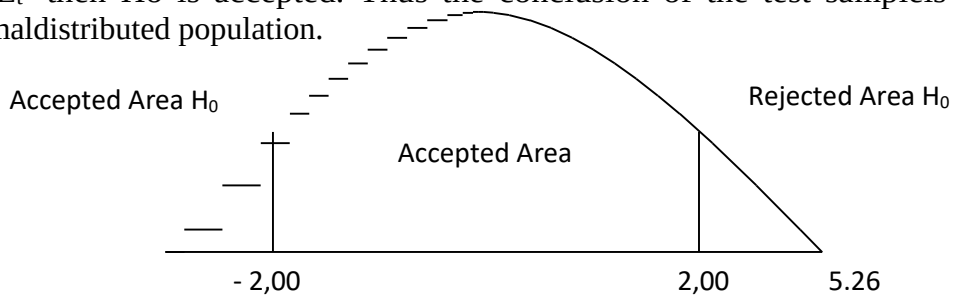
The third step: Calculate Z_i, $F(Z_i)$, $S(Z_i)$ and the difference $F(Z_i)$,- $S(Z_i)$ and input into the table.

Note: = 7.02

$Sd_1 = 1.06$

Step four: Summing up the results of calculations

From the calculation are listed in Table 4.3, obtained by thedifference of the highest or $L_{observation}$ worth 0.0259. Based on the tables of critical values L α Lilliefors test at 0:05 with dk 39 found L_{tabel} worth of 0142. So $L_{observation} < L_{tabel}$nie 0.0259 <0142.based on testing criteria if $L_o < L_t$ then Ho is accepted. Thus the conclusion of the test sampleis derived from a normaldistributed population.



Testing Homogeneity of Variance

To test the similarity of the variance of the population from which the sample is used the following

formula:

Step one: Determine the hypothesis testing
Hypothesis testing is

H_O: Variance homogeneous ($S_{12} = S_{22}$)
H_A: Variants are not homogeneous ($S_{12} \neq S_{22}$)
Step two: Determine the test criteria
Testing
criteria are:
Accept Ho if Fo ≤ Ft (α 0.05; dk 39)
Reject Ho if Fo> Ft (α 0.05; dk 39)

The third step: Calculate $F_{observation}$through formula F
= (Varian Large) / (Small Varian)
Note:
Sd_1 = 0.92
Sd_{12} = 0.85
Sd_2 = 1.06
Sd_{22} =1.12
F = (Varian Large) / (Small Varian)
=

Step four: Summing up the results of calculations.
From the above calculation, obtained Fobservation worth 1.32. Based on the tables of critical values F, at with α = 0.05, $df_{denominator}$= 39 and $df_{numerator}$ = 39 found F_{tabel} worth 1.71. So smaller FobservationF_{table} is 1.32 <1.71. Based on testing criteria if Fo<Ft then Ho is accepted which means H_A rejected. Thus the conclusion of the test is the variance of the population where the sample is homogenous. Based on testing requirements analysis (test for normality and homogeneity) turns a requirement to analyze the research hypotheses qualify. Therefore, the research hypothesis testing can proceed.

Step 3
Check list t (to determine the critical value of $t_{criteria}$) this study defined as follows:Significance level α = 0.05 or 5%
df = n_1 + n_2- 2
= 41 + 41-2
= 80
criteria = 2:00
to conclude:
X_1 and X_2 equal or different depending on the results of the calculation of the value t, if the value $t_{obsevasi}$<$t_{criteria}$ (t_{tabel}) then the value of X_1 and X_2 are the same. Vice versa, if the value $t_{Obsevasi}$>$t_{criteria}$(t_{tabel}) then X_1 and X_2 are different.
Statistical conclusions:
Reject H_0 (the null hypothesis) which means that $X_1 = X_2$
Step 4
Conclusion The results of analysis of existing data from the calculation of observation t 5.26. Table column in a table listing the numbers turns 80 does not exist then requested a list of the closest to 80 of 60.

df = 80 for the confidence level α = 0.05. 0.05 obtained $t_{criteria}$ = 2.00 Turns $t_{observation}$5.26> $t_{criteria}$ 2.00, so we can conclude that H_0 is rejected, becauseX_1 ‧ X_2. So only 5% may be wrong to say that based on a sample using cooperative learning strategies is the same. So H_0 rejected and H_i accepted.

Thus the hypothesis that there is a difference in student learning outcomes were tested using cooperative learning strategies that do not use cooperative learning strategies in social studies Integrated in Junior High School 3 Tondano acceptable.

Discussion of Results

Based on the results of data analysis showed that the hypothesis accepted that the use of cooperative learning strategies in teaching and learning activities by teachers positive effect on learning outcomes of students in Junior High School 3 Tondano. This is evident from the results of hypothesis testing showed that there are significant differences between the results of student learning using cooperative learning strategies with conventional learning. Cooperative learning effectively used in teaching and learning activities, because in this study tended to maximize student learning, in which students will be exposed how the study group with positive interdependence.Students with high academic ability who can learn the individual will be a tutor in academic ability of students is low.

By the time the students were divided into small groups among students of high academic ability and low academic ability of students in a random way up to achieve equality in small groups. Scores of all individuals in the group to be the result of learning together. All groups were satisfied when the learning outcomes are informed every learning outcomes. So that the groups will receive prizes such as: a great team, a good team, and a super team.

Cooperative learning can benefit both the students because students are required to work together in groups completing academic tasks.

Implications of Research Results

1. Implications of the results of research on theory The results of this study could be the subject of study theoretically to give birth to a learning strategyto effective and efficient.
2. Implications for advanced research. The results of this study is still a simple limited to the subject of economics. For the subjects and other subjects, researchers could not determine if cooperative learning strategies still need to be implemented or not, therefore it opens the opportunity for other researchers to investigate more.
3. The practical implications The results of this study can be used as the foundation for the teacher and for teachers of similar lesson order to doing how the actual teaching methods appropriate to the subjects.

Closed

Conclusion

Based on the results of research and discussion, gained some conclusions as follows:

1. There are significant differences in the use of cooperative learning strategies on student learning outcomes when compared with conventional learning.
2. Based on these results it is teachers who use cooperative learning strategies on any economic learning material presentation can enhance the absorption and ultimately increase student learning outcomes.
3. Based on the analysis of existing data, the final result $t_{observation}$ = 5.26 with df = 80, for the confidence level α = 0.05 was obtained table = 2.00, 5.26 observation turned out t> t_{table} of 2.00. So we can conclude that H_0 is rejected because X_1 ‧ X_2 so only 5% that may be

mistaken, or it can be said that there are significant differences between the results of student learning using cooperative learning strategies with the learning outcomes of students who use conventional learning.

Suggestions

1. Good learning results expected so that teachers can use cooperative learning strategies that correspond to the stages and phases of learning.
2. In the learning process suggested teachers are able to select techniques /methods and media of learning what to use, especially in facilitating the teachers present the teaching materials and also facilitate students in accepted lessons, study results increased from learning objectives can be achieved.

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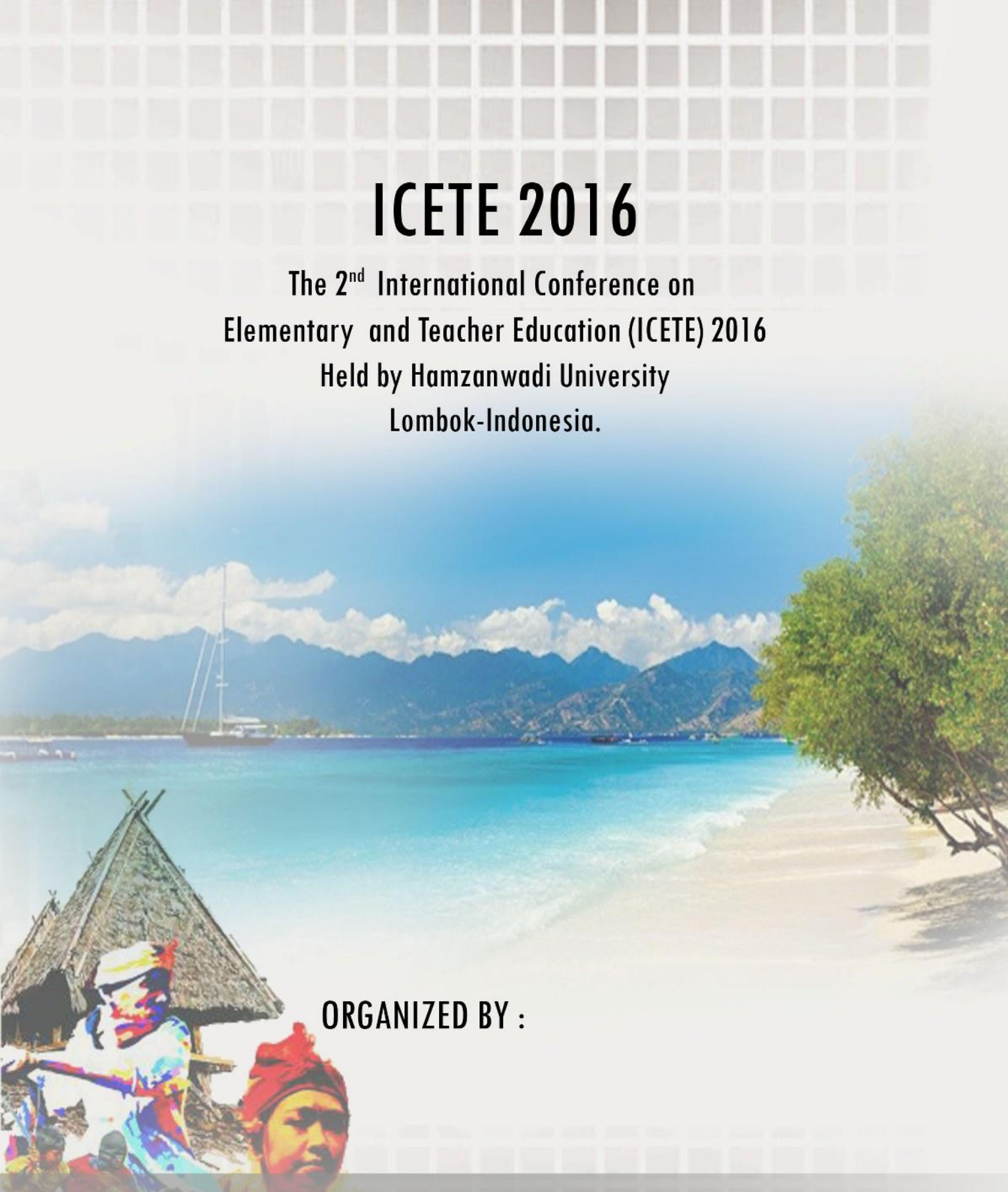

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