ABSTRACT: 21st Century learning requires educators to evaluate the implementation of learning in schools. The implementation of learning conducted by educators is currently not optimal in preparing students to face the challenges of the 21st century. This study aims to obtain information and discuss efforts to improve learning outcomes in geography through cooperative learning models of group investigation type in class XII IPS 1 Senior High School 1 Situjuah District. The research carried out is class action research (Classroom Action Research). This research was conducted in the even semester of the 2018-2019 school year starting from January to February 2019 with 4 meetings divided into 2 cycles. Cycle I had 2 meetings and Cycle II had 2 meetings. Subjects in this study were students of class XII IPS 1 at SMAN I Situjuah District with a total of 24 students. This research procedure consists of four stages, namely planning, implementation, observation, and reflection. Data collection techniques using observation, tests, and documentation. Data were analyzed using percentages and data reduction. The results showed that there was an increase in geography learning outcomes through cooperative learning models of group investigation type class XII IPS 1 SMAN 1, Situjuah District.

Keywords: Geography, Group Investigation, Learning Outcomes, Models

1. INTRODUCTION

The implementation of the study conducted by educators today is still not optimal in preparing learners for the challenges of the 21st-century. At this time, the educator's role this time will be very different from the role of an educator which is still held up and running in many schools. Educators in Indonesia are already familiar with the mutual cooperation model, in the world of education, the term mutual cooperation is known as a group work method. Learning is a basic process of human development. Human behavior can evolve with the learning activity and a change in behavior [1].

Law of the Republic of Indonesia Number 2 the Year 1989 on National Education System Article 1, paragraph 1 states that "Education is a conscious effort to prepare students through guidance, instruction, and/or training for its role in the future". Education is an effort to humanize young people [2-5]. Education is a very important element to the survival of a nation that has an important role concerning the maintenance and improvement of the life of a community [4]. Education can run properly when the curriculum becomes the main support in the learning process so that learning will be running optimally [5-8].

Appointment of a young man to the level of the human to be realized in the entire process or educational efforts. The present and future are full of rapid and fundamental developments and changes in various aspects of life.

Geography is the branch of earth science. In general, geography can be defined as the study of the location and spatial similarities and differences in physical and human phenomena on the surface of the earth. The word geography itself comes from the Greek language which is geo which means Earth and graphein which means writing or explaining. Geography was taught as science in schools and other educational purposes.

A teacher is expected to have the motivation and renewal in the learning process lived. The competent teachers are teachers who can manage teaching and learning programs [6-12]. Manage here have a broad sense that discusses how teachers teach about issues, such as opening and closing the lesson, explaining, vary the media, asking questions, support, and asked, also looking for teachers who discuss strategies, learn to study and learn, and help to learn conducive.

During the researchers made observations on students in class XII IPS 1 at SMAN I Situjuah the learning outcomes were still low. Students are not excited or not interested in learning so students
become passive, students follow Geography learning seemingly no intention, no passion and seriousness. Students’ speaking skills are still lacking, students are not yet skilled in expressing opinions, ideas and thoughts both through questions and in the form of statements and questions.

Improving student learning outcomes cannot be separated by the increased interest in student learning. If students are increasingly interested in learning the study results also increased. Group investigation is teaching methods that make the students active in learning so that the learning that takes place becomes a more meaningful and positive impact on student learning outcomes [7]. In other words, increasing learning outcomes are influenced by the students’ interest in learning.

Investigation group is a cooperative learning model the most complex and most difficult to implement [8]. The model Cooperative Learning Group Investigation (GI) is a method of learning with students learning in groups, study groups are formed based on the topics selected students. This approach requires norms and structures that are more complex than the approach that is more centered on the teacher. In cooperative learning, GI students were divided into several groups with 2-6 students are heterogeneous. The group selects a topic for investigation and conduct an in-depth investigation on the chosen topic, then prepare and present a report to the class.

2. METHOD

The research carried out is a class action research (Classroom Action Research), with the Group Investigation model [9]. This research was conducted at XII IPS 1 at SMAN I Situjuah, Lima Puluh Kota District, West Sumatran Province. The research was conducted in the second semester of 2018-2019 academic year from January to February 2019 as much as 4 times the meetings were divided into two cycles. 2 times the first cycle and the second cycle of meeting 2 times meetings. Subjek in this study were students at class XII IPS 1 in SMAN I Situjuah by the number of students 24 students. The procedure of this study consists of four phases: planning, action, observation, and reflection. Data collection techniques using observation, tests, and documentation. Data were analyzed using percentages and data reduction.

3. RESULTS AND DISCUSSION

Cycle II
Planning

Planning in this study is the activity of preparing a lesson plan (RPP), using the worksheet to prepare cognitive exercise questions and making observation guidelines for teachers and students, preparing learning media and learning package books, as well as field notes and interview guidelines for students.

Action

The action in the first cycle of the first meeting and the second learning activity is actually almost the same with a slight difference. The first meeting of the first cycle was held on Monday 28 January 2019 with the material discussing Analyzing the territory and zoning with basic material on understanding the village and village characteristics. At this first meeting consisted of three activities, namely the initial or preliminary activities, core activities and activities of election.

The initial activity of the teacher is preparing students, praying and presenting, the teacher motivates students, the teacher asks for prior learning, the teacher does apperception, the teacher conveys the learning objectives and the teacher informs. The core activity phase, the teacher gives an explanation of the area and territory including the understanding of the village and its characteristics, the teacher divides students into heterogeneous groups, the teacher explains the learning objectives and group assignments about regional and regional dynamics, the teacher calls on group leaders to take a different task material about the area and zoning.

Each group cooperatively discusses material that contains pictures of the area and territory, students conduct group discussions, each spokesperson submits the results of the discussion, the teacher provides a re-explanation of the area and territory and its impact on life, during the activity ongoing teacher assessment, provide reinforcement and inference. Closing activity, the teacher together with the students conclude learning materials, teacher reflection, the teacher providing follow-up of the material will come, teachers assign homework, the teacher gave the daily test questions, pray together.

The second meeting of the first cycle was held on Monday, February 4, 2019, with the material discussing Analyzing the territory and zoning with the main material on village pollution and village spatial structure. The learning objectives at this meeting students are expected to be able to identify the potential of the village concerning the development of urban villages and the structure of village space. This second meeting is almost the same as the one held at the first meeting which consists of three activities namely preliminary or initial activities, core activities, and closing activities. Where on its core activities to follow the steps of cooperative learning model type group investigation.
Observation

The initial activity phase carried out by the teacher in the excellent category, the core activity phase of the teacher explains the area and zoning, the teacher divides students into several heterogeneous groups of good categories, the teacher explains the learning objectives and group assignments about the region and territorial good category, the teacher calls group leaders to take a different task material about the region and territorial good category.

Each group cooperatively discusses the material that contains the findings of pictures about the region and territorial category is still not good, students do the group discussion the category is still not good, each spokesperson for the category is still not good, deliver the results of the discussion, the teacher gives an explanation re-zoning of the area and, during the activity the teacher assessment, provide reinforcement and inference excellent category and on the activities undertaken cover both categories.

Before learning improvement activity in the first cycle is over, then do the daily tests to determine the ability of students to understand the learning that has been presented in class XII IPS 1 in SMAN I Situjuah. The daily test results of an increase in student learning outcomes after learning corrective action made at the pre-cycle. The results of observation can be seen in the following table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Descriptions</th>
<th>The results in cycle I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The average value of formative tests</td>
<td>73.46</td>
</tr>
<tr>
<td>2.</td>
<td>The number of students who pass the study</td>
<td>14</td>
</tr>
<tr>
<td>3.</td>
<td>Percentage of mastery learning</td>
<td>58%</td>
</tr>
</tbody>
</table>

Based on the table above, it can be concluded that the obtained scores by an average of 73.46 and a percentage of 58% completeness study of only 14 students who have completed 24 students. This suggests that the ability to understand the concept of the village and rural characteristics generally still below the minimum completeness criteria (78) which has been set

Reflection

The first cycle reflection phase was carried out on Thursday, February 7, 2019, which was housed in the Situjuah SMAN teachers room, assisted by an observer named Yurnita. After the improvement of learning in the first cycle, observations from teachers and students and the results of daily tests were obtained, reflections on the cycle Firstly, in the learning process researchers provide little opportunity to ask students and vice versa no students want to ask, student learning outcomes have not yet reached the established indicator criteria. Student learning motivation is still lacking and the teacher is still not thoroughly guiding students, students are still very far less active in learning and the next meeting the teacher uses the media in effective learning. Based on observations and analysis of problems that arise in the first cycle of learning, the learning will continue in the second cycle.

Cycle II

Planning

Planning is to plan the implementation of learning and syllabus, set a piece of observation of teachers and students as well as prepare a matter of daily tests that aimed to determine the level of knowledge and understanding of the students after participating in learning activities, prepare the student worksheets and prepare infrastructure and media used in learning, as well as documentation tools, preparing media and organizing learning time so that it is more efficient, the cards used are more interesting and fun.

Action

The action of the second cycle of the first and the second learning activity is actually similar with a slight difference. The first meeting of the second cycle was held on Monday, February 11, 2019, to discuss the matter of understanding the city. This meeting consists of three activities, namely the preliminary activities, core, and cover. The initial activity of teachers prepared students, pray and check the attendance, teachers motivate students, the teacher asks previous learning, teachers do apperception, teachers convey the purpose of learning and teachers informed about the activities to be carried out.

The main activity that teachers display a picture of the state of the city, the teacher to explain the meaning of the city, teachers divide students into several heterogeneous groups, teachers explain the purpose of learning and group assignments on the definition of the city, the teacher calls the chairmen of the group to take a material different tasks on understanding the city.

Each group cooperatively discusses the material that contains the findings of the pictures about the understanding of the city, students conduct group discussions, each spokesperson, deliver the results of the discussion, the teacher provides a re-explanation of the understanding of the city, students are guided to conclude the
material that has been learned, the teacher gives a gift to the group with the best discussion results, during the activity the teacher makes an assessment, provides reinforcement and conclusions.

The closing activity, the teacher together with the students concludes the learning material, the teacher does the reflection, the teacher gives a follow up on the material that will be coming, the teacher gives homework, the teacher gives a question of daily tests, pray together.

The second meeting of the second cycle was held on Monday, 18 February 2019 with the material discussing the territory and zoning and the main material about the potential of the city and the structure of urban space. The purpose of learning in the second cycle of this second meeting of the student is expected to identify and analyze the theoretical models of the spatial structure of the city. At this second meeting as well as the first meeting of the second cycle which consists of three activities, namely the preliminary activities, core activities, and closing activity. At this stage of the implementation of the second cycle of this second meeting following the steps of cooperative learning group investigation.

**Observation**

The observation of teachers by collaborators in the enforceability of the learning that is in the beginning stages of learning implementation has been done very well. Core activities that teachers featuring images of the city have done very well, the teacher gives an explanation about the city and the structure of the city has done very well, teachers divide students into several heterogeneous groups have done very well, the teacher explains the purpose of learning and group assignments about the city and the structure of the city has done very well, the teacher calls the chairmen of the group to take a different task material on the dynamics of the lithosphere and its impact on life has done very well.

Each cooperative groups to discuss material that contains material findings of the pictures on the dynamics of the lithosphere and its impact on life has done well, the students had a discussion group has performed well, each spokesperson has done well, the communication of the results of the discussion has been done well, the teacher provides a re-explanation of the dynamics of the lithosphere and its impact on life has been done well, students guide to conclude that the material has been studied well done, the teacher gives a gift to the group with the best discussion results have been done well, during the ongoing activities the teacher has assessed done properly, provides reinforcement and inference has done well. While the closing activity of teachers implementing the learning has been done very well.

Before learning improvement activities in the second cycle ends, daily tests are conducted to find out the students' ability to understand the learning that has been conveyed to students. The results of observation can be seen in the following table:

**Table 2 Recapitulation of Formative Test Results in Cycle II**

<table>
<thead>
<tr>
<th>No.</th>
<th>Descriptions</th>
<th>The results in cycle II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The average value of formative tests</td>
<td>85.54</td>
</tr>
<tr>
<td>2.</td>
<td>The number of students who pass the study</td>
<td>21</td>
</tr>
<tr>
<td>3.</td>
<td>Percentage of mastery learning</td>
<td>88 %</td>
</tr>
</tbody>
</table>

Based on the table above it can be concluded that the average formative test of students at 85.54 is above the specified KKM, while the percentage of students completeness of 88% or 21 students out of 24 people have finished learning, but this has not reached the desired target of 80 %. From the table above can be explained that implementing a cooperative learning model of Group Investigation obtained mastery learning reaches 88% or there are 21 students from 24 students have been thoroughly studied. The results show that in the first cycle in the classical students have not been thoroughly studied, because students who received ≥ 78 value of 88% greater than the desired percentage of completeness that is equal to 80%. This is because students already feel understood what he meant and used by teachers to implement the cooperative learning model of Group Investigation.

**Reflection**

Phase II cycle of reflection was held on Thursday, February 21, 2019, which took place in the assembly room teacher is assisted by an observer named Yurnita. Based on observations and analysis of the results of daily tests after the learning process is obtained matters is learning conducted in class XII IPS I, wherein measures applied to learn following the steps on the model used, the results of observations made have reached the criteria both following predetermined indicators, student learning outcomes have reached the desired learning completeness.

Based on the results of students in pre-cycle action is then teachers need to redesign the learning more interesting, arousing curiosity in self-learners, encourage children to be more active, improve the creativity of children and others. Teachers can also use particular approaches, applying learning models appropriate to the subject matter and following the characteristics of the child.

The above results in the observation phase of the second cycle following the theory of Group
Investigation is an instructional model that involves students from the planning, either in the form of topics and ways to learn through investigation. Group Investigation requires students to have good skills in communication or a group process skills [10]. Cooperative learning model of Group Investigation can be used teachers to develop the creativity of learners, either individually or in groups. Group investigation cooperative learning model is also designed to help bring a sense of responsibility when learners following the learning process [11].

4. CONCLUSIONS

Based on the results of research and discussion of learning can be concluded that an increase in learning outcomes subjects Geografipada students XII IPS 1 in SMAN 1 Situjuah with application is cooperative learning model type group investigation is on in the first cycle in the know the average student only 73.46 students who completed only 14 people and the percentage of 58%. While on the second cycle in the average student know only 85.54 students who completed 21 and a percentage of 88%.

5. REFERENCES