APPLICATION OF SCIENTIFIC APPROACH TO IMPROVE THE RESULTS OF ENGLISH STUDENTS IN X IPA-1 GRADE AT SMAN 1 MARON

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Abstract
The purpose of this study is to find out the Application of Scientific Approach to Improve the Student Learning Outcomes of the English Subjects for Congratulations and Praise to X IPA-1 Grade at SMA NEGERI 1 in Academic Year 2019/2020.

This study uses an action research as much as two cycles. Each round consists of four stages namely action planning, action implementation, action observation, reflection and action revision. The target of this research is the Students of X-IPA 1 Grade of SMAN I Maron in Academic Year 2019/2020. The data obtained in the form of formative test results, observation sheets of teaching and learning activities, student achievement has increased from cycle 1 to cycle 2.

The conclusion of this research is the Use of Scientific Approach can improve the student learning outcomes of X-IPA 1 Grade of SMAN I Maron in Academic Year 2019/2020. It was found that classical completeness in the first cycle was (66.7%) and in the second cycle (93.3%) from the analysis.

Keywords: Approach, Scientific, Learning Outcomes

Introduction
The learning suggested in K-13 is a contextual learning. Contextual learning encourages students to make connections between the knowledge gained from learning and the facts in the environment so that the knowledge obtained is more useful. Contextual learning makes it easy for students to apply knowledge gained from learning. Learning becomes more productive and is able to foster reinforcement of concepts to students. Contextual learning requires more student activity, so the teaching and learning process is more concrete and meaningful (Sukinah, 2019).
The emphasis of curriculum development in 2013 is the refinement of the mindset, strengthening curriculum governance, deepening and expanding the material, strengthening the learning process, and adjusting the learning load in order to guarantee what is desired and what is produced.

The implementation of the 2013 curriculum in schools, one of them, the teacher must use a scientific approach. Approach is a general way of looking at the problem or object of study. Scientific approach is an approach that refers to investigative techniques for a phenomenon, gaining new knowledge, or correcting and integrating previous knowledge. The scientific approach includes observing, asking, reasoning, trying, and forming networks.

Utilization of relevant learning media in the classroom can optimize the learning process (Meiga, 2019). Teachers as educators have a role in providing intrinsic motivation through the use of instructional media. A child who has been motivated to learn something, will try to study it well and diligently, hoping to get good results. Thus motivation can encourage someone to have perseverance in learning (Prasetya, 2017). In the view of Prasetya etc (2018) student motivation has a strong enough influence in increasing a successful process and student learning outcomes. One indicator of the quality of learning is the growth of enthusiasm and motivation to learn from students.

One key to success that determines the successful implementation of the 2013 curriculum is the creativity of the teacher, because the teacher is an important factor that has a big influence, especially in applying scientific approaches in the learning process in the classroom. The application of scientific approach is considered appropriate to replace teacher learning strategies that are only monotonous (teacher center), so that learning objectives are more easily achieved. Students have a passion for learning and student learning outcomes can be increased.

Learning outcomes in schools are not only influenced by students who learn and understand the lessons at school, but the role of a teacher is also very important in determining the learning outcomes of students and the condition of the school environment that supports them. A conducive school environment will provide comfort for optimal student development, children become healthier and think clearly, so that they can become intelligent.
children and later become quality human resources (Prasetiya, 2017).

English lessons is very difficult to understand for the students, It seen from the learning process and the results of the analysis of learning outcomes show very low grades as well as creativity where students are only focused on the answers to the book without developing more ideas and ideas. Therefore we need an approach or learning strategy to solve these problems.

Based on the background above, the researcher is interested in conducting a class action research entitled "Application of Scientific Approaches to Improve the Student Learning Outcomes of the English Subjects for Congratulations and Praise to X – IPA – 1 Grade at SMAN 1 Maron, in Academic Year 2019/2020 ".

Supporting presidential regulations number 87 in 2017 on strengthening character education and education minister no. 23 of 2015 on the growth of character, it is necessary to conduct research, based on the problems above the researchers will find the best solution to build a 2045 golden generation that equipped with 21st Century skills. among them First; Character quality is how students adapt to a dynamic environment that includes religious, nationalist, independent, integrity, mutual cooperation, tolerance, responsibility, creative, and care for the environment. Then the second skill is basic literacy, which is how students apply basic daily skills which include language literacy skills, numeracy literacy, scientific literacy, digital literacy, literacy, and cultural and citizenship literacy. The third skill is competency; how to solve complex problems by thinking critically, creatively, communicatively and collaboratively. (kemendikbud 2016)

The Scientific Approach is a learning model that contains a series of data collection activities through observation, asking questions, experimenting, processing information or data, then communicating (Ministry of Education and Culture 2014). The scientific approach is the 2013 curriculum, learning approach through competency learning which strengthens to the learning process and authentic assessment with the aim of achieving competency in attitudes, knowledge and skills.

The scientific approach aims to improve the ability of students to think, form critical thinking skills in solving problems systematically, create learning conditions as a necessity, train
students in expressing ideas, also improve learning outcomes and develop students' character.

The learning process using a scientific approach is expected the students are able to formulate problems by asking lots of questions, not just by answering. The learning process is expected to be directed to train analytical thinking (students are taught how to make decisions) not to think mechanically (routinely by merely listening and memorizing only) (Majid, 2014)

Rasuman, (2015) said that the positive approach provides broad opportunities given to students to explore and elaborate on material and opportunities to actualize their abilities through learning activities that have been designed by the teacher.

Research Methods
The researcher's approach is needed to guide activities in conducting this research using a type of classroom action research (CAR). The location of this research is SMA Negeri 1 Maron. The subject of the research was the students of SMAN I Maron Probolinggo X IPA-1, Grade. Which numbered 30 people. The focus of research on student learning outcomes through tests. The subjects studied were English congratulatory and praising material.

This research was conducted at SMAN I Maron Probolinggo Regency in the Second Semester of Academic Year 2019/2020. The time of the study began on 11 January 2020 to 11 March 2020 adjusted to the schedule of English lessons in class X IPA-1.

Research Results And Discussion
Describe Pre-Cycle research results

See the results of the initial test session or called the pre-cycle test where this test is conducted to determine the level of student competency in this case the assessment can be seen through the following table

<table>
<thead>
<tr>
<th>NO</th>
<th>Kriteria</th>
<th>Pra Siklus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Jumlah</td>
</tr>
<tr>
<td>1</td>
<td>Pass</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Fail</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

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From the table above shows that 30 students who completed a total of 15 people are equivalent to 50% and students who are incomplete a number of 15 people are equivalent to 50 percent. And students who need further action are 15 students or 50%. From the above explanation, it can be concluded that the learning process needs to be followed up with conducting classroom action research.

The explanation of the results of observations on student activities, includes 5 Indicators, namely 1) The presence of the material presented by students is always present on time / excited in learning happy / excited when learning, 2) Active: the ability of students to answer teacher questions or friends to ask if they have not understood search information from other sources. 3) Thinking together; students pay attention to the teacher’s explanation notes important materials and work together with friends, do the assignments given.4) Honesty students in making presentations in front of the class purely his own mind and also when answering questions. 5) Communication: Students are able to communicatively to their peers during presentations.

### Recap of Student Observation Results

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Total</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Presence</td>
<td>90%</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>liveliness</td>
<td>75%</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Thinking together</td>
<td>60%</td>
<td>enough</td>
</tr>
<tr>
<td>4</td>
<td>Honesty</td>
<td>64%</td>
<td>enough</td>
</tr>
<tr>
<td>5</td>
<td>Comunicatif</td>
<td>60%</td>
<td>enough</td>
</tr>
<tr>
<td></td>
<td>Average Value</td>
<td>69,8%</td>
<td></td>
</tr>
</tbody>
</table>

Looking at the preliminary data above, it shows the average number is very far from what is expected at 85%. And it have not yet reached the minimum completeness criteria (KKM) set ie students who achieve grades ≥ 75. The lack of grades obtained by students due to the learning model that has been used the Scientific approach.
From the data above, the researchers got a picture that during the process of learning English in the classroom the students were very busy and ashamed to ask. From the attendance rate of 90% they were present, 75% activity means that only some students were active in receiving material, thinking together 60% meaning that students do not want to be together - to discuss about the material they could have been waiting for the results of their friends' answers. 64% honesty shows that students are not thorough in working on problems independently. and 60% communicative means students are not sufficiently communicating with classmates about the English material being taught. Therefore, researchers feel it is necessary to take action through the first cycle of assessment.

**Cycle 1**

In the first cycle of observation the following results were obtained:

1. The average student test score is 72 from these results indicating that the level of mastery of student material has not reached the target set which must reach ≥ 75. Student test scores are also presented in the following chart:

![SKOR TES SISWA SIKLUS I](image)

2. The percentage of student achievement is 66.67% of the results indicate that not exceeding the target set that is 85% of students scored get 75. The percentage of student achievement is also presented in the following diagram:
3. Student activity observation worksheets were obtained from 30 student data with the level of student activity reaching 74.67% with a good predicate. The results of the student activity observation worksheet are also presented in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Aspec</th>
<th>Percentage</th>
<th>Predicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Presence</td>
<td>97%</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>liveliness</td>
<td>82%</td>
<td>Very good</td>
</tr>
<tr>
<td>3</td>
<td>Thinking together</td>
<td>69%</td>
<td>good</td>
</tr>
<tr>
<td>4</td>
<td>Honesty</td>
<td>65%</td>
<td>enough</td>
</tr>
<tr>
<td>5</td>
<td>Comunicatif</td>
<td>60%</td>
<td>enough</td>
</tr>
<tr>
<td></td>
<td><strong>Average value</strong></td>
<td><strong>74.6%</strong></td>
<td><strong>good</strong></td>
</tr>
</tbody>
</table>

The percentage of students who achieved an indicator of success had not yet reached the minimum completeness criteria that had been set at 85%. Percentage of students who scored ≥ 75. this is because the learning model with the Scientific approach cannot be applied perfectly in the learning process. Therefore it needs to be improved through learning in the second cycle.

As a step to follow up the learning process in cycle I, there needs to be improvement with the actions in cycle II. The improvements made in the next cycle are as follows:
1) Actions cycle I that have been well maintained should be maintained.
2) Learning with a Scientific approach needs to be improved so that the learning process is as expected

Cycle II

The observations in cycle II were obtained as follows:
1. The average student test is 82.7, this shows that the indicator of mastery of student material has been fulfilled yaitu $\geq 75$. Student test scores are also presented in the following chart:

![SKOR TES SISWA SIKLUS II](image)

**SKOR TES SISWA SIKLUS II**

Figure 3.3 Results of the second cycle test score

2. The percentage of students' mastery learning has reached 93.33%, this has exceeded the target set of 85% of students who scored $\geq 75$. The percentage of student achievement is also presented in the following diagram:

![Prosentase Pencapaian Siswa](image)

**Prosentase Pencapaian Siswa**

- **Tuntas** 93%
- **Tidak Tuntas** 7%

Figure 3.4 Percentage of student achievement in cycle II based on test results
3. Student activity observation worksheets were obtained from data of 30 students with the level of student activity reaching 80.44% with the predicate Very Good. The results of the student activity observation worksheet are also presented in the following table:

Table 1.2 Percentage of observations of the activities of students in cycle II

<table>
<thead>
<tr>
<th>No</th>
<th>Aspec</th>
<th>Percentage</th>
<th>Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Presence</td>
<td>99%</td>
<td>Sangat Baik</td>
</tr>
<tr>
<td>2</td>
<td>liveliness</td>
<td>93%</td>
<td>Sangat Baik</td>
</tr>
<tr>
<td>3</td>
<td>Thinking together</td>
<td>72%</td>
<td>Baik</td>
</tr>
<tr>
<td>4</td>
<td>Honesty</td>
<td>71%</td>
<td>Baik</td>
</tr>
<tr>
<td>5</td>
<td>Comunicatif</td>
<td>67%</td>
<td>Baik</td>
</tr>
<tr>
<td></td>
<td><strong>Average value</strong></td>
<td><strong>80.4%</strong></td>
<td><strong>Sangat Baik</strong></td>
</tr>
</tbody>
</table>

4. The average test score increased from 72.00 in the first cycle, to 82.70 in the second cycle. The percentage of students' mastery learning increased from 66.67% in cycle 1, to 93.33% in cycle II. Student learning activities through observation assessment also increased from 74.6% with a good predicate in the first cycle, to 80.4% with a very good predicate in the second cycle.

After learning the action taken using the Scientific approach in cycle II the following results are obtained:

1. Achievement of student learning completeness from cycle I to cycle II has increased.
2. Students are able to solve problems using the Scientific approach.
3. Students feel happy during the learning process with a Scientific approach because they can improve their abilities with the exercises provided.
4. In the second cycle obtained completeness and student learning activities that increase and have reached the indicators of success that have been set. Therefore, the researcher decided to stop the research in cycle II.

**Closing**

Based on the results of the research and discussion described above, it can be concluded that learning with congratulatory material and praising the Scientific approach can increase student interest in learning in English subjects. This is evident from the
results of observations of student interest in cycle I to cycle II increased by 6.2%, the average cycle I amounted to 74.6% with a good predicate. In the second cycle increased to 80.4% with excellent ties. Learning with congratulatory material and praising with the Scientific approach can improve student learning outcomes. This can be seen from the level of mastery learning classically in the first cycle of 66.7%, there are 10 students (33.3%) who have not reached the grades in accordance with KKM. Whereas in the second cycle completeness classically increased to 93.3% and there were only 2 students (6.7%) who had not yet reached the grade in accordance with the specified KKM limits.

References