SENIOR HIGH SCHOOL STUDENTS' RESPONSES TO GUIDED INQUIRY LEARNING MODEL

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Abstract

The development of technology and education in the 21st century is also increasing the competition in the world. Learning model that can support the competition in the 21st century one of them is guided inquiry. Therefore, this study aims to describe the responses of senior high school students to guided inquiry learning model. This research is a pre-experimental study with one group pre-test - post-test design. Research subjects used in this study are 90 students divided into three classes, namely experiment 1, experiment 2, and experiment 3. Learning devices used are syllabus, lesson plan, handout, worksheet. The research instrument used is the questionnaire of the students' response questionnaire. The collected data were analyzed using responsive questionnaire analysis. The result of this research shows that in the experimental class 1 students get responses of 76.25% with good category, and in the experimental class 2 & 3 get the students response of 81.08% with very good category. The results of the students' responses prove that the guided inquiry learning model is effective when applied to physics learning.

Keywords: guided inquiry, response of students.

INTRODUCTION

The development of technology and education in the 21st century caused the competition in the workplace increasingly tight. So it takes qualification and excellent workforce competence. The competencies needed in the 21st century include critical thinking skills, problem solving, and collaboration. Preparing students who are able to compete in the 21st century is an obligation for schools in Indonesia.

Physics is a science that is closely related to natural phenomena. Physics is still developing. Physics is obtained from experiments and research done gradually until triggered laws that exist in physics. To learn this complex science, it takes considerable thought.

Based on the prerequisites in SMA Negeri 1 Gedangan through a pre-research questionnaire, most students do not like physics because physics has many formulas. Students can say so because in the teacher's learning is still using lecture and practice methods, so that students are encouraged in the formula of physics is not a physics concept.

Guided inquiry is one of the learning models that can be one of the alternative in learning. Based on Asnidar's research, S Khabibah, and R Sulaiman (2018) on the effectiveness of guided inquiry learning for the comparison topics concluded that the response of students to learning tools and learning process is positive.

Based on the above description, a study titled "Response of Senior High School Students to Guided Inquiry Learning Model" was made.

METHOD

The type of research used is pre-experimental research with one group pre-test - post-test design. The samples used were 90 students divided into three classes, namely experiment 1, experiment 2, and experiment 3. Research data was taken in April 2017/2018 academic year. Learning device used is syllabus, lesson plan, handout, worksheet. The instrument used in data retrieval is the student's response questionnaire.

Learning tools are validated by two Unesa physics lecturers. Validation results are calculated the percentage of matches by using Percentage of Agreement. Learning devices are said to be worthy of use if the percentage of matches is more than 75% (Borich, 1994). And from Percentage of Agreement calculations, validated learning tools get a percentage of more than 75% making it feasible to use in data retrieval.

The instrument of this study uses a questionnaire response of students. Response

Questionnaire containing statements and rubrics scores on learning with guided inquiry learning model. The percentage score of students' responses was obtained from:

$$response(\%) = \frac{total\ score}{ideal\ score} x100\%$$

With Likert Scale Rating,

Table 1 Likert Scale Rating

Direction Statement	Rating Scale			
	Very agree	Agree	Disagree	Very disagree
Positive	4	3	2	1
Negative	1	2	3	4

(Riduwan, 2010)

And response category as follows:

Table 2 Percentage and Category of Responses

Percentage Range	Category
0%-20%	Very less
21%-40%	Less
41%-60%	Enough
61%-80%	Good
81%-100%	Very good

(Riduwan, 2010)

Response students are said to be good if the percentage reaches ≥ 61%.

RESULT AND DISCUSSION

Student's response to guided inquiry learning model can be seen through student response questionnaire. This questionnaire contains 10 statements assessed by each student in experimental class 1, experiment 2, and experiment 3.

The percentage of students responses can be seen in Table 3.

Table 3 Percentage of Students Responses

Class	Average Student's Response	Category
Experiment 1	76,25%	Good
Experiment 2	81,08%	Very good
Experiment 3	81,08%	Very good

Table 3 shows that in all three classes getting a good response. In the experimental class 1, the average response was 76.25% with good category, whereas in the experimental class 2 and experiment 3, the average response was 81.08% with excellent category. Although there is a different class but still the average response of students in the three classes can still be said good.

The response of students can be known through the questionnaire of the response of students given after the learning process. Based on Table 3 shows a fairly high percentage of values. Although there is one class whose value is not the same, but the difference if averaged from the three classes still get results that fall into either category. The results of this response prove that the guided inquiry learning model is effective when applied in physics learning. This is in accordance with Asnidar et al (2018) study which shows the positive response of students about the device and the learning process and guided inquiry, so that guided inquiry can be used as an alternative in learning.

CLOSING

Conclusion

Based on the result of the research, it can be concluded that the guided inquiry learning model in the experimental class 1, experiment 2, and experiment 3 get a good response.

Suggestion

1. The learning process should be recorded in order for the students' responses to be seen more clearly.
2. Students should be given a chest number to make it easier for teachers in the assessment.

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APPENDIX

Table 4 Recapitulation of Student's Response

No.	Statement	Percentage of Response (%)			
		Experiment 1	**Experiment 2**	**Experiment 3**	**Average**
1.	With guided inquiry learning model, I have a high willingness to follow physics lessons.	74,17	82,5	80,83	79,17
2.	The guided inquiry learning model is able to increase my interest in studying work and energy.	75,83	84,17	77,5	79,17
3.	With guided inquiry learning model of work and energy materials is easier to understand.	73,3	82,5	79,17	78,3
4.	With guided inquiry learning model, I find it easier to remember physics material.	74,17	80	76,67	76,94
5.	With guided inquiry learning model, I have been more active in learning.	75	75,83	79,17	76,67
6.	With guided inquiry learning model, I can make logical conclusions based on information related to physics.	77,5	81,67	85,83	81,67
7.	With guided inquiry learning model the ability to analyze natural phenomena related to physics increases.	75,83	80,83	82,5	79,72
8.	With guided inquiry learning model the ability to process data and make conclusions based on experimental data is increasing.	76,67	80,83	83,3	80,28
9.	With guided inquiry learning model the ability to interpret the concept of physics is increasing.	78,33	81,67	82,5	80,83
10.	With guided inquiry learning model the ability to evaluate statements related to physics is better.	81,67	80,83	83,33	81,94
Average		76,25	81,08	81,08	79,47