

**ANALYSIS OF AVAILABILITY OF GUIDED INQUIRY MODELS ON
LESSON PLANS AND STUDENT WORKSHEETS PHYSICS GRADE XI
SEMESTER 1 IN SENIOR HIGH SCHOOLS**

THESIS UNDERGRADUATE

Submitted As One Of The Requirements To Get A Degree Bachelor of Education



By

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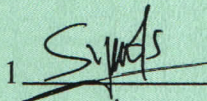
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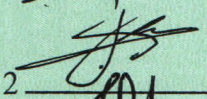
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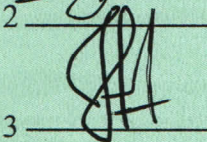
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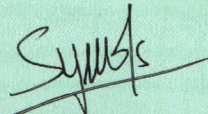
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STATEMENT

I hereby declare that:

1. My scientific work, the final project is in the form of a thesis with the title:
"Analysis of Availability of Guided Inquiry Model on Lesson Plans and Student Worksheets Physics Grade XI Semester 1 in Senior High Schools", is my original work.
2. This paper is purely my own ideas, formulations and research, without the help of other parties, except the supervisor.
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ABSTRACT

Windri Suci Gaitari, 2021 “Analysis of Availability of Guided Inquiry Model on Lesson Plans and Student Worksheets Physics Grade XI Semester 1 in Senior High Schools”

In the revised 2013 curriculum, students are required to have skills that fit the challenges of the 21st century. One way to train these skills is to apply the right model in learning, namely the guided inquiry model. The availability of guided inquiry models in learning can be seen from the learning tools commonly used by teachers, namely lesson plan and student worksheet. All lesson plan and student worksheet at public high schools have not been identified whether they have loaded the guided inquiry model. Therefore, this research aims to find out the availability of guided inquiry models in lesson plan and student worksheet Physics Class XI Semester 1 in high school.

This research is descriptive research with a qualitative approach. The population data in this study are all lesson plan and student worksheet Physics High School grade XI semester I used by 15 districts in West Sumatra. The samples in this study were lesson plan and student worksheet Physics in high schools grade XI Semester I from 7 schools created by teachers. The data in this study were taken using lesson plan and student worksheet serving analysis instruments and data collection techniques through documentation studies.

Based on the research that has been done, it can be concluded that the analysis conducted on the availability of the guided inquiry model in lesson plan and student worksheet physics grade XI semester 1 obtained the results of the analysis that lesson plan with the highest availability category is lesson plan 3 with a percentage of 83.3% of the categories is very available. For student worksheet with the highest availability category, student worksheet 5, with a percentage of 81.48% of the categories, is very available. The lesson plan with the lowest availability is lesson plan 1 and lesson plan 6 with a percentage of 16.67% in the unavailable category and for student worksheet with low availability, student worksheet code 6 is in the unavailable category. Thus, it can be concluded that the availability of the guided inquiry model in the lesson plans and physics worksheets for grade XI semester 1 is categorized as sufficient available.

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Padang, July 2021

Author

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CHAPTER I INTRODUCTION

A. Background of Research Problem

Educating the nation's life is one of the ideals of the Indonesian nation that can be realized through education. According to Law Number 20 of 2003, education is an essential and planned effort to create a learning atmosphere and learning process. Students actively develop their potential to have religious, spiritual strength, self-control, personality, intelligence, noble character, and the necessary skills themselves, society, nation, and state. Education in Indonesia will continue to develop following the demands of the 21st century. In the 21st century, education is essential to ensure that students have the skills to learn and innovate, use technology and information media, and work and survive by using life skills. skills) (Murti, 2015). These various demands are also called competencies needed by students in the current era of globalization, often referred to as 21st Century Skills. The concept of education is better known as 21st Century Learning.

Based on the challenges of the 21st century, the Ministry of Education and Culture made a breakthrough to improve the quality of education to produce graduates who are ready to compete globally in the future. One of those early breakthroughs by imposing 2013 revised 2017 curriculum. The change to the previous curriculum with 2013 revised 2017 curriculum aims to make students have 4C skills (communication, collaboration, critical thinking, creativity),

Strengthening Character Education (PKK), Scientific Literacy, HOTS (Higher Order Thinking Skill).

However, in reality, on the ground, the breakthroughs made by the government have not seen maximum results. One of the government's demands is that students have HOTS abilities that have not been appropriately implemented. From the results of research that Syafrinaldi has carried out (2020), namely by analyzing students' answers to the physics HOTS questions, the results show that students' HOTS abilities are still low, namely 20% for SHS 8 Padang, 19% for SHS 2 Padang, 43% for SHS 1 Padang, and 18% for SHS 14 Padang. This, of course, requires habituation in the learning process. The process of learning physics can be seen from the lesson plan (RPP) prepared and made by the teacher. Lesson plan is one of the standard units of the learning process that describes the procedures and management of learning to achieve a basic competency set out in the standard content described in the syllabus and applied in the learning process in the classroom. In the learning process, the teacher uses lesson plans and is also assisted by teaching materials in the form of worksheets. Student worksheet is one of the standard infrastructure facilities that help the learning process. For this reason, student worksheet must be made/developed by the teacher himself based on the learning scenario to adjust to the learning objectives to be achieved, especially in learning physics.

Physics learning is learning that aims to equip students with a series of theoretical competencies and physics concepts. Permendiknas on content standards states that the function and purpose of physics subjects in SMA and MA

are for students to have the ability, one of which is: 1) Cultivating scientific attitudes which include: being honest, being open to accepting opinions based on specific evidence, being critical of statements scientific, namely not easy to believe without the support of empirical observation results, can work together with others and 2) Provide experience to be able to propose and test hypotheses through experiments designing and assembling experimental instruments, collecting, processing, and interpreting data, compiling reports, and communicating results test orally and in writing. From that statement, it can be explained that physics lessons in SMA and MA are intended to train students to master the knowledge, concepts, and principles of physics, scientific skills, science process skills, and thinking skills.

To train these abilities, appropriate models are needed that are used in the learning process, especially in lesson plans and worksheets. In the regulation of the Minister of Education and Culture Number 65 of 2013 concerning Standards for the Process of Primary and Secondary Education (in Trianto 2014, p. 27), it is emphasized:

First, to achieve a learning process that refers to the standard of learning processes in the 2013 Curriculum, it uses a scientific approach in learning and adopts an integrated thematic learning model. Second, to strengthen the scientific approach (scientific), integrated thematic (inter-subject thematic) and thematic (in a subject) attitude/research-based learning (discovery/inquiry learning) is applied. Third, to encourage students' ability to produce contextual work, both individually and in groups, it is recommended to use a learning approach with problem-based learning.

Based on the law above, in the learning process, one of the preferred learning models in the implementation of the 2013 curriculum is the inquiry learning model, which in this study is the guided inquiry model.

The guided inquiry model is a learning model that can improve student learning outcomes by designing and discovering physics concepts for themselves, which will make the material longer stored in students' memories. In guided inquiry, the role of students is more dominant and students are more active, while the teacher directs and guides students in the right direction. The guided inquiry learning model can better familiarize students with proving a subject matter, proving it by conducting their own investigations by students who are guided by the teacher. Investigations can be carried out by students both indoors such as in the laboratory or in the open field, then the results of the investigation are analyzed by students using reference books that support the material being investigated. Guided inquiry learning facilitates students in the process of constructing knowledge and seeks to motivate students through investigation and discovery. Student involvement in learning makes it possible to find solutions to questions and problems encountered when building new knowledge (Hussain et al., 2011). During investigation activities, the teacher involves students asking scientific questions, formulating hypotheses, developing them, evaluating explanations, communicating, and justifying explanations (Alkaher & Dolan, 2011). By using this guided inquiry learning model, the development of students' cognitive domains is more focused and, in everyday life, can be applied motor. This is also reinforced by research conducted by Zikri (2020) that applying this

guided inquiry model will improve the abilities of students demanded by the 2013 curriculum.

So because the guided inquiry model can improve the abilities demanded by the 2013 curriculum, it is necessary to analyze the learning process through a documentation study of the availability of the guided inquiry model in the lesson plans and worksheets made by the teacher on the physics material for class XI semester 1. how much use of this model is implemented in learning. Based on the background of the problem described, the researchers conducted a descriptive study with the title "**Analysis of Availability of Guided Inquiry Models on Lesson Plans and Student Worksheets Physics Grade XI Semester 1 in Senior High Schools**".

B. Identification of the Research Problem

Based on the problems in the background that have been described, several problems can be identified. In this study, it is necessary to identify the problem so that the researcher's focus is clear. Researchers identify the following problems:

1. There is still a lack of adequate lesson plans and student worksheets that can train students' HOTS skills, critical thinking, and creative thinking.
2. It is not yet known the availability of the guided inquiry model in the Lesson Plan (*RPP*).
3. It is not yet known the availability of the guided inquiry model on the Student Worksheet (*LKS*) used.
4. No research has been found related to analyzing the availability of guided inquiry models in lesson plans and worksheets.

C. Limitation and Scope of the Problem

Given the limitations of time, energy, cost, and ability that the author has, it is necessary to limit the problem because the research is more focused. As a limitation of the problems raised in this study, namely:

1. The analysis in question is the analysis of the availability of guided inquiry models in the lesson plans and worksheets
2. The indicators used to analyze are indicators based on the syntax contained in the guided inquiry model according to the Kuhlthau syntax, including open, immerse, explore, identify, gather, create, share, evaluate
3. The lesson plan analyzed is the lesson plan for grade XI Semester 1 from several schools made by teachers following the circular letter of the Minister of Education and Culture Number 14 of 2019
4. The student worksheets analyzed is the student worksheets for grade XI Semester 1 used by several schools made by teachers in accordance with the 2008 Ministry of National Education.

D. Formulation of Research

Based on the research problems that have been proposed, it can be formulated as follows:

1. How is the availability of a guided inquiry model in the Lesson Plans (*RPP*) used by physics teachers in grade XI semester 1 in senior high schools?
2. How is the availability of the guided inquiry model on the Student Worksheet (*LKS*) used by the physics teacher in grade XI semester 1 in senior high schools?

E. Research Objectives

Based on the formulation of the problem, the objectives of this study are:

1. Knowing the availability of a guided inquiry model in the physics lesson plan grade XI semester 1 in senior high schools.
2. Knowing the availability of a guided inquiry model on physics worksheets grade XI semester 1 in senior high schools.

F. Research Benefits

With the achievement of the research objectives, it is hoped that the results of the research carried out by researchers will be helpful for various parties, including:

1. Researchers, for physics, teaching guidelines in the future, especially with the application of the suitable model when teaching
2. Teachers and students, as a reference to improve the quality of physics learning outcomes by using lesson plans and worksheets that use guided inquiry models
3. Other researchers, as material or input to continue and develop research in the future.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

1. The results of the analysis of the availability of the guided inquiry model in the lesson plans as a whole were obtained in the quite available category. For the availability of the highest syntax, namely the evaluate syntax. Then for schools that have a guided inquiry model in the lesson plan made by the teacher, the highest category is the lesson plans SMAN 4 Solok with the code (lesson plans 3). At the same time, the availability of the lowest syntax is the explore syntax, and the lowest availability of the guided inquiry model is the lesson plan made by the teacher. Namely lesson plans SMAN 1 Padang (lesson plans 1) and lesson plans SMAN 1 Mungka (lesson plans 6) because only one material uses a guided inquiry model.
2. The results of the analysis of the availability of the guided inquiry model on the student worksheet as a whole were obtained with the category of being quite available. For the highest syntax availability, namely the open, gather, create, evaluate syntax. Then for schools that have the availability of a guided inquiry model in the student worksheet made by the teacher, the highest category is the student worksheet SMAN 2 Pariaman with the code (student worksheet 5). At the same time, the lowest syntax availability is the Immerse syntax, and the lowest availability of the guided inquiry model is the student worksheet made

by the teacher. Namely, student worksheet SMAN 1 Mungka (student worksheet 6) because none of them used the guided inquiry model.

B. Suggestion

Based on the results of the research conducted and the conclusions obtained, the researchers put forward the following suggestions:

1. Teachers should use the guided inquiry model in lesson plans and worksheets, especially on materials that require a practicum. This model can improve students' abilities to be active, critical, creative, and understand the material well.
2. Other researchers will continue to make lesson plans and worksheets that contain guided inquiry learning models.

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