

**THE IMPLEMENTATION OF GUIDED INQUIRY LEARNING MODEL  
USING STUDENT WORKSHEET BASED ON LESSON STUDY TOWARD  
STUDENT'S ACHIEVEMENT IN SOLUBILITY AND SOLUBILITY  
PRODUCT TOPIC IN SMA N 3 MEDAN**

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**ABSTRACT**

This research aims to know the student's achievement, the student's cognitive aspect most improve, and the student perceptions of implementing Guided Inquiry Learning model using student worksheet based on Lesson Study in Solubility and Solubility Product Topic compared with conventional model. The population of this research is all Senior High School students XI grade SMA N 3 Medan, which the samples are 2 classes with chosen by purposive sampling. First class as experiment class was taught by Guided Inquiry Learning model using student worksheet based on Lesson Study while second class as control class was taught by Conventional model. The instrument test had been standardized by expert validator and empiric validity process. The result of test standardization is 20 multiple choice questions with reliability 0.896 the research result normally distributed data and samples are homogenous. The result data showed that student's achievement taught by Guided Inquiry Learning model using student worksheet with lesson study gave higher significance different compared with student's achievement taught by conventional model. The statement supported by the result of hypothesis testing is  $t_{count} (10.61) > t_{table} (1.67)$ . Cognitive aspect which highest improved is C4 (Analysis) with high score 0.94. From the learning process integrated with lesson study is obtained the lowest score in caring to other and posting opinion (58%) and the highest is forming "U" shape seat and asking to teach (83%). Students perceive that implementation of Guided Inquiry Learning model using student worksheet based on Lesson Study give benefit for students, exercise their ability to study independently, understand the concept of topic, and raise learning motivation.

**Keywords:** *Solubility and Solubility Product, Lesson Study, Guided Inquiry, Student's Achievement, Student worksheet*