

## **Penerapan Instruksi pada Subfase *Experimentation* di Fase *Investigation* Pembelajaran *Guided Inquiry* untuk Meningkatkan Kemampuan Menemukan dan Menghubungkan Konsep**

### **Implementation of Instruction on Experimentation Subphase in Investigation Phase of Guided inquiry Learning to Improve Student's Ability to Finding and Relating Concept**

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**Abstract:** The research aims to improve the student's ability to finding and relating the concepts by implementing instruction on *experimentation* sub-phase in the *investigation* phase of *guided inquiry* learning. The research was a classroom action research with two cycles. The research procedure includes 3 stages: plan, observation and action, and reflection. Research subjects were high school students consisting of 10 male students and 29 female students. Data were collected through observation, interview, documentation, and tests using concept maps. The validity of data used triangulation method. Data analysis used qualitative analysis techniques by data reduction, data display, and conclusions. The result of the research showed that the students' concept map score on the pre-cycle has a range of 3,13%-21,69% and the mean of concept map score was 10,15% with 56,41% from all students above the mean, the first cycle has a range of 4,14% -69,98% and the mean of concept map score was 43,58% with 64,54% from all students above the mean, and the second cycle has a range of 33,09%-75,29% and the mean of concept map score was 48,55 with 41% from all students above the mean, thus instruction implementation of *experimentation* in the *investigation* phase of *guided inquiry* learning improves the ability to finding and relating concepts based on the increase of students' concept map score from first cycle to second cycle.

**Keywords:** instructions, experimentation, investigation, guided inquiry, finding concept, relating concept

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## **DISKUSI**

### **Berliyana Indrasari, FKIP UNS**

#### **Pertanyaan:**

Apakah dampak pengiring dan pemberian instruksi yang terjadi pada pembelajaran selain terjadi peningkatan skor pada peta konsep?

#### **Jawaban:**

Keterampilan sains PD lebih terlatih dengan instruksi, karena pada subfase *experimentation* terdapat prosedur eksperimen yang melibatkan keterampilan sains yang meliputi mengamati, mengidentifikasi serta mengumpulkan mengolah data untuk memecahkan masalah. Selain itu, PD juga mampu melaksanakan prosedur secara sistematis dan data yang dikumpulkan lebih detail.