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# Hasil Belajar dan Keterampilan Berpikir Kritis Siswa SMA pada Pembelajaran Biologi Menggunakan Model Inkuiri

# Learning Results and Critical Thinking Skills SMA on Biology Learning Using Inquiry Model

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Abstract:

This study aims to 1) examine the influence of inquiry-based learning on product cognitive learning outcomes. 2) examine the influence of inquiry-based learning on the cognitive learning outcomes of the process. 3) examine the influence of inquiry-based learning on the critical thinking skills of high school students. The model used was quasi experiment with counter balance design, and the nonequivalent control group design. The independent variables of inquiry-based learning, while the dependent variable is the result of cognitive learning of the product, the cognitive learning outcome of the process, and the critical thinking ability. The research population of students of class XI SMA Negeri 1 Sungai Tabuk Banjar District consists of three classes, namely class XI IPA-1 XI IPA-2 and XI IPA-3. The samples of the significance test to the learning outcomes of treatment I were class XI IPA-2 and XI IPA-3, and control class XI IPA-1. Class II treatment is class XI IPA-1 and XI IPA-2, while control class is class XI IPA-3. Determination of treatment class with purposive sampling technique. The sample of significance test on the critical thinking thinking ability of class is XI IPA-2 and XI IPA-3, while control is class XI IPA-1. The study was conducted three months (October-December 2016). The instrument of cognitive product and cognitive measuring processes consists of multiple choice test items, and for measuring critical thinking skills with essay tests. The cognitive learning outcomes are scored 1 if true and 0 if false, whereas critical thinking skills use rubric essay tests. Test of significance using anacova with SAS release 9.1.3. The results obtained 1) Inquiry-based learning has an effect on the product cognitive learning outcomes (F-ratio = 42.95, P = 0.001 and F-ratio 37.84; P = 0.001). 2) also affects the cognitive learning outcomes of the process (F-ratio = 94.84; P = 0.001 and F-ratio 54.56; P = 0.001); and 3) has no effect on applicability (F-ratio = 1.03, P = 0.36), but has an effect on the ability to analyze (F-ratio = 39.75, P = 0.001, F-ratio 2.83.56; P = 0.05; F-ratio 11.89; P = 0.001), and the ability to evaluate (F-ratio = 2.70; P = 0.05).

Keywords: Model inquiry, learning outcomes, thinking skills

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#### **DISKUSI**

### Nonci M. Uki

# Pertanyaan:

Kapan menggunakan desain pertama dan kapan mengunakan dasain kedua?

# Jawaban:

Desain pertama digunakan saat penelitian skripsi. Sebaiknya dikoordinasikan adanya keseimbangan perlakuan. Sementara desain kedua / nonequivalent digunakan saat penelitian desain data.