

## ABSTRAK

**Rabiyatul Adawiyah.** Pengaruh Strategi Pembelajaran *Guided Discovery* dan *Group Investigation* Terhadap Keterampilan Proses Sains dan Hasil Belajar Tingkat Tinggi Biologi Siswa Kelas X SMA. *Tesis*. Program Pascasarjana Universitas Negeri Medan, 2018.

Penelitian ini bertujuan untuk mengetahui pengaruh strategi pembelajaran *guided discovery* dan *group investigation* terhadap: (1) keterampilan proses sains; (2) hasil belajar tingkat tinggi siswa; (3) korelasi antara keterampilan proses sains dan hasil belajar tingkat tinggi siswa pada pembelajaran *guided discovery*, *group investigation*, dan konvensional di kelas X SMA Negeri 1 Kutacane. Metode penelitian menggunakan kuasi eksperimen dengan sampel penelitian sebanyak 3 kelas yang ditentukan secara *purposive sampling*. Kelas X-2 dibelajarkan dengan strategi pembelajaran *guided discovery*, kelas X-4 dibelajarkan dengan strategi *group investigation*, dan kelas X-3 (kontrol) dibelajarkan dengan strategi pembelajaran konvensional. Instrumen penelitian menggunakan instrumen tes keterampilan proses sains dan hasil belajar tingkat tinggi dengan menggunakan tes essay. Teknik analisis data menggunakan Analisis Kovariat (Anacova) pada taraf signifikan  $\alpha = 0,05$  dengan bantuan SPSS 22,0. Hasil penelitian menunjukkan: (1) ada pengaruh yang signifikan strategi pembelajaran terhadap keterampilan proses sains siswa ( $F = 141,522$ ;  $P = 0,000$ ). Hasil keterampilan proses sains siswa yang diajarkan dengan menggunakan strategi pembelajaran *guided discovery* ( $84,49 \pm 5,928$ ) lebih signifikan dibandingkan dengan strategi pembelajaran *group investigation* ( $78,76 \pm 5,761$ ) maupun konvensional ( $62,08 \pm 4,452$ ); (2) Ada pengaruh yang signifikan strategi pembelajaran terhadap hasil belajar tingkat tinggi siswa ( $F = 117,869$ ;  $P = 0,000$ ). Hasil belajar tingkat tinggi siswa yang diajarkan dengan menggunakan strategi pembelajaran *guided discovery* ( $81,76 \pm 4,482$ ) lebih signifikan dibandingkan dengan strategi pembelajaran *group investigation* ( $71,31 \pm 5,471$ ) maupun konvensional ( $64,31 \pm 4,614$ ); (3) Terdapat korelasi antara keterampilan proses sains dan hasil belajar tingkat tinggi siswa pada pembelajaran *guided discovery*, *group investigation* dan konvensional  $r = 0,850$  dan ( $r^2$ )  $0,723$ . Sebagai tindak lanjut dari hasil penelitian ini diharapkan kepada guru untuk dapat menerapkan strategi pembelajaran *guided discovery* pada materi ekosistem dalam upaya meningkatkan keterampilan proses sains dan hasil belajar tingkat tinggi siswa.

*Kata kunci:* Pembelajaran *guided discovery*, *group investigation*, Keterampilan Proses Sains, Hasil Belajar Tingkat Tinggi.

## ABSTRACT

Rabiyatul Adawiyah. The Effect of Guided Discovery and Group Investigation Guided Learning Strategies on High School Biology Students' Learning Skills and Learning Outcomes. Thesis. Graduate Program of Medan State University, 2018.

This study aims to determine the effect of guided discovery and group investigation learning strategies on: (1) science process skills; (2) high student learning outcomes; (3) correlation between science process skills and high student learning outcomes in guided discovery, group investigation, and conventional learning in grade X SMA Negeri 1 Kutacane. The research method used quasi experiment with research sample of 3 classes determined by purposive sampling. Class X-2 is taught by guided discovery learning strategy, X-4 class is taught by group investigation strategy, and X-3 class (control) is taught by conventional learning strategy. The research instrument used a test instrument of science process skills and high-level learning results using an essay test. Data analysis technique using Covariate Analysis (Anacova) at significant level  $\alpha = 0,05$  with the help of SPSS 22,0. The results showed: (1) there was a significant effect of learning strategy on students' science process skill ( $F = 141,522$ ;  $P = 0,000$ ). The result of students' science process skills taught by using guided discovery learning strategy ( $84,49 \pm 5,928$ ) is more significant compared with group investigation learning strategy ( $78,76 \pm 5,761$ ) and conventional ( $62,08 \pm 4,452$ ); (2) There is a significant effect of learning strategy on high student learning outcomes ( $F = 117,869$ ;  $P = 0,000$ ). Higher learning outcomes of students taught using guided discovery ( $81,76 \pm 4,482$ ) were significantly more significant than group investigation ( $71,31 \pm 5,471$ ) or conventional ( $64,31 \pm 4,614$ ); (3) There is a correlation between science process skills and high student learning outcomes in guided discovery, group investigation and conventional studies  $r = 0,850$  and ( $r^2 = 0,723$ ). As a follow-up of the results of this study is expected to teachers to be able to apply guided discovery learning strategies on ecosystem material in an effort to improve the science process skills and high student learning outcomes.

Keywords: Guided discovery learning, group investigation, Science Process Skills, Higher Learning Outcomes.

