

ABSTRAK

Fanny Rizki Sembiring : Pengaruh Strategi Peta Konsep dalam *Problem Based Learning* terhadap Hasil Belajar dan Kemampuan Berpikir Kritis pada Kelas X Madrasah Aliyah Negeri Binjai. Tesis. Medan: Program Pascasarjana UNIMED, 2014.

Penelitian bertujuan untuk mengetahui; (1) pengaruh strategi peta konsep dalam PBL, strategi pembelajaran *problem based learning*, dan pembelajaran tradisional terhadap hasil belajar biologi siswa pada materi pokok pencemaran lingkungan; (2) mengetahui pengaruh strategi peta konsep dalam PBL, strategi pembelajaran *problem based learning*, dan pembelajaran tradisional terhadap kemampuan berpikir kritis materi pokok pencemaran lingkungan pada kelas X Madrasah Aliyah Negeri Binjai. Metode penelitian menggunakan metode quasi eksperimental dengan sampel penelitian sebanyak 3 kelas yang ditentukan secara acak dengan teknik *cluster random sampling* yaitu 2 kelas eksperimen yang dibelajarkan dengan strategi peta konsep dalam PBL (Eksperimen A), dan yang dibelajarkan dengan strategi pembelajaran *problem based learning* (Eksperimen B), sedangkan 1 kelas sebagai kontrol yang dibelajarkan dengan strategi pembelajaran tradisional. Instrumen penelitian menggunakan tes hasil belajar sebanyak 30 soal dalam bentuk pilihan berganda; tes kemampuan berpikir kritis sebanyak 18 soal. Soal telah diuji validitas, reliabilitas, daya beda, dan tingkat kesukaran dengan menggunakan rumus *product moment*.

Hasil penelitian menunjukkan: (1) Ada pengaruh yang signifikan antara penggunaan strategi peta konsep dalam PBL, strategi pembelajaran *problem based learning* dan strategi pembelajaran tradisional terhadap hasil belajar biologi pada materi pencemaran lingkungan di kelas X Madrasah Aliyah Negeri Binjai. Hasil belajar biologi siswa yang dibelajarkan dengan strategi peta konsep dalam PBL $85,23 \pm 5,207$ secara signifikan lebih tinggi dibandingkan hasil belajar biologi siswa yang dibelajarkan dengan strategi *problem based learning* $80,94 \pm 2,395$ maupun siswa yang dibelajarkan dengan strategi tradisional $77,39 \pm 3,353$; (2) Ada pengaruh yang signifikan antara penggunaan strategi peta konsep dalam PBL, strategi pembelajaran *problem based learning* dan pembelajaran tradisional terhadap kemampuan berpikir kritis siswa pada materi pencemaran lingkungan di kelas X Madrasah Aliyah Negeri Binjai. Kemampuan berpikir kritis siswa yang dibelajarkan dengan strategi peta konsep dalam PBL $83,13 \pm 2,109$ secara signifikan lebih tinggi dibandingkan kemampuan berpikir kritis siswa yang dibelajarkan dengan strategi pembelajaran *problem based learning* $79,34 \pm 2,635$ maupun siswa yang dibelajarkan dengan tradisional $75,61 \pm 5,130$.

Kata Kunci : Hasil Belajar Biologi, Kemampuan Berpikir Kritis, Strategi Peta Konsep dalam *Problem Based Learning*, Strategi *Problem Based Learning*, Pembelajaran Tradisional.

ABSTRACT

Fanny Rizki Sembiring: The Influence of Mapping Concept Strategy in Problem Based Learning on Learning Achievement, Critical Thinking Skills in Madrasah Aliyah Negeri Binjai. Thesis: Medan Postgraduate Program in UNIMED, 2004.

The study aims to investigate ; (1) the influence of concept mapping strategy in PBL, learning strategy of problem-based learning, and conventional method learning on the students' achievement about, environment pollution; (2) the effect of concept mapping strategy in PBL, learning strategies of problem based learning, and the critical thinking skills of conventional method learning on the subject matter environment pollution. The method of the study using a quasi experimental study with 3 class samples were determined randomly by cluster random sampling technique where two experimental classes which learned the concept mapping strategy in PBL (Experiment A), and the instructional strategies taught problem-based learning (Experiment B) while one class as control learning with conventional method. The instrument of the study using the test of learning achievement consist of 30 in the form of multiple-choice questions; critical thinking skills tests consist of 18 questions. The questions have been validated, the reliability, the power of difference (daya beda), and the level of difficulty which used the product moment formula.

The results of the study showed that (1) There is a significant effect between the using of concept mapping strategy in PBL, learning strategies of problem based learning and conventional method learning toward the students learning achievement on the biology materials : environment pollution in X class Madrasah Aliyah Negeri Binjai. The students achievement taught concept mapping strategy in PBL is $85,23 \pm 5,207$ significantly higher than the achievement of students taught with problem based learning strategies is $80,94 \pm 2,395$ and the students taught with the traditional strategy is $77,39 \pm 3,353$; (2) There is a significant effect between the using of concept mapping strategy in PBL, learning strategies of problem based learning and conventional method toward the students critical thinking skills on the environment pollution materials in X class of Madrasah Aliyah Negeri Binjai. The students Critical thinking skills taught with concept mapping strategy in problem based learning is $83,13 \pm 2,109$ significantly higher than the critical thinking skills of students taught with problem-based learning instructional strategies is $79,34 \pm 2,635$ although the students who learned with the traditional $5,130 \pm 75,61$.

Keywords: Learning Achievement of Biology, Critical Thinking Skills, Mapping Concept Strategy in Problem Based Learning, Problem Based Learning Strategy, and Conventional method learning.