

## ABSTRAK

**Kurnia Putra:** Pengaruh Model Pembelajaran terhadap Kemampuan Berpikir Tingkat Tinggi dan Kemampuan Pemecahan Masalah Materi Pencemaran Lingkungan di SMPN 1 Rantau Utara.

Tujuan penelitian ini untuk mengetahui pengaruh model pembelajaran *problem based learning*, *everyone is a teacher here*, dan ekspositori terhadap kemampuan berpikir tingkat tinggi dan kemampuan pemecahan masalah pelajaran biologi siswa materi pencemaran lingkungan SMPN 1 Rantau Utara. Populasi penelitian ini adalah seluruh siswa kelas VII SMPN 1 Rantau Utara Tahun Pembelajaran 2016/2017 berjumlah 373 siswa terdiri dari kelas VII<sub>1</sub> sampai dengan VII<sub>9</sub>. Sampel penelitian ini diambil dengan teknik *cluster random sampling* sebanyak 3 kelas masing-masing kelas terdiri dari 34 siswa. Kelas A sebagai kelas *problem based learning*, kelas B sebagai kelas *everyone is a teacher here*, dan kelas C sebagai kelas ekspositori. Instrument pengumpul data kemampuan berpikir tingkat tinggi dan kemampuan pemecahan masalah siswa digunakan tes uraian materi pencemaran lingkungan. Teknik analisis data menggunakan teknik analisis kovariat (ANACOVA) dengan  $\alpha = 0,05$ . Hasil penelitian yang diperoleh: hasil analisis kovariat menunjukkan bahwa model pembelajaran signifikan berpengaruh terhadap kemampuan berpikir tingkat tinggi ( $F = 1225,523$ ;  $P = 0,00$ ). Rata-rata kemampuan berpikir tingkat tinggi kelas *problem based learning* memberikan pengaruh sebesar 3,71 lebih tinggi dibandingkan kelas *everyone is a teacher here* dan 39,94 lebih tinggi dari ekspositori. Kelas *everyone is a teacher here* memberi pengaruh sebesar 36,23 lebih tinggi dibandingkan kelas ekspositori; dan hasil analisis kovariat menunjukkan bahwa model pembelajaran signifikan berpengaruh terhadap kemampuan pemecahan masalah ( $F = 414,239$ ;  $P = 0,000$ ). Rata-rata kemampuan pemecahan masalah kelas *problem based learning* memberikan pengaruh sebesar 3,3 lebih tinggi disbanding kelas *everyone is a teacher here* dan 34,18 lebih tinggi dari ekspositori. Kelas *everyone is a teacher here* memberi pengaruh sebesar 30,88 lebih tinggi dibandingkan ekspositori. Dapat disimpulkan bahwa terdapat pengaruh yang signifikan model pembelajaran *problem based learning* dan *everyone is a teacher here* terhadap kemampuan berpikir tingkat tinggi dan kemampuan pemecahan masalah pelajaran biologi siswa materi pencemaran lingkungan SMPN 1 Rantau Utara.

Kata Kunci : Model Pembelajaran, Kemampuan Berpikir Tingkat Tinggi, Kemampuan Pemecahan Masalah

## ABSTRACT

**Kurnia Putra:** The influence Models on Student's Higher-order Thinking and Problem Solving Skills Environmental Pollution Topics in SMPN 1 North Rantau.

The purpose of this study was to determine The influence of *problem-based learning*, *everyone is a teacher here*, and conventional models on student's higher-order thinking and problem solving skills in biology environmental pollution topics in SMPN 1 North Rantau. The population of this study was all first year of junior high students at SMPN 1 North Rantau 2016/2017 Academic Year, which are consist of 373 students in total, ranged from classes VII<sub>1</sub> to VII<sub>9</sub>. Three classes were taken as sample by cluster random sampling technique with 34 total students in every class. Class A for *problem-based learning class*, class B for *everyone is a teacher here class* and class C for conventional. Higher-order thinking instrument used was essay test of environmental pollution topics. Data analysis technique used was analysis of covariate (ANACOVA) with  $\alpha = 0,05$ . The results were ANACOVA showed that learning models significantly influence on higher-order thinking ( $F = 1225,523$ ;  $P = 0,00$ ). Average score of higher-order thinking in *problem-based learning class* gave 3.71 point influence higher than *everyone is a teacher here class* and 39,94 higher than conventional one. *everyone is a teacher here class* gave influence 36.23 higher compared to conventional class and ANACOVA result showed that learning models gave influence on problem solving skills ( $F = 414,239$ ;  $P = 0,000$ ). Average score of problem solving skills in *problem-based learning class* gave influence 3,3 higher than *everyone is a teacher here* and 34,18 point higher than conventional one. *Everyone is a teacher here class* gave 30.88 point higher than conventional class. In conclusion, there were significant influences of both models on student's higher-order thinking skills in environmental pollution topics.

Keywords : Problem-Based Learning, Everyone Is A Teacher Here, Higher-Order Thinking Skills