

ABSTRAK

Maiderawati: Pengaruh Model Pembelajaran Terhadap Sikap Ilmiah, Kemampuan Berpikir Kreatif dan Hasil Belajar Biologi Siswa SMAN 1 Telukkuantan Riau. Tesis. Program Pascasarjana UNIMED, Medan 2015.

Penelitian bertujuan untuk mengetahui: pengaruh model pembelajaran (*Project Based Learning*, kooperatif tipe NHT dan konvensional) terhadap (1) hasil belajar biologi; (2) sikap ilmiah; (3) kemampuan berpikir kreatif siswa SMAN 1 Telukkuantan Riau. Penelitian quasi eksperimen ini menggunakan desain penelitian *pretest and posttest control group design*. Populasi penelitian adalah seluruh siswa kelas XI MIPA dan terdapat tiga kelas paralel yang dipilih menggunakan teknik *cluster random sampling* yaitu kelas XI MIPA₃ dibelajarkan dengan *Project Based Learning*, kelas XI MIPA₄ dibelajarkan dengan model pembelajaran kooperatif tipe NHT, dan kelas XI MIPA₂ dibelajarkan dengan pembelajaran konvensional. Tiga instrumen tes digunakan dalam penelitian ini: (1) tes hasil belajar; (2) lembaran observasi sikap ilmiah; dan (3) daftar isian kemampuan berpikir kreatif. Uji persyaratan menunjukkan bahwa data terdistribusi normal dan homogen. Teknik analisis menggunakan teknik analisis kovariat (ANAKOVA) dan analisis varians satu jalur (*One Way Anova*) pada taraf signifikansi $\alpha = 0,05$ dengan bantuan program SPSS 19.0 diujikan dalam penelitian ini. Hasil penelitian diperoleh bahwa: (1) Terdapat pengaruh model pembelajaran terhadap hasil belajar biologi siswa SMAN 1 Telukkuantan, Riau, hasil belajar siswa yang dibelajarkan dengan model *project based learning* berbeda secara signifikan dengan kelas yang dibelajarkan dengan model kooperatif tipe NHT ($P = 0,049$), dan pembelajaran konvensional ($P = 0,037$); (2) Terdapat pengaruh model pembelajaran terhadap sikap ilmiah siswa SMAN 1 Telukkuantan, Riau, sikap ilmiah yang dibelajarkan dengan model *project based learning* tidak berbeda signifikan dengan kelas yang dibelajarkan dengan model kooperatif tipe NHT ($P = 0,138$) tetapi berbeda signifikan dengan kelas konvensional ($P = 0,000$); dan (3) Terdapat pengaruh model pembelajaran terhadap kemampuan berpikir kreatif siswa SMAN 1 Telukkuantan, Riau, kemampuan berpikir kreatif yang dibelajarkan dengan model *project based learning* tidak berbeda signifikan dengan kelas yang dibelajarkan dengan model kooperatif tipe NHT ($P = 0,102$) tetapi berbeda signifikan dengan kelas konvensional ($P = 0,046$). Berdasarkan hasil penelitian dapat disimpulkan bahwa model *Project Based Learning* lebih baik dari model kooperatif tipe NHT dan konvensional. Model *project based learning* memungkinkan siswa untuk melakukan aktivitas belajar sainstifik, aktivitas tersebut membantu proses konstruksi pengetahuan bagi siswa. Model kooperatif tipe NHT membuat siswa menjadi lebih mempersiapkan diri dalam pembelajaran, siswa bersungguh-sungguh belajar dalam kelompoknya untuk penguasaan materi pelajaran.

Kata Kunci: *Project Based Learning*, Kooperatif, NHT, Hasil Belajar, Sikap Ilmiah, Kemampuan Berpikir Kreatif.

ABSTRACT

Maiderawati: The Effect of Learning Model on Students' Scientific Attitude, Creative Thinking Ability and Biology Learning Outcomes in SMAN 1 Telukkuantan, Riau. Thesis. Medan: Post Graduete Study Program, UNIMED 2015.

This research was aimed to determine: the effect of learning model (Project Based Learning, cooperative NHT type and conventional) on students' (1) biology learning outcomes; (2) scientific attitude; (3) creative thinking ability in SMAN 1 Telukkuantan, Riau. A quasi-experimental research used *pretest and posttest control group design*. The population in this study was all students from XI MIPA and there were three parallel classes choosen as the sample using cluster random sampling technique, XI MIPA₃ students were being taught using *Project Based Learning*, XI MIPA₄ students were being taught with cooperative learning model NHT type, and XI MIPA₂ students were being taught with conventional learning model. Three research instruments were used in this study: (1) achievement test; (2) observation of students' scientific attitude; and (3) creative thinking ability checklists. The statistical assumption test revealed that the data were normally distributed and homogeneous. The Analysis of Covariances (ANCOVA) and One Way Analysis of Variances (One Way ANOVA) followed by Tukey's test with a significance level $\alpha = 0,05$ SPSS program version 19.0 were performed in this study. The result of this research showed that: (1) There is the effect of learning model on students at SMAN 1 Telukkuantan Riau learning outcome, those who were taught by using project based learning model had significantly higher learning outcome than those who were taught by using cooperative learning model NHT type ($P = 0.049$), and conventional learning ($P = 0.037$); (2) There is an effect of learning model on students' scientific attitude in SMAN 1 Telukkuantan, Riau, scientific attitude of students who were taught by project based learning model was not significantly different than those who were taught by using cooperative learning model NHT type ($P = 0.138$), but was significantly different from conventional learning ($P = 0.000$); and (3) There is an effect of learning model on students' creative thinking ability in SMAN 1 Telukkuantan, Riau, creative thinking ability of students who were taught by project based learning model was not significantly different than those who were taught by using cooperative learning model NHT type ($P = 0.102$), but was significantly different from conventional learning ($P = 0.046$). Results showed that Project Based Learning model is better than cooperative learning model NHT type and conventional learning. Project Based Learning model enable students to do scientifically influenced learning activities, in which it helps the process of constructing student' knowledge. cooperative learning model NHT type helps students to be more prepared by thoroughly learn in their group and achieved learning mastery.

Keywords: *Project Based Learning*, Cooperative, NHT, biology learning outcomes, Scientific Attitude, Creative Thinking Ability