

ABSTRACT

NoviaIndra. 2020. The Comparison Learning Competence Between Implementation Problem Based Instruction (PBI) Learning Model with Creative Problem Solving (CPS) Based Prior Knowledge of Class XI Students of Adabiah Senior High School Padang. Thesis. Padang State University Post Graduate Program.

The learning process in Biology requires students to have the ability to analyze the constituent parts and functions of a process or concept, and to compile a methodology or process that will be implemented through the application of a problem application. This condition requires teachers to be critical in determining the models, methods and media that will be used in the learning process. Adabiah Padang high school teachers have tried to apply the Problem Based Instruction learning model, but applying the PBI model still has not provided the expected improvement in the competence of students. Therefore, researchers offer a Creative Problem Solving learning model as an alternative to improving learning competencies by paying attention to cognitive competencies as an important prerequisite in increasing the competence of students.

This type of research is a quasi-experimental. The design of research is a 2x2 factorial design for prior knowledge by paying attention to cognitive competencies, while the research design for measuring affectives and psychomotor competencies uses Static Group Comparisons. The population of this study were students of class XI MIPA SMA Adabiah Padang who were registered in the 2019/2020 school year. The sample was determined by purposive sampling technique. The instruments used were multiple choice sheets, decision sheets, and products. Analysis of knowledge data with cognitive competencies used two-way ANOVA, while affectives and psychomotor used the Mann Whitney U test with the help of SPSS 16 software.

The results showed that the knowledge competencies that paid attention to the cognitive competencies of students and the affectives and psychomotor that applied the CPS learning model were better than students who applied the PBI model. In addition, there is a significant interaction between the learning model and the cognitive ability to the competence of students.

Keywords: Learning Competence, Problem Based Instruction (PBI), Creative Problem Solving (CPS), Prior Knowledge

ABSTRAK

Novia Indra. 2020. Perbandingan Kompetensi Belajar Antara Penerapan Model Pembelajaran Problem Based Instruction dengan Creative Problem Solving Ditinjau dari Kemampuan Awal Peserta Didik Kelas XI SMA Adabiah Padang. Tesis. Program PascaSarjana Universitas Negeri Padang.

Proses pembelajaran dalam Biologi menuntut peserta didik memiliki kemampuan menganalisis dalam mengidentifikasi bagian-bagian dan fungsi-fungsi konstituen dari suatu proses atau konsep, serta menyusun metodologi atau proses yang akan diimplementasikan melalui kemampuan pemecahan masalah. Kondisi ini menuntut guru harus kritis dalam menentukan model, metode dan media yang akan digunakan dalam proses pembelajaran. Guru SMA Adabiah Padang telah mencoba menerapkan model pembelajaran *Problem Based Instruction*, namun sayangnya penerapan model PBI masih belum memberikan peningkatan kompetensi peserta didik yang diharapkan. Oleh karena itu peneliti menawarkan model pembelajaran *Creative Problem Solving* sebagai model alternatif untuk meningkatkan kompetensi belajar dengan memperhatikan kemampuan awal sebagai prasyarat penting dalam meningkatkan kompetensi pengetahuan peserta didik.

Jenis penelitian ini adalah penelitian kuasi eksperimen. Desain penelitian berupa *Factorial Design 2x2* untuk kompetensi pengetahuan dengan memperhatikan kemampuan awal, sedangkan desain penelitian untuk mengukur kompetensi sikap dan keterampilan menggunakan *The Static Group Comparison*. Populasi pada penelitian ini adalah peserta didik kelas XI MIPA SMA Adabiah Padang yang terdaftar pada tahun ajaran 2019/2020. Sampel ditentukan dengan teknik *purposive sampling*. Instrumen yang digunakan berupa lembar soal pilihan ganda, lembar penilaian sikap, dan penilaian produk. Analisis data pengetahuan dengan kemampuan awal menggunakan ANOVA dua arah, sedangkan sikap dan keterampilan menggunakan uji *Mann Whitney U* dengan bantuan *software SPSS 16*.

Hasil penelitian menunjukkan bahwa kompetensi pengetahuan yang memperhatikan kemampuan awal peserta didik serta sikap dan keterampilan yang menerapkan model pembelajaran CPS lebih baik dibandingkan peserta didik yang menerapkan model PBI. Selain itu, terdapat interaksi yang signifikan antara model pembelajaran dengan kemampuan awal terhadap kompetensi pengetahuan peserta didik.

Keywords : *Kompetensi Belajar, Problem Based Instruction (PBI), Creative Problem Solving (CPS), Kemampuan Awal*