

## ABSTRAK

### Satria Mihardi. Pengaruh Model Project Based Learning Dengan Lembar Kerja KWL (Know-Want-Learn) Terhadap Berpikir Kreatif Pada Penyelesaian Masalah Fisika.

Studi Penelitian ini bertujuan menganalisis pengaruh model Project Based Learning dengan lembar kerja KWL (Know-Want-Learn) terhadap Berpikir Kreatif pada penyelesaian masalah Fisika di Universitas Negeri Medan. Tujuan penelitian menganalisi perbedaan pada Berpikir Kreatif Siswa yang dicapai melalui model Project Based Learning dengan lembar kerja KWL dan model Cooperative Learning dalam menyelesaikan permasalahan Fisika, menganalisis perbedaan Berpikir Kreatif Siswa dengan tingkat Berpikir Divergen di atas rata-rata dan di bawah rata-rata dalam menyelesaikan permasalahan Fisika, dan menganalisis interaksi antara model Project Based Learning dengan lembar kerja KWL dan model Cooperative Learning dengan tingkat Berpikir Divergen terhadap Berpikir Kreatif Siswa dalam menyelesaikan permasalahan Fisika. Jenis penelitian yang dilakukan adalah eksperimen-semu dengan desain dua grup pretes dan posttest pada populasi Mahasiswa Universitas Negeri Medan T.P 2012/2013 yang dipilih secara random dan dibagi menjadi dua kelas: kelas eksperimen dan kelas kontrol. Instrumen yang digunakan berupa soal Uraian dengan jumlah 5 (lima) soal yang telah diuji validitas dan reliabelitasnya. Setiap soal memiliki penilaian indikator Berpikir Divergen dan Berpikir Kreatif. Analisis data menggunakan uji Anava dua jalur untuk statistik parametrik dan Kruskall-Wallis untuk statistik non-parametrik jika sampel tidak berdistribusi normal atau homogen. Dari hasil penelitian dapat disimpulkan Pertama, hasil menunjukkan Berpikir Kreatif Siswa dengan model Project Based Learning lebih besar daripada model Cooperative Learning. Hal ini membuktikan adanya perbedaan Berpikir Kreatif Siswa yang dicapai melalui model Project Based Learning dengan lembar kerja KWL dan model Cooperative Learning dalam menyelesaikan permasalahan Fisika. Kedua Second, hasil menunjukkan Berpikir Kreatif Siswa dengan tingkat Berpikir Divergen di atas rata-rata lebih besar dibandingkan Berpikir Divergen di bawah rata-rata. Hal ini membuktikan adanya perbedaan Berpikir Kreatif Siswa dengan tingkat Berpikir Divergen di atas rata-rata dan di bawah rata-rata dalam menyelesaikan permasalahan Fisika. Ketiga, secara umum hasil menunjukkan tidak adanya pengaruh Berpikir Divergen terhadap Berpikir Kreatif Siswa pada model Project Based Learning. Hal ini membuktikan adanya interaksi antara model Project Based Learning dengan lembar kerja KWL dan model Cooperative Learning dengan tingkat Berpikir Divergen terhadap Berpikir Kreatif Siswa dalam menyelesaikan permasalahan Fisika. Dari perbedaan tersebut dapat dilihat pengaruh model Project Based Learning dengan lembar kerja KWL terhadap Berpikir Kreatif pada penyelesaian masalah Fisika.

**Keywords:**Model Project Based Learning, Lembar Kerja KWL, Berpikir Kreatif, dan Berpikir Divergen

## ABSTRACT

### **Satria Mihardi. Effect of Project Based Learning Model with KWL (Know-Want-Learn) Worksheet on Creative Thinking in Solved Physics Problems.**

This study research was aim to analyze effect of project based learning model with KWL worksheet on creative thinking in solved physics problems at State University on Medan. The aim of the research were analyzed the differences in creative thinking of Students through between the project based learning model with KWL worksheet and cooperative learning model to solved problems in physics, analyzed the differences in the creative thinking of students who have under average and above average category in divergent thinking to solved physics problems, and analyzed interaction between the Project Based Learning model with KWL Worksheet and Cooperative Learning model with the divergent thinking level in Student creative thinking to solved problems in Physics. The type of this research was quasy-experiment with two-group pretest and posttest design with the population in this research is all college in Undergraduated Education Physics of State University of Medan A.Y. 2012/2013 were randomly selected and divided into two classes: the experiment class and the control class. The instruments of the research was a essay test in higher order thinking with five item. Every item will be assessment for divergent thinking and creative thinking indicators. Analysis data would be using Anova Two ways for parametrics statistical and Kruskall-Wallis if sample is nonparametric sample distribution. From the result were concluded First, The result shown that Student creative thinking in project based learning model is greater than cooperative learning models. It proved there were different in creative thinking of Students through between the Project Based Learning model with KWL Worksheet and Cooperative Learning model to solved problems in Physics. Second, The result shown that Student creative thinking in above average Divergent Thinking was greater than under average Divergent Thinking in learning. It proved there were different in the creative thinking of Students who have Under Average and Above Average category in Divergent Thinking to solved Physics problems. Third, as generally result shown that DT wasn't effect Student creative thinking in PjBL model. It proved there were any interaction between the Project Based Learning model with KWL Worksheet and Cooperative Learning model with the divergent thinking level in Student creative thinking to solved problems in Physics. From those different could be seen that the effect of project based learning model with KWL worksheet on creative thinking in solved physics problems.

**Keywords:**Project Based Learning Model, KWL Worksheet, Creative Thinking, and Divergent Thinking