

**EFEKTIVITAS MODEL PEMBELAJARAN *PROBLEM BASED LEARNING* DAN *GROUP INVESTIGATION* TERHADAP HASIL BELAJAR SISWA PADA MATA PELAJARAN PEKERJAAN DASAR ELEKTROMEKANIK PROGRAM KEAHLIAN TEKNIK OTOMASI INDUSTRI DI SMK NEGERI 2 DEPOK**

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**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui: (1) peningkatan hasil belajar siswa dengan menggunakan model pembelajaran *Problem Based Learning* pada mata pelajaran Pekerjaan Dasar Elektromekanik kelas X SMK Negeri 2 Depok; (2) peningkatan hasil belajar siswa dengan menggunakan model pembelajaran *Group Investigation* pada mata pelajaran Pekerjaan Dasar Elektromekanik kelas X SMK Negeri 2 Depok; (3) efektivitas menggunakan model pembelajaran *Problem Based Learning* dan model pembelajaran *Group Investigation* pada mata pelajaran Pekerjaan Dasar Elektromekanik kelas X SMK Negeri 2 Depok; (4) Memperoleh perbedaan hasil belajar siswa antara menggunakan model pembelajaran *Problem Based Learning* dengan model pembelajaran *Group Investigation* pada mata pelajaran Pekerjaan Dasar Elektromekanik kelas X SMK Negeri 2 Depok.

Penelitian ini merupakan penelitian kuasi eksperimen *Pretest-Posttes Non Equivalent Control Group Design*. Subyek penelitian adalah siswa kelas X TOI A dan X TOI B di SMK Negeri 2 Depok sebanyak 62 orang. Teknik pengumpulan data menggunakan tes dan angket. Analisis data menggunakan deskriptif, uji *independent sample t-test*, dan *paired sample t-test*.

Hasil penelitian menunjukkan bahwa: (1) hasil belajar siswa kelas yang diajar dengan model *Problem Based Learning* yaitu nilai rata-rata antara *pretest* dan *posttest* mengalami peningkatan sebesar 17,90; (2) hasil belajar siswa kelas yang diajar dengan model *Group Investigation* yaitu nilai rata-rata antara *pretest* dan *posttest* mengalami peningkatan sebesar 18,23; (3) efektivitas menggunakan model *Problem Based Learning* mempunyai skor gain 0,382 termasuk dalam kategori sedang dan model *Group Investigation* mempunyai skor gain 0,390 termasuk dalam kategori sedang; (4) kelompok siswa yang mengikuti pembelajaran *Problem Based Learning*, hasil belajar setelah perlakuan tidak sama dibandingkan sebelum perlakuan; (5) kelompok siswa yang mengikuti pembelajaran *Group Investigation*, hasil belajar setelah perlakuan tidak sama dibandingkan sebelum perlakuan; (6) hasil belajar kelompok siswa yang mengikuti pembelajaran *Problem Based Learning* sama dibandingkan hasil belajar kelompok siswa yang mengikuti pembelajaran *Group Investigation*.

**Kata Kunci:** *Problem Based Learning*, *Group Investigation*, Hasil Belajar.

**EFFECTIVENESS OF THE LEARNING MODEL PROBLEM BASED  
LEARNING AND GROUP INVESTIGATION TOWARDS STUDENT  
LEARNING OUTCOMES IN LESSONS ELECTROMECHANICAL BASIC  
WORK EXPERTISE PROGRAM INDUSTRIAL AUTOMATION  
ENGINEERING IN SMK NEGERI 2 DEPOK**

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**ABSTRACT**

*This research knowing to determine: (1) improvement of student learning outcomes by using the Problem Based Learning learning model in the subjects of Electromechanical Basic Work in class X SMK Negeri 2 Depok; (2) increasing student learning outcomes by using the Group Investigation learning model in the subjects of Electromechanical Basic Work in class X SMK Negeri 2 Depok; (3) the effectiveness of using the Problem Based Learning learning model and the Group Investigation learning model in the subjects of Electromechanical Basic Work in class X SMK Negeri 2 Depok; (4) Obtaining differences in student learning outcomes between using the Problem Based Learning learning model and the Group Investigation learning model in the subject of Electromechanical Basic Work in class X SMK Negeri 2 Depok.*

*This research is a quasi experimental Pretest-Posttes Non Equivalent Control Group Design experiment. The research subjects were 62 students of class X TOI A and X TOI B in SMK Negeri 2 Depok as many as 62 people. Data collection techniques using tests and questionnaires. Data analysis used descriptive, independent sample t-test, and paired sample t-test.*

*The results showed that: (1) the learning outcomes of class students who were taught with the Problem Based Learning model ie the average value between pretest and posttest had increased by 17.90; (2) the learning outcomes of class students taught by the Group Investigation model, namely the average value between pretest and posttest has increased by 18.23; (3) the effectiveness of using the Problem Based Learning model has a gain score of 0.382 included in the medium category and the Group Investigation model has a gain score of 0.390 included in the medium category; (4) groups of students who follow Problem Based Learning, learning outcomes after treatment are not the same compared to before treatment; (5) groups of students participating in Group Investigation learning, learning outcomes after treatment are not the same compared to before treatment; (6) the learning outcomes of groups of students participating in Problem Based Learning are the same compared to the learning outcomes of groups of students who participate in Group Investigation learning.*

**Keywords:** *Problem Based Learning, Group Investigation, Learning Outcomes*