

ABSTRAK

Nina Fadilah. Peningkatan kemampuan pemecahan masalah matematis dan kemandirian belajar siswa SMK PAB Saentis Melalui Model pembelajaran *Problem Solving*. Tesis Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2017.

Tujuan penelitian ini untuk: (1) mengetahui apakah terdapat peningkatan kemampuan pemecahan masalah matematis siswa yang diajar dengan model pembelajaran *Problem Solving*, (2) mengetahui apakah terdapat peningkatan kemandirian belajar siswa yang diajar dengan model pembelajaran *Problem Solving* (3) mengetahui apakah terdapat interaksi antara model pembelajaran dengan kemampuan awal matematis siswa terhadap kemampuan pemecahan masalah matematis, (4) mengetahui apakah terdapat interaksi antara model pembelajaran dengan kemampuan awal siswa terhadap kemandirian belajar siswa. Penelitian ini dilaksanakan di SMK BM PAB Saentis. Penelitian ini merupakan suatu studi eksperimen dengan desain penelitian *pre-test-post-test control group design*. Populasi dalam penelitian ini adalah seluruh siswa di SMK BM PAB dengan mengambil kelas XI sebagai sampel melalui teknik pengambilan sampel secara acak. Instrumen yang digunakan terdiri atas tes kemampuan pemecahan masalah matematis dan angket kemandirian belajar siswa. Instrumen tersebut dinyatakan telah memenuhi syarat validitas isi, serta koefisien reliabilitas. Data dianalisis dengan uji ANAVA dua jalur. Sebelum digunakan uji anava dua jalur terlebih dahulu dilakukan uji homogenitas dalam penelitian dan normalitas dalam penelitian ini dengan taraf signifikansi 5%. Berdasarkan hasil analisis tersebut diperoleh hasil penelitian yaitu: (1) terdapat peningkatan kemampuan pemecahan masalah matematis siswa yang diajar dengan model pembelajaran *Problem Solving*, (2) terdapat peningkatan kemandirian belajar siswa yang diajar dengan model pembelajaran *Problem Solving*, (3) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal siswa terhadap kemampuan pemecahan masalah matematis, (4) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal siswa terhadap kemandirian belajar. Temuan penelitian merekomendasikan model pembelajaran *Problem Solving* dijadikan salah satu model pembelajaran yang digunakan di sekolah untuk mencapai kompetensi kreatif, variatif dan inovatif.

Kata Kunci: Model Pembelajaran *Problem Solving*, Kemampuan Pemecahan Masalah Matematis dan Kemandirian Belajar Siswa.

ABSTRACT

Nina Fadilah. The increasing of students mathematical Problem Solving Abilities and student's self regulated learning of SMK PAB Saentis students taught *Problem Solving* instruction model. Thesis of study Program of Mathematical Education Postgraduate in State University Medan, 2017.

The research aimed to: (1) know whether student mathematical *Problem Solving* abilities increased which taught by *Problem Solving* instruction model, (2) know whether student's self regulated learning increased which taught by *Problem Solving* instruction model, (3) know whether there is an interaction between instruction model by initial ability of mathematic in student to mathematical Problem Solving ability, (4) know whether there is an interaction between instruction model by initial ability to student's self regulated learning. This research was conducted at SMK BM PAB Saentis. This was an experiment study by pre-test-post-test control group design. The population of research was all students of SMK BM PAB by taking class XI as sample through random sampling. The instruments used consisted of test mathematical problem solving ability and questionnaire of student's self regulated learning. The instrument has been stated to have completed the content validity and reliability coefficient requirements. The data was analyzed by two ways ANAVA test. Prior to two ways ANAVA test, the homogrinity test had been conducted in research and normality of this research at significance level 5%. The result of research through analysis indicated that: (1) the mathematical problem solving ability in students taught by problem solving instruction model increased (2) there was increase in self regulated learning of students taught by Problem Solving instruction model, (3) there was not interaction between instruction model with initial ability of students to mathematical Problem Solving ability, (4) there was not interaction between instruction model with initial ability of students to independence of learning.

Key word: Problem Solving Instruction Model, Mathematical Problem Solving Ability, and Self Regulated Learning.

