

ABSTRAK

Heni Pujiastuti (2014). Pembelajaran *Inquiry Co-operation Model* untuk Meningkatkan Kemampuan Pemecahan Masalah, Komunikasi, dan *Self-Esteem* Matematis Siswa SMP.

Tujuan utama penelitian ini untuk menyelidiki pencapaian dan peningkatan kemampuan pemecahan masalah matematis, kemampuan komunikasi matematis, dan *self-esteem* matematis siswa, sebagai akibat dari pembelajaran *Inquiry Co-operation Model* (ICM) dan pembelajaran konvensional (PK). Penelitian ini menggunakan metode campuran (*mixed methods*) dengan model penggabungan KUANTITATIF dan kualitatif. Desain yang digunakan yaitu *concurrent embedded design*. Populasi penelitian ini adalah seluruh siswa Sekolah Menengah Pertama Negeri di Kota Serang, Provinsi Banten. Adapun sampelnya siswa kelas VIII yang berasal dari peringkat sekolah tinggi dan sedang. Pada masing-masing peringkat sekolah dipilih secara acak satu sekolah dan dari setiap sekolah dipilih secara acak dua kelas. Satu kelas sebagai kelompok eksperimen yang mendapat pembelajaran ICM dan satu kelas lagi sebagai kelompok kontrol yang mendapat pembelajaran PK. Instrumen yang digunakan dalam penelitian ini terdiri atas tes kemampuan awal matematis (KAM), tes kemampuan pemecahan masalah matematis, tes kemampuan komunikasi matematis, skala *self-esteem* matematis, dan lembar observasi. Hasil analisis data menggunakan uji-t, uji-t', uji *Mann-Whitney*, dan ANOVA dua jalur menyimpulkan bahwa: (1) pencapaian dan peningkatan kemampuan pemecahan masalah matematis, kemampuan komunikasi matematis, dan *self-esteem* matematis siswa yang mendapat pembelajaran ICM lebih baik daripada siswa yang mendapat pembelajaran PK; (2) tidak ada interaksi antara pembelajaran dan KAM terhadap pencapaian dan peningkatan kemampuan pemecahan masalah dan komunikasi matematis siswa; (3) ada interaksi antara pembelajaran dan KAM terhadap pencapaian *self-esteem* matematis siswa; (4) tidak ada interaksi antara pembelajaran dan KAM terhadap peningkatan *self-esteem* matematis siswa; (5) tidak ada interaksi antara pembelajaran dan peringkat sekolah terhadap pencapaian dan peningkatan kemampuan pemecahan masalah, komunikasi, dan *self-esteem* matematis siswa; dan (6) ada korelasi yang signifikan antara kemampuan pemecahan masalah, komunikasi, dan *self-esteem* matematis.

Kata kunci: *Inquiry Co-operation Model*, Pemecahan Masalah Matematis, Komunikasi Matematis, *Self-Esteem* Matematis.

ABSTRACT

Heni Pujiastuti (2014). Inquiry Co-operation Model for Enhancing Junior High School Students' Abilities in Mathematical Problem Solving, Communication, and Self-Esteem.

The main purpose of this research is to investigate the achievement and enhancement of students' mathematical problem solving ability, mathematical communication ability, and mathematical self-esteem, as a result of Inquiry Co-operation Model (ICM) and Conventional Learning (CL). This research used mixed methods with the incorporation QUANTITATIVE and qualitative models. The research design used is concurrent embedded design. Population of the research is Junior High School students in Serang City, Banten Province. The sample is eighth grade students from two school levels classified as high and medium level. Two classes are randomly selected from each school, one class as the experimental group who received ICM and another class as a control group who received CL. The instrument used consisted of mathematical prior ability test, mathematical problem solving ability test, mathematical communication ability test, mathematical self-esteem scale, and observation sheets. The results of data analysis using t-test, t'-test, Mann-Whitney test, and two-way ANOVA concluded that: (1) the achievement and enhancement of students' mathematical problem solving ability, mathematical communication ability, and mathematical self-esteem who received ICM are better than those of students who received CL, (2) there is no interaction between learning model and mathematical prior ability toward achievement and enhancement of students' mathematical problem solving and communication ability, (3) there is an interaction between learning model and mathematical prior ability toward achievement of students' mathematical self-esteem, (4) there is no interaction between learning model and mathematical prior ability toward enhancement of students' mathematical self-esteem, (5) there are no interaction between learning model and school levels toward achievement and enhancement of students' mathematical problem solving, communication, and self-esteem; and (6) there is a significant correlation between mathematical problem solving, communication, and self-esteem.

Keywords: Inquiry Co-operation Model, Mathematical Problem Solving, Mathematical Communication, Mathematical Self-Esteem.