

Abstrak

Norliyana. (1404585). Penerapan Pembelajaran *Thinking Aloud Pair Problem Solving* (TAPPS) untuk Meningkatkan Kemampuan Komunikasi Matematis dan *Self-Efficacy* Siswa SMP

Penelitian ini dilatarbelakangi oleh pentingnya kemampuan komunikasi matematis dan *self-efficacy* siswa. Namun, kemampuan komunikasi matematis dan *self-efficacy* siswa pada kenyataannya masih rendah. Oleh karena itu, pembelajaran *Thinking Aloud Pair Problem Solving* (TAPPS) diterapkan untuk mengatasi permasalahan tersebut. Masalah yang ingin diteliti yaitu peningkatan kemampuan komunikasi matematis ditinjau secara keseluruhan dan ditinjau dari kategori kemampuan awal matematis (KAM). Diteliti juga *self-efficacy* siswa antara kelas eksperimen dan kelas kontrol. Penelitian ini merupakan kuasi eksperimen yang menggunakan desain kelompok kontrol nonekuivalen. Populasi dalam penelitian ini adalah seluruh siswa kelas VII salah satu Sekolah Menengah Pertama Negeri di Kabupaten Banjar. Kelas eksperimen diberi perlakuan dengan pembelajaran TAPPS dan kelas kontrol dengan pembelajaran langsung pada materi bangun datar segi empat. Instrumen yang digunakan adalah tes kemampuan komunikasi matematis, angket *self-efficacy* dan lembar observasi. Analisis kuantitatif menggunakan uji-*t* dan uji *Mann-Whitney*. Sedangkan analisis kualitatif dilakukan secara deskriptif. Hasil penelitian ini menunjukkan bahwa peningkatan kemampuan komunikasi matematis siswa yang memperoleh pembelajaran TAPPS lebih tinggi dibandingkan siswa yang memperoleh pembelajaran biasa. Peningkatan kemampuan komunikasi matematis siswa yang memperoleh pembelajaran TAPPS tidak lebih tinggi dibandingkan siswa yang memperoleh pembelajaran biasa ditinjau dari KAM kategori tinggi dan rendah. Sedangkan peningkatan kemampuan komunikasi matematis siswa yang memperoleh pembelajaran TAPPS lebih tinggi dibandingkan siswa yang memperoleh pembelajaran biasa ditinjau dari KAM kategori sedang. Adapun *self-efficacy* siswa yang belajar dengan pembelajaran TAPPS tidak lebih baik dibandingkan siswa yang belajar dengan pembelajaran biasa.

Kata Kunci : Komunikasi Matematis, *Self-Efficacy*, *Thinking Aloud Pair Problem Solving*, Bangun Datar Segi Empat.

Abstract

Norliyana. (1404585). The Implementation of Thinking Aloud Pair Problem Solving (TAPPS) Learning to Improve Mathematical Communication Skills and Self-Efficacy of Junior High School Students.

This research was based on the importance of mathematical communication skills and self-efficacy of the students. However, mathematical communication skills and self-efficacy of the students in fact are still low. Therefore, the Thinking Aloud Pair Problem Solving (TAPPS) learning was applied to overcome the problem. The problem researched was the improvement of mathematical communication skills which reviewed on the whole and the improvement of mathematical communication skills as reviewed from the category of early mathematics skills (KAM)). In addition, the self-efficacy of the students between experimental class and control class was also researched. This research was a quasi-experimental research using nonequivalent control group design. The population of this research was all students of Grade VII in one of state junior high schools in Banjar Regency. The experimental class was given the treatment of TAPPS learning and the control class was taught by direct learning on quadrilateral lesson. The instruments used were mathematical communication skills test, self-efficacy questionnaire and observation sheet. The quantitative analysis was conducted using t-test and Mann-Whitney test. Meanwhile, the qualitative analysis was done descriptively. The results showed that the improvement of mathematical communication skills of the students treated by TAPPS learning is higher than the students who were taught using conventional learning. The improvement of mathematical communication skills of the students treated by TAPPS learning is not higher than the students who were taught using conventional learning as reviewed from high and low category of KAM. Whereas the improvement of mathematical communication skills of the students treated by TAPPS learning is higher than the students who were taught by conventional learning as reviewed from medium category of KAM. The self-efficacy of the students who learned using TAPPS learning is not higher than the students who learned using conventional learning.

Key words: Mathematical Communication, Self-Efficacy, Thinking Aloud Pair Problem Solving, Quadrilateral