KEMAMPUAN BERPIKIR LOGIS MATEMATIS
DAN *SELF-REGULATED LEARNING* SISWA SMP MELALUI PEMBELAJARAN
DENGAN STRATEGI *THINKING ALOUD PAIR PROBLEM SOLVING* (TAPPS)

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ABSTRAK

Penelitian ini dilatarbelakangi oleh kemampuan berpikir logis matematis dan *self-regulated learning* siswa yang masih rendah. Kemampuan berpikir logis matematis dan *self-regulated learning* merupakan salah satu tujuan pendidikan matematika yang harus dicapai. Salah satu strategi yang dipandang tepat untuk mewujudkan tujuan tersebut adalah pembelajaran dengan strategi TAPPS. Penelitian ini merupakan *quasi experiment* dengan desain untuk aspek kognitif yaitu *Pretest-Posttest Control Group Design* sedangkan untuk aspek afektif yaitu menggunakan desain *Posttest-Only Control Group Design*. Populasi penelitian ini adalah seluruh siswa kelas VII di salah satu SMPN Kabupaten Bandung Barat pada tahun pelajaran 2015/2016. Sampel yang digunakan adalah siswa kelas VII_F sebagai kelas eksperimen dan siswa kelas VII_B sebagai kelas kontrol. Instrumen yang digunakan berupa tes kemampuan berpikir logis matematis, skala SRL, lembar observasi, pedoman wawancara, dan jurnal harian siswa. Analisis data dalam penelitian menggunakan uji t', ANOVA satu jalur, dan uji *Mann Whitney*. Hasil penelitian menunjukkan:(1) terdapat perbedaan pencapaian dan peningkatan kemampuan berpikir logis matematis antara siswa yang memperoleh pembelajaran dengan strategi TAPPS dengan siswa yang memperoleh pembelajaran strategi konvensional; (2) terdapat perbedaan peningkatan kemampuan berpikir logis matematis siswa yang memperoleh pembelajaran dengan strategi TAPPS ditinjau dari KAM; (3) terdapat perbedaan antara rerata nilai skala akhir SRL siswa yang memperoleh pembelajaran dengan strategi TAPPS dan siswa yang memperoleh pembelajaran dengan strategi konvensional.
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Kata kunci: *Thinking Aloud Pair Problem Solving* (TAPPS), Kemampuan Berpikir Logis Matematis, dan *Self-Regulated Learning* (SRL).

JUNIOR HIGH SCHOOL STUDENTS'S LOGICAL THINKING ABILITY AND SELF-REGULATED LEARNING IN MATHEMATICS VIA LEARNING BY THINKING ALOUD PAIR PROBLEM SOLVING (TAPPS) STRATEGY

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ABSTRACT

This research is motivated by students' logical thinking ability in mathematics and their self-regulated learning which are still poor. These two abilities are goals of mathematics education should be achieved. One strategy that is suitable to achieve these goals is learning by TAPPS strategy. This study is a quasi experiment with Pretest-Posttest Control Group Design for cognitive aspects, while Posttest-Only Control Group Design is used for affective aspect. The population of this research is the VII^{th} grader students of SMPN West Bandung regency in the academic year 2015/2016. The sample is all students of grade VII (namely VII_F as experimental group and VII_B as control group). The instruments used were logical thinking ability tests, self-regulated learning scale, observation sheets, interview guides, and daily journal students. Data analysis in this study used t' test, one-way ANOVA, and Mann Whitney test. The study results show: (1) there are differences in achievement and enhancement of logical thinking ability in mathematics between the students who received TAPPS learning strategy and the students who received conventional learning strategy; (2) there are differences in enhancement of logical thinking ability in mathematics between the students who received TAPPS learning strategy viewed from students mathematical prior knowledge; (3) there are differences in achievement of self-regulated learning between the students who obtained learning TAPPS strategy and the students who received conventional strategy.

Keywords: Thinking Aloud Pair Problem Solving, Mathematical Logical Thinking Ability, and Self-Regulated Learning (SRL).