

## ABSTRAK

**Wijayanto, Jejen.** 2017. Implementasi Model Pembelajaran PQ4R dengan Pendekatan Saintifik Pada Peningkatan Kemampuan Pemecahan Masalah Matematis Siswa. Universitas Islam Sultan Agung. Pembimbing I. Mochamad Abdul Basir S.Pd., M.Pd., Pembimbing II. Hevy Risqi Maharani S.Pd., M.Pd.

**Kata Kunci :** PQ4R, Pendekatan Saintifik, Kemampuan Pemecahan Masalah.

Penelitian ini bertujuan untuk mengetahui desain pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik* pada peningkatan kemampuan pemecahan masalah matematis siswa dan untuk mengetahui keefektifan implementasi model pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik* dalam meningkatkan kemampuan pemecahan masalah matematis siswa. Keefektifan dalam penelitian ini didasarkan pada : (1) kemampuan pemecahan masalah matematis siswa yang menerima model pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik* mencapai ketuntasan minimal; (2) kemampuan pemecahan masalah matematis siswa yang menerima model pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik* lebih baik dari pada kemampuan pemecahan masalah matematis siswa yang menerima model pembelajaran *Survey, Question, Read, Recite, Review (SQ3R)*; dan (3) terdapat pengaruh yang signifikan antara keaktifan terhadap kemampuan pemecahan masalah matematis siswa yang menerima model pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik*.

Metode penelitian ini adalah metode kombinasi model *concurrent embedded*. Populasi dalam penelitian ini adalah siswa kelas VII SMP Negeri 39 Semarang. pengambilan sampel dengan cara *cluster random sampling*, sampel penelitian ini yaitu kelas VII I sebagai kelas eksperimen dan kelas VII F sebagai kelas kontrol. Teknik pengumpulan data menggunakan observasi, tes dan validasi. Analisis data kualitatif menggunakan model Miles and Huberman. Analisis data kuantitatif yang digunakan adalah uji normalitas, uji homogenitas, uji kesamaan rata-rata, uji instrumen tes, uji ketuntasan, uji banding, dan uji pengaruh.

Hasil penelitian menunjukkan bahwa : (1) desain model pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik* yang dilaksanakan dikelas VII I SMP Negeri 39 Semarang pada peningkatan kemampuan pemecahan masalah matematis siswa dengan enam tahapan meliputi *Preview* melalui kegiatan mengamati, *Question* melalui kegiatan menanya, *Read* melalui kegiatan mengumpulkan informasi, *Reflect* melalui kegiatan mengumpulkan informasi dan mengasosiasi/mengolah informasi, *Recite* melalui kegiatan mengasosiasi/mengolah informasi dan mengkomunikasikan dan *Review* dan (2) implementasi model pembelajaran *Preview, Question, Read, Reflect, Recite, Review (PQ4R)* dengan *Pendekatan Saintifik* efektif dalam meningkatkan kemampuan pemecahan masalah matematis siswa.

## ABSTRACT

**Wijayanto, Jejen. 2017.** The Implementation of PQ4R Learning Model with Scientific Approach to Increased Capability of Problem Solving Student Mathematically. Sultan Agung Islamic university. Supervisor I. Mochamad Abdul Basir S.Pd., M.Pd., Supervisor II. Hevy Risqi Maharani S.Pd., M.Pd.

**Keywords :** PQ4R, Scientific Approach, Problem Solving Skill.

This research is purpose to know learning design Preview, Question, Read, Reflect, Recite, Review (PQ4R) with Scientific Approach on increased capability of problem solving student mathematically and to know the effectivity implementation learning model Preview, Question, Read, Reflect, Recite, Review (PQ4R) with Scientific Approach on increased capability of problem solving student mathematically. The effective in this research base on three indicators, there are : (1) capability of problem solving student mathematically who accept learning models Preview, Question, Read, Reflect, Recite, Review (PQ4R) With Scientific Approach can reached standard minimum criteria of mastery learning; (2) capability of problem solving student mathematically who accept learning models Preview, Question, Read, Reflect, Recite, Review (PQ4R) is better than capability problem solving mathematically students who accept learning models Survey, Question, Read, Recite, Review (SQ3R); and (3) There are significant influence between liveliness to problem solving capability who accept learning models Preview, Question, Read, Reflect, Recite, Review (PQ4R)with scientific approach.

Methods of this research is combination methods with concurrent embedded models. Population in this research are students Junior High School 39 Semarang grade VII. Sample taken with cluster random sampling methods. Sample of this research are VII I class as experiment class and VII F Class as control class. Technique to collecting data is using test observation and validation. Data analyst for qualitative methods use Miles and Huberman models. Data analyst for quantitative methods are using normality test, homogeneity test, common average test, test instrument test, completeness test, comparative test, and effect test.

The result of this research showed that : (1) learning model design Preview, Question, Read, Reflect, Recite, Review (PQ4R) with Scientific Approach which implementation in class VII I Junior High School 39 Semarang on increased problem solving capability mathematically students with six steps there are preview with observation , question with ask activity, read with collect information, reflect with collect information and association information, recite with association information and communication and review and (2) implementation learning model Preview, Question, Read, Reflect, Recite, Review (PQ4R) with Scientific Approach effective to increased capability of problem solving student mathematically.