

ABSTRAK

Andriani, Nike. 2017. Keefektifan Model Pembelajaran *Cooperative Integrated Reading and Composition* Pendekatan *Joyful Learning* terhadap Kemampuan Penalaran Matematis Pada Materi Teorema Pythagoras Kelas VIII. Skripsi, Program Studi Pendidikan Matematika, Universitas Muhammadiyah Semarang. Pembimbing I. Venissa Dian Mawarsari, S.Pd. M.Pd., II. Eko Andy Purnomo, S.Pd., M.Pd.

Permasalahan dalam penelitian ini yaitu rendahnya kemampuan penalaran matematis peserta didik yang ditandai dengan peserta didik kesulitan dalam menyelesaikan soal penerapan untuk mengubah permasalahan kontekstual ke dalam bentuk matematika. Selain itu keaktifan dan minat dalam pembelajaran juga masih rendah. Salah satu upaya untuk mengatasi permasalahan tersebut adalah dengan menerapkan model pembelajaran *Cooperative Integrated Reading and Composition* Pendekatan *Joyful Learning*. Penelitian ini bertujuan untuk mengetahui penerapan model *Cooperative Integrated Reading and Composition* Pendekatan *Joyful Learning* efektif terhadap kemampuan penalaran matematis peserta didik dengan kriteria sebagai berikut: dapat mencapai ketuntasan, mengetahui pengaruh keaktifan dan minat terhadap kemampuan penalaran matematis, serta dapat mengetahui perbedaan kemampuan penalaran peserta didik yang menggunakan model *Cooperative Integrated Reading and Composition* Pendekatan *Joyful Learning* dibandingkan model pembelajaran Ekspositori.

Penelitian ini merupakan penelitian eksperimen, dengan populasi seluruh peserta didik kelas VIII pada SMP Muhammadiyah 3 Semarang tahun ajaran 2017/2018. Teknik pengambilan sampel menggunakan teknik *Purposive Sampling*. Metode pengumpulan data yang digunakan dalam penelitian ini adalah wawancara, dokumentasi, observasi, angket, dan tes evaluasi.

Hasil penelitian menunjukkan bahwa 28 dari 30 peserta didik mencapai ketuntasan secara individu dan ketuntasan secara klasikal sebesar 93,33%. Selain itu hasil uji pengaruh menunjukkan adanya pengaruh keaktifan dan minat peserta didik terhadap kemampuan penalaran matematis sebesar 88,6%. Hasil uji beda juga menunjukkan bahwa terdapat perbedaan rata-rata kemampuan penalaran matematis peserta didik antara kelas yang menggunakan model pembelajaran *Cooperative Integrated Reading and Composition* Pendekatan *Joyful Learning* dan kelas yang menggunakan model pembelajaran Ekspositori. Rata-rata kelas eksperimen adalah 82,00 sedangkan rata-rata kelas kontrol adalah 78,73. Jadi dapat disimpulkan bahwa pembelajaran dengan menggunakan model *Cooperative Integrated Reading and Composition* Pendekatan *Joyful Learning* terhadap kemampuan penalaran matematis pada materi teorema pythagoras efektif. Model ini dapat diterapkan pada materi teorema pythagoras atau materi lain untuk mengasah kemampuan penalaran matematis peserta didik.

Kata Kunci: *Cooperative Integrated Reading and Composition*, *Joyful Learning*, penalaran matematis.

ABSTRACT

Andriani, Nike. 2017. Effectiveness of Cooperative Learning Model “Cooperative Integrated Reading and Composition” Joyful Learning Approach the Ability of Mathematical Reasoning in Pythagoras Theorem Material of Class VIII. Skripsi, Mathematics Education, University of Muhammadiyah Semarang. Supervisor I. Venissa Dian Mawarsari, S.Pd. M.Pd., II. Eko Andy Purnomo, S.Pd., M.Pd.

The problems in this study appears is the low ability of students mathematical reasoning which is characterized most of learners difficulties in solving implementation problems to change contextual problems into mathematical form. In addition, students the activeness and interest is still low. One way to overcome these problems is to implement cooperative learning model “Cooperative Integrated Reading and Composition” Joyful Learning approach. This study aims to identify using a mathematical model of “Cooperative Integrated Reading and Composition” Joyful Learning approach the ability of mathematical reasoning of learners effective with the following criteria: can achieve the mastery. Recognize the influence of activeness and interest towards mathematical reasoning ability, and determine differences in reasoning abilities of learners who use Cooperative Integrated Reading and Composition Joyful Learning approach than expository model.

This study was an experimental study, the population of all students of class VIII on SMP Muhammadiyah 3 Semarang the academic year 2017/2018. The sampling technique used purposive sampling technique. Data collection methods employed in this study were interviews, documentation, observations, questionnaires, and evaluation test.

The results showed that 28 of the 30 learners achieve mastery individually and completeness in classical amounted to 93,33%. Besides the influence of test results shows the influence of the activity and interest of learners towards reasoning ability matematis 88,6%. Different test results also showed that the ability of reasoning mathematical students between classes using model “Cooperative Integrated Reading and Composition” Joyful Learning approach is better than the class that uses expository learning models. The average class experiment is 82,00 while the average grade control is 78,73. So we can conclude that learning by using models “Cooperative Integrated Reading and Composition” Joyful Learning approach on the ability of mathematical reasoning in pythagoras theorem material is effective. This model can be applied to the material pythagoras theorem or other material to improve the skills of reasoning mathematically learners.

Keywords: Cooperative Integrated Reading and Composition, joyful learning, reasoning mathematically.