

**THE IMPLEMENTATION OF PROBLEM SOLVING MODEL
USING NUMBERED HEADS TOGETHER IN THE TEACHING
CIRCLE SUBJECT VIEWED FROM STUDENT'S ADAPTIVE
REASONING IN SMP NEGERI 1 SURAKARTA**



RESEARCH PAPER

Submitted as Partial Fulfillment of The Requirements

for Getting Bachelor Degree of Education

in Mathematics Department

by :

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TEACHER TRAINING AND EDUCATION FACULTY

MUHAMMADIYAH UNIVERSITY OF SURAKARTA

2013

APPROVAL

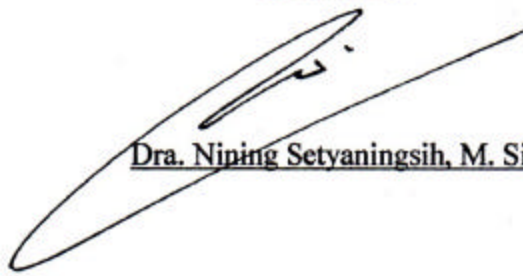
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Approved to be Examined by Consultant Team

Consultant :



Dra. Nining Setyaningsih, M. Si

ACCEPTANCE

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1. Dra. N. Setyaningsih, M. Si
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TESTIMONY

I testify that in this research paper, there is no plagiarism of the previous study which has been raised to obtain bachelor degree of university, nor there are opinions or masterpieces which have been written or published or others, except those which the writing are referred in the manuscript and mentioned in the bibliography.

If it is proved that there are some untrue of my statement above, I will be responsible.

Surakarta, 17 February 2013

A handwritten signature in black ink, appearing to read 'Ike Zetti Oktaviani', is centered on a light blue background.

IKE ZETTI OKTAVIANI

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MOTTO

“The reason why so many never reached his goal because he does not define it, studies it, and never seriously believe that his goal is achievable...”

(Dr Denis Waitley)

“Dream about what do you want to dream, go to the places you want to visit, be as you want, because you have only one life and one chance to do the things you want to do”

(Writer)

DEDICATION

Alhamdulillahirobil'amin...With thanks to Allah and from the bottom of my heart, this research paper is dedicated to:

Allah Ar-Rahman Ar-Rahim

The giver of life to all beings in the universe, where every breath is a manifestation of Majesty and your love

My father, mother and sister beloved

Thank you for all the affection, love and passion that always given for me, as well as the Dzikir and pray who have always spoken strengthens for my steps...I do love you...

My Friends

Thank you for my loving friends especially mathematical class of RSB that much help and mutual give spirit hopefully this commons never after

ACKNOWLEDGEMENT



Assalamu'alaikum Wr. Wb.

Alhamdulillah robbil'amin, all praises and thanks are given to Allah SWT, through His blessing and guidance, this research paper with title "THE IMPLEMENTATION OF PROBLEM SOLVING MODEL USING NUMBERED HEADS TOGETHER (NHT) IN THE TEACHING CIRCLE SUBJECT VIEWED FROM STUDENT'S ADAPTIVE REASONING IN SMP NEGERI 1 SURAKARTA" can be completed. Greeting and invocation are presented to the Prophet Muhammad SAW, who has guided humanity to the right path blessed by the Lord. On this opportunity, researcher would like to express her gratitude to those who have directly and indirectly help her finishing this research paper. Thus, the writer will give all immeasurable gratitude to:


1. Drs. Sofyan Anif, M. Si, as Dean of the Teacher Training and Education Faculty in Muhammadiyah University of Surakarta has given permission for the preparation of this research paper.
2. Dra. Sri Sutarni, M. Pd, as the Chairman of the Mathematics Education Course FKIP UMS that gives opportunity to finish this work well.
3. Dra. Nining Setyaningsih, M. Si, as a supervisor who gave the briefing, science, guidance, and advice to the author until finishing this research paper.
4. Dra. Hj. Sri Suwartinah, M. Pd as head master of SMP N 1 Surakarta that helped in this research

5. Miss Pudjiastuti, S.Pd as teacher in VIII class at SMP N 1 Surakarta that give some suggestion to researcher.
6. Mr. Syakuri as my English tutor, from starting until finishing my research paper.
7. All those who helped to finishing this thesis the author can not mention one by one.

May Allah SWT reward all deeds all parties with plenty of grace, Amin. The researcher realizes that in the preparation of this research paper is still far from perfect. Therefore, the researcher welcomes useful comments, criticism and suggestion from those who read it.

Wassalamu'alaikum Wr. Wb.

Surakarta, 17 February 2013



Writer

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ABSTRACT

The purpose of this research is to analyze: 1) the effect of learning model of Problem Solving model using Numbered Heads Together (NHT) and the conventional learning model for student's mathematics achievement, 2) the effects of low, medium, and high adaptive reasoning to student's mathematics achievement, 3) the interaction of learning model and student's adaptive reasoning to student's mathematics achievement. The populations are all students of grade VIII in SMP Negeri 1 Surakarta (8 classes). Sample in this research consist of 2 classes, there are class C as control class with 27 students and class D as experiment class with 25 students. The sampling technique use in this research is cluster random sampling. In effort to obtain the necessary data in this research, researchers use the test method there are questionnaire method and auxiliary method. Technique of data analysis uses two ways variance analysis test with unequal cell, a prerequisite using Liliefors test to analysis normality test and Bartlett test to analysis homogeneity test. The result of data analysis with significant level 5% satisfied that: 1) there is no significant effect of students that are given problem solving model using numbered heads together with students that given conventional model to the student's mathematics achievement. This is based on analysis of data with $F_a = 2,2222 < F_{table} = 4,056$. 2) There is significant effect of adaptive reasoning of students to the student's mathematics achievement. This is based on analysis of data with $F_b = 3,3333 > F_{table} = 3,206$. 3) There is no significant effect of interaction solving model using numbered heads together and conventional model viewed from student's adaptive reasoning to the student's mathematics achievement. This is based on analysis of data with $F_{ab} = 2,2222 < F_{table} = 3,206$.

Keywords: problem solving, numbered heads together, adaptive reasoning, student's mathematics achievement