EXPERIMENTATION OF MATHEMATICS LEARNING BY USING
COOPERATIVE MODEL TYPE TWO STAY TWO STRAY (TSTS) ON THE
SUBJECT OF A CIRCLE VIEWED FROM STUDENT’S CRITICAL
THINKING ABILITY IN GRADE VIII OF SMP N 1 SURAKARTA

RESEARCH PAPER

Submitted as a Partial Fulfillment of the Requirements
For Getting Bachelor Degree of Education
In Mathematics Department

by

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FACULTY OF TEACHER TRAINING AND EDUCATION
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TESTIMONY

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

Hence, later if it is proven that there are some untrue statements in this testimony; hence I will hold full responsibility.

Surakarta, March 2013

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MOTTO

“There is a will there is a way”

(Researcher)

“Back all your problems to Allah”

(Researcher)
DEDICATION

This research paper is dedicated to:

? My best gratitude to my beloved father Bapak Muhadi and mother Ibu Kartini, for the love, prayer, trust, financial, support, all sacrifices and guidance given to me.

? My lovely old sister Dhika and young brother Hawik, for love, support, and for everything that given to me.

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? My beloved friends in RSBI Class of mathematics, thanks for support, laugh and motivation for me.
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Assalamu’alaikum Wr. Wb

Alhamdulilahirobbil’alamin, all praise belongs to Allah SWT due to blessing and mercies that have been given to the writer, so can complete this research paper entitled ‘EXPERIMENTATION OF MATHEMATICS LEARNING BY USING COOPERATIVE LEARNING TYPE TWO STAY TWO STRAY (TSTS) ON THE SUBJECT OF A CIRCLE VIEWED FROM STUDENT’S CRITICAL THINKING ABILITY’

The writer realizes that this research paper is still far from being perfect, so all suggestions and criticism for improving this research are accepted happily.

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The writer realizes that this research still has many mistakes. Therefore, she accepts gratefully every suggestions, criticism, and comment from those who concern to this research. Hopefully, this research will be able to give contribution and be useful for the readers especially for those who are interested in similar study.

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SUMMARY


The purpose of this study are: (1) to analyze and examine the difference effect of using cooperative learning model type TSTS and conventional learning model to student’s mathematics achievement, (2) to analyze and examine the difference effect of student’s critical thinking ability to the student’s mathematics achievement, (3) to analyze and examine interaction effect of using learning model and critical thinking ability of students to student’s mathematics achievement. The population in this study are all students in VIII grade in SMP N 1 SURAKARTA 2011/2012 school year. Samples taken in this study are VIII G class as experiment class that given TSTS learning model and VIII H class as control class that given conventional learning model. The sampling technique used in this study is cluster random sampling. Collecting data method are used test method, questionnaire method, and documentation method. Data analysis technique using twoway analysis variance with unequal cell, a prerequisite are need before, using the Liliefors test analysis method to test normality and Barlet method to test the homogeneity. From the analysis of the data with significance level 5% satisfied that: (1) There is no difference effect of using cooperative learning model type TSTS and conventional learning model to student’s mathematics achievement with $F_A=1.51$, (2) there is difference effect of students’ critical thinking ability to student’s mathematics achievement with $F_B=8.18$, and (3) there is no interaction effect between learning model and student’s critical thinking ability with $F_{AB}=0.46$. 

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