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**IMPROVING CRITICAL THINKING SKILLS**

**IN MATHEMATICS LEARNING**

**THROUGH COOPERATIVE LEARNING**

**OF NUMBERED HEADS TOGETHER (NHT) TYPE**

**Indrati Setiarini1, Endang Listyani2, Kismiantini3**

*1,2,3Department of Mathematics Education, Yogyakarta State University*

**Abstract**

Cooperative learning is an approach to organizing classroom activities into academic and social learning experiences. Numbered Heads Together is a cooperative learning strategy that holds each student accountable for learning the material by having students work together in a group. This is an excellent strategy for teaching accountability in the classroom and promoting critical thinking. Students are placed

in groups and each person is given a number (from one to the maximum number in each group). The teacher poses a question and students "put their heads together" to figure out the answer. The teacher calls a specific number to respond as spokesperson for the group. By having students work together in a group, this strategy ensures that each member knows the answer to problems or questions asked by the teacher. We conducted a research for improving critical thinking skills of students in mathematics learning through cooperative learning of Numbered Heads Together (NHT) type. Research subject was students in a seventh grade at SMP Negeri 15 Yogyakarta using two cycles. Research materials included one variable linear equation and one variable linear inequality. Data was collected through observation, questionnaire, minterview and test. Thus, we used descriptive analysis. Result of the research showed that critical thinking ability of students has increased for four aspects. First aspect (giving simple explanation) has increased which started on the initial test at 74.19% to 83.05% for cycle I and 92.88% for cycle II. Second aspect (giving advanced explanation) increased which started on the initial test at 25% to 79.31% for cycle I and 98.79% for cycle II. Third aspect (setting strategy and tactic) increased which started on the initial test at 57.80% to 68.39% for cycle I and 90.59% for cycle II. Fourth aspect (making conclusion) increased which started on the initial test at 50.54% to 72.70% for cycle I and 87.37% for cycle II. These results were confirmed with data from questionnaires and interviews. The results showed that students responded very positively to implementation of mathematics learning through cooperative learning of Numbered Heads Together (NHT) type.

**Keywords:** critical thinking, mathematics learning, cooperative learning,

Numbered Heads Together (NHT)