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**THE EFFORTS TO INCREASE CRITICAL THINKING ABILITY**

**OF XI SCIENCE 2 STUDENTSOF SMA NEGERI 8 YOGYAKARTA**

**IN THE MATHEMATICS LEARNING**

**THROUGH COOPERATIVE LEARNING TYPE GROUP**

**INVESTIGATION (GI)**

By

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**Abstract**

The aim of this research is to increase the critical thinking ability of XI Science 2 students of SMA8 Yogyakarta through cooperative learning type Group Investigation (GI).

This research is action research class that consists of four phases, include: planning, acting, observing, and reflecting. Subject of this research are XI Science 2 students. Whereas, the object of this research are all of the process and mathematic learning result with the application of cooperative learning type Group Investigation (GI) to increase critical thinking ability. The instruments of this research are test, questionnaire, and observing sheets. Data analyze technique uses qualitative- descriptive analyze.

This research is conducted into two cycles of four meeting with the application of cooperative learning type Group Investigation (GI). The result of this action research class is the application of cooperative learning type Group Investigation (GI) that consists of four phases: grouping, planning, investigation, organizing, presenting, evaluating can increase critical thinking ability. In the first cycle, the percentage of give simple explanation ability aspect is 66,24%, qualification average; the percentage

of give advance explanation aspect is 97,41%, qualification very high; strategy organizing and tactic aspect reached 96,26%, qualification very high; summarize and evaluate aspect reached 36,50%, qualification very low. Therefore, the percentage of critical thinking ability of XI Science 2 students is 74,10%, qualification average. In the second cycle, the percentage of give simple explanation ability aspect is 94,83%, qualification very high; the percentage of give advance explanation aspect is 97,13%,

qualification very high; strategy organizing and tactic aspect reached 96,70%, qualification very high; summarize and evaluate aspect reached 72,55%, qualification average. So, the critical thinking ability of XI Science 2 is increase become 90,30% with qualification very high.

Keywords: critical thinking ability, Group Investigation.