

The Effectiveness of Differentiated Instruction with Student Heterogeneity to Improve Critical Thinking Skills in Economics Subject

(Quasi Experiment on Grade XI Students at SMA Pasundan 3 Bandung in the 2024/2025 Academic Year)

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ABSTRACT

This study aims to examine the effectiveness of differentiated instruction in enhancing students' critical thinking skills in the Economics subject for Grade XI students at SMA Pasundan 3 Bandung, by taking into account student heterogeneity. The research employed a quantitative approach with a quasi-experimental pretest-posttest control group design. The subjects consisted of 30 students in the experimental class and 20 students in the control class. The research instruments were multiple-choice and essay tests based on critical thinking indicators, which had been validated and declared reliable. Data analysis involved the Wilcoxon Signed Rank Test, Mann-Whitney U Test, and descriptive analysis. The Wilcoxon test results indicated a significant increase in critical thinking skills in both classes (experimental: $Z = 4.811$; $p < 0.001$; control: $Z = 4.029$; $p < 0.001$). Descriptively, the posttest average score of the experimental class (89.00) was higher than that of the control class (84.00), with N-Gain scores of 69.72 (high category) and 57.3 (medium category), respectively. The Mann-Whitney U test showed that the inter-group difference was not statistically significant ($p = 0.080$), but the mean rank of the experimental class was higher (28.33 vs 21.25), indicating a tendency toward the effectiveness of differentiated instruction in developing students' critical thinking skills while addressing the diversity of student characteristics. The study recommends that teachers optimize differentiated instruction according to student needs and readiness to improve critical thinking. Students are expected to be more active in discussions and reasoning, while schools should support this approach with facilities, training, and supportive policies. Future research is advised to explore other variables, educational levels, or subjects.

Keywords: *Differentiated Learning, Critical Thinking Skills, Heterogeneity*