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Differentiated Instruction in Mathematics: It's Effect on the Level of Critical Thinking Skills of Grade 7 Students

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Abstract

This study dealt in determining the effectiveness of differentiated instruction in Mathematics on the level of critical thinking skills among Grade 7 students. This research used a quasi-experimental research design, specifically the non-equivalent control group pretest-posttest design. These groups were intact groups of students as determined by the participating public high school in the Province of Quezon, which were chosen through cluster random sampling technique. Based on the findings, before exposing students to differentiated instructions, their level of reasoning skill was low for both flexible grouping and curriculum compacting. However, their levels of problem-solving skill were low and very low, for flexible grouping and curriculum compacting, respectively. After using differentiated instruction, the students' levels of critical thinking skills from both groups were at a high level. Findings also showed that the mean pretest and mean posttest scores of each group of the respondents were significantly different for both measures of critical thinking skills. This suggested that the two forms of differentiated instructions that were employed in this study are effective in developing students' critical thinking skills especially in discussing basic concepts of Geometry. Since the study found out that flexible grouping and curriculum compacting as forms of differentiated instructions can improve significantly the critical thinking skills of the students, then it is recommended that teachers may utilize flexible grouping and curriculum compacting as forms of differentiated instructions in Geometry.

Keywords: differentiated instruction, curriculum compacting, flexible grouping, critical thinking skill, problem solving, reasoning