

Project HDMI: A Hybrid-Differentiated Mathematics Instruction for Grade 11 Senior High School Students at Las Piñas City Technical Vocational High School

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Abstract : Diversity in the classroom might make it difficult to promote individualized learning, but differentiated instruction that caters to students' various learning preferences may prove to be beneficial. Hence, this study examined the effectiveness of Hybrid-Differentiated Mathematics Instruction (HDMI) in improving the students' academic performance in Mathematics. It employed the quasi-experimental research design by using a comparative analysis of the two variables: the experimental and control groups. The learning styles of the students were identified using the Grasha-Riechmann Student Learning Style Scale (GRSLSS), which served as the basis for designing differentiated action plans in Mathematics. In addition, adapted survey questionnaires, pre-tests, and post-tests were used to gather information and were analyzed using descriptive and correlational statistics to find the relationship between variables. The experimental group received differentiated instruction for a month, while the control group received traditional teaching instruction. The study found that Hybrid-Differentiated Mathematics Instruction (HDMI) improved the academic performance of Grade 11-TVL students, with the experimental group performing better than the control group. This program has effectively tailored the teaching methods to meet the diverse learning needs of the students, fostering and enhancing a deeper understanding of mathematical concepts in Statistics & Probability, both within and beyond the classroom.

Keywords : differentiated instruction, hybrid, learning styles, academic performance

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