The Impact of Personalized Module to the Grade 10 Students in Learning Pre-Calculus: A Case Study of a School in Cauayan City, Philippines

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Abstract

Purpose – This study aimed to develop an instructional material in learning pre-calculus that can be used by the Grade 10 students at a school in Cauayan City, Philippines to improve their competency in Mathematics, particularly in Pre-Calculus.

Method – The study employed a quasi-experimental research design consisting of two groups, the experimental and the control group. The students in the experimental group used the personalized module, while the control group used the existing material in Pre-Calculus published by the Department of Education.

Findings – The result of the study revealed that the personalized module is effective in studying Pre-Calculus. Furthermore, there is a significant effect size in using the personalized module in enhancing the performance of the students as evidenced by the computed effect size which is 1.82.

Significance – The personalized module in Pre-Calculus is helpful and can be used by the students as another reference in learning Pre-Calculus. Moreover, the personalized module is highly accepted because it meets the requirements / criteria namely: objectives, contents, usefulness, clarity, suitability, assessment, organization and presentation, and instructional design and support.

Keywords: Instructional material, Pre-calculus, Quasi-experimental, Pre-test, and Post-test.