Iloilo City

DEVELOPMENT OF FLEXIBLE LEARNING INSTRUCTION THROUGH PROGRESSIVE, PERSONALIZED, ENGAGING AND DIVERSIFIED (FLIPPED) VIDEO MEDIA

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(Elementary Mathematics)

by

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#### Abstract

In the conducted Competency-Based Assessment Tool (CBAT) in Mathematics among Grade 5 learners, results revealed that there are competencies that learners failed to master, prompting the researcher to develop instructional materials that offer a novel dimension of learning. Specifically, this study delved into the Development of Flexible Learning Instruction through Progressive, Personalized, Engaging, and Diversified (FLIPPED) Video Media, focusing on its application within the flipped classroom paradigm. This research aims to address three key questions: identifying the least learned competencies of Grade 5 learners in Mathematics, developing video media tailored to these competencies, and assessing the acceptability of the developed video media across various dimensions. Methodologically, the study involved one class of Grade 5 learners from one of the schools in the province of Capiz, alongside six expert evaluators with diverse backgrounds in educational and information technology and Mathematics teaching. Data collection relies on the result of CBAT administered to 25 Grade 5 learners. complemented by an evaluation questionnaire designed to gauge the acceptability of the video media among experts. Findings highlight specific areas of challenge in Grade 5 Mathematics, such as formulating rules for sequence progression,

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visualizing fraction multiplication, estimating decimal products, identifying base, rate, and percentage, and finding circumference of a circle. The instructional materials developed include sections on learning objectives, discussions, exercises with solutions, and summaries. Expert evaluations uniformly rated the developed video media as "Highly Acceptable" across dimensions of Flexible Learning, Progressive Instruction, Personalized Instruction, Learners' Engagement, and Diversified Instruction. The research findings conclude the efficacy of FLIPPED Video Media in addressing learning gaps and fostering a conducive learning environment that caters to diverse learning needs. Thus, it is recommended that the developed video media be used as a technology-aided instructional material to help improve learners' performance in their least-learned competencies in Grade 5 Mathematics.

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