

WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

GAMIFYING FORMATIVE ASSESSMENT THROUGH QUIZZZ AND MATHEMATICS
PERFORMANCE IN MODULAR DISTANCE LEARNING

A Thesis Presented to the
Faculty of the Graduate School
College of Education
West Visayas State University
La Paz, Iloilo City

In Partial Fulfilment
of the Requirements for the Degree
Master of Arts in Education
(Mathematics)

by

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May 2022

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Magsalang, Yoln E. *"Gamifying Formative Assessment Through Quizizz And Mathematics Performance In Modular Distance Learning."* Unpublished Graduate Thesis. Master of Arts in Education (Mathematics). West Visayas State University, College of Education, La Paz, Iloilo City, May 2022.

Abstract

This research aimed to investigate the effect of gamifying formative assessment on students' performance in modular distance learning. Specifically, it aimed to examine the effectiveness of gamifying formative assessment through Quizizz on student performance, investigate the differences in the increase in students' performance between the class with and without the Quizizz-aided learning method and describe the students' responses to using Quizizz. The research was quasi-experiment with a Matching-Only Pretest-Posttest Control Group. The participants in this study were 60 10th grader students divided equally into experimental and control classes. The researcher made self-learning modules, and formative assessments through QUIZIZZ were included in the intervention during one month of the experiment. The objective performance test was validated by a panel of experts in mathematics education, and its reliability was tested using the split-half method based on the pilot testing among 40 grade 10 students, where Spearman-Brown Coefficient of Equal Length, $\alpha=0.898$. The participants wrote their experiences in using Quizizz in their journals. Then, the Shapiro-Wilk test, Wilcoxon signed-rank test, and thematic analysis were used to analyze the data. Results showed that pretest performance of the students in both groups is below average and their posttest performance is average.

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The results also showed a significant difference before and after using Quizizz. Further, the experimental and control groups were significantly different in post-test performance. Those who used Quizizz had a significantly higher score. Thus, it can be concluded that Quizizz effectively improves mathematical performance. Moreover, students provided both positive and negative responses in learning using Quizizz. It is then recommended that Quizizz may be embedded in instruction, especially in modular modality.

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