WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

DEVELOPMENT AND EVALUATION OF INTERACTIVE MATHEMATICS INSTRUCTIONAL
MODULE ENHANCED BY SELF - ASSESSMENT

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

Jayron A. del Rosario

July 2022

WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
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APPROVAL SHEET

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Abstract

This design research aimed to develop an interactive mathematics instructional module enhanced by self–assessment for the third quarter of Mathematics 10. The processes were patterned on the Analyze, Design, Develop, Implement and Evaluate (ADDIE) Model. The "analyze," "design," and "develop" stages were done using the data gathered from the result of the researcher–made test, which identified the five least mastered competencies in the 3rd quarter of mathematics 10, which are: illustrate the probability of a union of two events and the intersection of events, illustrate the combination of n objects, solve problems involving permutation of n different objects, circular permutation, n alike objects, find the probabilities of independent and dependent events and identify and solve problems on conditional probability. On the other hand, the interviews of eight mathematics teachers handling Grade 10 mathematics subjects were subjected to thematic analysis. Most respondents suggested an interactive module as supplementary material for the previous quarter. Furthermore, in the "implement" stage, the interactive module was piloted in one Grade 10 section of 39 learners. Experts rated the material's acceptability in the "evaluate" stage, and the learners answered the satisfaction survey form. Mean and standard deviation were used in the analysis of quantitative data. In general, the experts' evaluation of the developed

interactive module was highly acceptable, and the learners were satisfied. The module mentioned above may be used as review material, particularly for struggling learners who need help clarifying mathematical concepts. Learners may utilize their laptop or computer to appreciate the module's interactivity fully. Quasi–experimental research may be conducted to ascertain the effectiveness of the developed interactive module.

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