

WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

BARRIERS IN TEACHING-LEARNING MATHEMATICS IN RURAL SENIOR HIGH
SCHOOLS: BASES FOR INSTRUCTIONAL IMPROVEMENT PLAN

A Dissertation 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
Doctor of Philosophy in Science Education
(Mathematics)

by

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Abstract

This mixed-method study examined the barriers to teaching-learning mathematics in rural senior high schools and developed an instructional improvement plan. The participants of this study were 213 Grade 11 completers and six mathematics teachers for SY 2018-2019 in Calinog, Iloilo. It utilized a validated survey questionnaire to determine the barriers to teaching – learning mathematics. Phenomenological interviews were used to gather qualitative data. These were the bases for the crafting of the instructional improvement plan. As perceived by students, the most prevalent pedagogical barrier was lack of classroom management, the societal barrier was the geographical location, and the systemic barrier was the class size was NOT within the standard. Mathematics teachers revealed that the most prevalent pedagogical barrier was a lack of knowledge of teaching methods, the societal barrier was a lack of family support, and the systemic barrier was that hygiene facilities were not available. On the hand, the qualitative inquiry revealed that student-informants encountered barriers such as poor classroom management by mathematics teachers, lack of varied teaching methods, increased responsibilities at home that impede available time for schoolwork, long distances and steep inclines from their homes to school, suspended classes during inclement weathers, suspended classes during the preparation and conduct of school

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activities, and teachers' non-attendance of classes due to other workloads. They identified agencies to better help them in learning mathematics. Teacher-informants reveal barriers, such as poor classroom management, suspended classes during inclement weather, insufficient teaching materials, and coping mechanisms, such as contextualizing the subject matter and conducting remediation classes to help their students. All these barriers lead to the decline in the quality of mathematics learning in rural senior high schools. Improving the current situation is a must for the betterment of the teaching and learning process of mathematics. The results of this study also implied that students and mathematics teachers could adapt, change, and face barriers. Moreover, the crafted Instructional Improvement Plan is a "very good" roadmap to address the perceived pedagogical, societal, and systemic barriers. Therefore, it is recommended that the instructional improvement plan be implemented among schools in the challenged areas or those with similar contexts.

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