

WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

IMPLEMENTATION OF THE SPIRAL CURRICULUM IN JUNIOR HIGH SCHOOL PHYSICS

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
(Physics)

by

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Abstract

This study utilized mixed-methods research design which described the implementation of the spiral curriculum in Junior High School Physics and examined cases of the models of implementation as to how they are being practiced in selected public secondary schools in the Division of Iloilo with units of analysis, namely: (A) Content, (B) Teaching Pedagogy, (C) Assessment, (D) Teacher Support, and (E) Facilities. This study involved two phases: survey and case study. The participants in the Phase I of this study were the 102 Junior High School Physics teachers while 10 among the total participants were purposively selected as participants in the Phase II of this study. A validated researcher-made survey instrument was utilized in the Phase I of this study while interview and focus-group discussion (FGD) were employed in Phase II. The statistical tools used for the Phase I of this study were the mean, rank, standard deviation, frequency count, and percentage while thematic analysis was used for the Phase II of this study. Results revealed that in terms of Content, Physics content is being taught by single-grade level and multi-grade level Physics teachers. Physics learning competencies in the curriculum guide intended for a quarter were not fully tackled by all Physics teachers. Physics teachers agree that the Physics topics discussed in the previous grade levels are needed in teaching the present grade level content. Among the teachers, non-physics majors teaching Physics experience more difficulty in

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teaching the subject. Physics teachers teaching in the spiral curriculum exhibit mastery of Physics topics but do not exhibit sufficient mastery in other Science areas. In terms of Teaching Pedagogy, Physics teachers utilize a variety of teaching strategies such as direct instruction, interactive instruction, indirect instruction, independent study, and experiential instruction and practices like grouping technique, contextualization, problem solving, questioning activity, and subject integration suited for the diverse characteristics and needs of the students. In terms of Assessment, Physics teachers employ a combination of traditional assessment such as pen-and-paper test and authentic type of assessment like performance tasks (projects, outputs, portfolios, journal, role playing) with the use of rubrics. In terms of Teacher Support, Physics teachers have attended limited trainings/seminars related to teaching in the spiral curriculum. Findings also show that collaboration is evident among Science teachers. In terms of Facilities, there is an inadequacy of Physics laboratory rooms and manuals in the schools in the Division of Iloilo. However, classroom facilities and teaching materials used as facilities in teaching Physics are apparent. The two models of implementation of the spiral curriculum in Junior High School Physics are the carousel-teacher scheme and single-teacher scheme. In the Carousel-teacher scheme model, teachers are teaching Physics in every quarter of all grade levels (grade 7 to 10) but have loads in other Science areas which means that Physics teachers are also teaching Biology, Chemistry, and Earth Science. In the Single-teacher scheme model, teachers teach all Science areas in the grade level they are assigned in. Moreover, teachers have positive and negative responses toward each of the models of implementation.

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