WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

5 Es INSTRUCTIONAL LEARNING ACTIVITIES ON LEARNERS' CONCEPTUAL UNDERSTANDING, SCIENCE PROCESS SKILLS, AND ATTITUDE TOWARDS PHYSICS

A Thesis Presented to the

Faculty of the Graduate School

West Visayas State University

College of Education

La Paz, Iloilo City

In Partial Fulfilment

of the Requirements for the Degree

Master of Arts in Education

(Physical Science)

by

Glaisa B. Lumampao

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APPROVAL SHEET

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Abstract

This research is rooted in the existing educational issue in science education, focusing on the successful attainment of science process skills and conceptual understanding, and the promotion of positive attitudes towards physics as stipulated in the K to 12 Science Curriculum of the Philippines. This quasi-experimental study, with a two-group pretest-posttest design study, aimed to determine the level of science process skills, conceptual understanding, and attitudes of Grade 8 learners towards physics after the employment of a set of 5 Es instructional learning activities (ILAs) in the topics of Newton's laws of motion, work and energy, and heat. The participants were divided into two groups: the Five Es ILAs group, and the non-5 Es ILAs group. The instruments, administered before and after the intervention, were the (1) science process skills test (SPST), (2) conceptual understanding test (CUT), and (3) attitude towards physics questionnaire. It can be concluded that the 5 Es instructional learning activities can be a useful and effective learning tool in delivering instruction in physics to grade 8 learners. It can significantly improve learners' science process skills and conceptual understanding of physics. Despite the increase in the average mean in the attitude of the learners towards physics, results showed that there was no significant difference between their attitudes before and after the intervention. Implications on theory and practice and recommendations for future research and pedagogy were advanced.

Keywords: Five Es, conceptual understanding, science process skills, attitudes, physics education

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