

WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

BRIDGING GAPS IN TEACHING HUMAN ANATOMY AND PHYSIOLOGY
FOR MEDICAL COURSES THROUGH THE DEVELOPMENT
OF LEARNING MATERIALS

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

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy in Science Education
(Biology)

by
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Abstract

The current status of medical and allied medical freshmen college students who were participants in this study is at risk due to poor educational outcomes resulting from learning gaps in Human Anatomy and Physiology courses as indicated in their learning competencies in senior high school. This study was conducted to design an instructional material in the form of modules to bridge the gaps found in their Human Anatomy and Physiology courses. The instructional material comprised of topics on respiratory, digestive, urinary, and reproductive systems utilizing the 4A approach. It incorporated various modalities in actively engaging students to work collaboratively. A pre-survey was conducted among four hundred seventy-three (473) freshmen college students as respondents enrolled in different medical courses in a private college in Iloilo City for the academic year 2019-2020. It included Assessment/Readiness Test on Knowledge (KR20=.860) consisted of sixty-five (65) items and fifty-five (55) items on laboratory skills (KR20=.790). Results of the survey showed that the level of knowledge of college freshmen students in Human Anatomy and Physiology were described as "Poor Knowledge" due to lack of knowledge while the levels of laboratory skills of freshmen students were described as "Needs Improvement" and "Poor Skills." The learning gaps encountered by freshmen students in Human Anatomy and Physiology based on the K-12 curriculum were on the biological parts and mechanisms underlying the animal body.

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Thirty-nine (39) Medical Laboratory Science freshmen students in one class were purposively selected as participants of the study for the implementation of the material. The evaluations of students, teachers, and experts of the instructional materials were used to improve the development of the instructional material. The developed instructional material was rated as "Satisfactory" to "Excellent" which satisfied the needs and fill in the gaps in the selected topics in human anatomy and physiology. Responses of the students and teachers on the module revealed a comprehensive, in-depth and clear content, good presentation, practicality and actualizations of the activities, and effective teaching and learning activities. All responses were positive after revising and considering the suggestions in the development of the module. Thus, the developed module may be utilized to suit the needs of the present learners on selected topics in Human Anatomy and Physiology for the tertiary level to bridge the identified learning gaps.

Keywords: Human Anatomy and Physiology, knowledge, skills, learning gaps, medical and allied medical courses, instructional materials, ADDIE model

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