

EFFECTIVENESS OF “DIGESTIVE JOURNEY” IN IMPROVING GRADE 6 LEARNERS’ CONCEPTUAL UNDERSTANDING OF THE DIGESTIVE SYSTEM

ABSTRACT

AUTHORS

Coleen Faye Baman
Angelica Castro
Menchu Ceneza
Bernadette Cruz
Kristine Tibooc

RESEARCH ADVISER

Ryan Christopher M.
Villalon, PhD

AFFILIATION

Bestlink College of the
Philippines

DISCIPLINE

Education

KEYWORDS

3d model, digestive journey, conceptual understanding, digestive system, quasi-experimental research, grade 6 learners

ARTICLE ID

AASGBCPJMRA-AB80351

This study assessed the use of “Digestive Journey,” a three-dimensional model, to improve Grade 6 learners’ conceptual understanding of the digestive system at San Agustin Elementary School in Quezon City, Philippines. Three-dimensional models can make science learning more interactive and provide concrete learning experiences, particularly for students who have difficulty understanding abstract concepts. The study also aligned with DepEd Order No. 17, s. 2017, which emphasizes hands-on science learning for Grades 4–6 pupils in public schools. The study employed a quasi-experimental design with cluster sampling and involved 50 Grade 6 students. Data were collected through pretests, posttests, and a survey questionnaire covering science practices, crosscutting concepts, and disciplinary core ideas. The analyses used weighted mean, standard deviation, frequency, percentage, Likert-scale interpretation, the Shapiro–Wilk test, and the Wilcoxon signed-rank test. The three-dimensional model significantly improved learners’ ability to identify digestive organs, their locations and functions, and their sequence in the digestive process. Students strongly agreed that the model supported their learning. The pretest mean was 4.33, indicating low proficiency, while the posttest mean increased to 5.97 and was interpreted as “Proficient.” The difference was statistically significant ($p < 0.0001$). The findings were interpreted in relation to Phenomena-Based Learning theory (Smithwhite, 2024), which emphasizes meaningful, real-world, and inquiry-based learning. Based on the results, the researchers developed guidelines for integrating three-dimensional model-based activities into science instruction. Recommendations include providing structured guidance in model use, incorporating reflective tasks that connect observations with scientific concepts, and applying interactive strategies to sustain engagement. The findings emphasize the value of meaningful hands-on experiences in making science concepts more accessible and relevant.

RECOMMENDED CITATION

Baman, C. F., Castro, A., Ceneza, M., Cruz, B., & Tibooc, K. (2026). Effectiveness of “Digestive Journey” in Improving Grade 6 Learners’ Conceptual Understanding of the Digestive System. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research Abstracts*, 8(6), 40.