

## Project-Based Digitized Module in Enhancing Scientific Competencies Among Distance Learning Students

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### Abstract

This study aimed to develop a project-based digitized learning module to enhance scientific competencies among distance learning Grade 10 students in San Pablo City Integrated High School. The study utilized a descriptive-developmental research design. The researcher developed a digitized learning module based on project-based learning strategy. This strategy was incorporated within the layout of activities included in the module. The module was created through the kotobee author application. Based on the results, the data revealed that most of the respondents agree that the elements of the project-based approach are integrated in the module. Learners perceived or “agreed” that the developed material is effective in terms of objectives; content; format and language; presentation; and, usefulness. Majority of the learners shows agreement that they perceived effectiveness of the developed Material in terms of the usage, ease of use, user satisfaction and attitude. It can be inferred that there is a significant difference between the pretest and posttest score of the respondent since the p-value of 0.000 is less 0.05. It can be determined that there is a significant improvement on the level of scientific competency skills of the students that undergoes the project-based digitized module. Overall perception on the incorporation of project-based digitized module has significant positive relationship with the scientific competency skills. It suggests that crafting digitized modules in the context of project-based learning can be an effective tool in improving learners’ scientific competency skills. Since it was found out that there is a significant link between project-based learning module and the scientific competencies of the learners, the aforementioned strategy may be used in the teaching-learning process to strengthen learner’s capability to improving their science skills.

*Keywords: Descriptive-developmental research, Project-Based Learning, Digitized Learning Module, Scientific Competencies, Distance Learning, San Pablo City, Laguna*