

Online Collaborative Learning and Learning Competencies of Senior High School Students in Earth and Life Science: Basis for the Development of Learning Management Plan

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Abstract

Online collaborative learning during the pandemic is one of the factors that determine how well the students will complete their journey toward information acquisition and plays a significant part in the remote classroom setting. In a competency-based education system, students understand learning objectives and also know what they must “know and show” to be proficient. This study sought to evaluate both the learning competencies in Earth and Life Sciences as well as the efficiency of the online collaborative learning practices used by PCU SHS students. A descriptive research design was used, modified and adopted questionnaire was employed to help supplement the data or information required for this study. The variables were learning competencies, the intended learning outcomes, academic performance, and the three online collaborative learnings as Team-based learning, Problem-based learning, and Process-Oriented Guided Inquiry Learning. A convenience sampling technique was used to obtain 306 grade 11 students and 6 faculty members of PCU SHS department as respondents. The study's findings revealed that the effectiveness of online collaborative learning among the respondents is very high in three areas in terms of team-based learning, problem-based learning, and process-oriented guided inquiry learning. Moreover, there is a statistically significant relationship between respondents' level of effectiveness of online collaborative learning and the level of influence on the learning competencies of senior high school students. Based on the findings, the recommended learning management plan takes pre-implementation, implementation, and post-implementation. These results, therefore imply that teachers should employ online collaborative learning more to aid SHS students in improving their academic performance in science. The proposed learning management plan will be implemented by the school administration to improve SHS students' academic performance in addition to other courses. Future researchers should determine whether there are research gaps in the study that need to be addressed. A post evaluation on the learning competencies developed through online collaborative learning.

Keywords: *Online Collaborative Learning, Learning Competencies, Learning Management Plan*