DEVELOPMENT AND EVALUATION OF LEARNING MODULES IN CHEMISTRY FOR JUNIOR HIGH SCHOOL STUDENTS

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ABSTRACT

The primary purpose of this study was to develop modules in Chemical Bonding for Grade 9 students. In order to establish an empirical basis in creating the modules, Input-Process-Output (IPO) model was utilized by the researchers and mixed-methods was used in the analysis of data. A validated and reliability-tested researcher-made instrument was used to determine the learning competencies of 210 students in chemical bonding. A focus group discussion through video conference was held to determine the module making strategies of teachers. The data gathered were analyzed using frequency, mean, and percentage for descriptive analysis and thematic analysis for focus group discussion. The results of the assessment test showed that majority of the students were not able to correctly answer the questions included in the learning competencies of chemical bonding. The results of the focus group discussion revealed that incorporation of overview and review of concepts and integration of contextualized activities should be part of the teaching strategies. Moreover, assistance of technology and active involvement of students through interactive activities should be considered as instructional tools. The use of formative assessment with variety of assessment tools and the consistency of assessment strategies to the set learning outcomes must also be realized. The newly developed module was evaluated by experts excellent in terms of the objectives of the module, content of the module, format and language of the module, presentation of the module, and the usefulness of the module. It showed potential as an effective learning material.

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