

EXPOSITORY SCIENCE TEXT-BASED MATERIAL AND THE INTEGRATED SCIENCE PROCESS SKILLS OF GRADE 12 STUDENTS

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ABSTRACT

A common component of successful science learning is the students' ability to read and understand scientific text (Imam, 2014). Thus, this study hopes to improve learning of physical science by testing the effectiveness of a researcher-made learning material incorporating a reading strategy that will help in addressing difficulties in understanding science lesson. Specifically, this study was undertaken to investigate on the effectiveness of the researcher-developed Expository Science Text-Based Material (ESTM) for Physical Science in developing the students' Integrated Science Process Skills (ISPS). A single group experimental design was used to determine whether significant difference exists between the ISPS pre-test and post test scores of the students. Further, using the descriptive-correlational design it sought to determine whether students' level of reading comprehension and their perception of material effectiveness relates to their post test scores. The reading comprehension skills test, ISPS tests, and a survey questionnaire were utilized to obtain the data from the 99 Grade 12 students enrolled in Callejon National High School during the academic year 2020-2021. Based from the results, the students were generally at the near mastery level in their reading comprehension skills. They perceived the expository science text-based material to be effective in terms of educational aspects, features, and ease of use. Their mastery level as well as their perception of effectiveness both relate significantly to their ISPS scores. Finally, a significant difference was found between the pre-test and post test scores. From beginning and developing level of performance, the learners were able to reach proficient and exemplary levels after using the developed material. These results suggest that incorporating ESTM into students' science learning activities improved their ISPS.

Keywords: Expository Science Text-Based Material, Integrated Science Process Skills, Reading Comprehension Skill