

## DESIGNING PROJECT-BASED FORMATIVE ASSESSMENT IN SCIENCE 10 IN A MODULAR DISTANCE LEARNING MODALITY

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### ABSTRACT

This study was aimed to design and to determine the effectiveness of a project-based formative assessment tool in science ten in a modular distance learning modality in terms of students' science process skills (SPS). Descriptive-developmental research design was used in this study. Three research instruments had undergone reliability and validation and were utilized. Pre-test and Posttest assessment were administered to the respondents. To test the significant difference in the students' test scores, independent t-test was used. Questionnaires were also administered to determine the effectiveness of the designed project-based formative assessment in science in terms of their SPS. Results revealed that the students perceived the learning output in terms of written works and performance as 'sometimes evident' and written tests are perceived as 'always evident' in their self-learning module. Students perceived the extent of availability of the learning resources in terms of printed and digital resources as 'sometimes available' in their home. On the other hand, the experts and student-respondents perceived the effectiveness of the designed project-based formative assessment tool in terms of clarity of language, appropriateness of level, adaptability and congruency and design coherence as 'highly manifested'. The pre-test and post test scores of the students revealed that respondents performed 'fairly' in both basic and integrated science process skills. It can be attributed to the recent situation regarding the implementation of modular distance learning modality where the teacher and students do not have a direct interaction during the actual conduct of the study. Nonetheless, there is a significant difference between the pre-test and posttest scores of the students in Grade 10 Science using project-based formative assessment tool as to their SPS.

*Keywords: Science process skills, formative assessment, modular distance learning modality, and students' performance*