

**PRODUCTIVE STRUGGLE IN LEARNING MATHEMATICS AND
PROBLEM-SOLVING SKILLS OF SENIOR HIGH
SCHOOL STUDENTS**

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ABSTRACT

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This world is cycles of mathematics where living organisms lived and stay. This research study used a complete enumeration research design and the instruments that were used by the researcher in gathering data dealt with the students' productive struggle in learning mathematics. The study was conducted with a total of 54 students from all Grade 11 and Grade 12 students of Marber National High School of STEM-STRAND students in Senior High School Department who are currently enrolled for the academic year 2022-2023. Results revealed that Grade 11 and Grade 12 STEM-STRAND students' level of Productive Struggle in Learning Mathematics is high with an overall mean of 3.68. There is no significant correlation between spatial skills and the problem-based learning approach, learning style and spatial skills, numerical factors and the problem-based learning approach, and learning style and numerical

factors. It was found that the Grade 11 and Grade 12 STEM-STRAND students of Davao del Sur State College possessed a weak level of mathematical ability, intend to choose STEM which is a study track that provides math related courses. The school administrators may provide plans and intervention in the issue of mathematical ability and also provide career guidance to support students on choosing their intended study track.

Keywords: Course, Productive Struggle, Mathematical ability, Learning Style, Problem-Based Approach, STEM, Complete-Enumeration, Quantitative, Philippines