



## LEARNING MATHEMATICS AT HOME TOWARDS A COMMGNITIVE DISCOURSE IN PRE- CALCULUS FOR GRADE 11 STEM STUDENTS

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### ABSTRACT

A policy gleaned from facilitating learning through a modular system of education rather than the traditional face-to-face setting to mitigate the effects of the COVID-19 pandemic. Printed materials are expected to bear the burden of conveying, translating, and impressing to learners the content from which the aforementioned most essential learning competencies are expected to be generated. With this, a study entitled, Learning Mathematics at Home Towards a Commognitive Discourse on Pre- calculus subject. Specifically, an inquiry on the relationship between mathematical discourse with home learning and math learning of STEM Grade 11 students in the 3rd quarter of the school year 2020-21 of the Senior High School of Lusacan National High School. Discourse is indicated by word use, visual mediators, routines and endorsed narrative measured using a set of problem-solving exercises, for Home Learning Environment are student closeness, teacher support, involvement, cooperation, and fairness, and for Home Math Environment are direct and indirect numeracy and spatial ability assessed through survey instruments. The findings revealed a negative correlation between student closeness and word usage. Students become somewhat proficient in their word use when student closeness is often observed. Indirect numeracy and routines also have a positive significant relationship. When students develop indirect numeracy, they are more likely to be able to capture somewhat proficient levels of performance in routines. With the experiences that the students have with their basic application in their home and math environment, it is possible that they would be able to recognize the strategies of solving for they will be able to explore the numerous ways of solving identities in a moderately proficient manner. An intervention must be given by the teacher phrasing the lessons in terms of activities relating more directly with everyday experiences as exemplified by indirect numeracy.

*Keywords: Commognitive Discourse, Home Learning Environment, Math Learning Environment*