

**PENGARUH KEMAMPUAN KOMUNIKASI MATEMATIS DAN
LITERASI TEKNOLOGI TERHADAP KEMAMPUAN PEMECAHAN
MASALAH MATEMATIKA DI SMP NEGERI 4 NUSA PENIDA**

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ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan pengaruh kemampuan komunikasi matematis dan literasi teknologi terhadap kemampuan pemecahan masalah matematika. Jenis penelitian yang digunakan adalah jenis penelitian *ex-post facto* dengan rancangan penelitian model persamaan *Structural Equation Model* (SEM). Populasi penelitian ini adalah siswa SMP kelas VII dan VIII sebanyak 274 siswa. Sampel penelitiannya sebanyak 118 siswa yang diambil menggunakan formula *Isaac-michael* dengan teknik *proportional random sampling*. Instrumen yang digunakan untuk mengukur kemampuan pemecahan masalah dan kemampuan komunikasi matematis berupa tes dan instrumen yang digunakan untuk mengukur literasi teknologi berupa kuesioner. Data dianalisis menggunakan *software* SmartPLS dan sebelumnya dilakukan uji coba prasyarat yaitu uji normalitas univariat, uji normalitas multivariat, dan uji linieritas. Berdasarkan hasil penelitian kemampuan komunikasi matematis memiliki pengaruh langsung terhadap kemampuan pemecahan masalah sebesar 0,723. Literasi teknologi memiliki pengaruh langsung terhadap kemampuan pemecahan masalah sebesar 0,087. Dengan adanya hasil penelitian ini, diharapkan kegiatan pembelajaran lebih memperhatikan pemecahan masalah serta memperhatikan faktor-faktor yang mempengaruhi pemecahan masalah seperti kemampuan komunikasi matematis dan literasi teknologi sehingga harapannya siswa dapat melakukan kegiatan pemecahan masalah dengan optimal.

Kata kunci: Pemecahan Masalah, Komunikasi Matematis, Literasi Teknologi

**THE EFFECT OF MATHEMATIC COMMUNICATION ABILITY AND
TECHNOLOGICAL LITERATURE ON MATHEMATICS PROBLEM
SOLVING ABILITY IN SMP NEGERI 4 NUSA PENIDA**

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Abstract

This study aims to describe the effect of mathematical communication skills and technological literacy on mathematical problem solving abilities. The type of research used is an ex-post facto research design with a structural equation model (SEM) research design. The population of this study were high school students in class VII and VIII as many as 274 students. The research sample was 118 students who were taken by proportional random sampling technique using the Isaac-Michael formula. The instrument used to measure problem solving skills and mathematical communication skills was in the form of tests and the instrument used to measure technological literacy was in the form of a questionnaire. The data were analyzed by SmartPLS and previously carried out prerequisite tests, namely the univariate normality test, multivariate normality test, and linearity test. Based on the research results, mathematical communication skills have a direct influence on problem solving abilities of 0.723. Technological literacy has a direct effect on problem solving abilities of 0.087. With the results of this study, it is hoped that learning activities will pay more attention to problem solving and pay attention to factors that influence problem solving such as mathematical communication skills and technological literacy so that students are expected to carry out problem solving activities optimally.

Keywords: *Mathematical Communication; Technological Literacy; Problem Solving*