

## **ANALISIS KEMAMPUAN KOMUNIKASI MATEMATIS SISWA KELAS X MADRASAH ALIYAH AL-KHAIRAAAT KOTA TERNATE PADA MATERI FUNGSI EKSPONENSIAL.**

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### **ABSTRAK.**

Penelitian kualitatif ini bertujuan untuk mendeskripsikan kemampuan komunikasi matematis siswa kelas X MA Al-Khairaat Kota Ternate dalam menyelesaikan soal materi fungsi eksponensial. Tehnik Pengumpulan data kemampuan komunikasi matematis siswa yang digunakan adalah tes, wawancara, dan dekomentasi. Instrumen tes yang digunakan adalah 2 butir soal tentang kemampuan komunikasi matematis yang telah divalidasi. Data kemampuan komunikasi matematis siswa yang dikumpulkan dianalisis secara kualitatif dengan teknik mereduksi, penyajian , dan penarikan kesimpulan. Subjek penelitian ini sebanyak 16 siswa kemudian dipilih 4 siswa sebagai perwakilan subjek penelitian berdasarkan kemampuan komunikasi matematis kategori (baik sekali, baik, cukup, kurang) untuk di analisis hasil kerjanya. Hasil penelitian menunjukan bahwa kemampuan komunikasi matematis siswa kelas X MA Al-Khairaat Kota Ternate dalam mempelajari fungsi eksponensial mencapai rata-rata sebesar 52,60% dalam kategori kurang. Kualifikasi kemampuan komunikasi matematis siswa dalam kategori sangat baik dicapai 2 siswa(12,5%) yang mampu mempresentasikan grafik fungsi eksponensial ide-ide matematis melalui lisan tertulis dan mendemonstrasikan serta mengambarnya secara visual. mampu dalam menggunakan istilah istilah yang terdapat pada grafik fungsi eksponensial, mampu memahami menginterpretasikan dan evaluasi konsep rumus. Selanjutnya, 3 siswa (18,7%) kriteria baik yang mampu mempresentasikan grafik fungsi eksponensial ide-ide matematis melalui lisan tertulis dan mendemontrasikan serta mengambarnya secara visual, mampu dalam menggunakan struktur-strukturnya untuk menyajikan ide menggambarkan model-model situasi, mampu memahami menginterpretasikan dan evaluasi konsep rumus tetapi tidak lengkap. Sebanyak 4 siswa (25%) kriteria cukup, mengalami kesulitan dalam menjelaskan ide matematis dari fungsi eksponensial. Sebanyak 7 siswa (43,75%) kriteria kurang, kesulitan untuk mempresentasikan grafik fungsi eksponensial dan kesulitan dalam menggunakan konsep rumus untuk mencari persamaan eksponensial.

**Kata kunci :** *Komunikasi Matematis.*

**ANALYSIS OF STUDENTS' MATHEMATICAL COMMUNICATION  
SKILLS CLASS X MADRASAH ALIYAH AL-KHAIRAAAT KOTA TERNATE  
ON THE MATERIAL OF EXPONENTIAL FUNCTIONS.**

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**ABSTRACT.**

This qualitative research aims to describe the mathematical communication skills of class X MA Al-Khairaat students in Ternate City in solving exponential function material problems. Data collection techniques for students' mathematical communication skills used are tests, interviews, and decommentation. The test instrument used is 2 items of questions about mathematical communication skills that have been validated. The collected data on students' mathematical communication skills were analyzed qualitatively with reducing techniques, presenting, and drawing conclusions. The subjects of this study as many as 16 students were then selected by 4 students as representatives of the research subject based on the mathematical communication skills of the category (very good, good, sufficient, less) to analyze the results of their work. The results showed that the mathematical communication skills of class X MA Al-Khairaat students in Ternate City in studying exponential functions reached an average of 52.60% in the less category. The qualification of mathematical communication skills of students in the category is very well achieved by 2 students (12.5%) who are able to present a graph of the exponential function of mathematical ideas through written oral and demonstrate and depict them visually. able to use term terms contained in exponential function graphs, able to understand the interpretation and evaluation of formula concepts. Furthermore, 3 students (18.7%) good criteria who are able to present a graph of the exponential function of mathematical ideas through written oral and demonstrate and draw them visually, are able to in use their structures to present ideas describing models of situations, are able to understand the interpretation and evaluation of formula concepts but are incomplete. A total of 4 students (25%) of the criteria were sufficient, having difficulty in explaining the mathematical idea of exponential functions. A total of 7 students (43.75%) criteria were lacking, difficulty to present graphs of ekponential functions and difficulty in using formula concepts to search for exponential equations.

**Keywords :** *Mathematical Communication.*