

ABSTRAK

Taufiq Budiarto. D. M (2026). Analisis *Computational Thinking* dalam Pemecahan Masalah Kontekstual Berbasis Kemaritiman. Tanjungpinang: Program Studi Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Dr. Rezky Ramadhona, S.Pd., M.Pd. Pembimbing II: Susanti, S.Pd.

Kata kunci: *Computational Thinking*, Pemecahan Masalah, Kontekstual, Kemaritiman.

Computational thinking merupakan kemampuan yang perlu dikembangkan untuk menyelesaikan masalah di abad 21. Penelitian ini bertujuan untuk mendeskripsikan kemampuan *computational thinking* siswa dalam menyelesaikan soal pemecahan masalah kontekstual berbasis kemaritiman pada materi Sistem Persamaan Linear Tiga Variabel. Penelitian ini menggunakan pendekatan kualitatif dengan jenis penelitian deskriptif. Subjek penelitian berjumlah 26 siswa kelas X.2 SMA yang mengikuti tes *computational thinking*, kemudian dipilih tiga siswa sebagai subjek wawancara yang mewakili kategori tinggi, sedang, dan rendah. Pengumpulan data dilakukan melalui tes dan wawancara, sedangkan analisis data meliputi reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa kemampuan *computational thinking* siswa didominasi kategori sedang dengan persentase 57,7%, sedangkan kategori tinggi sebesar 23,1% dan kategori rendah sebesar 19,2%. Siswa kategori tinggi mampu memenuhi seluruh indikator *computational thinking*, yaitu dekomposisi, abstraksi, pengenalan pola, dan algoritma. Siswa kategori sedang mampu memenuhi indikator dekomposisi, abstraksi, dan pengenalan pola, namun belum konsisten pada indikator algoritma. Sementara itu, siswa kategori rendah hanya mampu memenuhi indikator dekomposisi dan abstraksi, sedangkan indikator pengenalan pola dan algoritma belum terpenuhi. Temuan penelitian menunjukkan bahwa penggunaan konteks kemaritiman memberikan pembelajaran yang lebih bermakna, tetapi belum secara otomatis mempermudah siswa dalam menyelesaikan masalah. Oleh karena itu, pembelajaran matematika berbasis kemaritiman perlu dirancang untuk mengembangkan setiap indikator *computational thinking* secara bertahap agar siswa mampu menyelesaikan permasalahan kontekstual secara sistematis.

ABSTRAK

Taufiq Budiarto. D. M. (2026). *Analysis of Computational Thinking in Maritime-Based Contextual Problem Solving*. Tanjungpinang: Mathematics Education Study Program, Faculty of Teacher Training and Education, Universitas Maritim Raja Ali Haji. Advisor I: Dr. Rezky Ramadhona, S.Pd., M.Pd. Advisor II : Susanti, S.Pd.

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Computational thinking is an essential ability that needs to be developed to solve problems in the 21st century. This study aims to describe students' computational thinking abilities in solving maritime-based contextual problems on the topic of Systems of Linear Equations in Three Variables. This study employed a qualitative approach with a descriptive research design. The research subjects consisted of 26 tenth-grade students who participated in a computational thinking test. Subsequently, three students were selected as interview subjects representing high, medium, and low categories. Data were collected through tests and interviews, while data analysis consisted of data reduction, data presentation, and conclusion drawing. The results showed that students' computational thinking abilities were predominantly in the medium category, with a percentage of 57.7%, while the high category accounted for 23.1% and the low category for 19.2%. Students in the high category were able to fulfill all computational thinking indicators, namely decomposition, abstraction, pattern recognition, and algorithmic thinking. Students in the medium category were able to fulfill the indicators of decomposition, abstraction, and pattern recognition, but were not yet consistent in algorithmic thinking. Meanwhile, students in the low category were only able to fulfill the indicators of decomposition and abstraction, while the indicators of pattern recognition and algorithmic thinking had not yet been achieved. The findings indicate that the use of a maritime context provides more meaningful learning experiences but does not automatically make it easier for students to solve problems. Therefore, maritime-based mathematics learning needs to be designed to develop each computational thinking indicator gradually so that students are able to solve contextual problems systematically.