ABSTRAK

Christina Theola Putri Wardoyo, 2025. Analisis Kemampuan Koneksi Matematis Peserta Didik Kelas X SMA Bhakti Tunas Harapan Magelang Pada Materi Logaritma Setelah Diterapkan Pembelajaran Model *Problem Posing.* Program Studi Pendidikan Matematika. Jurusan Matematika dan Ilmu Pengetahuan Alam. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Sanata Dharma. Yogyakarta.

Kemampuan koneksi matematis peserta didik menjadi salah satu standar proses dalam matematika khususnya pada materi logaritma. Kemampuan koneksi matematis berfokus pada kemampuan mengenali dan menggunakan keterkaitan antar bidang konten matematika; matematika dengan disiplin ilmu lain; dan matematika dengan kehidupan sehari-hari. Tujuan dari penelitian ini yaitu menganalisis kemampuan koneksi matematis peserta didik kelas X SMA Bhakti Tunas Harapan pada materi logaritma setelah mengalami model pembelajaran *Problem Posing.*

Metode penelitian yang digunakan yaitu penelitian deskriptif dengan pendekatan kualitatif dan kuantitatif. Instrumen penelitian yang digunakan sebagai data utama yaitu *pre-test* dan *post-test*, kemudian didukung dengan lembar kerja yang menyesuaikan model pembelajaran *Problem Posing.* Hasil *pre-test* dan *post-test* digunakan untuk melihat perbandingan kemampuan koneksi matematis peserta didik sebelum dan setelah mengalami pembelajaran dengan model *Problem Posing.* Pengolahan data kualitatif menggunakan model analisis Miles dan Huberman yang melalui tahap reduksi data, penyajian data, dan penarikan kesimpulan.

Kesimpulan dari penelitian ini menunjukkan bahwa model pembelajaran *Problem Posing* mendukung peningkatan kemampuan koneksi matematis peserta didik terkhusus pada materi logaritma. Sebelum implementasi model pembelajaran, kurang dari 50% peserta didik memenuhi setiap indikator kemampuan koneksi matematis. Setelah implementasi, minimal 50% peserta didik mampu memenuhi setiap indikator kemampuan koneksi matematis. Kemampuan mengenali dan menggunakan ide-ide matematika didukung oleh tahap *listing attributes*, kemampuan memahami bagaimana ide-ide matematika saling berkaitan didukung oleh tahap *what-if-not-ing* dan *questions asking or problems posing*, kemampuan mengaplikasikan matematika ke dalam konteks di luar matematika didukung oleh tahap *analyzing problems* dan *choosing a starting point.*

Kata kunci: koneksi matematis, *problem posing,* logaritma

ABSTRACT

Christina Theola Putri Wardoyo, 2025. Analysis of Mathematics Connection Ability of 10th Grade Students of Bhakti Tunas Harapan Trilingual National School in Logarithm After Applied Problem Posing Learning Model. Mathematics Education Study Program. Department of Mathematics and Natural Science Education. Faculty of Teacher Training and Education. Sanata Dharma University, Yogyakarta.

Mathematics connection ability is one of the standard processes in mathematics, especially mathematics connection ability in logarithm. The mathematics connection ability focused on the capability to recognize and use the connections across content areas in mathematics; between mathematics with other disciplines; and mathematics in daily life. The aim of this research is to analyze the mathematics connection ability of 10th grade students of Bhakti Tunas Harapan Trilingual National School in logarithm after experiencing the Problem Posing learning model.

The research method used in this research is the descriptive method with qualitative and quantitative approaches. Research instruments that are used as the primary data are the results of pre-test and post-test, then supported by the results of worksheets that adjust the Problem Posing learning model. The results of pre-test and post-test will be used to see the comparison of mathematics connection ability before and after experiencing the Problem Posing learning model. The processing of qualitative data using the Miles and Huberman method through the steps of data reduction, data presentation, and conclusion drawing.

The conclusion of this research shows that the Problem Posing learning model supports the improvement of mathematical connection ability. Before the implementation of Problem Posing, less than 50% of students capable to occupy each indicator. After the implementation, at least 50% of students capable to occupy each indicator. Capability to recognize and use mathematical ideas supported by the listing attributes step, capability to understand how mathematical ideas interconnect supported by the what-if-not-ing and questions asking or problems posing step, and capability to apply mathematics in contexts outside mathematics supported by analyzing problems and choosing a starting point step.

Keywords: *mathematics connection, problem posing, logarithm*