ABSTRAK

Dwi Pratiwi Meisari, 2023. Pengaruh Model *Quantum Teaching* terhadap Keterampilan Proses Sains dan Kemampuan Kognitif Konsep Perpindahan Kalor Siswa Kelas V Sekolah Dasar, dibimbing oleh Syarifuddin Kune dan Hartono Bancong.

Penelitian ini bertujuan untuk mengetahui keterlaksanaan model *quantum teaching* serta pengaruhnya terhadap keterampilan proses sains (KPS) dan kemampuan kognitif konsep perpindahan kalor siswa kelas V sekolah dasar baik parsial maupun simultan. Penelitian ini termasuk penelitian kuantitatif dengan desain penelitian *quasi experimental*. Adapun populasi penelitian adalah seluruh siswa kelas V SD Gugus I Kecamatan Maniangpajo tahun Pelajaran 2022/2023 berjumlah 108 siswa. Teknik penarikan sampel ialah purposive sampling, Teknik pengumpulan data menggunakan observasi dan tes, yang akan dianalisis secara statistik baik deskriptif dan inferensial.
Hasil penelitian yang diperoleh, keterlaksanaan pembelajaran menggunakan model *quantum teaching* termasuk kategori efektif. Berdasarkan uji t, terdapat pengaruh model *quantum teaching* terhadap KPS karena nilai sig. $0,000 < 0,05$ atau thitung $15,802 > 2,1199$ t tabel. Begitu hasil uji t untuk kemampuan kognitif, terdapat pengaruh model *quantum teaching* terhadap kemampuan kognitif siswa karena nilai sig. $0,000 < 0,05$ atau nilai t hitung $22,409 > 2,1199$ t tabel. Untuk pengaruh secara simultan model *quantum teaching* terhadap KPS dan kemampuan kognitif, dilakukan uji MANOVA dan memperoleh hasil dari tabel *multivariate tests* menunjukkan nilai F untuk *Pillae Trace, Wilk Lambda, Hotelling Trace, Roy's Largest Root* nilai sig. $0,000 < 0,05$. Maka disimpulkan terdapat perbedaan KPS dan kemampuan kognitif yang signifikan antara siswa dengan pembelajaran model *quantum teaching* dengan siswa pembelajaran direct learning.

Kata Kunci: Model *Quantum Teaching*, Keterampilan Proses Sains, Kemampuan Kognitif.

ABSTRACT

Dwi Pratiwi Meisari, 2023. The Effect of the Quantum Teaching Model on Science Process Skills and Cognitive Abilities of the Concept of Heat Transfer in Class V Elementary School Students. Supervised by Syarifuddin Kune and Hartono Bancong.

This study aimed to determine the implementation of the quantum teaching model and its effect on science process skills (KPS) and the cognitive abilities of the heat transfer concept of fifth grade elementary school students, either partially or simultaneously. This research was a quantitative research with a quasi-experimental research design. The research population consisted of all fifth grade students at SD Cluster I, Maniangpajo District, for the 2022/2023 academic year with a total of 108 students. The sampling technique was purposive sampling. Data collection techniques used observation and tests, which analysed statistically both descriptively and inferentially.

The research results obtained, the implementation of learning using the quantum teaching model was included in the effective category. Based on the t test, there is an effect of the quantum teaching model on KPS because the sig. $0.000 < 0.05$ and tcount $15.802 > 2.1199$ t table. As soon as the results of the t test for cognitive abilities, there is an influence of the quantum teaching model on students' cognitive abilities because the sig. $0.000 < 0.05$ and the t-count value is $22.409 > 2.1199$ t-table. For the simultaneous effect of the quantum teaching model on KPS and cognitive ability, the MANOVA test was carried out and the results from the multivariate tests table showed that the F value for Pillae Trace, Wilk Lambda, Hotelling Trace, Roy's Largest Root was sig. $0.000 < 0.05$. So it can be concluded that there are significant differences in KPS and cognitive abilities between students learning the quantum teaching model and students learning direct learning.

Keywords: *Quantum Teaching Model, Science Process Skills, Cognitive Ability.*