

ABSTRAK

Agustin, Eka Listianah. 2025. *Pengaruh Model Pembelajaran Quantum Teaching Terhadap Pemahaman Konsep Pada Materi Fungsi Kelas VIII SMP*. Skripsi. Program Studi Pendidikan Matematika Universitas PGRI Delta. Dosen Pembimbing: 1) Dr. Lailatul Mubarakah, S. Pd., M. Pd. 2) Risdiana Chandra Dhewy, S. Si., M. Si.

Kata Kunci: *Model Pembelajaran Quantum Teaching, Pemahaman Konsep, Fungsi.*

Penelitian ini bertujuan untuk: (1) mendeskripsikan aktivitas peserta didik selama penerapan model pembelajaran *Quantum Teaching*, (2) mendeskripsikan pemahaman konsep matematika pada materi fungsi setelah penerapan model tersebut, dan (3) menganalisis pengaruh *Quantum Teaching* terhadap pemahaman konsep fungsi kelas VIII SMP. Jenis penelitian ini adalah kuantitatif dengan desain *One-Shot Case Study*. Sampel penelitian terdiri atas 25 peserta didik kelas VIII-A SMP PGRI 16 Sidoarjo. Data dikumpulkan melalui observasi aktivitas belajar dan tes pemahaman konsep berbentuk uraian, kemudian dianalisis menggunakan statistik deskriptif dan uji regresi linear sederhana. Hasil penelitian menunjukkan bahwa: (1) aktivitas peserta didik selama pembelajaran berada pada kategori sangat baik dengan rata-rata keterlibatan 84,95%, (2) pemahaman konsep peserta didik tergolong sangat baik dengan rata-rata skor *posttest* 30,16 dari skor maksimal 35, dan (3) terdapat pengaruh positif dan signifikan penerapan *Quantum Teaching* terhadap pemahaman konsep, dengan koefisien determinasi 88,1% serta nilai $t_{hitung} 13,061 > t_{tabel} 2,069$ dan $p\text{-value } 0,000 < 0,05$. Simpulan penelitian menegaskan bahwa *Quantum Teaching* efektif menciptakan pembelajaran interaktif dan berkontribusi signifikan dalam meningkatkan pemahaman konsep matematika, khususnya materi fungsi. Keterbatasan penelitian ini terletak pada instrumen observasi yang belum dilengkapi pedoman penilaian terperinci, sehingga hasil observasi berpotensi dipengaruhi subjektivitas pengamat. Oleh karena itu, penelitian selanjutnya diharapkan menyusun pedoman observasi yang lebih sistematis agar data lebih objektif dan reliabel.

ABSTRACT

Agustin, Eka Listianah. 2025. The Effect of Quantum Teaching Learning Model on Conceptual Understanding of Function Material in Grade VIII Junior High School. Thesis. Mathematics Education Study Program, Universitas PGRI Delta. Supervisors: 1) Dr. Lailatul Mubarakah, S.Pd., M.Pd. 2) Risdiana Chandra Dhewy, S.Si., M.Si.

Keywords: *Quantum Teaching Learning Model, Conceptual Understanding, Function.*

This study aims to: (1) describe students' learning activities during the implementation of the *Quantum Teaching* model, (2) describe students' conceptual understanding of functions after the implementation, and (3) analyze the effect of *Quantum Teaching* on conceptual understanding of functions in eighth-grade students. This quantitative research employed a *One-Shot Case Study* design with a sample of 25 students from class VIII-A of SMP PGRI 16 Sidoarjo. Data were collected through classroom activity observations and a conceptual understanding test in the form of essay questions, then analyzed using descriptive statistics and simple linear regression. The results showed that: (1) students' learning activities during the lessons were in the *very good* category, with an average engagement rate of 84.95%, (2) students' conceptual understanding was also in the *very good* category, with an average posttest score of 30.16 out of a maximum of 35, and (3) there was a positive and significant effect of Quantum Teaching on conceptual understanding, with a coefficient of determination of 88.1%, t_{value} of 13.061 > t_{table} of 2.069, and $p\text{-value}$ of $0.000 < 0.05$. The findings indicate that Quantum Teaching is effective in creating interactive learning environments and has a significant impact on improving students' mathematical conceptual understanding, particularly in function topics. However, this study has a limitation, namely the absence of a detailed observation rubric, which may lead to potential subjectivity in the assessment process. Future research is recommended to develop a more structured observation rubric to obtain more objective and reliable data.