

ABSTRAK

Indyah Kaeksi (2012). Meningkatkan hasil belajar dan keaktifan matematika melalui model pembelajaran *Quantum Teaching* pada pokok bahasan lingkaran siswa kelas VIII semester II SMP Negeri 2 Cawas tahun pelajaran 20011/2012. Program Studi Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta.

Penelitian ini bertujuan untuk mengetahui apakah model pembelajaran *Quantum Teaching* dapat meningkatkan hasil belajar matematika siswa kelas VIII semester II SMP N 2 Cawas pada materi pokok lingkaran.

Subjek penelitian ini adalah para siswa kelas XIII E SMP N 2 Cawas dengan jumlah siswa sebanyak 20 orang. Metode ini mempunyai model pembelajaran berupa TANDUR (Tumbuhkan, Alami, Namai, Demontrasi, Ulangi, dan Rayakan) dapat meningkatkan keaktifan siswa berani menyampaikan ide di depan kelas, siswa aktif bertanya dan berpendapat baik dengan guru maupun dengan temannya. Penelitian ini dilaksanakan pada semester 2 tahun pelajaran 20011/2012 dengan materi pokok lingkaran. Penelitian tindakan kelas ini terdiri dari 2 siklus, setiap siklus terdiri dari empat tahapan kegiatan, yaitu perencanaan, tindakan, pengamatan, dan refleksi. Dalam penelitian ini dilakukan refleksi diakhir siklus I guna mengetahui kekurangan yang terjadi pada siklus I agar selanjutnya pada siklus II kekurangan tersebut tidak muncul lagi sehingga dapat diperoleh langkah - langkah pembelajaran yang sesuai. Data keaktifan siswa diperoleh melalui pengamatan dengan lembar observasi keaktifan siswa. Pengambilan data minat belajar siswa melalui angket. Data prestasi belajar diperoleh melalui tes di akhir tiap siklus. Pengamat selama proses pembelajaran dilakukan oleh peneliti, guru bidang studi

Hasil penelitian menunjukkan pada studi awal nilai rata-rata materi pokok lingkaran siswa kelas VIII E SMP 2 Cawas pada tahun sebelumnya adalah 65. Hasil tersebut kurang dari standar ketuntasan yang ditetapkan sekolah yaitu nilai ketuntasan belajar ≥ 68 . Aktivitas siswa di kelas juga belum maksimal. Pada siklus I ketuntasan belajar dengan nilai rata - rata 67,35 dan masih banyak siswa yang belum tuntas serta aktifitas siswa belum mencapai indikator kinerja sebagai refleksi dilanjutkan pada siklus II dan diperoleh rata - rata 79 dan aktifitas siswa telah mencapai indikator . Simpulan yang dapat diambil dari penelitian ini adalah model *Quantum Teaching* membantu dalam menciptakan lingkungan belajar yang efektif dengan cara memanfaatkan unsur - unsur yang ada pada siswa.

Kata-kata kunci : pembelajaran matematika dengan menggunakan *Quantum Teaching*, penelitian tindakan kelas.

ABSTRACT

Indyah Kaeksi (2012). Improving the Learning Achievement and Mathematics Activeness using Quantum Teaching and Learning Model on the topic of Circle for Students of grade VIII semester II Cawas State Junior High School, No.2 Academic Year 2011/2012. Mathematics Science Education Study Program, Techers' Training Faculty, Sanata Dharma University, Yogyakarta.

This research was aimed to find out whether Quantum Teaching learning model could improve the mathematics learning achievement of students of grade VIII E in semester II 2 Cawas State JHS on the topic of circle.

The subjects of this research were the 20 students class VIII E 2 Cawas State JHS. This method used a learning model called *TANDUR* (*Tumbuhkan, Alami, Namai, Demonstrasi, Ulangi, and Rayakan* – Raise, Experience, Name, Demonstrate, Repeat, and Celebrate) that could improve the students' activeness and confidence to convey their opinions in front of the class. It also made the students ask questions actively and convey their opinions to teachers and friends. This research was conducted in semester 2 in the academic year 2011/2012 on the topic of circle. This class action research consisted of 2 cycles. Each cycle consisted of four activity steps. They were planning, action, observation, and reflection. In this research, the reflection was done at the end of cycle I to find out the weaknesses in cycle I so that the weaknesses did not happen in cycle II, and the steps could be adjusted. The students' activeness data were taken by doing observation on students' activeness observation sheet. The students' learning interest data were taken from the questionnaires. The learning achievement data were taken from the tests at the end of each cycle. The observation during the learning process was done by the researcher, mathematics teacher.

The research results showed that at the beginning of the learning process the average score on the subject of circle for students of grade VIII E 2 Cawas State JHS in the year before was 65. The score did not meet the standard passing score determined by the school. The standard passing score was ≥ 68 . The students' activities were not maximal. At the cycle I, with the same standard passing score, the average score was 67.35. There were many students who did not meet the standard passing score, and the students' activities did not meet the performance indicators as the reflection to be continued at cycle II. At the cycle II, the average score was 79, and the students' activities met the indicators. Based on the research results, it could be concluded that Quantum Teaching model helped to create effective learning environment using the students' elements.

Key words: mathematics learning using quantum teaching, class action research.