

## ABSTRAK

**SITI NABILA MUNAWARDAH** : “Capaian Model Pembelajaran RADEC (*Read, Answer, Discuss, Explain, Create*) Terhadap Pemahaman Konsep Siswa pada Materi Sistem Gerak”

Penelitian ini dilatar belakangi adanya kesulitan siswa untuk memahami materi sistem gerak yang berdampak rendahnya pemahaman siswa. Penelitian ini bertujuan menganalisis keterlaksanaan pembelajaran, tingkat keberhasilan, pengaruh, dan respon siswa terhadap pembelajaran menggunakan model RADEC pada materi sistem gerak. Metode yang digunakan adalah *Quasi Experimental* dengan desain *Non Equivalent Control Group*. Sampel terdiri atas 70 siswa yang dipilih melalui teknik *purposive sampling*. Instrumen penelitian mencakup lembar observasi, soal berindikator pemahaman konsep, dan angket respon siswa. Hasil penelitian menunjukkan bahwa keterlaksanaan aktivitas guru dan aktivitas siswa berada pada kriteria sangat baik. Rata-rata nilai *posttest* pemahaman konsep siswa pada kelas dengan menggunakan model RADEC sebesar 64,53 dengan kriteria sedang, sementara pada kelas tanpa menggunakan model RADEC sebesar 53,25 dengan kriteria rendah. Uji hipotesis menunjukkan nilai  $t_{hitung}$  (2,97)  $>$   $t_{tabel}$  (2,00), sehingga  $H_0$  ditolak dan  $H_1$  diterima, artinya terdapat perbedaan signifikan dalam pemahaman konsep antara kedua kelas. Data tersebut didukung nilai *effect size* sebesar 1,09 dengan kriteria besar. Respon siswa terhadap model RADEC memperoleh hasil yang baik dengan persentase 84,1%. Maka dapat disimpulkan bahwa terdapat pengaruh model RADEC terhadap pemahaman konsep siswa pada materi sistem gerak. Penelitian ini dapat dijadikan referensi variasi model pembelajaran sehingga siswa memperoleh pengalaman belajar yang lebih bermakna.

**Kata Kunci:** Model RADEC, Pemahaman Konsep, Sistem Gerak



## **ABSTRACT**

**SITI NABILA MUNAWARDAH:** "SITI NABILA MUNAWARDAH: "Achievements of the RADEC Learning Model (Read, Answer, Discuss, Explain, Create) on Students' Understanding of Concepts in Motion Systems Material"

*This research was motivated by students' difficulties in understanding movement system material which resulted in low student understanding. This research aims to analyze the implementation of learning, level of success, influence and student responses to learning using the RADEC model on movement systems material. The method used is Quasi Experimental with a Non Equivalent Control Group design. The sample consisted of 70 students selected through purposive sampling technique. The research instruments include observation sheets, questions indicating conceptual understanding, and student response questionnaires. The results of the research show that the implementation of teacher activities and student activities is in very good criteria. The average posttest score for students' conceptual understanding in classes using the RADEC model was 64.53 with medium criteria, while in classes without using the RADEC model it was 53.25 with low criteria. Hypothesis testing shows the value  $t_{hitung}$  (2.97) >  $t_{tabel}$  (2.00), so that  $H_0$  is rejected and  $H_1$  is accepted, meaning that there is a significant difference in conceptual understanding between the two classes. This data is supported by an effect size value of 1.09 with large criteria. Student responses to the RADEC model obtained good results with a percentage of 84.1%. So it can be concluded that there is an influence of the RADEC model on students' understanding of concepts in motion systems material. This research can be used as a reference for variations in learning models so that students gain a more meaningful learning experience.*

*Keywords:* Concept Understanding, Motion System, RADEC Model.

