

ABSTRAK

Nisrina Azahra: “Pengaruh Model Pembelajaran *Teams Games Tournament* (TGT) berbantuan *Game COC Memorize* terhadap Beban Kognitif Siswa pada Materi Pencemaran Lingkungan”

Beban kognitif merupakan salah satu faktor yang memengaruhi efektivitas proses pembelajaran karena berkaitan dengan kemampuan peserta didik dalam menerima, mengolah, dan memahami informasi. Pada materi pencemaran lingkungan, peserta didik sering mengalami kesulitan dalam memahami keterkaitan antarkonsep sehingga diperlukan model pembelajaran yang mampu membantu mengelola beban kognitif selama proses pembelajaran. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Teams Games Tournament* (TGT) berbantuan *Game COC Memorize* terhadap beban kognitif peserta didik pada materi pencemaran lingkungan. Penelitian ini menggunakan metode *quasi experiment* dengan desain *Posttest Only Control Group Design* dan teknik *purposive sampling*. Sampel penelitian terdiri atas 90 peserta didik, yaitu 45 peserta didik pada kelas eksperimen dan 45 peserta didik pada kelas kontrol. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran pada kelas eksperimen memperoleh persentase aktivitas guru sebesar 95% dan aktivitas peserta didik sebesar 96%, sedangkan pada pembelajaran menggunakan model *Problem Based Learning* (PBL) masing-masing memperoleh persentase sebesar 95% dengan kategori sangat baik. Rata-rata skor beban kognitif pada kelas eksperimen sebesar 1,61 dengan kategori sangat rendah, sedangkan pada pembelajaran menggunakan model *Problem Based Learning* (PBL) sebesar 2,06 dengan kategori rendah. Hasil uji *Mann–Whitney U Test* menunjukkan nilai *Asymp. Sig. (2-tailed)* sebesar 0,030 ($<0,05$) dengan *effect size* (r) sebesar 0,63 yang termasuk kategori *large effect*. Dengan demikian, dapat disimpulkan bahwa model pembelajaran *Teams Games Tournament* (TGT) berbantuan *Game COC Memorize* memberikan pengaruh yang signifikan terhadap beban kognitif peserta didik pada materi pencemaran lingkungan.

Kata Kunci: *Teams Games Tournament* (TGT), *Game COC Memorize*, Beban Kognitif, Pencemaran Lingkungan.

ABSTRACT

Nisrina Azahra: *“The Effect of the Teams Games Tournament (TGT) Learning Model Assisted by the COC Memorize Game on Students' Cognitive Load in Environmental Pollution Material”*

Cognitive load is one of the factors that influences the effectiveness of the learning process because it is related to students' ability to receive, process, and understand information. In environmental pollution topics, students often experience difficulties in understanding interconnected concepts; therefore, an instructional model that helps manage cognitive load during the learning process is needed. This study aimed to determine the effect of the Teams Games Tournament (TGT) learning model assisted by the COC Memorize Game on students' cognitive load in environmental pollution material. This study employed a quasi-experimental method using a Posttest Only Control Group Design with a purposive sampling technique. The research sample consisted of 90 students, including 45 students in the experimental class and 45 students in the control class. The results showed that the implementation of learning in the experimental class achieved 95% for teacher activities and 96% for student activities, while the implementation of learning using the Problem Based Learning (PBL) model achieved 95% for both teacher and student activities, all categorized as very good. The average cognitive load score in the experimental class was 1.61 (very low category), while the average score in the learning using the Problem Based Learning (PBL) model was 2.06 (low category). The Mann–Whitney U Test yielded an Asymp. Sig. (2-tailed) value of 0.030 (<0.05) with an effect size (r) of 0.63, indicating a large effect. Therefore, it can be concluded that the Teams Games Tournament (TGT) learning model assisted by the COC Memorize Game has a significant effect on students' cognitive load in environmental pollution material.

Keywords: Teams Games Tournament (TGT), COC Memorize Game, Cognitive Load, Environmental Pollution.