

## ABSTRAK

### **Hilmawati Alamiah : “Pengaruh Model *Learning Cycle 5E* (*Engagement, Exploration, Explanation, Elaboration, Evaluation*) terhadap Peningkatan Keterampilan Berpikir Tingkat Tinggi Siswa pada Materi Sistem Saraf**

Pasifnya pembelajaran menyebabkan keterampilan berpikir tingkat tinggi siswa pada mata pelajaran biologi masih tergolong cukup rendah, sehingga menyebabkan siswa tidak dapat menjawab soal pada kategori C4-C6 atau biasa disebut soal HOTS. Penelitian ini bertujuan untuk melihat pengaruh model *learning cycle 5e* berbantu *liveworksheet* terhadap peningkatan keterampilan berpikir tingkat tinggi siswa pada materi sistem saraf. Metode penelitian yang digunakan yaitu *quasi experiment* dengan desain *non-equivalent control group*. Hasil penelitian di kelas dengan model *learning cycle 5e* berbantu *liveworksheet* menunjukkan bahwa keterlaksanaan kinerja guru dan aktivitas siswa sebesar 97% kriteria terlaksana sangat baik. Peningkatan keterampilan berpikir tingkat tinggi siswa di kelas dengan model *learning cycle 5e* berbantu *liveworksheet* memiliki nilai *N-Gain* sebesar 0,72 dengan kriteria tinggi, sementara pada kelas tanpa model *learning cycle 5e* berbantu *liveworksheet* sebesar 0,52 dengan kriteria sedang. Hasil uji hipotesis diperoleh nilai Sig. (2-tailed) 0,01 ( $< 0,05$ ) yang berarti  $H_0$  ditolak dan  $H_1$  diterima, dikuatkan dengan nilai *effect size* sebesar 0,78 kriteria sedang, sehingga model *learning cycle 5e* berbantu *liveworksheet* berpengaruh positif sedang dan signifikan terhadap peningkatan keterampilan berpikir kritis siswa pada materi sistem saraf. Respon peserta didik terhadap pembelajaran sistem saraf terhadap kelas dengan model *learning cycle 5e* berbantu *liveworksheet* sebesar 78% dengan kategori baik, sementara kelas tanpa model *learning cycle 5e* berbantu *liveworksheet* sebesar 67% dengan kategori baik pula.

**Kata kunci** : Berpikir Tingkat Tinggi, *Learning Cycle 5e*, Sistem Saraf

## ABSTRACT

**Hilmawati Alamia:** *"The Effect of the 5E Learning Cycle Model (Engagement, Exploration, Explanation, Elaboration, Evaluation) on Improving Students' Higher Level Thinking Skills on Nervous System Material"*

*Passive learning causes students high level thinking in biology subjects to still be quite low, causing students to be unable to answer questions in the C4-C6 category or what are usually called HOTS questions. This research aims to see the effect of the 5e learning cycle model assisted by live worksheets on improving students' high-level thinking skills in nervous system material. The research method used was quasi-experimental with a non-equivalent control group design. The results of research in the classroom using the 5e learning cycle model assisted by live worksheets show that 97% of the criteria for teacher performance and student activities were met very well. Increasing students' high-level thinking skills in classes with the 5e learning cycle model assisted by liveworksheets had an N-Gain value of 0.72 with high criteria, while in classes without the 5e learning cycle model assisted with liveworksheets it was 0.52 with medium criteria. The results of the hypothesis test obtained a Sig value. (2-tailed) 0.01 ( $< 0.05$ ) which means  $H_0$  is rejected and  $H_1$  is accepted, confirmed by the effect size value of 0.78, medium criteria, so that the 5e learning cycle model assisted by liveworksheets has a positive and significant effect on improving students' critical thinking skills in nervous system material. The response of students to the neural learning system for classes with the 5e learning cycle model assisted by liveworksheets was 78% in the good category, while classes without the 5e learning cycle model assisted by liveworksheets was 67% in the good category.*

**Keywords:** *Higher Level Thinking, Nervous System, Learning Cycle 5e*