ABSTRAK

Fitri Febriani 1202060030 2026. Pengaruh Model *Predict Observe Explain* (POE) Berbantu Media Question Box Terhadap Peningkatan Keterampilan Berpikir Kritis Siswa Pada Materi Makanan Dan Sistem Pencernaan Manusia

Kemampuan berpikir kritis penting dalam pembelajaran IPA karena peserta didik tidak hanya dituntut memahami konsep, tetapi juga mampu menganalisis informasi, mengevaluasi masalah, menarik kesimpulan, dan menjelaskan alasan. Pada materi sistem pencernaan, kemampuan ini diperlukan untuk memahami hubungan antara zat makanan, organ pencernaan, gangguan sistem pencernaan, serta upaya menjaga kesehatan tubuh. Oleh karena itu, diperlukan model pembelajaran aktif. Penelitian ini bertujuan untuk: 1) mendeskripsikan keterlaksanaan pembelajaran dengan model *Predict–Observe–Explain* (POE) berbantu *Question Box Games* pada kelas eksperimen dan Project Based Learning (PjBL) pada kelas kontrol; 2) menganalisis peningkatan kemampuan berpikir kritis peserta didik; 3) menganalisis respon peserta didik terhadap pembelajaran; dan 4) menganalisis pengaruh model POE berbantu *Question Box Games* terhadap peningkatan kemampuan berpikir kritis peserta didik pada materi sistem pencernaan. Penelitian ini menggunakan pendekatan kuantitatif dengan metode quasi experiment dan desain nonequivalent pretest-posttest control group design. Kelas eksperimen menggunakan model POE berbantu *Question Box Games*, sedangkan kelas kontrol menggunakan model PjBL. Instrumen penelitian meliputi tes kemampuan berpikir kritis, lembar observasi keterlaksanaan aktivitas guru dan siswa, serta angket respon. Data dianalisis menggunakan N-Gain, uji normalitas, uji homogenitas, Independent Sample T-Test, dan effect size. Hasil penelitian menunjukkan bahwa: 1) keterlaksanaan pembelajaran kelas eksperimen memperoleh aktivitas guru 99% dan aktivitas siswa 91% dengan kriteria sangat baik, sedangkan kelas kontrol memperoleh aktivitas guru 91% dan aktivitas siswa 88% dengan kriteria sangat baik; 2) kemampuan berpikir kritis meningkat, ditunjukkan oleh pretest kelas eksperimen 47,50 menjadi 75,00 pada posttest dengan N-Gain 0,53 kategori sedang, sedangkan kelas kontrol memperoleh pretest 43,00 menjadi 63,67 pada posttest dengan N-Gain 0,35 kategori sedang; 3) respon peserta didik kelas eksperimen memperoleh 70,17% dengan kriteria baik, sedangkan kelas kontrol memperoleh 67,07%; dan 4) model POE berbantu Question Box Games berpengaruh positif dan signifikan, dibuktikan melalui uji t pretest 0,133 > 0,05, uji t posttest 0,001 < 0,05, serta effect size 1,52 kategori tinggi.

ABSTRACT

Fitri Febriani 1202060030 2026. ***The Effect of the Predict–Observe–Explain (POE) Model Assisted by Question Box Media on Improving Students' Critical Thinking Skills in the Topic of Food and the Human Digestive System***

Critical thinking ability is essential in science learning because students are required not only to understand concepts, but also to analyze information, evaluate problems, draw conclusions, and explain reasons logically. In the topic of the digestive system, this ability is needed to understand the relationship between nutrients, digestive organs, digestive system disorders, and efforts to maintain body health. Therefore, an active learning model is needed to train students' critical thinking ability. This study aimed to: 1) describe the implementation of learning using the Predict–Observe–Explain (POE) model assisted by Question Box Games in the experimental class and Project Based Learning (PjBL) in the control class; 2) analyze the improvement of students' critical thinking ability; 3) analyze students' responses to the learning process; and 4) analyze the effect of the POE model assisted by Question Box Games on improving students' critical thinking ability in the digestive system topic. This study employed a quantitative approach with a quasi-experimental method and a nonequivalent pretest-posttest control group design. The experimental class used the POE model assisted by Question Box Games, while the control class used the PjBL model. The research instruments consisted of a critical thinking ability test, observation sheets of teacher and student activities, and a student response questionnaire. The data were analyzed using N-Gain, normality test, homogeneity test, Independent Sample T-Test, and effect size. The results showed that: 1) the implementation of learning in the experimental class obtained 99% for teacher activity and 91% for student activity, both categorized as very good, while the control class obtained 91% for teacher activity and 88% for student activity, also categorized as very good; 2) students' critical thinking ability improved, as shown by the experimental class pretest score of 47.50 increasing to 75.00 in the posttest with an N-Gain of 0.53 in the moderate category, while the control class obtained a pretest score of 43.00 increasing to 63.67 in the posttest with an N-Gain of 0.35 in the moderate category; 3) students' responses in the experimental class reached 70.17% in the good category, while the control class reached 67.07%; and 4) the POE model assisted by Question Box Games had a positive and significant effect, as evidenced by the pretest t-test result of 0.133 > 0.05, the posttest t-test result of 0.001 < 0.05, and an effect size of 1.52 in the high category.