ABSTRAK

Azhara Dwi Febrianti: "Pengaruh Model *Problem Based Learning* (PBL) Berbasis *Socio Scientific Issue* (SSI) Terhadap Peningkatan Kemampuan Berpikir Kritis Siswa Pada Materi Sistem Ekskresi"

Pembelajaran 21, menekankan pentingnya kemampuan berpikir kritis sebagai salah satu keterampilan yang harus dimiliki oleh siswa. Penelitian ini bertujuan untuk menganalisis pengaruh model PBL berbasis SSI terhadap peningkatan kemampuan berpikir kritis pada materi sistem ekskresi. Penelitian menggunakan metode *quasi eskperimen* dengan desain penelitian *non-equivalent control group design.* Sampel terdiri atas 32 siswa kelas XI-2 sebagai kelas eksperimen dan 32 siswa kelas XI-3 sebagai kelas kontrol di SMAN 1 Talaga. Hasil penelitian menunjukkan bahwa keterlaksanaan aktivitas guru 90% (baik) dan siswa 89% (baik), sedangkan pada kelas kontrol keterlaksanaan aktivitas guru dan siswa 86% (baik). Peningkatan kemampuan berpikir analitis pada kelas eksperimen memperoleh nilai N-Gain sebesar 0,51 (sedang), sedangkan kelas kontrol memperoleh nilai N-Gain sebesar 0,40 (sedang). Hasil uji hipotesis menunjukkan nilai Sig. (2-tailed) 0,019 < 0,05 dengan *effect size* 0,60 (sedang), sehingga terdapat pengaruh signifikan model PBL Berbasis SSI terhadap peningkatan kemampuan berpikir kritis siswa. Respon siswa terhadap model PBL Berbasis SSI sebesar 83% sangat kuat. Model PBL berbasis SSI dapat diterapkan pada materi sistem ekskresi untuk meningkatkan kemampuan berpikir kritis siswa.

Kata Kunci: Berpikir Kritis, Sistem Ekskresi, PBL Berbasis *Socio-Scientific Issue*

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ABSTRACT

Azhara Dwi Febrianti : *"The Effect of the Socio Scientific Issue (SSI) Based Problem Based Learning (PBL) Model on the Improvement of Students' Critical Thinking Skills in the Topic of the Excretory System"*

Learning 21 emphasises the importance of critical thinking as one of the essential skills that pupils must possess. This study aims to analyse the effect of the SSI-based PBL model on the improvement of critical thinking skills in the subject of the excretory system. The study employed a quasi-experimental method with a non-equivalent control group design. The sample consisted of 32 students from Class XI-2 as the experimental group and 32 students from Class XI-3 as the control group at SMAN 1 Talaga. The results showed that the implementation of activities by teachers was 90 per cent (good) and by pupils 89 per cent (good), whilst in the control class, the implementation of activities by teachers and pupils was 86 per cent (good). The improvement in analytical thinking skills in the experimental class achieved an N-Gain value of 0.51 (moderate), whilst the control class achieved an N-Gain value of 0.40 (moderate). The results of the hypothesis test showed a Sig. (2-tailed) value of 0.019 < 0.05 with an effect size of 0.60 (moderate), indicating that the SSI-based PBL model has a significant effect on improving students' critical thinking skills. The students' response to the SSI-based PBL model was very strong at 83 per cent. The SSI-based PBL model can be applied to the excretory system curriculum to enhance students' critical thinking skills.

Keywords: *Critical Thinking, Excretory System, Socio-Scientific Issue-Based PBL*