

## ABSTRAK

**Muhammad Naufal Arrasyid 1212060080 (2021) :** “Pengaruh Model *Socio-Scientific Inquiry Based Learning* (SSIBL) Terhadap Peningkatan Keterampilan Argumentasi Siswa Pada Materi Perubahan Lingkungan”

Keterampilan argumentasi merupakan bagian dari kompetensi abad 21 yang penting dalam pendidikan sains. Keterampilan argumentasi di Indonesia masih tergolong rendah dan perlu dikembangkan. Penelitian ini bertujuan untuk menganalisis pengaruh model *socio-scientific inquiry based learning* (SSIBL) terhadap peningkatan keterampilan argumentasi siswa pada materi perubahan lingkungan. Penelitian ini menggunakan metode *quasi-experimental* dengan desain *non-equivalen control group*. Teknik pengambilan sampel menggunakan *purposive sampling* melibatkan siswa kelas X di MAN 1 Cianjur pada semester genap tahun ajaran 2024/2025. Instrumen yang digunakan meliputi lembar observasi, soal keterampilan argumentasi, dan angket respon. Data hasil penelitian menunjukkan bahwa kualitas pembelajaran terlaksana sangat baik dengan rata-rata presentase aktivitas guru sebesar 91.11% dan aktivitas siswa sebesar 90.61%. Baiknya kualitas pembelajaran direspon baik oleh siswa yang memperoleh presentase 84.3%. Hasil keterampilan argumentasi siswa kelas eksperimen memperoleh N-Gain sebesar 0.70 dengan kategori tinggi dan kelas kontrol memperoleh N-Gain 0.59 dengan kategori sedang. Hasil uji hipotesis menunjukkan Sig. 2-tailed  $0.00 < 0.05$  yang artinya  $H_0$  ditolak dan  $H_1$  diterima. Berdasarkan hasil tersebut dapat disimpulkan bahwa Model *Socio-Scientific Inquiry Based Learning* (SSIBL) berpengaruh positif terhadap keterampilan argumentasi siswa pada materi perubaha lingkungan. Implikasi dari penelitian ini adalah pembelajaran dengan model SSIBL dapat membekali siswa menghadapi isu-isu sains dalam kehidupan nyata.

**Kata Kunci :** Argumentasi, Perubahan Lingkungan, SSIBL

## **ABSTRACT**

**Muhammad Naufal Arrasyid 1212060080 (2021) :** *“The Effect of the Socio-Scientific Inquiry Based Learning (SSIBL) Model on Improving Students’ Argumentation Skills in Environmental Change Material”*

*Argumentation skills are part of 21st-century competencies that are essential in science education. In Indonesia, argumentation skills are still relatively low and need further development. This study aims to analyze the influence of the Socio-Scientific Inquiry Based Learning (SSIBL) model on improving students’ argumentation skills in the topic of environmental change. The research employed a quasi-experimental method with a non-equivalent control group design. The sampling technique used was purposive sampling, involving Grade X students at MAN 1 Cianjur during the second semester of the 2024/2025 academic year. The instruments used in this study included observation sheets, argumentation skill tests, and response questionnaires. The research findings show that the quality of learning was implemented very well, with an average percentage of teacher activity at 91.11% and student activity at 90.61%. The good quality of learning received positive responses from students, who gave an average score of 84.3%. The argumentation skill results showed that the experimental class obtained an N-Gain of 0.70 (high category), while the control class obtained an N-Gain of 0.59 (medium category). The hypothesis test results showed a Sig. 2-tailed value of  $0.00 < 0.05$ , indicating that  $H_0$  is rejected and  $H_1$  is accepted. Based on these results, it can be concluded that the Socio-Scientific Inquiry Based Learning (SSIBL) model has a positive effect on students’ argumentation skills in the topic of environmental change. The implication of this study is that learning using the SSIBL model can equip students to deal with real-life science-related issues.*

**Keywords:** *Argumentation, Environmental Change, SSIBL*