

ABSTRAK

HAWDHIYA KAYLA PRADINA ZAHRA: “Peningkatan Komunikasi Sains Siswa Menggunakan Model Pjbl Berbasis Etno–Stream (*Science, Technology, Religion, Engineering, Arts And Mathematics*) Pada Pembuatan Oncom Pasir Reungit Sumedang”

Penelitian ini bertujuan menganalisis peningkatan keterampilan komunikasi sains siswa melalui penerapan model *Project Based Learning* (PjBL) berbasis Etno–STREAM pada pembuatan oncom pasir reungit Sumedang. Penelitian menggunakan metode *quasi experiment* dengan desain *non-equivalent control group* dan teknik *purposive sampling*. Subjek penelitian melibatkan siswa kelas X-1 (eksperimen) dan X-4 (kontrol) masing-masing 36 orang di salah satu SMA Kecamatan Cimalaka. Instrumen penelitian berupa lembar observasi, modul ajar, tugas kinerja, dan soal komunikasi sains dengan indikator: mengubah bentuk penyajian data, menggambarkan data dalam grafik/tabel, menjelaskan hasil, membaca grafik/tabel, dan mendiskusikan kegiatan ilmiah. Hasil penelitian menunjukkan keterlaksanaan model pada kategori sangat baik, dengan rata-rata aktivitas siswa 89,04% dan guru 90,46%. Rata-rata N-gain kelas eksperimen 0,7 (kategori tinggi) dan kontrol 0,48 (kategori sedang). Indikator tertinggi adalah mengubah bentuk penyajian data, sedangkan indikator terendah adalah menjelaskan hasil. Uji-t menunjukkan perbedaan signifikan dengan perbedaan signifikan ($p = 0,001 < 0,05$). Rata-rata nilai produk kelas eksperimen 82,29 (baik) dan kontrol 75 (cukup). Refleksi siswa menunjukkan respon positif terhadap aspek Fact (83,3%), Filling (83,3%), Finding (91,7%), dan Future (83,3%). PjBL berbasis Etno-STREAM meningkatkan komunikasi sains dan memberikan pengalaman belajar.

Kata Kunci: Etno-STREAM, komunikasi sains, pembuatan oncom Pasir Reungit, *Project Based Learning*

ABSTRACT

HAWDHIYA KAYLA PRADINA ZAHRA: *“Enhancing Students’ Science Communication Skills through the Ethno–STREAM (Science, Technology, Religion, Engineering, Arts, and Mathematics) Based Project-Based Learning Model in Oncom Pasir Reungit Production in Sumedang”*

This study aims to analyze the improvement of students' science communication skills through the implementation of the Project Based Learning (PjBL) model based on Ethno-STREAM in producing Oncom Pasir Reungit from Sumedang. The research uses a quasi-experimental method with a non-equivalent control group design and purposive sampling. The subjects were students from class X-1 (experimental) and X-4 (control), each consisting of 36 students from a high school in Cimalaka. The instruments include observation sheets, teaching modules, performance tasks, and science communication questions focusing on the following indicators: changing data presentation, illustrating data in graphs/tables, explaining results, reading graphs/tables, and discussing scientific activities. Results show the model implementation was in the very good category, with average student activity of 89.04% and teacher activity of 90.46%. The experimental group's average N-gain was 0.7 (high), while the control group's was 0.48 (moderate). The highest indicator was changing data presentation, and the lowest was explaining results. A t-test revealed a significant difference ($p = 0.001 < 0.05$). The average product score for the experimental class was 82.29 (good), while the control class was 75 (adequate). Student reflections showed positive responses in the aspects of Fact (83.3%), Feeling (83.3%), Finding (91.7%), and Future (83.3%). PjBL Ethno-STREAM enhances science communication and provides valuable learning experiences.

Keywords: Ethno–STREAM, science communication, Oncom Pasir Reungit production, Project-Based Learning