

ABSTRAK

NADIA AULIA NURFADILAH: “Pengaruh Model *Problem Based Learning* Terhadap Kemampuan Komunikasi Ilmiah Pada Materi Sistem Reproduksi Manusia”

Penelitian ini bertujuan untuk menganalisis pengaruh model *Problem Based Learning* (PBL) terhadap kemampuan komunikasi ilmiah peserta didik pada materi Sistem Reproduksi Manusia. Penelitian ini menggunakan pendekatan kuantitatif dengan metode kuasi eksperimen dan desain control group design. Sampel penelitian terdiri atas dua kelas, yaitu kelas eksperimen dan kelas kontrol yang masing-masing berjumlah 33 peserta didik. Pengumpulan data dilakukan melalui tes kemampuan komunikasi ilmiah, lembar observasi keterlaksanaan pembelajaran, dan angket respons peserta didik. Data dianalisis menggunakan uji normalitas, uji homogenitas, N-Gain, dan *Mann-Whitney U Test*. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran menggunakan model PBL memperoleh persentase sebesar 90% pada aspek guru dengan kategori sangat baik dan 71% pada aspek peserta didik dengan kategori baik. Dan didukung juga oleh respons peserta didik terhadap penerapan PBL memperoleh persentase sebesar 81,79% dengan kategori sangat baik. Peningkatan kemampuan komunikasi ilmiah ditunjukkan melalui nilai N-Gain pada kelas eksperimen sebesar 0,66 dengan kategori sedang, sedangkan kelas kontrol sebesar 0,25 dengan kategori rendah. Hasil uji *Mann-Whitney U Test* menunjukkan nilai Asymp. Sig. (2-tailed) sebesar $0,001 < 0,05$, sehingga H_0 ditolak dan H_a diterima. Dengan demikian, model *Problem Based Learning* berpengaruh signifikan terhadap kemampuan komunikasi ilmiah peserta didik pada materi Sistem Reproduksi Manusia.

Kata kunci: *Problem Based Learning*, kemampuan komunikasi ilmiah, Sistem Reproduksi Manusia.

ABSTRACT

NADIA AULIA NURFADILAH : “The Effect of the *Problem-Based Learning* Model on Scientific Communication Skills Regarding the Human Reproductive System”

This study aims to analyze the effect of the Problem-Based Learning (PBL) model on students' scientific communication skills regarding the Human Reproductive System. This study employed a quantitative approach using a quasi-experimental method with a control group design. The research sample consisted of two classes, namely an experimental class and a control class, each consisting of 33 students. Data were collected through a scientific communication skills test, a learning implementation observation sheet, and a student response questionnaire. The data were analyzed using normality tests, homogeneity tests, N-Gain, and the Mann-Whitney U Test. The results showed that the implementation of learning using the PBL model obtained a percentage of 90% in the teacher aspect, categorized as very good, and 71% in the student aspect, categorized as good. This finding was also supported by students' responses to the implementation of PBL, which obtained a percentage of 81.79%, categorized as very good. The improvement in scientific communication skills was indicated by an N-Gain score of 0.66 in the experimental class, categorized as moderate, while the control class obtained an N-Gain score of 0.25, categorized as low. The results of the Mann-Whitney U Test showed an Asymp. Sig. (2-tailed) value of $0.001 < 0.05$, indicating that H_0 was rejected and H_a was accepted. Therefore, the Problem-Based Learning model had a significant effect on students' scientific communication skills regarding the Human Reproductive System.

Keywords: *Problem-Based Learning, scientific communication skills, Human Reproductive System.*