

ABSTRAK

Septriyani Sianturi, NIM. 4183151023. Implementasi *Blended Learning* Berbasis Pendekatan Saintifik terhadap Kemandirian dan Hasil Belajar IPA.

Penelitian ini bertujuan untuk mengetahui implementasi *blended learning* berbasis pendekatan saintifik terhadap kemandirian dan hasil belajar siswa, serta hubungan kemandirian dengan hasil belajar pada materi IPA usaha dan pesawat sederhana kelas VIII SMP. Penelitian ini dilakukan dengan metode *quasi* eksperimen *two group pretest-posttest design*. Teknik pengambilan sampel menggunakan teknik *random sampling*. Sampel penelitian terdiri dari dua kelas yaitu kelas VIII-10 dan VIII-11 yang masing-masing terdiri dari 32 siswa. Kelas VIII-11 merupakan kelas eksperimen yang diajarkan dengan *blended learning* berbasis pendekatan saintifik. Kelas VIII-10 adalah kelas kontrol yang diajarkan dengan pembelajaran konvensional. Instrumen penelitian yang digunakan adalah non-tes dan tes, non-tes berupa angket kemandirian belajar siswa yang terdiri dari 30 pernyataan dengan empat pilihan jawaban. Instrumen tes digunakan untuk mengetahui hasil belajar siswa, sebanyak 20 pertanyaan dengan empat pilihan. Data *pre-test* dan *post-test* kemandirian belajar siswa pada kelas eksperimen adalah 55,10 dan 78,35 sedangkan data *pre-test* dan *post-test* kemandirian belajar siswa pada kelas kontrol adalah 55,67 dan 65,78. Data pretes dan postes hasil belajar siswa pada kelas eksperimen adalah 38,12 dan 84,04 sedangkan data pretes dan postes hasil belajar siswa pada kelas kontrol adalah 37,18 dan 59,21. Data dianalisis menggunakan uji manova (multivariate analysis of variance) dan kolerasi kemandirian dan hasil belajar siswa. Berdasarkan uji hipotesis, terdapat perbedaan kemandirian dan hasil belajar siswa secara signifikan dengan penerapan pembelajaran *blended learning* berbasis pendekatan saintifik pada materi IPA. Terdapat hubungan kolerasi positif antara kemandirian belajar siswa terhadap hasil belajar siswa yaitu 0,498 dengan kategori sedang. Persentase peningkatan N-gain kemandirian belajar siswa pada kelas eksperimen adalah 51% dengan kategori sedang dan kelas kontrol adalah 22% dengan kategori rendah. Persentase peningkatan N-gain hasil belajar siswa pada kelas eksperimen 74% dengan kategori tinggi dan kelas kontrol 35% dengan kategori sedang.

Kata Kunci: *Blended learning*, pendekatan saintifik, discovery learning, kemandirian belajar, Hasil belajar dan Kolerasi

ABSTRACT

Septriyanti Sianturi, NIM. 4183151023. The Application of Blended Learning Based on the Scientific approach to Independent and Learning Outcomes in Science.

This study aims to determine the implementation of blended learning based on a scientific approach to student independence and learning outcomes, as well as the relationship between independence and learning outcomes in the science material of effort and simple aircraft in class 8th grade junior high school. This research was conducted using the quasi-experimental method of two group pretest-posttest design. The sampling technique used random sampling technique. The research sample consisted of two classes, namely class VIII-10 and VIII-11, each of which consisted of 32 students. Class VIII-11 was the experimental class taught with blended learning based on scientific approach. Class VIII-10 was the control class taught with conventional learning. The research instruments used were non-test and test, non-test in the form of a student learning independence questionnaire consisting of 30 statements with four choices. The test instrument is used to determine student learning outcomes, as many as 20 questions with four choices. The pretest and post-test data of student learning independence in the experimental class were 55.10 and 78.35 while the pretest and post-test data of student learning independence in the control class were 55.67 and 65.78. The pretest and posttest data of student learning outcomes in the experimental class were 38.12 and 84.04 while the pretest and posttest data of student learning outcomes in the control class were 37.18 and 59.21. The data were analyzed using the monova test (multivariate analysis of variance) and the correlation of independence and student learning outcomes. Based on hypothesis testing, there is a significant difference in students' independence and learning outcomes with the application of blended learning based on the scientific approach in science materials. There is a positive correlation relationship between student learning independence and student learning outcomes, namely 0.498 with a moderate category. The percentage increase in N-gain of student learning independence in the experimental class is 51% with a moderate category and the control class is 22% with a low category. The percentage increase in N-gain of student learning outcomes in the experimental class was 74% with a high category and the control class was 35% with a moderate category.

Keywords: *Blended learning*, scientific approach, discovery learning, learning independence, learning outcomes, dan correlation