ABSTRAK

NIDA CHAIRUL UMMAH. 2021. **PENGARUH *BLENDED PROBLEM BASED LEARNING* BERBASIS *GOOGLE CLASSROOM* TERHADAP BEBAN KOGNITIF PESERTA DIDIK PADA MATERI KEANEKARAGAMAN HAYATI (Studi Eksperimen di Kelas X MIPA SMA Negeri 1 Cigalontang Tahun ajaran 2021/2022).** Jurusan Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Siliwangi, Tasikmalaya.

Penelitian ini bertujuan untuk mengetahui pengaruh *blended problem based learning* berbasis *google classroom* terhadap beban kognitif peserta didik di kelas X MIPA SMA Negeri 1 Cigalontang. Metode penelitian yang digunakan adalah *true experiment* dengan menggunakan *postest-only control design.* Populasi pada penelitian ini yaitu kelas X MIPA sebanyak 61 orang. Sampel diambil dengan teknik sampling total sehingga seluruh populasi dijadikan sampel, sedangkan untuk penentuan perlakuan pada sampel digunakan teknik *cluster random sampling*. Kelas X MIPA 1 sebanyak 31 orang peserta didik sebagai kelas eksperimen dan kelas X MIPA 2 sebanyak 30 orang peserta didik sebagai kelas kontrol. Instrumen penelitian yang digunakan dalam penelitian ini yaitu kuisioner beban kognitif dengan jumlah 28 pernyataan. Teknik analisis data yang digunakan yaitu uji t *independent*. Berdasarkan hasil analisis data dan uji hipotesis maka dapat disimpulkan bahwa ada pengaruh *blended problem based learning* berbasis *google classroom* terhadap beban kognitif dengan nilai signifikansi 0,013. Beban kognitif peserta didik menunjukkan rata-rata skor sebesar 3,233 dengan kategori beban kognitif rendah.

Kata Kunci : Beban Kognitif; *Blended Problem Based Learning* Berbasis *Google Classroom*; Eksperimen; Kontrol

ABSTRACT

NIDA CHAIRUL UMMAH. 2021. **THE EFFECT OF BLENDED PROBLEM BASED LEARNING BASED ON GOOGLE CLASSROOM TOWARD STUDENT'S COGNITIVE LOADS IN BIODIVERSITY MATERIALS (Experimental Study in Class X MIPA SMA Negeri 1 Cigalontang Academic Year 2021/2022).** *Biology Education Department, Faculty of Science and Teacher's Training and Education, Siliwangi University of Tasikmalaya.*

This study aims to determine the effect of blended problem based learning based on google classroom on the cognitive load of students in class X MIPA SMA Negeri 1 Cigalontang. The research method used was a true experiment using a posttest-only control design. The population in this study is class X MIPA as many as 61 people. The sample was taken using a total sampling technique so that the entire population was sampled, while for determining the treatment of the sample used cluster random sampling technique. Class X MIPA 1 as many as 31 students as the experimental class and class X MIPA 2 as many as 30 students as the control class. The research instrument used in this study was a cognitive load questionnaire with a total of 28 statements. The data analysis technique used is independent t test. Based on the results of data analysis and hypothesis testing, it can be concluded that there is an effect of blended problem based learning based on google classroom on cognitive load with a significance value of 0.013. The cognitive load of the students showed an average score of 3,233 with the category of low cognitive load.

Keywords: Cognitive Loads; Blended Problem Based Learning Based on Google Classroom; Experiment; Control