

## ABSTRAK

NINDA LUTHFIANI 2021. Pengaruh *Blended Problem Based Learning Berbasis Whatsapp* terhadap Kemampuan Berargumentasi Ilmiah Peserta Didik Pada Konsep Virus (Studi Eksperimen di Kelas X MIPA MA Negeri 2 Kabupaten Tasikmalaya Tahun Ajaran 2021/2022). Skripsi Jurusan Pendidikan Biologi. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Siliwangi.

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Penelitian ini bertujuan untuk mengetahui pengaruh *blended problem based learning* berbasis *whatsapp* terhadap kemampuan berargumentasi ilmiah peserta didik pada konsep virus di kelas X MIPA MA Negeri 2 Kabupaten Tasikmalaya. Metode penelitian yang digunakan adalah kuasi eksperimen dengan menggunakan *posttest only control design*. Populasi pada penelitian ini adalah kelas X MIPA sebanyak 202 orang. Sampel di ambil secara *non-probability sampling* berupa *purposive sampling*. Sampel yang digunakan yaitu kelas MIPA 5 dan X MIPA 6 MA Negeri 2 Kabupaten Tasikmalaya sebanyak 61 peserta didik. Dengan kelas MIPA 6 sebanyak 30 orang peserta didik sebagai kelas eksperimen dan X MIPA 5 sebanyak 31 orang peserta didik sebagai kelas kontrol. Pengumpulan data dilakukan dengan memberikan soal argumentasi ilmiah sebanyak 7 pertanyaan. Teknik analisis data yang digunakan adalah *t test independent* dengan bantuan SPSS *versi 26 for windows* dengan nilai signifikansi (0,000). Hasil penelitian menunjukkan terdapat pengaruh dari *blended problem based learning* berbasis *whatsapp* terhadap kemampuan berargumentasi ilmiah peserta didik pada konsep virus. Temuan lainnya menunjukkan bahwa rata-rata kemampuan berargumentasi ilmiah peserta didik pada konsep virus berdasarkan komponennya yakni *claim* (2,224), *evidence* (1,825) dan *reasoning* (0,378).

**Kata Kunci:** *blended problem based learning* dan argumetasi ilmiah

## ***ABSTRACT***

NINDA LUTHFIANI 2021. **The Effect of Whatsapp-Based Blended Problem Based Learning on Students' Scientific Argumentation Ability on the Virus Concept (Experimental Study in Class X MIPA MA Negeri 2 Tasikmalaya Regency Academic Year 2021/2022).** Thesis Department of Biology Education. Faculty of Teacher Training and Education. Siliwangi University.

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*This study aims to determine the effect of WhatsApp-based blended problem-based learning on students' scientific argumentation skills on the concept of a virus in class X MIPA MA Negeri 2 Tasikmalaya Regency. The research method used is a quasi-experimental using a posttest only control design. The population in this study was class X MIPA as many as 202 people. Samples were taken by non-probability sampling in the form of purposive sampling. The sample used is MIPA 5 and X MIPA 6 classes at MA Negeri 2 Tasikmalaya Regency as many as 61 students. With MIPA 6 class as many as 30 students as the experimental class and X MIPA 5 as many as 31 students as the control class. Data collection was done by giving 7 questions of scientific argumentation. The data analysis technique used was an independent t test with the help of SPSS version 26 for windows with a significance value (0.000). The results showed that there was an effect of WhatsApp-based blended problem based learning on students' scientific argumentation skills on the concept of viruses. Other findings show that the average scientific argumentation ability of students on the concept of a virus is based on its components, namely claim (2.224), evidence (1.825) and reasoning (0.378).*

**Keywords:** *blended problem based learning and scientific argument*