Implementation of Blended Learning on Molecular Genetics Course to Improve Understanding and Learning Independence

by Nur Aeni Ariyanti, Suyitno, Ixora Kartika

ABSTRACT

Abstract
Molecular Genetics course (BIO 8205) is a theoretical course without laboratories activity that will develop science in-depth way in the molecular field, especially those related to genetics or inheritance in living things. During this time, Molecular Genetics lectures are still limited on using the reading material provided by the lecturer and also the material delivered in class. With the implementation of Blended Learning, students are expected to be able to learn independently and be able to increase their creativity in exploring the material. The preparation phase begins with a limited meeting held with all members of the teaching team. The course handbook (RPS) resulting from the team's discussion was then adjusted to the Blended Learning method to be applied. Out of the 16 scheduled meetings, the Blended Learning method can only be applied to the last 3 meetings. This is caused by the material construction process in Be-Smart which takes a long time. The results of the pre-test and post-test scores for Bioinformatics material showed an increasing on students' understanding. It is expected that the implementation of the even semester of 2019-2020 can be implemented 100% so that it can be seen an increase in the independence and creativity of students in the learning process with the hope of deepening mastery of the material further.

Kata Kunci: *Blended learning, molecular genetics, independence, understanding*