

ABSTRAK

AYUNI KHAIRIYYAH. 8186182031. Pengaruh Pembelajaran *Blended Learning* Berbasis *Google Classroom* dan Kemampuan Awal Matematika terhadap Kemampuan Representasi Matematis dan Resiliensi Siswa di Masa Pandemi Covid-19. Tesis. Pendidikan Dasar. Pascasarjana Universitas Negeri Medan. 2021.

Penelitian ini bertujuan untuk mengetahui: (1) pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan representasi matematis siswa, (2) pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan resiliensi siswa, (3) interaksi antara pembelajaran (*blended learning* berbasis *google classroom* dan biasa) dengan kemampuan awal matematika siswa terhadap kemampuan representasi matematis siswa (4) interaksi antara pembelajaran (*blended learning* berbasis *google classroom* dan biasa) dengan kemampuan awal matematika siswa terhadap resiliensi siswa (5) besar pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan representasi matematis siswa (6) besar pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan resiliensi siswa. Penelitian ini merupakan penelitian eksperimen semu (*quasi experiment*). Populasi dalam penelitian ini seluruh siswa kelas VII SMPIT Ulil Albab Pematangsiantar Tahun Ajaran 2020/2021 yang terdiri atas tiga kelas. Sampel dipilih secara *cluster random sampling* sebanyak dua kelas. Kelas yang dipilih yaitu VII-1 sebagai kelas eksperimen (16 siswa) dan VII-2 sebagai kelas kontrol (17 siswa). Instrumen yang digunakan yaitu tes KAM, tes kemampuan representasi matematis dan angket resiliensi siswa. Data yang diperoleh dari instrumen penelitian dianalisis menggunakan ANAVA dua jalur. Sebelum digunakan uji ANAVA dua jalur terlebih dahulu dilakukan uji normalitas dan homogenitas dalam penelitian ini dengan taraf signifikansi 5%. Hasil penelitian menunjukkan bahwa: (1) terdapat pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan representasi matematis siswa ($p\text{-value} = 0,014 < 0,05$), (2) terdapat pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan resiliensi matematis siswa ($p\text{-value} = 0,019 < 0,05$), (3) tidak terdapat interaksi antara antara pembelajaran (*blended learning* berbasis *google classroom* dan konvensional) dengan kemampuan awal matematika terhadap kemampuan representasi matematis siswa ($p\text{-value} = 0,550 > 0,05$), (4) terdapat interaksi antara pembelajaran (*blended learning* berbasis *google classroom* dan konvensional) dengan kemampuan awal matematika terhadap kemampuan resiliensi matematis siswa ($p\text{-value} = 0,030 < 0,05$), (5) Besar pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan representasi matematis adalah 19,4%, dan (6) Besar pengaruh pembelajaran *blended learning* berbasis *google classroom* terhadap kemampuan resiliensi matematis adalah 12,7%.

Kata Kunci: *Blended Learning*, *Google Classroom*, Representasi Matematis, Resiliensi Siswa, Kemampuan Awal Matematika (KAM).

ABSTRACT

Ayuni Khairiyah. 8186182031. The Effect of Blended Learning Based on Google Classroom and Early Math Ability on Mathematical Representation Skills and Students' Resilience during the COVID-19 Pandemic. Thesis. Basic Education. Postgraduate State University of Medan. 2021.

The purpose of this study is to determine: (1) the effect of blended learning based on google classroom to students' mathematical representation abilities, (2) the effect of blended learning based on google classroom to students' mathematical resilience abilities, (3) the interaction between the learning model (blended learning based on google classroom and conventional) and the student's early mathematical ability toward students' mathematical representation abilities, (4) the interaction between the learning model (blended learning based on google classroom and conventional) and the student's early mathematical ability toward students' mathematical resilience abilities, (5) the big influence of blended learning based on google classroom to the ability of students' mathematical representation, (6) the big influence of blended learning based on google classroom to the ability of students' mathematical resilience. This research is a quasi-experimental research. The population in this study were all class VII students of SMPIT Ulil Albab Pematangsiantar for the 2020/2021 academic year, which consisted of three classes. The sample was selected by cluster random sampling consisting of two classes. The classes chosen were VII-1 as the experimental class (16 students) and VII-2 as the control class (17 students). The instruments used were the KAM test, a mathematical representation ability test and a student resilience questionnaire. The data obtained from the research instrument were analyzed using two-way ANOVA. Before using the two-way ANOVA test, the normality and homogeneity test was first carried out in this study with a significance level of 5%. The results of this research have shown that: (1) there are significant effect of blended learning based on google classroom on students' mathematical representation abilities ($p\text{-value} = 0,014 < 0,05$), (2) there are significant effect of blended learning based on google classroom on students' mathematical resilience abilities ($p\text{-value} = 0,019 < 0,05$), (3) there is no interaction between learning model (blended learning based on google classroom and conventional) and student's early math ability to students' mathematical representation abilities ($p\text{-value} = 0,550 < 0,05$), and (4) there is interaction between learning model (blended learning based on google classroom and conventional) and student's early math ability to students' mathematical resilience abilities ($p\text{-value} = 0,550 < 0,05$), (5) The big influence of blended learning based on google classroom to the mathematical representation abilities is 19.4%, and (6) The big influence of blended learning based on google classroom to the mathematical resilience abilities is 12,7%,

Keywords: Blended Learning, Google Classroom, Mathematical Representation, Resilience, Early Math Ability.