

ABSTRAK

Togi A Napitupulu. Perbedaan Kemampuan Spasial Dan Disposisi Matematik Antara Siswa Yang Diajar Melalui Pendekatan Penemuan Terbimbing Berbantuan *Cabri 3-D* Dengan Siswa Yang Diajar Melalui Metode Ekspositori Berbantuan *Cabri 3-D*.

Penelitian ini bertujuan untuk: (1) Mengetahui perbedaan kemampuan spasial siswa dan menganalisis perbedaan kemampuan spasial siswa antara siswa yang diajar menggunakan pendekatan penemuan terbimbing berbantuan *Software Cabri 3D* dengan metode ekspositori berbantuan *Software Cabri 3D*. (2) Mengetahui perbedaan disposisi matematik siswa dan menganalisis perbedaan disposisi matematik antara siswa yang diajar menggunakan pendekatan penemuan terbimbing berbantuan *Software Cabri 3D* dengan metode ekspositori berbantuan *Software Cabri 3D*. Teknik pengumpulan data dengan mengambil data dari nilai pretes dan postes dari masing-masing kelas eksperimen untuk menguji kemampuan spasial matematik dan angket respon siswa untuk menguji disposisi matematik siswa dari dua pendekatan yaitu pendekatan penemuan terbimbing dan ekspositori dengan berbantuan *Software Cabri 3D*. Hasil penelitian menunjukkan : (1) Model regresi yang sudah diperoleh untuk kemampuan spasial sebelumnya yaitu kelas metode ekspositori berbantuan *Software Cabri 3D* adalah $Y_{E2} = 3,794 + 1,031X_{E2}$ dan kelas pendekatan penemuan terbimbing berbantuan *Software Cabri 3D* $Y_{E1} = 6,606 + 3,794X_{E1}$. (2) Kemampuan spasial kelompok pendekatan penemuan terbimbing berbantuan *Software Cabri 3D* yaitu $Y = 6,606$ lebih besar dari persamaan konstanta persamaan garis regresi linier kelompok metode ekspositori berbantuan *Software Cabri 3D* yaitu $Y = 3,794$. (3) Berdasarkan peningkatan rata-rata tersebut, terlihat bahwa perbedaan rata-rata kelas eksperimen 1 lebih tinggi daripada peningkatan rata-rata kelas eksperimen 2, yaitu $63,37 > 62,50$ dan $89,53 > 80,00$. (4) Pembelajaran dengan menggunakan pendekatan penemuan terbimbing berbantuan *software Cabri 3D* memberikan dampak yang baik terhadap peningkatan disposisi matematik siswa.

Kata Kunci: Kemampuan Spasial, disposisi matematik, *Software Cabri 3D*, penemuan terbimbing, ekspositori.



ABSTRAC

Togi A Napitupulu The difference of spatial ability and mathematics disposition between learned student helped by *Cabri 3d* guided assisted discovery approach and learned student helped by *3-D Cabri* assisted expository method.

This study is aimed to: (1) determine the differences in students' spatial abilities and analyze the differences in students' spatial abilities between students who are taught helped by guided discovery approach assisted by Cabri 3D Software with expository method assisted by Cabri 3D Software. (2) Knowing the differences in students' mathematical dispositions and analyzing the differences in mathematical dispositions between students who were taught helped by using a guided discovery approach assisted by Cabri 3D Software with an expository method assisted by Cabri 3D Software. The data collection technique is by taking data from the pretest and posttest scores from each experimental class in order to test mathematical spatial abilities and student response questionnaires in order to test students' mathematical dispositions from two approaches, namely guided discovery and expository approaches with the help of Cabri 3D Software. The results of the study show: (1) The regression model which has been obtained from the previous spatial ability is the expository method class assisted by 3D Cabri Software. 3D which is namely as $Y_{E2} = 3,794 + 1,031X_{E2}$ and a guided discovery approach class assisted by Cabri 3D Software, which is namely as $Y_{E1} = 6,606 + 3,794X_{E1}$. (2) The spatial ability of the guided discovery approach group assisted by Cabri 3D software, which is namely as $Y = 6.606$, is greater than the linear regression line constant equation of the expository method group assisted by Cabri 3D software, which is namely as $Y = 3.794$. (3) Based on the increasing in the average, it can be seen that the average difference in the experimental class 1 is higher than the increasing in the average increase in the experimental class 2 which is, namely as $63.37 > 62.50$ and $89.53 > 80.00$. (4) Learning using a guided discovery approach assisted by Cabri 3D software has a good impact on increasing students' mathematical disposition.

Keywords: Spatial ability, mathematical disposition, Cabri 3D software, guided discovery, expository.