ABSTRACT

Lusy Mariana Pasaribu , the effect of using Media and logical Thinking ability on student' achievement in learning mathematics of SMP Negeri 1 Rantau Selatan. Thesis: Postgraduate Program of UNIMED, 2015 .

This research is aimed to know: (1) the differences of students' achievement in learning mathematics by using text book with poster media between by using text book with picture media. (2) the differences of students' achievement in learning mathematics those who has a high logical thinking ability between students who have a lower logical thinking ability, (3) the interaction between the media and logical thinking ability to the students' achievement in learning mathematics .

This study used the quasi experimental design with a 2X2 factorial data and analayzed by using ANOVA two . The population of this study was The students of SMP Negeri 1 Rantau Selatan. There were 192 students, which consists of 6 classes .there were 29 students as sample for being taught by using text book with poster and there were 32 students as sample for being taught by using text book with picture media. This study was conducted with cluster randomized. The instrument of collecting data was multiple choice test with four answer options consists of 28 questions . To collect the data of logical thinking ability was used multiple choice test with four answer options consists of 30 questions. Methods used quasi experimental design with a 2× 2 factorial study data were analyzed using ANOVA two tails at significance level $\alpha = 0.05$.

The findings of study shows that: (1) students' achievement in learning mathematics taught by using instructional media with textbook posters ($\bar{X}$ = 19.60) was higher than the student' achievement taught by instructional media textbook with pictures ($\bar{X}$ = 16 , 34), with t-observed = 6.7 > t- table = 4.16, (2) students' achievement in learning mathematics who have high logical thinking ability ($\bar{X}$ = 15.90) was higher with students' achievement who have low logical thinking ability ($\bar{X}$ = 16.03) with t-observed = 9.41> t-table = 4.16. it means that (a) teaching mathematics by using text book with poster media has more significant effect than by using text book with picture media and, (b) also students who have high logical thinking ability has a higher score than student who have low logical thinking ability, (c)There was a interaction of media and logical thinking ability to the students' achievement in learning mathematics.

ABSTRAK

Lusy Mariana Pasaribu, Pengaruh Penggunaan Media Pembelajaran dan Kemampuan Berpikir Logis Terhadap Hasil Belajar Matematika Siswa SMP Negeri 1 Rantau Selatan. *Tesis*: Program Pascasarjana Universitas Negeri Medan,2015.

Penelitian ini bertujuan untuk mengetahui: (1) perbedaan hasil belajar matematika siswa yang diajarkan dengan media pembelajaran buku teks disertai poster dengan hasil belajar matematika siswa yang diajarkan dengan media pembelajaran buku teks disertai gambar, (2) perbedaan hasil belajar matematika siswa yang memiliki kemampuan berpikir logis tinggi dengan hasil belajar matematika siswa yang memiliki kemampuan berpikir logis rendah, (3) interaksi antara media pembelajaran dan kemampuan berpikir logis terhadap hasil belajar matematika.

Populasi penelitian adalah seluruh siswa SMP Negeri 1 Rantau Selatan berjumlah 192 orang yang berasal dari 6 kelas. Teknik penarikan sampel dilakukan dengan cluster random sampling. Jumlah sampel penelitian untuk media pembelajaran buku teks disertai poster terdiri dari 29 siswa dan 32 siswa untuk media pembelajaran buku teks disertai gambar. Instrument pengukuran untuk mengukur hasil belajar digunakan tes berbentuk pilihan ganda dengan empat pilihan jawaban terdiri dari 28 soal. Untuk menjaring data kemampuan berpikir logis digunakan tes berbentuk pilihan ganda dengan empat pilihan jawaban terdiri dari 30 soal. Metode Penelitian yang digunakan metode quasi eksperimen dengan desain penelitian factorial 2×2. Teknik analisis data menggunakan ANAVA dua jalur pada taraf signifikan $\alpha = 0{,}05$.

Temuan penelitian menunjukkan bahwa: (1) Hasil belajar matematika siswa yang diajar dengan media pembelajaran buku teks disertai poster ($\bar{X}$ = 19,60) lebih tinggi daripada hasil belajar matematika siswa yang diajar dengan media pembelajaran buku teks disertai gambar ($\bar{X}$ = 16,34), dengan $F_{hitung} = 6{,}7 > F_{tabel} = 4{,}16$, (2) hasil belajar matematika siswa yang memiliki kemampuan berpikir logis tinggi ($\bar{X}$ = 15,90) lebih tinggi daripada hasil belajar matematika siswa yang memiliki kemampuan berpikir logis rendah ($\bar{X}$ = 16,03) dengan $F_{hitung} = 9{,}41 > F_{tabel} = 4{,}16$. Disimpulkan bahwa: (a) hasil belajar matematika siswa yang diajar dengan media pembelajaran buku teks disertai poster lebih tinggi daripada hasil belajar matematika siswa yang diajar dengan media pembelajaran buku teks disertai gambar, (b) hasil belajar matematika siswa yang memiliki kemampuan berpikir logis tinggi lebih tinggi daripada hasil belajar matematika siswa yang memiliki kemampuan berpikir logis rendah, (c) terdapat interaksi antara media pembelajaran dengan kemampuan berpikir logis siswa.