ABSTRACK

Asymah Evayanti Pasaribu. (2014). ***The Effect of Implementation Instructional Strategy and Numeric Ability to Students of KELAS XI SMA SWASTA TELADAN MEDAN***. Thesis, State University Medan Of Pasca Sarjana.

The aims of this research is to find of : (1) the difference of instructional result of physics stundents taught by using the strategy computer simulation learning base on laboratory to the students by using strategy laboratory experiment instructional, (2) the interaction between instructional strategy and numerical ability to physics learning outcomes from the students ofSMP Negeri 9 Tebing Tinggi, (3) the students with high numerical competence which are taught by computer simulation learning base on laboratory instructional strategy have difference in taught to the students who are taught by strategy laboratory experiment instructional strategy, (4) the students who have low numerical competence which are taught by computer simulation learning base on laboratory instructional strategy have difference in taught to the students who are taught by strategy laboratory experiment instructional strategy.

The research was conducted to the students of SMP Negeri 9 Tebing Tinggi class for second semester in 2013/2014 period to the result physic learning. The way to taking sample is used cluster Random Sampling base on student's numeric ability, so this sample research to each learning group consists of 28 for experiment group and 31 students for control group. The method used in this study is a quasi experimental treatment by level with 2 x 2 factorial . The analysis technique used is a two-track analysis of variance with a significance level α = 0.05 by F test , the continuity test used the Scheffe test. The research method uses experiment quasi treatmeny by level with desain factor 2 x 2.

Finding research show (1) physic learning outcomes between the strategy computer simulation learning base on laboratory is more clever than the students that follow laboratory experiment learning at significance level α = 0,05 F_h is 17,40 and F_{table} = 4,02 for significancei 5 % $F_{hitung} > F_{table}$ = 17,40 > 4,02. At the continuon test Scheefe is gotten F_h is 11,62 dan F_{table} = 4,00 for significancy 5 % $F_{hitung} > F_{table}$ = 8,61 > 4,00. For significance level 5 % $F_{count} > F_{table}$ = 8,60 > 4,02 So all of student of SMP Negeri 9 Tebing Tinggi that follow the strategy computer simulation learning base on laboratory get better mark than students are taught use strategy laboratory experiment learning, (2) the average amount of physics learning outcomes for each learning group is as follows , to $\overline{X}$simKT = 34.57 and 28.57 , while $\overline{X}_{sim}$KT = 34,57 dan $\overline{X}_{sim}$KR = 28,57sedangkan $\overline{X}P_{lab}$KT = 28,25 $\overline{X}_{lab}$PR = 32,00 the results of calculations 2x2 factorial ANOVA with treatment by level of calculation results obtained Fb = 182.34 and price tables Ft =

4.02 at the level of $\alpha = 0.05$ with df = (1,57) is $F_{t\ (\ 0.05\ )\ (\ 1.57\ )} = 4.02$ so that it can be stated F_h (182.34) > F_t (4.02) , then the hypothesis is formulated , there was an interaction between learning strategies and numerical abilities against the learning outcomes of the physics students of SMP Negeri 9 Tebing Tinggi been verified at the significance level of 0.05 thus, H_a is accepted and H_o is rejected at the 0.05 confidence level, (3) that the results of analysis of variance on differences in learning outcomes between students who have the physical ability of a high numerical simulation with the application of computer based learning strategies laboratory average of 34.57 and laboratory experiments for learning strategies average was 28.25. The results of calculations using Scheffe Test F_h = 24.57 and F table = 4.17, then F_h (24.57) > Ft (4.17). Thus the findings of the study concluded that the hypothesis which says physics student learning outcomes that have a high numerical skills , learning strategies are given lab -based computer simulations with higher student learning strategies given laboratory experiments, it has been verified that the hypothesis Ho is rejected and Ha accepted . and (4) the results of the calculation results of the analysis of variance of the difference between students learning physics which has a low numerical ability with the application of computer -based learning strategy simulation laboratory average of 28.57 and laboratory experiments for learning strategies are an average of 32.00. Test results of calculations using Scheeffe Fb = 12.70 and F table = 4.18 , then Fh (12.70) > Ft (4.17). Thus the findings of the study concluded that the hypothesis which says physics student learning outcomes that have a low numerical abilities , learning strategies are given higher laboratory experiments with students are given learning strategy based computer simulation laboratory, has verified that the hypothesis Ho is rejected and Ha accepted, thus the better the learning strategy used in delivering teaching materials physics, the higher the physics student learning outcomes, or the higher the numerical abilities of students with learning strategy, the higher the student achievement of competencies acquired, the interaction between learning strategies and numeracy will a positive impact in improving student learning outcomes physics. However, the influence of learning strategies more influence on learning physics goal should be compared with the numerical abilities of students.

ABSTRAK

Asymah Evayanti Pasaribu. (2014). ***Pengaruh Strategi Pembelajaran Dan Kemampuan Berpikir Kreatif Terhadap Kemampuan Membaca Pemahaman Siswa Kelas XI SMA Swasta Teladan Medan T.P. 2013/2014***. Tesis, Program Studi Teknologi Pendidikan, Pasca Sarjana Universitas Negeri Medan

Penelitian ini bertujuan untuk mengetahui : (1) perbedaan kemampuan membaca pemahaman siswa yang diajarkan dengan strategi Quantum Teaching dengan kemampuan membaca pemahaman siswa strategi pembelajaran Ekspositori (2) perbedaan kemampuan pemahaman antara kelompok siswa yang memiliki kemampuan berpikir tinggi dan kelompok siswa yang memiliki kemampuan berpikir rendah. (3) intraksi antara strategi pembelajaran dengan kemampuan berpikir kreatif terhadap kemampuan pemahaman membaca siswa kelas XI SMA Swasta Teladan Medan.

Penelitian ini dilakukan pada siswa SMA Swasta Teladan Medan semester genap tahun ajaran 2013/2014 terhadap kemampuan pemahaman siswa. Teknik pengambilan sampel digunakan dengan Cluster Random Sampling berdasarkan kemampuan berpikir kreatif siswa, sehingga sampel penelitian ini pada kelompok pembelajaran masing-masing terdiri dari 40 orang untuk eksperimen dan 40 orang untuk kelompok kontrol. Metode penelitian yang digunakan adalah quasi eksperimen dengan faktorial 2 x 2. Teknik analisis yang digunakan adalah analisis varian dua jalur dengan taraf signifikansi $\alpha = 0{,}05$ dengan Uji F, pengujian lanjut menggunakan Uji Tuckey.

Temuan penelitian menunjukkan (1) kemampuan membaca pemahaman siswa yang diajarkan dengan strategi pembelajaran Quantum Teaching dibandingkan dengan siswa yang mengikuti strategi pembelajaran pada taraf signifikasi $\alpha = 0{,}05$ dengan F_h sebesar 32,78 dan $F_{tabel} = 3{,}96$ untuk taraf signifikansi 5 % $F_{hitung} > F_{tabel} = 32{,}78 > 3.96$. Dengan Uji lanjut Tuckey diperoleh F_h sebesar 8,44 dan $F_{tabel} = 3.79$ untuk taraf signifikansi 5 % $F_{hitung} > F_{tabel} = 8{,}44 > 3.96$. Maka secara keseluruhan siswa SMA Swasta Teladan Medan yang mengikuti strategi pembelajaran quantum teaching memperoleh kemampuan yang lebih baik dibandingkan dengan siswa yang diajar dengan menggunakan strategi pembelajaran ekspositori. Perhitungan analisis varians tentang perbedaan kemampuan pemahaman antara kelompok siswa yang memiliki kemampuan pemahaman membaca tinggi dengan kemampuan pemahaman antara kelompok membaca rendah pada taraf signifikasi 5 % $F_{hitung} > F_{tabel} = 414{,}27 > 3.96$ untuk taraf signifikansi 5 % $F_{hitung} > F_{tabel} = 21{,}36 > 3.96$.

Dengan demikian temuan penelitian menyimpulkan, bahwa hipotesis penelitian yang berbunyi kemampuan membaca pemahaman siswa yang memiliki kemampuan berpikir kreatif tinggi dengan kemampuan membaca pemahaman siswa yang memiliki kemampuan berpikir kreatif rendah, telah teruji kebenarannya sehingga hipotesis Ha diterima dan Ho ditolak. (4)hasil perhitungan rata-rata kemampuan membaca pemahaman siswa untuk strategi pembelajaran $X\ S_{qt}\ B_T$ = 36,10 dan $S_{qt}\ B_t$ = 28,25 sedangkan $X\ S_{ep}\ B_r$ = 31,40 dan $X\ S_{ep}\ B_r$ = 30,25. Hasil perhitungan Anava Factorial 2x2 hasil perhitungan F_h = 5272,18 dan harga table F_t= 3,96 pada taraf signifikan 0,05% dengan dk = 1,76 adalah $Ft_{(0,05)(1,76)}$ = 3,96 sehingga di dapat F_h = 5272,18 > F_t = 3,18, maka hipotesis yang dirumuskan terdapat strategi pembelajaran

Dengan demikian temuan penelitian menyimpulkan, bahwa hipotesis penelitian yang berbunyi hasil belajar fisika siswa yang memiliki kemampuan numerik rendah, yang diberikan strategi pembelajaran eksperimen laboratorium lebih tinggi dengan siswa yang diberikan strategi pembelajaran simulasi komputer berbasis laboratorium, telah teruji kebenarannya sehingga hipotesis Ha diterima dan Ho ditolak, Dengan demikian semakin baik strategi pembelajaran yang digunakan dalam menyampaikan materi ajar fisika, maka semakin tinggi hasil belajar fisika siswa, atau semakin tinggi kemampuan numerik siswa dengan strategi pembelajaran, maka semakin tinggi pencapaian kompetensi yang diperoleh siswa, interaksi antara strategi pembelajaran dan kemampuan numerik akan memberikan dampak positif dalam meningkatkan hasil belajar fisika siswa. Akan tetapi pengaruh strategi pembelajaran lebih banyak memberikan pengaruh terhadap hasi belajar fisika dibandingkan dengan kemampuan numerik siswa.