

ABSTRACT

Dermawati. The Effect of Learning Strategy and The Ability of Logical Thinking on the Students' Achievement in Chemistry at SMA Negeri Kecamatan Tanjung Pura. Thesis: Post Graduate Program of State University of Medan. 2006.

This research is aimed at finding out : (1) the achievement of chemistry between the student that taught by learning of science technology society and conventional strategies, (2) the achievement of chemistry between student who had ability of high logical thinking and low logical thinking, (3) interaction between learning strategies and the ability of logical thinking on the students' achievement in chemistry.

The population of this research were the eleven grade students of SMA Negeri Kecamatan Tanjung Pura that consists of 7 classes with 280 students, the sample of the research were chosen from XI-1 and XI-5 class. For XI-1 class taught by learning of science technology society strategy and for XI-5 done by learning of conventional strategy. The samples taken by cluster random sampling technique. The research instrument that used the measure the achievement was test of multiple choice with 4 option. To get the data of ability of logic thought used Formal Objective Test of Piagetian, that amount 24 questions. The research method used quasi-experiment with factorial design 2×2 . Technic of analyzing data used Anava of two directions at $\alpha = 0,05$.

The finding of the research showed that; (1) the students' achievement in chemistry that taught by science technology society ($\bar{X} = 28,15$) is higher than the students' achievement that taught by conventional strategy ($\bar{X} = 26,92$), with $F_{count} = 29,57 > F_{table} = 3,968$ (2) the students' achievement in chemistry by the ability of high logical thinking ($\bar{X} = 29,94$) is higher than the ability of low logical thinking ($\bar{X} = 25,94$), with $F_{count} = 4,43 > F_{table} = 3,968$ (3) the is interaction between learning strategy and the ability of logical thinking on the students' achievement in chemistry counted by statistic found $7,18 > F_{tabel} = 3,968$. The latter counting by scheffe tested also showed the significance difference between the students' achievement that taught by science technology society and conventional strategies like wise the students' achievement in chemistry who have ability of high logical thinking and low logical thinking.

ABSTRAK

Dermawati, Pengaruh Strategi Pembelajaran Dan Kemampuan Berpikir Logis Terhadap Hasil Belajar Kimia Siswa SMA Negeri Kecamatan Tanjung Pura. Tesis: Program Pasca Sarjana Universitas Negeri Medan. 2006.

Penelitian ini bertujuan untuk mengetahui : (1) hasil belajar Kimia antara siswa yang dibelajarkan dengan strategi pembelajaran sains teknologi masyarakat dan strategi konvensional, (2) hasil belajar kimia antara siswa dengan kemampuan berpikir logis tinggi dan kemampuan berpikir logis rendah dan (3) interaksi antara strategi pembelajaran dan kemampuan berpikir logis terhadap hasil belajar Kimia.

Populasi penelitian adalah siswa kelas XI SMA Negeri 1 Tanjung Pura yang berjumlah 7 kelas dengan jumlah siswa 280, sampel penelitian ditetapkan untuk kelas XI-1 dilaksanakan pembelajaran sains teknologi masyarakat dan kelas XI-5 dilaksanakan pembelajaran strategi konvensional. Teknik penarikan sampel dilakukan dengan cluster random sampling. Instrumen penelitian untuk mengukur hasil belajar digunakan tes berbentuk pilihan ganda dengan 4 pilihan jawaban. Untuk menjangkau data kemampuan berpikir logis digunakan tes Piagetian Objektive Formal yang berjumlah 24 pertanyaan. Metode penelitian menggunakan metode quasi eksperimen dengan design penelitian faktorial 2×2 . Teknik analisis data menggunakan anava dua jalur pada taraf signifikansi $\alpha = 0,05$.

Temuan penelitian menunjukkan bahwa : (1) hasil belajar Kimia siswa yang dibelajarkan dengan strategi sains teknologi masyarakat ($\bar{X} = 28,15$) lebih tinggi daripada hasil belajar siswa yang dibelajarkan dengan strategi konvensional ($\bar{X} = 26,92$), dengan $F_{hitung} = 29,57 > F_{tabel} = 3,968$, (2) hasil belajar Kimia siswa dengan kemampuan berpikir logis tinggi ($\bar{X} = 29,94$) lebih tinggi daripada hasil belajar siswa dengan kemampuan berpikir logis rendah ($\bar{X} = 25,94$), dengan $F_{hitung} = 4,43 > F_{tabel} = 3,968$. (3) terdapat interaksi antara strategi pembelajaran dan kemampuan berpikir logis terhadap hasil belajar Kimia, melalui penghitungan statistik diketahui $F_{hitung} = 7,18 > F_{tabel} = 3,968$. Perhitungan uji lanjut dengan uji Scheffe juga menunjukkan perbedaan yang signifikan antara hasil belajar siswa yang dibelajarkan dengan strategi sains teknologi masyarakat dengan strategi konvensional demikian juga hasil belajar Kimia siswa dengan kemampuan berpikir logis tinggi dengan kemampuan berpikir logis rendah.