

## ABSTRAK

**RAHMI NAZLIAH. 8116173020.** Pengaruh Multimedia dan Motivasi Dalam Strategi Pembelajaran *Problem Solving* Terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa pada Materi Sistem Gerak di SMA Negeri 1 Kualuh Hulu Aek Kanopan. Tesis. Program Pascasarjana Universitas Negeri Medan. 2014.

Penelitian ini bertujuan untuk mengetahui: (1) pengaruh multimedia dalam strategi pembelajaran *problem solving* terhadap kemampuan berpikir kritis siswa pada materi sistem gerak SMA Negeri 1 Kualuh Hulu Aek Kanopan; (2) pengaruh motivasi dalam strategi pembelajaran *problem solving* terhadap kemampuan berpikir kritis siswa pada materi sistem gerak SMA Negeri 1 Kualuh Hulu Aek Kanopan; (3) interaksi antara strategi pembelajaran *problem solving* menggunakan multimedia dan motivasi belajar terhadap kemampuan berpikir kritis siswa pada materi sistem gerak SMA Negeri 1 Kualuh Hulu Aek Kanopan; (4) pengaruh multimedia dalam strategi pembelajaran *problem solving* terhadap hasil belajar siswa pada materi sistem gerak SMA Negeri 1 Kualuh Hulu Aek Kanopan; (5) pengaruh motivasi dalam strategi pembelajaran *problem solving* terhadap hasil belajar siswa pada materi sistem gerak SMA Negeri 1 Kualuh Hulu Aek Kanopan; dan (6) interaksi antara strategi pembelajaran *problem solving* menggunakan multimedia dan motivasi belajar terhadap hasil belajar siswa pada materi sistem gerak SMA Negeri 1 Kualuh Hulu Aek Kanopan.

Subjek dalam penelitian ini diambil sebanyak 3 kelas yang ditentukan secara acak teknik *cluster sampling*, yang mengambil 3 kelas dengan jumlah sampel tiap kelas 35 orang. Metode penelitian menggunakan penelitian quasi-eksperimen (*quasi experiment*) dengan rancangan kelompok *pretest-posttest experiment group design*.

Berdasarkan hasil penelitian diperoleh: (1) terdapat perbedaan kemampuan berpikir kritis siswa menggunakan strategi pembelajaran *problem solving* dengan *camtasia* dengan siswa menggunakan strategi pembelajaran *problem solving* dengan *power point* pada materi sistem gerak ( $F_{hitung} > F_{tabel}$  ( $9,357 > 3,49$ )); (2) terdapat perbedaan kemampuan berpikir kritis siswa yang memiliki motivasi belajar tinggi dengan siswa yang memiliki motivasi belajar rendah pada materi sistem gerak ( $F_{hitung} > F_{tabel}$  ( $21,773 > 3,49$ )); (3) terdapat interaksi antara strategi pembelajaran *problem solving* menggunakan multimedia dan motivasi belajar terhadap kemampuan berpikir kritis siswa pada materi sistem gerak ( $F_{hitung} > F_{tabel}$  ( $4,210 > 3,49$ )); (4) terdapat perbedaan hasil belajar siswa menggunakan strategi pembelajaran *problem solving* dengan *camtasia* dengan siswa menggunakan strategi pembelajaran *problem solving* dengan *power point* pada materi sistem gerak ( $F_{hitung} > F_{tabel}$  ( $6,414 > 3,49$ )); (5) terdapat perbedaan hasil belajar siswa yang memiliki motivasi belajar tinggi dengan siswa yang memiliki motivasi belajar rendah pada materi sistem gerak ( $F_{hitung} > F_{tabel}$  ( $12,922 > 3,49$ )); dan (6) terdapat interaksi antara strategi pembelajaran *problem solving* menggunakan multimedia dan motivasi belajar terhadap hasil belajar siswa pada materi sistem gerak ( $F_{hitung} > F_{tabel}$  ( $6,841 > 3,49$ )).

Hasil penelitian yang diperoleh diharapkan memberikan informasi bagi guru dan sekolah untuk menggunakan strategi pembelajaran *problem solving* dan motivasi belajar dalam meningkatkan kemampuan berpikir kritis dan hasil belajar siswa pada materi sistem gerak.

## ABSTRACT

**RAHMI NAZLIAH. 8116173020.** The Effect of Multimedia and Motivation in Problem Solving Learning Strategy toward Students' Critical Thinking Skills and Learning Outcomes on The Movement System Topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan. Thesis. Graduate Program, State University of Medan. 2014.

This study aims to determine: (1) the influence of multimedia in problem solving learning strategy toward students' critical thinking skills on the movement system topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan; (2) the effect of motivation in problem solving learning strategy toward students' critical thinking skills on the movement system topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan ; (3) interaction between problem solving learning strategy using multimedia and motivation toward students' critical thinking skills on the movement system topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan; (4) the effect of multimedia in problem solving learning strategy toward students' learning outcomes on the movement system topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan; (5) the effect of motivation in problem solving learning strategy toward students' learning outcomes on the movement system topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan; and (6) interaction between problem solving learning strategy using multimedia and motivation toward students' learning outcomes on the movement system topic in SMA Negeri 1 Kualuh Hulu Aek Kanopan.

Subjects in this study are taken as much as 3 classes is determined by a randomized cluster sampling, which took 3 classes with a sample of 35 people per class. The research method used in this study is quasi-experiment with pretest-posttest experiment group design.

Based on the results obtained : (1) there were differences in students' critical thinking skills who learned the movement system topic using problem solving learning strategy with camtasia compared with student who learned the movement system topic using problem solving learning strategy with a power point ( $F_{\text{count}} > F_{\text{table}}$  ( $9.357 > 3.49$ )); (2) there were differences in students' critical thinking skills who have high learning motivation compared with students who have low learning motivation who learned the movement system topic ( $F_{\text{count}} > F_{\text{table}}$  ( $21.773 > 3.49$ )); (3) there was an interaction between problem solving learning strategy using multimedia and motivation toward students' critical thinking skills on the movement system topic ( $F_{\text{count}} > F_{\text{table}}$  ( $4.210 > 3.49$ )); (4) there was a difference in students' learning outcomes who learned the movement system topic using problem solving learning strategy with camtasia compared with student who learned the movement system topic using problem solving learning strategy with a power point ( $F_{\text{count}} > F_{\text{table}}$  ( $6.414 > 3.49$ )); (5) there was a difference in students' learning outcomes who have high learning motivation compared with students who have low learning motivation who learned the movement system topic ( $F_{\text{count}} > F_{\text{table}}$  ( $12.922 > 3.49$ )); and (6) there was an interaction between problem solving learning strategy using multimedia and motivation toward students' learning outcomes on the movement system topic ( $F_{\text{count}} > F_{\text{table}}$  ( $6.841 > 3.49$ )).

The results obtained are expected to provide information for teachers and schools to use learning strategies of problem solving and motivation to improve students' critical thinking skills and learning outcomes in the movement system topic.