ABSTRACT

Dina Kharida: The Effect Of Mobile Homework On Students' Learning Outcomes, Homework Quality, and Perception Toward Mobile Learning For Digestive and Respiratory System Topics at SMA Negeri in Medan. *Thesis. Post-graduate Program UNIMED. 2015.*

The aims of this study were to investigate the effect of Mobile Homework on students' (1) learning outcomes, (2) ability in answering questions based on Bloom's taxonomy of cognitive domain, (3) homework scores, (4) homework quality, and to analyze (5) the correlation between leaning outcomes and average homework score, (6) the correlation between leaning outcomes and average homework quality score, (7) students' perception on mobile learning, (8) student' rate of homework submission, and (9) the rate of homework submission among male and female students. Three classes of students from three different public senior high schools in Medan, North Sumatera Province, Indonesia, were clustery selected and assigned with mobile homework, while other three classes of students were given with paper-based homework. Students' learning outcomes were measured with multiple choice tests and essay test, while rating scales was used to assess students' homework quality. Data of perception on the mobile homework were derived from questionnaire filled by the students. The data were analyzed with Quade Non-parametric ANCOVA, Mann Whitney-U test, Spearman rank correlation, and Chi-Square using SPSS and MYSTAT v.13.1 software packages. Results showed that Mobile Homework had significantly effected student' (1) learning outcomes (F = 56.38 ; P = 0.00), (2) ability in answering C3 (Application) and C4 (Analysis-Synthesis) questions (U = 3, 130.00; P = 0.00), (3) ability in answering C5 (Evaluation) and C6 (Creation) questions (U = 3.643,00; P = 0.00), (4) homework scores (U = 1,090.00; P = 0.00), (5) homework quality (U = 3, 194.00; P = 0.00), of the experimental class compare with those who were given with paper-based homework, while (6) there was a moderate, positive correlation between homework scores and learning outcomes (r_s = 0.47; P = 0.00), (7) there was a moderate, positive correlation between good homework quality and better learning outcomes (r_s = 0.49; P = 0.00), (8) experimental class have equal rate of homework completion compare with those who were given with paper-based homework, in which the difference of the rate of homework submission were not significantly different, χ^2 (2) = 5.23; p = 0.07, and (9) the frequency and total percentage of both experimental and control group with regards to their gender, showed that male student in general have lower complete mobile homework submission compared with female students. Students at experimental class are in general show a positive perception towards mobile learning. Thus, mobile homework with its mobile learning feature has a number of advantages over traditional paper based homework

Keywords: mobile learning, homework, learning outcome, homework quality

ABSTRAK

Dina Kharida: Pengaruh Mobile Homework Terhadap Hasil Belajar Siswa, Kualitas Tugas, dan Persepsi Terhadap Mobile Learning, Pada Topic Sistem Pencernaan dan Pernapasan di SMA Negeri Medan. *Tesis. Program Pascasarjana UNIMED. 2015.*

Tujuan penelitian ini adalah untuk memahami pengaruh Mobile Homework terhadap (1) hasil belajar, (2) kemampuan menjawab pertanyaan berdasarkan Taxonomi Ranah Kognitif Bloom, (3) skor tugas rumah, (4) kualitas tugas rumah siswa, dan untuk menganalisis (5) korelasi antara hasil belaljar dan skor tugas mingguan, (6) korelasi antara hasil belajar dan kualitas tugas rumah, (7) persepsi siswa atas mobile learning, (8) rata-rata pengumpulan tugas rumah dan, (9) rata-rata penyelesaian tugas rumah antara siswa pria dan wanita dan (10) persepsi siswa terhadap Mobile Learning. Enam kelas dari tiga SMA Negeri di Kota Medan, Provinsi Sumatera Utara, Indonesia dipilih secara bertingkat dan ditugasi dengan mobile homework, sedangkan tiga kelas lainnya diberikan tugas rumah tertulis. Hasil belajar siswa diukur dengan menggukan tes pilihan berganda dan tes uraian, sedangkan skala pengukuran digunakan untuk menilai kualitas tugas rumah siswa. Data persepsi siswa terhadap Mobile Learning berasal dari Kuesioner yang diisi oleh siswa kelas eksperiment. Data dianalisis menggunakan Quade Non-parametric ANCOVA, Mann Whitney-U test, Spearman rank correlation, and Chi-Square dengan bantuan Software SPSS v.19 and MYSTAT v.13.1. Hasil menunjukkan bahwa Mobile Homework secara signifikan berpengaruh terhadap (1) hasil belajar (F = 56.38; P= 0.00), (2) kemampuan menjawab pertanyaan berdasarkan Ranah Kognitif C3 dan C4 (U = 3, 130.00; P = 0.00), (3) kemampuan menjawab pertanyaan berdasarkan Ranah Kognitif C5 dan C6 (U = 3, 643.00; P = 0.00), (4) skor tugas mingguan (U = 1, 090.00; P = 0.00), (5) kualitas tugas rumah (U = 3, 194.00; P = 0.00) siswa pada kelas eksperimen dibandingkan dengan siswa yang diberikan tugas rumah tertulis (6) terdapat korelasi positif sedang antara hasil belajar dan skor tugas rumah (r_s= 0.47; P = 0.00), dan (7) terdapat korelasi positif sedang antara hasil bekajar dan kualitas tugas rumah (r_s= 0.49; P = 0.00), (8)siswa yang ditugaskan dengan Mobile Homework memiliki rata-rata pengumpulan tugas yang sama ketika dibandingkan dengan siswa yang diberikan tugas rumah tertulis dimana perbedaan antara rataan pengumpulan tugas tidak berbeda signifikan, χ^2 (2) = 5.23; p = 0.07, dan (9) berdasarkan persentase dan frekuensi total, baik kelas eksperimen dan kelas control, menunjukkan bahwa siswa pria secara umum memiliki rataan pengumpulan tugas rumah yang lebih rendah dibandingkan siswa perempuan. Siswa pada kelas eksperimen secara umum menunjukkan persepsi yang positif terhadap Mobile Learning, sehingga Mobile Homework dengan kelebihan Mobile Learningnya dapat dikatakan memiliki sejumlah kelebihan dibandingkan tugas rumah tertulis.

Kata kunci: mobile learning, mobile homework, hasil belajar, kwalitas tugas rumah