ABSTRAK

Dinda Ramadhani, NIM 4181121018. Efektivitas Pengaplikasian Model *Problem Based Learning* Berbantuan Animasi Powtoon terhadap *Higher Order Thinking Skill* Siswa SMA pada Materi Momentum dan Impuls.

Tujuan dilakukannya penelitian ini adalah: (1) Mengetahui kemampuan HOTS siswa kelas X setelah diterapkannya model *Problem Based Learning* berbantuan media animasi *Powtoon*, (2) Mengetahui kemampuan HOTS siswa kelas X setelah diterapkannya model pembelajaran konvensional, (3) Mengetahui model pembelajaran yang lebih efektif dalam meningkatkan HOTS peserta didik kelas X, model *Problem Based Learning* berbantuan media animasi *Powtoon* atau model pembelajaran konvensional. Metode penelitian yang digunakan adalah kuantitatif dengan desain penelitian *quasi experimen two group pretest-posttest*. Populasi dalam penelitian ini adalah kelas X di SMA Swasta Cerdas Murni dan sampel yang digunakan adalah kelas XII MIPA 1 sebagai kelas eksperimen dan X MIPA 2 sebagai kelas kontrol. Pengumpulan data dilakukan dengan penggunaan soal HOTS pada *pretest* dan *posttest*. Hasil penelitian menunjukkan bahwa rata-rata nilai *pretest* di kelas eksperimen dan kontrol berturut-turut sebesar 37,4 dan 35,5 sedangkan rata-rata nilai *postest* yang diperoleh di kelas eksperimen dan kontrol sebesar 80,7 dan 75,2. Hasil rata-rata *N-Gain* skor di kelas eksperimen sebesar 0,70 dan masuk dalam kategori "tinggi" sedangkan di kelas kontrol, hasil rata-rata *N-Gain* skor sebesar 0,61 dan masuk dalam kategori "sedang". Kesimpulan penelitian ini adalah terdapat peningkatan lebih baik setelah diterapkannya model *Problem Based Learning* berbantuan animasi *Powtoon* terhadap kemampuan HOTS siswa sehingga model *Problem Based Learning* berbantuan animasi *Powtoon* lebih efektif dalam meningkatkan kemampuan HOTS siswa dibandingkan model pembelajaran konvensional.

Kata Kunci: Model *Problem Base Learning, Powtoon, Higher Order Thinking Skill* (HOTS)

ABSTRACT

Dinda Ramadhani, NIM 4181121018. The Effectiveness of Applying *The Problem Based Learning* Model Assisted by Powtoon Animation to *Higher Order Thinking Skills* of High School Students on Momentum and Impulse Materials.

The objectives of this study are: (1) Knowing the HOTS abilities of class X students after the application of the *Problem Based Learning* model assisted by *Powtoon* animation media, (2) Knowing the HOTS abilities of class X students after the application of conventional learning models, (3) Knowing the learning model that is more effective in improving the HOTS of class X students, *the Problem Based Learning* model assisted by *Powtoon* animation media or conventional learning models. The research method used is quantitative with a *quasi-experiment research design of two groups pretest-posttest*. The population in this study was class X in SMA Swasta Cerdas Murni and the sample used was class XII MIPA 1 as the experimental class and X MIPA 2 as the control class. Data collection was carried out with the use of HOTS questions in *the pretest* and *posttest*. The results showed that the average *pretest* scores in the experimental and control classes were 37.4 and 35.5 respectively while the average *postest* scores obtained in the experimental and control classes were 80.7 and 75.2. The average result of *the N-Gain* score in the experimental class was 0.70 and fell into the "high" category while in the control class, the average result of *the N-Gain* score was 0.61 and fell into the "medium" category. The conclusion of this study is that there is a better improvement after the application of the *Problem Based Learning* model assisted by *Powtoon* animation to students HOTS abilities so that *the Problem Based Learning* model assisted by *Powtoon* animation is more effective in improving students HOTS abilities than conventional learning models.

Keywords: *Problem Base Learning* Model, *Powtoon, Higher Order Thinking Skill* (HOTS)