

## ABSTRAK

**Dea Fayana Pratiwi NIM 4203351024 (2025), Pengaruh Model *Problem Based Learning* Berbantuan Video Animasi Terhadap *HOTS Literacy* Siswa Kelas VII SMP Muhammadiyah 01 Medan.**

Penelitian ini bertujuan untuk mengetahui pengaruh PBL berbantuan video animasi terhadap *HOTS literacy* serta dampak penggunaan video animasi terhadap pemahaman materi bumi dan tata surya kelas VII SMP Muhammadiyah 01 Medan. Desain penelitian yang digunakan adalah *two-group pretest-posttest design*. Sampel penelitian terdiri dari dua kelas dengan jumlah sampel sebanyak 70 siswa yang diperoleh secara *purposive sampling*. Kelas eksperimen diajarkan dengan menggunakan model PBL berbantuan video animasi dan kelas kontrol menggunakan pembelajaran konvensional. Instrumen yang digunakan berupa tes kemampuan *HOTS literasi* yang telah divalidasi dalam bentuk pilihan ganda sebanyak 20 butir soal dengan memenuhi syarat uji validasi, reliabilitas, kesukaran dan daya beda. Hasil penelitian menunjukkan rata-rata nilai *pretest* dan *posttest* kelas eksperimen adalah 38,85 dan 84,68, sedangkan kelas kontrol 37,48 dan 58,45. Peningkatan kemampuan pemecahan masalah diperoleh bahwa pada kelas eksperimen dengan *N-gain* 73,33% pada kategori tinggi sedangkan pada kelas kontrol dengan *N-gain* 33,09% pada kategori sedang. Analisis data menggunakan uji *t* satu pihak yaitu pihak kanan pada taraf signifikan 5% ( $=0,05$ ), diperoleh bahwa  $T_{hitung} > T_{tabel}$  ( $145,72 > 1,671$ ) sehingga  $H_a$  diterima dan  $H_0$  ditolak dimana ada peningkatan model pembelajaran PBL berbantuan video animasi terhadap *HOTS literacy* dibandingkan dengan pembelajaran konvensional. Pada kelas eksperimen *HOTS literasi* yaitu hasil persentase C5 sebesar 84,29%, C4 sebesar 75%, dan C6 sebesar 54,29% maka ranah kognitif yang paling berkembang yaitu C5 sebanyak 84,29% diajarkan menggunakan model PBL berbantuan video animasi.

Kata Kunci: Model PBL; Video animasi; *HOTS literasi*; Sistem Tata Surya



## ABSTRACT

*Dea Fayana Pratiwi NIM 4203351024 (2025), The Effect of Problem Based Learning Model Assisted by Animated Videos on HOTS Literacy of Class VII Students of SMP Muhammadiyah 01 Medan.*

This study aims to determine the effect of PBL assisted by animated videos on HOTS literacy and the impact of using animated videos on the understanding of the earth and solar system material of class VII of SMP Muhammadiyah 01 Medan. The research design used was a two-group pretest-posttest design. The research sample consisted of two classes with a total sample of 70 students obtained by purposive sampling. The experimental class was taught using the PBL model assisted by animated videos and the control class used conventional learning. The instrument used was a validated HOTS literacy ability test in the form of 20 multiple choice questions that met the requirements for validation, reliability, difficulty and discrimination. The results showed that the average pretest and posttest scores of the experimental class were 38.85 and 84.68, while the control class was 37.48 and 58.45. The increase in problem solving ability was obtained that in the experimental class with N-gain 0.73 in the high category while in the control class with N-gain 33.09% in the medium category. Data analysis using a one-tailed t-test, namely the right side at a significance level of 5% ( $\alpha=0.05$ ), it was obtained that  $T_{count} > T_{table}$  ( $145.72 > 1.671$ ) so that  $H_a$  was accepted and  $H_o$  was rejected where there was an increase in the PBL learning model assisted by animated videos on HOTS literacy compared to conventional learning. In the HOTS literacy experimental class, namely the percentage results of C5 were 84.29%, C4 was 75%, and C6 was 54.29%, then the most developed cognitive domain, namely C5 as much as 84.29% was taught using the PBL model assisted by animated videos.

*Keywords: PBL Model; HOTS literacy; animated video; Solar System*

