

ABSTRAK

Wulan Sri Mulyani. 2026. **PENGARUH MODEL *FLIPPED CLASSROOM* BERBANTUAN *GOOGLE SITES* TERHADAP HASIL BELAJAR KOGNITIF SISWA PADA MATERI DINAMIKA HUKUM NEWTON**

Berdasarkan hasil studi pendahuluan di SMA Negeri 1 Garut, rendahnya hasil belajar kognitif siswa pada materi dinamika hukum newton melatarbelakangi pelaksanaan penelitian ini. Untuk mengatasi permasalahan tersebut, diterapkan model *Flipped Classroom* berbantuan *Google Sites* sebagai alternatif pembelajaran dalam mengoptimalkan proses belajar. Penelitian ini bertujuan untuk mengetahui pengaruh model *Flipped Classroom* berbantuan *Google Sites* terhadap hasil belajar kognitif siswa pada materi dinamika hukum newton di kelas X SMA Negeri 1 Garut tahun ajaran 2025/2026. Metode yang digunakan adalah kuasi eksperimen dengan *posttest only control group design*. Populasi penelitian mencakup seluruh kelas X SMA Negeri 1 Garut yang terdiri atas 12 kelas dengan total 576 siswa. Sampel penelitian ditentukan melalui teknik *purposive sampling* sebanyak dua kelas, ditetapkan kelas X-1 sebagai kelas eksperimen dan kelas X-2 sebagai kelas kontrol, dengan masing-masing kelas berjumlah 48 siswa. Hasil belajar kognitif diukur menggunakan instrumen tes berbentuk uraian (*essay*) yang diberikan setelah perlakuan (*posttest*), dengan masing-masing soal disusun berdasarkan indikator hasil belajar kognitif. Data dianalisis menggunakan uji-t dengan taraf signifikansi ($\alpha = 0,05$) setelah memenuhi uji prasyarat normalitas dan homogenitas. Hasil uji hipotesis menunjukkan nilai $t_{hitung} = 9,151 > t_{tabel} = 1,985$ sehingga H_0 ditolak dan H_a diterima. Dengan demikian, dapat disimpulkan bahwa model *Flipped Classroom* berbantuan *Google Sites* berpengaruh terhadap hasil belajar kognitif siswa pada materi dinamika hukum newton di kelas X SMA Negeri 1 Garut tahun ajaran 2025/2026. Pengaruh tersebut terjadi karena model *Flipped Classroom* memberikan kesempatan kepada siswa untuk mempelajari materi secara mandiri sebelum pembelajaran di kelas, sehingga siswa lebih siap mengikuti proses pembelajaran yang difokuskan pada diskusi, pemecahan masalah, dan penguatan konsep. Hal ini dibuktikan dengan skor rata-rata *posttest* hasil belajar kognitif di kelas eksperimen sebesar 43,88 yang lebih tinggi dibandingkan kelas kontrol sebesar 28,21.

Kata kunci: Dinamika Hukum Newton, *Google Sites*, Hasil Belajar Kognitif, Model *Flipped Classroom*

ABSTRACT

Wulan Sri Mulyani. 2026. ***THE EFFECT OF THE GOOGLE SITES-ASSISTED FLIPPED CLASSROOM MODEL ON STUDENTS' COGNITIVE LEARNING OUTCOMES ON THE MATERIAL OF NEWTON'S LAW DYNAMICS***

Based on the results of a preliminary study at SMA Negeri 1 Garut, the low cognitive learning outcomes of students on the subject of Newton's law dynamics were the background for this research. To overcome this problem, the Flipped Classroom model assisted by Google Sites was implemented as an alternative learning method to optimize the learning process. This study aims to determine the effect of the Flipped Classroom model assisted by Google Sites on students' cognitive learning outcomes on the subject of Newton's law dynamics in class X of SMA Negeri 1 Garut in the 2025/2026 academic year. The method used was a quasi-experimental method with a posttest only control group design. The study population included all class X of SMA Negeri 1 Garut, consisting of 12 classes with a total of 576 students. The research sample was determined through a purposive sampling technique of two classes, designated class X-1 as the experimental class and class X-2 as the control class, with each class consisting of 48 students. Cognitive learning outcomes were measured using an essay-shaped test instrument given after the treatment (posttest), with each question arranged based on cognitive learning outcome indicators. The data were analyzed using a t-test with a significance level ($\alpha = 0.05$) after fulfilling the prerequisite tests of normality and homogeneity. The results of the hypothesis test showed a calculated t value = 9.151 > t table = 1.985 so that H_0 was rejected and H_a was accepted. Thus, it can be concluded that the Flipped Classroom model assisted by Google Sites has an effect on students' cognitive learning outcomes on the material of Newton's law dynamics in class X of SMA Negeri 1 Garut in the 2025/2026 academic year. This effect occurs because the Flipped Classroom model provides opportunities for students to study the material independently before class learning, so that students are better prepared to follow the learning process that is focused on discussion, problem solving, and concept reinforcement. This is evidenced by the average posttest score of cognitive learning outcomes in the experimental class of 43.88 which is higher than the control class of 28.21.

Keywords: Cognitive Learning Outcomes, Flipped Classroom Model, Google Sites, Newton's Law Dynamics