ABSTRACT

Marshal Adrianus Panggabean, NIM. 4161121013 (2023), The Effect of Scientific Inquiry Learning Assisted by Algodoo Simulation to Science Process Skills and Student Learning Outcomes Grade X of SMA Negeri 5 Medan.

This research is a quasi-experimental research with a two-group pretest-posttest design. The sample of this research is class X MIPA 2 taught with Scientific Inquiry learning assisted by algodoo simulation and class X MIPA 3 taught with conventional learning. The instruments used consisted of learning achievement test instruments and science process skills observation instruments. The results showed that: (1) Students science process skills in the subject matter of momentum and impulse using Scientific Inquiry learning assisted by algodoo simulation obtained an average of 71,2. (2) Students science process skills on the subject matter of momentum and impulse using conventional learning obtain an average of 65,4. (3) Student learning outcomes on the subject matter of momentum and impulse using the Scientific Inquiry learning model assisted by algodoo simulation obtain an average of 68,9. (4) Student learning outcomes on the subject matter of momentum and impulse using conventional learning obtain an average of 60,4. (5) There are differences in students science process skills due to the influence of the Scientific Inquiry learning model assisted by algodoo simulation and conventional learning. (6) There are differences in student learning outcomes due to the influence of the Scientific Inquiry learning model assisted by algodoo simulations with conventional learning.

Keyword: Scientific Inquiry Learning, Algodoo Simulation, Science Process

Skills, Learning Outcomes

