

**PENGARUH IMPLEMENTASI ASESMEN DIRI BERMUATAN PROSES SAINS
TERHADAP SIKAP ILMIAH DAN HASIL BELAJAR FISIKA DENGAN
MENGONTROL PENGETAHUAN AWAL**

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ABSTRAK

Penelitian ini bertujuan mengkaji pengaruh implementasi asesmen diri bermuatan proses sains terhadap sikap ilmiah dan hasil belajar fisika dengan mengontrol pengetahuan awal. Penelitian ini dilakukan dengan pendekatan eksperimen semu pada siswa kelas X MIPA SMA Negeri di Kota Singaraja dengan menggunakan rancangan *single factor independent group design with use of covariate*. Penelitian ini melibatkan 143 orang siswa SMA kelas X MIPA yang diambil dengan teknik *multistage random sampling*. Instrumen yang digunakan adalah kuesioner sikap ilmiah, tes pengetahuan awal dan tes hasil belajar fisika. Data diolah dengan analisis kovarians multivariat. Hasil penelitian menunjukkan terdapat perbedaan sikap ilmiah dan hasil belajar siswa yang mengikuti pembelajaran fisika dengan asesmen diri bermuatan proses sains dan siswa yang mengikuti pembelajaran fisika dengan asesmen konvensional setelah mengontrol pengetahuan awal, baik secara mandiri maupun secara simultan. Pengetahuan awal siswa berkontribusi terhadap sikap ilmiah sebesar 22,8%, dan terhadap hasil belajar fisika sebesar 19,4%. Guru disarankan menggunakan asesmen diri bermuatan proses sains dalam pembelajaran untuk meningkatkan sikap ilmiah dan hasil belajar.

Kata-kata kunci : asesmen diri, proses sains, sikap ilmiah, hasil belajar fisika, pengetahuan awal



***THE EFFECT OF SELF ASSESSMENT WHICH CONTAINING THE SCIENCE
PROCESS IN PHYSICS LEARNING ON SCIENTIFIC ATTITUDE AND PHYSICS
LEARNING ACHIEVEMENT
BY CONTROLLING PRIOR KNOWLEDGE***

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ABSTRACT

This study was aimed at investigating the effect of self assessment which containing the science process in physics learning on scientific attitude and physics learning achievement by controlling prior knowledge. This study used the experimental approach with senior high school students in Singaraja with single factor independent group design with use of covariate. This study involved 143 high school students of class X MIPA as sample, using multistage random sampling technique. The instruments used were the scientific attitude questionnaire, the prior knowledge test and the physics learning achievement test. The data were analyzed using multivariate analysis of covariance. The results showed that there was a difference in scientific attitude and physics learning achievement between the students who learned physic with self assessment which containing the science process and those who learned physics with conventional assessment after the prior knowledge was controlled, both separately and simultaneously. The students' prior knowledge in learning physics contributed to their scientific attitude by 22,8%, and to the students' physics learning achievement by 19,4%. It is recommended to the teachers that to improve the scientific attitude and physics learning achievement need to use self assessment which containing the science process.

Keywords : *self assessment, science process, scientific attitude, physics learning achievement, prior knowledge.*

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