PENERAPAN *SCIENTIFIC APPROACH* PADA PEMBELAJARAN FISIKA DI SMP

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ABSTRAK

Telah dilakukan penelitian mengenai penerapan *Scientific Approach* pada pembelajaran Pemanasan Global di SMP yang bertujuan untuk memperoleh gambaran pembelajaran *Scientific Approach*, memperoleh gambaran peningkatan hasil belajar kompetensi pengetahuan, memperoleh gambaran hasil belajar kompetensi sikap dan keterampilan serta mengidentifikasi miskonsepsi siswa. Metode penelitian yang dipakai ialah *Experimental-Descriptive* dengan *Pre-Experimental Observational Design* dalam bentuk *One-Group Pretest-Posttest Participant and Nonparticipant Observation Design*. Subjek penelitian yang digunakan, yaitu 33 siswa kelas VII di salah satu SMP Negeri kota Bandung. Instrumen penelitian yang digunakan berupa tes hasil belajar dan lembar observasi untuk menilai keterlaksanaan pembelajaran, hasil belajar kompetensi sikap, dan keterampilan. Keterlaksanaan pembelajaran *Scientific Approach* ditentukan dengan menghitung persentase keterlaksanaan pembelajaran dan diinterpretasikan kategorinya menurut Mundilarto. Peningkatan hasil belajar kompetensi pengetahuan ditentukan dengan menghitung nilai gain yang dinormalisasi dan diinterpretasikan kategori peningkatannya menurut Hake berdasarkan hasil *pretest* dan *posttest*. Hasil belajar kompetensi sikap dan keterampilan ditentukan dengan menghitung persentase rata-rata Indeks Prestasi Kelompok (IPK) dan diinterpretasikan kategorinya menurut Mundilarto. Identifikasi miskonsepsi siswa ditentukan dengan menghitung persentase miskonsepsi dengan teknik *Certainty of Responses Index* (CRI) dan di interpretasikan kategori persentase miskonsepsinya menurut Suwarna. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran *Scientific Approach* telah terlaksana dengan kategori baik, hasil belajar kompetensi pengetahuan mengalami peningkatan dengan kategori sedang (<g> = 0,51), hasil belajar kompetensi sikap yang dihasilkan selama pembelajaran *Scientific Approach* berada pada kategori baik (rata-rata IPK = 86,6 %), hasil belajar kompetensi keterampilan selama pembelajaran *Scientific Approach* berada pada kategori terampil (rata-rata IPK= 80 %), dan persentase miskonsepsi siswa bernilai sebesar 17,17% dengan kategori rendah.

Kata Kunci**:** *Scientific Approach*, Hasil Belajar Siswa SMP, Miskonsepsi, Pemanasan Global

USING A SCIENTIFIC APPROACH TO PHYSICS LEARNING IN JUNIOR HIGH SCHOOL

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ABSTRACT

The research done by using a Scientific Approach to Global Warming learning in Junior High School which aims to: described implementation of Scientific Approach learning, described improvement student's achievement in knowledge competence, described student's achievement in affective and psychomotor competence, as well as to identified student's misconception. One-Group Pretest-Posttest Participant and Nonparticipant Observation Design under Pre-Experimental Observational Design in Experimental-Descriptive method was used. Subject of study is 33 students in 7th grade in one of Public Junior High School in Bandung city. Data were obtained through achievement test in knowledge competence and observation sheets for evaluate implementation of Scientific Approach learning, student's achievement in affective and psychomotor competence. Description implementation of Scientific Approach learning were determined by calculating percentage of learning implementation and category interpreted according to Mundilarto. The improvement student's achievement in knowledge competence learning were determined by calculating percentage of normalized gain and category interpreted according to Hake through pretest and posttest. Student's achievement in affective and psychomotor competence were determined by calculating average percentage Index of Group Achievement (IGA) and category interpreted according to Mundilarto. Identification of student's misconception were determined by calculating percentage of misconception with Certainty of Responses Index (CRI) and category interpreted according to Suwarna. The results of study is: a Scientific Approach in the Global Warming learning has been implemented with good category (<g> = 0,51), student's achievement in knowledge competence going through an improvement with medium category (<g> = 0,51), student's achievement in affective competence during Scientific Approach learning is resulted in good category (average IGA = 86,6 %), student's achievement in psychomotor competence during Scientific Approach learning is resulted in skillful category (average IGA = 80 %), and the percentage of student's misconception are amounted to 17.17% with low category.

Keywords: Scientific Approach, Junior High School Student's achievement, Misconception, Global Warming