

PENGEMBANGAN SSP FISIKA BERBASIS PENDEKATAN CTL UNTUK MENINGKATKAN KETERAMPILAN PROSES SAINS DAN MOTIVASI BELAJAR

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Abstrak

Penelitian ini bertujuan untuk menghasilkan *Subject-Specific Pedagogy* (SSP) fisika, untuk meningkatkan keterampilan proses sains dan motivasi belajar siswa. Penelitian ini menggunakan model pengembangan 4D. Subjek coba pada penelitian ini merupakan siswa SMA Muhammadiyah 2 Yogyakarta kelas XI. Instrumen pengumpulan data berupa lembar validasi ahli, lembar observasi keterampilan proses sains, lembar observasi keterlaksanaan pembelajaran, angket respon siswa terhadap buku siswa dan LKS, angket respon siswa terhadap proses pembelajaran, angket motivasi belajar siswa, dan soal tes keterampilan proses sains. Data penelitian ini dikumpulkan melalui lembar observasi, angket, dan soal tes tertulis. Data yang diperoleh dianalisis secara kuantitatif. Hasil penelitian menunjukkan bahwa (1) pengembangan SSP fisika dilaksanakan sesuai dengan prosedur pengembangan produk. (2) hasil validasi ahli menunjukkan bahwa SSP fisika berkriteria sangat baik. (3) keterbacaan buku siswa dan LKS berkriteria baik. (4) kenaikan skor kelas eksperimen lebih tinggi dari kelas kontrol dalam aspek keterampilan proses sains dan motivasi belajar siswa. Hasil tersebut menunjukkan bahwa SSP fisika ini layak digunakan dalam pembelajaran.

Kata Kunci: SSP fisika, pendekatan CTL, KPS, motivasi belajar

DEVELOPING THE SSP OF PHYSICS BASED ON THE CTL APPROACH TO IMPROVE THE SCIENCE PROCESS SKILLS AND LEARNING MOTIVATION

Abstract

This research aims to develop a learning device as Subject-Specific Pedagogy (SSP) of physics, and to improve science process skills and learning motivation of the students. This research used the 4D model. The subjects of this research were the XI grade students of Muhammadiyah High School 2 Yogyakarta. The data collecting instruments were expert validation sheets, science process skill observation sheets, questionnaire of students' response to the student books and worksheets, questionnaire of students' response to teaching process, students' motivation learning sheets, and science process skill paper test. The research data were collected through observation, questionnaire, and paper test, and analyzed quantitatively. The results show as follows. (1) The development of physics SSP is carried out in accordance with the procedures of 4D model product development. (2) The results of expert's validation show the physics SSP is in the very good criteria. (3) The readability of the student books and worksheets is in the good criteria. (4) The increasing of the score of science process skills and students' learning motivation in the experimental class is higher than that in the control class. This shows that the physics SSP is fit for use in physics teaching.

Key words: SSP of physics, CTL approach, SPS, learning motivation