

ABSTRAK

PENGEMBANGAN ALAT SUBLIMASI UNTUK MENINGKATKAN KETERAMPILAN PEMECAHAN MASALAH DAN KINERJA DI LABORATORIUM

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Penelitian ini bertujuan mengembangkan alat sublimasi untuk meningkatkan keterampilan pemecahan masalah dan kinerja di laboratorium. Metode penelitian yang digunakan adalah metode Research and Development (R&D) dengan model 4D (*Define, Desain, Develop, Disseminate*). Sampel penelitian yaitu 60 siswa kelas tujuh MTs Assyifa Lampung Selatan. Instrumen yang digunakan adalah instrument tes dan angket. Data kinerja di laboratorium siswa diambil dengan instrumen kinerja yang merujuk pada prosedur percobaan menggunakan alat sublimasi hasil pengembangan dan data keterampilan pemecahan masalah siswa diambil dengan instrumen berupa soal pretes dan postes.

Hasil penelitian menunjukkan bahwa: (1) alat sublimasi hasil pengembangan dinyatakan sesuai materi, memiliki nilai pendidikan, tahan lama, tepat dalam pengukuran, efisien serta aman bagi siswa berdasarkan tanggapan guru dan siswa masing-masing sebesar 100% dan 98% dengan kriteria sangat tinggi. (2) nilai-nilai kinerja siswa di laboratorium memiliki persebaran yang dekat dengan nilai rata-rata kinerja siswa (93,50). (3) keefektifan penerapan alat sublimasi dengan menggunakan lembar kerja peserta didik diperoleh hasil yang baik dalam meningkatkan keterampilan pemecahan masalah dengan kriteria tinggi (0,64) dan memberikan pengaruh tinggi (1,64). Berdasarkan hasil tersebut, alat sublimasi hasil pengembangan dinyatakan efektif untuk meningkatkan kinerja di laboratorium dan keterampilan pemecahan masalah.

Kata kunci: pengembangan, alat sublimasi, pemecahan masalah

ABSTRACT

DEVELOPMENT OF SUBLIMATION TOOLS TO IMPROVE PROBLEM SOLVING SKILLS AND PERFORMANCE IN THE LABORATORY

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This study aims to develop a sublimation tool to improve problem solving skills and performance in the laboratory. The research method used is the Research and Development (R&D) method with a 4D model (Define, Design, Develop, Disseminate). The research sample is 60 seventh grade students at MTs Assyifa South Lampung. The instruments used were test instruments and questionnaires. Performance data in the student's laboratory were taken with performance instruments which referred to experimental procedures using the development result sublimation tool and data on students' problem solving skills were taken with instruments in the form of pretest and posttest questions.

The results showed that: (1) the developed sublimation tool was stated according to the material, had educational value, was durable, precise in measurement, efficient and safe for students based on the responses of teachers and students respectively by 100% and 98% with very high criteria. (2) student performance scores in the laboratory have a distribution close to the average student performance score (93.50). (3) the effectiveness of the application of the sublimation tool using student worksheets obtained good results in improving problem solving skills with high criteria (0.64) and high influence (1.64). Based on these results, the developed sublimation tool is declared effective to improve performance in the laboratory and problem solving skills.

Keywords: development, sublimation tools, problem solving