PENGEMBANGAN BUKU PANDUAN PRAKTIKUM BERBASIS *PROBLEM SOLVING* PADA MATERI LISTRIK STATIS

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ABSTRAK

Penelitian ini bertujuan untuk menghasilkan bahan ajar berupa buku panduan praktikum berbasis *problem solving* pada materi listrik statis yang valid dan praktis. Penelitian ini dilakukan di SMA Negeri 6 Palembang pada semester genap tahun ajaran 2022/2023 dengan subjek penelitian yaitu peserta didik kelas XII IPA. Penelitian ini menggunakan model pembelajaran *problem solving* dengan metode penelitian *Research and Development* (R&D) model Borg & Gall. Teknik pengumpulan data yang digunakan berupa observasi, wawancara, angket, dan dokumnetasi. Instrumen yang digunakan pada pengumpulan data yaitu angket yang diberikan kepada ahli materi, ahli media, ahli bahasa dan responden yang bertujuan untuk menguji kevalidan dan kepraktisan dari bahan ajar yang telah dikembangkan. Hasil penelitian ini yaitu telah dikembangkan buku panduan praktikum berbasis *problem solving* pada materi listrik statis yang telah divalidasikan oleh para validator. Hasil validasi ahli materi sebesar 88%, ahli media sebesar 96%, dan ahli bahasa sebesar 98% dengan kategori sangat valid. Hasil uji coba lapangan diperoleh persentase respon peserta didik sebesar 89% dan respon pendidik sebesar 89% dengan kategori sangat praktis. Berdasarkan hasil penelitian dapat disimpulkan bahwa bahan ajar berbasis *problem solving* pada materi listrik statis yang telah dikembangkan sangat valid dan sangat praktis serta dapat digunakan dalam proses pembelajaran.

Kata Kunci: Panduan Praktikum, *Problem Solving,Research and Development* (R&D), dan Listrik Statis

DEVELOPMENT OF PRACTICUM GUIDEBOOKS BASED ON PROBLEM SOLVING IN STATIC ELECTRICITY MATERIALS

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ABSTRACT

This study aims to produce teaching materials in the form of a valid and practical practicum guidebook based on problem solving on static electricity. This research was conducted at SMA N 6 Palembang in the even semester of the 2022/2023 school year with the research subjects being students of class XII IPA. This study uses the problem solving learning model with the Borg & Gall Research and Development (R&D) model. Data collection techniques used in the form of observation, interviews, questionnaires, and documentation. The instrument used in data collection was a questionnaire given to material experts, media experts, linguists and respondents who aimed to test the validity and practicality of the teaching materials that had been developed. The result of this research is that a practicum guidebook based on problem solving on static electricity has been developed which has been validated by the validators. The validation results of material experts were 88%, media experts were 96%, and linguists were 98% with very valid categories. The results of the field trials obtained the percentage of student responses by 89% and the teacher's response by 89% in the very practical category. Based on the results of the study it can be concluded that the problem solving-based teaching materials on static electricity material that have been developed are very valid and very practical and can be used in the learning process.

Keyword: *Practical Book, Problem Solving, Research and Development (R&D), and Static Electricity*