

ABSTRAK

Keterampilan proses sains merupakan kemampuan yang harus dimiliki oleh siswa agar mampu mencapai tujuan pembelajaran melalui pengalaman langsung. Namun sayangnya kegiatan seperti praktikum yang bisa meningkatkan keterampilan proses sains belum dilakukan secara optimal. Kegiatan praktikum tidak dilengkapi dengan petunjuk praktikum yang mengakomodasi gaya belajar siswa. Berdasarkan permasalahan tersebut maka dirasa perlu untuk mengembangkan petunjuk praktikum bernuansa diferensiasi konten untuk mempermudah kegiatan praktikum. Penelitian pengembangan ini menggunakan model pengembangan 4D yang terdiri dari tahapan pendefinisian, perencanaan, pengembangan dan penyebaran. Metode pengumpulan data menggunakan lembar observasi. Petunjuk praktikum yang telah dibuat telah diuji validitas, kepraktisan, dan efektivitasnya sebelum dapat digunakan di kelas sebagai media penunjang kegiatan praktikum. Hasil uji menunjukkan bahwa petunjuk praktikum bernuansa diferensiasi konten layak dan praktis digunakan saat praktikum. Petunjuk praktikum efektif meningkatkan keterampilan proses sains siswa. Oleh sebab itu, dapat disimpulkan bahwa petunjuk praktikum yang dikembangkan layak, praktis, dan efektif digunakan dalam kegiatan praktikum.

Kata Kunci: Petunjuk Praktikum, Diferensiasi Konten, Keterampilan Proses Sains

Abstract

Science process skills are abilities that students must have in order to be able to achieve learning goals through direct experience. Science process skills are obtained from theoretical and practical science learning. However, unfortunately learning activities are still carried out using lecture and practicum methods which can improve science process skills and have not been carried out optimally. Practical activities are not equipped with practical instructions. The practical instructions used in schools only use the teacher's book so they do not accommodate all students' learning styles. Based on these problems, it is deemed necessary to develop practical instructions with nuanced content differentiation to facilitate practical activities. The practical instructions for nuanced content differentiation have descriptive explanations and video explanations that are scanned using a QR-Code. This development research uses a 4D development model which consists of the stages of definition, planning, development and dissemination. The data collection method uses observation sheets. The practicum instructions that have been created have been tested for validity, practicality and effectiveness before they can be used in the classroom as a medium to support practicum activities. The test results show that practical instructions with nuanced content differentiation are feasible and practical to use during practicum. Practical instructions are effective in improving students' science process skills. Therefore, it can be concluded that the practical instructions developed are feasible, practical and effective for use in practical activities.