

ABSTRAK

Penelitian ini bertujuan untuk menghasilkan desain praktikum berbasis inkuiri tentang sifat air asam tambang untuk membangun literasi lingkungan peserta didik SMK. Desain penelitian yang digunakan adalah model pengembangan Borg and Gall yang dibatasi sampai empat tahap yaitu : penelitian dan pengumpulan data, perencanaan, pengembangan *draft* produk, uji coba lapangan awal. Instrumen yang digunakan yaitu lembar penilaian ahli, lembar observasi, angket keterbacakan, tes literasi lingkungan, angket respon peserta didik dan wawancara. Partisipan dalam penelitian ini adalah 25 peserta didik di salah satu Sekolah Menengah Kejuruan (SMK) di Kabupaten Muara Enim. Prosedur praktikum pada buku kimia SMK belum berorientasi literasi lingkungan. Penyusunan LKPD didasari oleh hasil uji coba prosedur praktikum netralisasi air asam tambang menggunakan kapur. Berdasarkan hasil reviu ahli, desain praktikum berupa proses rancangan dan prosedur praktikum dinilai layak dan dapat diterapkan dalam pembelajaran. Kemampuan literasi lingkungan peserta didik mengalami peningkatan baik pada domain pengetahuan, keterampilan kognitif, dan sikap peduli lingkungan. Akan tetapi, masih tergolong ke dalam kategori rendah. Hasil analisis angket dan respon wawancara guru menunjukkan respon yang positif terhadap implementasi praktikum netralisasi air asam tambang berbasis inkuiri. Berdasarkan hasil tersebut, disimpulkan bahwa desain praktikum berbasis inkuiri tentang sifat air asam tambang dapat membangun literasi lingkungan peserta didik.

Kata Kunci : pengembangan, prosedur praktikum kimia, air asam tambang, literasi lingkungan.

ABSTRACT

This study aimed to obtained an inquiry based practicum design about acid mine characteristic to build environmental literacy of vocational high school students. This study used developing model by Borg and Gall which limited into four steps there are: research and data collection, planning, development of draft product, and initial field trials. Methods of data collection used expert assessment sheets, observation sheet, readability questionnaire, environmental literacy test, questionnaire and interview. Subject were 25 students in one of Vocational High School in Muara Enim District. Laboratory work in students chemistry books not oriented to enviromental literacy. The student worksheet have been developed based on the result of trial practicum of acid mine drainage neutralization using limestone. Based on the expert review, practicum design that are design process and practicum procedure considered feasible and can be applied in learning. Students' environmental literacy ability has increased for al domains of knowladge, kognitive skill, and environmental awarness. Eventhough, it was in low category. Based on questionnare analysis and interview, teacher and students provide positive responses to implementation of acid mine drainage neutralization inquiry based practicum. Findings indicated that inquiry based practicum design about acid mine characteristic was able to build students' environmental literacy ability.

Keywords: development, chemical laboratory work, acid mine drainage, environmental literacy.