

ABSTRAK

PENGEMBANGAN PROGRAM PEMBELAJARAN BERBASIS *INQUIRY LABORATORY* PENCEMARAN LIMBAH INDUSTRI *LAUNDRY* UNTUK MENINGKATKAN KETERAMPILAN PEMECAHAN MASALAH SISWA SMP

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Penelitian ini bertujuan untuk mengembangkan program pembelajaran IPA berbasis *inquiry laboratory* pencemaran limbah industri *laundry* untuk meningkatkan keterampilan pemecahan masalah siswa SMP. Model yang digunakan dalam penelitian ini yaitu model ADDIE (*analyze, design, development, implementation, evaluation*). Pada tahap *analyze* sumber data diperoleh dari 30 orang guru IPA dan 80 siswa SMP kelas VII. Pada tahap *development* sumber data diperoleh dari dua orang validator ahli dan enam orang guru IPA di Propinsi Lampung. Pada tahap *implementasi* sumber data yaitu 26 siswa kelas VII SMP Negeri 4 Pesawaran. Kevalidan program pembelajaran *inquiry laboratory* yang dikembangkan dilihat pada aspek kesesuaian isi dan konstruksi. Validasi ahli menunjukkan bahwa rata-rata persentase aspek kesesuaian isi sebesar 77,62% dengan kriteria sedang, dan aspek konstruksi sebesar 99% dengan kriteria sangat tinggi. Keterlaksanaan program dinilai sudah berjalan baik dengan persentase keterlaksanaan sintaks program pembelajaran sebesar 90% dengan kriteria sangat tinggi. Keefektivan program pembelajaran yang ditinjau dari *n-gain* dan *effect size* berturut-turut sebesar 0,6 dan 0,95 dengan kriteria sedang dan besar. Berdasarkan hal tersebut, program pembelajaran berbasis *inquiry laboratory* pencemaran limbah industri *laundry* efektif untuk meningkatkan keterampilan pemecahan masalah siswa SMP.

Kata kunci: Pembelajaran *inquiry laboratory*, pencemaran limbah industri *laundry*, keterampilan pemecahan masalah

ABSTRACT

DEVELOPMENT OF LEARNING PROGRAM BASED ON LABORATORY INQUIRY POLLUTION OF LAUNDRY INDUSTRIAL WASTE TO IMPROVE PROBLEM SOLVING SKILLS OF JUNIOR HIGH SCHOOL STUDENTS

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This study aims to develop an inquiry laboratory-based learning program for laundry industry waste pollution to improve problem-solving skills of junior high school students. The model used in this study is the ADDIE model (analyze, design, development, implementation, evaluation). In the analyze phase, the data source was obtained from 30 science teachers and 80 grade VII junior high school students. At the development stage, data sources were obtained from two expert validators and six science teachers in Lampung Province. In the data source implementation stage, there were 26 class VII students of SMP Negeri 4 Pesawaran. The validity of the laboratory inquiry learning program that was developed was seen in the suitability of content and construction aspects. Expert validation shows that the average percentage of content suitability aspects is 77.62% with moderate criteria, and the construction aspect is 99% with very high criteria. The implementation of the program is considered to have run well with the percentage of implementation of the learning program syntax of 90% with very high criteria. The effectiveness of the learning program in terms of n-gain and effect size is 0.6 and 0.95 respectively with medium and large criteria. Based on this result, the inquiry laboratory-based learning program for laundry industry waste pollution is effective in improving junior high school students' problem solving skills.

Keywords: Laboratory inquiry learning, laundry industry waste pollution, problem solving skills

