

ABSTRAK

EFFI NURMA HUSNITHA. Pengembangan Bahan Ajar Berbasis Model *Problem Based Learning* (PBL) Untuk Meningkatkan Kemampuan Berpikir Kritis Pada Materi Kimia Semester Genap Kelas XI SMA/MA

Terdapat permasalahan dalam cara meningkatkan kemampuan berpikir kritis beserta motivasi belajar peserta didik yang disebabkan kurangnya sumber bahan ajar yang mendukung untuk digunakan pada pembelajaran kimia. Penelitian ini bertujuan untuk menganalisis kelayakan penggunaan bahan ajar berdasarkan kriteria BSNP serta mengembangkan bahan ajar berbasis *Problem Based Learning* (PBL) yang nantinya akan digunakan untuk meningkatkan kemampuan berpikir kritis, dan melihat motivasi peserta didik serta respon peserta didik pada penerapan Bahan Ajar berbasis PBL. Pada penelitian ini menggunakan metode pengembangan (R&D) dengan desain *Analysis, Design, Development, Implementation, Evaluation* (ADDIE). Subjek penelitian ini sejumlah satu kelas terdiri dari 29 orang peserta didik yang dilakukan secara purposive sampling. Instrumen penelitian berupa angket wawancara, angket kelayakan BSNP yang telah dimodifikasi, instrument tes, angket aktivitas belajar peserta didik, dan angket respon peserta didik terhadap penggunaan Bahan Ajar berbasis PBL. Hasil analisis kebutuhan awal disimpulkan bahwa proses pembelajaran kimia yang digunakan guru didalam kelas cenderung memakai metode ceramah, selain itu bukuyang dijadikan guru sebagai bahan ajar cenderung masih berfokus pada materi, adapun hasil BSNP dari buku tersebut ialah 3,56 (Buku A) dan 3,64 (Buku B). Hasil analisis kelayakan bahan ajar berbasis masalah yang dikembangkan memperoleh nilai rata-rata 3,86 (dosen kimia) dan 3,73 (guru kimia) dengan kategori valid tanpa perlu revisi dan layak digunakan dalam pembelajaran kimia kelas XI semester Genap. Sedangkan untuk kemampuan berpikir kritis pada siswa yang diajarkan dengan bahan ajar berbasis masalah memiliki nilai yang lebih tinggi dari KKM yang ditunjukkan dengan uji one sample t-tes yang diperoleh nilai $t_{hitung} > t_{tabel}$ ($9.896 > 2,048$) nilai Sig 2 tailed $0,000 < 0,005$. Motivasi belajar kelas eksperimen diperoleh nilai sebesar 92,7 % dimana termasuk pada kategori sangat termotivasi, dan respon siswa pada bahan ajar ini memperoleh nilai sebesar 90,3% yang dapat dikategorikan sangat baik. Kesimpulan yang dapat diambil pada penggunaan bahan ajar berbasis PBL ialah bahan ajar ini dapat meningkatkan Kemampuan Berpikir Kritis dan motivasi belajar peserta didik.

Kata Kunci : Pengembangan, Bahan Ajar, *Problem Based Learning*, Kemampuan Berpikir Kritis, Motivasi.

ABSTRACT

EFFI NURMA HUSNITHA. Development of Teaching Materials Based on the Problem Based Learning (PBL) Model to Improve Critical Thinking Ability in Chemistry Material Even Semester Class XI SMA/MA

There are problems in improving students' critical thinking skills and learning motivation due to the lack of sources of supporting teaching materials for use in chemistry learning. This research aims to analyze the feasibility of using teaching materials based on BSNP criteria and develop Problem Based Learning (PBL) based teaching materials which will later be used to improve critical thinking skills, and look at student motivation and student responses to the application of PBL-based teaching materials. This research uses the development method (R&D) with the Analysis, Design, Development, Implementation, Evaluation (ADDIE) design. The subjects of this research were one class consisting of 29 students, which was carried out using purposive sampling. The research instruments were interview questionnaires, modified BSNP eligibility questionnaires, test instruments, student learning activity questionnaires, and student response questionnaires regarding the use of PBL-based teaching materials. . The results of the initial needs analysis concluded that the chemistry learning process used by teachers in the classroom tends to use the lecture method, apart from that the books used by teachers as teaching materials tend to still focus on the material, while the BSNP results from these books are 3.56 (Book A) and 3, 64 (Book B). The results of the feasibility analysis of the problem-based teaching materials developed obtained an average score of 3.86 (chemistry lecturer) and 3.73 (chemistry teacher) in the valid category without the need for revision and suitable for use in class XI chemistry learning, Even Semester. Meanwhile, the critical thinking ability of students who are taught with problem-based teaching materials has a higher value than the KKM as indicated by the one sample t-test which obtained a value of $t_{count} > t_{table}$ ($9,896 > 2.048$) a value of Sig 2 tailed $0.000 < 0.005$. The learning motivation for the experimental class obtained a score of 92.7% which was included in the very motivated category, and student responses to this teaching material obtained a score of 90.3% which could be categorized as very good. The conclusion that can be drawn from the use of PBL-based teaching materials is that these teaching materials can improve students' Critical Thinking Ability and learning motivation.

Keywords: Development, Teaching Materials, Problem Based Learning, Critical Thinking Ability, Motivation.