

ABSTRAK

Tira Kania Pardosi, NIM. 4221131026. Developmen of a Google Sites Web Learning Media Integrated with the Problem Based Learning (PBL) on Hydrocarbon Material

Penelitian ini bertujuan untuk mengembangkan dan mengevaluasi media pembelajaran berbasis web Google Sites yang terintegrasi dengan model Problem Based Learning (PBL) pada materi hidrokarbon untuk siswa sekolah menengah atas. Penelitian dilaksanakan di SMA Negeri 2 Percut Sei Tuan dengan menggunakan pendekatan Research and Development (R&D) melalui model pengembangan 4D yang meliputi tahap Define, Design, Develop, dan Disseminate. Subjek penelitian terdiri atas 34 siswa kelas XI-E. Teknik pengumpulan data meliputi wawancara, angket validasi, tes hasil belajar (pretest dan posttest), serta angket respons guru dan siswa. Kelayakan media yang dikembangkan dinilai oleh ahli materi dan ahli media berdasarkan standar BSNP. Hasil penelitian menunjukkan bahwa media pembelajaran web Google Sites terintegrasi model PBL berada pada kategori sangat layak, dengan skor rata-rata validasi sebesar 3,58 untuk aspek materi dan 3,51 untuk aspek media. Keefektifan media ditunjukkan oleh peningkatan hasil belajar siswa yang signifikan, dengan rata-rata nilai pretest sebesar 36,76 meningkat menjadi 87,20 pada posttest, serta nilai N-gain sebesar 0,79 yang termasuk dalam kategori tinggi. Selain itu, respons guru dan siswa terhadap media yang dikembangkan berada pada kategori sangat positif, yang mencerminkan tingginya minat, kejelasan materi, dan kemudahan penggunaan. Dengan demikian, media pembelajaran web Google Sites yang terintegrasi dengan model PBL efektif dalam meningkatkan pemahaman dan hasil belajar siswa pada materi hidrokarbon serta layak digunakan sebagai alternatif inovatif dalam pembelajaran kimia.

Kata kunci: Google Sites, Materi Hidrokarbon, Problem Based Learning (PBL), Media Pembelajaran Berbasis Web

ABSTRACT

Tira Kania Pardosi, NIM. 4221131026. Development of a Google Sites Web Learning Media Integrated with the Problem Based Learning (PBL) on Hydrocarbon Material

This research aims to develop and evaluate a Google Sites-based web learning media integrated with the Problem Based Learning (PBL) model on hydrocarbon material for senior high school students. The research was conducted at SMA Negeri 2 Percut Sei Tuan using a Research and Development (R&D) approach with the 4D development model, consisting of Define, Design, Develop, and Disseminate stages. The subjects of the study were 34 students of class XI-E. Data were collected through interviews, validation questionnaires, learning outcome tests (pretest and posttest), and teacher and student response questionnaires. The feasibility of the developed media was assessed by material and media experts based on BSNP standards. The results showed that the Google Sites web learning media integrated with the PBL model was categorized as very feasible, with an average validation score of 3.58 for material aspects and 3.51 for media aspects. The effectiveness of the media was indicated by a significant improvement in students' learning outcomes, with the average pretest score increasing from 36.76 to a posttest score of 87.20 and an N-gain value of 0.79, which falls into the high category. Furthermore, teacher and student responses toward the developed media were very positive, indicating high interest, clarity of material, and ease of use. These findings suggest that Google Sites web learning media integrated with the PBL model is effective in improving students' understanding and learning outcomes in hydrocarbon material and can be used as an innovative alternative learning media in chemistry instruction.

Keywords: Google Sites, Hydrocarbon Material, Problem Based Learning (PBL), Web-Based Learning Media