

## ABSTRAK

### PENGEMBANGAN BAHAN AJAR DARING BERBANTUAN NEARPOD PADA TOPIK BILANGAN OKSIDASI UNTUK MENGANALISIS KEAKTIFAN PESERTA DIDIK

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Bahan ajar merupakan komponen penting yang dapat mempengaruhi efektivitas pembelajaran. Selama pembelajaran kimia di SMA Negeri 2 Pangkalan Bun, guru belum pernah mengembangkan bahan ajar dan hanya menggunakan buku paket, sehingga kurang memaksimalkan aktivitas pembelajaran dan berdampak pada keaktifan peserta didik. Penelitian ini bertujuan untuk: 1) menghasilkan produk berupa bahan ajar daring berbantuan nearpod pada topik bilangan oksidasi; 2) mengetahui kriteria valid, praktis dan efektif dari produk; dan 3) mengetahui keaktifan peserta didik selama menggunakan produk. Penelitian ini mengacu pada model pengembangan 4D (Thiagarajan, Semmel, dan Semmel, 1974:5) yang telah dimodifikasi menjadi 3D. Instrumen penelitian yang digunakan adalah lembar wawancara, lembar validasi, lembar soal *posttest*, lembar observasi keaktifan peserta didik dan lembar angket respon peserta didik. Data yang diperoleh dianalisis menggunakan statistik Aiken's V dan deskriptif. Sampel penelitian ini adalah 10 orang peserta didik kelas X MIPA 4 SMA Negeri 2 Pangkalan Bun. Hasil penelitian menunjukkan bahwa: 1) produk cocok dikembangkan dengan model 3D karena memiliki tahapan yang sistematis dan sederhana; 2) produk telah memenuhi kriteria valid dengan rata-rata persentase 80%; sangat praktis dengan rata-rata persentase 83,25%; efektif dengan rata-rata persentase 85,36%; dan 3) keaktifan peserta didik selama menggunakan produk dikategorikan sangat baik dengan rata-rata persentase 85,36%. Produk dapat digunakan untuk menganalisis keaktifan peserta didik pada pembelajaran bilangan oksidasi.

**Kata kunci:** Bahan ajar daring berbantuan nearpod, keaktifan, bilangan oksidasi

**ABSTRACT**

**DEVELOPMENT OF NEARPOD-ASSISTED ONLINE TEACHING MATERIALS ON  
THE TOPIC OF OXIDATION NUMBER TO  
ANALYZE STUDENT'S ACTIVENESS**

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*Teaching materials are important component that can affect the effectiveness of learning. During chemistry learning at SMA Negeri 2 Pangkalan Bun, teacher had never developed teaching materials and only used textbooks, so that they did not maximize learning activities and had impact on the activeness of students. This study aims to: 1) create product in the form of online teaching materials assisted by nearpod on the topic of oxidation number; 2) know the valid, practical, and effective criteria of the product; and 3) know the activeness of students while using the product. This research refers to the 4D development model (Thiagarajan, Semmel, and Semmel, 1974:5) which has been modified into 3D. The research instruments used were interview sheet, validation sheets, posttest questions sheet, student's liveliness observation sheet, and student's response questionnaire sheet. Data obtained were analyzed using Aiken's V and descriptive statistics. The sample of this research is 10 students of X MIPA 4 at SMA Negeri 2 Pangkalan Bun. The results showed that: 1) product was suitable to be developed with 3D development model; 2) product has fulfilled valid criteria with average percentage of 80%; very practical with average percentage of 83.5%; effective with average percentage of 85.36%; and 3) the liveliness of students while using the product is categorized as very good with average percentage of 85.36%. The product can be used to analyze the liveliness of students in learning of oxidation number.*

**Keywords:** *nearpod-assisted online teaching materials, student's activeness, oxidation number*