

## ABSTRAK

**A.F. Zikra R Caniago : Pengembangan media pembelajaran interaktif “KoloiDang Xplore” terintegrasi Etno-STREAM berbasis budaya rendang Sumatera Barat pada materi koloid**

Penelitian ini bertujuan mengembangkan media pembelajaran interaktif *KoloiDang Xplore* yang terintegrasi pendekatan Etno-STREAM berbasis budaya rendang Sumatera Barat pada materi koloid. Media ini dirancang untuk mendukung pembelajaran kimia yang kontekstual, interaktif, dan bermakna melalui integrasi aspek sains, teknologi, nilai religius, rekayasa, seni, dan matematika. Penelitian menggunakan metode *Design-Based Research* (DBR) dengan model pengembangan ADDIE yang dilaksanakan hingga tahap analisis, desain, dan pengembangan. Analisis kebutuhan dilakukan melalui wawancara dan angket terhadap guru kimia, yang menunjukkan perlunya media interaktif yang menghubungkan materi koloid dengan budaya lokal serta mendukung pembelajaran mandiri dan visual. Tahap desain mencakup penyusunan *flowchart* dan *storyboard*. Pada tahap pengembangan, dihasilkan aplikasi berbasis web yang dapat diakses melalui perangkat HP maupun laptop, dengan fitur eksplorasi materi, video eksperimen, kuis, dan refleksi berbasis nilai budaya Minangkabau. Validasi oleh tiga dosen ahli memperoleh skor rata-rata  $r$  hitung 0,96 (sangat valid). Uji kelayakan memperoleh rata-rata 96% (sangat layak). Revisi meliputi penyempurnaan warna tampilan, penambahan musik latar, perapian tata letak teks, serta penguatan aspek sains dan seni. Hasil akhir menunjukkan *KoloiDang Xplore* layak digunakan sebagai media pembelajaran kimia kontekstual yang mengintegrasikan budaya lokal dan religius secara komprehensif.

**Kata Kunci** : Media Pembelajaran Interaktif; Etno-STREAM; Rendang Koloid; Budaya Lokal

## **ABSTRACT**

**A.F. Zikra R Caniago : Development of “KoloiDang Xplore” interactive media with Ethno-STREAM based on rendang culture in colloids**

*This research aims to develop an interactive learning media called KoloiDang Xplore, which integrates the Ethno-STREAM approach based on the cultural context of rendang from West Sumatra in colloid materials. The media is designed to support contextual, interactive, and meaningful chemistry learning through the integration of science, technology, religious values, engineering, arts, and mathematics. The study employed the Design-Based Research (DBR) method with the ADDIE development model, implemented up to the analysis, design, and development stages. Needs analysis was carried out through interviews and questionnaires with chemistry teachers, indicating the necessity of interactive media that connects colloid concepts with local culture while supporting independent and visual learning. The design stage included the preparation of a flowchart and storyboard. In the development stage, a web-based application was produced, accessible via smartphones and laptops, featuring material exploration, experimental videos, quizzes, and cultural reflections. Validation by three expert lecturers obtained an average  $r$  value of 0.96 (very valid). Feasibility testing resulted in an average score of 96% (very feasible). Revisions included color adjustments, background music in videos, improved text layout, and strengthening scientific and artistic aspects. The final product demonstrates that KoloiDang Xplore is highly feasible as contextual chemistry learning media that comprehensively integrates local culture and religious values.*

**Keywords** : Interactive Learning Media; Ethno-STREAM; Rendang ; Colloid; Local Culture