

## **ABSTRAK**

Andayani, E.W 2022. Pengembangan *Mobile Learning* Berbasis Android Sebagai Media Pembelajaran pada Materi Sistem Periodik Unsur. Skripsi. Tanjungpinang : Jurusan Pendidikan Kimia, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing skripsi: Assist. Prof. Dina Fitriyah, S.Pd., M.Si., dan Asisst. Prof. Dr. Nancy Willian, S.Si., M.Si.

### **Kata Kunci : Android, *Mobile Learning*, Sistem Periodik Unsur**

Perkembangan teknologi saat ini berkembang pesat, salah satunya adalah *smartphone* berbasis android yang dapat dimanfaatkan dalam proses pembelajaran. *Mobile learning* menjadi salah satu media pembelajaran dengan memanfaatkan perangkat seluler (*smartphone*) yang dapat diakses kapanpun serta dimanapun. Penggunaan *smartphone* di kalangan pelajar belum optimal pemanfaatannya dalam proses pembelajaran. Sebagian besar digunakan untuk mengakses sosial media dan bermain *game*. Tujuan dari penelitian ini adalah untuk 1) mengetahui proses pengembangan *Mobile Learning* berbasis android pada materi sistem periodik unsur; 2) mengetahui tingkat validitas *Mobile Learning* berbasis android pada materi sistem periodik unsur; dan 3) mengetahui tingkat praktikalitas *Mobile Learning* berbasis android pada materi sistem periodik unsur. Penelitian ini merupakan penelitian pengembangan dengan tahapan *Analysis* (Analisis), *Design* (Perancangan), *Development* (Pengembangan) dan *Implementation* (Implementasi). Hasil penelitian: 1) dihasilkan *Mobile Learning* berbasis android dalam bentuk aplikasi; 2) *Mobile Learning* berbasis android pada materi sistem periodik unsur kriteria sangat valid dengan hasil uji ahli media diperoleh persentase sebesar 85%, dan hasil uji ahli materi diperoleh persentase sebesar 75%, layak digunakan oleh guru dan peserta didik; 3) praktikalitas *Mobile Learning* berbasis android pada materi sistem periodik unsur oleh guru diperoleh persentase sebesar 94,64% dengan kriteria sangat praktis, dan praktikalitas media oleh peserta didik diperoleh persentase sebesar 90,80% dengan kriteria sangat praktis. Berdasarkan hasil yang diperoleh dari penelitian dapat disimpulkan bahwa *mobile learning* berbasis android sebagai media pembelajaran pada materi sistem periodik unsur valid dan praktis digunakan dalam pembelajaran.

## **ABSTRACT**

Andayani, E.W 2022. Development of Android-Based Mobile Learning as Learning Media on Material Periodic System of Elements. Thesis. Tanjungpinang : Department of Chemistry Education, Faculty of Teacher Training and Education, Raja Ali Haji Maritime University. Thesis supervisor : Assist. Prof. Dina Fitriyah, S.Pd., M.Si., and Asisst. Prof. Nancy Willian, S.Si., M.Si.

**Keywords:** **Android, Mobile Learning, Periodic System of Elements**

The development of technology was currently growing rapidly, one of which was an Android-based smartphone that can be used in the learning process. Mobile learning was one of the learning media by utilizing mobile devices (smartphones) that can be accessed anytime and anywhere. The use of smartphones among students has not been optimally utilized in the learning process. Mostly used for accessing social media and playing games. The purposes of this study were to 1) determine the process of developing Android-based Mobile Learning on the material for the periodic system of elements; 2) determine the level of validity of Android-based Mobile Learning on the material of the periodic system of elements; and 3) knowing the practical level of Android-based Mobile Learning on the material of the periodic system of elements. This research was a development research with the stages of Analysis (Analysis), Design (Design), Development (Development) and Implementation (Implementation). Research result: 1) Android-based Mobile Learning was produced in the form of an application; 2) Android-based Mobile Learning on the periodic system material with very valid criteria with the results of the media expert test obtained by a percentage of 85%, and the results of the material expert test obtaining a percentage of 75%, suitable for use by teachers and students; 3) the practicality of Android-based Mobile Learning on the material, periodic system of elements by the teacher obtained a percentage of 94.64% with very practical criteria, and the practicality of media by students obtained a percentage of 90.80% with very practical criteria. Based on the results obtained from the research, it can be concluded that android-based mobile learning as a learning medium on the material of the periodic system of elements was valid and practical to used in learning.