

**PENGEMBANGAN MEDIA PEMBELAJARAN MANDIRI *MINICLASS*  
BERBASIS ANDROID PADA MATERI ASAM BASA KELAS XI SMA/MA**

**Oleh :  
Ammar Fauzan  
NIM. 11314244005**

**Pembimbing Utama : Marfuatun, M.Si.**

---

---

**ABSTRAK**

---

---

Penelitian ini merupakan penelitian pengembangan media pembelajaran kimia. Tujuan penelitian pengembangan ini untuk mengembangkan media pembelajaran mandiri *Miniclass* berbasis android pada materi asam basa kelas XI SMA/MA dan menentukan kualitas media pembelajaran mandiri *Miniclass*.

Pengembangan ini menggunakan model pengembangan ADDIE yang meliputi lima tahapan, yaitu tahap *analyze, design, development, implementation, dan evaluation*. Aplikasi *Miniclass* berbasis android terdiri dari pembahasan teori asam basa, indikator asam basa, kesetimbangan air, konsentrasi asam basa, derajat keasaman (pH), titrasi asam basa, dan *quiz* dengan tiga level kesulitan. Produk awal ditinjau oleh satu ahli materi, satu ahli media, dan tiga orang *peer reviewer*. Produk akhir dinilai oleh lima guru kimia SMA/MA sebagai *reviewer*. Penilaian produk ini ditinjau dari enam aspek, yaitu materi, soal, kebahasaan, keterlaksanaan, tampilan audio dan visual, dan rekayasa perangkat lunak. Hasil penilaian digunakan untuk menentukan kualitas produk.

Hasil penelitian pengembangan ini berupa media pembelajaran mandiri *Miniclass* berbasis android pada materi asam basa kelas XI SMA/MA. Berdasarkan penilaian lima guru SMA/MA, aplikasi *Miniclass* mendapatkan skor rata-rata sebesar 93,0 yang menurut kriteria penilaian ideal berada pada rentang  $\bar{X} > 92,4$  dengan kategori kualitas sangat baik (SB) dengan persentase keidealan 84,5%. Oleh karena itu, aplikasi *Miniclass* layak digunakan sebagai media pembelajaran kimia mandiri untuk peserta didik kelas XI SMA/MA.

**Kata kunci :** *pengembangan, miniclass, media pembelajaran mandiri*

**THE DEVELOPMENT OF SELF LEARNING MEDIA MINICLASS BASED  
ON ANDROID IN ACID AND BASE CHAPTER FOR 11<sup>st</sup> GRADE STUDENT  
OF SENIOR HIGH SCHOOL/ISLAMIC SENIOR HIGH SCHOOL**

**By :  
Ammar Fauzan  
NIM. 11314244005**

**Supervisor : Marfuatun, M.Si.**

---

---

**ABSTRACT**

---

---

This research was a development research of chemistry learning media. The aim of this development was to develop the self learning media Miniclass and to determine the quality of self learning media, named Miniclass.

This development research uses the model of ADDIE that includes five steps, i.e. analyze, design, development, implementation, and evaluation. The Miniclass application based on android, consist of several parts, i.e. acid base theory, acid and base indicator, water equilibrium, acid and base concentration, the power of acidity (pH), acid and base titration, and quiz. The early product was observed by a content expert, media expert, and three peer reviewers. The last product was assigned by five chemistry teachers as reviewers. The assignment of this product based on six aspect i.e. matter content, quiz, linguistic, implementation, audio and visual appearance, and software technology. The result of assignment is used to determine the product quality.

The result of this development was self learning media Miniclass based on android in acid base chapter for 11<sup>st</sup> grade student of senior high school/islamic senior high school. Based on the assignment of five senior high school teachers, Miniclass is get average point 93 that belongs to ideal assignment placed in  $\bar{X} > 92,4$  that means the quality is very good by the ideal percentage 84,5%. Therefore, The Miniclass application is suitable as self chemistry learning media for 11<sup>st</sup> grade student of senior high school/islamic senior high school.

**Keywords :** *development, miniclass, self learning media*