

**THE DEVELOPMENT OF *SOLAR SYSTEM SIMULATOR*  
TO TEACH ENGLISH VOCABULARY AT ELEMENTARY  
SCHOOL**

**THESIS**

Submitted in partial fulfillment of the requirement for the degree of Sarjana  
Pendidikan (S.Pd) in Teaching English



**UIN SUNAN AMPEL  
S U R A B A Y A**

**By:**

**Graena Pelangi Nagara**

**(D95219064)**

**TEACHER TRAINING AND TARBIYAH FACULTY  
ENGLISH EDUCATION DEPARTMENT**

**UIN SUNAN AMPEL**

**SURABAYA**

**2023**

## PERNYATAAN KEASLIAN TULISAN

Saya yang bertanda tangan dibawah ini:

Nama : Graena Pelangi Nagara

NIM : D95219064

Jurusan/Program Studi : Pendidikan Bahasa Inggris

Fakultas : Tarbiyah dan Keguruan

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Surabaya, 26 September 2023

Yang membuat pernyataan,



**Graena Pelangi Nagara**  
D95219064

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This thesis by Graena Pelangi Nagara entitled "The Development Of Solar System Simulator To Teach English Vocabulary At Elementary School" has been approved by the thesis advisors for further approval by the Boards of Examiners.

Surabaya, 23 September 2023

Advisor I.



Dr. Arbaiyah YS, MA  
196405031991032002

Advisor II.




Hilda Izzati Madjid, M.A.  
198602102011012012

## EXAMINER APPROVAL SHEET

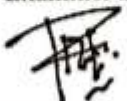
This thesis by Graena Pelangi Nagara entitled "The Development of Solar System Simulator to Teach English Vocabulary At Elementary School" has been examined and approved by boards of examiners.

  
Surabaya, 3 October 2023  
Dean,  
  
Prof. Dr. H. Mohammad Thohir, S.Ag., M.Pd.  
197407251998031001


Examiner 1,

  
M. Hanafi, M.Ag. MA  
197408042000031002

Examiner 2,

  
Rizka Safrivani, M.Pd  
198409142009122005

Examiner 3,

  
A.N. Head of ELED  
Dr. Arbaivah YS, MA  
196405031991032002

Examiner 4,

  
Hilda Izzati M. diid, M.A  
198602102011012012



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KEMENTERIAN AGAMA  
UNIVERSITAS ISLAM NEGERI SUNAN AMPEL SURABAYA  
PERPUSTAKAAN

Jl. Jend. A. Yani 117 Surabaya 60237 Telp. 031-8431972 Fax.031-8413300  
E-Mail: perpus@uinsby.ac.id

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Nama : Graena Pelangi Nagara  
NIM : D95219064  
Fakultas/Jurusan : Tarbiyah dan Keguruan / Pendidikan Bahasa Inggris  
E-mail address : graenapelangi@gmail.com

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## ABSTRACT

Nagara, Graena Pelangi. (2023). *THE DEVELOPMENT OF SOLAR SYSTEM SIMULATOR TO TEACH ENGLISH VOCABULARY AT ELEMENTARY SCHOOL*. Thesis. English Language Education Department, Faculty of Tarbiyah and Teacher Training, UIN Sunan Ampel Surabaya. Supervisors: Dr. Arbaiyah YS, MA. and Hilda Izzati Madjid, M.A.

Key Words: *Mobile Learning, Simulator, Solar System, English Vocabulary.*

This project aims to build an Android-based application for students at elementary school level. The application is called Solar System Simulator which students can use to better understand vocabulary about the solar system. This research project has two questions; (1) How is the development of a Solar System Simulator to teach English vocabulary at elementary school? (2) What are the challenges that students encounter while using this application? This project research is in the form of qualitative descriptive Research and Development (RnD), which adopts the ADDIE model for the project development process. This project uses guideline interviews as a tool for collecting data. The subjects of this project are 6 students at SDN Klurak Sidoarjo who are in class 6. There are two validators involved in the process of validating learning media and learning materials. The findings from this project are (1) The development of the Solar System Simulator application includes three phases (framework creation, application creation, and application publicity), (2) Analysis of both validation criteria and students' qualitative feedback revealed that students had some challenges related to using this app. The absence of sound effects as well as voice over, a slight lag when switching pages, and the challenge to be brave and get used to communicating and discussing with the teacher regarding the learning material being discussed.

## ABSTRAK

Nagara, Graena Pelangi. (2023). *THE DEVELOPMENT OF SOLAR SYSTEM SIMULATOR TO TEACH ENGLISH VOCABULARY AT ELEMENTARY SCHOOL*. Tesis. Jurusan Pendidikan Bahasa Inggris, Fakultas Tarbiyah dan Keguruan, UIN Sunan Ampel Surabaya. Pengawas: Dr. Arbaiyah YS, MA. dan Hilda Izzati Madjid, M.A.

Kata Kunci: *Mobile Learning, Simulator, Tata Surya, Kosakata Bahasa Inggris.*

Proyek ini bertujuan untuk membangun aplikasi berbasis android untuk siswa pada tingkat SD. Aplikasi tersebut bernama Solar System Simulator yang dapat digunakan para siswa untuk lebih memahami pemahaman tentang tata surya. Penelitian proyek ini memiliki dua pertanyaan; (1) Bagaimana pengembangan Simulator Tata Surya untuk mengajarkan kosakata bahasa Inggris di sekolah dasar? (2) Apa saja tantangan yang dihadapi siswa saat menggunakan aplikasi ini? Proyek penelitian ini berupa Penelitian dan Pengembangan deskriptif kualitatif (RnD), yang mengadopsi model ADDIE untuk proses pembangunan proyek. Proyek ini menggunakan pedoman wawancara sebagai alat untuk mengumpulkan data. Subjek dari proyek ini adalah 6 orang siswa siswi SDN Klurak Sidoarjo yang duduk di kelas 6. Terdapat dua validator yang dilibatkan untuk proses validasi media pembelajaran dan materi pembelajaran. Temuan dari proyek ini adalah; (1) Pembangunan dari aplikasi Solar System Simulator mencakup tiga fase (pembuatan kerangka, pembuatan aplikasi, dan publisitas aplikasi), (2) analisis kedua kriteria validasi dan umpan balik kualitatif siswa mengungkapkan bahwa siswa memiliki beberapa tantangan terkait penggunaan aplikasi ini. Tidak adanya surara efek sekaligus voice over, sedikit lag saat pergantian halaman, dan tantangan untuk berani dan terbiasa berkomunikasi dan berdiskusi dengan guru terkait materi pembelajaran yang sedang dibahas.

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## LIST OF ABBREVIATIONS

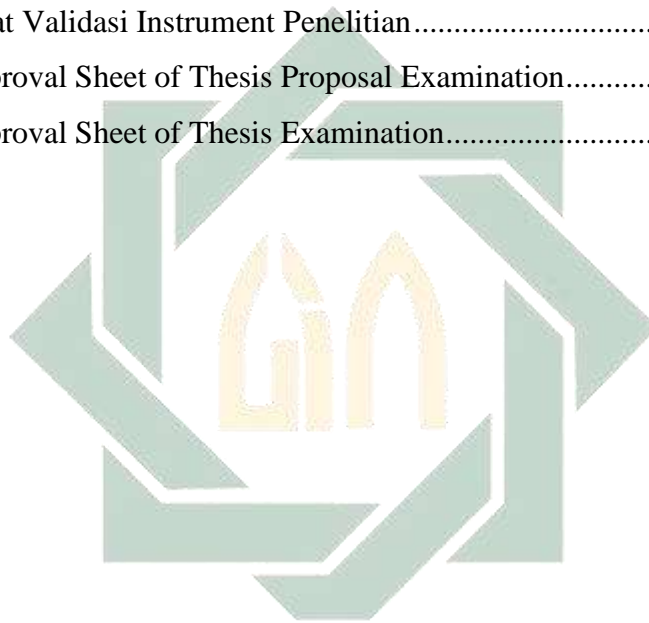
KI KD: Kompetensi Inti, Kompetensi Dasar



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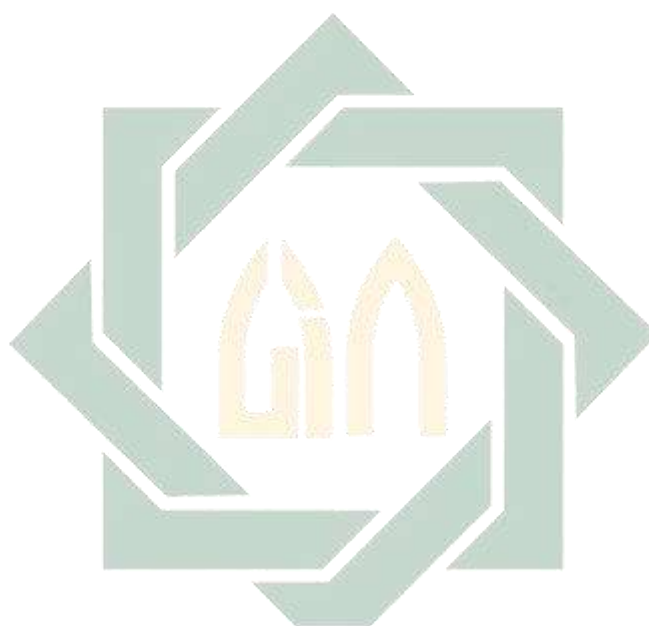
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