

**ANALYSIS OF CLIMATE CHANGE EDUCATION
LEARNING KIT "GENERAksi!" EFFECTIVENESS
FOR HIGH SCHOOL LEVEL**



RESEARCH & TECHNOLOGY PROGRAM REPORT

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**VISUAL COMMUNICATION DESIGN STUDY PROGRAM
FACULTY OF ART AND DESIGN
UNIVERSITAS MULTIMEDIA NUSANTARA
TANGERANG
2025**

**ANALYSIS OF CLIMATE CHANGE EDUCATION
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RESEARCH & TECHNOLOGY PROGRAM REPORT

Submitted as one of the requirements to obtain

a Bachelor's Degree in Visual Communication Design (S.Ds.)

Sherline Widjaja

00000077038

VISUAL COMMUNICATION DESIGN STUDY PROGRAM

**FACULTY OF ART AND DESIGN
UNIVERSITAS MULTIMEDIA NUSANTARA
TANGERANG**

2025

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"GENERAksi" EFFECTIVENESS
FOR HIGH SCHOOL LEVEL**

By

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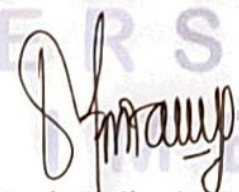
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Judul Karya Ilmiah : ANALYSIS OF CLIMATE CHANGE EDUCATION LEARNING KIT “GENERAKSI!” EFFECTIVENESS FOR HIGH SCHOOL LEVEL

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PREFACE

The author offers gratitude to the Almighty God, for all His grace and blessings in enabling the author to complete the report titled “Analysis of Climate Change Education Learning Kit "GENERAksi!" Effectiveness for High School Level”. In writing this report, the author also extends thanks to all relevant parties who played a role in providing motivation for the completion of this report.

Say my thanks for:

1. Dr. Andrey Andoko, selaku Rektor Universitas Multimedia Nusantara.
2. Muhammad Cahya Mulya Daulay, S.Sn., M.Ds., as Dean of the Faculty of Art and Design, Universitas Multimedia Nusantara.
3. Fonita Theresia Yoliando, S.Ds., M.A., as head of the Visual Communication Design Study Program, Universitas Multimedia Nusantara.
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5. Avianto Amri, PhD., as the Supervisor who has provided guidance, direction, and motivation to complete this *PRO-STEP Research & Technology* program.
6. Fonita Theresia Yoliando, S.Ds., M.A, as the Advisor who has provided guidance, direction, and motivation to complete this *PRO-STEP Research & Technology* program.
7. My family, who has provided material and moral support, so that the writer can complete this *PRO-STEP Research & Technology* program.

Through this report, the author hopes it might prove to be useful and beneficial for others who are researching similar topics or are going through the same program as the author.

Tangerang, 5 December 2025



(Sherline Widjaja)

ANALISIS EFEKTIVITAS KIT PEMBELAJARAN
PENDIDIKAN PERUBAHAN IKLIM “GENERAKSI!”
UNTUK TINGKAT SEKOLAH MENENGAH

(Sherline Widjaja)

ABSTRAK (Indonesia)

Untuk meningkatkan tingkat keterlibatan di antara para guru dan siswa sekolah menengah berlokasi di Jakarta, terhadap efek perubahan iklim dalam kehidupan sehari-harinya, sebuah kit pembelajaran pendidikan perubahan iklim (Climate Change Education [CCE]) berjudul "Generasi Beraksi!" atau disingkat sebagai "GENERAKSI!" dibuat. Kit pembelajaran "GENERAKSI!" akan dinilai dan dianalisis untuk memecahkan masalah tingkat keterlibatan rendah dan kesenjangan dalam translasi pengetahuan sebagai tindakan dalam inisiatif pendidikan perubahan iklim seputar pembelajaran interaktif. Analisis ini mengkaji efektivitas kit pembelajaran CCE dalam meningkatkan keterlibatan guru dan siswa tingkat menengah untuk mengambil aksi iklim. Analisis menggunakan alat pengukuran analisis tematik dengan Universal Design Learning (UDL) framework sebagai dasar dari prinsip dan indikator pedoman dalam pengkodean data, sedangkan pengembangan kit pembelajaran CCE sendiri menggunakan pendekatan Human-Centered Design (HCD) yang terdiri dari fase inspirasi, ideasi, dan implementasi. Pengumpulan data dilakukan melalui penelitian sekunder, Focus Group Discussion (FGD), dan kuesioner terbuka untuk mengumpulkan masukan dalam iterasi kit pembelajaran CCE. Hasil dari analisis menunjukkan bahwa kit pembelajaran CCE "GENERAKSI!" memiliki kemampuan yang sepadan untuk meningkatkan efektivitas keterlibatan audiensnya, dengan menetapkan implementasi yang fleksibel, mudah diakses, dan menarik demi mendorong motivasi guru dan siswa dalam mengambil aksi-aksi iklim berbasis materi pendidikan perubahan iklim.

Kata kunci: Pendidikan perubahan iklim, kit pembelajaran, pembelajaran berbasis permainan, Universal Design Learning (UDL) framework, Human-Centered Design (HCD).

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ANALYSIS OF CLIMATE CHANGE EDUCATION LEARNING KIT "GENERA KSI!" EFFECTIVENESS FOR HIGH SCHOOL LEVEL

(Sherline Widjaja)

ABSTRACT

To increase the low level of engagement amongst high school level teachers and students in Jakarta towards climate change impacts in their daily lives, a Climate Change Education (CCE) learning kit titled “Generasi Beraksi!” or is shortened as “GENERA KSI!” is created. The “GENERA KSI!” CCE learning kit will also undergo an assessment to solve the problem of low engagement and knowledge-action gap within CCE initiatives revolving around interactive learning. This analysis assesses the effectiveness of the CCE learning kit in increasing engagement for climate actions for teachers and students using the Universal Design Learning (UDL) framework as the principles and indicators guide in the data coding process while conducting a thematic analysis, meanwhile the development of the CCE learning kit itself uses Human-Centered Design (HCD) approach comprising inspiration, ideation, and implementation phases. Data collection was done through secondary research, Focus Group Discussion (FGD), and an open-ended questionnaire to gather feedback for the CCE learning kit iterations. The results of the analysis showcased that the “GENERA KSI!” CCE learning kit has the necessary capabilities to increase engagement efficacies within its audience, with implementations that showcases flexibility, accessibility, and interest to motivate teachers and students in taking self-initiatives for climate actions which are based from CCE.

Keywords: Climate change education, learning kits, game-based learning, Universal Design Learning (UDL) framework, Human-Centered Design (HCD).

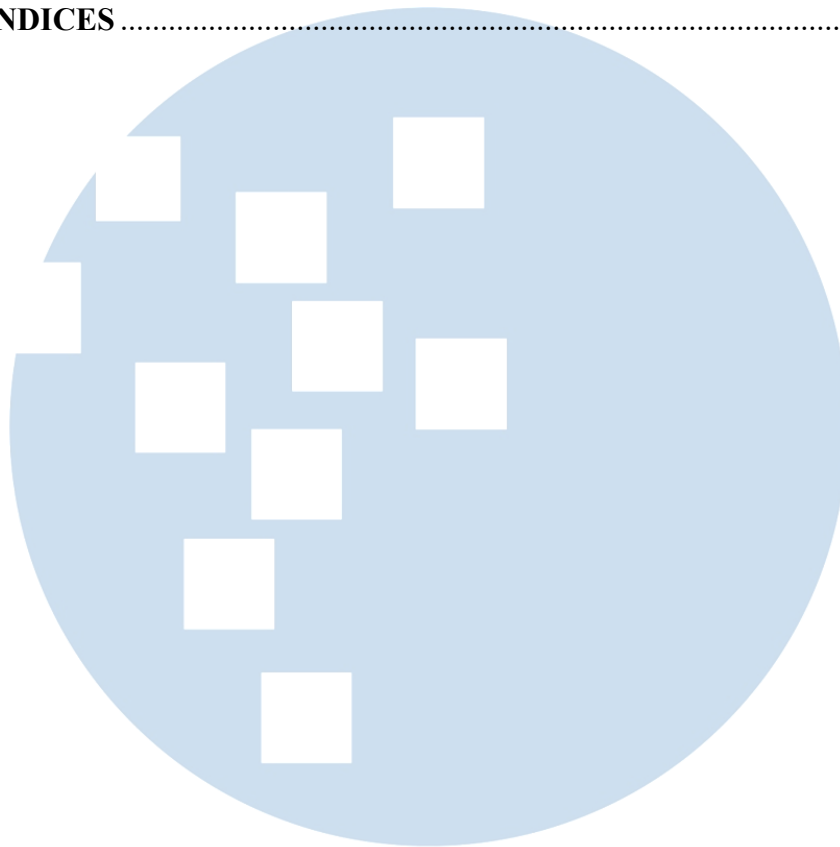
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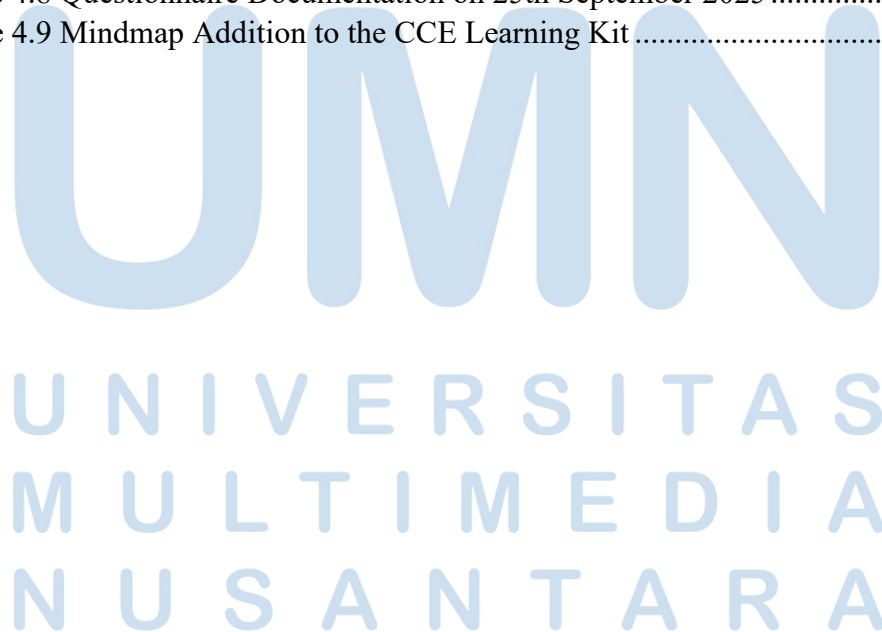
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