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**PENGEMBANGAN MODUL *COMPUTATIONAL THINKING*  
BERBASIS *GAME* MENGGUNAKAN *SCRATCH BLOCKS*  
DI KELAS V SEKOLAH DASAR**



**SKRIPSI**

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar  
Sarjana Pendidikan Program Studi Pendidikan Guru Sekolah Dasar

Oleh  
Siti Masitoh  
NIM 2108673

**PROGRAM STUDI S1 PENDIDIKAN GURU SEKOLAH DASAR  
KAMPUS UPI TASIKMALAYA  
UNIVERSITAS PENDIDIKAN INDONESIA  
2025**

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Sarjana Pendidikan Program Studi S1 Pendidikan Guru Sekolah Dasar

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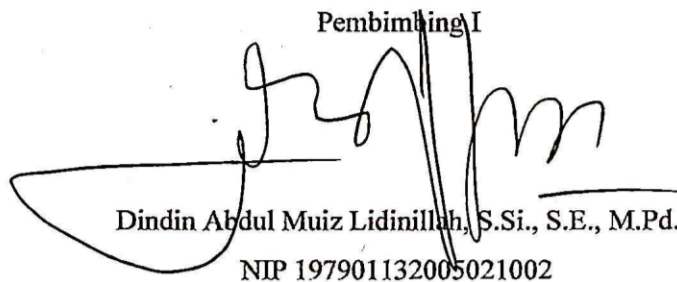
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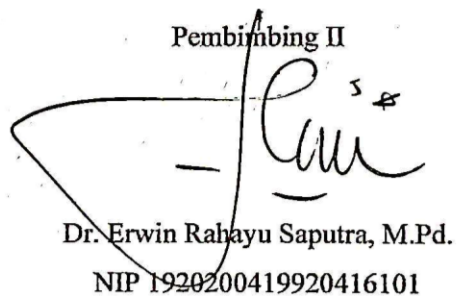
Disetujui dan disahkan oleh pembimbing:

Pembimbing I



Dindin Abdul Muiz Lidinillah, S.Si., S.E., M.Pd.  
NIP 197901132005021002

Pembimbing II



Dr. Erwin Rahayu Saputra, M.Pd.  
NIP 1920200419920416101

Mengetahui Ketua Program Studi S1 PGSD  
UPI Kampus Tasikmalaya



Dr. Ghulam Hamdu, M.Pd.  
NIP. 198006222008011004

## ABSTRAK

Penelitian ini dilatarbelakangi oleh keterbatasan bahan ajar berbasis *plugged* yang dapat memfasilitasi keterampilan berpikir komputasional peserta didik sekolah dasar. Selama ini pembelajaran coding di sekolah masih terbatas pada kegiatan unplugged sederhana, sementara pemanfaatan laboratorium komputer belum optimal. Oleh karena itu, penelitian ini bertujuan untuk mengembangkan modul ajar *computational thinking* berbasis *Game* menggunakan *Scratch* Block bagi peserta didik kelas V sekolah dasar. Metode yang digunakan adalah Educational Design Research (EDR) menurut model McKenney dan Reeves (2012) yang meliputi tahap analisis dan eksplorasi, desain dan konstruksi, serta evaluasi dan refleksi. Partisipan penelitian meliputi 20 peserta didik kelas V di SDN Cicariu, dua guru kelas, serta tiga validator ahli yang menilai produk. Modul disusun secara sistematis berlandaskan *Hypothetical Learning Trajectory* (HLT) dengan isi berupa pengenalan *Scratch*, proyek *Game* sederhana, serta tantangan eksplorasi. Hasil validasi menunjukkan persentase kelayakan 84% dari ahli materi informatika, 82% dari ahli bahasa, dan 93% dari ahli pedagogis, sehingga modul dinyatakan layak hingga sangat layak. Implementasi dalam dua siklus pembelajaran memperlihatkan bahwa modul tidak hanya meningkatkan keterampilan *computational thinking*, tetapi juga memfasilitasi praktik *tinkering*, *making*, *remixing*, dan *debugging*. Respon peserta didik terhadap modul berada pada kategori sangat layak dengan persentase 97,69% pada siklus I dan 98,39% pada siklus II. Respon guru juga positif dengan persentase 96% dan 82%. Dengan demikian, modul ajar berbasis *Scratch* Block yang dikembangkan terbukti layak dan memiliki respon positif untuk mendukung pembelajaran informatika di sekolah dasar.

**Kata Kunci:** Modul, *Computational thinking*, *Scratch* Block, Sekolah Dasar

## **ABSTRACT**

*This study was motivated by the limited availability of plugged learning materials that can foster computational thinking skills in elementary school students. Coding instruction has so far been restricted to simple unplugged activities, while the use of computer laboratories has not been optimized. Therefore, this research aimed to develop a computational thinking teaching module based on Game projects using Scratch Blocks for fifth-grade elementary students. The method employed was Educational Design Research (EDR) following McKenney and Reeves' (2012) model, which consists of the stages of analysis and exploration, design and construction, and evaluation and reflection. The participants included 20 fifth-grade students at SDN Cicariu, two classroom teachers, and three expert validators. The module was systematically designed based on a Hypothetical Learning Trajectory (HLT) and contained Scratch introductions, simple Game projects, and exploration challenges. Validation results showed feasibility percentages of 84% from the informatics expert, 82% from the language expert, and 93% from the pedagogical expert, indicating that the module was feasible to highly feasible. Implementation in two learning cycles revealed that the module not only improved students' computational thinking skills but also facilitated core practices such as tinkering, making, remixing, and debugging. Student responses indicated a very feasible category with 97.69% in the first cycle and 98.39% in the second cycle, while teacher responses were also positive with 96% and 82%. Thus, the developed Scratch Block-based teaching module has proven to be feasible and has received a positive response to support informatics learning in elementary schools.*

**Keywords:** Teaching Module, Computational thinking, Scratch Blocks, Elementary School

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