

**THE EFFECTS OF NATURE-BASED LEARNING TO  
STUDENTS' RESEARCH SKILL AND ENVIRONMENTAL  
AWARENESS IN LEARNING ECOSYSTEM**

Submitted as requirement to obtain masteral degree of Magister Pendidikan in  
Science Education Study Program



**Arranged By:**

Balgis Az Zahra

2105568

**SCIENCE EDUCATION  
FACULTY OF MATHEMATICS AND SCIENCE EDUCATION  
UNIVERSITAS PENDIDIKAN INDONESIA  
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**THE EFFECTS OF NATURE-BASED LEARNING TO STUDENTS' RESEARCH SKILL  
AND ENVIRONMENTAL AWARENESS IN LEARNING ECOSYSTEM**

Oleh  
Balgis Az Zahra

S.Pd Universitas Pendidikan Indonesia, 2017

Sebuah Tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Magister Pendidikan (M.Pd.) pada Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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By:

Balgis Az Zahra

2105568

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**BALGIS AZ ZAHRA**

THE EFFECTS OF NATURE-BASED LEARNING TO STUDENTS'  
RESEARCH SKILL AND ENVIRONMENTAL AWARENESS IN LEARNING  
ECOSYSTEM

Approved and Confirmed by:


Supervisor I,



Dr. Rini Solihat, M.Si.

NIP. 197902132001122001

Supervisor II,



Dr. Lilit Rusvati, M.Pd.

NIP. 198704202012122001

Examiner I,



Prof. Dr. H. R. Asep Kadarohman M.Si.

NIP. 196305091987031002

Examiner II,



Dr. Hj. Any Fitriani, M.Si

NIP. 196502021991032001

Perceived by,

a.n. Head of Science Education Study Program



Prof. Dr. Phil. Ari Widodo, M.Ed.

NIP. 196705271992031001

## DECLARATION SHEET

I hereby declare that the research paper entitled “THE EFFECTS OF NATURE-BASED LEARNING TO STUDENTS’ RESEARCH SKILL AND ENVIRONMENTAL AWARENESS IN LEARNING ECOSYSTEM” with everything contained on it is all true by my work. I did not do plagiarism or quotation that is not appropriate with the ethics used in academic society. Thus, I am ready to bear with the risk or sanction if later it is found that there is scientific ethics violation or claims from other parties regarding the authenticity of my work.

Bandung, Januari 2025

The Author,



Balgis Az Zahra

NIM. 2105568

## PREFACE

Bismillahirrahmanirrahim,

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Alhamdulillah, all praises and gratefulness be to Allah S.W.T. for His blessing, mercy and love so that the author have enough strength, courage, and sincerity in finishing the research paper entitled “The Effects of Nature-Based Learning to Students’ Research Skill and Environmental Awareness in Learning Ecosystem”. May the blessings and prosperity always be devoted to our great Prophet Muhammad S.A.W., to all his family, friends, and also to all his followers around the world.

The research paper is the last requirement for all university students to obtain *Master degree*. As the student of Science Education study program, the author also has an obligation to finish her research paper that focuses in educational issue. Through this research paper, author is willing to describe the research that has been conducted by author. The description is divided into five chapters consist of introduction; supportive theory; research methodology; result and discussion; and conclusion and recommendation.

However, the perfection is only belongs to Allah SWT, the author realizes that there are still a lot of weaknesses needed to be improved. Positive critiques, comments and suggestions are really welcome to improve the quality of learning process in the future. Hopefully, the results that presented in this research paper can be useful for all readers, especially whose come from educational field as reading source and reference to gain more knowledge.

Bandung, January 2025

Balgis Az Zahra

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Bandung, January 2025

Balgis Az Zahra



# **THE EFFECTS OF NATURE-BASED LEARNING TO STUDENTS' RESEARCH SKILL AND ENVIRONMENTAL AWARENESS IN LEARNING ECOSYSTEM**

Balgis Az Zahra  
Science Education  
[balgisazzahra@upi.edu](mailto:balgisazzahra@upi.edu)

## **ABSTRACT**

This research aims to investigate the effects of Nature-Based Learning on students' research skills, environmental awareness, and their impressions of Nature-based learning within learning ecosystem. The method used in this research was experimental with one group pretest posttest design. Population of this research was all of seven grader in public school in Purwakarta which implement *kurikulum merdeka* for science course. The sampling technique used was convenience sampling with 34 students as participant. The quantitative data of this research was obtained through research skill test referring to research skill aspects by Willison, and environmental awareness questionnaire adapted from Novotny. Meanwhile, qualitative data was obtained through observation and students' interview. Effect of Nature-based learning to students' research skills and environmental awareness was analyzed by using Wilcoxon test. According to the analysis of research, it is obtained that: nature-based learning improved students' research skill and environmental awareness significantly (sig: 0.001). Further analysis was done by using N-gain. Students' research skills is improved as much as 0.64 that is categorized as medium improvement. Students' environmental awareness is improved as much as 0.59 that is categorized as medium improvement. Students' impression toward nature-based learning showing positive responses in all indicators. This result is gained due to implementation of Nature-based learning with learning activity designed to improve students' research skill and environmental awareness.

Key words: ecosystem; Nature-Based Learning, students' research skill, students' environmental awareness.

# **PENGARUH PEMBELAJARAN BERBASIS ALAM TERHADAP KEMAMPUAN MENELITI DAN KESADARAN LINGKUNGAN PESERTA DIDIK DALAM TOPIK EKOSISTEM**

Balgis Az Zahra  
Pendidikan IPA  
[balgisazzahra@upi.edu](mailto:balgisazzahra@upi.edu)

## **ABSTRAK**

Penelitian ini bertujuan untuk menyelidiki pengaruh *nature-based learning* terhadap kemampuan meneliti, kesadaran lingkungan, dan impresi peserta didik terhadap *nature-based learning* dalam topik ekosistem. Metode yang digunakan dalam penelitian ini adalah *experimental* dengan *one group pretest posttest design*. Populasi penelitian ini adalah seluruh siswa kelas 7 SMP di salah satu sekolah negeri di Purwakarta yang mengimplementasikan kurikulum merdeka untuk mata pelajaran IPA. Teknik pengambilan sampel yang digunakan adalah *convenience sampling* dengan 34 peserta didik sebagai partisipan. Data kuantitatif pada penelitian ini didapatkan dari tes keterampilan meneliti yang mengacu pada aspek keterampilan meneliti oleh Willison, dan angket kesadaran lingkungan yang diadaptasi dari Novotny. Sedangkan, data kualitatif didapatkan dari lembar observasi dan wawancara peserta didik. Dampak dari *nature-based learning* terhadap kemampuan meneliti dan kesadaran lingkungan peserta didik dianalisis dengan menggunakan tes Wilcoxon. Berdasarkan analisis hasil penelitian, didapatkan bahwa *nature-based learning* meningkatkan kemampuan meneliti dan kesadaran lingkungan peserta didik meningkat secara signifikan (sig: 0,001). Analisis lebih lanjut dilaksanakan dengan menggunakan N-gain. Kemampuan meneliti peserta didik meningkat 0,64 yang terkategori sebagai peningkatan medium. Kesadaran lingkungan peserta didik meningkat 0,59 yang terkategori sebagai peningkatan medium. Impresi peserta didik terhadap pembelajaran menunjukkan respon yang positif di seluruh aspek. Hasil tersebut didapatkan dari implementasi *nature-based learning* yang sudah didesain untuk meningkatkan kemampuan meneliti dan kesadaran lingkungan peserta didik.

Kata kunci: Ekosistem; kemampuan meneliti; kesadaran lingkungan; *nature-based learning*.

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