



Ecofeminist pedagogy in literary learning to cultivate environmental ethics awareness

Wiyatmi Wiyatmi¹, Maman Suryaman², Esti Swatika Sari³, Novita Dewi⁴

¹Universitas Negeri Yogyakarta, Indonesia, wiyatmi@uny.ac.id, ORCID ID: 0000-0003-3561-7898

²Universitas Negeri Yogyakarta, Indonesia, ORCID ID: 0000-0001-7699-6914

³Universitas Negeri Yogyakarta, Indonesia, ORCID ID: 0000-0002-3626-3246

⁴Universitas Sanata Dharma Yogyakarta, Indonesia, ORCID ID: 0000-0003-0004-9632

ABSTRACT

Most countries in the world have experienced environmental disasters. To ameliorate environmental disasters everyone must take part, including those in schools and universities. The aim of the study was to instil and develop ecofeminism awareness by means of ecofeminist pedagogy in the literature class. The study involved students and lecturers of the three universities in the cities of Yogyakarta and Surakarta, Indonesia. The study was conducted in two semesters (February – May and September – November 2018). The findings show that the ecofeminist pedagogical model of learning was able to cultivate and elevate students' ecofeminism awareness as indicated by their willingness to be involved in taking care of and preserving the environment in their daily life activities, individually or in groups. This attitude was evident in the lecturers' and students' knowledge and skills in reading, selecting, and interpreting literary works that raise ecofeminism issues as source texts revealed in the essays that were written and compiled in book form. Publication of this book was one of the efforts to disseminate the ideas and knowledge of ecofeminism. Finally, after attending the ecofeminist pedagogical classes, students were also expected to take part in and be responsible for the preservation of the environment and Earth and appreciate gender equality. These findings can be used as a model for learning other subjects, especially at universities that have a green campus vision.

RESEARCH ARTICLE

ARTICLE INFORMATION

Received:

26.02.2021

Accepted:

02.01.2023

KEYWORDS:

Ecofeminist, education, environment, literature learning, pedagogy.

To cite this article: Wiyatmi, W, Suryaman, M., Sari, E. S., & Dewi, N. (2023). Ecofeminist pedagogy in literary learning to cultivate environmental ethics awareness. *Journal of Turkish Science Education*, 20(2), 252-265.

Introduction

Environment and feminism are inseparable phenomena worthy of attention. Environmental crises bring misery, especially to women. It is women who commonly bear the heavy burden of maintaining the continuance of family life, including the challenge of providing food. Under the patriarchal system, women hold the responsibility of managing and serving food, in addition to taking care of the family and children (Walby, 1990; Bhasin, 2006). Despite the varieties in feminist thinking, feminism is based on the premise that one lives in a male-dominated society that unequally distributes power according to gender; this power is defined by economics, politics, social standing, and personal worth. Emerging in the mid of the 1970s together with the second wave of feminism and the green movement, ecofeminism is a movement that sees the relation between the exploitation of

nature and the repression of women. Ecofeminism claims that nature and women in the patriarchal system are regarded as objects and property to be exploited (Warren & Chaney, 1991; Candraningrum, 2013). Ecofeminism was born as a social movement to struggle against the exploitation of both nature and women (Warren & Chaney, 1991; Harvester & Blenkinsopp, 2010; Tong, 2013). According to this paradigm, the subjugation of women and nature go hand-in-hand. Indeed, gender bias permeates in all walks of life including education. To quote but two studies, sexism is often perpetuated in education as proven by school textbooks (Papadakis, 2018; Papadakis et al., 2018). It is important to deconstruct gender stereotypes along with advocacy for environmental protection at the earliest age.

At the present time, numerous countries around the world including Indonesia are faced with critical ecological conditions (Barri, 2018; Forest Watch Indonesia, 2018; Frumkin & Haines, 2019; Gusman & Waluyo, 2015; Kahfi, 2014; Luhukay, 2016; Souza et.al., 2022; Wiyatmi et.al., 2022). Given that the environmental crisis is linked with women's oppression, ecofeminist pedagogy should be a learning paradigm in the 21st century sustainable education. Ecofeminist pedagogy is an instructional model that has theoretical and practical orientation to bring together political concerns and educational practices (Houde, et al., 2000; Gough et al., 2017). As part of environmental pedagogy (Goralnik et. al., 2012), ecofeminist pedagogy can be used as an educational framework to promote both social/gender justice and ecological sustainability (Harvester, 2009; Li, 2007; Barton, 2003; Liu & Guo, 2018). Ecofeminist pedagogy can help stimulate an in-depth and complex discussion on environmental and social issues in relation to patriarchal societal structures (Harvester & Blenkinsopp, 2010). Earlier on, Warren & Rheingold (1993) state that feminist pedagogy is the educational manifestation of feminist theory, translating feminist thoughts into practices in a classroom setting.

In the Indonesian context, the application of ecofeminist pedagogy as a learning paradigm is necessary for at least three reasons, namely the prevalence of ecological problems, the growth of the green campus vision, and the rarity of ecofeminist theory and praxis. Indonesia faces critical ecological conditions owing in part to natural resource management. According to Nur Hidayat the Executive Director of the National Environmental Body (NEB), as many as 159,178,237 hectares of land – about 31% of the nation's area (land and sea) - have been warranted with licenses. Coverage can be even greater if regional licensing data can be registered well by the ministerial departments or institutions (<https://walhi.or.id/tinjauan-lingkungan-hidup-2018/>). NEB also noted 302 environmental and agrarian conflicts during 2017, and 163 people have been criminalized. Furthermore, based on data of the National Body of Disaster Management (NBDM), 2,175 disasters have taken place in Indonesia. Around 99% of the disasters cited were ecological, caused by the increase in the frequency of cyclones as a result of weather changes (Hidayat, 2018). Indonesia is ecologically under threat.

Ecological crises should not be left unattended; hence education should take a part in natural conservation. The university is one of the institutions that must take an active part in facing ecological crises. The United Nations Education, Scientific, and Cultural Organization (UNESCO) has called for educational reforms to aim at better outcomes for social and ecological wellbeing (Ball & Lai, 2006; Dewi, 2018). In the last two decades, most universities in Indonesia's big cities have implemented green campus or eco-campus programmed. The green campus is an implementation of the Tbilisi Declaration, formulated during the world's first intergovernmental conference on environmental education organized by UNESCO in cooperation with the UN Environment Programmed (UNEP) convened in Tbilisi, Georgia, USSR in October 14 to 26, 1977 (Gillet, 1977; Pavlova, 2011; <https://www.gdrc.org/-uem/ee/tbilisi.html>). The eco-campus programmed is founded on the contention that campus surroundings must be comfortable, clean, green, nice-looking and healthy for the members to carry out their activities. Through the green campus programmed, the academic community may be able to elevate the awareness and commitment of the campus community to participate and take responsibility in minimizing global warming (Nasution, 2009). In this context, ecofeminist pedagogy can be implemented as a learning paradigm in green campuses.

In Indonesian context, ecofeminist perspectives are relatively new in that not many studies raise this issue. Ecofeminism entered Indonesia in the early 1990s (Tong, 2006) to be followed by a number

of books and studies on feminism written by Indonesians. A number of prominent books that have some influence on the Indonesian academia include *Feminist Thought: A More Comprehensive Introduction* (1998) by Rosemarie Putnam Tong, *Feminist Methods in Social Research* (1992) by Shulamit Reinharz, *The Routledge to Feminism and Post feminism* (2004) by Sarah Gamble, *Post feminism: Feminism, Cultural Theory, and Cultural Forms* (1997) by Ann Brooks. This is to say that ecofeminism is yet to be explored by Indonesian scholars. Amidst the scarcity of studies on ecofeminism, some works are worth mentioning. Wiyatmi (2016a, 2016b) examines three novels by two contemporary Indonesian woman writers, Ayu Utami (Bilangan Fu, Manjali and Cakrabirawa, and Maya), and Laksmi Pamuntjak (Amba). In light of ecofeminism, the characters in Utami's three novels resist the patriarchal authority over nature and the environment, and women in the Sewugunung Earth Park and Calwanarang temple site during the New Order era. In Pamuntjak's novel there is the exploitation of the forests in Buru Island by newcomers, especially the gold mining companies that continue to exploit the island legally or otherwise. Wiyatmi (2016b) concurs that the novels under study openly decry the exploitation and destruction of forests in Indonesia. Wiyatmi et.al. (2022) examine deforestation in Indonesian and Malaysian novels through an eco-critical perspective. Reading such novels, the readers, especially students in literature classes, may be made more aware of the environmental crises that happen in the real world.

Several other previous studies that are relevant to ecofeminist learning are about the scientific literacy of students (Safrizal, Sudarmono & Yulia, 2022; Prasad, Utaya, Astina and Utama, 2022; Özalemdar, 2021). Safrizal, Sudarmono, & Yulia (2022) studied science literacy at the Adiwiyata school (a school that carries out environmental education) in Padang, Indonesia, which shows that science literacy indirectly supports the school literacy movement which has been planned by the government and has been implemented in several schools in Indonesia. Prasad (2022) examines the role of University of the South Pacific and the State University of Malang students in mitigating climate change. The results of the study show that the actions of students at the State University of Malang are centered around campus activities, while students at the University of the South Pacific boast broader participation such as in policymaking. Barriers to climate change mitigation at both universities include lack of funds, information, involvement, time, and attitudes towards climate change mitigation. Özalemdar (2021) examines the effect on environmental attitudes of the active learning method applied in teaching the biology topic "Current Environmental Issues and Human" for 10th grade school students. The results of the study show that the active learning method, which is applied in teaching the related topic, has a positive effect on the students' environmental attitude and environmental behavior.

Having outlined the above three reasons as research rationales, this current study is intended to cultivate ecofeminism awareness among students and lecturers via an action-research project designed for three universities, viz Yogyakarta State University (YSU), Sanata Dharma University (SDU), and Sebelas Maret University (SMU). These universities have implemented a green campus programmed and ecofeminist pedagogy in their respective literature teaching. In addition, the campuses are located closely to each other, and so general lectures can be easily attended by students from the three universities. The project was conducted between the months of February and November 2018. Forty students and five lecturers took the role of community members who would be assumed to apply ecofeminist perspectives in making decisions. To achieve the objective of promoting and developing students' and lecturers' ecofeminist visions through literature teaching, the ecofeminist pedagogy learning model was used in this research.

Ecofeminism is yet to be implemented in literature teaching at three green campuses through a Research and Development model. The application of eco-humanism in literature classes is nothing new. For example, in teaching poetry to EFL students, the eco humanist pedagogy model has helped students appreciate ecologically themed poems and acquire awareness that moves them to get involved in Earth-care activities (Dewi, 2018). This study is expected to help students to have environmental awareness and feminist ethics in order that they will take responsibility in preserving the environment, guarding the Earth, and respecting gender equality. By having these competencies,

students will resist natural exploitation that brings about degradation of human beings, especially women. They will no longer have the perception that the environment, nature, and women are chattels that can be exploited at will as a normal practice found in patriarchal societies (Warren, 2011; Warren & Chaney, 1991; Candraningrum, 2013).

Methods

Research Design

This study used the Kemmis and Taggart (1988) model of action research which was designed in two cycles. Each cycle was conducted through the phases of planning, action, observation, and reflection. In the first cycle, initial information was gathered from the students concerning their understanding of ecofeminism as a theoretical approach to read and understand issues in studying literary works. The lecturer then introduced the concepts of ecofeminism, especially the relevant ones to literary research. The next step was for the students and the lecturer to select and review literary works containing ecofeminism issues. The students wrote the results of the reviews in essay forms to be produced in an anthology. The anthology was used as a source of discussion in which students and lecturer exchanged information on ecological issues represented in literary works.

Participants

The study involved 40 students and 5 lecturers of each of the three participating universities, Yogyakarta State University (YSU), Sanata Dharma University (SDU), and Sebelas Maret University (SMU).

Instruments and Procedures

First, the research team had a discussion with lecturers teaching literature subjects in the three universities to deliberate the instructional objectives and materials of the classes using ecofeminist pedagogy. Secondly, the deliberation produced the following agreements: (1) the study involved one lecturer and ten students in each university, and (2) a special class session was given at the beginning of the first cycle and at the end of the second cycle involving five lecturers and 30 students from the three universities. Research instruments were developed in the forms of an observation sheet, a questionnaire, an interview guide, and a test. Follow-up actions were also discussed at this stage.

During the subsequent action phase, the following activities were carried out in the first cycle: introducing ecofeminist pedagogy in literary theory and research class; introducing the ecofeminist model; implementing the model used in the classroom; observing students' responses and reactions on how the class proceeded; and administering an evaluation by asking students to write a literary criticism using ecofeminist concepts. During the second cycle, activities were carried out using necessary modifications resulting from the reflection phase of Cycle 1. Basically, it clarified and improved things considered substandard. In the observation phase, the following activities were carried out: conducting direct observation of the running of the class observing students' behaviour during the classroom sessions; and finding out the results of the instructional processes. In the reflection phase, evaluation and analysis of the results were carried out. Reflection involved looking at the observation results, test results, and information items in the documents. Results of the analyses were used to plan for the next actions (in the case of Cycle 2). Successful actions were sustained while unsuccessful ones were improved for the next cycle.

Data Analysis

Qualitative data analysis is used to understand the data in the form of information about understanding the concept of ecofeminism from students and lecturers, obtained from questionnaires during the learning process (in the first and second cycles) and learning products in the form of essays written by students, as well as field notes during the learning process.

Findings and Discussion

Implementation of Ecofeminist Pedagogy in Literary Learning Classes

The results showed that, during the initial phases of the class, students confirmed that ecofeminism was relatively new for them in understanding environmental and women issues in literary works. Beforehand, they had already made use of sociological perspectives and feminist literary criticisms in examining environmental and women's issues in literature. The textbooks they used such as *Beginning Theory, on Introduction to Literary and Cultural Theory* (Barry, 2002), *Literature and Literature: An Introduction to Literary Theory* (Teeuw, 1984), and *Modern Indonesian Literary Criticism* (Pradopo, 2002) did not include eco-criticism and ecofeminism.

In the initial phases of the class instruction, it was revealed that the students had known some novels which raised environmental and women's issues. They were able to mention some of these novels such as *Bunga* [Flower] by Korrie Layun Rampan, *Senyum Karyamin* [Karyamin's Smile] by Ahmad Tohari, *Lemah Tanjung* [Weak Cape] by Ratna Indraswari Ibrahim, *Acuh Tak Acuh* [Indifferent] by Korrie Layun Rampan, and *Tanah Tabu* [Taboo Land] by Anindita S. Thayf. Some of them were also able to state that the poems *Ballada Orang-orang Tercinta* [The Ballad of Beloved People] by W. S. Rendra and "Derai Cemara" and "Senja di Pelabuhan Kecil" ["Patter Cemara" and "Dusk at the Small Harbour"] by Chairil Anwar also raised environmental issues. However, they did not know how to analyse these texts using ecofeminism as the theoretical framework.

The learning outcome expected from the general lecture session was for the students to obtain a better understanding of perspectives of ecofeminism, either at an initial or advanced competency level, so that they would be able to participate effectively in environmental preservation. Besides, they were expected to become individuals who were sensitive towards environmental and gender issues. After attending the general lecture session, the students were able to find problems or titles for their future research and to extend their understanding of ecofeminism further with the guidance from their lecturers. *Ecofeminism: Ecological and Feminist Literary Criticism* was used as a textbook. With the supervision of the lecturer, students conducted an ecofeminist analysis that was designed at the end of the general lecture session. Some of the research topics include "Role and Image of Women in Preserving Nature in the Novel *Api Awan Asap* [Smoke Cloud Fire] by Korrie Layun Rampan", "A Dialogue between Women and Nature in *Acuh Tak Acuh* [Indifferent] by Korrie Layun Rampan", "A Portrait of Exploitation toward Nature and Women in Dayak Tribe in Inner Kalimantan in the Short Story "Beremai Village" by Korrie Layun Rampan", "A Portrayal of Characters in the Life of Women and Nature in the Short Story "Karyamin's Smile" by Ahmad Tohari", "Errors in Women Assumptions in Using Natural Richness in the Short Story "Janda Sungai Gayam" ["Widow of Gayam River"] by Dwi Ratih Ramadhany", and "One of the Boys: Women in Musical Scene". Students' essay drafts as a result of students' reviews became the first task at the end of the first cycle. The research team conducted an observation on these essay drafts and found that, on the average, they showed students' better understanding on ecofeminism.

By the end of the first cycle, the results revealed the following. First, students should take parts in environmental preservation in real situation, for example no littering, planting trees around their home and campus, recycling paper and trash, minimizing the use of paper, plastic, etc. Secondly, students should take parts in green literature and ecofeminist movements by writing essays to be published for public use to raise awareness in ecofeminism. Thirdly, efforts should be made to make

students choose ecofeminism-based literary studies as their graduating tasks. These reflection items were then used for developing Cycle 2 of the study.

Actions in Cycle 2 were based on the results of the instructional processes in Cycle 1, i.e., evaluation by the research team and assessment on the students' essay drafts in the workshop for essay improvement. This workshop was held in October 2018 attended by students, lecturers, and research team members involved. During the workshop, the students exchanged their understanding, shared experience, and identified strengths and weaknesses found in their essays. Criteria for evaluation were not only on the depth of the analysis and application of ecofeminism but also on the quality and standard in the essays that were later to be published in a book form. Then, in order to look at the results of the second cycle, the same task was given. This was a time of revising the essay drafts using the inputs given by the lecturers as well as research team members. In order to achieve publishable material, a two-week time was allocated to revise the drafts. The students' essays were submitted in due course to be revised and included for publication. Articles that met the satisfying requirements, that is, the proper use of ecofeminism as delineated in the research objectives were included in the publication.

Products Resulted from the Ecofeminist Pedagogy Class

From the two cycles of this action research, students' products were obtained in the form of literary critical essays using ecofeminism perspectives. Table 1 presents the quality of the students' essays.

Table 1

List of Students' Essays and the Evaluation

No.	Title	Cycle I	Cycle II
1.	Role and Image of Women in Preserving Nature: Ecofeminism Study on the Novel <i>Smoke Cloud Fire</i> by Korrie Layun Rampan	Analysis is in accord with ecofeminism perspectives. References should include the sources. Conclusion should be given at the end of the essay.	Referencing is completed with sources. Conclusion is given
2.	Dialog between Women and Nature in <i>Acuh Tak Acuh [Indifferent]</i> by Korrie Layun Rampan	Analysis is in accord with ecofeminism perspectives. Referencing should mention the sources, Information of the work being studied must be given	Referencing is complete. Information is given for the reviewed work.
3.	Portrait of the Exploitation of Dayak Nature and Women Exploitation of Nature and Women in Inner Kalimantan in the Short Story "Kampung Beremai" ["Beremai Village"] by Korrie Layun Rampan	Analysis must be linked to the theoretical framework of ecofeminism. More references should be added on	Analysis linked to the theoretical framework of ecofeminism. More references are added on

No.	Title	Cycle I	Cycle II
4.	Portrait of Characters of Women and Nature Life in the Short Story <i>Senyum Karyamin</i> [<i>Karyamin's Smile</i>] by Ahmad Tohari	Background is too far and wide. Go directly to the work under review. Analysis should use the ecofeminism perspectives.	Background is revised, irrelevant matters are deleted. Analysis is suited to the ecofeminism perspectives
5.	Women's Assumption Errors in Using Nature richness in the Short Story "Janda Sungai Gayam" ["Widow of Gayam River"] by Dwi Ratih Ramadhany	Too many synopses in the introductory part. Analysis should be added. Analysis should be made deeper in ecofeminism perspectives.	Synopsys is shortened. Analysis is added. Analysis is more linked with ecofeminism perspectives.
6.	Myth of Nyi Roro Kidul, Mbah Marijan, Twin Banyan Trees in the Main Square South and Sweeping at Night in the ecofeminism perspectives	Data sources must be listed. Ecofeminism analysis is not seen yet	Data sources are listed. Analysis is deepened. Analysis is suited to the ecofeminism perspectives
7.	Intimacy between Women and Nature in the Short Story "Janda Sungai Gayam" ["Widow of Gayam River"] by Dwi Ratih Ramadhany	Writing format should be revised. Data sources should be listed. revised, data sources need to be listed. Ecofeminism analysis is not seen yet	Writing format is revised. Data sources are mentioned. analysis is suited to the ecofeminism perspectives
8.	Review on Ecofeminism on "One Of The Boys : Perempuan Dalam Scene Musik" [One Of the Boys: Women in Musical Scene"] by Zara Zahrina	Long synopsis is not needed in discussion session. Writing format and systematics should be refined. Ecofeminism should be deepened	Synopsis is shortened. Writing format and systematics are refined. analyses is suited to the ecofeminism perspectives
9.	<i>Api Awan Asap</i> [<i>Smoke Cloud Fire</i>] by Korrie Layun Rampan's and its Reflection in the Modern Era	Ecofeminism analysis should be deepened. No need to include strengths and weaknesses of the work. List of reference needs addition	analyses is suited to the ecofeminism perspectives strengths and weaknesses Reference list is added
10	Environmental Wisdom in the novel <i>Sebuah Wilayah yang Tidak Ada di Goorle Earth</i> [<i>A Territory That Doesn't Exist in Google Earth</i>] by Pandu Hamzah.	Ecofeminism analysis is adequate in depth. Conclusion needs to be added at the end of the manuscript.	Conclusion is added at the end of the manuscript.

From the results of the evaluation of their works, it is evident that the students were able to select a literary work that thematically raises environmental issues, also known as green literature. It shows that they conceptually understood and were able to identify samples of green literature. In the first cycle, the students were also able to conduct an ecofeminist analysis on the works they have chosen. Essays 1, 2, and 10 look good from the beginning, showing understanding of ecofeminist

concepts and their applications in reading the source texts. Essays 3, 4, 5, and 8 do not show in-depth analyses of ecofeminism in Cycle 1, but they improve in Cycle 2. Essays 6 dan 7 do not have clear analyses of ecofeminism in Cycle 1, but they improve in Cycle 2 with elaborated analysis.

The quality of the reviews of ecofeminism aspects written in Cycle 1 was unsatisfactory owing to the students' lacks of understanding of the ecofeminism conceptual framework. This is in line with initial information that ecofeminism theories are new to the students. As a result, they do not have enough sensitivity of ecofeminist awareness when they read and analyse gender and ecological issues in the source texts. Differences in the qualities of the essays that are related to differences in the sensitivities of ecofeminism awareness can be seen in the following comparison of the essays.

Essay 1

The short story "Kampung Beremai" by Korrie Layun Rampan is a work that raises the issues of ecology. The story, written in 2003 and having been published in *Suara Karya* daily, tells about life of the Dayak community in the inland of East Kalimantan. The main problem faced by the community is one of poverty ending in forest exploitation. It is this economic problem tailing in forest exploitation that impacts losses for women.

"The rear part of the *lou* was a swampy land and was good for planting. But nobody wanted to start cultivating it because they preferred planting in a piece far away in the foot of Piraq River or at the pier of Kedang Pahu River. There were also those who opened the forest across the river although the soil was not very fertile, and rice plants often went dried, more when dry season came. Strange, I thought, why should the village stood at that place, whereas there was nothing to wait for in the swampy area. All the inhabitants' fields and yards were tens of kilometres in distances from that *lou*. It were as they waited for the wind or season to cut down the *meranti* trees and then floated down to the city. They used the money for gambling, and they used some of that money as a capital for staying idle for months while cursing the season that dried the rice crop and spices in the fields. Some of them cursed the crocodiles and dolphins for destroying the net and cursed the fish that never came because they had been electricized by seasonal fishermen from downstream. When the money was gone and they had nothing else to sell, they went foresting, from downstream to upstream and floated the logs again (Rampan, 2007).

When the flood season came, the river was overflowed up to the edge of the bank and almost touched the floor of the *taho*. Only the canoe and its rower were useful to carry people and children to school in the village across. Connection among villages got stuck, similar to a traffic jam in the middle of the city of Jakarta. It was hard for people to move for the land surface was covered with water evenly. The forest workers were sometimes jobless, but those who had work outside the licensed area floated logs to be piled at the *logpond*....(Rampan, 2007:).

From the quotation above, it looks clear that the people living around the *lou*, long house of the Dayak, do not make use of the land at the back of the *lou*. They preferred to earn living by working at the fields far from the *lou*. Unfortunately, there are those who do not work in the fields cut down trees and sell the logs in town. It is clear ant this practice gives bad impacts on the nature. Instead of using the money for their children and wives so that they can have a better living, they spent the money on the gambling table and for staying....("Portrait of the Exploitation of Dayak Nature and Women in the inland of Kalimantan in the Short Story "Beremai Village" by Korrie Layun Rampan")

Essay 2

The character Ratih in the short story "Widow of Gayam River" actually feels that the environment where she lives in must be preserved. The beauty Ratih is gifted with is one that she purely possess from the beginning. As the community there considers that the myth of the Gayam tree and river is greater, it is there that the biotic of the environment maintenance is neglected.

In this story, as has been described before, when nature is not well cared of, then nature will act. Ratih in this story is actually the figure of the Gayam tree, and when the community members hurt her, they have automatically destroyed the life of the tree. Nature around the tree then acts to wipe all the disturbances impacted by the people (“Intimacy of Women and Nature in the Short Story “Widow of Gayam River” by Dwi Ratih Ramadhany”).

Essay 3

In a region, edge of Nyawatan River, inhabitants build a *lou* (*betang*, long house). From that *lou*, two friends -Jue and Sakatn- after making a trip of 300 kilometres, enter the cave to take away the swallow nest. Jue who married Nori a month ago, daughter of *Jepi* Leader, has the task to enter the cave, his waist is tied with a plastic rope; while Sakatn waits outside. Because he is also silently in love with Nori, Sakatn cuts off the rope. Consequently, Jue is lost inside the dark cave.

In this novel, the writer (Rampan) tries to build an understanding of the oppression of the patriarchal culture of the Dayak tribe of which they are not quite aware. Here, the novelist digs up from daily life in a straight forward and transparent ways. The story tells about the disappearance of Jue (Nori’s husband) and Sakatn (Executer) who is a friend, as if he were a hero. Nevertheless, Nori still holds her contention and stays strong with her prolonged waiting for the return of her husband (*Smoke Cloud Fire* by Korrie Layun Rampan and *Its Reflection in the Modern Era*”).

In the three quotations above, Essay 1 has a deeper analysis and some supporting evidence from the source text. Essay 2 seems to be lower in its depth and it is not completed with supporting data. In the same way, Essay 3 has very little perspective in ecofeminism; it even leans towards literary sociology. In addition, it does not provide supporting evidence from the source texts. This evaluation was given at the beginning of Cycle 2 with the expectation that students revised their essays so that they would have a better essay. An interesting phenomenon is evident in the analyses of *Api Awan Asap* [*Smoke Cloud Fire*] and “Janda Sungai Gayam” [“Widow from Gayam River”], for each is reviewed in two different essays. Although the source is the same, the different foci of the essays result in different analyses. The focus of “Role and Image of Women in Preserving Nature: Ecofeminism Analysis on the Novel *Api Awan Asap* [*Smoke Cloud Fire*] by Korrie Layun Rampan”, is on how women become subjects that have a role in taking care of the environment. This is different from the other essay “*Api Awan Asap* [*Smoke Cloud Fire*] by Korrie Layun Rampan and *Its Reflection in the Modern Era*” that focuses more on the destruction of the forest in Kalimantan due to capitalism and arrival of foreign people into the area to over-exploit the forest. In the essay “Women’s Errors in Using Nature Richness in the Short Story “Janda Sungai Gayam” [“Widow of Gayam River”] by Dwi Ratih Ramadhany”, the analysis is focused on the protagonist character Widow of Gayam River.

In analysing *Smoke Cloud Fire* or short stories in *Indifferent*, the finding shows that students practically understand the impacts of illegal logging and nature management that does not give consideration to environmental ethics. In order to be able to make an in-depth understanding about environmental ethics, the students need to gather empirical data on illegal logging and land management in Kalimantan that become sources of inspiration of the two works by Korie Layun Rampan. During the process of analysis and essay writing, students are led to think critically in understanding the environmental destruction and threats to the forest preservation in the inland of Kalimantan.

At the end of Cycle 2, the essays of the students and the lecturers were published in an anthology titled *Ecofeminism in Indonesian Literature* (Wiyatmi ed., 2018). This book is not only a documentation of research results, but it can also be used as a model of ecofeminism analyses for future instruction in literature learning. Examples of essays that show good qualities after Cycle 2 are given in the following.

Essay 1

On the other side, the river becomes one of the ways to connect one village to another. This passageway is used for going to-and-fro for getting household needs that are not available in their village, especially by women. The following quotation shows this fact: *but Karyamin's friends begin talking about women on board* (Tohari, 2015).

In an indirect way, the taking of the rocks done by Karyamin and his friends can hurt the environment, especially for the river that becomes one of the living sources for the villagers. Impact of the continual removal of the rocks can be seen from the clearness level of the water. In time, the water will be dark that will hinder washing, bathing, and cooking. Other than the clearness of the water, habitations of animals and plants will be disturbed. Animals and plants that are used by the villagers as sources of food will eventually decrease, or even disappear.

Washing and cooking can be said as women's errands. Therefore, if nature that becomes the center of the activities is ruined, the activity doers who are mostly women will be disturbed or even, threatened to be.... ("Portrait of Characters of Women and Nature Life in the Short Story *Karyamin's Smile* by Ahmad Tohari").

Essay 2

The novel *A Territory That Doesn't Exist in Google Earth* by Pandu Hamzah raises environment problems that disturb ecosystem. The *Kiara* trees in Ciremai Mountain that gives water and provides living for the hunting dogs are cut down for building a shelter and a television transmitter tower. The male woodcutter character experiences weird happenings from the tree cutting. Initially, he is haunted by an *Ulu-ulu* that is believed to be a jungle ghost that appears when someone has done wrong to nature. The woodcutter finally hikes up Ciremai Mountain to contemplate on the wrongs he had done.

During the hike, the woodcutter realized that nature had an extraordinary integrity for living. I become more aware; the forest is an organism having a special system. A system that is not at all scary, it even gives unusual peace when I am there alone. Peace that is hard for me to describe in words; kind of a pure *fly* feeling, should it be simplified that spirituality consists of purity and connect ability, so it is the forest that is truly the purest of all human beings' spiritualities (pp. 61-62).

It can be concluded that this awareness is an attitude of respect to nature. This respect to nature is reflected in (1) the ability of valuing nature, (2) the awareness that nature has values towards itself, (3) the awareness that nature has the right to be respected, (4) the awareness that nature has integrity, and (5) appreciation towards nature to exist, live, grow, and develop naturally in accord to its creation (Armstrong and Botzler, 1993; Keraf, 2010:). ("*Environmental Wisdom in the Novel A Territory That Doesn't Exist in Google Earth* by Pandu Hamzah").

From these two quotations, it can be concluded that the writers understand the conceptual framework of ecofeminism and its application in the analysis of a literary work. They have the knowledge of the nature of ecofeminist pedagogy that uses ecofeminism as a theoretical framework in analysing environmental issues that have an impact on life, especially women. The writers are able to see that there is, in the material they work on, a phenomenon of domination towards nature, which also means domination towards women (Warren, 2011). In Essay 2, the ecofeminism framework can be seen in the analysis showing the awareness that nature, more specifically forests, is not to be exploited, but be respected and cared for; an awareness that emerges after the woodcutter was hunted by the jungle ghost. The writer's ecofeminism perspectives can be detected when telling that after being haunted (*Ulu-ulu*), the woodcutter admits his wrong-doings. It is awareness that gives the understanding that nature has extra-ordinary integrity for its living. He also realizes that the forest is an organism with a special system and gives him peace. From the analysis, it is clear that the writer is not only able to identify environmental problems that cause harm to human survival, especially women's, but is also able to apply the ecofeminism theoretical framework in the analysis.

Evaluation and Reflection

From the evaluation and reflection conducted by the end of the learning processes in this action-research project, it can be seen that the use of the ecofeminist pedagogy model of learning in the three universities of YSU, SMU, and SDU is able to change the mindsets of traditional learning that is tied to hierarchical classroom structures to a new model of learning that is transformative. This is in line with the argument of Harvester & Blenkinsop (2010) that ecofeminist pedagogy calls for a radical relational shift in education; “a shift towards something that is more dialogical, where the human (teacher and student), the community, and the more-than-human come together and engage with each other in more robust and equitable ways than is currently the norm.”

From the learning processes using the ecofeminist pedagogy model, it can be seen that lecturers and students alike have more understanding on the conceptual framework of environmental ethics, green literature, and ecofeminism, as well as their application in understanding and analysing Indonesian literary works. In addition, through the analyses of literary works, awareness is indirectly grown in the importance of caring and preserving the environment. Destruction on the environment will not only threaten the balance of the ecosystem, but it will also cause human misery, especially for women. Besides, findings also show that ecofeminism pedagogy does not only give environmental knowledge, but also environmental values (Liu & Guo, 2018).

The research results also show that the objectives of the environmental education as recommended in the Tbilisi Declaration can be realised in this project. The basic aim of environmental education is to succeed in making individuals and communities understand the complex nature of the natural and the built environments resulting from the interaction of their biological, physical, social, economic, and cultural aspects, and acquire the knowledge, values, attitudes, and practical skills to participate in a responsible and effective way in anticipating and solving environmental problems, and in the management of the quality of the environment; a further basic aim of environmental education is clearly to show the economic, political, and ecological interdependence of the modern world, in which decisions and actions by different countries can have international repercussions (Gillet, 1977). Besides, with the growing awareness of the lecturers and the students, who are involved in this research project, they can continue to take part in guarding and preserving the ecosystem. Thus, slowly but certainly, environmental crises that have threatened the Indonesian nation and societies can gradually diminish.

Conclusion

This research has shown that the action-research project aimed at cultivating and elevating the ecofeminism awareness of the students in the Literary Theory and Research class in three universities (YSU, SMU, and SDU) is able to instil and develop students' ecofeminism awareness. This is proven from their abilities in taking part in daily-life activities in taking care of and preserving the environment. Awareness and improvement of these competencies can be seen from their knowledge and skills in reading, selecting, and interpreting literary works that raise ecofeminism issues as their learning sources. This is shown by the results of the discussion held during the learning sessions and by the essays published in a book. The publication of the book is also one of the efforts in disseminating ideas and knowledge of ecofeminism to the members of the society at large. Having taken the ecofeminism pedagogical classes, the students are expected to have the awareness to take part in and be responsible for taking care of the environment and to appreciate gender equality.

This research has also shown that ecofeminist pedagogy is an instructional model that can help minimizing and terminating oppression and exploitation of nature which threatens the destruction of nature and life environment which, in turn, are hurtful to humans, especially women. It becomes an urgent need for parties to cultivate the awareness towards ecofeminism in the young generation through instructional processes in literature classes. It is by classroom instruction that thought and value systems are transformed.

The implication of this research is that students and lecturers alike are made aware of ecofeminism and ready to be involved in protecting and preserving the environment in daily life activities. Additionally, it also supports the green campus movement and ecofeminism learning. In order that the movement is not interrupted, it is recommended that this research model also be carried out at other universities in diverse literary subjects and learning contexts.

References

- Barri, M. F. et.al. (2018). *Deforestasi tanpa henti, potret deforestasi di Sumatera Utara, Kalimantan Timur, dan Maluku Utara*. [Endless deforestation, a portrait of deforestation in North Sumatra, East Kalimantan, and North Maluku]. Forest Watch Indonesia.
- Barton, J. G. (2013). Re-thinking green: ecofeminist pedagogy and the archetype of the witch in young adult literature. [A thesis the faculty of the Dorothy F. Schmidt College of Arts and Letters]. Florida Atlantic University.
- Ball, E.L., & Lai, A. (2006). Place-based pedagogy for the arts and humanities. *Pedagogy* 6(2), 261-287.
- Barry, P. (2002). *Beginning theory: an introduction to literary and cultural theory*. Manchester University Press.
- Bhasin, K. (2006). *What is patriarchy?* New Delhi: Kali for Woman.
- Bianchi, B. (2012). Ecofeminist thought and practice," 3rd International conference on degrowth for ecological and sustainability and social equity. Venice, Sept. 12-23
- Brooks, A. (1997). *Post-feminism: feminism, cultural theory and cultural forms*. Roudledge.
- Candraningrum, D. (2013). *Ecofeminism in the interpretation of religion, education, economics and culture*. Jalsutra.
- Cuomo, C. (2002). On ecofeminist philosophy. *Ethics & Environment*, 7(2), 1-11.
- Dewi, N. (2016). Ekokritik dalam sastra Indonesia: kajian sastra yang memihak. [Eco-criticism in Indonesian literature: a partial literary]. *Adabiyat: Jurnal Bahasa dan Sastra*, 15(1), 19–37. <https://doi.org/10.14421/ajbs.2016.15102>.
- Dewi, N. (2017). People and nature in Asian stories: reading and writing materials for eco education. *K@ta*, 19(1), 32-40. doi.org/10.9744/kata.19.1.39-46.
- Dewi, N. (2018). Eco humanism in teaching poetry for elf students in Indonesia. *GEMA Online® Journal of Language Studies*, 18(2), 168-81. <http://doi.org/10.17576/gema-2018-1802-12>.
- Frumkin, H., & Haines, A. (2019). Global environmental change and noncommunicable disease risks. *Annual Review of Public Health*, 40, 261-282.
- Gamble, S, ed. (2004). *The Routledge to feminism and post feminism*. Routledge.
- Trustees of the University of Illinois, 13, 159.
- Gillet, M. (1977). The Tbilisi declaration. *McGill Journal of Education*, 12(2), 243-245. <http://mje.mcgill.ca/article/view/7156/5095>
- Goralnik, L, M, Nelson, M.P., & Thorp, L.(2012). An environmental pedagogy of care: emotion, relationships, and experience in higher education ethics learning. *Journal Experimental Education*, 35(3), 412-428. <https://journals.sagepub.com/doi/10.1177/105382591203500303> doi.org/10.1177/105382591203500303.
- Gough, A., Russell, C., & Whitehouse, H. (2017). Moving gender from margin to centre in environmental education. *The Journal of Environmental Education*, 48(1), 5-9. doi.org/10.1080/00958964.2016.1252306.
- Gusman, D. & Waluyo, T.J. (2015). Peran *greenpeace* dalam penanganan kerusakan lingkungan (polusi udara dan air) di China [Greenpeace's role in damage management environment (air and water pollution) in China] *Jurnal Transnasional*, 6(2), 1163-1674.
- Harvester, L, J. (2009). Ecofeminist pedagogy: framework for eco social justice in education. [Tesis]. Simon Fraser University.
- Houde, L. J., & Bullis, C. (1999). Ecofeminist pedagogy: An exploratory case. *Ethics and the Environment*, 4(2), 143-174.

- Henderson, K. A. (1997). Ecofeminism and experiential education. *Journal of Experiential Education*, 20(3), pp. 130-133. <https://doi.org/10.1177/105382599702000304>
- Kahfi, A. (2014). Kejahatan lingkungan hidup. [Environmental crime]. *Al Daulah*, 3(2), 206-216. <https://doi.org/10.24252/ad.v3i2.1437>.
- Karokaro, A.S. (2018). Walhi: kondisi Indonesia masih darurat ekologis [Walhi: Indonesia's condition is still an ecological emergency].
- Kemmis, S. & Mc. Taggart, R. (1988). *The action research planner*. Deakin University Press.
- Langit Perempuan (2015) Sejarah yayasan jurnal perempuan [History of the women's journal foundation]. <http://www.langitperempuan.net/tag/feminisme/07/08/2015>.
- Li, Hueli-li. 2(007) Ecofeminism as a pedagogical project: women, nature and education. *Educational Theory*, 57(3), 239-388. <https://doi.org/10.1111/j.1741-5446.2007.00262.x>
- Liu. S. & Gou, L. (2018). Based on environmental education to study the correlation between environmental knowledge an environmental value. *Eurasia Journal of Mathematics, Science and Technology Education*. 14(7), 3311-3319. <https://doi.org/10.29333/ejmste/91246>.
- Nasution, P. (2009). Green campus vs pemanasan global. www.gogreenindonesiaku.com/green_opinion2.php.
- Özalemdar, L. (2021). The Effect on environmental attitude of the active learning method applied in teaching the biology topic "current environmental issues and human" for 10th grade students. *Journal of Turkish Science Education*, 18(2), 276-289. <https://doi.org/10.36681/tused.2021.65>.
- Papadakis, S., Tousia, Ch. & Polychronaki, K. (2018). Women in computer science. the case study of the computer science department of the University of Crete, Greece. *Int. J. Teaching and Case Studies*, 9(2), 142-151. <https://www.inderscienceonline.com/doi/10.1504/IJTCS.2018.090963>.
- Papadakis, S. (2018). Gender stereotypes in greek computer science school textbooks. *Int. J. Teaching and Case Studies*, 9(1), 48-71. <https://www.inderscienceonline.com/doi/10.1504/IJTCS.2018.090196>
- Pavlova, M. (2011). Environmental education and/or education for sustainable development: What role for technology education. *Perspectives on Learning in Design & Technology Education*, 25(8), 333-339.
- Pradopo, R. D. (1997). *Several literary theories, methods of criticism, and their applications* Yogyakarta: Pustaka Pelajar.
- Prasad, R. R., Utaya, S., Astina, I. K., & Utomo, D. H. (2022). Mitigating climate change via education: A systematic study of the University of the South Pacific and the State University of Malang. *Journal of Turkish Science Education*, 19(1), 111-128.
- Rayakultura. (2014). Sastra hijau.: pena yang menyelamatkan bumi [Green literature: the pen that saves the earth]. <http://rayakultura.net/>.
- Reinharz, S. (2005). *Feminist methods in social research..* Jakarta: Woman Research Institute.
- Safrizal, Sudarmono, & Yulia (2022), Developing students science literacy in adiwiyata school: case study in Padang City, Indonesia. *Journal of Turkish Science Education*, 19(1), 111-128. <https://doi no: 10.36681/tused.2022.169>.
- Souza, J.L, et.al. (2022). Environmental damage: when anger can lead to supplier discontinuity. *Revista de Administração de Empresas*, 62(2), 1-15.
- Taylor, B. R. Ed. (2005). *Encyclopaedia of religion and nature. 1: A-J*, Continuum.
- Teeuw, A. (1984). *Literature and literay studies: an introduction to literary theory*. Pustaka Jaya.
- Tong, R. P. (2013). *Feminist thought: a more comprehensive introduction*. Indonesia Edition.
- Wahana Lingkungan Hidup (2018). Tinjauan lingkungan hidup 2018. [Environment review 2018]. <https://walhi.or.id/tinjauan-lingkungan-hidup-2018/>
- Walby, S. (1990). *Theorizing patriarchy*. Blackwell Publishers Ltd.
- Warren, K. J. & Chaney, J. (1991). Ecological feminism and ecosystem ecology. *Hypatia*. 6(1) (Spring), 179-197.
- Warren, K. J. & Rheingold, A. (1993). Feminist pedagogy and experiential education: a critical look. *Journal of Experiential Education*, 16 (3), 25–31. <https://doi.org/10.1177/105382599301600305>

- Warren, K. J. (2011). An ecofeminist philosophical perspective of Anthony Weston's the incomplete eco-philosopher. *Ethics, Politics, & Environmental*, 14(1), 103-111. [https://doi/10.1080/21550085.2011.561603](https://doi.org/10.1080/21550085.2011.561603).
- Wiyatmi. (2016a). Deconstruction of the power of patriarchy over nature, environment and women in ayu utami novels. *Litera*, 15(2), 281-291. <https://doi.org/10.21831/ltr.v15i2.11829>.
- Wiyatmi. (2016b). Conquest and care for the preservation of nature and environment in the novel amba by laksmi pamuntjak: study ecocriticism. *Humaniora*, 28(3), 315-325. doi.org/10.22146/jh.v28i3.22285.
- Wiyatmi, Swatika S., E, & Suryaman, M. (2017). *Ecofeminism: ecological and feminist literary criticism*. Cantrik Pustaka.
- Wiyatmi, Ed. (2018). *Ecofeminism in Indonesian literature*. Spasi.
- Wiyatmi, Liliani, E., Sari, E.S., & Safei, M. (2022). Deforestation in Indonesian and Malaysian novels: when wild forests are destroyed by anthropocentrism. *K@ta*, 24(1), 29-39. doi.org/10.9744/kata.24.1.29-39.