



Feeling nature in writing: environmental education in the EFL writing course

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Abstract

Environmental degradation increases the threat to ecological disaster. Thus, environmental education is crucial for disaster mitigation. This study is intended to investigate the students' level of environmental attitude, the students' writing performance when writing with environmental issues, and their opinion when writing about an environmental topic. The study uses a cross-sectional design. The subjects were 23 students of the Department of English at a state university in Malang, Jawa Timur, Indonesia who joined the Essay writing course. The result shows that the students' environmental attitude fall in the moderate category, the students' performance in writing essays with environmental topics belongs to the 'good' category, and the students said that using an environmental issue raised their ecological awareness and their critical thinking skills. The result also shows that most of the students can write the introduction well, make relevant topic sentences well, give a relevant explanation well, and write a proper conclusion by using a recommendation to save and protect the environment. The study implies that environmental topics can be incorporated into language classes to sharpen language skills and to nurture the care and love of nature.

Keywords: environmental topic; essay writing; students' opinion

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Introduction

Indonesia is rich in natural resources. Its land is fertile, and its sea is rich with thousands of varieties of fish and reefs. The Indonesian forests in Kalimantan and Sumatra are said to become the lungs of the world (Fardah, 2012). However, as industrialization increases, more and more life, both human and non-human, are threatened. Many natural disasters that occur in Indonesia are caused by human exploitation of nature (Sukmawan & Setyowati, 2017). Just to name a few, illegal logging, forest burning, forest clearing, the excessive use of plastics, the use of giant trawls to catch fish, oil spills, land conversion, waste disposal are the harms that humans put on nature (Nkwetisama, 2011; Setyowati & Widiati, 2014; Sukmawan & Setyowati, 2017). Moreover, the real environmental problem faced by people nowadays is climate change. Sri Mulyani, Indonesia's minister of finance, in her speech at the launch of the book *Buku 25 Tahun Kontan: Melintasi 3 Krisis Multidimensi [25 years of Kontan: Crossing 3 Multidimensional Crisis]*, on October 25, 2021, said that after COVID-19, one of the real threats that could threaten people and state finances is the crisis caused by climate change (Nurdiana, 2021). Therefore, mitigation measures must be prepared so that Indonesia is ready to face environmental crises in the future.

Concerning this, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) urges nations worldwide to include Environmental Education (EE) in schools' core curriculum by 2025 (UNESCO, 2021). The member of this organization believes that everyone should have adequate knowledge, skills, and values to make the world a better place and to protect the planet for future generations (UNESCO, 2021). UNESCO has started the movement of EE in 1972 which result in the Belgrade Charter (UNESCO-UNEP, 1975). The charter sets out the importance of environmental education and its objectives. Yet, the document that becomes the official guidelines for Environmental Education (EE) is the Tbilisi declaration adopted in 1977 (UNESCO & UNEP, 1977). The goals of EE as stated in the Tbilisi declaration are 1) to cultivate awareness and concern for human and ecological interdependence, 2) to equip individuals with knowledge, values, attitudes, and skills to protect the environment, and 3) to promote participation to protect the

environment. Further, as stated in the document, there are 5 objectives of EE, namely awareness, knowledge, attitude, skills, and participation (UNESCO & UNEP, 1977).

In the framework of socially responsible teaching, teachers share equal responsibility to participate in making the world a better place. Environmental problems need to be introduced in the classroom to make the students aware and have a caring attitude (Wahyudin & Malik, 2019), which in the end turn them into active agents to help solve the environmental problems (Gürsoy & Salı, 2014). Thus, with the continuing impact of environmental problems, people need to start to think about how to mitigate the disaster. 'Thinking green' and 'acting green' are activities that people should do to have a more environmentally friendly lifestyle. Concerning this, lecturers as educators have a shared- responsibility to cultivate students' awareness of the global problems. Teaching, after all, is not only about how to achieve high grades (Pratama & Yuliati, 2016) but it goes beyond that. Teaching should also be directed to grow noble characters within individuals, in which among them is to care and respect nature (Setyowati, 2015).

The responsibility to participate in environmental protection does not only belong to the government and environmental activists but also the language teachers. Cates (1990) believes that language teachers have at least two reasons why they should be concerned about global problems. The first reason is the ethical reason, and the second reason is personal. He argued that in their profession as teachers, they have a moral responsibility to society to apply their skills to take part in solving world problems. Therefore, incorporating global issues in language classrooms is highly recommended because these issues fall under both content-based and theme-based teaching approaches (Cates, 1990; Gürsoy, 2010; Gursoy & Saglam, 2011). Furthermore, according to Rachman et al. (2015), there is a need to improve people's environmental awareness to preserve nature through formal education.

To be able to participate in solving environmental problems requires critical thinking skills. As stated by Werner and Bleich (2017) the ability to make decisions and actions cannot be separated from critical thinking skills. In addition, Geng (2014) stated that the nature of critical thinking skills includes making judgments, making arguments, asking questions, processing information, solving problems, dispositions, and meta-cognition skills. Students are generally required to be able to think critically, such as criticizing, analyzing, drawing conclusions, making conclusions about a certain issue (Rezaee & Mubarak, 2018). One way to see how critical a person's thinking can be seen is from writing. As stated by Dunn and Smith (2009), the activity of

expressing one's thoughts in writing is a form of critical thinking. In writing, one is required to integrate and implement various skills, such as making arguments, making organization, and planning, and choosing appropriate grammar and fluctuation rules. Thus, writing is usually seen to improve critical thinking skills (Quitadamo & Kurtz, 2007). Writing and critical thinking are intertwined (Rahmat et al., 2020). In essence, with the broad environmental problems facing people today, the need to include environmental concerns in classroom teaching is becoming increasingly urgent. Bringing the world into the classroom will force students to think critically to find ways to solve problems.

Moreover, the higher education curriculum always promotes critical thinking skills, in which one skill is to evaluate problems and solve them. Since 2018, a state university in Malang, Indonesia has promoted a new curriculum, called the life-based learning approach (Fachrunnisa et al., 2020). The core of life-based learning is to connect the real world and the course subject and to enable learners in and from wider contexts. This being the case using environmental issues for classroom teaching is considered compatible with the university curriculum, because environmental degradation presents real threats to human and non-human life. According to Jacobs et al. (2006), environmental issues can be incorporated into language classes by using a content-based or theme-based approach. It is content/theme-based because the teaching and learning process requires the students to use the language for communicative purposes and in a meaningful way through content (Villalobos, 2014).

In the Department of English at a state university in Malang, Indonesia, the students receive writing course material in stages. One of them is an essay writing course. Based on the course description as stated in the catalogue of the Department, students who take essay writing courses should have the ability to write and organize expository essays. They must write compositions based on writing theory by using various types of paragraph development.

An essay has three main elements, namely an introduction, content, and conclusion. The first thing any reader will read in an essay is the introduction. As noted by Murray and Murray (2012), the introduction provides the framework for the body of the essay and provides the reader with a context for the next discussion. The second element of the text is the core part of the essay. The core section presents and develops the main ideas (Murray & Murray, 2012). This section is where ideas are explored, explained, and detailed. The last part is the conclusion. Writing the closing paragraph for the essay is very important. As suggested by Zemach and Carlos (2004), the conclusion need not state an entirely new idea. Conclusions can restate the topic, summarize main

ideas, make predictions related to the topic being discussed, and provide suggestions or advice related to the topic.

Similarly, studies on the use of environmental topics for EFL writing have been carried out in recent years. First, Setyowati and Widiati (2014) shared activities that language teachers can use to integrate environmental issues in a Genre-Based Approach (GBA) for teaching various types of texts. Second, Fauzan (2015) investigated the attitudes and awareness of middle school students in Central Kalimantan about environmental problems. The results showed that students had low environmental knowledge and awareness and did not take any action to prevent environmental damage that might occur. The results suggest that there should be teaching materials that enrich students' knowledge about environmental conservation. Newer research is conducted by Setyowati et al. (2019). They found out that the students' ability to write an essay by using environmental topics falls in the moderate category. The result also shows that the students could state the thesis statement and elaborate the body of the essay, even though not all were able to end the essay with a proper conclusion. In terms of the level of environmental awareness, a study shows that Indonesian university students possess good environmental knowledge and willingness to participate in an environmental action (Ma'ruf et al., 2016). Unfortunately, at the high school level, research shows Indonesian students have poor environmental awareness (Parker et al., 2018; Gustria & Fauzi, 2019).

Based on the previous studies, research on writing elements and the use of environmental issues are typically done in a separate domain. Research on writing elements mostly focuses on the problems and difficulties the students encounter when writing in English (Alharbi, 2019; Qonitatun, 2016; Yunhadi, 2016). While research on environmental issues mainly targets the instructional strategies (Setyowati & Widiati, 2014) and learners' ecological attitudes in general (Fauzan, 2015). But there is not much information about the students' environmental attitude level after they write an essay that discusses an environmental topic. Furthermore, as stated by Wamsler (2020), education for sustainability is scarce research. This study is an attempt to address this gap and to guide this present research. The research questions were formulated as follows:

- (1) What is the students' level of environmental awareness?
- (2) How is the students' ability in writing opinion essays responding to the environmental issue as reflected in 'The Giving Tree'?
- (3) What is the students' opinion on using the environmental issue for writing opinion essays?

Method

Research design

This study uses a cross-sectional design. A cross sectional-design is quantitative and a type of observational study design (Setia, 2016). The cross-sectional design is like Creswell's (2012) mixed-method design. Mixed method design integrates the quantitative data and the qualitative data. Among the many types of mixed-method design, Creswell's (2012) explanatory sequential design fits this study. In this design, the quantitative data collection and analysis is followed by qualitative data collection and analysis before results interpretation. Zheng (2015) calls the combination of this design is a cross-sectional explanatory sequential design. This is the same design used by Ivankova et al. (2006) and Kavanoz (2017) in their research. These researchers investigated participants' variable levels by using a survey, then proceeded with a qualitative phase to gain more explanation.

Participants

The subjects of the study were 23 freshmen students in the Department of English at a state university in Malang, Jawa Timur, Indonesia. The students must take an essay writing course as a compulsory subject. This means that the essay writing course is a new subject for them.

Table 1. Demographic profile

Characteristics		F	%
Department	English	26	100
Gender	Male	3	12
	Female	23	88
Class participation	Active	23	88
	inactive	3	12
Age	18-19	26	100

Table 1 shows the demographic profile of the students joining this research. The students' age ranges between 18-19. There were 23 females and 3 males in offering F class batch 2020. Three students were not actively involved in the essay writing course. Their attendances were on and off, so the researchers excluded them from the data collection and data analysis. The researchers only used 23 students who were actively involved in the class discussion.

Research instruments

The instruments to collect the data were an environmental attitude scale questionnaire, a writing test, documentation, scoring rubric, and chat interview. The environmental attitude scale used in the study is developed by Tafli and Ates (2016). The scale was to measure the preservice teacher in Biology education, Anatolia, Turkey. This environmental attitude scale has followed the research and development procedure, in which it was developed, validated, and tested to some samples. The questionnaire has an internal consistency of Cronbach alpha was 0.87, suggesting that the items have high internal consistency (Tafli & Ates, 2016). When the instrument is used to collect the data and filled by 23 respondents in this study, the Cronbach alpha value shows 0.815, suggesting that the instrument is relatively consistent. The questionnaire has 18 questions. The questions have five dimensions. Each of the dimensions is in Table 2.

Table 2. Item distribution

Dimension	N item
Environmental problem	5
Energy saving	4
Waste product	4
Environmental responsibility	3
Environmental supports	2

Each item uses 5 points Likert scale, ranging from strongly agree (5 points) to strongly disagree (1 point). But the same scoring technique cannot be used with negatively worded questions. Therefore, for the negatively worded questions, the researchers applied reverse coding or reverse scoring. Reverse scoring means that the numerical scoring scale runs in the opposite direction.

The second instrument used is the writing test. The students were given authentic material entitle 'The Giving Tree' by Shell Silverstein. It is a children's picture storybook that is written and illustrated by the author himself. It was published in 1964 by Harper and Row. It was republished since then and translated to many languages all over the world. The book tells a story of the friendship between a tree and a boy in which in the story, the tree is always 'giving' while the boy is always 'taking' (Luis, 2018). 'The Giving Tree' has become one of the most well-known titles from Shel Silverstein. The test prompt required the students to read the narrative poem and respond to the text. They were also required to give their opinion about what should human do to nature and what they can do for nature conservation.

Next is the documentation. The researchers documented all the students' compositions when they were assigned to write an essay by the writing lecturer. The instrument is appropriate because the research data is in the form of words/phrases/sentences/discourse from students' essays that require interpretive activities. The researchers, then, are required to be active readers. The researchers read student essays continuously, identify, identify, compile, and classify data based on indicators. The data collection took one month. To analyze the data, the researchers set up an indicator for each essay element.

The third instrument is the scoring rubric. The scoring rubric used was the one developed by the writing lecturer group in the English Department. The analytical scoring covers five writing areas (content, organization, accuracy, grammar, and mechanic). Each of the items has a different weight with content having the highest percentage (30%), organization, accuracy, and vocabulary each weighing 20%, and mechanics weighing 10%. The researchers also used an unstructured interview to have an in-depth understanding of the students' opinions in using environmental issues for writing an opinion essay. The students were encouraged to express their ideas freely. Fourteen students participated in the interview section. The interview was done online. They were free to answer the questions either in voice mail or in the WhatsApp chat.

Data collection

There are several steps of data collection. The questionnaire was distributed to the students after they finished the writing task. The environmental attitude scale was distributed via the Goggle Form application. Next, the researchers collected the students' essays. The researchers made a list of indicators to help collect and analyze data. The list consisted of the characteristics of a good essay based on the theory of writing essays summarized from various sources. The data retrieved from the essay was then coded with its category. The researchers also applied a coding system. The coding system is divided into four broad categories: the introduction (Data 1), the body (Data 2), the conclusion (Data 3), and the students' opinion (Data 4). The codification of data 1, 2, and 3 covered the student's initial name, last three-digit number of the student's ID, class offering, and the title of the essay. For example, the researchers analyzed the conclusion by a student named. The first author, with a student's ID of 2011009789 from offering F, and the title of the essay is *Nature is Us*, then the coding system would be Data3/LS/ 789/F/Nature is Us. If there were parts of the essay (the opening, the developmental paragraphs, and the closing paragraph)

that did not match those in the indicator list, the essay was considered less acceptable. Three English lecturers scored the students' essays. Before scoring the students' writing, the raters were told how to score the students' essays with the scoring rubric. The scoring period took one week.

Data analysis

The students' writing test were analyzed quantitatively. As stated earlier, the students' essay was analyzed by using a list of indicators, and the scoring rubric to find out their performance. The researchers also check the inter-rater reliability among the three raters by using statistic software. The result of the Cronbach alpha coefficient among the three raters is 0.626. As stated by Taber (2018), in science education, the alpha value between 0.61-0.65 is considered adequate. The students' scores used in this study are those the average between three raters. To decide the students' level of performance, the researchers used the faculty grading standard.

Next, the questionnaire result was also analyzed quantitatively. The researchers analyzed the level of students' environmental attitudes by using descriptive statistics. Firstly, the researchers change the measurement of the interval scale to the ordinal scale with three categories (high, moderate, low). The interval scale is fitted into the ordinal scale within the categories of those who score below the mean minus one standard deviation ($X < (\bar{x}-1SD)$) belongs to the low level, but those who score above the mean plus one standard deviation ($X > (\bar{x}+1SD)$) belongs to the high-level category. Meanwhile, the students who score between the two categories are said to be in the moderate level $(\bar{x}-1SD) < X < (\bar{x}+1SD)$ (Azwar, 2012). Meanwhile the data from interview and documentation were analysed qualitatively. The researchers read all the qualitative data, and applied codification technique to categorize them. The researchers calculated each category using the tally system to find out what percentage of essays had ideal criteria for each part of the essay element. The research data were analyzed by applying the procedure proposed by (Miles & Huberman, 1994) in which data collection, data reduction, data presentation, and conclusion drawing took place in a cyclic process.

Findings

The students' environmental attitude level

The result of the students' environmental attitude of 23 students is divided into five dimensions. The dimensions are 1) environmental problems awareness, 2) energy-saving awareness, 3) waste product awareness, 4) environmental responsibility awareness, and 5) environmental supports.

Table 3. The analysis result of the students' environmental awareness (N=23)

Dimension	Mean (\bar{x})	Std. Deviation (SD)	Percentage respondent		
			Low $X < (\bar{x} - 1SD)$	Medium $(\bar{x} - 1SD) < X < (\bar{x} + 1SD)$	High $X > (\bar{x} + 1SD)$
Environmental problem	20.9	2.24	13.04	60.86	20.08
Energy saving	16.3	2.26	13.04	78.26	8.69
Waste product	14.91	1.59	21.73	60.86	17.39
Environmental Responsibility	10.52	1.62	13.04	60.86	20.08
Environmental supports	7.56	1.19	17.39	60.86	21.73

Table 3 shows that for the first dimension, three students (13.04%) have low environmental problems attitude. More than half of the students (60.86%) are in the moderate level, and six students belong to the high level. For the energy saving category, the same number of students belongs to the low-level attitude (13.04%), while two-thirds of the students (78.26%) have a moderate attitude to save energy use. Interestingly, in the waste product dimension, especially in the use of plastics for food containers, five students are in a low category (21.73%), more than half of them (60.86%) realize that trashes need to be recycled and should be handled carefully. The data also show that 60.86% of the students have moderate environmental responsibility, while 20.08% have a high level of responsibility, and only 13.04% belong to the low level. The students also show a positive level of environmental supports. The result yields that 60.86% of the students fall in the moderate level, five students (21.73%) have a high level of environmental supports.

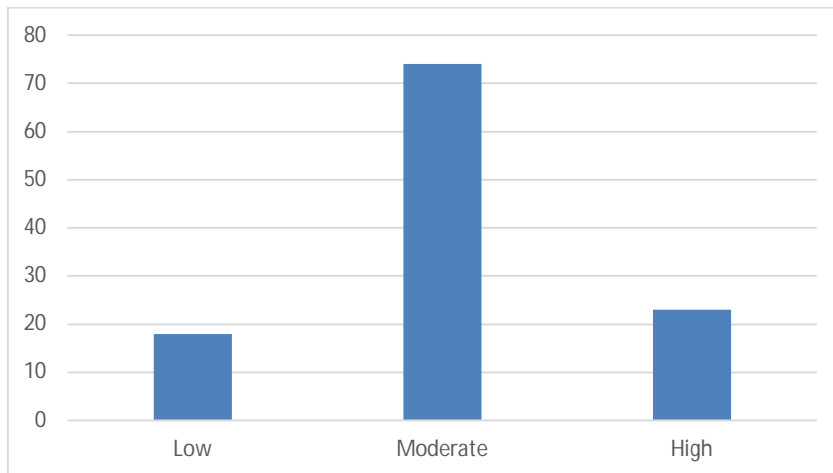


Figure 1. Students' environmental awareness

Figure 1 shows that 64% of the students are in the moderate category, 20% of them belong to a high-level environmental attitude, and only 16% are in the low category. Thus, it can be concluded that the respondents in this study are in the moderate category of environmental attitude level

The students' writing performance

The students' writing performance was taken from the students' essay when writing by using an environmental topic and scored by three raters. The score used to determine their performance was the average score among the three raters. The researchers also used faculty standard grading (see Appendices) to determine whether the students fall in the excellent, very good, good, fair, and poor categories. The result of the score distribution is presented in Figure 2.

The data from the students' writing shows that most of the students fall in the 'good' category (57%) with a score between 75-79. Some students fall in the 'excellent' category (22%), and 'very good category' (17%) with scores ranging from 80-84. Unfortunately, one student falls in the 'fair category'.

Table 4. Tests of normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Writing score	.148	23	.200*	.946	23	.246

The descriptive statistics computation (see Table 4) shows that there is an outlier in the group. Yet, the result of the normality test shows that the

students' writing scores are normally distributed. This shows that the students' ability is homogenous.

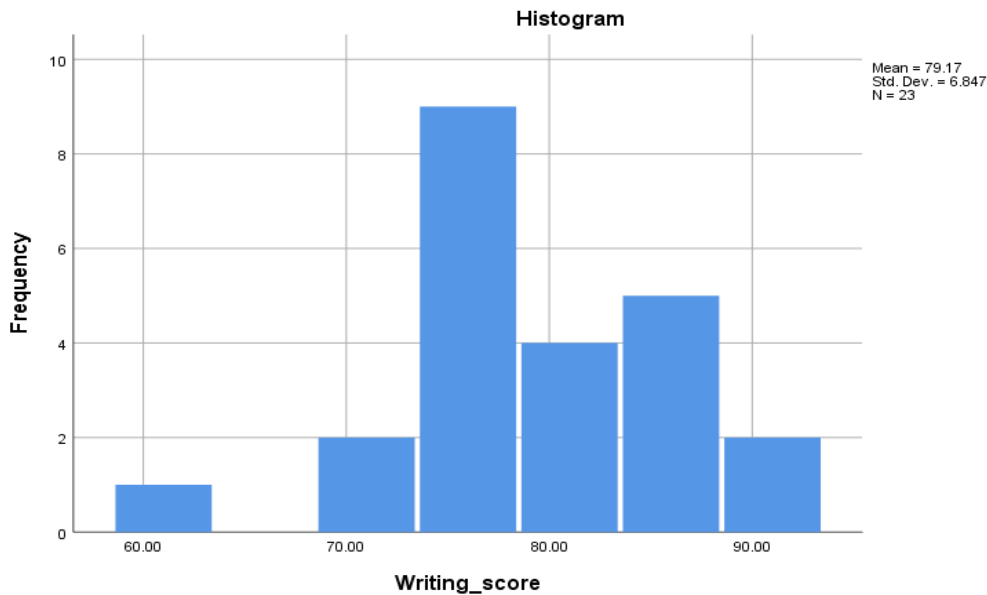


Figure 2. The distribution of the students' score

The ability to write introductory paragraph

Based on the data, the researchers found that all students can write introductory paragraphs for their essays. Most of the introductory paragraphs used general background information or the funnel type to start the essay. In the last line of the introductory paragraph, the students stated their thesis statement.

The data shows that all students (100%) can write the introductory paragraph for their essay. To start the essay, the students wrote their general impression of the text and how it relates to their life or the environmental problem they are facing nowadays.

The narrative poem called *The Giving Tree* by Shell Silverstein is an accurate picture of what happens here in real life. Humans get as much as they can, no longer that they need, and they give nothing in return. We should take care of nature and this earth for our future generation by spreading awareness and rebuilding nature. (Data 1/ DAS/426/F/Human and The Nature that We Lived In).

The excerpt shows how the student started their essay, and how the thesis was formulated at the end of the paragraph. The students in the excerpt stated two controlling ideas in the thesis statement. The controlling ideas were a reason to spread awareness and a reason to rebuild nature.

The body of the essay

The data shows that every paragraph in the body of the essay has its topic sentence which is usually written in the first line. The data also shows that 17 students (94%) can give relevant reasons about their topic sentence, and only one student (6%) gave an irrelevant explanation. Interestingly, not all students can provide relevant and sufficient details to support their opinion and to develop the paragraphs in the body of the essay. The data shows that only 11 students (61%) can provide relevant and specific details, while the rest (39%) could not present relevant examples to support the topic sentence.

The exploitation of nature by humans can threaten the existence of protected flora and fauna. Nowadays, many animals are threatened with extinction. For example, like the Java rhino, whose horns were taken by the hunters. This horn is very expensive and much sought after by collectors.
Therefore, it is important to have the self-awareness to protect and care for nature. (Data 2/AMAA/429/F/ Nature Exploitation)

The example from one of the student's essays shows how he developed the second paragraph in the body of the essay. He provided many examples to support his opinions, such as the endangered animals (Java rhino, Sumatran tigers, orangutans) and the endangered plants because of the forest clearings for oil plantations. At the end of the second paragraph, he strengthened his opinion on why it was necessary to protect nature.

The conclusion

The data shows that all students have their conclusions in their essays. Interestingly, no students used summary only to close their essays. The students seemed to feel that the essay with the environmental topic was more appropriately closed both with a summary and recommendations or hope for the future. Thus, the students had varieties of strategies to give the closing remarks. Based on the data, it was found that 8 students (44%) use

recommendations and the rest of them (56%) use a combination between summary and recommendation.

In conclusion, we can say that nature plays a significant role in our lives. It is a source of our living and also a source of all the necessities that help us to live. My greatest wishes go for the future of our world and hope that nature can heal, with humans guarding its very existence (Data 3/RSA/422/F/The Blessing of Nature)

Data 3 from RSA/422/F shows that she presented a summary of the whole essay in the first line of the concluding paragraph. And the rest of the writing went on with her recommendation to protect the environment and closed with a final remark about her hope for the future. Since most of the essays had a conclusion, and the content was relevant to the thesis statement, the researchers concluded that the students had a very good ability to write the conclusion.

The students' opinion

The students had positive views on using the environmental topic for writing an opinion essay. The students expressed their opinions and feelings either through chats or voice mail. Yet, many of them preferred to share their ideas in the chats form. The data shows that many of them feel that they have no problem at all when reading the text and when writing about the issue.

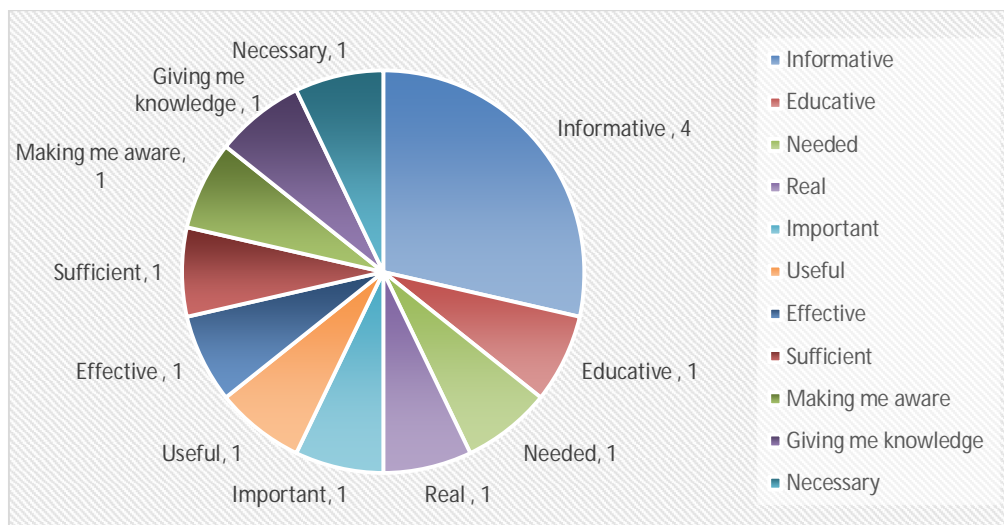


Figure 3. The students' opinion

The students' views on using the environmental topics for writing were similar. They thought that the issue among others was informative, useful, and educative. The environmental topic brought into the classroom made them more aware of what happens in their surroundings. The topic also challenged their critical thinking skill. Based on the result of the interview, the students' problem with the environmental topic was the researching or the information gathering before writing. This phase was important because it gave them enough background knowledge to write about the topic.

Discussion

Concerning the environmental attitude, the result of this study shows that the students have a moderate level of environmental attitude (64%). Some of them have a high level of environmental attitude (20%), and only a small number of the students have low environmental attitude (16%). This study supports Ma'ruf et al. (2016) who found out that university students in Indonesia have good environmental knowledge, and a good interest to involve themselves in environmental protection. The result of this study does not support Parker et al. (2018) and Gustria and Fa'zi's (2019) research in which they show that high school Indonesian students have low environmental awareness. Parker et al. (2018) found out that the students have insufficient environmental awareness and lack of skills to propose ideas to solve environmental problems. Meanwhile, Gustria and Fauzi (2019) argue that there are possible factors that cause their respondents to have low environmental attitudes, among them are daily behavior, lack of knowledge about environmental problems, social economy, and family background. Akkor and Gündüz (2018) state that at the university level, female students have a better environmental attitude than male students.

Yet, the increasing environmental degradation has put a deep concern on educators, teachers, lecturers, and researchers. Many have been interested to explore how environmental issues are incorporated into the language classroom (Ramadhan et al., 2019, 2021; Setyowati et al., 2019; Setyowati & Widiati, 2014; Zahoor & Janjua, 2020; Zamora-Polo & Sánchez-Martín, 2019). It is important that the students need to be aware of the cause of the environmental problems, have sufficient knowledge about them, and how to solve them (Parker et al., 2018) because environmental protection is everyone's responsibility. It is hoped that when the students have a good environmental attitude, they will become caring individuals.

The second research question addresses the students' writing performance when writing opinion essays by using environmental issues. In this study, the students must respond to 'The Giving Tree', a children's short story that had a special relationship with a tree. The story of 'The Giving Tree' is rich in moral value. It is a story about human greed and natural exploitation told artistically. This type of story can make the students emotionally involved with the topic and may urge the call to save and protect the environment. As stated by Dewi (2017), the inner motivation to environmental protection is better done in a friendly manner rather than in a patronizing way. The short story as one form of the literary genre can teach students about noble characters that one should have. Thus, literature can serve as a medium for character education (Muassomah et al., 2020). Reading a short story that is related to the topic of the essay might help the students with ideas of what to write in their essay.

For foreign language learners, especially in the Indonesian context, writing in English is mostly seen as a difficult activity (Setyowati & Sukmawan, 2016; Toba et al., 2019). Research has shown that even though EFL students have a moderate writing attitude when measured with a writing scale questionnaire, in practice, they view writing as a demanding task (Setyowati & Sukmawan, 2016). But the result of the present study shows that the students' ability to write opinion essays responding to the environmental topic is satisfactory. The students' paragraphs in the body of the essay, mostly are well developed. The students have the topic sentences in each body paragraph, and some of them adequately explain the topic sentences, then provide details and examples to support their ideas. The result of this study supports Setyowati et al. (2019), in which they found that the students can write a well-structured essay with an environmental topic.

The result of this study also shows that students' essays are well-written in terms of the completeness of essay elements and content-related discussion to the topic presented. The result of this study does not support the research conducted by Yunhadi (2016). In his research, he found out that the students at Kutai Kertanegara University could not make a well-written and coherent paragraph. The students under his study also could not make a topic sentence and supporting sentences to elaborate on the topic. The result of this research also does not support Qonitaun's (2016) research in which she found out that the students she investigated could not produce a well-structured essay. In this study, the students can make essays discussing the environmental topic with a complete essay element, namely the introductory, the body of the essay, and the conclusion. The data shows that many of the students' sentences are compound

sentences using the phrases like *and, or, but, so*) and some also use complex sentences.

In addition to that, the result of this study is in contrast with Mantra and Widiastuti's (2019). Their research shows that the students face some challenges when they were asked to produce a descriptive paragraph in at least seven sentences. Even though the students' ability in their study falls at the moderate level, the finding suggests that there is still more to be done to help the students write better. Newer research also shows that the typical problems the students encounter are in organizing ideas, language use, diction, and content (Liunokas, 2020). The findings of previous research imply that EFL students in the Indonesian context need some helps in what to write and how to write well by using English.

This study also does not support Alharbi (2019) who found out that the students have difficulties in writing a well-written paragraph in their composition. The result of this research shows that the first-year students have satisfactory ability in writing the opening part of the essay. Moreover, the students in the present study have slight issues in grammar, while the students in his study have issues in using proper mechanics and grammar. The students in his study also have problems in making topic sentences and supporting sentences.

Even though the students in the present study have done well with their essays, it does not mean that there is no room for improvement, because there is always room for perfection. The students should enhance the essay to a much better composition by doing more readings from authentic texts. The result of the interview has shown that the students need to do some research before they write the essay. They usually visit websites relevant to their topics to get more data and additional knowledge. Research has shown that the use of authentic materials is beneficial to help students write better. Some examples of authentic materials are news in printed/digital materials (Setyowati, 2019) and videos (Kamariah, 2018; Styati, 2016). Relating to the environmental topic, the students can read and watch more news about environmental issues. Having more information about this topic can enhance the students' background knowledge about the topic, improve vocabulary and syntactical complexity. After all, reading and writing are indeed connected (Erlina et al., 2018). Without much reading, they will not be able to express ideas fully.

Conclusion

Preserving nature is everyone's responsibility living on the earth. The result of the research implies that, firstly, being a language teacher is not merely teaching about language, but also teaching the students how to use it for a meaningful purpose, one of them is to share their thoughts for disaster mitigation and nature conservation. Secondly, the field of literature and teaching is no longer a separate dimension in academic life. The use of literature for language teaching is beneficial because the students can have both literary appreciation and a chance to train their writing skills. To have more meaningful teaching and learning, writing teachers can select materials with a life-based topic, such as the relationship between humans and nature. The result of the study shows that the students' ability in writing an opinion essay by using the environmental topic is very satisfactory. The hard evidence shows that many of the compositions have a full essay structure, ranging from the introductory paragraph (hook and thesis statement), the body of the essay (topic sentences and details), and the conclusion. The researchers conclude that using the environmental topic for language class is manageable and feasible. It gives benefits for the students' writing ability and their behavior towards the environment. The data also shows that the students possess a good environmental attitude. Yet, it is not clear what is the cause of their positive attitude toward the environment. As this research is not a cause-effect relationship, the result of this research cannot be used as a generalization as it applies to subjects under study.

Some recommendations are addressed to the writing teachers and future researchers. For the writing teachers, it is suggested that the teaching of writing integrate the environmental topic by using a content-based or theme-based approach. The students need to be presented with real-life issues so that they can have more awareness about their surroundings. Secondly, the real-life problems enable the students to think critically to solve and take action in environmental protection. For future researchers, the result of this research can serve as baseline research for more writing studies in the future. Future research can also investigate the linguistic errors made by the students in their composition when writing about environmental issues. Other research can also be directed to find the correlation between the students' environmental attitude and their essay performance. All in all, integrating environmental issues in the essay writing class is beneficial for the EFL writing class. It can improve the students' writing skills, critical thinking skills, and self-awareness to care for and protect the environment.

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References

- Akkor, Ö., & Gündüz, Ş. (2018). The study of university students' awareness and attitude towards environmental education in northern Cyprus. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(3), 1057-1062 <https://doi.org/10.12973/ejmste/81366>
- Alharbi, M. A. (2019). EFL university students' voice on challenges and solution in learning academic writing. *Indonesian Journal of Applied Linguistics*, 8(3), 576–587. <https://doi.org/10.17509/ijal.v8i3.15276>
- Azwar, S. (2012). *Penyusunan skala psikologi edisi 2 [The compilation of the psychological scale edition 2]*. Yogyakarta: Pustaka Pelajar
- Budiharso, T. (2017). Developing prompts of argumentative essay writing for EFL college students. *IJOLTL: Indonesian Journal of Language Teaching and*

- Linguistics*, 2(3), 227-244. <https://doi.org/10.30957/ijoltl.v2i3.531>
- Cates, K. (1990). Teaching for a better world: global issues in language education. *The Language Teacher* 14: 3-5. Retrieved from <https://www.hurights.or.jp/archives/pdf/asia-s-ed/v05/06cates.pdf>
- Cresswell, J. (2012). Educational research: planning, conducting and evaluating qualitative and quantitative research (4th ed.). Boston: Pearson Education Inc.
- Dewi, N. (2017). People and nature in asian stories: reading and writing materials for eco education. *K@ta*, 19(1), 32-40, <https://doi.org/10.9744/kata.19.1.39-46>
- Dunn, D. S., & Smith, R. A. (2009). Writing as critical thinking. In *teaching critical thinking in psychology: a handbook of best practices* (pp. 161–173). <https://doi.org/10.1002/9781444305173.ch14>
- Erlina, Hayati, R., & Jaya, H. P. (2018). Helping students to write better through reading and writing connections strategy. *International Journal of Applied Linguistics and English Literature*, 7(6), 23-27. <https://doi.org/10.7575/aiac.ijalel.v.7n.6p.23>
- Fachrunnisa, R., Fitriyati, U., Susilo, H., Suwono, H., Setiawan, D., & Ibrohim, I. (2020). Life-based learning: two trajectories of students in biology education program. *AIP Conference Proceedings*, 2215(1), <https://doi.org/10.1063/5.0000704>
- Fardah. (2012, February 18). "News focus: heart of Borneo designated as "world's lungs". *Antaranews*. Retrieved from <https://en.antaranews.com/news/79968/news-focus-heart-of-borneo-designated-as-worlds-lungs>
- Fauzan, A. (2015). EFL students' awareness and attitudes on environmental issues and its educational solution. *Journal on English as a Foreign Language*, 3(2), 77-84. <https://doi.org/10.23971/jefl.v3i2.66>
- Geng, F. (2014). An content analysis of the definition of critical thinking. *Asian Social Science*, 10(19), 124–128. <https://doi.org/10.5539/ass.v10n19p124>
- Gürsoy, E. (2010). Implementing environmental education to foreign language teaching to young learners. *Educational Research*, 1(8), 2141–5161.
- Gursoy, E., & Saglam, G. T. (2011). ELT teacher trainees attitudes towards environmental education and their tendency to use it in the language classroom. *Journal of International Education Research (JIER)*, 7(4), 47–52. <https://doi.org/10.19030/jier.v7i4.6046>
- Gürsoy, E., & Salı, P. (2014). A language course within the scheme of socially responsible teaching: ELT trainees' expectations. *Journal of Educational and Social Research*. 4 (2), 355-365. <https://doi.org/10.5901/jesr.2014.v4n2p355>

- Gustria, A., & Fauzi, A. (2019). Analysis of high school students' environmental attitude. *Journal of Physics: Conference Series*. Vol 1185. <https://doi.org/10.1088/1742-6596/1185/1/012079>
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: from theory to practice. *Field Methods*. <https://doi.org/10.1177/1525822X05282260>
- Jacobs, G. M., Lie, A., & Amy, S. (2006). An Indonesia example of teaching English via environmental education. In S. Mayer & G. Wilson (Eds.), *Ecodidactic perspectives on English language, literatures and cultures* (pp. 45-62). Trier, Germany: Wissenschaftlicher Verlag Trier.
- Kamariah, A. (2018). Using video as an authentic material in improving students writing ability. *International Journal of Humanities and Innovation (IJHI)*. 1(3), 184-199. <https://doi.org/10.33750/ijhi.v1i3.23>
- Kavanoz, S. (2017). An explanatory mixed method study on pre-service language teachers' communication apprehension towards their instructors. *International Journal of Languages' Education*, 5(1), 631-650. <https://doi.org/10.18298/ijlet.1721>
- Liunokas, Y. (2020). The ability of Indonesian EFL university students in writing an explanation text. *IDEAS: Journal on English Language Teaching and Learning*, 8(2), 611-622. <https://doi.org/10.24256/ideas.v8i2.1692>
- Luis, K. N. (2018). The giving tree: In *Herlands*. <https://doi.org/10.5749/j.ctv69t2nq.7>
- Ma'ruf, M., Surya, S., & Apriliyani, P. D. (2016). Knowledge, attitudes and behavior of university students towards environmental issues in Indonesia. *Sains Humanika*, 8(1-2), 81-88. <https://doi.org/10.11113/sh.v8n1-2.836>
- Mantra, I. B. N., & Widiastuti, I. A. M. S. (2019). An analysis of EFL students' writing ability to enhance their micro and macro writing skill. *International Journal of Linguistics and Discourse Analytics (IJOLIDA)*, 1(1), 29-34. <https://doi.org/10.52232/ijolida.v1i1.6>
- Miles, M. A., & Huberman, M. B. (1994). Chapter 4. In *Qualitative Data Analysis: An Expanded Sourcebook* (pp. 50-72).
- Muassomah, M, Abdullah, I., Istiadah, I., Mujahidin, A., Masnawi, N., & Sohrah, S. (2020). Believe in Literature: character education for Indonesia's youth. *Universal Journal of Educational Research*, 8(6), 2223-2231. <https://doi.org/10.13189/ujer.2020.080605>
- Murray, N., & Murray, N. (2012). Writing an introduction. In *Writing Essays in English Language and Linguistics* (pp. 89-99). <https://doi.org/10.1017/cbo9781139035347.009>

- Nurdiana, T. (2021, October 24). Sri Mulyani: Pasca COVID, ancaman krisis berikutnya bisa climate change dan disruptsi [Sri Mulyani: Post COVID, next crisis threat can be a climate change and disruption]. In *Kontan*. Retrieved from <https://nasional.kontan.co.id/news/sri-mulyani-pasca-covid-ancaman-krisis-berikutnya-bisa-climate-change-dan-disrupsi>.
- Nkwetisama, C. M. (2011). EFL/ESL and environmental education: Towards an eco-applied Linguistic Awareness in Cameroon. *World Journal of Education*, 1(1), 110–118. <https://doi.org/10.5430/wje.v1n1p110>
- Parker, L., Prabawa-Sear, K., & Kustiningsih, W. (2018). How Young people in indonesia see themselves as environmentalists: identity, behaviour, perceptions and responsibility. *Indonesia and the Malay World Journal*, 46(136), 263-282. <https://doi.org/10.1080/13639811.2018.1496630>
- Pratama, H., & Yuliati. (2016). Global education in english classroom: integrating global issues into English language teaching. *International Journal of Social Science and Humanity*. 6(9), 719-722. <https://doi.org/10.7763/ijssh.2016.v6.739>
- Qonitaton, Q. (2016). The quality of essay writing of indonesian EFL learners. *ASIAN TEFL Journal of Language Teaching and Applied Linguistics*, 1(1), 55-76. <https://doi.org/10.21462/asiantefl.v1i1.6>
- Quitadamo, I. J., & Kurtz, M. J. (2007). Learning to improve: using writing to increase critical thinking performance in general education biology. *CBE Life Sciences Education*, 6(2), 140–154. <https://doi.org/10.1187/cbe.06-11-0203>
- Rachman, I., Toru, M., & Yustiani, Y. M. (2015). Influence of parents' behavior on awareness of children towards environmental preservation. *Sampurasun e-Journal*, 1(1), 1-6. <http://dx.doi.org/10.23969/sampurasun.v1i1.22>
- Rahmat, N. H., Aripin, N., Lin, N. M., Whanchit, W., & Khairuddin, Z. (2020). Exploring the connection between critical thinking skills and academic writing. *International Journal of Asian Social Science*, 10(2), 118-128 <https://doi.org/10.18488/journal.1.2020.102.118.128>
- Ramadhan, S., Atmazaki, Sukma, E., & Indriyani, V. (2021). Design of task-based digital language teaching materials with environmental education contents for middle school students. *Journal of Physics: Conference Series*, 1811, 1-8 . <https://doi.org/10.1088/1742-6596/1811/1/012060>
- Ramadhan, S., Sukma, E., & Indriyani, V. (2019). Environmental education and disaster mitigation through language learning. *IOP Conference Series: Earth and Environmental Science*, 314, 1-9. <https://doi.org/10.1088/1755-1315/314/1/012054>
- Rezaee, A. A., & Mubarak, L. (2018). EFL learners' proficiency level and critical thinking: the case of Iraqi university students. *International Journal of*

- Language Studies*, 12(3), 91–108. Retrieved from <http://www.ijls.net/pages/volume/vol12no3.html>
- Setia, M. S. (2016). Methodology series module 3: cross-sectional studies. *Indian Journal of Dermatology*, 61(3), 261-4. <https://doi.org/10.4103/0019-5154.182410>
- Setyowati, L. (2019). Authentic materials for teaching writing: a critical look. *International Journal of Language Education*, 3(2), 68-77. <https://doi.org/10.26858/ijole.v3i2.9609>
- Setyowati, L. (2015). Integrating character building into teaching to enhance the students environmental awareness. *Journal on English as a Foreign Language*, 3(1), 1-10. <https://doi.org/10.23971/jefl.v3i1.57>
- Setyowati, L., & Sukmawan, S. (2016). EFL Indonesian students' attitude toward writing in english. *Arab World English Journal*, 7(4), 365-378. <https://doi.org/10.24093/awej/vol7no4.24>
- Setyowati, L., Sukmawan, S., & Ahsana El-Sulukiyah, A. (2019). Investigating the students' writing ability in responding to environmental issue. *Arab World English Journal*, 10(4), 338–350. <https://doi.org/10.24093/awej/vol10no4.18>
- Setyowati, L., & Widiati, U. (2014). Integrating environmental education into a genre-based EFL writing class. *English Teaching Forum*, 52(4), 20–27.
- Styati, E. W. (2016). Effect of youtube videos and pictures on EFL students' writing performance. *Dinamika Ilmu*, 16(2), 307-317. <https://doi.org/10.21093/di.v16i2.534>
- Sukmawan, S., & Setyowati, L. (2017). Environmental messages as found in Indonesian folklore and its relation to foreign language classroom. *Arab World English Journal (AWEJ)*, 8(1), 298-308. <http://dx.doi.org/10.2139/ssrn.2945909>
- Taber, K. S. (2018). The use of cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48, 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Tafli, T., & Ates, A. (2016). Development of environmental attitude scale towards pre-service biology teachers. *Journal of Education and Practice*, 7(32), 33-40.
- Toba, R., Noor, W. N., & Sanu, L. O. (2019). The current issues of Indonesian efl students' writing skills: ability, problem, and reason in writing comparison and contrast essay. *Dinamika Ilmu*, 19(1), 57-73. <https://doi.org/10.21093/di.v19i1.1506>
- Townsend, M. A. R., Hicks, L., Thompson, J. D. M., Wilton, K. M., Tuck, B. F., & Moore, D. W. (1993). Effects of Introductions and conclusions in assessment of student essays. *Journal of Educational Psychology*, 85(4), 670–678.

- <https://doi.org/10.1037/0022-0663.85.4.670>
- UNESCO. (2021, May 12). UNESCO Urges making environmental education a core curriculum component in all countries by 2025. *Press Release*. Retrieved from <https://en.unesco.org/news/unesco-urges-making-environmental-education-core-curriculum-component-all-countries-2025>
- UNESCO-UNEP. (1975). The belgrade charter: a framework for environmental education. In *Connect: UNESCO-UNEP Environmental Education Newsletter*. Retrieved from <https://naaee.org/sites/default/files/153391eb.pdf>
- UNESCO, & UNEP. (1977). The tbilisi declaration - final report. *Intergovernmental Conference on Environmental Education*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000032763>
- Villalobos, O., B. (2014). Content-based instruction: a relevant approach of language teaching. *Innovaciones Educativas*, 15(20), 71-83. <https://doi.org/10.22458/ie.v15i20.515>
- Wahyudin, D., & Malik, R. S. (2019). Teaching environmental education for sustainable development: strategies and challenges. *Journal of Sustainable Development Education and Research*, 3(1), 51-70. <https://doi.org/10.17509/jsder.v3i1.17172>
- Wamsler, C. (2020). Education for sustainability: fostering a more conscious society and transformation towards sustainability. *International Journal of Sustainability in Higher Education*, 21(1), 112-130. <https://doi.org/10.1108/IJSHE-04-2019-0152>
- Werner, S. H., & Bleich, M. R. (2017). Critical thinking as a leadership attribute. *Journal of Continuing Education in Nursing*, 48(1), 9–11. <https://doi.org/10.3928/00220124-20170110-03>
- Yunhadi, W. (2016). The structural parts of paragraph writing by Indonesian EFL learners. *International Journal of EFL*, 1(1), 33. <https://doi.org/10.21462/ijefl.v1i1.6>
- Zahoor, M., & Janjua, F. (2020). Green contents in English language textbooks in Pakistan: an ecolinguistic and ecopedagogical appraisal. *British Educational Research Journal*, 46(2), 321-338. <https://doi.org/10.1002/berj.3579>
- Zamora-Polo, F., & Sánchez-Martín, J. (2019). Teaching for a better world. sustainability and sustainable development goals in the construction of a change-maker university. *Sustainability (Switzerland)*, 11(15), 1-15. <https://doi.org/10.3390/su11154224>
- Zemach, D., & Islam, C. (2004). *Paragraph writing: from sentence to paragraph* (1st ed.). London: Macmillan Education
- Zheng, M. (2015). Conceptualization of cross-sectional mixed methods studies in health science: a methodological review mingying zheng university of

nebraska-lincoln. *International Journal of Quantitative and Qualitative Research Methods*, 3(2), 66-87. Retrieved from <https://www.eajournals.org/wp-content/uploads/Conceptualization-of-Cross-Sectional-Mixed-Methods-Studies-in-Health-Science.pdf>

Appendices

Appendix 1. Essay scoring sheet

(Put a tick mark on a suitable column)

Standard	Weight	Not at all Absolutely										W x Score	
		1	2	3	4	5	6	7	8	9	10		
1. Content: thorough development of topic	3												
2. Organization: Ideas are well organized based on relevant/suitable essay development	2												
3. Grammatical Accuracy: few errors in grammar and meaning is clear.	2												
4. Vocabulary: appropriate word choice	2												
5. Mechanics: correct punctuation, spelling, capitalization, and paragraphing	1												
Obtained Score:													
Obtained Score =													
Final Score:													

Appendix 2: Environmental education questionnaire (developed by Tafli & Ates, 2016)

No	Question	SD	D	N	A	SA
		1	2	3	4	5
A. Environmental Problem						
1	Since environment recleans itself, wastes do not cause a problem in terms of environmental pollution					
2	Natural disasters, which occur in any place on the earth do not have any effect on environment					
3	Spending energy sources of our country insensibly makes me anxious					
4	While some factors work with dangerous energy for environment makes me anxious					
5	Besides degeneration of ecosystem, break downs in environmental balance do not make me anxious.					
B. Energy Saving						
6	I turn off unnecessary lights in home or school/campus.					
7	I turn off the taps when I see that they are running unnecessarily in home or school/campus					
8	I do not pay attention whether it is plugged or unplugged after I charge my phone or computer					
9	I pay attention not to waste too much water while I am washing my hands in home or school/campus					
C. Waste Product						
10	Waste products like paper, metal, glass and plastic should be left into recycle bins by dividing into groups.					
11	Buying drinking in glass bottles instead of plastic bottles does not provide benefit for environment					
12	I take care of leaving trashes by dividing them into groups appropriately in home or school/campus					
13	Before buy a product, I pay attention to its recyclable feature.					
D. Environmental Responsibility						
14	I join environmental foundations.					
15	I follow television programs and documentaries curiously, which are about environment on TV, radio or the Internet					
16	I take care about not to harm any living creatures since they have their own duties in environment					

E. Environmental Support						
17	I support environmental foundations					
18	I give importance environmental projects.					
	Total					

Note: SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Disagree

Appendix 3: List of indicators characteristics of a good essay

Indicators			
A. Introductory Paragraph			
1.	The occurrence of a Hook (funnel, anecdote, a question, facts/statistics)		
2.	The occurrence of a thesis statement which shows their opinion (ThSt)		
B. The body of the essay			
1.	The occurrence of a topic sentence in each paragraph in the body of the essay		
2.	Using of one of the essay organizations or a combination of at least two organizations		
3.	The existence of two or more examples/details (ExDet)		
C. Concluding paragraph			
1.	Using at least one type of closing (summary, hope, recommendation, restating topic sentence)		
2.	Using a phrase/phrase that indicate a concluding remark		