




Original article

An Analysis of Ecopedagogical Features in Turkish High School English Language Coursebooks

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Abstract

Ecopedagogy is related to environmental education and it is considered necessary to evaluate it from a critical and in-depth perspective. The basis of ecopedagogy is the protection of nature and the impact of human on nature is an issue that should be considered. The study aims to analyze the curriculum of 9th and 12th grade English lessons to indicate if the ecopedagogical themes include the fundamental principles according to the Earth Charter (2000). For this study, the qualitative method is used in terms of data collection, data recording, and analysis. To evaluate the data, the frequency graphic displays were used to analyze the descriptive quantitative results. As a research tool, Earth Charter Data Chart (Burton, 2019) was used to categorize the ecological terms in the books with the codes of this chart. The qualitative data were analyzed via descriptive content analysis (SPSS 21). The findings of the study show that both books must be restructured to make the students more aware of ecopedagogy. Even if the books include partly ecopedagogical codes of the data chart, the result is not satisfying. For further studies on this topic, it can be said that this study is limited to examining only 9th and 12th grade books. For this reason, it is recommended that the content can be expanded by analyzing the relevant themes of all grades.

Keywords: Ecopedagogy, the Earth Charter, curriculum, English lessons, 9th 12th grades.

Received: 09 May 2023 * **Accepted:** 23 May 2023 * **DOI:** <https://doi.org/10.29329/jeps.2023.561.2>

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INTRODUCTION

Ecopedagogy is a reaction to today's and tomorrow's most serious concerns about environmental devastation such as the destruction of air and water, climate change, endangering all living and non-living things (Grigorov, 2012). It includes Ecology of Nature (natural resource protection), Social Ecology (human impact on the environment), and Holistic Theory on Ecology (from an ecological point of view to civilization – ecology) economic, social, accommodation) (Kahn, 2010). In the light of these components, it is obvious that the cornerstone of ecopedagogy is respect to human beings, animals, plants in connection with respect, ecopedagogy makes social justice, human responsibilities, democracy, and compassion possible. The roots of ecopedagogy are based on critical pedagogy the first line follows how ecopedagogy appeared and the second line is the broad range of terminology that is used to describe environmental education (such as eco-literacy, educating for sustainability, teaching for ecological sustainability (Ecoliteracy demonstrates how educators can include awareness about and empathy for all life systems into the principles of social and emotional intelligence (Goleman et al., 2013), “ecojustice education, experiential education, place-based education, holistic education, critical animal studies and environmental education itself)” (Burton, 2019, p. 4). Freire, widely regarded as the father of critical pedagogy, used critical theory concepts in his work with locals in Brazil, developing and criticizing the 'banking model' of education and advocating instead for a liberatory dialectical approach, which he most clearly outlined in his seminal work, *Pedagogy of the Oppressed* (2000). Kahn (2010) interprets that after the United Nations Earth Summit in Rio de Janeiro, Brazil in 1992, which prompted educators such as Freire to understand that critical pedagogy must nurture an ecological dimension, ecopedagogy emerged as a subset of critical pedagogy in Latin America. With the critical approach, students can develop a critical consciousness helping them to look at the situations from the oppressed one's perspective therefore praxis (taking an action) can be developed as a response to the problems around them by questioning. To save the planet, it is the ultimate responsibility of humans to reduce these destructions and take precautions by acting against neoliberal ideologies called by Harvey (2005) as financing everything. Most of the countries with capitalist minds aim to gain money by struggling with almost all living such as hydroelectricity, fossil fuels, industrial pollution, urbanization policy, etc. In that vein, Kahn (2010) claims to our detriment, dominion over nature has accompanied capitalism's unceasing expansion and unequalled dominance over all aspects of human life. This dominant mindset has been indoctrinated unmercifully through a slew of public policies and practices that easily gloss over massive inequities as necessary evils for democracy to thrive. He also notifies that some enforcements, notably the West's economic piracy, have aided the degradation of civil rights and unprecedented ecological exploitation of civilizations, resulting in conditions that now threaten human survival unless we change course. Our organic relationship with the planet is inextricably linked to our fights for cultural autonomy, protecting the environment, material and social fairness, and international peace, according

to Kahn (2010). To provide them, this consciousness can be handled in the education system as it is fruitful to make the students critique these issues and take an action.

It is possible to take an action for overcoming these issues by raising awareness of all the people and giving hope for Earth and the future. One of the most effective ways to react to these problems is to give education from the perspective of ecopedagogy “the pedagogy of the Earth” (Gadotti, 2005, p.240). It can create a critical perspective for the students to critique the environmental problems all the livings are facing nowadays. Analyzing ecopedagogy in terms of education is a critical approach to classroom instruction about the connections between social and environmental problems (Misiaszek, 2015). Misiaszek (2015) states that Environmental Pedagogy involves both environmental education and sustainable development whose approaches are partly non-critical, ecopedagogy focuses on a critical approach. More ecopedagogically conscious students can be raised with a curricular approach and it can be effective for the students to become planetary citizens by looking from an ecological point of view (Godotti, 2005). Burton (2020) states that ecopedagogy is a relatively new concept, having ties to previous efforts to promote awareness and change global culture, such as The Earth Charter (2000). Earth Charter is a manifesto containing sixteen ideas (see Appendix 1) that serve as the foundation for a global movement. When you put it into practice in your workplace, school, or community, you are putting your awareness into action to help all life on Earth succeed. It serves as an ethical organization for efforts aimed at creating a more equitable, sustainable, and peaceful world in the twenty-first century. It expresses a global interdependence and shared responsibility philosophy. It presents a hopeful vision and a call to action (“Earth Charter”, 2000). It can be said that Earth Charter principles (respect to all diversities, compassion, democratic societies, so on) are a cornerstone of ecopedagogical education therefore these principles can be predicated on the curriculums. If it is claimed that the curriculum of an educational institution, it can be analyzed whether the curriculum includes these principles or not. This study follows this line by analyzing relevant themes of English lesson curriculums to determine if the curriculum is ready from an ecopedagogical perspective. Misiaszek (2015) indicates that at all levels and in all disciplines, problem-solving and dialogical teaching methods must be used in environmental education. All subjects in a curriculum should include ecopedagogy and global citizenship. This necessitates not just a change in the substance taught, but also in the way it is delivered. All fields' curricula should be redesigned to include ecopedagogical teachings. This necessitates critical pedagogical development and a deeper socio-environmental awareness of teachers of various specialties. Grigorov (2012) “We, as educators, play an important historical role in our civilizations! Education as a humane organizational force must be rethought and renewed to generate new ecological, sustainable, and social futures” (p.17). In this case, it is fundamental for the educators to take responsibility to create awareness and praxis, they must not only teach for the exams but also make the students question planetary problems because they are directly in our life. If the students are the future, they need to scrutinize these issues.

When some available research is analyzed, there is some done about ecopedagogy. For example, one research conducted on ecology and social studies with 8th-grade students was done by Atmaca (2015). Also, another study about environmental problems with participating of high school students aims to analyze the attitudes of the high school students, (Kutay, 2019), another study on Teaching English to Speakers of Other Languages (TESOL) as handled to analyze content curriculum by focusing on climate science (Goulah, 2017), and a study related to the teachers' perspectives on ecopedagogy with a holistic approach was done with the teacher attitudes and opinions on ecopedagogy (Berberoğlu, 2015). Additionally, a master thesis on the impacts of ecopedagogy on the curriculum of the high schools for all the lessons in terms of Earth Charter principles (Burton, 2019) even if this research partly includes English Language Arts curriculums, there is not sufficient research carried on ecopedagogy in the curriculums of English lessons. Therefore, there must be some enlightening research to arrange the curriculums in Turkey and all over the world. It shows that there is a gap in the literature as there is no research on the place of ecopedagogy in English lesson curriculums in Turkey.

Ecopedagogy in High School Curriculum

Board of Education and Discipline has published new Curriculum Renewal and Change Studies. When this document is analyzed, new curriculum presents ecopedagogical approach to English lessons for high schools. There are some purposes of the Board of Education and Discipline shows what changes have done related to ecopedagogy below:

- Recognizing and appreciating social traditions, cultural elements, language diversity under the heading of Communication in Foreign Languages (Talim ve Terbiye Kurulu Başkanlığı, 2017, p. 25).
- The root values intended to be passed on to students through curriculums are justice, friendship, honesty, self-control, patience, respect, love, responsibility, patriotism, charity under the heading of Main Interventions in Curriculums (Talim ve Terbiye Kurulu Başkanlığı, 2017, p. 8).

Additionally, with the renewed curriculums, the basic qualifications and skills aimed at bringing students are given jointly for all disciplines. These competencies and skills are directly or indirectly associated with the achievements and/or explanations of disciplines in curriculums. The so-called 21st century skills, which are expected to be available to graduates of the new century, have also been considered in the configuration of gains and explanations of achievements (Talim Terbiye Kurulu Başkanlığı, 2017). It proves that the curriculum was prepared in a cross curricular way. For this reason, it is possible to associate curriculums of different lessons with each other. When "Democracy and Human Rights" lesson's curriculum is analyzed, there are lots of aims overlapped with ecopedagogy. General concepts related to human rights and freedoms according to the curriculum of Democracy and

Human Rights: human rights, equality, freedom, ethics, and responsibility (MEB, 2013). These concepts are directly linked to ecopedagogy, and they can shed light on whether the curriculum of English include ecopedagogical concepts needfully. Furthermore, it is claimed under the heading of Ethics and Values Education that the key values that should be transferred to the learners in line with the learning outcomes are friendship, justice, honesty, self-control, patience, respect, love, responsibility, patriotism, and altruism. However, these values should not be considered as a separate entity. They should be embedded into the themes and topics of the syllabi. However, these values should not be considered as a separate entity. They should be embedded into the themes and topics of the syllabi (MEB, 2018, p. 9). In the books, the soul of program must be reflected; thereby, this paper analyzes whether the relevant units of 9th and 12th grade English books represent ecopedagogy in a proper way. The reason why 9th and 12th grades were chosen for this study is to determine whether there is any differentiation on the themes and goals in the grades including first and last high school years for the students.

By including ecopedagogical features in the relevant units, it is supposed to create awareness and give appropriate knowledge about ecology for the students. Some main components are presented in Appendix 1 (see Appendix 1) (“Earth Charter”, 2000). For analyzing English lessons in curriculums of public high schools, it is fruitful to analyze whether these components are included in the curriculums because these components consist of almost all the ecopedagogical needs to raise awareness for the students. A similar study was done by Burton (2019) also analyses the curriculums of Manitoba high school to determine the place of ecology in all the lessons. For this analysis, he profits from a chart consisting of some codes such as earth, humanity, world, nature, peace, soil, water, environment, population, pollution, etc. and he implements the frequency of usage of the codes in the curriculum for all lessons. Similarly, this study is conducted on whether these codes are included in the units in the curriculums and how frequently they are used. However, this study presents the usage of ecopedagogy only for English lessons. Consequently, the study aims to determine the place of ecopedagogy in the relevant units named Human in Nature (Theme 4, 9th grade) and Alternative Energy (Theme 8, 12th grade) of the curriculums (see Appendix 2) for English lessons constituted by the Ministry of National Education in Turkey.

MATERIALS and METHODS

This study employs a qualitative method as Creswell (2013) stated debating the study's sample and general data gathering and recording techniques is part of the qualitative method. It delves deeper into the steps of data analysis, as well as how the data is presented, interpreting it, confirming it, and determining the study's possible outcomes. In this research, these steps of the qualitative method are used in terms of data collection, data recording, and analysis. For this reason, to evaluate the frequency of graphic displays, the author used a quantitative method. This research was handled by analyzing English books named High School 9 Grade Relearn Student’s Book by Karamil, and Birincioğlu- Kaldar

(2021), and Count Me In 12 Student's Book edited by Kömür (2019). Also, its reliability was measured by repeating the coding analysis after 2 months and the findings were accepted as reliable. The research questions are presented below:

1. What ecopedagogical features mentioned by the Earth Charter (2000) are frequently used in the activities of the relevant units?
2. To what extent do the outcomes of the relevant themes in the books for 9th and 12th grades coincide with each other?

Data Collection Tools

In this study, the author benefited from the Data Chart (see Appendix 3) used in the study of Burton (2019). In this Data Chart, one can find 51 codes measuring the place of ecopedagogy, adapted from Earth Charter (2000). In Earth Charter (2000), there are 16 principles, and they create the source of the codes in Burton (2019)'s study. These 16 components are "independence of all life, love & responsibilities, democracy & freedom, justice across generations, protect earth's diversity, prevent ecological harm, sustainable lifestyles, share knowledge, eradicate poverty, equitable human development, gender equality & equity, dignity, inclusion & well-being, transparency & participation, integrate values into education, respect all living beings, and nonviolence & peace" ("Earth Charter", 2000, Preamble section). In this way, this Data Chart helped to explore the usage of ecopedagogy in English lessons of 9th and 12th grades in public high schools. The data was collected through document analysis with the relevant activities in each book. The reason for using document analysis is to analyze the curriculums of the relevant parts in English lessons of public high schools.

Data Analysis

The qualitative data was analyzed via doing a content analysis to determine the extent to which units included ecopedagogy with the ideas of the Data Chart codes are supported, ignored, or contradicted in the activities evaluated four skills in the English books for high schools as the inspected activities were indicated in Table 1. The quantitative data was analyzed via descriptive content analysis (SPSS 21); therefore, the findings were presented with frequency graphic displays.

Table 1.Textual Analysis of the Relevant Units of 9th and 12th grade Books

Four Skills	9 th Grade Book	12 th Grade Book
Reading	“Warm up activity” page 46 “Reading Time: Are people born with different abilities?” page 50 “Reading Time: What can we do to prevent natural disasters?” page 53 “Reading activity” page 54	“A Life Devoted to Science and Technology” page 77 “Analyze the text to respond to the questions” page 78 “Complaint letter” page 80 “Read the first part of their conversation and discuss” page 81 “Complaints and solution offer” page 82 “Reading dialogue” page 83 “Reading text on alternative energy on TV” page 84
Writing	“Warm up activity” page 46 “Writing on Track 14” page 47 “What can / cannot they do? On Track 14” page 48 “Writing Time: write about a person with different / unusual abilities” page 51 “Writing on Track 16” page 52 “Write a short paragraph about love for nature” page 55	“Noting down the solutions to the given problems of excessive energy consumption. Typescript 8.1” page 76 “Writing about the passage on A Life Devoted to Science and Technology” page 77 “Analyze the text to respond to the questions” page 78 “Write a letter of complaint about an environmental problem” page 81
Listening	“Track 14” page 47 “Listening Time: What does a zookeeper do? Track 16” page 52	“Noting down the solutions to the given problems of excessive energy consumption. Typescript 8.1” page 76
Speaking	“Ask and answer about your daily activities” page 48	“Discuss how they may be related to environmental solutions” page 78 “Read the first part of their conversation and discuss” page 81

RESULTS and DISCUSSION

There are two different figures showing two different themes “Human in Nature” and “Alternative Energy” in English student’s books.

RQ 1. What ecopedagogical features mentioned by the Earth Charter (2000) are frequently used in the activities of the relevant units?

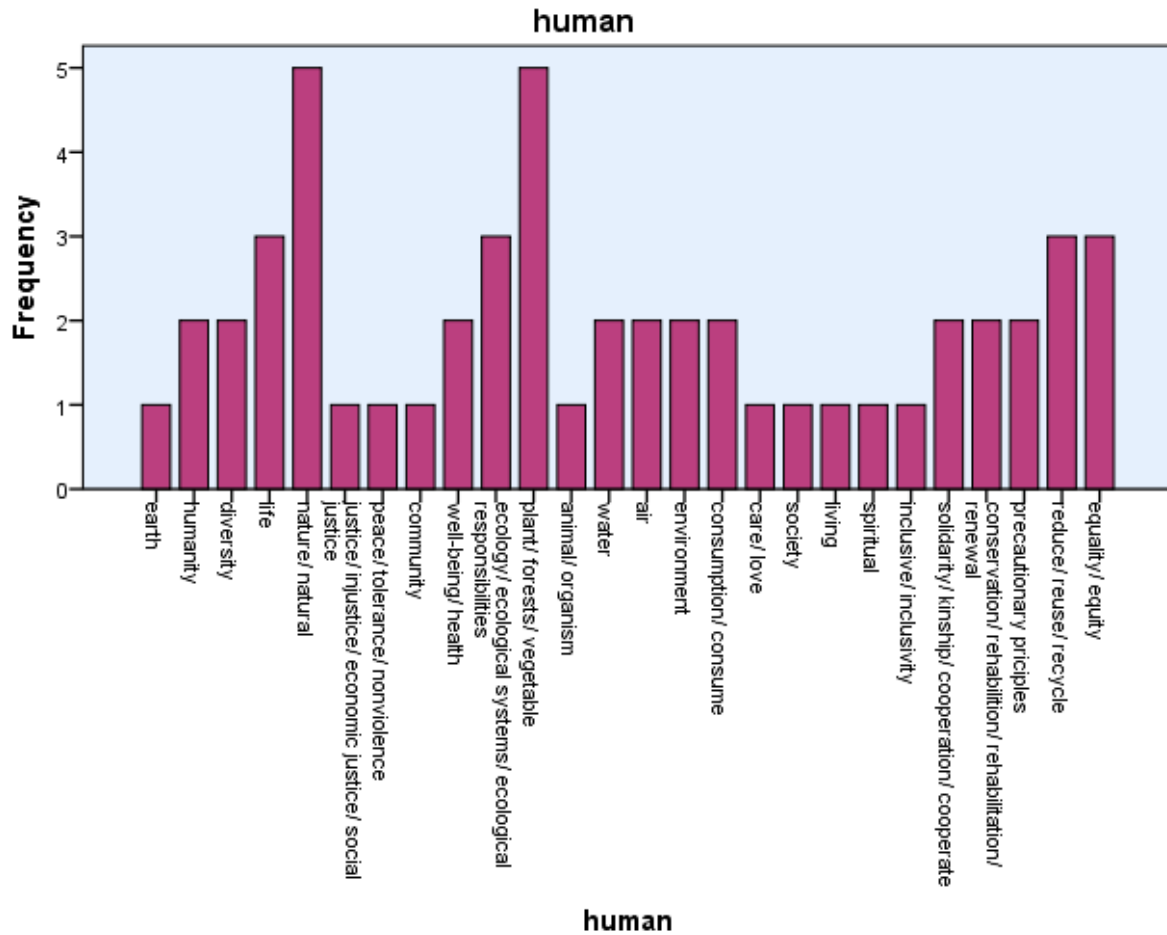


Figure 1. Grade 9 frequency of codes in human in nature

Figure 1 presents the frequency of the ecopedagogy codes, prepared by Burton (2019) by adapting from Earth Charter (2000), in Theme 4 (Human in Nature) 9th grade English books written by Karamil, and Birincioğlu- Kaldar (2021). There are just 29 codes that appear, and it means 22 codes (see Appendix 3) are not mentioned in Human in Nature. These unnamed codes are World/ planet, culture, humane/ human development, human rights/ rights, resilience, biosphere/ ecosystem, responsibility, soil, global, poverty, population, security, democracy, political/ government, local, ethics/ unethical, sustainable, dignity/ respect, action/ praxis, wild, endangered species, fossil fuels, pollution/ toxic, energy, and gender. The mentioned codes frequency is totally 52, earth (1), humanity (2), diversity (2), life (3), nature/ natural (5), justice/ injustice/ economic justice/ social justice (1), peace/ tolerance/ nonviolence (1), community (1), well-being/ health (2), ecology/ ecological systems/ ecological responsibilities (3), plant/ forests/ vegetable (5), animal/ organism (1), water (2), air (2), environment (2), consumption/ consume (2), care/ love (1), society (1), living (1), spiritual (1), inclusive/ inclusivity (1), solidarity/ kinship/ cooperation/ cooperate (2), conservation/ rehabilitation/ rehabilitation/ renewal (2), precautionary principles (2), reduce/ reuse/ recycle (3), equality/ equity (3) involved in Burton (2019)'s

Data Chart (see Appendix 3). According to the findings of Figure 1, the most frequently used codes are the codes about soft problems on nature, environment, and soft solutions as what reduces them. However, critical ones such as justice, peace, community and so on are just used once or not mentioned such as democracy, human development, rights, sustainability, etc. It can be claimed that the mentioned codes are in sufficient for the students to take an action.

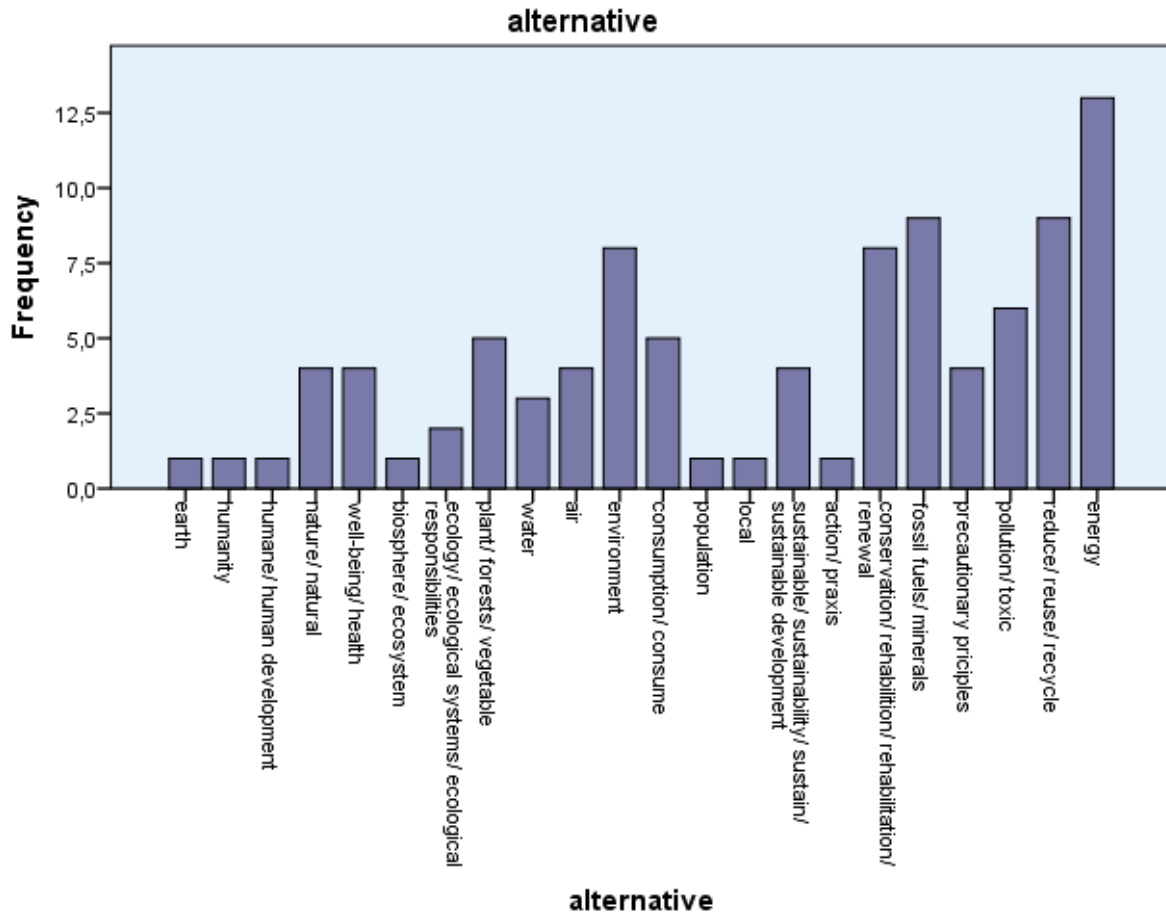


Figure 2. Grade 12 frequency of codes in alternative energy

Figure 2 shows the frequency of the ecopedagogy codes (see Appendix 3) in Theme 8 (Alternative Energy) of the 12th grade English book edited by Kömür (2019). According to Figure 2, the total number of mentioned codes is 95 and 22 out of them are used in the theme, Alternative Energy. It means 29 codes are absent in this unit and they are World/ planet, diversity, culture, life, human rights/ rights, justice/ injustice/ economic justice/ social justice, peace/ tolerance/ nonviolence, community, resilience, responsibility, animal/ organism, soil, global, poverty, security, compassion/ care/ love, society, democracy, living, political/ government, spiritual, inclusive/ inclusivity, solidarity/ cooperation, ethics/ unethical, dignity/ respect, wild, endangered species/ species, equality/ equity, and gender. The mentioned codes frequency is totally 95, and they are earth (1), humanity (1), humane/ human

development (1), nature/ natural (4), well-being/ health (4), biosphere/ ecosystem (1), ecology/ ecological systems/ ecological responsibilities (2), plant/ forests/ vegetable (5), water (3), air (4), environment (8), consumption/ consume (5), population (1), local (1), sustainable/ sustainability/ sustain/ sustainable development (4), action/ praxis (1), conservation/ rehabilitation/ rehabilitation/ renewal (8), fossil fuels/ minerals (9), precautionary principles (4), pollution/ toxic (6), reduce/ reuse/ recycle (9), and energy (13) involved in Burton (2019)'s Data Chart (see Appendix 3). In the light of these results, the most repeated codes are the terms that should be already used under the name of the Theme, Alternative Energy such as energy, fossil fuels, environment, pollution, etc. However, ecopedagogy is an umbrella term including more than the mentioned codes in the book. There must be some terms such as responsibility, political, cooperation, respect, and more. Nevertheless, it is partly satisfactory in terms of the theme involving humane/ humane development, ecological responsibilities, sustainable development, and action/ praxis even if some of them have been mentioned only once such as responsibilities and action/ praxis.

RQ 2. To what extent do the outcomes of the relevant themes in the books for 9th and 12th grades coincide with each other?



Figure 3. Frequency of overlapping outcomes of the relevant units for both of 9th and 12th grades

Figure 3 presents the frequency of the ecopedagogical terms used in the 9th and 12th grade English books. In the light of this figure, it is obvious that plant is the most mentioned ecopedagogical term and the following one is earth/ land in both books. Other terms humanity, nature/ natural, ecology and water were not used at the same frequency; however, their frequencies are so close to each other. It can be inferred that the outcomes do not coincide with each other at all, although the units are prepared on the topics related to ecopedagogy. The number of the overlapping terms is not noteworthy since Earth Charter includes 51 terms associated with ecopedagogy and there are just 2 terms coincided with each other among the 51 terms in the chart.

According to two themes presented with ecopedagogical concerns to the students, it is understood from the findings that they must be restructured. Except for including the codes in the data chart used

for this study. Campbell and Padgett (2020) claim that it is critical to express respectful curiosity about others' histories and lived experiences; openly exchange ideas and beliefs; build empathy, honor, awareness, and relation; observe diversification in sociocultural, political, and historical contexts instead of superficial or oversimplified ways; acknowledge prejudices and connect to individual people rather than leaders of groups and acknowledge that power and privilege inflict harm. As Campbell and Padgett explained creating awareness and consciousness for the students is crucial in the curriculum. In this case curriculums must be redesigned with the help of environmental curriculum theory. Payne (2015) highlighted this theory with the words; the environmental curriculum theory was just one of several issue-based curriculum themes pioneered by distinct curriculum research groups at Deakin University, including physical and health education. There was genuine energy or 'education revolution' going on, and I was able to participate in it. Furthermore, I understood that this curricula innovation emphasized substantial links between education and research progress. This theory may be useful for improving several ecopedagogic topics in the textbooks such as “Alternative Energy” theme in 12th grades. It is also obvious that in both themes, there is no part related to democracy and rights even if it is a vital point for ecopedagogy. According to Payne (2015), At least one of the 'democracies' of the bodily movement took place in a variety of indoor and outdoor environments that sustainable and ecologically engaged students in an inter/transdisciplinary democracy/ecology of significance and knowledge creation across the silos of literacy, numeracy, artistic, and scientific expertise, and learning.

In these books, there are some problematic situations in the texts or listening tracks that must be changed. In the 9th grade English book (Karamil & Birincioğlu- Kaldar, 2021), for Human in Nature, there is a listening activity on “Zookeeper”, in this part a zookeeper tells her experiences in the zoo as how they keep the animals there, etc. However, the animals kept in the zoo cannot live in their habitat, in nature such as forests. They must feel such as living in the prison. How nice can it be to prevent them to live in their natural habitat? This topic should not be present in the books as the aim is to encourage the students on keeping the animals in the prison with material concerns. It is against ecopedagogical concerns such as peace, human responsibilities, animals, ecosystem, care/ compassion/ love, justice, ethics, endangered species, respect, etc. Relatedly, Zahoor and Janjua (2020) claimed humans are shown as authentic, successful, knowledgeable, and so on in textbooks, whereas nature is portrayed as a risky, wild, or dangerous other that must be tamed. The animals are largely the aim of the human actor's material process, while being in the agentive situation of behavioral and material processes, the animals are more likely to follow their human master's orders (Zahoor & Janjua, 2020). Obviously, these themes were created in an anthropocentric way; therefore, they are just pseudo- ecologic by giving all the natural or ecological topics with human benefit.

In the 12th grade English book, the theme named Alternative Energy was prepared solution oriented. It means the book focuses on both problems and solutions such as reducing the problems by

involving precautional principles also there is one part that includes action/ praxis. There are some exercises on writing a letter to the local authority to complain about environmental problems around the students. This part can be helpful for the students to take any action against an ecological problem. Payne (2015) stated that in education, as well as environmental education and research, qualifications and experience are not well understood. Individually, collectively, and more recently, globally, environmental education notions have consistently emphasized the importance of experiential and multidisciplinary inquiry into real-world environmental issue and social justice issue identity, democracy consideration about them, political critiques of traditional views of thought and practice, affiliated goal setting and reconstruction, and reasonable action. There is also another part consisting of some banners on express complaints or solutions.

Discussion and Conclusion

Consequently, when these two themes of the two books are analyzed, it is obvious that in the 9th grade English book, the relevant theme includes some of the codes of the Data Chart prepared by Burton (2019) adapted from Earth Charter (2000). It means this book can be improved by editing some exercises such as “Zookeeper” and including more ecopedagogical principles such as critiquing some ecological issues and taking an action. 12th-grade book (Kömür, 2019) is a little more satisfying since no text or listening activity gives conflicting ideas against ecopedagogy. However, it can be improved by adding more parts on ecopedagogical concerns such as the principles in the data chart. All in all, for both books, the absent principles in the findings can be taken into consideration by adding more pedagogical perspective to Turkish public high schools’ curricula, it may be possible to increase the quality of education in public high schools and to bring ecological awareness to students in Turkey. For further studies on this topic, I would like to indicate that the limit of this study has been by analyzing just 9th and 12th grades books. For this reason, it is recommended that the content can be expanded by analyzing the relevant themes of all grades. This study has been handled in terms of analyzing the textbooks prepared for the freshmen and seniors of Turkish high schools from an ecopedagogical perspective. However, future studies may embrace the other grades as well to reach larger results by supporting or enlarging this study.

REFERENCES

- Atmaca, Y. (2015). Ortaokul 5, 6 ve 7. sınıf sosyal bilgiler dersinde ekoloji konularına ilişkin kazanımların gerçekleşme düzeyinin çeşitli değişkenler açısından incelenmesi [Unpublished master’s thesis dissertation], Adıyaman Üniversitesi
- Burton, W. (2019). Measuring the prevalence of ecopedagogy in the manitoba senior years curriculum: a critical content analysis. *Canadian Journal for New Scholars in Education/Revue canadienne des jeunes chercheurs et chercheurs en éducation*, 10(2).

- Campbell, A., & Padgett, G. (2020). Ecopedagogy in the fourth-grade classroom: Reflections on implementing a multidisciplinary STEAM Program. *The STEAM Journal*, 4(2), Article 7. doi: 10.5642/steam.20200402.07
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approach*. SAGE Publications, Inc.
- Freire, P. (2000). *Pedagogy of the oppressed*. Continuum
- Gadotti, M. (2005). *Pedagogy of the earth and the culture of sustainability*. Revista Lusófona de Educação.
- Goleman, S. K. (Ed.). (2013). International handbook of ecopedagogy for students. Retrieved January 17, 2013, from https://www.researchgate.net/publication/330117855_International_Handbook_Of_Ecopedagogy_for_Students_Educators_Parents_A_Project_for_a_New_Eco-Sustainable_Civilization
- Goulah, J. (2017). Research in English for speakers of other languages. *The TESOL Encyclopedia of English Language Teaching*, 1–7. <https://doi.org/10.1002/9781118784235.eelt0227>
- Grigorov, S. K. (Ed.). (2012). International handbook of ecopedagogy for students, educators & Parents. <http://bslde.org/>.
- Harvey, D. (2005). *A brief history of neoliberalism*. Oxford University Press. Retrieved from <https://www.proglocode.unam.mx/sites/proglocode.unam.mx/files/ABriefHistoryNeoliberalism.pdf> on 20.05.2023.
- Kahn, R. V. (2010). *Critical Pedagogy, ecoliteracy, & planetary crisis: The Ecopedagogy movement*. Peter Lang.
- Karamil, L., & Birincioğlu Kaldar, E. (2021). *High school high school 9 grade relearn!*. Pasifik Yayınları.
- Kutay, Y. (2019). Attitudes of high school students towards environmental problems: Kayser Sample. <https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=1T7pEkvnAhpApRS5NorCPw&no=oh14jGWm8CJOTFjD8F3BAw>
- MEB (2013). *Ortaöğretim demokrasi ve insan hakları dersi öğretim programı*. Ankara: Talim ve Terbiye Kurulu Başkanlığı. Retrieved April 5, 2022, from <http://mufredat.meb.gov.tr/ProgramDetay.aspx?PID=1106>
- MEB (2018). *Ortaöğretim İngilizce dersi (9, 10, 11 ve 12. sınıflar) öğretim programı*. Retrieved April 5, 2021, from <http://mufredat.meb.gov.tr/ProgramDetay.aspx?PID=342>
- Misiaszek, G. W. (2015). Ecopedagogy and citizenship in the age of globalisation: Connections between environmental and Global Citizenship Education to save the planet. *European Journal of Education*, 50(3), 280–292. <https://doi.org/10.1111/ejed.12138>
- Payne, P. G. (2015). Critical curriculum theory and slow ecopedagogical activism. *Australian Journal of Environmental Education*, 31(2), 165–193. <https://doi.org/10.1017/aee.2015.32>
- 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>

Appendix 1: The Earth Charter (“Earth Charter”, 2000, Preamble section)

PRINCIPLES

I. RESPECT AND CARE FOR THE COMMUNITY OF LIFE

1. Respect Earth and life in all its diversity.

- a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings.
- b. Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity.

2. Care for the community of life with understanding, compassion, and love.

- a. Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people.
- b. Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.

3. Build democratic societies that are just, participatory, sustainable, and peaceful.

- a. Ensure that communities at all levels guarantee human rights and fundamental freedoms and provide everyone an opportunity to realize his or her full potential.
- b. Promote social and economic justice, enabling all to achieve a secure and meaningful livelihood that is ecologically responsible.

4. Secure Earth's bounty and beauty for present and future generations.

- a. Recognize that the freedom of action of each generation is qualified by the needs of future generations.
- b. Transmit to future generations values, traditions, and institutions that support the long-term flourishing of Earth's human and ecological communities.

In order to fulfill these four broad commitments, it is necessary to:

II. ECOLOGICAL INTEGRITY

5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.

- a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives.
- b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage.
- c. Promote the recovery of endangered species and ecosystems.
- d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms.
- e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems.
- f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.

6. Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach.

- a. Take action to avoid the possibility of serious or irreversible environmental harm even when scientific knowledge is incomplete or inconclusive.
- b. Place the burden of proof on those who argue that a proposed activity will not cause significant harm, and make the responsible parties liable for environmental harm.
- c. Ensure that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities.
- d. Prevent pollution of any part of the environment and allow no build-up of radioactive, toxic, or other hazardous substances.
- e. Avoid military activities damaging to the environment.

7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being.

- a. Reduce, reuse, and recycle the materials used in production and consumption systems, and ensure that residual waste can be assimilated by ecological systems.
- b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind.
- c. Promote the development, adoption, and equitable transfer of environmentally sound technologies.
- d. Internalize the full environmental and social costs of goods and services in the selling price, and enable consumers to identify products that meet the highest social and environmental standards.
- e. Ensure universal access to health care that fosters reproductive health and responsible reproduction.
- f. Adopt lifestyles that emphasize the quality of life and material sufficiency in a finite world.

8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired.

- a. Support international scientific and technical cooperation on sustainability, with special attention to the needs of developing nations.
- b. Recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being.
- c. Ensure that information of vital importance to human health and environmental protection, including genetic information, remains available in the public domain.

III. SOCIAL AND ECONOMIC JUSTICE

9. Eradicate poverty as an ethical, social, and environmental imperative.

- a. Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required.
- b. Empower every human being with the education and resources to secure a sustainable livelihood, and provide social security and safety nets for those who are unable to support themselves.
- c. Recognize the ignored, protect the vulnerable, serve those who suffer, and enable them to develop their capacities and to pursue their aspirations.

10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner.

- a. Promote the equitable distribution of wealth within nations and among nations.
- b. Enhance the intellectual, financial, technical, and social resources of developing nations, and relieve them of onerous international debt.
- c. Ensure that all trade supports sustainable resource use, environmental protection, and progressive labor standards.
- d. Require multinational corporations and international financial organizations to act transparently in the public good, and hold them accountable for the consequences of their activities.

11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.

- a. Secure the human rights of women and girls and end all violence against them.
- b. Promote the active participation of women in all aspects of economic, political, civil, social, and cultural life as full and equal partners, decision makers, leaders, and beneficiaries.
- c. Strengthen families and ensure the safety and loving nurture of all family members.

12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities.

- a. Eliminate discrimination in all its forms, such as that based on race, color, sex, sexual orientation, religion, language, and national, ethnic or social origin.
- b. Affirm the right of indigenous peoples to their spirituality, knowledge, lands and resources and to their related practice of sustainable livelihoods.
- c. Honor and support the young people of our communities, enabling them to fulfill their essential role in creating sustainable societies.
- d. Protect and restore outstanding places of cultural and spiritual significance.

IV. DEMOCRACY, NONVIOLENCE, AND PEACE

- 13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.**
- a. Uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest.
 - b. Support local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making.
 - c. Protect the rights to freedom of opinion, expression, peaceful assembly, association, and dissent.
 - d. Institute effective and efficient access to administrative and independent judicial procedures, including remedies and redress for environmental harm and the threat of such harm.
 - e. Eliminate corruption in all public and private institutions.
 - f. Strengthen local communities, enabling them to care for their environments, and assign environmental responsibilities to the levels of government where they can be carried out most effectively.
- 14. Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life.**
- a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development.
 - b. Promote the contribution of the arts and humanities as well as the sciences in sustainability education.
 - c. Enhance the role of the mass media in raising awareness of ecological and social challenges.
 - d. Recognize the importance of moral and spiritual education for sustainable living.
- 15. Treat all living beings with respect and consideration.**
- a. Prevent cruelty to animals kept in human societies and protect them from suffering.
 - b. Protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged, or avoidable suffering.
 - c. Avoid or eliminate to the full extent possible the taking or destruction of non-targeted species.
- 16. Promote a culture of tolerance, nonviolence, and peace.**
- a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations.
 - b. Implement comprehensive strategies to prevent violent conflict and use collaborative problem solving to manage and resolve environmental conflicts and other disputes.
 - c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration.
 - d. Eliminate nuclear, biological, and toxic weapons and other weapons of mass destruction.
 - e. Ensure that the use of orbital and outer space supports environmental protection and peace.
 - f. Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.

Appendix 2: Curriculums of 9th and 12th grades for English Subject

9th Grade

THEME 4: HUMAN IN NATURE		
Functions and Useful Language	Language Skills and Learning Outcomes	Suggested Materials and Tasks
<p>1. Describing daily routines 2. Talking about abilities 3. Talking about frequencies of activities</p> <p>I wake up at seven a.m. every morning when I go camping.</p> <p>He runs a couple of miles every morning to clear his head.</p> <p>Mum grows organic vegetables in her garden.</p> <p>We don't stay in a tent during our summer holidays.</p> <p>-How often do you go trekking? -Sometimes. -Once a week.</p> <p>Robert can cook delicious meals but I can't.</p> <p>How long can you survive without water? I am not sure but I think one or two days.</p> <p>What can Sheila do?</p> <p>What can we do to prevent natural disasters?</p> <p>My friends help the victims/casualties of natural disaster.</p>	<p>Listening E9.4.L1. Students will be able to identify the subject of a text with the help of familiar words. E9.4.L2. Students will be able to identify time expressions of daily routines.</p> <p>Pronunciation E9.4.P1. Students will be able to pronounce /s/ , /z/ and / ɪz/ sounds. Eg. runs /rʌns/ brings /brɪŋz/ watches /wɒtʃɪz/</p> <p>Speaking E9.4.S1. Students will be able to talk about their abilities. E9.4.S2. Students will be able to talk about their daily activities and the frequencies of those activities.</p> <p>Reading E9.4.R1. Students will be able to identify specific information in a simple written material such as short newspaper articles on effects of natural events. E9.4.R2. Students will be able to scan reading passages about people to find out different/unusual abilities.</p> <p>Writing E9.4.W1. Students will be able to write about their friend's daily life and the frequencies of their activities. E9.4.W2. Students will be able to write a short paragraph about love for nature.</p>	<p>Magazines</p> <p>Newspapers</p> <p>Internet websites</p> <p>Graphics/Charts</p> <p>TV news broadcasts</p> <p>Monologues</p> <p>Jigsaw</p> <p>Informative texts</p> <p>DISCUSSION TIME</p> <p>TECH PACK</p> <p>E-PORTFOLIO ENTRY</p> <p>VIDEO BLOG ENTRY</p>

12th Grade

THEME 8: ALTERNATIVE ENERGY		
Functions and Useful Language	Language Skills and Learning Outcomes	Suggested Materials and Tasks
<p>1. Describing problems 2. Making complaints 3. Offering solutions</p> <p>Sorry to bother you, but I think there's a problem that requires an urgent solution.</p> <p>We'd like you to...</p> <p>I think we should...</p> <p>In order to solve this problem we must first/ initially....</p> <p>Another way of looking at this problem is...</p> <p>The solution to this problem is...</p> <p>Don't get me wrong, but I think we should...</p> <p>...was a result of...</p> <p>Maybe you forgot to...</p> <p>I think you might have forgotten to...</p>	<p>Listening E12.8.L1. Students will be able to note down the solutions to the problems of excessive energy consumption around the world in a recorded text.</p> <p>Pronunciation E12.8.P1. Students will be able to use intonation in a sentence appropriately. Eg. I think we're completely lost. (falling intonation)</p> <p>Speaking E12.8.S1. Students will be able to make complaints and offer solutions to environmental /energy problems. E12.8.S2. Students will be able to participate in an informal debate about alternative energy in the future.</p> <p>Reading E12.8.R1. Students will be able to summarize a reading passage about alternative energy. E12.8.R2. Students will be able to analyze a reading passage to find out solutions to environmental problems.</p> <p>Writing E12.8.W1. Students will be able to write an email/a letter of complaint to a local authority about an environmental problem to suggest solutions. E12.8.W2. Students will be able to write their opinions about the usage of alternative energy.</p>	<p>Conversations</p> <p>Roleplay/Simulation</p> <p>Summarizing</p> <p>Video project</p> <p>Interviews</p> <p>Outdoor activities</p> <p>Posters (e.g. wildlife protection, public health)</p> <p>E-mails</p> <p>Environmental Project (e.g. Describing animal habitats)</p> <p>IDIOMS/PROVERBS OF THE WEEK</p> <p>DISCUSSION TIME</p> <p>TECH PACK</p> <p>E-PORTFOLIO ENTRY</p> <p>VIDEO BLOG ENTRY</p>

Appendix 3: Content Analysis Data Chart (Burton, 2019)

	“Human in Nature” 9 th Grade	“Alternative Energy” 12 th Grade
Earth/ Land	1	1
Humanity	2	1
World/planet	0	0
Diversity	2	0
Culture	0	0
Life	3	0
Humane/human development	0	1
Nature/natural	5	4
Human rights/rights	0	0
Justice/injustice/economic justice/ social justice	1	0
Peace/tolerance/non-violence	1	0
Community/communities	1	0
Resilience	0	0
Well-being/health	2	4
Biosphere/ecosystem	0	1
Ecology/ecological systems/ecological responsibility	3	2
Responsibility	0	0
Plant/plants/forests/vegetable	5	5
Animal/organism	1	0
Soil	0	0
Water	2	3
Air	2	4
Global	0	0
Environment/environmental	2	8
Consumption/consume	2	5
Poverty	0	0
Population	0	1
Security	0	0
Care/compassion/love	1	0
Society	1	0
Democratic/democracy	0	0
Living	1	0
Political/politics/government/governance	0	0
Spiritual	1	0
Inclusive/inclusivity	1	0
Local/locally	0	1
Solidarity/kinship/cooperation/cooperate	2	0
Ethics/ethical/unethical	0	0
Sustainable/sustainability/sustain/sustainable development	0	4
Dignity/respect	0	0
Action/praxis	0	1
Conservation/restoration/rehabilitation/renewal	2	8
Wild	0	0
Endangered species/species	0	0
Minerals/fossil fuels	0	9
Precautionary principle	2	4
Pollution/toxic	0	6
Reduce/reuse/recycle	3	9
Energy	0	13
Equality/equity	3	0
Gender	0	0
Total	52	95