

# An Intervention for Environmental Awareness: Ecopedagogy-Based Outdoor Environmental Education

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## Abstract

Recently outdoor education has become an important teaching method in order to increase environmental awareness. The aim of this research is to evaluate the effectiveness of an ecopedagogy-based outdoor environmental education program on the environmental awareness of in-service teachers. The research conducted on analysing the participants' reflective writings at the beginning and end of the program by content analysis. It is found that ecopedagogy-based outdoor environmental education is effective in order to increase environmental awareness and biodiversity awareness of in-service teachers.

**Key Words:** Environment education, outdoor education, ecopedagogy, environmental awareness, case study, teacher education

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## Introduction

The concept of ecopedagogy, which is based on sustainability, holism, and proactivity, is the political and critical side of ecology. Ecopedagogy proposes that schools and curriculums should be enough the needs of sustainable environment and future. (Gadotti, 2010; Kahn, 2010). Curricula based on ecopedagogy helps to overcome anthropocentrism of traditional pedagogy (Gadotti, 2010). According to the anthropocentric view, nature is considered an instrument to supply with human demands, and human is the most powerful species in the world (Barry, 2007). However ecopedagogy has eco-centric view therefore there is not any most powerful species in the world. Every species has

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equal right in order to live like human therefore human cannot use nature lavishly. (Kahn, 2010; Barry, 2007) Briefly, ecopedagogy helps to understand the human- nature relationship (Kahn, 2010).

First and foremost ecopedagogical programs involve new teaching and learning methods, of which one of them is outdoor education (OE) (Gadotti, 2010). OE focuses on first hand experiences (Brody, 2005; Priest, 1986) outside the classroom walls (Donaldson& Donaldson, 1958 in Powers, 2004). Recently OE has become an important part of environmental education (EE) and these terms (EE&OE) have often started to use synonymously (Robinson, 2008). In this perspective ecopedagogy based OE is to aim better understanding of complex environmental relationships and sustainable development (Morgan, Hamilton, Bentley& Myrie, 2009; Dillon, 2003; Brody& Tomkiewicz, 2002). Researchers of this paper think that having knowledge and being aware of environmental problems are important in order to understand complex environmental relationship therefore it is concentrated on environmental awareness (EA) in this research because OE research in other countries (Irwin, 2010 [New Zealand]; Blair, 2008 [Australia]; Thomas, 2005 [Australia]; Preston, 2004 [Australia]; Preston& Griffiths 2004 [Australia]; Lugg& Slattery, 2003 [Australia]; Piller, 2002 [Canada]; Palmberg& Kuru, 2000 [Finland]) especially focus on this theme.

In the second place all these studies research the effectiveness of an OE on EA via qualitative methodology, and they find OE is effective in order increase EA level. As seen above five of the research belong to Australia. Australia is one of the significant countries in terms of OE and Australian outdoor environment education also is based on ecopedagogy (Huckle, 1991). One of the remarkable characteristics of ecopedagogy is to increase EA level (Fien, 1993 in Preston, 2011). Conversely Turkish environmental education system is based on 'education about environment' (Okur, 2012) therefore this education is not effective to raise EA level. The teacher education in Turkey has been supported to teach environmental education within OE since last decade however the research related to OE, and effectiveness of OE on EA are very limited in Turkey.

#### **Literature Review**

Guler (2009) carries out an ecology-based OE at Gala Lake National Park, and Igneada Longoz Forest National Park in Edirne collaboration with Hacettepe University and TUBITAK (The Scientific and Technological Research Council of Turkey) in 2008. 24 in-service teachers attend to the project which is applied for 12 days. The aims of the research are to determine expectations of in-service teachers from the project, to indicate self-efficacy level of EE teaching, and to identify the change of personal opinion about EE. The data is collected by semi-structured interview and analysed by discourse analyses. At the end of the analyses, the participants say that their expectation from project is to gain environmental knowledge, and they have it. They also say they are happy because of their perspective to the world change favourably, they feel more responsible to the nature, and they will share and teach what they have learnt. On the other hand, the participants do not have enough self-efficacy about using OE within a lesson therefore they tend to invite an expert or academician while using OE.

Keles, Uzun and Varnaci-Uzun (2010) carry out an ecology-based OE at Ihlara Valley in Aksaray collaboration with Aksaray University and TUBITAK in 2009. 25 pre-service teachers attend to the project which is applied for 10 days. The aims of the research are to determine environmental awareness, and attitudes of participants by the scales. The scales are applied as pretest- posttest-posttest (after 3 months). At the end of the analyses, it is indicated that the EA level of participants is increased, and environmental attitude is changed favourably.

As seen above only one research examines effectiveness of OE on EA and both research do not mention ecopedagogical perspective. Whereas some research claims the relationship between environmental knowledge- awareness – attitude- behaviour (Barker& Rogers, 2004) therefore EA should not be ignored. The aim of this research is to test effectiveness of an ecopedagogy-based OE programs on EA. Primary and secondary education system of Turkey is changed in 2012, and Turkish Ministry of Education has started to develop a new curriculum after 15 years. If the research supports the effectiveness of OE on EA, then outdoor environmental education might be very popular and common in Turkish education system.

## Methodology

The data for this research is collected via the 109B031 coded TUBITAK project (Ecology in Canakkale and its Suburbs) in 2009. An ecopedagogy-based OE programme which has academic and spiral properties is designed specifically for this research.

### *Program development of the ecopedagogy-based OE*

Firstly the program has spiral characteristic because there are 22 subjects related to ecology. Bruner (1960) states that spiral curriculum is very useful to teach a wide range of knowledge. Secondly Lang (1986 in Tsai, 2006) points out that OE should be prepared within an academic discipline. The aims of an academic program (AP) are to help participants to be a part of knowledge-making process, to gain relative perspectives, to improve cognitive levels, to sense the world as a whole, and to provide knowledge from simple to complex while emphasizing the interrelationship. Awareness belongs to cognitive area so if somebody would like to be aware of a subject, he/she should have knowledge related to the subject. The main idea of an AP is essentially to promote thinking like a scientist, and have analytical thinking therefore people can understand the complex relationship among components of different disciplines and themes (Bird, 2001; McNeil, 1996).

Thirdly the project program is based on four themes: abiotic factors, biotic factors, specific characteristics of area, and human pressure on ecosystem (App 1). Each activity is managed by a lecturer who has PhD degree related to the subject. There are 22 different activities in the project and, correspondingly, 22 lecturers (App 2). The programme is applied sequentially. In other words, knowledge gained from each activity is repeated and connected to the other activities – with the aim participants to observe the interconnectedness of all activities. (Yalcin-Ozdilek, Ozdilek, Okur& Eryaman, 2011)

#### Within ecopedagogical perspective

- Program is designed according to interdisciplinary perspective (Bunderson& Cooper 1997; Piller 2002; Brookes 2004);
- Program is carried out within community in practice with ecologic and social contexts (Preston 2004; Robottom 1987, in Fien & Rawling, 1996).
- Program is based on ontological perspective, of which it means what I can do in order to solve/ prevent environmental problems (Thomashow, 1998; Ward, 1996).
- All activities are carried out as placed-based (Emmons 1997; Piller 2002; Lugg, Slattery 2003; Brookes 2004; Irwin 2010; Harrison 2010) in terms of Canakkale;

And as problem- based (Palmberg, Kuru 2000; Piller 2002) having connection with actual environmental problems.

### *Participant selection*

The participants in the project are in-service teachers, of which it is one of the criteria of TUBITAK. In-service teachers might share their environmental knowledge and experiences with their students and families. Students might also share their acquisitions with their families therefore successive sharing might happen.

The in- service teachers are recruited through an advertisement send to primary and secondary schools' electronic e-mail accounts. Volunteer enrolments to the initial program have to reply to all the questions posted at the project website. The participant teachers are asked to complete an online questionnaire which asked them why they wished to be involved in the project and some demographic information. The participants are selected according to two criteria: One of them is 'not to be joined to

any TUBITAK EE project.' This is a special institutional policy. Teachers can only join once to these projects. The other one is participant essay which explains why they would like to join to this project.

The project proposal program is presented to TUBITAK for 10 days, and two periods. Each period aims to educate 20 in-service teachers who work at different disciplines such as primary school, mathematics, science, literature. 8 of the participants are male and 12 of the participants are female in each period. These 40 participants are divided into two groups randomly.

### *Data collection*

Case study is determined as a research strategy to have a description or test a theory within single settings. Qualitative, quantitative or both data resources might be used in order to have research aims. (Eisenhardt, 1989). Stufflebeam (2001) states that case study is also helpful to enable an examination opportunity for both intended and unforeseen outputs. In this research qualitative data are collected. Hence the project team compares project outputs with expectations of project team. Project team determines project expectations according to TUBITAK's expectations and Fien and Tilbury (1996). Fien and Tilbury (1996), mention 57 different outputs in their report about environmental education of in-service teachers. We compare expectations of TUBITAK and outputs of Fien and Tilbury. According to this comparing the project team determine the project expectations. (Table 1)

Qualitative data are collected by two ways: open-ended questions and observation. Participants' reflective writings are used for the case study on the basis of Hatch's (2002) findings, which claim that the researcher may collect more valid data if the participants are given the option of expressing themselves independently. With this in mind, the open-ended questions are asked in the hope of identifying as clearly as possible the participants' own thoughts. Each question is written on a blank page and it is wanted participants to express themselves independently.

Participants write reflectively twice; at the beginning and end of the project. The questions are "Why did you choose to participate in this project?"; "What is your expectations from participating in this project?" at the beginning of the project and "Was the project up to your expectations?", "How would you rate your satisfaction of the project?" at the end of it.

Furthermore it is established by Vidich (1955) that the application of multiple methodological techniques is crucial to insure a process of triangulation (Morgan et al, 2009). Triangulation promotes validity and reliability of collected data. By this way results may check via double techniques.

One of these techniques is observation (Zanovello, 1999). The researcher might not always be with the participants of project, or participants might show different attitudes when they are alone as opposed to being in the presence of the researcher (Bas & Akturan, 2008). Hence project team do not observe the participants. Participants observe another participants behalf of project team.

Firstly the project team explains aims, process of the program, and responsibilities of participants at the first day. Secondly, after this explanation, randomly each participant draw lots to determine who observes the other in the group however no participant has known each other before enrolling in the project. Thirdly at the end of each day, the participants are asked to fill out an observation form. Four questions are asked in the daily observation forms;

- Which behaviour or attitude did the observed person exhibit in terms of protecting the environment?,

- What was the opinion of the observed person on technology and pollution?,

- How did the observed person define him or herself amongst other living things in nature?,

- What was the opinion of the observed person on the improvement of community awareness?.

All questions are supplemented by asking to all participants to provide at least one example alongside his/her answer.

Finally all participants' essays are entered into the computer and two researchers are coded independently these essays. The coherence of these two evaluations are determined by Cohen's kappa index. This index is used in order to understand the coherence between two or more independent evaluations and it should be at least between 0.60 – 0.70 in order to have satisfactory coherence (Wood, 2007).

Cohen's kappa index is also calculated on SPSS 15 programme. The Cohen's kappa index of this research is 0.65. In other words, the coherence of two researchers is at the satisfactory level.

The researchers coded the essays according to the key words and key ideas of the expectations of the project team and TUBITAK. The expectations of the project are seen at Table 1. The participants' expressions are presented with a coded format. For example '1.20', it means that the participant belongs to the first group, and 20<sup>th</sup> line.

Table 1

The list of project team's expected outcomes from the participants

1.	increase of general knowledge related to the environment
2.	ability to reconstruct own knowledge through analysis and synthesis
3.	ability to present individual and group knowledge through devising activities
4.	ability to distinguish relations between practical knowledge gained with subjects taught
5.	ability to gain knowledge through discussions held with other participants
6.	ability to <i>see</i> the environment from another angle – “ <b>looking and seeing are not the same</b> ”
7.	realization of the fact that humans <b>are not alone</b> in nature
8.	ability to describe and question further the concept of <b>biodiversity</b>
9.	realization of the importance of <b>biodiversity</b>
10.	integration of participants experience of everyday life with the knowledge gained during the project
11.	realization of the need to economize
12.	ability to manipulate everyday patterns in order to lower consumption and waste
13.	realization of the need to avoid behaving egotistically
14.	admiration towards living simply [naturally]
15.	contemplation and discussion on the potential threat of the disappearance of nature
16.	realization of the need to avoid constantly use nature as a source of material wellbeing
17.	ability to formulate own opinions on issues related to nature
18.	realization that the claim of a zero effect on nature by human activity is simply impossible
19.	a passion towards active participation in subjects related to nature and conservation

## Results

The project team determines 20 awareness utterances according to the 40 participants' essays at the end of the research. Especially the first group gives more utterances than the second group (Tbale2). The awareness utterances are named as 'environmental awareness' and 'biodiversity awareness'. None of the themes is determined at the pre-writing essays at both groups while both theme are conversely determined at the post-writings. These results show that the ecopedagogy-based OE is effective in order to gain environmental and biodiversity awareness. Moreover the 6<sup>th</sup> and 7<sup>th</sup> expectations are related to environmental awareness while the 8<sup>th</sup> and 9<sup>th</sup> expectations are related to biodiversity awareness (Table 1).

Table 2

Awareness expressions of participants according to the pre and post writings

Codes	1.Group		2. Group		Total
	Pre-writing	Post- writing	Pre- writing	Post- writing	
1.Environmental awareness	-	7	-	6	13
2. Biodiversity awareness	-	5	-	2	7
<b>Total</b>	0	12	0	8	20

### *Environmental Awareness*

The 7<sup>th</sup> activity of the program is 'Water quality and aquatic organisms', and carried out at the Karamenderes River in Pinarbaşı Village. The participants are divided to five groups. They filter the water river by milk strainer, and catch some invertebrate. They identify the invertebrate at the genus

level by an identification key. The participants also measure some chemical and physical properties of water. 1.10 coded female participant reflects her opinion very remarkably:

*“We firstly learnt ‘ecosystem’ concept by practicing today. I think we learnt a little bit ‘the language of the nature’. ‘Nature’ means a little bit more meaningful for us. I dunked to the spring water my hand at the first time. It was so cold, and nice.*

*And this is the first time I researched in a stream which I ignored until this time, considered it as ‘dirty water’ before. I was disgusting insects till yesterday, today I collected insect, snail, worm by laboratory penset. It was an unpredictable and happy times for me. I won’t look at spiders disgustingly; this is a big development for me...*

*Our time is passing more productive, more enjoyable, and more ‘natural’ here. It is delightful... “*

The 8<sup>th</sup> activity is ‘Forest Ecosystem& Definition of vegetation and types’. The lecturer explains formation of forests according to elevations, and microclimatic properties of them at the Dalak Water. 1.17 coded male participants explain his opinion as:

*“I realized how much the flora which I seems me ‘casual grass’ is important, and they live in special land places. “*

The other interesting reflection comes from 2.13 coded male participant. The participants observe each other during the program. This participant observes 2.8 coded female participant, and mentions ‘Underwater and marine ecology& Diving with tube” activity. The participants have theoretic lesson previous day. They dive with tube almost 3 meters, and observe the underwater life. After diving, the lecturer wants them to observe the coast, and draw all the marine species that they see. 2.8 coded participants finds a starfish during this activity, and 2.13 coded participants reflects own observation as:

*“The day which we dived with tube I observed.....She found a starfish. We started to talk and she said she wanted to kill it. Another participant (I don’t remember his name) said that it was an endemic species. I am impressed because of she released it to the sea. If she kills it, I would be sad. Honestly I impressed because of this lady’s environmental awareness.”*

The last activity of the project is named ‘Our Ecological Footprints: How We Used to Live a Century Ago’. General examples are given on environmental changes. *Caretta caretta* sea turtles is one of the subjects of this activity. 2.18 coded female participant’s reflection gives a good example of this theme.

*“Watching the ovulation of *Caretta caretta* sea turtles, and the later dash to the sea of the baby turtles after they hatch from the eggs were my most memorable moments during this activity. It was a wonderful example on the struggle of life – of how wonderful a balance exists in the nature.”*

1.1 coded male participant expresses his opinion about this activity as:

*“I understood to what extent ecological footprint is important. If we buy an air conditioner which does not release CO<sub>2</sub>, it doesn’t mean there is not any carbon releasing while production. This is our ecologic footprint.”*

### *Biodiversity Awareness*

The participants visit the Dalak Water Resource during the ‘Endemic Plants in Canakkale’ and ‘Forest ecosystems& Definition of vegetation and types’ activities. They are divided into five groups and asked to count the number of plants they recognized within a square meter of their immediate surroundings. They are later asked to collect and explain the morphological properties of their

collected plants to the other groups whilst their audience tried to guess what the collected plants are. The female participant 1.3's description gives a good example on the reflections in this theme:

*"I found endemic plants most interesting. I did not know that Turkey has such a great variety of endemic plants. Now I know that Turkey has 12,000 different types of endemic plants – the same number of endemic plant varieties found all across the European continent. We should protect them against the extinction."*

1.9 coded female participant explains;

*"I am confused to find twelve plant species in one meter square."*

The other remarkable activity for participants is 'The role of insects in protection of nature'. The participants are divided into five groups, and they catch some insects by an insect sweeping net in Intepe region. They do not kill the insects. The lecturer brings some fixed specimens. The participants compare fixed specimens with the caught insects. They try to find differences, and similarities. 1.1 coded male participants mentions this activity as:

*"The importance of biological combat, and endemic species are affected me very much."*

2.12 coded female participant express their opinion related to this activity as:

*"It is affected me the eye structure of insects are alike a pollen, so they see subjects/their environs like mosaic; not as whole. I learnt that we focus on ourselves when we evaluate insects as harmful or useful."*

1.15 coded male participant mentions the 4<sup>th</sup> activity at the program (App. 1), of which its name is 'Fauna of Canakkale and its environs'. The participants are divided to five groups in Dardanelle Campus, and try to catch some reptilian, for instance turtle, lizard. The lecturer also brings some fixed specimens (snake, turtle, lizard), and the participants examine them. The fixed specimens are especially used in the research because sometimes it is so hard to catch some species such as snake in daytime.

*"The knowledge related to reptilian is affected me. I am not aware of having more reptilian species, and their properties in Turkey."*

## Discussion

Environmental awareness and biodiversity awareness are determined at the end of this research. Both themes are easily observed at the post-reflective writing stage, whilst none of them exists at the pre-reflective writings (Table 2). These results can be attributed as overall success in terms of awareness. In fact biodiversity awareness is a part of environmental awareness but some of the participants especially express the biodiversity awareness.

Firstly biodiversity is particularly mentioned at the biotic factor theme (App. 1) and expressions of biodiversity awareness are related to the 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> activities. We think that the participants have connection and experiences with species directly by these activities and they are impressed/ affected due to touching fixed or living species. Priest (1986) emphasizes the importance of experiences gained from experiential learning and the usage of the five senses via first hand in OE. The participants have extensive environmental experience during the education programme, and the project is evaluated as successful after analysing the findings, which point out towards an increasing of biodiversity awareness.

Secondly the project team only focuses on the effectiveness of the OE program on EO within this study. Environmental awareness is among the expectations of the project and TUBITAK (Table 1). The project team wants participants to develop environmental awareness. Keles et al (2010)

findings are similar to this project however they only mention environmental awareness, not biodiversity awareness. In this perspective ecopedagogy based OE program is also especially effective in order to increase biodiversity awareness. Keles et al (2010) do not mention which activity and how they apply. The activity selection and process might cause this result.

The high aim OE like all other forms of education is to change behaviour (Kahn, 2010; Biel, 2003). However behavioural change takes longer periods in order to realize it (Ozden, 2008). Due to the fact of our project is applied for ten days, it is clear even before the start of the research that there would not be an observance of any meaningful behavioural change. It is, however, offered by the project team that the participants need to be further observed by a follow up procedure in the future.

Furthermore the research program is the first ecopedagogy based OE program of Turkey. At this first step it is successful to increase environmental awareness and reveal biodiversity awareness. This kind of programs might be evaluated in terms of gaining knowledge, attitude or behavioural changing.

It is thought OE projects may support teachers' professional development. The teachers are honest while expressing their lack of ecological knowledge and outdoor experience as Lugg and Slattery (2003) suggest. Their purpose of joining a trip to the national park is to remedy this drawback. Similar expressions are indicated by the teachers in Turkey. One of the participants of this project say:

*"I am a biology teacher but really do not know the ecology subjects. Also the ecology subjects are at the end of the syllabus so we tend to neglect these subjects. Most of the teachers in Turkey are alike me, and they are ashamed to confess these drawbacks. However, I now have self-confidence for the ecological subjects. I am keen on applying what I have learnt."*

The institutions such as TUBITAK or MEB (Ministry of National Education of Turkey) and universities might collaborate in order to remove teachers' professional inadequacy.

The concept of environmental education is not a recent trend – it has been recognized as an important topic ever since the UN's 1975 Belgrade Charter and 1977 Tbilisi Declaration. According to this declaration, people of all ages need to be educated for a sustainable world (UNESCO, 1977). Another topic of the debate in EE is whether it works better within a classroom, or outdoors. If individuals are given chance to have actual experience then they have tendency to protect and love the nature. The current reality of human existence is a physical and emotional disengagement from the natural environment (Shanely, 2006; Petrina, 2000; Zanovello, 1999). Education's importance increases at this crucial point.

Above all OE is not very popular in Turkey. It is generally a part of physical education or private weekend activities in terms of adventure education. However we think that OE may be an important part of the formal education. We understand that OE is applied very successfully in New Zealand and Australia within formal education. There are also special OE departments in the universities (for instance Christchurch Polytechnic Institute of Technology (New Zealand), Latrobe University, University of Wollongong, Griffith University, Victoria University, University of South Australia, Monash University (Australia) and foundations (Auckland City Council, Canterbury Environmental Trust (New Zealand), Outdoor Educators Association of South Australia, South Australian Secondary School Assessment Board, Outdoor Education Australia) related to OE, and they support formal education. When we search literature review we realize that New Zealand and Australia have either experimental/ summative research (Irwin, 2010 [New Zealand]; Blair, 2008 [Australia]; Thomas, 2005 [Australia]; Preston, 2004 [Australia]; Preston & Griffiths 2004 [Australia]; Lugg & Slattery, 2003 [Australia] or formative research (Fien, 2000; Payne, 2002; Gralton, Sinclair & Purnell, 2004; Robottom, 2005). There is only one formative article in terms of environmental education in Turkey (Erdogan, Marcinkowski & Ok, 2009). Our research evaluation is summative. We also need formative evaluations. One of the project members would like to evaluate as formative the other projects' programs which applied since 1999 but TUBITAK did not open the archive therefore the project directors should publish their result reports. By this way another researchers can decide what their further step should be.



To conclude Turkish education system has changed in 2012 and has started to renew the primary and secondary level curriculum after 15 years. The previous system focused on 'education about environment', and this was not succeeding to have strong sustainability. Strong environmental sustainability is a big problem for Turkey. Turkey is a nominee country for European Union (EU), and 27<sup>th</sup> negotiation title is 'environment' (EU Negotiation Framework, 2005). EU wants Turkey to have sustainable environment according to this title (EU Thinking Group, 2010) however the environmental policies of Turkish Government are opposite of strong environmental sustainability. MEB, TUBITAK, universities and Non-Governmental Organisations might collaborate in order to develop curriculum, teacher education, and teachers' professional development. By this way, it might be possible to have strong environmental sustainability because Turkey needs to change own political perspective towards education and environment. We need critical thinking, political activity which are based on ecopedagogy like Australia.

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## Appendix 1

### The theme of the project program and the activity names in the project

Theme	Activity names
I. Abiotic factors	1. Astrophysics and Formation of the universe
	2. Geological structure and history of Canakkale province
	3. Geographical Information Systems (GIS) applications and usage in nature
II. Biotic factors	4. Fauna of Canakkale and its environs,
	5. Endemic plants in Canakkale,
	6. Role of insects in protection of nature
III. Specific properties of area	7. Water quality and aquatic organisms
	8. Forest ecosystems& Definition of vegetation and types
	9. Underwater and marine ecology& Diving with tube
	10. Importance of food supply from nature in Canakkale
IV. Human pressure on ecosystem	11. Naturally-occurring and human-enriched magnetism and environmental health
	12. Local bottled water factory and Atikhisar Dam
	13. "Can 18 Mart" thermal power plant
	14. Making compost from domestic organic waste
	15. Ethnobotany
	16. Troy National Park from prehistoric times to the present
	17. Importance of Canakkale from historical perspective (Gallipoli War)
	18. Development of national parks using protective and utilization measures
	19. Environmentally correct urban planning in Canakkale
	20. Ecotourism
	21. Deep ecology
22. Our Ecological Footprints: How We Used to Live a Century Ago	

## Appendix 2

## The first period of the project program

<i>Date</i>	<i>Hours</i>	<i>Activity Names</i>	<i>Activity Venue</i>
27.07.2009	8:30-9:30	Enter Speech& Pre-writings	Motel
27.07.2009	09:30-10:30	First Aid	Motel
27.07.2009	10:45-13:00	14	Motel Kitchen
27.07.2009	11:00-19:00	2	Ayazma – Bayramic
28.07.2009	08:30-10:00	10	Ezine
28.07.2009	11:00-13:00	15	Ayvacic
28.07.2009	14:00-20:00	8	Dalak Water
29.07.2009	08:00-13:30	7	Karamenderes River– Pınarbasi Village, Karamenderes River
29.07.2009	14:30-18:30	16	Troy National Park
29.07.2009	19:00-20:30	18	Tevfikiye Village
30.07.2009	9:00-12:45	5	Guzelyali
30.07.2009	14:00-20:00	3	Dardanelle
31.07.2009	08:30-12:00	4	Dardanelle
31.07.2009	13:00-18:00	19	Streets of Suburb
01.08.2009	8:00-10:00	Diving with tube (9)	Bozcada Island
01.08.2009	10:00-13:00	20	Bozcada Island
01.08.2009	13:15-19:30	9	Bozcada Island
02.08.2009	09:00-12:00	6	Intepe
02.08.2009	13:00- 16:00	11	Intepe- Wind Tribune
02.08.2009	18:00-21:00	22	Motel
03.08.2009	08:00-20:30	17	Gallipoli National Park
04.08.2009	09:00-10:00	12	Canakkale-Can Motorway
04.08.2009	11:00-18:00	13	Can Town
04.08.2009	18:15-20:15	21	Motel
04.08.2009	21:00-22:30	1	Ulupinar Observatory
05.08.2009	09:00-11:00	14	Motel Garden
05.08.2009	11:30-13:00	Appreciation Speech& Post-writings	Motel