

Some Suggestions for Turkey within the Scope of Outdoor Education Success of New Zealand

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ABSTRACT

Outdoor education is evaluated a complementary component of the formal education. New Zealand is one of the most successful countries in terms of outdoor education. Therefore the author conducted interviews with three people who have been working at the outdoor education foundations in New Zealand. The aim of this study is to determine how New Zealand is successful at outdoor education and what Turkey can do in order to improve outdoor education. Qualitative approach and semi-structured interview were used in this research. 14 questions were prepared according to two main points. One of them was Taba-Tyler Model. The other point was intuitional management. 2 themes and 8 codes were determined at the end of the evaluations. The themes were named 'programme development and management'. There were four codes under programme development: aim, content, learning experiences, evaluation. There were four codes under management: staff, collaboration and professional development of teachers, first aid, and expenditure. Turkey realizes the importance of outdoor education and funds some outdoor education via TUBITAK but this is not enough. Outdoor education in Turkey needs to be institutionalisation. This is important to get sustainability of outdoor education.

Keywords: Outdoor Education; Environment; Sustainability; New Zealand; Turkey

INTRODUCTION

'School' concept comes to mind when somebody mentions education. The schools are set up for mass education at the beginning of the 19th century and their duties are to educate people in order to have critical perspective, curiosity for research, to take active role for solving of environmental and political problems (Stevenson, 2007). School education is formal education and mostly based on theoretical knowledge; on the other hand practical lessons might be supported with outdoor education (Kassas, 2002). However outdoor education is mostly based on informal education (Miller, 2008; Mann, 2003).

Informal education is considered a kind of unplanned education but outdoor education is not unplanned education. Recently the outdoor education is considered complementary of the formal education (Dori & Tal, 1998). Outdoor education helps to develop environmental awareness, attitude, knowledge, time management, social relationship, success motivation, emotion control of people etc. (Carrier, 2004; Cumberbatch, 1999; Halligan, 2006; Miller,



2008; Murdock, 2007; Schmitt, 2005). Piller (2002) says that outdoor education is a method in order to teach environmental subject however it is not clear that outdoor education is the most effective way to teach the environmental subject. On the other hand Okur (2012) finds that outdoor education is effective method in order to teach environmental subjects especially in terms of environmental awareness, environmental attitude, gaining holistic perspective and behavioural change. Outdoor education is even used interchangeable with environmental education (Ford, 1986). Hence outdoor education should be researched as a learning area or method. 'Outdoor education' term will be also used rest of the paper for environment education.

The outdoor education is considered complementary of the formal education of the schools. On the other hand natural environment comes to mind when the outdoor education is mentioned. Whereas the outdoor education might be used within zoos, museums, science centres, aquariums, botanic gardens, forests etc. (Bozdoğan, 2007; Fadigan & Hammrich, 2004; Koran, Koran & Ellis, 1989). The applications of outdoor environment education in the world and in Turkey expand (Carrier, 2004; Cumberbatch, 1999; Halligan, 2006; Miller, 2008; Murdock, 2007; Okur-Berberoglu, Yalcin-Ozdilek, Sonmez, & Olgun, 2014; Okur-Berberoglu, Guder, Sezer, & Yalcin-Ozdilek, 2013; Schmitt, 2005; Yalcin & Okur, 2014).

Why is the outdoor education important for Turkey?

Turkey is a developing country as one of the members of G-20 (UN, 2009) and adopts the Mickey Mouse economic model like the other developing countries (SANZ, 2009). In other words, the economic development is in front of the sustainable development. These countries say 'laissez faire' in order to earn much more money so use environmental resources unsustainable (SANZ, 2009).

On the other hand Turkey is like a bridge between continents and has biodiversity richness among European and Middle Eastern countries because Anatolia has a special geographical location (Baskent, Kose, Terzioglu, Baskaya, & Altun, 2005; Cepel, 2008; Erten, 2004). This special location gives rise to ecosystem diversity, eventually genetic and species richness. At this point, the sustainable development and economic development of Turkey are a big dilemma because it is quite difficult to manage sustainable economic development without missing natural resources. Turkey has specific geographical characteristics, environmental resources and richness so the outdoor education is a very valuable tool in order to teach sustainable environmental development.

Why New Zealand (NZ)?

NZ is among the developed countries (UN Statistics Division, 2013). Sustainable environmental development is also very important for NZ because it has many more endemic species. These species are under protection by laws. Biodiversity Strategy Plan is published in 2000 by the Ministry of Environment of NZ. (The New Zealand Biodiversity Strategy, 2000) NZ is one of the most successful countries in terms of using outdoor education as an alternative education and supportive education. The educators often mentions sustainable development of NZ within their courses. (The New Zealand Curriculum, 2007)

The aim of this research is to determine how NZ is successful at outdoor education and give some suggestions for Turkey. Within this research, I interviewed three people who have been working at the outdoor education centres in NZ.

METHODOLOGY

Qualitative approach and semi-structured interview were used in this research. 14 questions (Appendix) were prepared according to two main points. One of them was Taba-Tyler Model. This model is used in order to design education programme and there are four

steps in the model: aims (2nd), content (6th, 7th), learning experiences (8th, 9th) and evaluation (10th) (Demirel, 2005). 2, 6, 7, 8, 9, and 10th questions proposed these steps. The other point was intuitional management and rest of the questions aimed at this point. The questions were checked out by two specialist, environmental education and linguistic at the last stage.

Firstly outdoor education centres in New Zealand googled. An e-mail was sent to them which explained the research's aim and requested an interview. Some people gave positive feedbacks and interviewer list was prepared. Hilary Chidlow from Auckland City Council, Dr. David Irwin from Christchurch Polytechnic Institute of Technology and Ruth Millar from Canterbury Environmental Trust (CET) accepted the interview invitation.

Auckland City Council is one of the biggest city council of New Zealand. The interview with Hilary Chidlow was hold on the 25 of November, 2011 at the city council building. Hilary Chidlow is the team leader at education department of the centre. She is a teacher and has been working there for 17 years.

The interview with Dr. Irwin was held on the 29th of November, 2011 at Christchurch Polytechnic Institute of Technology building. Dr. Irwin was selected because either his PhD was about outdoor education or he has been working as an academic at the outdoor education department.

The interview with Ruth Millar was held at the CET on the 29th of November, 2011. Ruth Millar used to be a primary school teacher for 20 years. She is enthusiastic to the environmental subjects so she has started to work at CET.

All the interviews were recorded with consent of the interviewees and by a voice recorder. The records were decoded after each interview. The researcher and environmental education specialist coded the interview document separately. The coherent level of the two decoding was evaluated Cohen kappa index (Wood, 2007). This index should be between 0.60- 0.70 in order to have satisfactory coherent (Wood, 2007). The index was calculated on SPSS and found 0.67. Its mean the coherent level of two researchers were satisfactory.

FINDINGS

2 themes and 8 codes were determined at the end of the evaluations. The themes were named 'programme development and management'. There were four codes under programme development: aim, content, learning experiences, evaluation. There were four codes under management: staff, collaboration and professional development of teachers, first aid, and expenditure.

1. Auckland City Council (Hilary Chidlow)

Auckland has many more outdoor education centres. Probably this might be related to Auckland's situation because it is the biggest city of New Zealand. There are 3 education centres depending upon the city council. These are Ambury Regional Park, Waitakere Ranges Regional Park and Auckland Botanic Gardens. These three centres are open to public and have been organising educations for 20 years.

1.1. Programme development

1.1.1. Aim

The centres serves outdoor education for primary school students and nearly 25,000 students each year are educated at these centres. The students can have education throughout the day or half of the day. The aims of the centres are to educate the students in order to have environmental responsibility and take active role for solving environmental problems.

1.1.2. Content

All the programmes are coherent with the curriculum of the Ministry of Education of New Zealand. The environmental subjects in the curriculum are very comprehensive so it is not difficult to organise the content of the programme.

1.1.3. Learning experiences

The education programme is designed by Hilary Chidlow because she has outdoor education experience. The trainee teachers also work with her in the office. Each team works on an education programme and under Hilary Chidlow's responsibility. After each education programme, the feedbacks are provided from the students and in-service teachers in order to evaluate the programmes. The programme is changed if it does not work for the aims. However some education programmes which works for the aims have been using for 16 years. On the other hand everybody accepts that the programme should be changed according to the needs.

Some farms, agriculture areas, gardens are used for the educations. Hilary Chidlow says that there are some students who do not know milk is getting from a cow or who have never seen farm life. These students can experience farm life at these educations and join to some activities. The activities are based on experiential learning however some methods such as drama, role play are also used at the educations.

1.1.4. Evaluation

The educations are evaluated via the feedbacks but these evaluations are not based on scientific basis. They are just related to understanding of the education process or how the educations work. Some questions are asked students and in-service teachers at the beginning, in the middle or at the end of the programme. On the other hand the student capacity of the centres are high so they cannot follow up them. The teams do not have any collaboration with academician for the programme evaluation. Some team members have PhD degree so the evaluation is done with them. The programmes are just for half day or one day so the teams do not expect any environmental behaviour change in this short term. Hence the interview results of the students and in-service teachers are enough for the teams.

1.2. Management

1.2.1. Staff

There are 3 full- time, permanent teachers and 3 or 4 full-time, temporary teachers. The city council looks for some points from the teachers such as teaching experience, enthusiastic to environmental subjects, liking outdoor education and having experience about outdoor education etc.

1.2.2. Collaboration and professional development of in-service teachers

The centre also organises workshops for the in-service teachers. Next year's workshop programme is organised from previous year. All the in-service teachers are volunteers in order to join the workshops. The content of the workshop programme is organised according to the in-service teachers' needs. The centre team has interview with the in-service teachers and ask them which environmental subject should be in the programme in terms of their professional development. The workshops are mostly for one day and at the theoretical level.

1.2.3. First aid

There are medical teams at the education centres and all the teachers in the centres have outdoor first aid training. If something happens, the teachers do emergency treatment. If serious events happen the medical team takes in charge.

1.2.4. Expenditure

The most difficult side of the programme process is the budget. The three education centre of the Auckland City Council had been funding by the Ministry of Education until last 3 years. This fund was cut according to the last political laws. Now the only financial resource of the centres is the city council. The programmes' budgets are supported according to the feedback which is provided from students and in-service teachers. Each student pays money when they join to the programme. This money is usually 2 NZ \$ but some programmes' prices might be 4 NZ \$, 5 NZ \$ or 15 NZ \$.

The pamphlets are published and renewed for each year. Each pamphlet explains which education program is carried out in which centre, which activities are used and suitable for which age group, what the price of the programme is for per student and contact details for the reservation. The internet page of the centre is also renewed so the people can easily reach to the centre. For example, if the in-service teacher decides for a programme, s/he can easily reach the programme director very easily and can have appointment. The time table of the centres are very busy because they are very popular among the students and in-service teachers. It is recommended that the in-service teachers should have the appointment least 6 months before the education.

The education centres of the Auckland City Council use some buildings in the regional parks but it is not cheap to direct an outdoor education centre. The cost of an outdoor education centre might be roughly 70,000- 80,000 NZ \$.

2. Christchurch Polytechnic Institute of Technology (CPIT) (Dr. David Irwin)

CPIT is under Christchurch University. Polytechnic schools are equal to vocational schools in Turkey. Polytechnic schools have educations for 3 years, 1 year and 6 months. CPIT has been graduating students since 1995.

2.1. Programme development

2.1.1. Aim

The environmental education was a course under the adventure education however the outdoor environmental education has become an independent course over the time. Each certificate and diploma programme have own aims. On the other hand the common aim of these programmes is to educate people in order to have awareness to the natural environment.

2.1.2. Content

The programme of 'Sustainability and Outdoor Education' is for 3 years and CPIT gives bachelor degree diploma at the end of the programme. There are two more course options for one year in order to support professional development of the in-service teachers, these are 'Graduate Diploma in Sustainability and Outdoor' and 'Graduate Certificate of Environmental and Outdoor Leadership'. There are also two other course for 6 months for in-service teachers, these are 'Certificate of Outdoor Recreation' and 'Certificate of Skiing Teaching'. The outdoor education of New Zealand has started within adventure education.

Some topics overlap within adventure education, outdoor education and environmental education. Some topics are specific for each education. Hence sometimes it might be difficult to determine content of the education programme. The programme development team is very careful when they determine the aims and contents of the programmes.

2.1.3. Learning experiences

The education programme is designed according to the aims of the department by 5 academicians who works there. The main point here is the programme should be based on

experiential learning. The education experiences of these academicians are also effective on development of the programme.

2.1.4. Evaluation

The feedback is provided from the students at the end of each year and the programme is revised according to these feedbacks. The educators get specific feedbacks after graduation or they can evaluate the students' scores as feedback. The feedbacks are mostly qualitative.

2.2. Management

2.2.1. Staff

11 people are working at the Sustainability and Outdoor Education department. These people have bachelor, master, PhD degree or having on master or PhD education. The graduation research area of these people are related to academic or industrial branch of outdoor education. These people are assigned according to the department's need.

Each department has a head of department. This person depends upon the manager; the manager depends upon the dean. Each department has own security responsibility. There is also a technician who is responsible on equipment at the department.

2.2.2. Collaboration and professional development of in-service teachers

CPIT has collaboration with many local schools in Christchurch. These schools are supported in terms of outdoor education. There are also international exchange programmes for students and academicians at the department.

Environmental education consists of many more sub-subjects so it is very open to change and development. Environmental education was a sub-subject under adventure education and is a discipline on its own now. Especially in-service teachers needs professional development in terms of environmental education because the change and development are very fast at environmental subjects and their effects. These professional development subject might be related to increase outdoor experience of the in-service teachers or to increase graduated number of Sustainability Education Department.

2.2.3. First aid

Each educator has first aid certificate at the department.

2.2.4. Expenditure

The budget of the department consists of students' tuition and university budget. Annual fee per students is about 5,000 NZ \$. When the students graduate from the department they can especially work at some outdoor education centres in Australia. The graduated students might work as a teacher at the primary and secondary schools. There are also many more eco-schools in New Zealand and all of them have 'environmental education' course. There are also many more environmental activities within this course. However there is not any obligation to have outdoor education certificate or diploma in order to be teacher at these eco-schools. If a teacher is enthusiastic to the environmental subjects, s/he can easily be a teacher for this course. The eco-schools or the other schools might be a good job vacancy for the graduated students.

3. Canterbury Environmental Trust (CET) (Ruth Millar)

CET has been servicing since 1992 and especially focuses on outdoor education. The outdoor education is especially used for environmental education.

3.1. Programme development

3.1.1. Aim

The target group of the education is 11-12 years old students. CET aims the students to like natural environment, to evaluate the environmental subjects as scientifically and to take active role for solving environmental problems.

3.1.2. Content

The sustainability is the main concept within environmental education in NZ so every topic under sustainability takes part in the education programme. CET is also very careful about to design an education programme which is coherent with curriculum of the Ministry of Education. The environmental subjects in the curriculum are very broad so they can easily choose any environmental subject.

3.1.3. Learning experiences

There are no specific education programme within the CET. There is a small committee with 4 or 5 people. These people have environmental education experience so they decide which and how the programme should be used. Each teacher carries out own education programme. The main and the first part of the outdoor education is experiential education. Experiential education is used for each education. The other educational methods are at the second level.

3.1.4. Evaluation

A survey is given to the students at the end of the programme and their opinion are taken as feedback.

3.2. Management

3.2.1. Staff

The staff structure of the CET is a bit complicated. Sometimes the CET gets support from academicians or NGOs. The management system of the CET is very simple. There is an administrative board and there are 6 or 7 people at this board. All the board members are working as volunteer.

3.2.2. Collaboration and professional development of in-service teachers

CET usually have collaboration with academicians (for example from Lincoln University) or NGOs (for example Untouched World).

3.3.3. First aid

The other important point is the security of the students. The educators of the CET are responsible for the security so if any medical problem happens, the educators contact directly to the related departments.

3.2.4. Expenditure

The CET and has an internet web-site. The schools can have an appointment via this web site. The CET does not have any other advertisement tool but it accepts donations. It is like an NGO so sometimes it can use some governmental buildings. The CET also takes money from the students for joining to the education programmes. The cost of a founding like the CET is around 20,000- 30,000 NZ \$ if the building construction is excluded.

RESULT

Auckland City Council, Christchurch Polytechnic Institute of Technology and Canterbury Environmental Trust are carried out outdoor environmental education successfully. It is thought that their education programmes and applications are important at this success:

- The target groups of Auckland City Council and Canterbury Environmental Trust are primary school students. Hanna (1995) emphasizes that environmental education should start at early ages. These two institution's target groups are coherent with the literature.

- Especially Auckland City Council carries out CIPP evaluation model. There are four main concepts at this model: context, input, process, and product (Stufflebeam, 2003) so the education programmes of the Council should be analysed detailed.

- Auckland City Council also selects the environmental subjects from daily life. Palmberg and Kuru (2000) and Piller (2002) say that outdoor environmental education subjects should be selected from daily life and the subjects should be problem-based.

- All these institutions carries out experiential education. The literature emphasizes that outdoor education should be experiential (Brookes, 2004; Goudie, 2008, Auer, 2008).

- Goudie (2008) emphasizes that there should be collaboration between universities, NGOs and governmental institutions and these three institutions have collaborations.

SUGGESTIONS

1. The outdoor education is open to new developments. Turkey knows the importance of outdoor education because some outdoor environmental education projects are funded by TUBITAK (The Scientific and Technological Research Council of Turkey) within 4004 coded science and society projects. On the other hand the funding of these projects is not enough, the outdoor education in Turkey needs to institutionalisation. This institutionalisation is important to have sustainable environment education in Turkey.

2. NGOs, private and governmental sectors should support the outdoor education activities in terms of money and morally. Each outdoor activity needs time, budget and security. The institutions and educators should be supported in terms of outdoor education. United Nations (UN) within Global Compact wants private sector to support some environmental organisations. For example Garanti Bank supports WWF (The World Wide Fund for Nature) or Koc Holding looks after monk seal 'Badem' and funds Badem's looking after. UN within Global Compact can force the private sector in order to fund the outdoor education centres.

3. The outdoor education departments and centres should be opened within universities. The Sports Vocational Schools at the universities have camp activities. These schools have essential backgrounds and infrastructure so the outdoor education departments might be opened within these schools. The adventure education and the environmental education departments might be under The Sports Vocational Schools. The graduated students from the outdoor education departments might work various outdoor education centres.

4. The National Ministry of Education of Turkey (MEB) and Higher Education Council of Turkey (YOK) might revise the curriculum. Environmental education course might be

compulsory course at the primary, secondary and tertiary levels. There is eco-school project of MEB so it needs environmental education teachers. The deficiency of teachers might be supplied from graduated students from the outdoor education departments of the universities.

5. The outdoor education centres should be opened at the universities. The outdoor environmental education covers different disciplines such as Biology, Education, Geology, Geography, Tourism, Economy, History, Culture, Anthropology etc. It might be insufficient to think and place the outdoor education under a department. If an outdoor education centre is set up then it would be easy to work with different disciplines (Bunderson & Cooper, 1997; Piller, 2002; Brookes, 2004). There are thesis researches which are directed collaboration with different disciplines at the Otago University of New Zealand.

6. Otago University is the most successful university in terms of carrying out sustainability in NZ. There is a Sustainability Centre of the Otago University (Otago University, 2012) and interdisciplinary researches are happened at the centre. The vice chancellors of the universities came together in order to discuss sustainable using of the natural environment in Tallories, France in 1990. They decided what the responsibility of the universities are for sustainable development under 10 topics (Tallories Declaration Action Plan, 2012). One of the topics was related to what the universities' strategic plans should be for sustainability, to develop new education programmes, collaboration with NGOs and schools, to support primary, secondary and tertiary levels for environmental education. The Tallories Agreement was signed by 436 vice chancellors of the universities from 52 countries. The Ankara University is the one university which signed the agreement from Turkey (Tallories Declaration, 2012). The universities in New Zealand have own 'sustainable strategic plan' although none of them signed this agreement. These universities carry out recycling, compost production, pick up the waste according to the components, plant the local flowers and trees, green building designs, alternative energy resources, using energy efficiently in the campus. They also organise different educations and activities for the students, employees and academicians.

- The activities of the Ankara University are not known. YOK might want the universities to have a sustainable strategic plan, carry out it and to share their acquisitions with the other universities.

- A sustainable centre might be set up like Otago University. The scientific researches, various educations and activities might be carried out there.

7. The University of Waikato Teaching Development Unit organises some workshop for the academicians in order to develop their professional development. One of the topics of these workshops was "Integrating 'sustainability' concept into teaching: How can I teach sustainability if I do not know its meaning". I attended to this workshop on the 14th of February, 2012 and there were academicians from management, ecology, education, tourism, natural science, engineering, law, economy departments. All these academicians were mentioning sustainability within their courses so I thought that it should be more useful to set up an independent sustainability centre instead of having a department under a faculty.

8. It is very obvious that it is not easy to set up and open a department or centre, to organise staff, education programme, technical infrastructure etc. However if the universities start to outdoor education somewhere, it will be develop slowly slowly in further times. Each feedback from the academicians, employees, students or in-service teachers will help to improve more developed education programmes, have favourable outputs.

9. There are no 'one size fits all' education programme so each country can consider own outdoor education situation. The countries can develop own education programmes and use own infrastructure because the outdoor environmental education programmes should be placed-based (Brookes, 2004; Emmons, 1997; Harrison, 2010; Irwin, 2010; Lugg & Slattery, 2003; Piller, 2002) and problem-based (Palmberg & Kuru, 2000; Piller, 2002). Every country

might have various environmental resources and problems so they can develop various outdoor education activities.

10. The target groups of Auckland City Council and Canterbury Environmental Trust are primary school students; the target group of Christchurch Polytechnic Institute of Technology is university students. There might be held an interview with some institution whose target group is secondary school students. Their programme and outputs might be different.

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APPENDIX**Interview questions**

Permission: Could you please give me permission to record your voice?:

1. How many years has this centre/ foundation been going?
2. What are the aims of this centre/ foundation?
3. How many staff are there working in your centre/ foundation?
4. What sort of qualifications do you look for when you take on staff/ when you interview staff?
5. Could you tell me about your management structure?
Could you tell me how this centre is managed?
6. I understand that you run a special environmental education program.
Could you please tell me about the design of this program?
For example; Who designed? Have there been any changes over time?
7. Do you think there would be further changes in the future?(about education program)
8. Have you had any problems/ difficulties with your education programs?
Could you please explain these problems/ difficulties?
How did you solve these problems/ difficulties?
9. I know that some centres use drama, role playing, hand-on activities etc. What about you? Which activities do you use?
10. Do you have follow up procedures after a group has gone through a course? For example; course assessment?
11. Can you tell me about safety procedures?
12. How do people find out about your centre, and your programs that you offer?
What sort of information do you give people who contact you?
13. Can we talk about funding? Can I ask about funding?
I would like to know are you privately funded, government funded, grant funded..?
14. How much does the establishment/running cost such as a centre/foundation?