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**Evaluating the implementation of WWF Hellas program for a
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Evaluating the implementation of WWF Hellas program for a "Better Life"

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Abstract

The following article refers to the current way that Environmental Education (E.E.) is being incorporated in primary schools in European countries, and specifically the Greek primary schools. It emphasizes the implementation of an alternative environmental program by the N.G.E.O. WWF Hellas. Furthermore this article refers to the role of Non Governmental Environmental Organizations (N.G.E.O.) in E.E and its evaluation. Finally it addresses how the field of Environmental Education (E.E.) has incorporated effective ways into creating responsible environmental behavior.

Keywords: environmental education, responsible environmental behavior, evaluation of environmental programs

1. INTRODUCTION

The issues of environmental instability and worldwide environmental degradation have resulted in a call for greater emphasis on environmental education (EE) in order to create and maintain optimal and sustainable relationships between the public and the environment [1]. Recognizing that human influences have the greatest impact on the environment, specific programs in governmental sectors, non-profit organizations and public schools focused on the promotion of environmental actions for children who are going to be the 'future' citizens [2].

The most effective way in order to solve the environmental problems is the education of the societies [3]. The active participation in issues involving the environment is required [4]. In our days, young students are technologically adept, but without the connection to nature, which is so important in early years, children are going to be deprived from developing an 'environmental sympathy', respect and curiosity about the natural world. Young individuals should experience the power, fragility, interconnectedness and awe of nature, so they can become environmental stewards of the future [2]. The fundamental objective behind environmental education is to foster environmental awareness in all segments of society and inculcate positive enduring behavioral changes [5]. Many children lack a personal intimacy with the environment that would enable them to have a true understanding of common environmental

problems [2]. Outdoor educational programs are generally believed to be a suitable alternative to conventional biology settings that improve participants' environmental attitudes and knowledge [2]. The purpose of nature education is to help the participants identify nature, its products and meaning by interacting with it. From this standpoint, this type of education should be carried out in real conditions in order to enhance interest for nature and relate with it [6].

The purpose of this paper is to explore practice of environmental education in order to study tendency of urban environmental stewardship [4]. The interrelationship of nature and society can help researchers to access specific knowledge on how to implement conservation projects [4].

2. ENVIRONMENTAL EDUCATION (E.E.)

E.E. is considered an ongoing process, which is an integral dimension of citizen education, oriented towards knowledge acquisition, development of habits, skills, attitudes, and values formation [7]. It plays a significant role in harmonizing the relation between men and nature, providing the reorientation of economic, social and cultural variables when sustainable development is the issue of concern [8]. E.E. imparts knowledge and creates experience to change beliefs, attitudes – and most importantly – behavior [9]. The basis of teaching is to connect with the children through their own experiences [1]. This form of education could be considered “learning by doing” which is believed to be highly meaningful and therefore retained longer by the students [10]. Another study showed that elementary students' environmental behaviors were independent of their knowledge of environmental issues [11]. Affective variables seemed to have greater influence on their behaviors, emotional bonding, for example, and sensitivity toward nature, traits that may have influenced their environmental literacy [11]. Studies have started to reveal that environmental concerns and the environmental fear, known as eco-phobia, relate to feelings of helplessness, which may impact children's willingness to participate in environmentally friendly activities [12]. The increase in eco-phobia is partly rooted in society's emphasis on distant ecological problems such as rainforest destruction, or effects of climate change [12]. Environmental communication needs to be carried out, beginning at the local level and reaching national and international proportions [5].

2.1. Environmental Education in primary school system

The educational system worldwide is charged with the vital task of encouraging students to promote responsible environmental behavior, and, furthermore, of assisting them in their advocacy [7]. Because of this, environmental educators are continuously in search for topics and materials capable of capturing the attention of young students

and inspiring them to take action--an ongoing task that highlights the importance of the media in discussing current events and promoting groundbreaking research [7]. Environmental education assist youth in developing mental skills, which enable young individuals to identify the environmental concerns, to collect information about the relevant issues, to take the right approach, and to solve the environmental problems [13]. Emerging environmental education components require new approaches to teaching, incorporating inquiry methods and field studies, ensuring the integration of knowledge, emotion and action, i.e., “heads, hearts and hands” [14].

2.1.1. In Greek schools

The school, in these days, cannot ignore the demands of modern society that wants man to be an active and responsible citizen based on free will [15]. As a result the ‘‘Flexible Zone’’ has been implemented in schools, in which all the primary and nursery schools are obliged to execute programs and working plans, as stated in relevant educational regulations [15]. Students are not only tested on acquired knowledge, but they are encouraged to participate in relevant activities [15]. Based on national educational acts the Environmental Education is part of the pedagogical processes in both primary and secondary schools [15]. The purpose of environmental education, specially formulated programs, according to the Law NO. 1892/90, Act. 111, § 13 is: to have students recognize the relationship between man and his natural and social environment; to be aware about the problems associated with the environment; and to become environmentally active [15].

2.2. Case Study: “Better Life – economy, ecology, participation”

The program of WWF Hellas, «Better Life - economy, ecology, participation" started in October 2013 and it is a comprehensive public information and training hub in everyday matters, providing simple and effective recommendations for all and encourages involvement in small and large acts of cooperation and solidarity. This program is developed on four themes: a) consumption, b) nutrition, c) city life, and d) energy, it is aimed at the entire society (citizens, students, teachers, etc.) in order to improve the everyday lives of Greeks and encourage them to take actions at home, the neighborhood and the city. It is approved by, the Greek Ministry of Education. WWF Hellas created this program in order to propose a new model of life by which citizens would be persuaded to reduce the ecological footprint and the heavy demand for natural resources. This program sets daily activities and it tries to prove that the environment, society and the economy are interdependent parts. It aims to promote a lifestyle different and better, since it would be based on collective action, cooperation, information, environmental education and "special missions". This program attempts to identify policy weaknesses in order to change policy at central or local level [16].

WWF Hellas under the Better Life program works with the Future Library network [17] and creates special training programs for librarians.

2.2.1. At the schools

The aim of this program is to motivate students, teachers, parents and local residents. The driving force is the school but the activities are diffused in homes, the streets and neighborhoods. WWF Hellas invites teachers and students to work with all citizens and to take actions to improve the quality of city life, home and neighborhood. The schools can sign up in the program Life Best and then they get involved with one or more topics that have been proposed (Consumption, Diet, Green City, Energy) and at three levels: school, home, neighborhood. When someone from the school signs up, he/she can see the available actions and the schools that participate in the program. With the completion of each action, every participating school has the opportunity to record the experiences of children and to upload relevant material with photos and videos to inspire others. Schools have the opportunity to communicate, to exchange views and to work together. On the website of this program there is educational material on each working topic, which provides ideas and suggestions for action, but also gives guidance on how these activities can become effective [16].

2.2.2. Data Analysis

The Better Life program of WWF Hellas has 6.725 members and it has implemented 85 actions until now, which are based on the topics of consumption, nutrition, city life, and energy. Examples of related actions are: take the green in your hands; what season is suitable to sow; what we have to do to avoid a fire; eco-driving; creating compost; garden creation in yards and gardens; reuse and creation of handmade things; cooking without wasting etc. Examples of programs are: the road of the water, green brunch, garden creation in the schoolyard, exchange, construction and corrections in order to minimize energy losses in the school buildings, etc.

2.3. NGOs as a means for effective environmental education

Environmental education is the crux of an NGO's work. Without knowledge, there can be no action, and without action there can be no change. NGOs can create awareness by giving talks during school assemblies or lectures supplemented by exhibition panels etc. At this level, there is minimal two-way interaction. Boosting knowledge though, does not necessarily lead to appropriate (desired) behavioral or attitudinal change. Workshops, discussions or other in-class sessions would allow for more interaction between the students and NGO representatives. This enables the initiation of skills that would enforce the problem solving processes [18]. The students are not taught "what

to think” but “how to think”, giving them skills to analyze information, make “sound” judgments and respond with solutions, ideas or new questions [18]. The interactive method (discussions and experiments) internalizes the behavior. With adequate awareness, facilitation and positive experiences in the environment, students can be encouraged to design and implement their own projects [18]. Once this level of initiative, self-motivation and environmental leadership is achieved, an NGO has successfully contributed to the nurturing of highly aware and concerned “future” citizens [18]. Without the educational component, NGOs wouldn’t be instrumental in lobbying for changes in public policy and perception [18].

2.4. Responsible Environmental Behavior (R.E.B)

The humans live and operate, virtually without exception, in social systems that are inextricably linked to the ecological systems in which they are embedded [7]. Therefore citizens should possess knowledge about the impacts of human actions on the environment and be able to critically assess their responsibilities as both beneficiaries and stewards of the environment. E.E. also entails extensive practice in decision-making skills and the formulation of a code of conduct of each individual on the problems related to the quality of the environment. It must offer cognitive and emotional stimuli, which are concerned with the formation of values, attitudes, and—subsequently - behavior [7]. According to research projects, participation in environmental education and the belief that this education is able to foster behavioral change are closely related [19]. The education about the environment aims not only to increase educational knowledge of the individuals but also to translate the positive attitudes about the environment into successful behavioral characteristics [3]. There are studies indicating that when the environmental education is carried out in nature with field works, it is easier for the acquired knowledge to turn into behavior and to develop positive environmental attitudes [6].

The knowledge is a necessary, however not sufficient precondition for developing pro-environmental moral norms and attitudes [20]. The main goal of environmental education should thus be to engage students with a complex toolset - containing cognitive, affective and conative elements - which foster behavioral change [19]. Self-Determination Theory (SDT) posits that people are more likely to engage in a behavior, if they perceive that, the motivation to do it comes from within them rather than from an external, controlling agent [21]. In other words, when people feel a sense of ownership of the goals they select, they typically try harder and longer [21].

3. EVALUATING ENVIRONMENTAL EDUCATION SCHOOL PROGRAMS

EE is enhanced through the evaluation of its programs. Disseminating evaluation results, to a broader audience, increases even further the benefits associated with improvement of EE practices. The programs' evaluation is an attempt to measure the overall impact of the corresponding programs. Specifically evaluation refers to the systematic collection of information about the activities, characteristics, and outcomes of programs, in order to make suggestions about how the program can improve its effectiveness [22].

The evaluation of a program determines the degree to which the program contributes to the overall environmental literacy [23]. It includes ways to capture and assess unanticipated outcomes and it determines if the addressed needs were correctly identified in the initial needs assessment report [23]. Goals and objectives should be explicitly linked to key factors and the focal targets of the project [22].

Questions that should be included in an evaluation are the following [24]:

- How satisfied are the program participants?
- What are the demographics of the program participants? How did the program participants feel and which of their attitudes changed after the implementation of the program?
- Did the program increase stewardship behavior?
- What did the program participants learn from the program?
- Did the program have impacts on eco practices, biodiversity, water quality, solid waste and sustainability?

In general, evaluation results are used to help determine areas of strength and potential gaps, how a specific activity has impacted the community, how to function more effectively, to identify areas needing attention or improvement, to help clarify issues, to provide direction, to inform decision-making, to promote the program within the community, to communicate within one's own agency or organization, to fulfill funding requests, to build group visibility in the community, and to recruit other participants [23]. The assessment of the evaluation reports serves as an educational tool and directs experts into creation of new programs that will have a positive impact on the community.

4. ENVIRONMENTAL EDUCATION THEORY RELATING TO WWF HELLAS ACTIONS

The implementation of the program "Better Life - economy, ecology, participation" of WWF Hellas is fully harmonized to environmental education theory, principles and agenda.

Through the environmental education, children and adults learn and explore their environment and make smart choices for an improved everyday life by reducing their ecological footprint. Education should encourage critical thinking and be linked to personal experiences and everyday life demands. This way, through acquired knowledge and information, the configured values support environmental attitudes, which in turn result in the promotion of environmentally responsible communities.

WWF Hellas, Better Life program, all of the above mentioned necessary characteristics, are supported by appropriate educational material, containing information on food, energy, green city and consumption issues. The program proposes actions, which encourage people to deal with environmental protection and get to know nature by interacting with it (e.g. creation of gardens), Furthermore, important environmental values are supported, which then become a way of life. The program sets small, achievable goals (e.g. festivities without wasting food), motivating this way everyone to participate, learn and act. These small but very important everyday interactions create the will to program participants to want to work harder for the environment's sake as well as their own, because they realize the importance of their own actions. The personal motivation to engage into environmental tasks comes from within us, a concept that is supported by the Self Determination Theory (SDT) [21].

The program of WWF Hellas has a consistent structure, renewing and enriching its educational material with new actions. So everyone has the opportunity to choose what action suits him best and choose from a wide variety of plans. Also, the program encourages all participants to communicate and share experiences, difficulties in implementing the actions, tips and questions. This way a group of people with common interests is being created, acquiring experiences on various environmental issues and ready to inform others by sharing what has been experienced through implementation of specific environmental actions. New members of the community are lured into wanting to become part of this environmental "cult".

5. DISCUSSION - CONCLUSION

The relationship with nature is not just a pleasant task, but it is also an essential component of the human wellbeing general goal [2]. It is of paramount importance to understand children's perspectives, since children both now and in the future will influence and be influenced by environmental issues in many ways [12]. Outdoor environments can enhance mental health of participating students, contribute to students' intellectual and emotional development, support their environmental awareness and can give them opportunities to play and get involved in creative activities as well as connect directly with nature [2].

The "Better Life" program aims in a new type of practice, i.e., civic ecology practice. Students are introduced to significant daily issues on consumption, nutrition, life in the city and energy resources and are informed and encouraged through related articles and pictures on how to act. It is an exploration of urban stewardship, with the goal of developing a deeper understanding of how such practices emerge, grow, and are sustained over time [25].

If citizens all over the world had been environmentally educated to actively participate in the decision-making process, we wouldn't need to worry about environmental disasters [7]. Responsible citizens, able to manage environmental issues and to control their own environmental destiny are the true target of the WWF Hellas program that was presented in this paper.

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