

Investigation of the impact of Environmental Education on the Greek family through her children. A Case study on the topic of carbon footprint.

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Keywords: Environmental education, environmental literacy, carbon footprint

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Abstract

Environmental education is a very important tool for awakening people's environmental consciousness nowadays. It enables them to be aware of environmental issues so that they are active in their management direction (Hungerford 1990). We are lucky that it has now been included in the educational process in Primary and Secondary Education. Its main objective is the understanding by various social groups of important environmental concepts

These concepts contribute to the awareness and initiation of learners into the care and protection of the environment (Liebermann 1995). Although many families are considered to be environmentally illiterate, children's environmental literacy helps significantly to eliminate environmental illiteracy in the family environment. The adults of the Greek families did not receive teaching contact with this subject through Environmental Education, so no environmental literacy - knowledge, values, attitudes and behaviors - was achieved in their school years, but also in their later adult life. Individuals themselves often declare themselves connoisseurs, although at the same time an abusive attitude towards the environment is observed in them.

The above findings led the research team to proceed with the research under presentation with the object of investigating the household carbon footprint. This particular investigation was chosen mainly because part of environmental literacy is the management of the carbon footprint, which each family can reduce with its daily contribution to home operations. This is achieved through simple daily habits, such as conjugating water when bathing, eating seasonal products and removing household appliances from the outlet. Such attitudes and behaviors contribute significantly to the reduction of the carbon footprint, primarily individually and in a second time collectively.

The purpose of this survey was to record and investigate the views and knowledge of 100 parents of students of the 5th Primary School of Agios Nikolaos in Lasithi and 100 parents of students of Skydra High School, who were asked to answer relevant questions (questionnaire method) regarding environmental education and carbon footprint. In particular, their daily contribution to its reduction was investigated, through the influence of the education they or their children have received. In order to carry out the survey, photocopied questionnaires were distributed to parents through their children. The return time of the answered questionnaires was one week, i.e. the same in both regions. The research focused mainly on mapping the degree of impact of environmental education of their educated children, through parallel informal education of their family, on reducing their carbon footprint. Similar targeted research has been conducted by Helesco (2010) with interesting conclusions drawn. Its exploratory objective was the calculation of the carbon footprint of Greek households with emphasis on the effects of heating, the use of electrical appliances, means of transport and other secondary activities.

So what drives a person to demonstrate an environmentally responsible attitude? It is certain that the citizen, whether a minor or an adult, must be cultivated critical thinking and instilled in him the obligation to assume the responsibility that belongs to him, in order to act responsibly as a citizen and as a consumer (Kousoulas 2008). This sense of responsibility will lead him to take appropriate measures in his daily life in a participatory environmentally friendly way (Teksoz et al. 2014). Activities in nature, such as camping, hiking, cycling create experiences that lead individuals to develop into responsible citizens in the future (Wells, 2006). It has been found that parents with a low level of education and illiterate environmentally, can take inspiration from their children's environmentally friendly attitudes and become literate (Morris et al. 2003). Therefore, children who possess environmental knowledge and apply it at home, are likely to positively influence their parents as well (Hungerford & Volk 1990).

According to the subsequent analysis of the results obtained, we concluded that the environmental education of students has contributed significantly to the improvement of the daily habits of the above researched families. We hope that the findings of this research will influence families who have so far failed to benefit from their children's environmental literacy to be motivated to do so. Particularly positive is our finding that most respondents are knowledgeable about the objects under investigation and responded that they have been significantly affected, either by their children or by other bodies in improving their behavior.