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ENVIRONMENTAL EDUCATION IN SCHOOL, FAMILY AND
COMMUNITY

Mihaela Sencovici (a), Gica Pehoiu (b)*

*Corresponding author

(a) Valahia University of Târgoviște, Str. Lt. Stancu Ion, no. 35, Târgoviște, Romani, e-mail:
mihaelasencovici@gmail.com

(b) Valahia University of Târgoviște, Str. Lt. Stancu Ion, no. 35, Târgoviște, Romania, e-mail.:
gpehoiu@yahoo.com

Abstract

In this study, inquiry was used as a sociological method, and, as an investigation tool, we used a questionnaire based on closed and open questions about aspects of the environmental state, the respondents' perceptions and attitudes, the respondents being students who work in the area of Târgoviște municipality. This study also aims to assess the interest in the relation between urban and natural environment. It was found that the natural environment and man suffer increasingly more because of the absorption of resources by the society but also because of the inclusion of foreign components in the normal composition of the environment resulting from human activities or due to the fragmentation of the natural ecological system by continued economic growth and fragmented society, especially of the private sector. In addition to the questionnaire mentioned above, a literature review was realized, consulting bibliographical sources and archival directories of communicated data and information. Following the documentation and the questionnaire, we have conducted a series of graphs illustrating the involvement of families, schools and other institutions in local and national programs related to the environmental education perception, particularly in point of selective waste collection.

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Keywords: Environment, waste, education.

1. Introduction

The role of the educational institutions, of the teachers as trainers shaping the public opinion concerning the environmental education and the involvement of the pupils and of the students in environmental problems has been highlighted by the application of a questionnaire. Out of the answers given to the questions included in the questionnaire, one can evaluate the teachers' involvement and perception regarding the environment where they live and work. At the same time, the answers to the respective items highlight some environmental dysfunctionalities.

Environmental education relies on awareness (it supposes understanding and sensitivity to the environmental problems), knowledge (understanding the mechanism of balanced environmental functioning), attitude (desire to participate to maintain the environmental balance), habits (acquiring the necessary abilities to identify and investigate the problems the environment is faced with and contribute to solving them), participation (putting into practice the knowledge and skills acquired, in order to realize positive and well-conceived actions that will lead to solving the environmental problems (Fig. 1).

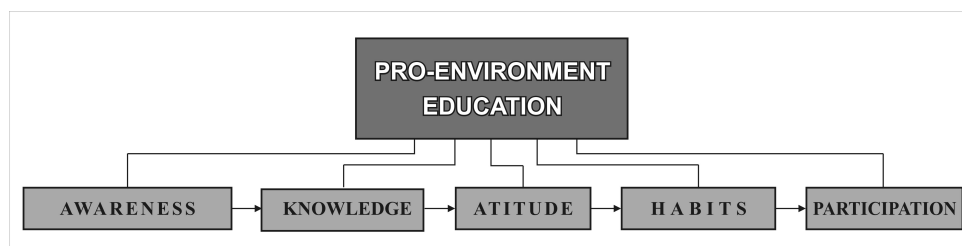


Figure 01. Pro-environmental education

All these elements are closely related and only by going through a number of five objectives can an efficient environmental education and a sustainable development be obtained.

In a society aspiring to sustainable education, by living in consensus with the environment, it is necessary to maintain the environmental balance (Fig. 2).

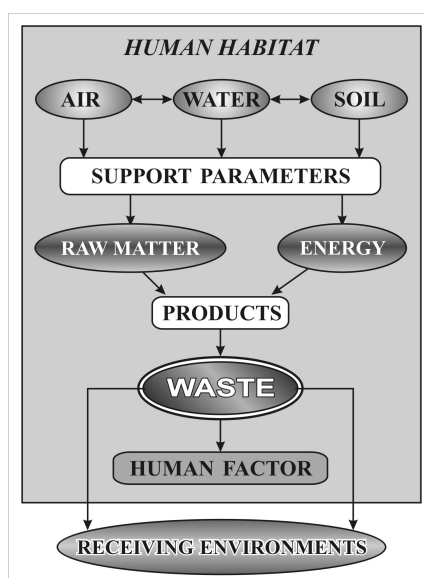


Figure 02. Functioning of the urban ecosystem - scheme

Environmental education is a process meant to attract different social categories who should be aware and preoccupied by the environmental problems but should also have the knowledge, attitude, skills, motivation and capacity to interact to find solutions or to prevent environmental situations (Dincă, 2007). The basis of an efficient teaching approach is learning by direct interaction with the natural environment. Ecological conscience is at the basis of the ecological conduct, of the ecological behavior (Pehoiu, Muică & Sencovici, 2006).

Thus, educational institutions have a very important role in making the pupils receptive to what is shown to them and what is said to them regarding the environment. The mission of the educational institutions is to offer, gradually and in harmony with the age particularities, scientific knowledge able to motivate the eco-civic conducts and norms, to create and organize educative activities and actions regarding the environment. The ecological conduct is the way the ecological conscience (knowledge of the sense of each species in life on Earth) shaped by education determines ethical actions and attitudes to the life surrounding us.

2. Problem Statement

In the present analysis we applied a questionnaire as a tool for investigating the perception of the role of educational institutions in environmental education..

3. Research Questions

The questionnaire is appreciated, in the sociological literature, as the most important, the most frequent and the most efficient instrument used to collect the necessary information, in all the activity domains (Chelcea, 1992).

We tried, by applying questions structured according to well-defined principles, to awaken the interest and get the subject to answer as sincerely and clearly as possible to the respective items (Chelcea, Mărginean & Cauc, 1998).

4. Purpose of the Study

The research questionnaire is characterized as being a technique and an investigation tool. In the beginning, introductory questions were applied (contact questions, meant to win the respondent's trust in the questionnaire operator), then *identification questions*, by which data on the subjects are requested; *buffer questions*, meant to announce a new group of questions, namely the passage to another problem; *filter questions*, which stop the passage of certain categories of subjects to the subsequent questions and represents a control for the quality of the answers; questions calling for expressing opinions (Sencovici, 2010).

A hierarchy of the terms would include the following examples: survey is a method; the questionnaire used represents a technique; the self-administration of the questionnaire is a procedure; the list of questions in the questionnaire represents an investigation tool (Fig. 3).

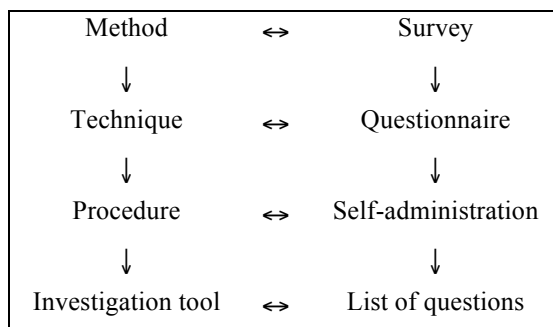


Figure 03. The model of the terminological relations used in the sociological research (our processing of Chelcea, 1992)

The collection of the information was realized after the subjects were motivated by the explanations given and after mentioning the aim pursued. The information obtained was processed and based on this information, different representative graphs were obtained.

5. Research Methods

The questionnaire was applied on a sample of 119 respondents (students). After the application of the questionnaire, it has been noticed that the students coming from school units involved in selective wastes collection programs transmitted this habit in their families as well, unlike the students coming from school units where no ecologization activities were practiced, who do not have enough information on the importance of the wastes and have no habits formed in this sense. It is demonstrated that, if the actions undertaken are sustainable and not superficial, behavior can be modeled, educated, changed for the better, in the long run, as well.

6. Findings

Out of the analysis of the graph for item 5 it results that most of the answers belong to the category bad and satisfactory quality of the environmental components. The component appreciated as very affected refers to the vegetation, because during the last years, the oxygenated area increased, but only in the central area and in the area of the intersections by the realization of green roundabouts in the area of the municipality. A very low number of respondents situated this vegetal component of the environment in the category “very good”, a fact demonstrating that the young are aware of the very important role of the green, oxygenated areas (Fig. 4).

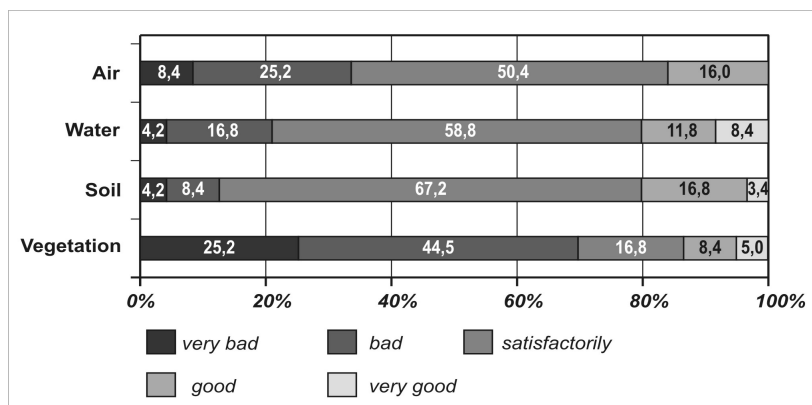


Figure 04. Weight of the answers for item 5 (Check, according to your appreciation, the quality of the following environmental components in your neighborhood: *air, water, soil, vegetation*)

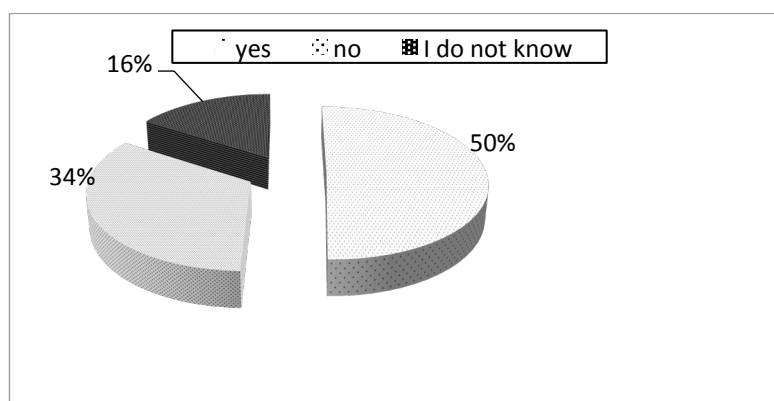


Figure 05. Weight of the answers for item 6 (Is waste collected in your neighborhood in good conditions?)

The subjects, when they were asked if the wastes collection was done in good conditions answered in proportion of 50% affirmatively but one can note a quite high percentage, 40% of the interviewees, who answered negatively. Impressive is the fact that 19% of the interviewees do not know how domestic wastes are collected (Fig. 5).

After the application of item 7 it has been noticed that the majority of the respondents answered that the wastes are not collected selectively in their families, which denotes that the percentage of the subjects who receive in the family an adequate education, regarding the selective wastes collection *is low*. Out of the respondents, a small number answered that they are influenced by the family in the habit they have for the selective collection of the domestic wastes (Fig. 6).

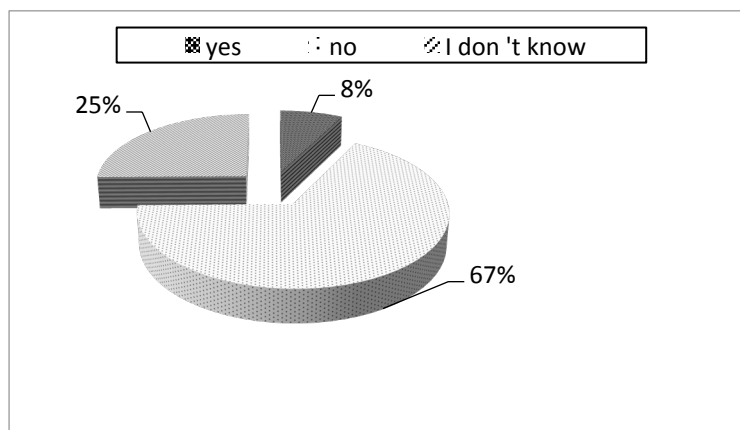


Figure 06. Weight of the answers for item 7 (Is waste collected selectively in your family?)

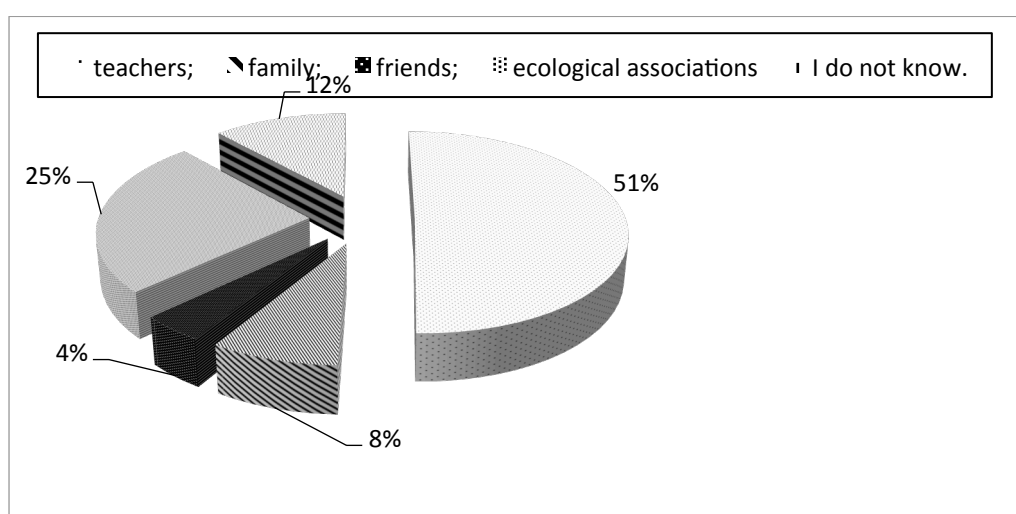


Figure 07. Weight of the answers for item 8 (Who influenced you to collect waste selectively?)

Most of the respondents answered that the habit of selective collection of the domestic wastes was taken over from school /high school, completed and supported by different activities by the faculty (Fig. 7). From this item, it has also been noticed that, in a significant percentage, the subjects appreciated that ecological Associations had an important role in their awareness regarding the selective wastes collection.

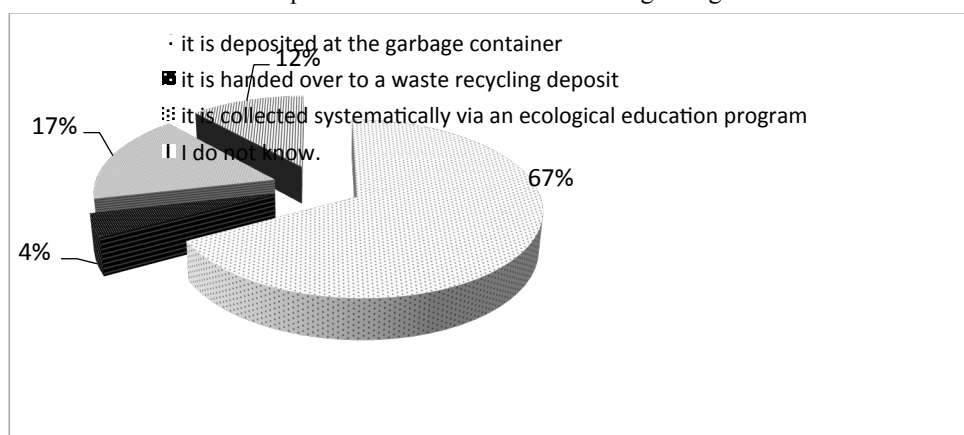


Figure 08. Weight of the answers for item 9 (What happens with the recyclable waste collected by your family?)

For this item, it has been answered in a percentage of 67% that recyclable wastes are deposited in the waste container (Fig. 8). A number of 20 respondents answered that wastes *are collected systematically for an ecological education program (Home Electric Appliances Day)*.

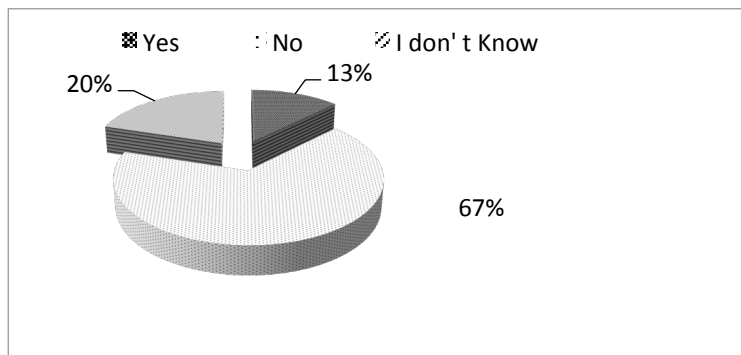


Figure 09. Weight of the answers for item 10 (Are there enough garbage bins in your city, neighborhood? How about possibilities of collecting large waste, for example from repairs sites, apartment modernization, old domestic appliances etc.?)

For item 10, which refers to the existence of special places for depositing large wastes (for example from repairs sites, apartment modernization, old domestic appliances etc.)? the subjects answered in a proportion of 67% that this does not exist. Again, a high percentage (20%) has been noticed of those who do not know the neighborhood, do not know if such special depositing places exist (Fig. 9).

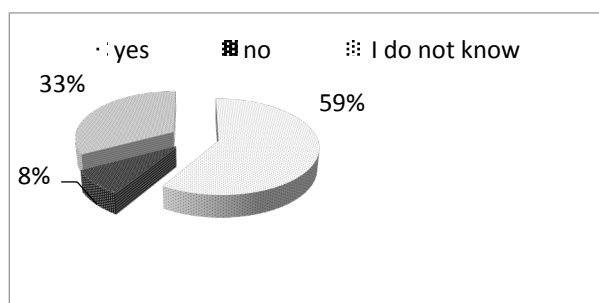


Figure 10. Weight of the answers for item 11 (Are there differentiations in the environmental quality among neighborhoods?)

For item 11 it is noticed that 33% of the interviewees know no aspects related to the environmental quality outside their neighborhood (Fig. 10).

The research undertaken highlights, by the answers received to the 12 questions of the questionnaire addressed to the students, their opinion on the environmental problems in the area where they live. The subjects largely admit the existence of environmental dysfunctionalities in their neighborhood. We analyzed and interpreted the perception level, the result highlighting the discomfort they feel and the need for information.

7. Conclusion

After the realization of this study, it has been noticed that the number of the respondents who appropriated the habit of selective wastes collection in the family is low, only a percentage of 8%

admitted the role of the family in ecological awareness, while 25% acknowledged the important role of the ecological Associations. A high percentage (51%) went to the special role of the education institutions.

The family took over from the children the habit of a correct selective wastes collection and, consequently, one can affirm that the educational institutions have an important role in environmental education, the teachers being the ones shaping in the pupils, in the students, convictions, habits and attitudes reflected in an adequate behavior towards the environment.

Another aspect understood following this study refers to the dysfunctionalities related to the residual wastes resulted from all the renewal, home modernization activities.

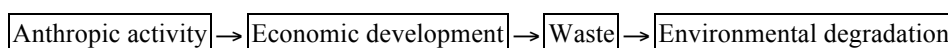


Figure 11. Waste's circuit

What has been noticed is an active involvement of the educational units and of the other institutions in local and national environmental education programs, especially related to selective wastes collection.

Maintaining a balance between natural development and offering better living conditions for the population in the long run supposes: reducing the quantities of wastes, adequate hygiene for the depositing places, increasing the green (oxygenated) areas, increasing the number of projects meant for environmental protection in the educational units.

The interdependence between economic-social development and environmental development is prominent in the urban area, concentrating most of the environmental dysfunctionalities.

A human habitat relies on abiotic, biotic and anthropic factors, their interaction yielding products and wastes assimilated by the receiving environments of the urban ecosystems but also by its neighboring areas (Fig. 12).

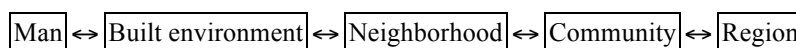


Figure 12. Hierarchic components of the urban ecosystem

In order to successfully realize the environmental education, it is essential to effectively combine the forms of “alternative education” with the forms of institutionalized education. In environmental education, important and relevant are the power of the example and of the word, each person must have the possibility to manifest his personal attitude, the responsibility to the environment he lives in.

The participation of the education units in the activities related to knowing, understanding some environmental acts and phenomena, identifying and solving certain environmental pollution and degradation problems, results in the formation of certain convictions and habits related to the environmental defense, conservation and balanced development.

The educational units, by their destination and role, assure the adequate environment for the development of a complex training: both instructive and educative.

The pupils, the students have a very important role in the society, in the geographic environment, as they are the future of the planet and at the same time those who will make a change, trying to create a society more involved in environmental education.

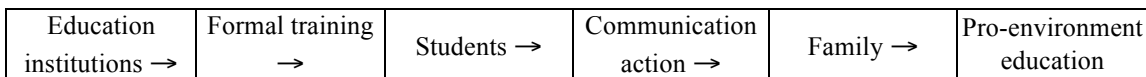


Figure 13. Pro-environment education

The problems that the present environment is facing are serious and must be approached by the whole community, and education in the educational institutions is a viable solution.

The involvement of the education institutions in the promotion of the environmental problems is the chance of developing a balanced environmental conscience.

The most important role in modeling the children's and the pupils' consciences goes to the teachers. The educators, the primary school teachers and the teachers in general, by the curricula of various subjects, by the optional disciplines and extracurricular activities put the pupils and students into concrete or imaginary situations able to awaken their interest and motivate them to act for the improvement of the environmental quality.

The educative approach is directed towards the adoption of an adequate behavior of environmental protection, essential being the modalities of passage from theoretical information towards concrete action, by individual participation.

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