

SENIOR PUPILS DEVELOPMENT OF RATIONAL NATURAL RESOURCES CONSUMPTION

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The paper presents the results of the level of influence of senior pupils on the environment using the methodology of the “ecological footprint”. As well as it reveals the possibility of using the “ecological footprint” methodology for educational purposes for the rational consumption of resources.

Keywords: ecological footprint, natural resources, rational consumption.

The concept of the ecological footprint offers a special perspective on the question of the ratio of the population to the territory in which it lives. An ecological footprint is the area of a productive territory and water area necessary to meet people's needs for resources and to absorb waste.

The simplicity of calculations makes it possible to widely use the ecological footprint for educational and studying purposes. Awareness of their contribution to the environmental crisis can lead to real changes in lifestyle and practices of human consumption. The use of the ecological footprint in pedagogical practice can serve as a method for students to self-evaluate their consumption of resources and energy. An ecological footprint as an example of how knowledge of facts from the field of ecology becomes a condition for a person to recognize their responsibility for a favorable environment and to understand exactly what actions need to be taken for this. From this point of view, the ecological footprint is rather a guideline for assessments and actions than an accurate indicator of environmental friendliness. It cannot but have a moral dimension, since the ultimate goal of its use is not just the calculation of the exact area of the territory used by man, but the awareness of the need to protect the environment by as many people as possible.

This work was carried out in order to identify the level of influence of high school students on the environment, using the methodology of the “ecological footprint”. And also the task was to assess the impact of the “ecological footprint” survey on the level of students' environmental literacy regarding resource consumption. The study involved students of 11 “A” class of secondary school No. 121 of Minsk with a total number of 26 people. The study used a questionnaire to calculate the ecological footprint, as well as a survey on the attitude of students to the rational consumption of resources before and after calculating the ecological footprint.

As a result of the main aspects analysis of pupil's life and their impact on the environment, the following points were noted. Most of the respondents live in an apartment (95 %). 43 % of the respondents choose urban transportation, 33 % – a bicycle, 24 % – a car. Only 5 % of pupils use energy from renewable sources, the remaining 95 % use the energy of natural resources such as oil, natural gas and coal. The majority of respondents (57 %) eat meat or fish 2–3 times a week, 43 % eat meat every day, senior pupils who follow a vegetarian diet have not been identified. Students prefer a shower to a bath (76 % versus 24 %). Some pupils sort solid household waste: 38 % of waste paper, 5 % return glass containers to a special station, 28 % separately sort waste from plastic.

We also compared the results of the survey on the attitude of students to the consumption of resources obtained before and after calculating the ecological footprint. As a result, the number of students who expressed a wish to rationally consume resources grew by 54 % (23 % – before, 77 % – after). Also, most pupils changed their opinion about the rationality of the resources consumed: before calculating the ecological footprint, 56 % of those polled said that they were using their resources rationally, after only 23 %. It is worth noting that at the control stage, 54 % more of pupils offered their options for saving energy and resources.

Summing up, we found that in terms of consumption and lifestyle, 44 % of students fit into one conditional planet. It was also found that the calculation of the ecological footprint makes it possible to effectively use it as an educational method in relation to the students' rational use of the planet's resources.