

Regional environmental problems and ways of their solution by means of ecological education of schoolchildren and students

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Nowadays it is becoming more and more evident that technical means can improve the condition of the environment, if people do not seek to observe requirements of environmental constraints and take an active part in the solution of environmental problems. In conditions of ecological instability modern society proclaims the Conception of sustainable development, which is orientated towards harmonization of life-sustaining human activity, human social, economic, and ecological relations. Nevertheless, there are major environmental problems in many Russian regions such as high level of air pollution, destruction of the unique natural water objects (minor rivers, springs); flooding and destruction of banks of the river Volga as a result of functioning of the Saratov and Volgograd storage reservoirs; low quality of the fresh water; functioning of the power-generating units of Balakovo Nuclear Power Station; absence of the program for urban greening; unsatisfactory condition of the cities; poor condition of roads and sidewalks; absence of due attention to protection of rare and endangered species of plants and animals; consumerist position of many inhabitants of the region towards the natural riches of the native land and many other issues.

Over a few decades many official documents have identified principal importance of the environmental education for the solution of regional and local environmental problems. Nevertheless, formation of environmental thinking within the framework of informative education of pupils and development of responsible attitude to nature in the sphere of environmental education was pushed to the foreground. Nowadays, theoretical foundations of environmental education are being actively developed and enriched with new psychological-pedagogical approaches, views, and concepts. It is established that a new type of attitude to nature should be subjective non-pragmatic attitude, which is characterized by orientation towards partnership interaction with living beings (Yasvin, 2000). The backbone element of education, which allows major utilization of ecological, educational, and psychological principles and regularities for the formation of ecological consciousness and ecological culture of pupils, defines ecological adequacy, where meaningfulness acts as an integral discriminant and subjective significance of environmental activities (Ermakov,

2008). Actualization of issues of development of the spiritually-moral system of noosphere man and noosphere education takes place (Subetto, 2008). Modern strategy of modernization of Russian education presupposes that the success of solution of the educational targets' performance depends on how the assessment system is organized. The new standards connect the realization of educational results (personal, meta-subject, subject) with the directions of personal development of pupils on the basis of their educational activity.

Saratov region has implemented the regional target program «Environmental rehabilitation of Saratov region in 2009-2013», developed the concept of continuous ecological education in 2009-2019. An important trend in the development of a system of continuous environmental education of the region is its focus on the disclosure of internal resources of the personality of a child and formation of ecological competence of the environmental and educational process subjects. In the years 2006-2012 educational institutions of Saratov region implemented the following environmental and educational projects: «School of good deals», «World of the indoor plants», «Green Memory Alley», «Let's preserve the nature of our native land», «Let's preserve the natural park "Kumysnaya polyana"». More than one hundred educational institutions of Saratov region took the part in the projects.

Participation of pupils in the «School of good deals» (Morozova,2008) project allowed: to give an opinion on the school rules and traditions, on the school history; to do some serious thinking about the future of schools and why it is necessary to study; to give the characteristic of school as the object of social, economic, and ecological purpose; identify one's own attitude to educational and environmental activities. It has become apparent that we need to do a lot of work on the development of environmental and educational development of schools.

Educational potential of the project «World of indoor plants» (Morozova, etc., 2011) presented the possibility of formation of pupils' adequate understanding of the links within natural and socio-cultural systems, formation of valuable attitude to the objects of living nature and gaining experience of environmentally correct placement of indoor plants at school. Placing plants in the class, pupils have rarely taken into account the needs of plants, such as sufficient light, humidity, temperature, their viability, and to a great extent paid attention to beauty, decoration, useful properties of plants. Creation of the Museum of indoor plants

allowed to improve the productivity of environmental and educational activities of pupils.

The project «Green Memory Alley» (Morozova, Gorina, 2006; Morozova, etc.,2012) focuses on the identification of the value of plants in the context of significant human values and gaining experience of environmentally correct placement of plants on the schoolyard territory. During the execution of the project, collectives from educational institutions created alleys and corners of Memory, mini-museums, cultural and historical centers. In real practice it was difficult to organize the "alley", where the choice of objects was informed, due to practical, ecological, aesthetic, cultural, and symbolic value of plants, and specifications of vegetation in a particular area was taken into consideration.

The project «Let's preserve the nature of our native land» (Morozova, et.al., 2011) permits us to carry out comprehensive analysis of the geographical position, geological aspects, landscape, water, geological, and biological resources of Saratov region, to identify the main environmental problems of the region and assess one's own opportunities for participation in their resolution.

The project «Let's preserve the natural park "kumysnaya polyana"» (Morozova, et.al.,2013) is oriented at identifying the environmental and recreational potential of the natural park, which acts as the most important element of the environmental infrastructure of the city, discussion of unwanted process of the Park's forest areas steppification and assessment of its security arrangement. We developed the program on preservation and restoration of natural potential of the Park, including scientific and educational, protective and remedial, and cultural events.

During the environmental and educational practice we revealed certain difficulties of teachers in the organization of diagnostic procedures of the environmental activity of pupils; we registered the prevalence of rational forms of educational interaction in the course of the development of emotional-valuable relationship to nature; we marked some difficulties in the organization of cooperation of teachers, students, representatives of public and state structures for the solution of specific environmental problems of the region. Theoretical and practical tasks appear in the course of identifying ways of improving ecological education of schoolchildren in the system of uniform environmental and educational space of the region.

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