

DEVELOPMENT OF ECOLOGICAL CULTURE IN STUDENTS ON THE BASE OF INTERDISCIPLINARY CONNECTIONS OF GEOGRAPHY

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DOI: 10.5958/2249-7137.2022.00760.1

ABSTRACT

The article shows the theoretical aspects, content and methodology of developing environmental culture in students based on the interdisciplinary relations of geography in the general secondary education system. Development of ecological culture in students on the basis of interdisciplinary connections ensures a lively, interesting transition of the educational process. Chemistry deals with the release of chemicals into the atmosphere and its effects, water, minerals and fertilizers, and other natural phenomena. The average amount of water used per year at the country level, its importance in irrigation and electricity generation, sources of river water pollution are discussed.

KEYWORDS: *General Secondary Education, Geography, Ecology, Ecological Culture, Interdisciplinary Communication, Biology, Internal And External Communication.*

INTRODUCTION

The development of environmental culture among general secondary school students requires the teaching of academic subjects, including geography, in connection with biology, chemistry, physics, and mathematics. Because, first of all, the solution of environmental problems requires complex measures, and to achieve this, it is necessary to look at the problem from different aspects, and for this, knowledge obtained from different disciplines is necessary. Secondly, in the general secondary education system, environmental education is not reflected only on the basis of a specific subject, but is manifested in interdisciplinarity. Because it cannot be fully implemented within any discipline.

Also, the opportunities to implement environmental education in the process of teaching different subjects are not the same. They are determined by the specific tasks and content of science. For example, biology studies the interaction of living organisms with the environment, biosphere, ecosystem, etc. Chemistry deals with the release of chemicals into the atmosphere and its effects, water, minerals and fertilizers, and other natural phenomena. In the physics course, students study radioactive substances and their effects on living organisms.

Therefore, environmental education at school has an interdisciplinary character and environmental problems are studied in various aspects, that is, in the harmony of geography, biology, chemistry, physics and other disciplines.

B.S.Abdullaeva, S.T.Alikulov, N.J.Isaqulova, P.G.Kulagin, N.A.Loshkareva, V.N. Maksimova about interdisciplinarity, its content, importance in increasing the effectiveness of the educational process. , E.Mambetkunov, M.Q.Mukhliboev, Kh.B.Norbo'taev, A.A.Salomov, V.N.Fedorova, A.Ch.Choriev have conducted scientific researches [1;156].

According to scientist B.S.Abdullaeva, there are more than 30 concepts of the "interdisciplinary" category in pedagogical literature... Interdisciplinary relationships are objects of real existence that are reflected in the content, forms, and methods of the educational process, and in their interrelationship, they fulfill educational, developmental, and educational tasks. , means a pedagogical category that expresses unifying, accelerating relations between events and processes [15; 12-13].

Researcher N.J. Isaqulova explains the importance of connection of subjects in the educational process as follows: the optimal way to organize the educational process; different disciplines approach the subject of the lesson; the interesting side of the lesson increases; the range of information learned during one session expands; it is possible to make conclusions about various subjects; realizes independent thinking... In short, interdisciplinary communication serves as a pedagogical problem, principle, method, and an important effective tool in improving the quality of education [43;21].

From this point of view, it is necessary for the science teacher to rely on the knowledge and skills obtained from various subjects in the development of environmental knowledge, skills and abilities of students, to develop their thinking abilities by teaching them to use various information.

Development of ecological culture in students on the basis of interdisciplinary connections ensures a lively, interesting transition of the educational process. Increases the responsibility of students in learning subjects, makes it easier to study the curriculum. Brings the knowledge of students from various subjects into a whole system, helps to use this knowledge in real life processes.

In the process of developing environmental culture among students, we studied the inter-curricular communication (internal) and the connection of geography with other subjects (external).

Intercourse communication. Passing the topic in connection with the topics of the previous lesson is a necessary condition for its effective learning. Connection within the subject activates the lesson, ensures its interesting passage.

When studying each subject, the teacher should pay attention to the following connections within the subject: the connection of the studied subject to the previously studied subject; connection to the main topic; connection to subsequent topics; linking to the material covered in the lower class; connection to the materials passed in the upper class.

We describe the relationship within science for the process of studying the topic "Inland waters of Uzbekistan" in the 7th grade. According to the curriculum, this topic is studied for three hours.

As the first lesson gives a general description of "rivers of Uzbekistan", it is appropriate to start the lesson with practical work. Because information about the rivers of Uzbekistan is given in the lower classes.

Teacher: Find the largest rivers in Uzbekistan from the atlas.

Students will consider the rivers Syrdarya, Amudarya, Zarafshan, Chirchik, which are prominent in the atlas.

Teacher: What major rivers flow through the Turan plain?

Students: Amudarya, Syrdarya flow.

Teacher: Why do these rivers flow from the southeast to the northwest?

Students answer that the Turan lowland slopes from the southeast to the northwest, so the rivers also flow in that direction.

Here, the teacher connects the topic to one of the previous topics - relief. Depending on the flow speed of the rivers, it should be based on the information obtained by the students on the relief of Uzbekistan.

When it comes to the source of saturation of rivers - it depends on the climate. The topic can be linked to the topic of "Uzbekistan's water resources use and their protection". The average amount of water used per year at the country level, its importance in irrigation and electricity generation, sources of river water pollution are discussed.

When studying "Uzbekistan's internal waters", its necessity for irrigation, electricity production, etc., the importance of fish in the river, and the extraction of water from it for the needs of the population are also mentioned.

It is obvious that this information will be related to the topic "Economic and social geography of Uzbekistan" which will be taught in the VIII grade. Because in class VIII, the topic is "General description of the economy of Uzbekistan", and when information is given about the departments (industry, agriculture, transport) of this topic, it is impossible not to connect with the topic "Internal waters of Uzbekistan" that was discussed earlier.

To make the lesson more interesting and meaningful, it is necessary to connect it to everyday life and the materials of one's country. All subjects studied in classes can be studied in the same way as above.

In the development of environmental culture in students, it is also important to teach geography based on its connections with other subjects. As an example, let's consider the relationship between geography and biology.

The biology taught at the school is very close to geography and ecology in some areas of the studied objects. Biological science is closely related to natural and economic geography, and these closely related sciences use their own characteristics to study the same phenomena and things in nature.

Biology studies the life characteristics of plant and animal organisms in relation to their environment. Geography studies the reasons for the distribution of flora and fauna in the area.

For example, when nature zones are studied in a school geography course, the patterns of distribution of flora and fauna depending on the climate and soil conditions of this place are analyzed. For example, in a zoology class, students learn how certain animals live, eat, and structure their bodies. In the geography lesson, where and under what conditions and for what reasons this animal lives here is studied.

It is known that the topic "Zones of Nature" in the course of natural geography of the 6th grade includes information about the types of plants and their dependence on the climate, and the fauna on the climate and plants. Environmental problems that have arisen in natural zones, for example, the complete exploitation of the steppe natural zone, the disappearance of flora and fauna naturally occurring in it, and the reduction of forest area in the zone of equatorial and coniferous forests can be mentioned as information. On this basis, students are given a general understanding of nature zones.

The topic "Plant wealth of Uzbekistan" is taught in the 6th grade botany curriculum. At the end of this topic, an excursion will be organized to see the material in practice. As a result, the biology lesson is repeated and geographical knowledge is strengthened.

In the 6th grade of the botany curriculum, the topic "Plant is a whole organism" is studied. In this case, an excursion to nature is made to determine the connection of plants with the environment, the influence of various conditions (soil, moisture, light).

After going through the above materials and going on an excursion on the topic, the students will understand the different living conditions of different plants and the reasons for this.

In the 8th grade, the natural conditions of Uzbekistan and the importance of resources in the economy, the study of agriculture and animal husbandry of economic regions should be based on the knowledge of zoology. The students' knowledge of zoology is also used in the study of directions of livestock breeding of Uzbekistan, intensive ways of increasing livestock productivity, poultry and fisheries.

As a conclusion, it can be said that in the era of increased volume of information and increased processes of globalization, it is an important necessity to familiarize the young generation with the issues of rational use of nature and its protection. In this process, systematization of information provided by educational subjects, revealing the relationship between man and nature with a complex approach to the issue is carried out in an interdisciplinary relationship.

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