

SCIENTIFIC SOURCES OF THE ECOLOGICAL EDUCATION AND ITS DEVELOPMENT IN AZERBAIJAN

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Научные источники экологического образования и его развития в Азербайджане. В некоторых странах экология преподается как свободная дисциплина в средних и более высоких школах. Есть много стран, у которых есть отделы экологии, школа экологии, даже университет. Но в некоторых странах экология преподается не как отдельная дисциплина в средних школах, они включают это в образовательную программу другой дисциплины. В Азербайджане используется второй вариант. В данной статье приводятся примеры такого типа экологического образования.

Ключевые слова: экология, образования, история, этапы, Азербайджан

Ecology arose integrating with another sciences therefore it has much teaching forms. The level of the ecological education depends on developmental courses of the concrete country and the level of modern education development. In some countries ecology is taught as a free discipline in the middle and higher schools. There are many countries which have ecology departments, ecology school, even university. But in some countries ecology is not as separate discipline in secondary schools, they include it to educational program of another discipline. In Azerbaijan is used the second variant. Generally, ecological education has a two types: Formal and informal education. In Azerbaijan is used the formal education. Informal education is in not. The ecological education according to its scale is regional, intergovernmental and international. The international ecological education they are implementing with the help of UN, UNESCO and funds (Mustafayev, 1970; Aliyeva, Mustafayev, 2004).

Ecological education has direct, indirect, oral, written, passive, active forms. The passive education is possible with living in the ecologists family, in rich ecological condition, be on friendly terms with ecologist, take part in ecological public debates and with conscious relation to nature. But for the active ecological education you must take part in the work of the different ecological forums, in the seminars of ecology, you must read literature and get the information, study the environment, and last to learn the problems of ecology (Aliyeva etc., 2006)

A brief history of the ecological education. To middle of the XX century there was not official ecological education in Azerbaijan. But there was ceremonies with ecological essential in Azerbaijan. In the ancient Azerbaijan careful attitude to the nature have been considered the basic condition of life. In the monuments, folk-lore, in religious and philosophical looks of material culture of the azerbaijan people the native relation to nature is seen clearly (Mustafayev, Mammadov, 2008). Still existed BC VI century in the book of Avesta with Laws Collection, goes fight between the darkness and light, between gain and evil and the nature is protected from pernicious strengths. In the protecting of alive has been preferred to the variant of idolizing. Thought of "Animal is for sacrifice" is not being accepted in the Avesta (in contrary, endless love to the alive nature is applauded).

In the epos of "Kitabi Dede-Qorqud", one of the first written literature of Azerbaijan, has been written that in that period in people was the relation to environment very preoccupied. In the Oghuz idea has been taken like "nature means man and man is nature. The people has attached great importance to the cleanness of the water, tree has been considered holy, even they accepted them like mother. At that time was many preserves. Was demand to behave carefully with the hunting animals. Unfortunately, has not been to the same demands in the next periods, therefore much of the sorts of animal which included to the list of red book were the hunting animals (Mustafayev, Sadiqova,

2006). In the community of Dede Qorqud people were not touch to the thin, weak, expensive animals. According to the Islam the nature is gift of God, it is his deposit. The God has created nature like place and resource for population, has thought the ways for the using from it who do not keep to this rule they are called mistaken people (Mammadaliyev, 2006). In Islam is applauded to economize on the resources widely, but squandering has been condemned strongly, has attached serious importance to the cleanness, against, has been fight to the dirty widely.

At XX century the famous naturalist of Azerbaijan Hassanbey Zardabi gives great importance the role of soil, water and climate in the development of plants and animals, and in their productivity. There is wide attention for preoccupied relation to the nature in the classic literature of Azerbaijan. And at present there is a good attention for the folk medicine in the biological courses(Aliyev, Mehraliyev, 2001).

Academician Hassan Aliyev was one of active naturalists and was founder of applied ecology in Azerbaijan at the end of the last century. He never has used the word of ecology in his scientific works, but all his activities were like ecologists. Such activities have been named "Preecology" and it is a new ecological conception. After II World War ecological education was developed intensive in Azerbaijan. We have made an effort to investigate the general view of the world ecological education in our scientific article which was published in 2005 (Ahmadov, Muradova, 2005)
Scientific bases of the ecological education.

Pupils of secondary school very well know that the word of ecology was coined by E.Hekgel and he has applied ecology conception the first time in 1866. But the ideas of famous naturalists C.Darwin, K.Rulye and etc. we can include to the conception of "Preecology". After E.Hekgel the Ç.Elton, K.Mebius, A.Tensly, V.Sukachev, C. Adams, V.Shelford, D.Kashkarov, A.Vernadskiy, X.Odum, Piter Skott, Ceral Darell, Beringard Qrjimek, A.Bannikov, V.Flint, A.Rustamov, S.Shvars, N.Naumov, I.Shilov, A.Bekklemishev, A.Gilyarov, Q.Novikov, Riklefs, N.Reymers and etc. have developed the ecology in all world. These scientists rendered a great influence to world ecology.

Professor Gara Mustafayev was one of the first scientists in Azerbaijan who began to teach the general ecology courses in Baku State University and he for the first time developed the conception ecological education in 1958 (Mustafayev, Tagiyev, 2008, 2008a).

It is important problem of our period the ecological assessment of all components of the environment for the safety of biodiversity. Solution of this problem has arisen in the basis of soil sciences and has been developed by the academician G.Mammadov (2007) and he is author of this theme in Azerbaijan. Ecological assessment of land in the Lankaran region was fulfilled by S.Z. Mammadova (2003). In general with the fundamental investigations in the problems of "Economy, Society and Ecology" was engaged N.A.Nabiyev (2000).

It is the fauna and flora except of soil which define the fate of the each ecosystem. In the century XX they attached great importance to this problem in Azerbaijan and were fulfilled fundamental investigations. The same investigations were directed to the area of biological variety and gene pool in last years (Talibov, 2003). Were been investigated the present situation of the forests in the Shirvan of the south - east of Azerbaijan and flora of another areas of republic. There are some monograph which has been devoted to plant of the National park of Gizilagach and to medicine plant species (Hajiev, Yusifov,2003). Animal kingdom could not remain beyond attention which is connected with plant cover. This problem have been solved by academician Derjavin A.N. corresponding member of the Azerbaijan National Academy of Sciences Abdurakhmanov Y. and etc. in the XX century. Important investigations have been carried out with approach to this problem within last years from point of view biological variety and gene pool (Abbasov, Hajiev,2007).

In Azerbaijan ecological situation of the Caspian Sea has been investigated and published the monograph about ecology of the water and biodiversity of the Caspian sea . The basic investigator of amphibious in Azerbaijan was A.M.Alekberov (1978). But in the last periods suitable modern investigations about amphibious have been fulfilled by F.R.Qaniyev and E.Q.Cafarova and T.R.Aliyev (2004). There are much more investigations about the birds in the last years. The works of N.A.Sadiqova are very important with point of view the biodiversity and their valuing (Mustafayev,Sadigova, 2008). The very good scientific work about mammals is the work of N.K.Vereshagin (1959) in Azerbaijan. But a new investigations have been carried out within last years. There are a little scientific literature about the protecting of the invertebrates. Modern ecological situation of the republic of Azerbaijan has been done in a few works (Hasanov,2007; Sultanov,2000; Bailem,2000; Mustafayev,Ismailov,2006) .

Ecological legality. Modern population can not live with natural laws, the production and consumption must be based on conscious and democratic laws (Mustafayev, 2009). Ecological laws are the young area of general legality. In Azerbaijan since 1970 years the ecological laws is teaching . But as Azerbaijan is independent state, he has accepted own ecological legality.

The Parliament of Azerbaijan has accepted about 20 ecological law, Cabinet of Ministers has accepted more than 50 important ecological decisions as laws. These all are based on the Constitution of the Azerbaijan Republic (1995). Modern ecological legality condition of the population was reflected in a few books (Namazova,1996; Afandiyev,2002; Aliyev,2002). Protecting on rare plants of the nature monuments has been organized well , but still there has not protecting with the help of the natural monument status of the rare animals which already are lost species

Ecological education in the secondary schools. In Azerbaijan due to formal character of ecological education the teaching of ecology is not being as free discipline in the secondary schools. This subject consists in structure of the general biology in two chapters like a "Advanced Ecology" and "Biosphere training". Therefore is based to the unique plan on all over the country. Even the programs of additional ecological education for V-VII class are same formal character for all schools (Ahmadov,2003).

Taking into account it has been written "Additions to general biology from Ecology " named school supplies and have been done corresponding change in the educational plan (Babayev, Mustafayev, 1992). In latest years has been translated textbook "Ecology" a school supplies for IX-XI classes into Azerbaijani from Russian (Mamadov, Suravagina, 2000).In 2003 the Parliament of Azerbaijan has taken the law of "The Ecological education and ecological enlighten in Azerbaijan". In Azerbaijan according to the law about ecological education should be, it is organised life-long ecological education . We understand it thus that ecology must be in all of education cycle from kindergarten to doctoral studies. With help purpose to the solution of these problems there have been published some materials like textbook "Ekologiya (9-11)" (Aliyeva, Mustafayev,2004) . Unfortunately, these all need the personal license from Ministry of Education.

In that case must be done to the program of all school disciplines the corresponding additions from the ecology. Has not been done this. Ecologist will be able to do the additions, but teachers of different subjects know the ecology no very good therefore it will be not enough effective. Therefore in the education schools of universities to the program of different disciplines must be included of the ecology subjects.

In the secondary school both unformal and formal types of the education must be developed in the same period . But reality is that ecology is not being taught as free discipline in our secondary schools. In the programs of another discipline has not been included subjects from ecology and there is only formal type of education in secondary schools of Azerbaijan.

With the purpose of to complete our thought, we must add that in the result of positive reforms in the secondary school within last years there are considerably improving and

changing in programs of all subjects. First of all let us note that ecological theme in the biological disciplines is consider satisfactory in the schools . Are published many teaching materials and textbooks for primary and secondary school classes (Husseyinov, 2008). For example, has been published a few times "Nature study" textbook, Zoology and Biology textbooks with ecological aspects. Especially to note that all these materials has been published also in audio-video variants and CD formats.

Ecological education in the higher schools. In higher schools of Azerbaijan the ecology teaching began for the first time in 1950 in the courses of botany and zoology in Baku State University as a special course (Aliyeva, Mustafayev, Hajiyeva, 2006). In 1960 years has been included to programs of the biology, geography and chemistry the subject of "Nature conservation" and some late have been published the first textbook in ecology for high schools of Azerbaijan (Mustafayev,1970).

In 1970 years began teaching the course of "Ecology and efficient usage from nature " in biology, geography and chemistry and subject of "Ecological law" in the courses of jurisprudence. With this purpose have been published many textbooks and additional course materials, for example "Ecology of vertebrate animals" (Mustafayev etc., 1994) and "Ecological chemistry" (Abbasov, etc., 2003) for the bachelor students of School of Biology, "Economy and ecological bases of usage from nature" (Goychayli, Ismayilov, 2006) and "Geoecology" for the School of Geography ; "Ecological law" (Asadov, etc., 2007) for the School of Law . The textbook supplies published for courses of a master's degree of the education it is much more. Ecology teaching is been almost in all the numerous universities of the Azerbaijan Republic and has been secured with corresponding textbooks. Even ecological departments and schools have been opened.

Thus it is possible to tell that now ecological education develops intensively and for this purpose is very good scientific and pedagogical bases in Azerbaijan .

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